

**Annual Management Report for Groundfish Fisheries  
in the Kodiak, Chignik, and South Alaska Peninsula  
Management Areas, 2019**

by

**Kayla Bevaart**

and

**Kim Phillips**

November 2020

---

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



## Symbols and Abbreviations

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

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

***FISHERY MANAGEMENT REPORT NO. 20-26***

**ANNUAL MANAGEMENT REPORT FOR GROUND FISH FISHERIES IN  
THE KODIAK, CHIGNIK, AND SOUTH ALASKA PENINSULA  
MANAGEMENT AREAS, 2019**

by

Kayla Bevaart  
and  
Kim Phillips

Alaska Department of Fish & 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

November 2020

The Fishery Management Reports series was established in 1989 by the Division of Sport Fish for the publication of an overview of management activities and goals in a specific geographic area, and became a joint divisional series in 2004 with the Division of Commercial Fisheries. Fishery Management Reports are intended for fishery and other technical professionals, as well as lay persons. Fishery Management Reports are available through the Alaska State Library and on the Internet: <http://www.adfg.alaska.gov/sf/publications/>. This publication has undergone regional peer review.

*Kayla Bevaart  
and  
Kim Phillips  
Alaska Department of Fish and Game, Division of Commercial Fisheries,  
351 Research Ct. Kodiak, AK 99615*

*This document should be cited as follows:*

*Bevaart, K., and K. Phillips. 2020. Annual management report for groundfish fisheries in the Kodiak, Chignik, and South Alaska Peninsula Management Areas, 2019. Alaska Department of Fish and Game, Fishery Management Report No. 20-26, Anchorage.*

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

**If you believe you have been discriminated against in any program, activity, or facility please write:**

ADF&G ADA Coordinator, P.O. Box 115526, Juneau, AK 99811-5526

U.S. Fish and Wildlife Service, 4401 N. Fairfax Drive, MS 2042, Arlington, VA 22203

Office of Equal Opportunity, U.S. Department of the Interior, 1849 C Street NW MS 5230, Washington DC 20240

**The department's ADA Coordinator can be reached via phone at the following numbers:**

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648,

(Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

**For information on alternative formats and questions on this publication, please contact:**

ADF&G Division of Sport Fish, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907) 267-2375

# TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES.....	iii
LIST OF APPENDICES .....	iii
ABSTRACT .....	1
INTRODUCTION.....	1
PACIFIC COD .....	2
Parallel Season.....	2
Background.....	2
Kodiak Area .....	3
Chignik Area .....	3
South Alaska Peninsula Area .....	3
State-Waters Season .....	3
Background.....	3
2019 State-Waters Pacific Cod Season Overview .....	4
Kodiak Area .....	4
Chignik Area .....	5
South Alaska Peninsula Area .....	6
Pacific Cod Harvest Monitoring.....	7
BLACK ROCKFISH.....	8
2019 Black Rockfish Overview .....	8
Kodiak Area .....	8
Chignik Area .....	8
South Alaska Peninsula Area .....	8
Black Rockfish Harvest Monitoring.....	9
LINGCOD.....	9
PARALLEL WALLEYE POLLOCK FISHERIES.....	9
REFERENCES CITED .....	10
TABLES AND FIGURES.....	11
APPENDIX A. FREQUENTLY USED ACRONYMS AND KEY WORDS.....	63
APPENDIX B. PACIFIC COD FISHERY SEASON AND MANAGEMENT ACTION DATES .....	65
APPENDIX C. KODIAK, CHIGNIK, AND SOUTH ALASKA PENINSULA MANAGEMENT AREAS STATE-WATERS STATISTICAL AREAS FOR GROUND FISH.....	69

## LIST OF TABLES

Table	Page
1. Kodiak, Chignik, and South Alaska Peninsula management areas groundfish emergency orders summary, 2019.....	12
2. Top 30 species harvested, by weight in pounds, as reported on groundfish fish tickets, from state waters of Kodiak, Chignik, and South Alaska Peninsula groundfish management areas, 2019.....	13
3. Central Gulf of Alaska Management Area federal and state-waters Pacific cod harvest, in millions of pounds, 1990–2019. ....	14
4. Western Gulf of Alaska Management Area federal and state-waters Pacific cod harvest, in millions of pounds, 1990–2019. ....	15
5. Kodiak Area Pacific cod harvest, in pounds, by gear type, during parallel Pacific cod seasons, 1997–2019. ....	16
6. Chignik Area Pacific cod harvest, in pounds, by gear type, during parallel Pacific cod seasons, 1997–2019. ....	17
7. South Alaska Peninsula Area Pacific cod harvest, in pounds, by gear type, during parallel Pacific cod seasons, 1997–2019.....	18
8. Kodiak, Chignik, and South Alaska Peninsula areas regulatory development for state-waters and parallel Pacific cod fisheries, 1996–2019.....	19
9. Kodiak, Chignik, and South Alaska Peninsula areas state-waters Pacific cod effort, guideline harvest level, harvest in pounds, and value, 2000–2019.....	21
10. Kodiak Area state-waters Pacific cod guideline harvest level, effort, harvest in pounds, and value, by gear type, 1997–2019. ....	23
11. Pacific cod effort and harvest in pounds by statistical area, from the Kodiak Area state-waters season, 2019. ....	25
12. Kodiak Area state-waters Pacific cod fishery dates and management actions, by gear type, 1997–2019.....	26
13. Chignik Area state-waters Pacific cod guideline harvest level, effort, harvest in pounds, and value, by gear type, 1997–2019. ....	30
14. Pacific cod effort and harvest in pounds by statistical area, from the Chignik Area state-waters season, 2019. ....	32
15. Chignik Area state-waters Pacific cod fishery dates and management actions, by gear type, 1997–2019.....	33
16. South Alaska Peninsula Area state-waters Pacific cod guideline harvest level, effort, harvest in pounds, and value, by gear type, 1997–2019.....	37
17. Pacific cod effort and harvest in pounds by statistical area from the South Alaska Peninsula Area state-waters season, 2019.....	39
18. South Alaska Peninsula Area state-waters Pacific cod fishery dates and management actions, by gear type, 1997–2019.....	40
19. Kodiak, Chignik, and South Alaska Peninsula areas black rockfish regulatory development and management actions, 1997–2019. ....	44
20. Kodiak, Chignik, and South Alaska Peninsula areas black rockfish guideline harvest level, harvest in pounds, and fishery closure date, by district, 2019.....	45
21. Kodiak Area black rockfish jig effort, guideline harvest level, harvest in pounds, and value, 1990–2019.....	46
22. Chignik Area black rockfish jig effort, guideline harvest level harvest in pounds, and value, 1990–2019.....	47
23. South Alaska Peninsula Area Eastern District black rockfish jig effort, guideline harvest level, harvest in pounds, and value, 1990–2019. ....	48
24. Kodiak, Chignik, and South Alaska Peninsula areas lingcod harvest in pounds, by gear type, 1988–2019. ....	49
25. Central Gulf of Alaska (CGOA) and Western Gulf of Alaska walleye pollock fishery dates, 2014–2019.....	50
26. Central Gulf of Alaska walleye pollock effort and harvest, in millions of pounds, 1995–2019.....	51
27. Western Gulf of Alaska walleye pollock effort and harvest, in millions of pounds, 1995–2019.....	52

## LIST OF FIGURES

Figure	Page
1. Alaska Department of Fish and Game and National Marine Fisheries Service groundfish management areas.....	53
2. Kodiak Area state-waters Pacific cod harvest, in pounds, by statistical area, 2019. ....	54
3. South Alaska Peninsula state-waters Pacific cod harvest, in pounds, by statistical area, 2019. ....	55
4. Kodiak Area Pacific cod length frequency from state-waters fisheries, 2009–2019. ....	56
5. Chignik Area Pacific cod length frequency from state-waters fisheries, 2009–2019. ....	56
6. South Alaska Peninsula Area Pacific cod length frequency from state-waters fisheries, 2009–2019. ....	57
7. Kodiak Area Pacific cod age composition from the state-waters fisheries, 2009–2019. ....	57
8. Chignik Area Pacific cod age composition from the state-waters fisheries, 2009–2019. ....	58
9. South Alaska Peninsula Area Pacific cod age composition from the state-waters fisheries, 2009–2019. ....	58
10. Kodiak, Chignik, and South Alaska Peninsula black rockfish management areas and districts. ....	59
11. Kodiak Area black rockfish harvest, in pounds, by statistical area, 2019. ....	60
12. Kodiak Area black rockfish length frequency from directed fisheries, 2009–2019. ....	61
13. Kodiak Area black rockfish age composition from directed fisheries, 2009–2019. ....	61

## LIST OF APPENDICES

Appendix	Page
A1. Frequently used acronyms and key words. ....	64
B1. Summary of the Kodiak, Chignik, and South Alaska Peninsula parallel and state-waters Pacific cod pot gear seasons and management action dates. ....	66
B2. Summary of the Kodiak, Chignik, and South Alaska Peninsula parallel and state-waters Pacific cod jig gear seasons and management action dates. ....	67
C1. Kodiak Management Area state-waters statistical areas for groundfish. ....	70
C2. Chignik Management Area state-waters statistical areas for groundfish. ....	71
C3. South Alaska Peninsula Management Area state-waters statistical areas for groundfish. ....	72





## ABSTRACT

This report summarizes 2019 harvest, effort, and management of commercial state-waters and parallel groundfish fisheries managed by the Alaska Department of Fish and Game (ADF&G) in the Kodiak, Chignik, and South Alaska Peninsula management areas. Principal state-waters fisheries include Pacific cod *Gadus macrocephalus* and black rockfish *Sebastes melanops*. The 2019 harvest of Pacific cod during state-waters fisheries totaled 8.58 million pounds from 96 vessels, with an estimated exvessel value of \$4.29 million. Black rockfish harvested in the Kodiak, Chignik, and South Alaska Peninsula Eastern District areas jig fisheries, totaled 125,815 pounds from 16 vessels with an estimated exvessel value of \$104,972. During parallel fisheries, ADF&G adopts most season dates, bycatch limits, area closures, and allowable gear types established by the National Marine Fisheries Service for federal fisheries that occur in the adjacent exclusive economic zone. Walleye pollock *Gadus chalcogrammus* and Pacific cod are the predominant species harvested during parallel fisheries.

Key words: Kodiak, Chignik, South Alaska Peninsula, groundfish, Pacific cod, black rockfish, walleye pollock, state-waters, parallel, commercial fisheries, exvessel, trawl, pot, longline, jig, Annual Management Report

## INTRODUCTION

This report provides an overview of commercial groundfish fisheries in the Kodiak, Chignik, and South Alaska Peninsula management areas and summarizes commercial catch information and regulations that guide management of groundfish resources. These commercial fisheries include Pacific cod *Gadus macrocephalus*, black rockfish *Sebastes melanops*, lingcod *Ophiodon elongatus*, and walleye pollock *Gadus chalcogrammus*. Fishery harvest data reported is acquired from the Alaska Department of Fish & Game (ADF&G) fish ticket database. Appendix A defines frequently used acronyms and key words associated with groundfish fisheries.

Commercial groundfish fisheries inside state waters (0–3 nmi) are managed by ADF&G under regulations developed by the Alaska Board of Fisheries (BOF). Management authority for commercial groundfish fisheries in the exclusive economic zone (EEZ; 3–200 nmi) off Alaska, with the exception of exclusively state managed species (e.g., black rockfish), is delegated to National Marine Fisheries Service (NMFS) through the Magnuson–Stevens Fishery Conservation and Management Act (MSFCMA 2007). Federal commercial groundfish fisheries are prosecuted under guidelines developed by the North Pacific Fishery Management Council (NPFMC).

Several commercially important groundfish species managed by NMFS also occur inside state waters. To facilitate consistency between state and federal regulations for specific transboundary groundfish species, ADF&G issues an annual emergency order (EO) establishing parallel groundfish seasons in state waters, during which the state adopts most regulations of adjacent federal fisheries unless superseded by BOF regulations.

State-waters seasons are independent of federal/parallel seasons. In the Kodiak, Chignik, and South Alaska Peninsula management areas, state-waters seasons for Pacific cod, lingcod, black rockfish and dark rockfish *S. ciliatus* are established by regulation. State-waters seasons for Pacific cod are prosecuted exclusively within state waters of Alaska, whereas ADF&G has management authority from shore to the 200 nautical mile boundary of the EEZ in the Gulf of Alaska (GOA) for lingcod, black rockfish, and dark rockfish. In 2019, 19 EOs were issued to regulate groundfish fisheries in the Kodiak, Chignik, and South Alaska Peninsula management areas (Table 1).

During 2019, walleye pollock and Pacific cod were the primary species harvested from state waters in the Kodiak, Chignik, and South Alaska Peninsula areas (Table 2). In state waters, all

directed walleye pollock harvest occurred during parallel seasons, whereas Pacific cod were harvested during both parallel and state-waters seasons.

## **PACIFIC COD**

In the GOA, Pacific cod are managed as a single stock (Shimada and Kimura 1994) but are apportioned as Acceptable Biological Catches (ABCs) among the federal regulatory areas of Eastern Gulf of Alaska (EGOA), Central Gulf of Alaska (CGOA), and Western Gulf of Alaska (WGOA; Figure 1). The 2019 GOA Pacific cod ABC of 37.48 million pounds was apportioned 45.1% to the CGOA (16.90 million pounds), 44.9% to the WGOA (16.83 million pounds), and 10% to the EGOA (3.74 million pounds; Barbeaux et al. 2018).

Pacific cod ABCs are further apportioned between federal/parallel fisheries and state-waters fisheries. In the CGOA, federal/parallel fisheries receive 75% of the CGOA ABC as Total Allowable Catch (TAC) and state-waters fisheries receive 25% of the CGOA ABC as Guideline Harvest Level (GHL). In the WGOA, federal/parallel fisheries receive 70% of the WGOA ABC and state-waters fisheries receive 30% of the WGOA ABC. Federal/parallel TACs are further apportioned by season, gear, and processing activity. Annually, NMFS allocates 60% of the TAC to the spring A season, and the remaining 40% of the TAC is made available for the fall B season. State-waters Pacific cod GHLs in the Kodiak, Chignik, and South Alaska Peninsula areas are not apportioned into A and B seasons.

NMFS conducts an annual stock assessment to establish Pacific cod ABCs. A persistent marine heatwave event from 2014–2016 (commonly referenced as “The Blob”) led to poor recruitment due to increased natural mortality (Barbeaux et al. 2018). Following this heatwave event, data from the 2017 NMFS GOA bottom trawl survey estimated Pacific cod abundance and biomass to be the lowest in the survey time series (Barbeaux et al. 2018). As a result, the 2018 and 2019 GOA ABCs were substantially reduced, resulting in historical low Pacific cod TACs, GHLs, participation, and harvest (Tables 3, 4, and 9).

The 2019 CGOA Pacific cod harvest, including federal, parallel, and state-waters seasons, totaled 15.36 million pounds, which was 91% of the CGOA ABC (Table 3). Approximately 40% of the CGOA total harvest was taken from state waters. Total Pacific cod harvest from the WGOA during 2019 totaled 15.79 million pounds, which was 94% of the WGOA ABC (Table 4). Approximately 42% of the total WGOA harvest was taken from state waters.

## **PARALLEL SEASON**

### **Background**

ADF&G annually issues an EO establishing parallel Pacific cod seasons in state waters of the Kodiak, Chignik, and South Alaska Peninsula management areas (EO# 4-GF-01-19; Table 1). This EO adopts most federal fishing regulations including season dates, allowable gear, area closures, bycatch limits, or other regulations the commissioner determines reasonably necessary to accommodate federal fishery management measures in state waters. Most NMFS area closures, including closures for Steller sea lion (SSL) protection, are in effect during parallel fisheries. Federal seabird avoidance requirements are recognized by the state during parallel Pacific cod fisheries as are vessel monitoring system (VMS) and catch reporting requirements. Federal sector allocations based on processing activity are not recognized in parallel Pacific cod fisheries. State waters adjacent to federal waters open to a gear type, for either catcher processor

(CP) or catcher vessel (CV), are considered open in the parallel fishery for that same gear type regardless of processing activity.

### ***Kodiak Area***

The 2019 Kodiak Area parallel pot gear A season was open from January 1 through January 27, and the parallel jig gear A season was open from January 1 through March 12. The Kodiak Area parallel pot gear B season was open from September 1 through October 12, and the parallel jig gear B season was open from December 16 through December 31 (Appendix B1 and B2).

Harvest of Pacific cod by all gear types during the 2019 parallel fishery within the Kodiak Area totaled 1.07 million pounds (Table 5). Most Pacific cod were harvested using longline gear (45%) and pot gear (44%).

### ***Chignik Area***

The majority of the Chignik Area is located within the CGOA with a small portion located within the WGOA federal management area (Figure 1). The Chignik Area parallel season has separate dates according to location within federal management areas (Appendix B1 and B2). For the Chignik Area located within the CGOA, the 2019 parallel pot gear A season was open from January 1 through January 27 and the parallel jig gear A season was open from January 1 through March 12. The parallel pot gear B season did not open because the state-waters rollover season did not close until October 30. The parallel jig gear B season was open from October 30 through December 31. For the Chignik Area located within the WGOA, the parallel pot gear A season was open from January 1 through January 26 and the parallel jig gear A season was open from January 1 through March 13. The parallel pot gear B season did not open because the state-waters rollover season did not close until October 30. The parallel jig gear B season was open from October 30 through December 31.

The 2019 Chignik Area parallel Pacific cod harvest of 517,520 pounds was harvested by vessels using pot, longline, and trawl gear (Table 6). Chignik Area parallel harvest of Pacific cod was predominantly located in the CGOA, but some parallel harvest in the WGOA did occur.

### ***South Alaska Peninsula Area***

The 2019 South Alaska Peninsula Area parallel A season was open from January 1 through January 26 for pot gear and from January 1 through March 13 for jig gear. The WGOA parallel pot gear B season was open from September 1 through October 20 for pot gear and from June 10 through December 31 for jig gear (Appendix B1 and B2). Harvest of Pacific cod by all gear types during the 2019 South Alaska Peninsula Area parallel season totaled 1.39 million pounds (Table 7). Trawl gear vessels harvested the largest proportion (52%), followed by pot gear vessels (24%).

## **STATE-WATERS SEASON**

### **Background**

State-waters Pacific cod seasons in the Kodiak, Chignik, and South Alaska Peninsula management areas began in 1997. The BOF developed state-waters Pacific cod management plans for each management area (Table 8). Allowable gear types (pot, mechanical jigging, and hand troll gear) and gear limits (60 pots or 5 jig machines) were the same across management

areas, whereas fishing season dates, vessel size, registration exclusivity, GHL allocations and rollover provisions, and gear storage regulations were unique to each management area.

The GHGs for each management area are set as a percentage of the annual federal Pacific cod ABC. State-waters GHGs were initially set at 15% of the ABC established for the federal CGOA or WGOA management areas and were structured to increase incrementally to 20% and then 25% of federal ABCs if harvest in any year exceeded 90% of the established state-waters GHG. By 2003, each management area achieved the maximum GHG increment and GHGs were set at 25% of the WGOA ABC for the South Alaska Peninsula Area and 25% of the CGOA ABC divided among the Kodiak Area (12.5%), Chignik Area (8.75%), and Cook Inlet Area (3.75%). In 2014, the BOF increased the South Alaska Peninsula Area GHG to 30% of the WGOA ABC.

## **2019 State-Waters Pacific Cod Season Overview**

Approximately 8.58 million pounds of Pacific cod were harvested from Kodiak, Chignik, and South Alaska Peninsula areas by 96 vessels during the 2019 state-waters seasons (Table 9). This was a 33% increase in participation and an 8% increase in harvest compared to the 2018 state-waters season, but still well below historical levels of participation and harvest (Table 9). Total 2019 state-waters seasons exvessel value was approximately \$4.29 million.

### ***Kodiak Area***

The 2019 Kodiak Area GHG was 2.11 million pounds (Table 9). Pot and jig gear vessels were each allocated 50% of the total GHG, or 1.06 million pounds (Table 10). Total Pacific cod harvest from the 2019 Kodiak Area state-waters season was 2.12 million pounds taken by 48 vessels with an estimated exvessel value of \$1.20 million based on an average price of \$0.56 per pound (Table 9). Pacific cod were harvested from 26 statistical areas during the season (Table 11). Harvest was well distributed around the Kodiak Archipelago; notable harvest occurred around Shuyak Island (statistical area 525834) and Uganik Bay (statistical area 535732), and south of Cape Ikolik (statistical area 545703; Table 11; Figure 2; Appendix C1).

### **Kodiak Pot Gear Season**

The Kodiak Area state-waters pot gear season opens 7 days after closure of the federal CGOA pot gear A season. The 2019 federal CGOA pot gear A season closed January 27; therefore, the Kodiak Area state-waters Pacific cod pot gear season opened February 3 (Table 12).

A total of 16 vessels participated in the 2019 Kodiak Area state-waters pot gear season; 9 vessels were over 58 feet overall length (OAL) and 7 vessels were 58 feet OAL or less. This was an increase from the previous year but the second-lowest number of participating vessels overall since the start of the fishery in 1997. Pot vessels over 58 feet OAL were restricted to 25% of the total state-waters GHG (528,209 pounds) before September 1. Fleetwide landings ranged from approximately 1,300 to 278,600 pounds per day and averaged 56,621 pounds per day on days when landings occurred. Individual vessel landings ranged from approximately 1,300 to 108,500 pounds with an average landing of 29,254 pounds. The pot gear season closed on February 11 for vessels over 58 feet OAL and on February 15 for vessels 58 feet OAL or less. Pot gear harvest prior to the fall allocation rollover was 1.15 million pounds (109% of the pot GHG allocation; Table 10). The pot gear season was open for 12.5 days (Table 12). The estimated exvessel value of the 2019 pot gear fishery was \$983,000, based on an average exvessel price of \$0.56 per pound (Table 10).

## **Kodiak Jig Gear Season**

The state-waters jig gear season opens 48 hours after the close of the federal CGOA jig gear A season. However, if the federal jig gear season has not closed by March 15, the state-waters season may open based on remaining federal quota or inseason assessment of effort and harvest rate. The federal CGOA jig gear A season closed March 12. Due to low participation, and as a means to increase harvest opportunity, the state-waters Pacific cod jig gear season immediately opened March 12, instead of 48 hours after the federal closure (Table 12).

A total of 33 vessels participated in the 2019 Kodiak state-waters jig gear season, landing 363,646 pounds, 34% of the jig GHl allocation (Table 10). This was a 70% increase in participation and a 92% increase in harvest compared to the 2018 season.

Harvest during the Kodiak jig gear season occurred from mid-March through May. During this time period, the number of landings per week ranged from 1 to 29. Fleetwide landings ranged from approximately 100 to 45,200 pounds per day and averaged 10,650 pounds per day on days when landings occurred. Individual vessel landings ranged from approximately 100 to 20,500 pounds with an average landing of 3,936 pounds. The jig gear season closed at the end of the allocation rollover season on December 16 (Table 12). The estimated exvessel value of the 2019 jig gear fishery was \$215,000 based on an average price of \$0.59 per pound (Table 10).

## **Allocation Rollover**

Provisions in the *Kodiak Area Pacific Cod Management Plan* (5 AAC 28.467) permit additional harvest opportunity if ADF&G determines the GHl will not be attained by the regulatory closure on December 31. The management plan allows unharvested state-waters GHl to be taken by either pot or jig gear after closure of the federal CGOA pot gear B season. In 2019, the federal CGOA pot gear B season closed on October 12; therefore, an allocation rollover season opened to both pot and jig gear on October 12 with approximately 595,000 pounds of unharvest state-waters GHl remaining. Four pot gear vessels harvested 601,367 pounds during the allocation rollover from mid-October until the rollover season closure on December 16, bringing the total 2019 state-water pot harvest to 1,755,259 pounds (Table 10).

## ***Chignik Area***

The 2019 Chignik Area GHl was 1.48 million pounds (Table 9). Vessels using pot gear were allocated 90% of the GHl, or 1.33 million pounds, and vessels using jig gear were allocated 10%, or 147,898 pounds (Table 13). Total Pacific cod harvest from the 2019 Chignik Area state-waters season was 1.39 million pounds (94% of the GHl), taken by 5 pot gear vessels with an estimated exvessel value of \$722,000 based on an average price of \$0.52 per pound (Table 9). Harvest occurred in 5 statistical areas during the 2019 state-waters season. Although a large portion of statistical area level harvest data is confidential, 55% of the harvest occurred near Mitrofanina Island (statistical area 585531; Table 14; Appendix C2).

## **Chignik Pot Gear Season**

The Chignik Area state-waters pot gear season opens 7 days after closure of the federal CGOA pot gear A season or March 1, whichever is later. The 2019 federal CGOA pot gear A season closed January 27; therefore, the Chignik Area state-waters Pacific cod pot gear season opened March 1 (Table 15).

A total of 5 vessels participated in the 2019 Chignik Area state-waters pot gear season (Table 13). All effort and harvest occurred during March. Fleetwide landings ranged from approximately 45,600 to 318,900 pounds per day and averaged 154,303 pounds per day on days when landings occurred. Individual vessel landings ranged from approximately 3,100 to 175,100 pounds with an average landing of 60,379 pounds. Harvest at the time of the pot gear closure on March 13 was 1.39 million pounds (104% of the GHL allocation; Table 13). The pot gear season was open for 13 days (Table 15).

### **Chignik Jig Gear Season**

The 2019 Chignik Area state-waters jig gear season opened, by regulation, on March 15 and closed on October 30 (Table 15). No vessels participated in the 2019 Chignik Area directed jig gear season (Table 13).

### **Allocation Rollover**

Provisions in the *Chignik Area Pacific Cod Management Plan* (5 AAC 28.537) permit additional harvest opportunity if ADF&G determines the GHL will not be attained by the regulatory closure date of October 30. The management plan allows unharvested GHL to be taken by either pot or jig gear starting August 15. In 2019, the rollover fishery was open from August 15 through October 30; however, no harvest occurred.

### ***South Alaska Peninsula Area***

The 2019 South Alaska Peninsula Area GHL was 5.05 million pounds (Table 9). Vessels using pot gear were allocated 85% of the total GHL, or 4.29 million pounds; vessels using jig gear were allocated 15% of the GHL, or 757,000 pounds (Table 16). The 2019 total harvest of 5.07 million pounds (101% of the GHL) was taken by 43 vessels with an estimated exvessel value of \$2.39 million based on an average exvessel price of \$0.47 per pound (Table 9). Harvest occurred in 16 statistical areas with notable harvests near Cape Pankof and Ikatan Bay (statistical area 635432) and Nagai Island (statistical area 605502; Table 17; Figure 3; Appendix C3).

### **South Alaska Peninsula Pot Gear Season**

Unless delayed by weather, the state-waters pot gear season opens March 7 or seven days after the close of the federal WGOA pot gear season, whichever is later. The 2019 federal WGOA pot gear A season closed January 26; therefore, the South Alaska Peninsula Area state-waters Pacific cod pot gear season opened March 7 (Table 18).

A total of 24 vessels participated in the 2019 South Alaska Peninsula Area state-waters pot gear season (Table 16). Fleetwide landings ranged from approximately 119,200 to 1,065,000 pounds per day, and averaged 524,059 pounds per day on days when landings occurred. Individual vessel landings ranged from approximately 1,900 to 130,700 pounds, with an average landing of 54,843 pounds. Harvest at the time of the pot gear season closure on March 13 was 4.72 million pounds, or approximately 110% of the pot gear GHL allocation. The pot gear season was open for 6.5 days (Table 18). The estimated exvessel value of the pot gear fishery was \$2.22 million based on an average price of \$0.47 per pound (Table 16).

### **South Alaska Peninsula Jig Gear Season**

The state-waters jig gear season opens 48 hours after the close of the federal WGOA jig gear season, unless delayed by weather. However, if the federal jig season has not closed by March 15, the state-waters season may open based on remaining federal quota or inseason

assessment of effort and harvest rate. The 2019 federal WGOA jig gear A season closed on March 13. Unlike prior seasons and as a means to increase harvest opportunity, the state-waters Pacific cod jig gear season immediately opened March 13 (Table 18).

A total of 21 vessels participated in the 2019 South Alaska Peninsula state-waters jig gear season. The 2019 season jig gear harvest was 358,447 pounds, 47% of the jig gear GHL allocation (Table 16). Fleetwide landings ranged from approximately 40 to 39,800 pounds per day and averaged 13,276 pounds per day on days when landings occurred. Individual vessel landings ranged from approximately 40 to 18,100 pounds, with an average landing of 4,371 pounds. The jig gear season closed on April 22 when the South Alaska Peninsula GHL was achieved (Table 18). The full 2019 jig gear GHL allocation was not available to jig gear vessels due to the pot gear fleet overharvesting the pot gear GHL allocation (Table 16). The estimated exvessel value of the 2019 jig gear fishery was \$172,000 based on an average price of \$0.48 per pound (Table 16).

### **Allocation Rollover**

Provisions in the *South Alaska Peninsula Area Pacific Cod Management Plan* (5 AAC 28.577) permit additional harvest opportunity if ADF&G determines the GHL will not be attained by the regulatory closure date of December 31. The management plan allows unharvested state-waters GHL to be taken by either pot or jig gear after closure of the federal WGOA pot gear B season. In 2019, the state-waters GHL was achieved by April 22, precluding the need for an allocation rollover.

### ***Pacific Cod Harvest Monitoring***

During the 2019 Pacific cod seasons, daily harvest reports were obtained from vessel operators using pot gear. Harvest reports included daily number of pots pulled, pounds retained, and fishing location for each vessel. Processor and vessel catch reports were subsequently referenced against landing data derived from the Interagency Electronic Reporting System (eLandings) to track daily catch and forecast harvests.

Dockside sampling was conducted in the port of Kodiak throughout the state-waters season and in Sand Point and King Cove during periods of high fishing effort. Pacific cod harvested in the Chignik Area were opportunistically sampled if those fish were landed in Sand Point or Kodiak. Dockside samplers conducted confidential interviews with vessel operators to obtain information on catch location, catch per unit effort, and bycatch. Samplers also collected data on fish length, weight, sex, age, and reproductive status. Sampling goals include 500 otolith samples for each gear type (jig and pot) for the Kodiak Area, and 500 otolith samples for combined gear types per area for Chignik and the South Alaska Peninsula.

During 2019, dockside sampling staff in Kodiak, King Cove, and Sand Point conducted 32 skipper interviews and collected biological samples from 59 deliveries. Samplers collected 3,374 fish lengths, 1,720 individual fish weights, extracted 1,720 otolith pairs for age determination, and made 1,719 observations of sex and maturity.

In 2019, average length of Pacific cod in the Kodiak Area was 64 cm, similar to the recent 10-year average (63 cm; Figure 4). Average length of sampled Pacific cod in the Chignik Area (70 cm) and South Alaska Peninsula area (70 cm), were greater than the 10-year averages (63 cm and 64 cm, respectively; Figures 5 and 6). Preliminary results indicate the age of Pacific cod

sampled from all areas during 2019 harvest ranged from three to twelve years, whereas the recent 10-year averages ranged between age two to eleven years (Figures 7, 8, and 9).

## **BLACK ROCKFISH**

In 1998, ADF&G assumed management authority for black rockfish within the EEZ of the GOA. Beginning that year, ADF&G assigned GHGs to state groundfish management areas within the GOA to better distribute effort (Figure 10). Since 2008, the BOF has provided further structure to black rockfish fishery regulations through registration requirements, trip limits, and bycatch limits (Table 19).

The Kodiak Area is divided into seven districts: Afognak, Northeast, Eastside, Southeast, Southwest, Westside, and Mainland. The Chignik Area is divided into three districts: Mitrofanina, Chignik Bay, and Sutwik Island (Figure 10). ADF&G annually establishes district GHGs for the South Alaska Peninsula Eastern District and five districts of the Kodiak Area. Two districts in the Kodiak Area, Southwest and Mainland districts, only allow harvest of black rockfish as bycatch in other fisheries. For the Chignik Area, there are no district GHGs but rather an area GHG with district harvest caps (Table 19).

Jig and hand troll gear are the only legal gear in the directed black rockfish fishery. All black rockfish harvested by jig gear, either through directed effort or as bycatch to other jig gear fisheries (i.e., Pacific cod or dusky rockfish *Sebastes variabilis*), are managed together under area or district GHGs. Black rockfish bycatch harvest from non-jig gear fisheries (i.e., trawl, longline) does not accrue against area or district GHGs. Districts are individually managed and closed to directed fishing upon achieving the district GHG or district harvest cap. Additionally, individual area or district bycatch limits may be reduced inseason to prevent exceeding GHGs.

### **2019 Black Rockfish Overview**

The black rockfish fishery in the Kodiak, Chignik, and South Alaska Peninsula Eastern District areas opened January 1, 2019. Guideline harvest levels were attained in four districts in the Kodiak Area; GHGs were not fully harvested in the Chignik Area or South Alaska Peninsula Eastern District (Table 20).

#### ***Kodiak Area***

Twelve vessels harvested a total of 109,899 pounds of the 120,000-pound GHG during the 2019 Kodiak Area black rockfish fishery (Table 21; Figure 11). Seven vessels harvested 107,190 pounds (89% of the GHG) during the directed fishery with the remainder taken as bycatch to other jig gear fisheries (Table 20). Directed harvest in the Afognak, Northeast, Eastside, and Southeast districts occurred from late January through July, although effort was concentrated from February to April. The estimated exvessel value of the 2019 black rockfish fishery was approximately \$98,000 based on an average price of \$0.89 per pound (Table 21).

#### ***Chignik Area***

The 2019 Chignik Area black rockfish GHG was 100,000 pounds; however, there was no effort or harvest (Table 22).

#### ***South Alaska Peninsula Area***

Four vessels harvested a total of 15,916 pounds of a 75,000-pound GHG during the 2019 South Alaska Peninsula Area black rockfish fishery (Table 23). Harvest occurred sporadically from



late-April through mid-August. The estimated exvessel value of the 2019 black rockfish fishery was approximately \$7,000 based on an average price of \$0.45 per pound (Table 23).

### ***Black Rockfish Harvest Monitoring***

Black rockfish harvest is monitored through fish ticket records, vessel registrations, mandatory directed fishery logbooks, and dockside sampling. Information collected by dockside samplers includes fish length, weight, sex, age, and reproductive status. The 2019 black rockfish dockside data collection was primarily focused on the Kodiak Area due to limited availability of dockside staff in Sand Point.

During 2019, dockside sampling staff in Kodiak collected biological samples from 29 deliveries from the Kodiak Area. Samplers collected 2,819 fish lengths and 1,016 individual fish weights, extracted 1,019 otolith pairs for age determination, and made 1,019 observations of sex and maturity.

Black rockfish sampled from the Kodiak Area during 2019 averaged 43 cm in length, shorter than the recent 10-year average of 47 cm (Figure 12). Sampled ages ranged from 5 to 47 years with several predominant age classes (6, 7, 10, and 11) in the catch, making up 63% of the samples (Figure 13). Average age of sampled black rockfish in the Kodiak Area was 14 years, younger than the 10-year average of 17 years (Figure 13).

## **LINGCOD**

Commercial regulations in the Kodiak and Chignik areas prohibit retention of lingcod prior to July 1 and require retained lingcod to be a minimum of 35 inches in total length. These regulations buffer against commercial exploitation during nest-guarding and ensure only mature fish are harvested. The South Alaska Peninsula Area is believed to be near the western limit of lingcod distribution (Mecklenburg et al. 2002) and harvests are uncommon; therefore, seasonal retention and size limit regulations are unnecessary.

Since 1988, harvests of lingcod in the Kodiak, Chignik, and South Alaska Peninsula areas have generally remained below 100,000 pounds annually. Although jig and hand troll gear may be used to target lingcod, most harvest occurs as bycatch in other commercial groundfish fisheries. The 2019 lingcod harvest in the Kodiak, Chignik, and South Alaska Peninsula areas was 39,194 pounds (Table 24).

## **PARALLEL WALLEYE POLLOCK FISHERIES**

State waters are opened for parallel walleye pollock seasons concurrent with adjacent federal seasons. Annual harvest limits are allocated across four seasons (A, B, C, and D seasons). In some years and areas, more than one opening occurred within a season to ensure the full seasonal allocation was harvested (Table 25). Walleye pollock were primarily harvested by vessels using trawl gear.

The 2019 retained walleye pollock harvest totaled 193.9 million pounds in the CGOA and 48 million pounds in the WGOA (Tables 26 and 27). Approximately 7% (13.8 million pounds) of the total 2019 CGOA walleye pollock harvest and 10% (4.7 million pounds) of the total 2019 WGOA harvest occurred in state waters.

In recent years, commissioner permits have been issued to harvest pollock with jig and seine gear in state waters. These experimental fisheries are designed to provide an opportunity for smaller

vessels to target pollock. In 2019, one commissioner permit (jig gear) was issued for the Kodiak Area, but harvest was nominal.

## REFERENCES CITED

- Barbeaux, S., K. Aydin, B. Fissel, K. Holsman, B. Laurel, W. Palsson, K. Shotwell, Q. Yang, and S. Zador. 2018. Assessment of the Pacific cod stock in the Gulf of Alaska. [In] Plan team for the groundfish fisheries of the Gulf of Alaska (compiler). Stock assessment and fishery evaluation report for the groundfish resources of the Gulf of Alaska. North Pacific Fishery Management Council, Anchorage.
- Mecklenburg, C. W., T. A. Mecklenburg, and L. K. Thorsteinson. 2002. Fishes of Alaska. American Fisheries Society, Bethesda, Maryland.
- MSFCMA (Magnuson–Stevens Fishery Conservation and Management Act). 2007. Magnuson–Stevens Fishery Conservation and Management Act as amended through January 12, 2007. U. S. Department of Commerce, NOAA Technical Memorandum.
- Shimada, A. M., and D. K. Kimura. 1994. Seasonal movements of Pacific cod (*Gadus macrocephalus*) in the eastern Bering Sea and adjacent waters based on tag-recapture data. Fishery Bulletin 92:800–816.

## **TABLES AND FIGURES**

Table 1.—Kodiak, Chignik, and South Alaska Peninsula management areas groundfish emergency orders summary, 2019.

Emergency order	Effective date	Explanation
4-GF-01-19	January 1, 2019	Established parallel commercial groundfish fishing seasons and bycatch limits in the Kodiak, Chignik, South Alaska Peninsula, and Bering Sea-Aleutian Islands areas
4-GF-03-19	March 7, 2019	Opened South Alaska Peninsula state-waters Pacific cod season to pot gear
4-GF-04-19	February 3, 2019	Opened Kodiak Area Pacific cod season to pot gear
4-GF-05-19	March 1, 2019	Opened Chignik state-waters Pacific cod season to pot gear
4-GF-06-19	February 11, 2019	Closed Kodiak Area state-waters Pacific cod season to vessels greater than 58 feet to pot gear
4-GF-07-19	February 15, 2019	Closed Kodiak Area state-waters Pacific cod season to pot gear
4-GF-09-19	March 10, 2019	Opened Kodiak Area state-waters Pacific cod season to jig gear
4-GF-10-19	March 13, 2019	Opened South Alaska Peninsula state-waters Pacific cod season to jig gear
4-GF-12-19	March 13, 2019	Closed South Alaska Peninsula state-waters Pacific cod season to pot gear
4-GF-13-19	March 13, 2019	Closed Chignik state-waters Pacific cod season to pot gear
4-GF-15-19	March 29, 2019	Closed directed black rockfish fishery and reduced black rockfish bycatch allowance for vessels using jig gear, from 20% to 5%, in the Eastside District of the Kodiak Area
4-GF-16-19	April 22, 2019	Closed South Alaska Peninsula state-waters Pacific cod season to jig gear
4-GF-17-19	April 23, 2019	Closed directed black rockfish fishery and reduced black rockfish bycatch allowance for vessels using jig gear, from 20% to 5%, in the Southeast District of the Kodiak Area
4-GF-20-19	June 13, 2019	Designated Kodiak Area as a nonexclusive registration area for vessels targeting Pacific cod with jig gear
4-GF-21-19	August 15, 2019	Removed gear limits and the harvest allocation between pot and jig gear for the remainder of the Chignik Area state-waters Pacific cod season
4-GF-22-19	August 15, 2019	Increased trip limit from 5,000 pounds to 7,000 pounds for vessels targeting black rockfish in the Westside District of the Kodiak Area
4-GF-23-19	August 23, 2019	Closed directed black rockfish fishery and reduced black rockfish bycatch allowance for vessels using jig gear, from 20% to 5%, in the Northeast District of the Kodiak Area
4-GF-24-19	October 12, 2019	Removed gear limits and the harvest allocation between pot and jig gear for the remainder of the Kodiak Area state-waters Pacific cod season
4-GF-25-19	December 16, 2019	Closed Kodiak Area state-waters Pacific cod season for vessels using pot and jig gear

Notes: Omitted emergency orders (e.g., 4-GF-02-19) enacted for management areas outside of Kodiak, Chignik, and South Alaska Peninsula.

Table 2.—Top 30 species harvested, by weight in pounds, as reported on groundfish fish tickets, from state waters of Kodiak, Chignik, and South Alaska Peninsula (SAP) groundfish management areas, 2019.

Species	Kodiak	Chignik	SAP	Total
Walleye pollock	12,257,088	1,586,152	4,683,201	18,526,442
Pacific cod	3,188,546	1,906,246	6,463,639	11,558,431
Pacific halibut	1,127,975	176,332	642,256	1,946,563
Black rockfish	107,852	187	15,908	123,947
Arrowtooth flounder	84,352	11,518	6,382	102,252
Octopus spp.	87,475	5,725	2,218	95,418
Flathead sole	22,053	1,894	6,329	30,276
Dusky rockfish	26,725	CF	CF	26,750
Pacific ocean perch	20,411	4,086	259	24,756
Dark rockfish	13,422	0	0	13,422
Longnose skate	10,294	CF	251	10,545
Jellyfish spp.	5,020	5,020	389	10,430
Sablefish	9,250	248	842	10,340
Capelin	9,300	0	0	9,300
Chinook salmon	3,007	1,291	3,907	8,204
Yelloweye rockfish	4,778	1,439	1,625	7,842
Big skate	6,916	CF	611	7,527
Herring Bycatch	6,935	0	CF	6,935
Rex sole	3,851	210	CF	4,061
Pacific sleeper shark	CF	0	0	CF
Spiny dogfish	1,506	337	0	1,843
Chum salmon	677	CF	776	1,453
Rougheye rockfish	1,227	25	72	1,324
Lingcod	1,078	0	CF	1,078
Euchalon	CF	CF	0	1,056
Lumpsucker	766	CF	100	866
Squid	65	472	231	768
English Sole	CF	0	CF	656
Sculpin spp.	156	147	302	605
Salmon Shark	569	0	0	569

Notes: Weights reported in whole fish pounds; discards at sea excluded; CF = Confidential; data are confidential when fewer than three vessels participated; total fish pounds do not include confidential data.

Table 3.—Central Gulf of Alaska Management Area federal and state-waters Pacific cod harvest, in millions of pounds, 1990–2019.

Year	Federal waters		State waters		Total harvest	ABC	Discards at sea
	Harvest	% of total	Harvest	% of total			
1990	79.79	87.1%	11.82	12.9%	91.61	130.95	0.58
1991	81.24	80.6%	19.55	19.4%	100.79	106.48	0.51
1992	73.12	81.6%	16.53	18.4%	89.65	85.40	0.46
1993	60.31	83.9%	11.60	16.1%	71.91	77.50	0.66
1994	50.28	79.6%	12.89	20.4%	63.16	68.89	0.81
1995	72.84	77.0%	21.76	23.0%	94.60	100.69	0.79
1996	71.93	81.1%	16.76	18.9%	88.70	94.58	3.22
1997	76.64	75.7%	24.59	24.3%	101.24	113.20	1.83
1998	72.63	74.5%	24.90	25.5%	97.53	108.20	0.39
1999	71.03	67.6%	34.08	32.4%	105.11	117.22	0.17
2000	56.32	72.2%	21.71	27.8%	78.03	96.01	0.45
2001	50.00	78.0%	14.08	22.0%	64.08	85.20	0.80
2002	42.44	70.0%	18.18	30.0%	60.62	69.84	1.11
2003	41.97	67.6%	20.14	32.4%	62.11	64.02	0.99
2004	47.26	66.1%	24.19	33.9%	71.45	78.93	0.49
2005	38.94	61.9%	24.00	38.1%	62.94	73.01	0.24
2006	37.21	62.5%	22.29	37.5%	59.50	83.49	0.14
2007	43.58	65.4%	22.99	34.6%	66.57	83.49	0.41
2008	45.21	63.6%	25.84	36.4%	71.05	83.56	1.16
2009	35.33	59.9%	23.68	40.1%	59.02	69.50	1.23
2010	63.34	63.9%	35.74	36.1%	99.08	108.10	0.94
2011	66.87	59.9%	44.86	40.1%	111.73	118.64	0.48
2012	67.86	58.8%	47.51	41.2%	115.38	125.53	0.44
2013	54.64	67.0%	26.85	33.0%	81.49	108.66	0.88
2014	65.95	64.8%	35.77	35.2%	101.72	117.07	2.62
2015	58.61	57.9%	42.64	42.1%	101.26	135.19	1.14
2016	33.81	46.4%	39.05	53.6%	72.86	108.71	0.14
2017	26.41	59.2%	18.20	40.8%	44.61	97.40	0.11
2018	9.68	64.9%	5.25	35.1%	14.93	17.90	0.30
2019	9.29	60.5%	6.07	39.5%	15.36	16.90	0.72

Notes: Weights reported in whole fish pounds; discards at sea excluded from all columns except the *Discards at sea* column; state and federal harvests may not add to total due to rounding; ABC = Acceptable Biological Catch.

Table 4.—Western Gulf of Alaska Management Area federal and state-waters Pacific cod harvest, in millions of pounds, 1990–2019.

Year	Federal waters		State waters		Total harvest	ABC	Discards at sea
	Harvest	% of total	Harvest	% of total			
1990	72.20	84.6%	13.13	15.4%	85.33	65.48	0.74
1991	71.95	94.4%	4.29	5.6%	76.24	56.67	0.32
1992	59.73	82.0%	13.15	18.0%	72.87	51.80	0.74
1993	37.90	95.3%	1.88	4.7%	39.78	41.25	0.18
1994	24.88	77.3%	7.32	22.7%	32.20	36.67	0.15
1995	35.68	79.9%	8.99	20.1%	44.67	44.24	0.20
1996	35.28	73.2%	12.92	26.8%	48.20	41.56	0.29
1997	47.34	70.8%	19.55	29.2%	66.88	62.89	0.37
1998	39.98	68.9%	18.06	31.1%	58.04	60.11	0.08
1999	39.73	65.2%	21.16	34.8%	60.90	65.12	0.04
2000	33.73	54.7%	27.90	45.3%	61.63	60.64	0.07
2001	23.02	53.5%	19.97	46.5%	42.99	53.81	0.03
2002	26.32	55.4%	21.22	44.6%	47.54	49.52	0.07
2003	17.55	40.4%	25.93	59.6%	43.48	45.40	0.07
2004	17.11	37.8%	28.16	62.2%	45.27	49.85	0.05
2005	16.49	42.5%	22.29	57.5%	38.77	46.11	0.05
2006	11.23	28.8%	27.74	71.2%	38.96	59.21	0.04
2007	15.83	41.6%	22.31	58.4%	38.14	59.21	0.05
2008	21.53	50.1%	21.47	49.9%	43.00	57.17	0.06
2009	17.11	42.4%	23.24	57.6%	40.35	47.55	0.05
2010	26.00	44.0%	33.16	56.0%	59.16	61.03	0.36
2011	28.42	43.7%	36.63	56.3%	65.05	66.98	0.10
2012	30.93	54.7%	25.59	45.3%	56.53	61.80	0.07
2013	31.37	55.2%	25.41	44.8%	56.78	62.35	0.12
2014	32.92	49.0%	34.24	51.0%	67.16	72.19	0.08
2015	28.75	46.0%	33.77	54.0%	62.52	85.32	0.14
2016	27.69	45.3%	33.49	54.7%	61.18	89.29	0.05
2017	30.83	54.0%	26.24	46.0%	57.07	80.01	0.03
2018	9.37	58.0%	6.78	42.0%	16.15	17.82	0.08
2019	9.13	57.9%	6.65	42.1%	15.79	16.83	0.09

Notes: Weights reported in whole fish pounds; discards at sea excluded from all columns except the *Discards at sea* column; state and federal harvests may not add to total due to rounding; ABC = Acceptable Biological Catch.

Table 5.—Kodiak Area Pacific cod harvest, in pounds, by gear type, during parallel Pacific cod seasons, 1997–2019.

Year	Gear type				Total
	Pot	Longline	Trawl	Jig	
1997	8,311,893	1,894,214	857,688	CF	11,063,795
1998	4,998,323	2,166,389	799,570	27,246	7,991,527
1999	8,102,503	2,579,782	1,226,554	27,963	11,936,802
2000	4,459,508	3,577,798	247,475	79,365	8,364,146
2001	2,800,868	2,284,067	213,454	22,414	5,320,803
2002	2,324,281	1,310,940	270,531	5,926	3,911,678
2003	3,104,572	2,700,479	428,503	16,045	6,249,599
2004	2,329,223	3,857,610	498,690	244,600	6,930,123
2005	3,890,960	3,508,713	366,751	298,326	8,064,750
2006	4,429,520	5,423,320	398,582	190,037	10,441,459
2007	5,018,241	3,420,699	150,583	68,583	8,658,106
2008	3,317,365	1,941,762	305,023	38,267	5,602,418
2009	2,741,107	2,910,195	139,002	70,765	5,861,069
2010	5,142,268	3,319,129	115,026	232,643	8,809,066
2011	7,804,342	4,747,813	108,274	1,080,840	13,741,269
2012	6,401,191	8,175,700	32,606	783,464	15,392,961
2013	3,021,936	2,892,600	59,008	66,766	6,040,309
2014	3,425,588	4,189,250	95,711	240,985	7,951,533
2015	9,058,728	3,782,261	186,690	742,855	13,770,535
2016	12,098,040	1,411,143	44,068	493,548	14,046,799
2017	5,512,551	1,736,340	4,244	28,539	7,281,674
2018	280,159	942,012	11,603	0	1,233,774
2019	471,411	483,954	48,885	65,691	1,069,641

Notes: Weights reported in whole fish pounds; discards at sea excluded; CF = Confidential; data are confidential in cases where fewer than three vessels participated; total pounds do not include confidential data.



Table 6.—Chignik Area Pacific cod harvest, in pounds, by gear type, during parallel Pacific cod seasons, 1997–2019.

Year	Gear Type				Total
	Pot	Longline	Trawl	Jig	
1997		CF – All Gear Types			651,504
1998		CF – All Gear Types			541,455
1999	822,098	3,056	39,704	0	864,858
2000		CF – All Gear Types			434,483
2001		CF – All Gear Types			174,654
2002		CF – All Gear Types			294,577
2003		CF – All Gear Types			292,112
2004		CF – All Gear Types			211,006
2005		CF – All Gear Types			95,400
2006		CF – All Gear Types			112,499
2007	CF	1,549	CF	0	40,033
2008		CF – All Gear Types			210,326
2009	239,584	63,551	0	0	303,135
2010	564,567	66,398	0	0	630,965
2011	258,963	96,036	CF	CF	357,322
2012	CF	14,631	37,626	CF	88,878
2013	395,052	25,716	20,018	0	440,785
2014	1,729,086	6,828	0	0	1,735,914
2015	1,053,533	14,881	837	0	1,069,251
2016	1,154,775	57,981	5,245	0	1,218,002
2017	352,566	8,587	171	0	361,324
2018	0	11,079	0	0	11,079
2019	CF	CF	CF	0	517,520

Notes: Weights reported in whole fish pounds; discards at sea excluded; CF = Confidential; data are confidential in cases where fewer than three vessels participated; total pounds include confidential data.

Table 7.—South Alaska Peninsula Area Pacific cod harvest, in pounds, by gear type, during parallel Pacific cod seasons, 1997–2019.

Year	Gear Type				Total
	Pot	Longline	Trawl	Jig	
1997	2,068,400	32,624	7,758,378	CF	9,859,402
1998	4,205,388	522,328	3,867,782	0	8,595,498
1999	3,279,793	34,975	5,308,250	0	8,623,018
2000	5,699,112	236,808	6,698,838	11,499	12,646,257
2001	3,272,010	53,184	2,424,221	340,092	6,089,507
2002	6,051,920	30,456	666,876	411,378	7,160,630
2003	12,966,344	60,803	310,012	92,528	13,429,687
2004	12,887,904	30,455	945,983	397,922	14,262,264
2005	6,175,670	566,138	2,835,871	100,691	9,678,370
2006	9,286,910	233,028	6,366,015	CF	15,885,953
2007	6,559,997	426,535	2,483,748	3,300	9,473,580
2008	6,387,463	626,799	863,671	114,599	7,992,532
2009	8,054,281	2,308,330	654,176	417,515	11,434,302
2010	13,229,552	1,605,590	1,691,696	763,299	17,290,137
2011	17,487,423	375,680	765,222	503,458	19,131,783
2012	5,720,700	358,908	2,761,687	567,920	9,409,215
2013	7,851,502	356,391	700,882	674,577	9,583,352
2014	8,551,709	503,917	1,048,900	1,690,458	11,794,984
2015	8,115,335	211,007	707,076	120,803	9,154,221
2016	7,464,402	462,774	2,185,670	114,765	10,227,611
2017	4,164,565	407,498	1,340,668	106,746	6,019,476
2018	691,392	56,093	407,353	274,989	1,429,827
2019	327,056	46,080	719,310	296,219	1,388,665

Notes: Weights reported in whole fish pounds; discards at sea excluded; CF = Confidential; data are confidential in cases where fewer than three vessels participated; total pounds do not include confidential data.

Table 8.–Kodiak, Chignik, and South Alaska Peninsula areas regulatory development for state-waters and parallel Pacific cod fisheries, 1996–2019.

Year	Regulation
1996	<ul style="list-style-type: none"> <li>– Alaska Board of Fisheries developed state-waters Pacific cod management plans for Kodiak, Chignik, and SAP areas</li> <li>– Kodiak, Chignik, and SAP areas established as exclusive registration areas for state-waters fisheries; suspension of exclusivity allowed after October 30</li> <li>– Kodiak, Chignik, and SAP areas allowable gear for state-waters established; mechanical jigging machines (five machines), hand troll, and pots (60 pots); suspension of gear limits allowed after October 30</li> <li>– Season opening dates established for state-waters fisheries; Kodiak and SAP areas open 14 days after federal season closure; Chignik Area opens April 15</li> <li>– Vessel size limits established for Chignik and SAP state-waters fisheries (<math>\leq 58'</math>); suspension of vessel size limit allowed after October 30</li> <li>– Kodiak Area state-waters GHLL allocated by gear type (50% pot, 50% jig); allocation rollover allowed after August 31</li> </ul>
1997	<ul style="list-style-type: none"> <li>– Kodiak, Chignik, and SAP areas first state-waters fisheries prosecuted</li> </ul>
1998	<ul style="list-style-type: none"> <li>– Season opening dates changed for state-waters fisheries; Kodiak and SAP areas open seven days after federal season closure; Chignik Area opens April 1</li> <li>– SAP Area state-waters GHLL allocated by gear type (85% pot, 15% jig); allocation rollover allowed after August 31</li> </ul>
1999	<ul style="list-style-type: none"> <li>– Chignik Area state-waters season opening date changed to April 15</li> <li>– Chignik Area state-waters GHLL allocated by gear type (85% pot, 15% jig); allocation rollover allowed after August 14</li> <li>– Chignik Area changed to superexclusive registration area for state-waters fishery</li> <li>– Kodiak Area pot gear vessels <math>&gt;58'</math> harvest capped at 25% of state-waters GHLL prior to September 1</li> </ul>
2001	<ul style="list-style-type: none"> <li>– State regulation adopted recognizing Steller sea lion haulouts during parallel fisheries</li> <li>– Chignik Area state-waters season opening date changed to seven days after federal CGOA closure</li> </ul>
2002	<ul style="list-style-type: none"> <li>– Vessel monitoring system (VMS) rules implemented during parallel fisheries</li> <li>– Pot storage requirements liberalized in Kodiak and Chignik areas for transition period between parallel and state-waters fisheries</li> <li>– Chignik Area state-waters season opening date changed to March 1</li> </ul>
2004	<ul style="list-style-type: none"> <li>– Pot storage requirements liberalized in SAP Area for transition period between parallel and state-waters fisheries</li> </ul>
2005	<ul style="list-style-type: none"> <li>– Chignik Area state-waters GHLL allocation changed (90% pot, 10% jig)</li> </ul>
2007	<ul style="list-style-type: none"> <li>– SAP Area 24-hour weather delay prior to state-waters season opening adopted</li> <li>– SAP Area mandatory inseason catch reporting by vessels during state-waters fishery adopted</li> <li>– SAP Area registration requirements changed, prohibiting fishing in another groundfish fishery outside of SAP Area and a portion of Chignik Area</li> </ul>
2010	<ul style="list-style-type: none"> <li>– SAP Area vessel size limit (<math>\leq 58'</math>) for parallel fishery adopted</li> </ul>

-continued-

Table 8.–Page 2 of 2.

Year	Regulation
2011	– Chignik Area vessel size limit ( $\leq 58'$ ) for parallel fishery adopted
2012	– Kodiak Area state-waters season opening dates changed: pot gear opens seven days after federal CGOA pot gear A-season closure; jig gear opens 48 hours after federal CGOA jig gear A-season closure
	– Chignik Area state-waters season opening dates changed: pot gear opens seven days after federal CGOA pot gear A-season closure or March 7, whichever is later
	– SAP Area state-waters season opening dates changed: pot gear opens seven days after federal WGOA pot gear A-season closure or March 7, whichever is later, unless delayed by weather
	– Kodiak, Chignik and SAP areas state-waters season closure dates changed: jig gear closes June 8 or later, based on inseason assessment, to allow parallel jig gear season
2014	– SAP Area state-waters GHL increased to 30% of WGOA ABC
	– Chignik Area state-waters season opening dates changed: pot gear opens seven days after federal CGOA pot gear A-season closure or March 1, whichever is later
	– Chignik and SAP areas pot gear storage regulations changed: vessels may store open and unbaited pots at any depth beginning seven days prior to state-waters season opening
2015	– Chignik Area gear limits removal date changed from after October 30 to after August 14
2016	– Chignik Area reduced waters closed for Steller sea lion haulouts during parallel fishery for vessels that do not possess a FFP
2017	– Kodiak Area nonexclusive registration area designation date changed from October 30 to June 10 for jig gear vessels
2018	– Chignik Area state-waters rollover season closure date changed from September 1 to October 30, or when the GHL is attained, whichever occurs first
	– SAP Area state-waters season opening weather delay provision removed for vessels using jig gear

Notes: SAP = South Alaska Peninsula; GHL = Guideline Harvest Level; CGOA = Central Gulf of Alaska; WGOA = Western Gulf of Alaska; ABC = Acceptable Biological Catch; FFP = Federal Fisheries Permit.

Table 9.—Kodiak, Chignik, and South Alaska Peninsula areas state-waters Pacific cod effort, guideline harvest level (GHL), harvest in pounds, and value, 2000–2019.

	Year	Vessels	Landings	GHL	Harvest <sup>a</sup>	Price per pound <sup>b</sup>	Exvessel value
Kodiak Area	2000	204	1,707	12,001,414	8,562,816	\$0.37	\$3,168,242
	2001	103	669	10,651,083	4,843,741	\$0.35	\$1,695,309
	2002	82	552	8,730,306	8,825,851	\$0.32	\$2,824,272
	2003	128	837	7,991,757	8,154,867	\$0.35	\$2,854,203
	2004	156	1,122	9,865,686	10,033,889	\$0.30	\$3,010,167
	2005	158	1,011	9,126,311	8,548,163	\$0.33	\$2,820,894
	2006	113	646	10,436,959	6,330,518	\$0.41	\$2,595,512
	2007	94	639	10,436,959	6,406,965	\$0.52	\$3,331,622
	2008	111	988	10,444,675	10,548,875	\$0.60	\$6,329,325
	2009	130	971	8,686,489	8,591,477	\$0.34	\$2,921,102
	2010	114	880	13,514,888	13,566,306	\$0.27	\$3,662,903
	2011	161	1,168	14,830,496	15,268,123	\$0.36	\$5,496,524
	2012	179	1,356	15,691,401	15,416,530	\$0.37	\$5,704,116
	2013	88	441	13,582,680	7,277,324	\$0.27	\$1,964,877
	2014	100	753	14,633,165	12,347,200	\$0.34	\$4,198,048
	2015	127	1,046	16,898,432	12,180,136	\$0.34	\$4,141,246
	2016	140	931	13,589,294	10,161,895	\$0.33	\$3,353,425
	2017	48	227	12,174,904	3,839,186	\$0.39	\$1,497,283
	2018	20	56	2,237,118	1,166,191	\$0.52	\$606,419
	2019	48	161	2,112,834	2,118,905	\$0.56	\$1,186,587
Chignik Area	2000	25	163	6,720,792	1,794,759	\$0.31	\$556,375
	2001	26	179	5,964,606	2,648,655	\$0.26	\$688,650
	2002	25	198	4,888,971	4,227,519	\$0.20	\$845,504
	2003	28	257	4,475,384	4,467,571	\$0.28	\$1,250,920
	2004	28	297	6,905,980	5,750,461	\$0.24	\$1,380,111
	2005	23	250	6,388,418	5,787,543	\$0.25	\$1,446,886
	2006	14	206	7,305,871	3,439,521	\$0.34	\$1,169,437
	2007	16	241	7,305,871	5,700,861	\$0.45	\$2,565,387
	2008	25	265	7,311,273	6,838,934	\$0.56	\$3,829,803
	2009	12	123	6,080,542	5,679,676	\$0.24	\$1,363,122
	2010	17	183	9,460,421	9,153,719	\$0.30	\$2,746,116
	2011	32	244	10,381,347	10,346,856	\$0.31	\$3,207,525
	2012	26	204	10,983,981	10,496,608	\$0.36	\$3,778,779
	2013	19	191	9,507,876	8,712,190	\$0.27	\$2,352,291
	2014	13	157	10,243,216	9,593,269	\$0.29	\$2,782,048
	2015	19	213	11,828,903	10,248,382	\$0.27	\$2,767,063
	2016	10	192	9,512,506	8,482,544	\$0.28	\$2,375,112
	2017	11	103	8,522,432	3,253,854	\$0.32	\$1,041,233
	2018	3	19	1,565,982	1,413,366	\$0.46	\$650,148
	2019	5	24	1,478,983	1,388,727	\$0.52	\$722,138

-continued-

Table 9.—Page 2 of 2.

	Year	Vessels	Landings	GHL	Harvest <sup>a</sup>	Price per pound <sup>b</sup>	Exvessel value
South Alaska	2000	90	650	15,156,781	15,044,104	\$0.38	\$5,716,759
Peninsula	2001	121	727	13,448,198	13,464,020	\$0.26	\$3,500,645
Area	2002	103	594	12,381,712	12,715,465	\$0.23	\$2,924,557
	2003	92	604	11,353,806	11,560,663	\$0.27	\$3,121,379
	2004	88	594	12,461,629	12,442,442	\$0.24	\$2,986,186
	2005	74	529	11,527,972	11,436,857	\$0.26	\$2,973,583
	2006	54	386	14,801,285	11,739,736	\$0.38	\$4,461,100
	2007	60	465	14,801,285	12,678,151	\$0.47	\$5,958,731
	2008	97	700	14,292,568	13,302,050	\$0.57	\$7,582,169
	2009	72	514	11,886,774	11,594,124	\$0.25	\$2,898,531
	2010	69	534	15,258,744	15,288,266	\$0.26	\$3,974,949
	2011	82	551	16,744,109	16,806,305	\$0.31	\$5,209,955
	2012	95	644	15,449,995	15,356,768	\$0.34	\$5,221,301
	2013	74	529	15,586,682	15,583,345	\$0.27	\$4,207,503
	2014	73	616	21,657,085	21,949,138	\$0.29	\$6,365,250
	2015	76	759	25,596,991	23,867,585	\$0.28	\$6,682,924
	2016	55	619	26,788,149	22,821,190	\$0.27	\$6,161,721
	2017	49	570	24,002,142	20,196,191	\$0.31	\$6,260,819
	2018	41	182	5,345,273	5,347,934	\$0.42	\$2,246,132
Total Harvest	2019	43	175	5,048,314	5,074,974	\$0.47	\$2,385,238
	2000	314	2,519	33,878,987	25,401,678	\$0.36	\$9,144,604
	2001	246	1,575	30,063,887	20,956,415	\$0.28	\$5,867,796
	2002	208	1,344	26,000,989	25,768,835	\$0.30	\$7,730,651
	2003	248	1,698	23,820,947	24,183,101	\$0.34	\$8,222,254
	2004	272	2,013	29,233,295	28,266,792	\$0.27	\$7,632,034
	2005	253	1,790	27,042,701	25,772,563	\$0.30	\$7,731,769
	2006	179	1,234	32,544,115	21,509,775	\$0.40	\$8,603,910
	2007	170	1,345	32,544,115	24,785,977	\$0.50	\$12,392,989
	2008	232	1,953	32,048,516	30,689,859	\$0.59	\$18,107,017
	2009	213	1,608	26,653,805	25,865,277	\$0.30	\$7,759,583
	2010	199	1,597	38,234,053	38,008,291	\$0.27	\$10,262,239
	2011	275	1,963	41,955,952	42,421,284	\$0.34	\$14,423,237
	2012	300	2,204	42,125,377	41,269,905	\$0.36	\$14,857,166
	2013	180	1,161	38,677,238	31,572,859	\$0.27	\$8,524,672
	2014	186	1,526	46,533,466	43,889,607	\$0.31	\$13,605,778
	2015	222	2,018	54,324,326	46,296,103	\$0.31	\$14,351,792
	2016	205	1,742	49,889,949	41,465,629	\$0.30	\$12,439,689
	2017	107	900	44,699,478	27,289,230	\$0.33	\$9,005,446
	2018	64	257	9,148,373	7,927,492	\$0.43	\$3,408,822
	2019	96	360	8,640,131	8,582,606	\$0.50	\$4,291,303

Notes: Weights reported in whole fish pounds; discards at sea excluded; totals by area may not match number of vessels by gear type in Tables 11, 14, and 17 because a vessel used more than one gear type; GHL = Guideline Harvest Level.

<sup>a</sup> Chignik Area jig vessel harvest excluded in 2006, 2008–2010, 2014–2015, and 2017 due to confidentiality

<sup>b</sup> Price per pound calculated from whole fish pounds sold, excluding bait and meal

Table 10.–Kodiak Area state-waters Pacific cod guideline harvest level (GHL), effort, harvest in pounds, and value, by gear type, 1997–2019.

Year	Gear	GHL	Vessels	Landings	Harvest <sup>a</sup>	% of GHL harvested	Price per pound <sup>b</sup>	Exvessel value
1997	Jig	4,249,410	72	483	1,976,546	46.5%	\$0.23	\$454,606
	Pot	4,249,410	38	243	5,769,129	135.8%	\$0.22	\$1,269,208
1998	Jig	4,057,608	88	662	2,114,685	52.1%	\$0.23	\$486,378
	Pot	4,057,608	47	310	6,070,139	149.6%	\$0.22	\$1,335,431
1999 <sup>c</sup>	Jig	5,860,989	113	793	2,294,837	39.2%	\$0.38	\$872,038
	Pot	5,860,989	77	471	8,492,710	144.9%	\$0.32	\$2,717,667
2000	Jig	6,000,707	139	1,226	2,814,481	46.9%	\$0.40	\$1,125,792
	Pot	6,000,707	69	481	5,748,334	95.8%	\$0.39	\$2,241,850
2001	Jig	5,325,542	69	433	1,252,692	23.5%	\$0.36	\$450,969
	Pot	5,325,542	34	236	3,591,049	67.4%	\$0.33	\$1,185,046
2002	Jig	4,365,153	51	340	1,389,838	31.8%	\$0.28	\$389,155
	Pot	4,365,153	33	212	7,436,013	170.3%	\$0.29	\$2,156,444
2003	Jig	3,995,878	100	688	3,195,605	80.0%	\$0.35	\$1,118,462
	Pot	3,995,878	42	149	4,959,262	124.1%	\$0.32	\$1,586,964
2004	Jig	4,932,843	120	961	4,210,284	85.4%	\$0.34	\$1,431,497
	Pot	4,932,843	47	161	5,823,605	118.1%	\$0.29	\$1,688,846
2005	Jig	4,563,155	117	849	4,570,327	100.2%	\$0.33	\$1,508,208
	Pot	4,563,155	51	162	3,977,835	87.2%	\$0.30	\$1,193,350
2006	Jig	5,218,480	77	477	1,446,881	27.7%	\$0.43	\$622,159
	Pot	5,218,480	41	169	4,883,637	93.6%	\$0.41	\$2,002,291
2007	Jig	5,218,480	63	457	1,249,753	23.9%	\$0.52	\$649,872
	Pot	5,218,480	33	182	5,157,212	98.8%	\$0.41	\$2,114,457
2008	Jig	5,222,338	76	647	2,042,082	39.1%	\$0.61	\$1,245,670
	Pot	5,222,338	37	341	8,506,792	162.9%	\$0.59	\$5,019,007
2009	Jig	4,343,244	94	833	4,450,423	102.5%	\$0.32	\$1,424,135
	Pot	4,343,244	38	138	4,141,054	95.3%	\$0.32	\$1,325,137
2010	Jig	6,757,444	81	707	6,504,733	96.3%	\$0.30	\$1,951,420
	Pot	6,757,444	36	173	7,061,573	104.5%	\$0.25	\$1,765,393
2011	Jig	7,415,248	132	980	7,135,466	96.2%	\$0.35	\$2,497,413
	Pot	7,415,248	46	190	8,132,657	109.7%	\$0.35	\$2,846,430
2012	Jig	7,845,701	145	1,160	7,938,727	101.2%	\$0.38	\$3,016,716
	Pot	7,845,701	45	196	7,477,802	95.3%	\$0.38	\$2,841,565

-continued-

Table 10.—Page 2 of 2.

Year	Gear	GHL	Vessels	Landings	Harvest <sup>a</sup>	% of GHL harvested	Price per pound <sup>b</sup>	Exvessel value
2013	Jig	6,791,340	55	199	587,942	8.7%	\$0.26	\$152,865
	Pot	6,791,340	34	242	6,689,382	98.5%	\$0.26	\$1,739,239
2014	Jig	7,316,583	77	520	3,170,713	43.3%	\$0.35	\$1,109,750
	Pot	7,316,583	28	233	9,176,488	125.4%	\$0.30	\$2,752,946
2015	Jig	8,449,216	100	809	3,879,512	45.9%	\$0.36	\$1,396,624
	Pot	8,449,216	30	236	8,300,600	98.2%	\$0.34	\$2,822,204
2016	Jig	6,794,647	108	747	3,327,887	49.0%	\$0.35	\$1,164,760
	Pot	6,794,647	36	184	6,834,008	100.6%	\$0.33	\$2,255,223
2017	Jig	6,087,452	23	50	101,991	1.7%	\$0.41	\$41,816
	Pot	6,087,452	25	177	3,737,195	61.4%	\$0.39	\$1,457,506
2018	Jig	1,118,559	10	21	29,016	2.6%	\$0.50	\$14,508
	Pot	1,118,559	10	35	1,137,175	101.7%	\$0.52	\$591,331
2019	Jig	1,056,417	33	101	363,646	34.4%	\$0.59	\$214,551
	Pot	1,056,417	16	60	1,755,259	166.2%	\$0.56	\$982,945

Notes: Weights reported in whole fish pounds; discards at sea excluded; GHL = Guideline Harvest Level.

<sup>a</sup> Harvest may include landings made after allocation rollovers

<sup>b</sup> Price per pound calculated from sold whole fish pounds

<sup>c</sup> Beginning in 1999, vessels >58' using pot gear are capped at 25% of the total GHL prior to September 1



Table 11.—Pacific cod effort and harvest in pounds by statistical area, from the Kodiak Area state-waters season, 2019.

Statistical area	Vessels	Landings <sup>a</sup>	Harvest
525834	3	8	466,336
535732	17	30	315,078
545703	3	5	307,269
525733	9	21	124,526
525701	11	21	123,979
525731	7	14	115,388
545701	3	3	111,402
535803	11	18	78,232
535733	5	6	57,095
525806	10	10	36,906
525703	4	5	22,877
535734	3	3	16,851
Other <sup>b</sup>	11	24	342,967
Total	48	161	2,118,906

*Notes:* Weights reported in whole fish pounds; discards at sea excluded; total counts are for the fishery.

<sup>a</sup> Landings may involve multiple statistical areas

<sup>b</sup> A total of 14 statistical areas combined due to confidentiality

Table 12.—Kodiak Area state-waters Pacific cod fishery dates and management actions, by gear type, 1997–2019.

	Pot gear	Jig gear
1997	<i>Fishery Dates:</i> April 4–May 4 September 1–December 31 <i>Management Actions:</i> May 4 - Pot gear season closed when GHl was attained September 1 - Allocation rollover; pot gear season reopened October 31 - Gear limits and exclusive registration lifted	April 4–December 31
1998	<i>Fishery Dates:</i> March 17–April 27 September 1–December 31 <i>Management Actions:</i> April 27 - Pot gear season closed when GHl was attained September 1 - Allocation rollover; pot gear season reopened October 31 - Gear limits and exclusive registration lifted	March 17–December 31
1999	<i>Fishery Dates:</i> March 21–April 29 October 5–December 31 <i>Management Actions:</i> April 29 - Pot gear season closed when GHl was attained September 1 - Jig gear season closed for parallel B season October 5 - Pot and jig gear seasons reopened following federal CGOA B season closure October 31 - Gear limits and exclusive registration lifted	March 21–September 1 October 5–December 31
2000	<i>Fishery Dates:</i> March 11–December 31 <i>Management Actions:</i> October 31 - Gear limits and exclusive registration lifted	March 11–December 31
2001	<i>Fishery Dates:</i> March 11–December 31 <i>Management Actions:</i> October 31 - Allocation rollover; gear limits and exclusive registration lifted	March 11–December 31
2002	<i>Fishery Dates:</i> March 16–May 4 September 1–December 31 <i>Management Actions:</i> May 4 - Pot gear season closed when GHl was attained September 1 - Allocation rollover; pot gear season reopened October 31 - Gear limits and exclusive registration lifted	March 16–December 31

-continued-

Table 12.–Page 2 of 4.

	Pot gear	Jig gear
2003	<i>Fishery Dates:</i> February 16–March 2 <i>Management Actions:</i> March 2 - Pot gear season closed when GHL was attained May 9 - Jig gear season closed when GHL was attained	February 16–May 9
2004	<i>Fishery Dates:</i> February 7–February 22 <i>Management Actions:</i> February 22 - Pot gear season closed when GHL was attained April 20 - Jig gear season closed when GHL was attained	February 7–April 20
2005	<i>Fishery Dates:</i> February 2–February 13 <i>Management Actions:</i> February 13 - Pot gear season closed when GHL was attained April 21 - Jig gear season closed when GHL was attained	February 2–April 21
2006	<i>Fishery Dates:</i> March 7–March 29 <i>Management Actions:</i> March 29 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B season	March 7–September 1
2007	<i>Fishery Dates:</i> March 6–April 8 <i>Management Actions:</i> April 8 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B season	March 6–September 1
2008	<i>Fishery Dates:</i> February 27–March 26 October 5–November 22 <i>Management Actions:</i> March 26 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B season October 5 - Allocation rollover; pot and jig gear seasons reopened following federal CGOA B season closure November 22 - Pot and jig gear seasons closed when GHL was attained	February 27–September 1 October 5–November 22
2009	<i>Fishery Dates:</i> February 3–February 18  <i>Management Actions:</i> February 18 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B-season October 3 - Jig gear season reopened following federal CGOA B-season closure	February 3–September 1 October 3–December 31

-continued-

Table 12.–Page 3 of 4.

	Pot gear	Jig gear
2010	<i>Fishery Dates:</i> February 7–February 23 <i>Management Actions:</i> February 23 - Pot gear season closed when GHL was attained June 5 - Jig gear season closed when GHL was attained	February 7–June 5
2011	<i>Fishery Dates:</i> February 5–February 18 <i>Management Actions:</i> February 18 - Pot gear season closed when GHL was attained April 14 - Jig gear season closed when GHL was attained	February 5–April 14
2012	<i>Fishery Dates:</i> February 17–March 1  <i>Management Actions:</i> March 1 - Pot gear season closed when GHL was attained May 23 - Jig gear season closed when GHL was attained October 12 - Allocation rollover; jig gear season reopened following federal CGOA B season closure	March 8–May 23 October 12–December 31
2013	<i>Fishery Dates:</i> February 17–April 2 <i>Management Actions:</i> April 2 - Pot gear season closed when GHL was attained October 29 - Exclusive registration for jig gear lifted	March 15–December 31
2014	<i>Fishery Dates:</i> February 20–March 19 November 10–December 31 <i>Management Actions:</i> March 19 - Pot gear season closed when GHL was attained November 10 - Allocation rollover; pot gear season reopened following federal CGOA B season closure; gear limits and exclusive registration lifted	March 15–December 31
2015	<i>Fishery Dates:</i> February 23–March 24 <i>Management Actions:</i> March 24 - Pot gear season closed when GHL was attained	March 4–December 31
2016	<i>Fishery Dates:</i> February 8–February 26 <i>Management Actions:</i> February 26 - Pot gear season closed when GHL was attained	March 3–December 31
2017	<i>Fishery Dates:</i> March 2–September 1 <i>Management Actions:</i> September 1 - Pot gear season closed to coordinate with parallel B season opening	March 15–December 31

-continued-

Table 12.–Page 4 of 4.

	Pot gear	Jig gear
2018	<i>Fishery Dates:</i> February 21–March 23 <i>Management Actions:</i> March 23 - Pot gear season closed when GHL was attained	January 1–December 31
2019	<i>Fishery Dates:</i> February 3–February 15 October 12–December 16 <i>Management Actions:</i> February 15 - Pot gear season closed when GHL was attained October 12 - Allocation rollover; pot gear season reopened December 16 - Pot and jig gear seasons closed when GHL was attained	March 12–December 16

*Notes:* GHL = Guideline Harvest Level; CGOA = Central Gulf of Alaska

Table 13.—Chignik Area state-waters Pacific cod guideline harvest level (GHL), effort, harvest in pounds, and value, by gear type, 1997–2019.

Year	Gear	GHL	Vessels	Landings	Harvest <sup>a</sup>	% of GHL harvested	Price per pound <sup>b</sup>	Exvessel value
1997	Jig	5,949,174 <sup>c</sup>	4	14	35,002	19.1%	\$0.18	\$6,300
	Pot		10	60	1,098,970		\$0.18	\$197,815
1998	Jig	5,680,652 <sup>c</sup>	11	59	167,283	98.7%	\$0.18	\$30,111
	Pot		32	236	5,440,796		\$0.17	\$924,935
1999	Jig	8,205,384 <sup>c</sup>	11	56	218,408	78.3%	\$0.32	\$69,891
	Pot		32	396	6,207,176		\$0.29	\$1,800,081
2000	Jig	1,008,119	5	12	38,453	3.8%	\$0.31	\$11,920
	Pot	5,712,673	20	151	1,756,305	30.7%	\$0.30	\$526,892
2001	Jig	894,691	13	55	277,411	31.0%	\$0.27	\$74,901
	Pot	5,069,916	15	124	2,371,243	46.8%	\$0.26	\$616,523
2002	Jig	733,346	14	59	324,199	44.2%	\$0.20	\$64,840
	Pot	4,155,625	12	139	3,903,320	93.9%	\$0.20	\$780,664
2003	Jig	671,308	16	106	433,067	64.5%	\$0.28	\$121,259
	Pot	3,804,076	15	151	4,034,504	106.1%	\$0.26	\$1,048,971
2004	Jig	1,035,897	14	53	141,697	13.7%	\$0.24	\$34,007
	Pot	5,870,083	17	244	5,608,763	95.5%	\$0.23	\$1,290,016
2005	Jig	638,842	9	44	136,948	21.4%	\$0.24	\$32,868
	Pot	5,749,576	15	206	5,650,595	98.3%	\$0.25	\$1,412,649
2006	Jig	730,587	2	4	CF	CF	CF	CF
	Pot	6,575,284	12	202	3,439,521	52.3%	\$0.34	\$1,169,437
2007	Jig	730,587	0	0	0	0.0%	ND	ND
	Pot	6,575,284	16	241	5,700,861	86.7%	\$0.45	\$2,565,387
2008	Jig	731,127	2	3	CF	CF	CF	CF
	Pot	6,580,145	23	262	6,838,934	103.9%	\$0.56	\$3,829,803
2009	Jig	608,054	1	1	CF	CF	CF	CF
	Pot	5,472,488	11	122	5,679,676	103.8	\$0.24	\$1,363,122
2010	Jig	946,042	2	24	CF	CF	CF	CF
	Pot	8,514,379	15	160	9,153,719	107.5	\$0.24	\$2,196,893
2011	Jig	1,038,135	10	45	224,400	21.6	\$0.32	\$71,808
	Pot	9,343,213	23	199	10,122,456	108.3	\$0.32	\$3,239,186
2012	Jig	1,098,398	6	15	266,639	24.3	\$0.30	\$79,992
	Pot	9,885,583	20	189	10,229,969	103.5	\$0.35	\$3,580,489

-continued-

Table 13.—Page 2 of 2.

Year	Gear	GHL	Vessels	Landings	Harvest <sup>a</sup>	% of GHL harvested	Price per pound <sup>b</sup>	Exvessel value
2013	Jig	950,788	0	0	0	0.0%	ND	ND
	Pot	8,557,088	19	191	8,712,190	101.8%	\$0.25	\$2,178,048
2014	Jig	1,024,322	2	3	CF	CF	CF	CF
	Pot	9,218,894	12	154	9,593,269	104.1%	\$0.28	\$2,686,115
2015	Jig	1,182,890	2	6	CF	CF	CF	CF
	Pot	10,646,013	17	207	10,248,382	96.3%	\$0.27	\$2,767,063
2016	Jig	951,251	0	0	0	0.0%	ND	ND
	Pot	8,561,255	10	192	8,482,544	99.1%	\$0.28	\$2,375,112
2017	Jig	852,243	1	2	CF	CF	CF	CF
	Pot	7,670,189	10	101	3,253,854	42.4%	\$0.32	\$1,041,233
2018	Jig	156,598	0	0	0	0.0%	ND	ND
	Pot	1,409,384	3	19	1,413,366	100.3%	\$0.46	\$650,148
2019	Jig	147,898	0	0	0	0.0%	ND	ND
	Pot	1,331,085	5	24	1,388,727	104.3%	0.52	\$722,138

Notes: Weights reported in whole fish pounds; discards at sea excluded; ND = No Data; CF = Confidential; data are confidential when fewer than three vessels participated; GHL = Guideline Harvest Level

<sup>a</sup> Harvest may include landings made after allocation rollovers

<sup>b</sup> Price per pound calculated from whole fish pounds sold, excluding bait and meal

<sup>c</sup> Total GHL; no GHL allocation by gear type during 1997–1999 seasons

Table 14.—Pacific cod effort and harvest in pounds by statistical area, from the Chignik Area state-waters season, 2019.

Statistical area	Vessels	Landings <sup>a</sup>	Harvest <sup>b</sup>
585531	3	13	760,174
Other <sup>c</sup>	3	11	628,552
Total	5	24	1,388,726

*Notes:* Weights reported in whole fish pounds; discards at sea excluded; total counts are for the fishery.

<sup>a</sup> Landings may involve multiple statistical areas

<sup>b</sup> Harvest is from pot gear only

<sup>c</sup> A total of 4 statistical areas combined due to confidentiality



Table 15.–Chignik Area state-waters Pacific cod fishery dates and management actions, by gear type, 1997–2019.

	Pot gear	Jig gear
1997	<i>Fishery Dates:</i> April 15–June 15 August 1–December 31 <i>Management Actions:</i> August 1 - Pot and jig gear seasons reopened to harvest remaining GHL October 31 - Vessel size limit, gear limits, and exclusive registration lifted	
		April 15–June 15 August 1–December 31
1998	<i>Fishery Dates:</i> April 1–April 26 <i>Management Actions:</i> April 26 - Pot and jig gear seasons closed when pot GHL was attained May 20 - Jig gear season reopened	
		April 1–April 26 May 20–December 31
1999	<i>Fishery Dates:</i> April 15–September 1 October 5–December 31 <i>Management Actions:</i> September 1 - Pot and jig gear seasons closed for parallel B season October 5 - Pot and jig gear seasons reopened following federal CGOA B season closure October 31 - Vessel size limit, gear limits and exclusive registration lifted	
		April 15–September 1 October 5–December 31
2000	<i>Fishery Dates:</i> April 15–December 31 <i>Management Actions:</i> October 31 - Vessel size limit and gear limits lifted	
		April 15–December 31
2001	<i>Fishery Dates:</i> March 11–December 31 <i>Management Actions:</i> October 31 - Vessel size limit and gear limits lifted	
		March 11–December 31
2002	<i>Fishery Dates:</i> March 1–December 31 <i>Management Actions:</i> October 31 - Vessel size limit and gear limits lifted	
		March 1–December 31
2003	<i>Fishery Dates:</i> March 1–April 11 <i>Management Actions:</i> April 11 - Pot gear season closed when GHL was attained June 4 - Jig gear season closed when GHL was attained	
		March 1–June 4

-continued-

Table 15.–Page 2 of 4.

	Pot gear	Jig gear
2004	<i>Fishery Dates:</i> March 1–May 13 August 15–December 31 <i>Management Actions:</i> May 13 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened October 31 - Vessel size limit and gear limits lifted	March 1–December 31
2005	<i>Fishery Dates:</i> March 1–May 10 August 15–December 31 <i>Management Actions:</i> May 10 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened October 31 - Vessel size limit and gear limits lifted	March 1–December 31
2006	<i>Fishery Dates:</i> March 1–September 1 <i>Management Actions:</i> August 15 - Allocation rollover September 1 - Pot and jig gear seasons closed for parallel B season	March 1–September 1
2007	<i>Fishery Dates:</i> March 1–September 1 <i>Management Actions:</i> August 15 - Allocation rollover September 1 - Pot and jig gear seasons closed for parallel B season	March 1–September 1
2008	<i>Fishery Dates:</i> March 1–April 17 August 15–September 1 October 5–December 31 <i>Management Actions:</i> April 17 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened September 1 - Pot and jig gear seasons closed for parallel B season October 5 - Pot and jig gear seasons reopened following federal CGOA B season closure November 4 - Vessel size limit and gear limits lifted	March 1–September 1 October 5–December 31

-continued-

Table 15.–Page 3 of 4.

	Pot gear	Jig gear
2009	<i>Fishery Dates:</i> March 1–April 8 August 15–September 1 October 3–December 31 <i>Management Actions:</i> April 8 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened September 1 - Pot and jig gear seasons closed for parallel B season October 3 - Pot and jig gear seasons reopened following federal CGOA B season closure	
2010	<i>Fishery Dates:</i> March 1–April 6 August 15–September 1 September 13–December 31 <i>Management Actions:</i> April 6 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened September 1 - Pot and jig gear seasons closed for parallel B season September 13 - Pot and jig gear seasons reopened following federal CGOA B season closure	
2011	<i>Fishery Dates:</i> March 1–March 17 August 15–September 1 October 9–December 31 <i>Management Actions:</i> March 17 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened September 1 - Pot and jig gear seasons closed for parallel B season October 9 - Pot and jig gear seasons reopened following federal CGOA B season closure	
2012	<i>Fishery Dates:</i> March 7–March 28 October 12–December 31 <i>Management Actions:</i> March 28 - Pot gear season closed when GHL was attained June 10 - Jig gear seasons closed for parallel B season June 29 - Jig gear season reopened following federal CGOA jig B-season closure October 12 - Allocation rollover; pot gear season reopened following federal CGOA pot B season closure	
2013	<i>Fishery Dates:</i> March 7–March 29 <i>Management Actions:</i> March 29 - Pot gear season closed when GHL was attained	

-continued-

Table 15.–Page 4 of 4.

	Pot gear	Jig gear
2014	<i>Fishery Dates:</i> March 1–March 19 August 15–October 7 <i>Management Actions:</i> March 19 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened October 7 - Pot gear seasons closed for parallel B season	March 15–December 31
2015	<i>Fishery Dates:</i> March 1–March 23 August 15–December 31 <i>Management Actions:</i> March 23 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened	March 15–December 31
2016	<i>Fishery Dates:</i> March 1–April 16 August 15–December 31 <i>Management Actions:</i> April 16 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened	March 15–December 31
2017	<i>Fishery Dates:</i> March 2–December 31 <i>Management Actions:</i> August 15 - Allocation rollover	March 15–December 31
2018	<i>Fishery Dates:</i> March 2–March 24 August 15–December 31 <i>Management Actions:</i> March 24 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened	March 15–December 31
2019	<i>Fishery Dates:</i> March 1–March 13 August 15–October 30 <i>Management Actions:</i> March 13 - Pot gear season closed when GHL was attained August 15 - Allocation rollover; pot gear season reopened	March 15 –December 31

Notes: GHL = Guideline Harvest Level; CGOA = Central Gulf of Alaska

Table 16.—South Alaska Peninsula Area state-waters Pacific cod guideline harvest level (GHL), effort, harvest in pounds, and value, by gear type, 1997–2019.

Year	Gear	GHL	Vessels	Landings	Harvest <sup>a</sup>	% of GHL harvested	Price per pound <sup>b</sup>	Exvessel value
1997	Jig	9,424,762 <sup>c</sup>	43	178	349,468	100.2%	\$0.17	\$59,410
	Pot		51	469	9,097,805		\$0.19	\$1,728,583
1998	Jig	1,352,205	29	126	438,320	32.4%	\$0.16	\$70,131
	Pot	7,662,497	49	309	8,192,803	106.9%	\$0.17	\$1,392,777
1999	Jig	1,953,737	25	166	706,952	36.2%	\$0.29	\$205,016
	Pot	11,071,174	52	388	11,115,028	100.4%	\$0.26	\$2,889,907
2000	Jig	2,273,517	28	145	757,953	33.3%	\$0.28	\$212,227
	Pot	12,883,263	65	505	14,286,151	110.9%	\$0.30	\$4,285,845
2001	Jig	2,017,230	69	417	3,402,427	168.7%	\$0.24	\$816,582
	Pot	11,430,968	55	311	10,421,593	91.2%	\$0.25	\$2,605,398
2002	Jig	1,857,257	63	318	2,045,894	110.2%	\$0.24	\$491,015
	Pot	10,524,455	49	276	10,669,572	101.4%	\$0.21	\$2,240,610
2003	Jig	1,703,071	65	413	3,633,007	213.3%	\$0.27	\$980,912
	Pot	9,650,736	41	191	7,927,656	82.1%	\$0.27	\$2,140,467
2004	Jig	1,869,244	51	317	1,671,461	89.4%	\$0.23	\$384,436
	Pot	10,592,385	43	277	10,770,980	101.7%	\$0.23	\$2,477,325
2005	Jig	1,729,196	40	262	1,230,517	71.2%	\$0.25	\$307,629
	Pot	9,798,776	39	267	10,206,340	104.2%	\$0.25	\$2,551,585
2006	Jig	2,220,193	12	36	99,552	4.5%	\$0.36	\$35,839
	Pot	12,581,092	43	350	11,640,183	92.5%	\$0.36	\$4,190,466
2007	Jig	2,220,193	14	59	254,178	11.4%	\$0.47	\$119,464
	Pot	12,581,092	46	406	12,423,973	98.8%	\$0.47	\$5,839,267
2008	Jig	2,143,885	52	310	1,401,011	65.3%	\$0.57	\$798,576
	Pot	12,148,683	48	390	11,901,039	98.0%	\$0.56	\$6,664,582
2009	Jig	1,783,016	26	185	1,093,382	61.3%	\$0.23	\$251,478
	Pot	10,103,758	47	329	10,500,742	103.9%	\$0.26	\$2,730,193
2010	Jig	2,288,812	34	294	2,315,081	101.1%	\$0.25	\$578,770
	Pot	12,969,933	38	240	12,973,186	100.0%	\$0.25	\$3,243,297
2011	Jig	2,511,616	42	271	2,443,043	97.3%	\$0.28	\$684,052
	Pot	14,232,492	49	280	14,363,262	100.9%	\$0.29	\$4,165,346
2012	Jig	2,317,499	48	345	1,989,884	85.9%	\$0.34	\$676,561
	Pot	13,132,496	53	299	13,366,884	101.8%	\$0.34	\$4,544,741

-continued-

Table 16.—Page 2 of 2.

Year	Gear	GHL	Vessels	Landings	Harvest <sup>a</sup>	% of GHL harvested	Price per pound <sup>b</sup>	Exvessel value
2013	Jig	2,338,002	38	281	2,198,511	94.0%	\$0.27	\$593,598
	Pot	13,248,680	37	248	13,384,834	101.0%	\$0.27	\$3,613,905
2014	Jig	3,248,563	39	295	3,143,144	96.8%	\$0.28	\$880,080
	Pot	18,408,522	38	321	18,805,994	102.2%	\$0.29	\$5,453,738
2015	Jig	3,839,549	35	323	2,215,841	57.7%	\$0.27	\$598,277
	Pot	21,757,443	42	436	21,651,744	99.5%	\$0.28	\$6,062,488
2016	Jig	4,018,222	17	121	430,479	10.7%	\$0.27	\$116,229
	Pot	22,769,927	38	498	22,390,711	98.3%	\$0.27	\$6,045,492
2017	Jig	3,600,321	7	24	54,935	1.5%	\$0.31	\$17,030
	Pot	20,401,820	42	546	20,141,256	98.7%	\$0.31	\$6,243,789
2018	Jig	801,791	17	84	390,736	48.7%	\$0.41	\$160,202
	Pot	4,543,482	25	99	4,958,500	109.1%	\$0.42	\$2,082,570
2019	Jig	757,247	21	82	358,447	47.3%	\$0.48	\$172,055
	Pot	4,291,067	24	93	4,716,527	109.9%	\$0.47	\$2,216,768

Notes: Weights reported in whole fish pounds; discards at sea excluded; GHL = Guideline Harvest Level.

<sup>a</sup> Harvest may include landings made after allocation rollovers

<sup>b</sup> Price per pound calculated from whole fish pounds sold, excluding bait and meal

<sup>c</sup> Total GHL; no GHL allocation by gear type during 1997 season

Table 17.—Pacific cod effort and harvest in pounds by statistical area from the South Alaska Peninsula Area state-waters season, 2019.

Statistical area	Vessels	Landings <sup>a</sup>	Harvest
605502	13	34	1,949,008
635432	5	19	884,999
635434	5	10	372,751
625434	5	9	355,234
605507	13	44	326,087
625401	4	10	230,612
595503	3	4	92,125
605504	11	19	90,742
605533	6	11	73,484
605501	8	9	32,944
Other <sup>b</sup>	6	16	666,989
Total	43	175	5,074,974

Notes: Weights reported in whole fish pounds; discards at sea excluded; total counts are for the fishery.

<sup>a</sup> Some landings include multiple statistical areas

<sup>b</sup> Total of 6 statistical areas combined due to confidentiality

Table 18.—South Alaska Peninsula Area state-waters Pacific cod fishery dates and management actions, by gear type, 1997–2019.

	Pot gear	Jig gear
1997	<i>Fishery Dates:</i> April 4–December 22 <i>Management Actions:</i> October 31 - Vessel size limit, gear limits, and exclusive registration lifted December 22 - Pot and jig gear seasons closed when GHL was attained	April 4–December 22
1998	<i>Fishery Dates:</i> March 10–April 16 <i>Management Actions:</i> April 16 - Pot gear season closed when GHL was attained	March 10–December 31
1999	<i>Fishery Dates:</i> March 15–April 11 October 31–December 31 <i>Management Actions:</i> April 11 - Pot gear season closed when GHL was attained October 31 - Allocation rollover; reopened pot gear season November 10 - Gear limits lifted	March 15–December 31
2000	<i>Fishery Dates:</i> March 11–April 8 <i>Management Actions:</i> April 8 - Pot gear season closed when GHL was attained September 19 - Jig gear season closed when GHL was attained	March 11–September 19
2001	<i>Fishery Dates:</i> March 6–April 13 <i>Management Actions:</i> April 13 - Pot gear season closed when GHL was attained June 12 - Jig gear season closed when GHL was attained	March 6–June 12
2002	<i>Fishery Dates:</i> March 5–March 24 <i>Management Actions:</i> March 24 - Pot gear season closed when GHL was attained April 26 - Jig gear season closed when GHL was attained	March 5–April 26
2003	<i>Fishery Dates:</i> February 24–March 11 <i>Management Actions:</i> March 11 - Pot gear season closed when GHL was attained April 22 - Jig gear season closed when GHL was attained	February 24–April 22

-continued-



Table 18.–Page 2 of 4.

	Pot gear	Jig gear
2004	<i>Fishery Dates:</i> March 2–March 24 <i>Management Actions:</i> March 24 - Pot gear season closed when GHL was attained April 14 - Jig gear season closed when GHL was attained	March 2–April 14
2005	<i>Fishery Dates:</i> March 3–March 24 <i>Management Actions:</i> March 24 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B season	March 3–September 1
2006	<i>Fishery Dates:</i> March 9–March 29 April 4–April 7 <i>Management Actions:</i> March 29 - Pot gear season closed when GHL was expected to be attained April 4 - Pot gear season reopened April 7 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B season	March 9–September 1
2007	<i>Fishery Dates:</i> March 15–April 17 <i>Management Actions:</i> April 17 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B season	March 15–September 1
2008	<i>Fishery Dates:</i> March 7–April 1 <i>Management Actions:</i> April 1 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B season	March 7–September 1
2009	<i>Fishery Dates:</i> March 4–April 4 <i>Management Actions:</i> April 4 - Pot gear season closed when GHL was attained September 1 - Jig gear season closed for parallel B season	March 4–September 1
2010	<i>Fishery Dates:</i> March 5–March 23 <i>Management Actions:</i> March 23 - Pot gear season closed when GHL was attained May 27 - Jig gear season closed when GHL was attained	March 5–May 27

-continued-

Table 18.–Page 3 of 4.

	Pot gear	Jig gear
2011	<i>Fishery Dates:</i> February 25–March 11 <i>Management Actions:</i> March 11 - Pot gear season closed when GHL was attained April 26 - Jig gear season closed when GHL was attained	February 25–April 26
2012	<i>Fishery Dates:</i> March 7–March 22 <i>Management Actions:</i> March 21 - Jig gear season opened; weather delay March 19–20 March 22 - Pot gear season closed when GHL was attained June 10 - Jig gear season closed for parallel B season	March 21–June 10
2013	<i>Fishery Dates:</i> March 9–March 22 <i>Management Actions:</i> March 9 - Pot gear season opened; weather delay March 7–8 March 22 - Pot gear season closed when GHL was attained July 16 - Jig gear season closed for parallel B season	March 15–July 16
2014	<i>Fishery Dates:</i> March 7–March 24 <i>Management Actions:</i> March 20 - Jig gear season opened; weather delay March 15–19 March 24 - Pot gear season closed when GHL was attained May 16 - Jig gear season closed for parallel B season	March 20–May 16
2015	<i>Fishery Dates:</i> March 7–March 31 <i>Management Actions:</i> March 18 - Jig gear season opened; weather delay March 15–18 March 31 - Pot gear season closed when GHL was attained	March 18–December 31
2016	<i>Fishery Dates:</i> March 7–September 1 <i>Management Actions:</i> September 1 - Pot gear season closed to coordinate with parallel B season opening	March 15–December 31
2017	<i>Fishery Dates:</i> March 7–September 1 <i>Management Actions:</i> September 1 - Pot gear season closed to coordinate with parallel B season opening	March 17–December 31

-continued-

Table 18.–Page 4 of 4.

	Pot gear	Jig gear
2018	<i>Fishery Dates:</i> March 10–March 17 <i>Management Actions:</i> March 10 - Pot gear season opened; weather delay March 7–9 March 16 - Jig gear season opened; weather delay March 15 March 17 - Pot gear season closed when GHL was attained June 4 - Jig gear season closed when GHL was attained	March 16–June 4
2019	<i>Fishery Dates:</i> March 7–March 13 <i>Management Actions:</i> March 13 - Pot gear season closed when GHL was attained April 22 - Jig gear season closed when GHL was attained	March 13–April 22

Notes: GHL = Guideline Harvest Level.

Table 19.—Kodiak, Chignik, and South Alaska Peninsula areas black rockfish regulatory development and management actions, 1997–2019.

Year	Regulation
Pre-1997	– Black rockfish managed by NMFS
1997	– NPFMC removed black rockfish from Pelagic Shelf Rockfish Group – State-waters managed separately from federal waters: Kodiak Area GHL established at 170,000 pounds; Chignik Area and SAP Area Eastern District GHLS established at 100,000 pounds
1998	– State assumed management authority from NMFS for black rockfish in the Exclusive Economic Zone – Kodiak and Chignik areas and SAP Eastern District established as non-exclusive registration areas – Kodiak Area divided into seven districts each with separate GHLS
1999	– Kodiak Area Northeast District GHL reduced from 25,000 pounds to 20,000 pounds
2003	– Kodiak Area: regulation stating that vessels may not be concurrently registered for black rockfish and Pacific cod established – Kodiak Area trip limit established at 5,000 pounds per five days – Chignik Area designated superexclusive registration area – Chignik Area divided into three management districts
2004	– Kodiak Area Westside District GHL reduced from 30,000 pounds to 20,000 pounds
2005	– SAP Area Eastern District divided into three management sections – Kodiak Area incidental trip limit of 2,500 pounds established for vessels fishing during other directed jig groundfish fisheries in Kodiak Area – Kodiak Area logbooks mandated
2006	– SAP Area Eastern District GHL reduced from 100,000 pounds to 75,000 pounds
2007	– Kodiak Area Northeast, Afognak, and Southeast districts incidental trip limit reduced from 2,500 pounds to 1,000 pounds
2011	– Kodiak Area Rockfish Management Plan revised: incidental trip limits repealed and replaced with bycatch percentages established by EO; trip limit increased from 5,000 to 7,000 pounds after August 14 by EO; reporting requirements and trip limits for catcher processors established
2012	– Kodiak Area Southwest and Mainland district GHLS eliminated; harvest as bycatch only
2014	– Kodiak Area Westside District GHL reduced from 20,000 pounds to 10,000 pounds
2015	– Kodiak Area Afognak District GHL reduced from 35,000 pounds to 30,000 pounds

Notes: NMFS = National Marine Fisheries Service; NPFMC = North Pacific Fishery Management Council; GHL = Guideline Harvest Level; SAP = South Alaska Peninsula; EO = Emergency Order.

Table 20.—Kodiak, Chignik, and South Alaska Peninsula areas black rockfish guideline harvest level (GHL), harvest in pounds, and fishery closure date, by district, 2019.

Area/District	GHL	Harvest			Directed fishery closure date
		Directed	Bycatch	Total <sup>b</sup>	
Kodiak Area					
Afognak	30,000	28,687	1,009	29,696	December 31
Northeast	20,000	19,435	523	19,958	August 23
Eastside	30,000	29,438	CF	29,438	March 29
Southeast	30,000	29,630	CF	29,630	April 23
Southwest	Bycatch only	0	0	0	NA
Westside	10,000	CF	CF	CF	December 31
Mainland	Bycatch only	0	CF	CF	NA
Total <sup>b</sup>	120,000	107,190	1,532	108,722	
Chignik Area					
Sutwik Island	45,000 <sup>a</sup>	0	0	0	December 31
Chignik Bay	45,000 <sup>a</sup>	0	0	0	December 31
Mitrofanina	45,000 <sup>a</sup>	0	0	0	December 31
Total	100,000	0	0	0	
South Alaska Peninsula Area					
Eastern	75,000	CF	CF	15,916	December 31

Notes: Weights reported in whole fish pounds; discards at sea excluded; data are confidential when fewer than three vessels or processors participated; GHL = Guideline Harvest Level; NA = Not Applicable; CF = Confidential.

<sup>a</sup> District harvest cap

<sup>b</sup> Totals do not include confidential data

Table 21.—Kodiak Area black rockfish jig effort, guideline harvest level (GHL), harvest in pounds, and value, 1990–2019.

Year <sup>a</sup>	Vessels	Landings	GHL	Harvest	Price per pound <sup>b</sup>	Exvessel value
1990	2	8	NA	CF	CF	NA
1991	55	317	NA	782,133	\$0.25	\$195,533
1992	34	167	NA	476,623	\$0.24	\$114,390
1993	14	58	NA	105,244	\$0.24	\$25,259
1994	23	126	NA	116,724	\$0.37	\$43,188
1995	33	183	NA	311,455	\$0.44	\$137,040
1996	43	167	NA	301,798	\$0.46	\$138,827
1997	50	297	NA	221,664	\$0.38	\$84,232
1998	64	348	190,000	196,548	\$0.33	\$64,861
1999	70	300	185,000	128,008	\$0.42	\$53,763
2000	72	260	185,000	245,891	\$0.44	\$108,192
2001	36	168	185,000	213,629	\$0.50	\$106,815
2002	25	123	185,000	196,166	\$0.43	\$84,351
2003	33	90	185,000	84,237	\$0.36	\$30,325
2004	37	124	185,000	122,180	\$0.39	\$47,650
2005	23	85	175,000	116,726	\$0.40	\$46,690
2006	25	97	175,000	123,443	\$0.42	\$51,846
2007	21	96	175,000	135,386	\$0.41	\$55,508
2008	17	91	175,000	132,325	\$0.53	\$70,132
2009	18	90	175,000	122,136	\$0.41	\$50,076
2010	12	74	175,000	103,630	\$0.39	\$40,416
2011	21	67	175,000	124,900	\$0.39	\$48,711
2012	19	53	135,000	80,940	\$0.42	\$33,995
2013	20	62	135,000	141,226	\$0.44	\$62,139
2014	17	74	125,000	109,053	\$0.46	\$50,164
2015	26	120	125,000	112,340	\$0.45	\$50,553
2016	45	192	120,000	132,181	\$0.50	\$66,091
2017	20	91	120,000	108,269	\$0.54	\$58,465
2018	8	65	120,000	107,725	\$0.44	\$47,399
2019	12	72	120,000	109,899	\$0.89	\$97,810

Notes: Weights reported in whole fish pounds; discards at sea excluded; data are confidential when fewer than three vessels participated; GHL = Guideline Harvest Level; NA = Not Applicable; CF = Confidential.

<sup>a</sup> Prior to 1998, black rockfish were managed by the National Marine Fisheries Service (NMFS)

<sup>b</sup> Price per pound based on whole fish pounds sold, excluding bait and meal

Table 22.—Chignik Area black rockfish jig effort, guideline harvest level (GHL) harvest in pounds, and value, 1990–2019.

Year <sup>a</sup>	Vessels	Landings	GHL	Harvest	Price per pound <sup>b</sup>	Exvessel value
1990	0	0	NA	0	ND	ND
1991	0	0	NA	0	ND	ND
1992	0	0	NA	0	ND	ND
1993	0	0	NA	0	ND	ND
1994	0	0	NA	0	ND	ND
1995	5	6	NA	25,125	\$0.49	\$12,311
1996	11	25	NA	201,825	\$0.36	\$72,657
1997	9	39	NA	80,741	\$0.23	\$18,570
1998	10	30	100,000	87,712	\$0.28	\$24,559
1999	10	30	100,000	11,305	\$0.25	\$2,826
2000	7	14	100,000	95,572	\$0.43	\$41,096
2001	13	33	100,000	102,316	\$0.41	\$41,950
2002	7	15	100,000	81,015	\$0.41	\$33,216
2003	10	40	100,000	46,598	\$0.42	\$19,571
2004	6	26	100,000	99,122	\$0.27	\$26,763
2005	7	16	100,000	49,721	\$0.40	\$19,888
2006	2	4	100,000	CF	CF	CF
2007	2	7	100,000	CF	CF	CF
2008	1	4	100,000	CF	CF	CF
2009	2	2	100,000	CF	CF	CF
2010	1	5	100,000	CF	CF	CF
2011	1	1	100,000	CF	CF	CF
2012	1	1	100,000	CF	CF	CF
2013	0	0	100,000	0	ND	ND
2014	1	1	100,000	CF	CF	CF
2015	0	0	100,000	0	ND	ND
2016	1	1	100,000	CF	CF	CF
2017	1	5	100,000	CF	CF	CF
2018	0	0	100,000	0	ND	ND
2019	0	0	100,000	0	ND	ND

Notes: Weights reported in whole fish pounds; discards at sea excluded; data are confidential when fewer than three vessels participated; GHL = Guideline Harvest Level; NA = Not Applicable; ND = No Data; CF = Confidential.

<sup>a</sup> Prior to 1998, black rockfish were managed by the National Marine Fisheries Service (NMFS)

<sup>b</sup> Price per pound based on whole fish pounds sold, excluding bait and meal

Table 23.—South Alaska Peninsula Area Eastern District black rockfish jig effort, guideline harvest level (GHL), harvest in pounds, and value, 1990–2019.

Year <sup>a</sup>	Vessels	Landings	GHL	Harvest	Price per pound <sup>b</sup>	Exvessel value
1990	0	0	NA	0	ND	ND
1991	1	1	NA	CF	CF	CF
1992	0	0	NA	0	ND	ND
1993	0	0	NA	0	ND	ND
1994	0	0	NA	0	ND	ND
1995	8	49	NA	120,745	\$0.33	\$39,846
1996	19	78	NA	150,188	\$0.25	\$37,547
1997	9	32	NA	109,076	\$0.34	\$37,086
1998	6	18	100,000	84,145	\$0.29	\$24,402
1999	9	38	100,000	55,308	\$0.41	\$22,676
2000	20	73	100,000	94,797	\$0.35	\$33,179
2001	30	82	100,000	101,605	\$0.36	\$36,578
2002	9	30	100,000	102,114	\$0.29	\$29,613
2003	4	6	100,000	5,267	\$0.21	\$1,106
2004	15	24	100,000	8,925	\$0.26	\$2,321
2005	11	26	100,000	57,732	\$0.35	\$20,206
2006	3	8	75,000	7,015	\$0.37	\$2,596
2007	2	9	75,000	CF	CF	CF
2008	0	0	75,000	0	ND	ND
2009	3	3	75,000	705	\$0.25	\$176
2010	1	1	75,000	CF	CF	CF
2011	1	2	75,000	CF	CF	CF
2012	0	0	75,000	0	ND	ND
2013	2	4	75,000	CF	CF	CF
2014	0	0	75,000	0	ND	ND
2015	1	1	75,000	CF	CF	CF
2016	5	13	75,000	77,321	\$0.40	\$30,928
2017	3	21	75,000	45,127	\$0.40	\$18,051
2018	5	14	75,000	24,449	\$0.40	\$9,780
2019	4	8	75,000	15,916	\$0.45	\$7,162

Notes: Weights reported in whole fish pounds; discards at sea excluded; data are confidential when fewer than three vessels participated; GHL = Guideline Harvest Level; NA = Not Applicable; ND = No Data; CF = Confidential.

<sup>a</sup> Prior to 1998, black rockfish were managed by the National Marine Fisheries Service (NMFS)

<sup>b</sup> Price per pound based on whole fish pounds sold, excluding bait and meal



Table 24.–Kodiak, Chignik, and South Alaska Peninsula areas lingcod harvest in pounds, by gear type, 1988–2019.

Year	Jig	Longline	Pot	Trawl	Total <sup>a</sup>
1988	59	43	0	136,191	136,294
1989	69	0	0	14,324	14,394
1990	1,418	158	402	8,839	10,816
1991	8,375	501	386	663	9,925
1992	5,569	4,261	72	10,897	20,799
1993	0	511	0	4,778	5,289
1994	4,820	803	0	229	5,852
1995	34,574	3,467	79	1,191	39,311
1996	43,403	7,878	0	10,929	62,209
1997	12,637	6,499	4,251	5,267	28,654
1998	5,756	1,771	0	3,514	11,041
1999	1,358	3,802	4,189	4,593	13,941
2000	3,400	6,734	2,676	2,127	14,938
2001	527	4,063	3,597	5,688	13,875
2002	29	6,131	2,749	5,380	14,290
2003	229	9,740	0	5,069	15,037
2004	2,990	6,865	205	16,731	26,791
2005	772	18,831	7,983	14,078	41,663
2006	289	16,028	20,127	12,670	49,114
2007	35	28,058	32,024	45,420	105,538
2008	1,518	31,637	21,278	466,826	521,259
2009	373	28,112	3,614	65,182	97,281
2010	812	31,204	1,935	33,594	67,545
2011	123	25,045	14,962	82,323	122,454
2012	297	18,815	69,657	69,683	158,453
2013	0	14,341	19,222	29,166	62,729
2014	0	11,285	23,949	34,148	69,382
2015	0	5,098	12,822	44,669	62,589
2016	CF	5,200	6,838	36,532	48,570
2017	CF	4,837	3,376	16,715	24,928
2018	CF	8,571	662	37,222	46,455
2019	154	4,197	CF	34,843	39,194

Notes: Weights reported in whole fish pounds; discards at sea excluded; data are confidential when fewer than three vessels participated; CF = Confidential.

<sup>a</sup> Total does not include confidential data

Table 25.—Central Gulf of Alaska (CGOA) and Western Gulf of Alaska (WGOA) walleye pollock fishery dates, 2014–2019.

NMFS area	2014	2015	2016	2017	2018	2019
CGOA Area 630	Jan 20–Mar 9	Jan 20–Mar 9	Jan 20–Jan 27	Jan 20–Jan 29	Jan 21–Feb 14	Jan 20–Feb 10
	Mar 10–Mar 31	Mar 10–Apr 16	Jan 29–Mar 10	Mar 11–May 11	Mar 10–Mar 10	Mar 10–Mar 11
	Aug 25–Sep 23	Aug 25–Sep 28	Mar 10–Mar 13	Sep 6–Sep 30	Aug 25–Sep 30	Aug 25–Sep 30
	Oct 1–Nov 1	Oct 1–Nov 1	Aug 25–Sep 30	Oct 1–Oct 31	Oct 1–Oct 31	Oct 1–Oct 31
			Oct 1–Nov 1			
CGOA Area 620	Jan 20–Mar 9	Jan 20–Mar 9	Jan 20–Mar 10	Jan 20–Mar 10	Jan 20–Feb 23	Jan 20–Feb 8
	Mar 10–Apr 10	Mar 10–May 25	Mar 10–May 24	Mar 10–May 30	Mar 10–Mar 23	Mar 10–Mar 21
	Aug 25–Sep 16	Aug 25–Sep 30	Aug 27–Sep 29	Sep 4–Sep 30	Aug 25–Sep 1	Aug 25–Sep 29
	Oct 1–Nov 1	Oct 1–Oct 28	Oct 2–Oct 31	Oct 2–Oct 31	Oct 1–Oct 7	Oct 1–Nov 1
WGOA Area 610	Jan 20–Mar 9	Jan 20–Mar 9	Jan 20–Jan 28	Jan 20–Feb 11	Jan 20–Feb 25	Jan 20–Mar 6
	Mar 10–Jun 1	Mar 10–Apr 14	Mar 12–Mar 28	Mar 23–Apr 13	Mar 10–Mar 12	Mar 10–Mar 29
	Aug 25–Sep 30	Aug 25–Sep 30	Aug 25–Sep 29	Aug 25–Sep 27	Aug 25–Sep 3	Aug 25–Sep 8
	Oct 1–Nov 1	Oct 1–Nov 3	Oct 1–Nov 1	Oct 1–Oct 31	Oct 1–Oct 13	Oct 1–Oct 8

Notes: NMFS = National Marine Fisheries Service; CGOA = Central Gulf of Alaska; WGOA = Western Gulf of Alaska.

Table 26.—Central Gulf of Alaska (CGOA) walleye pollock effort and harvest, in millions of pounds, 1995–2019.

Year	Vessels	Landings	Federal waters		State waters		Total harvest	Discards at sea
			Harvest	% of total	Harvest	% of total		
1995	108	810	65.04	87.9	8.98	12.1	74.02	1.25
1996	84	904	36.07	71.6	14.28	28.4	50.35	1.57
1997	107	1,528	83.37	68.7	37.91	31.3	121.28	1.91
1998	119	1,702	136.18	65.9	70.46	34.1	206.64	0.40
1999	101	1,293	107.75	72.7	40.36	27.3	148.12	0.52
2000	60	1,108	101.63	95.8	4.45	4.2	106.09	0.53
2001	74	1,160	69.00	79.4	17.88	20.6	86.88	0.29
2002	72	838	40.17	56.7	30.73	43.3	70.90	0.15
2003	61	730	55.30	77.0	16.56	23.0	71.86	0.17
2004	57	772	54.99	63.5	31.64	36.5	86.64	0.36
2005	53	820	79.13	76.9	23.77	23.1	102.90	0.29
2006	48	988	68.61	71.0	28.07	29.0	96.69	0.16
2007	42	894	53.87	74.2	18.77	25.8	72.65	0.28
2008	47	990	48.89	68.4	22.59	31.6	71.48	1.02
2009	43	821	35.05	65.3	18.66	34.7	53.71	0.62
2010	50	1,028	77.71	76.7	23.60	23.3	101.31	0.98
2011	56	1,061	110.15	90.5	11.59	9.5	121.74	1.67
2012	70	1,262	126.37	82.0	27.66	18.0	154.03	1.62
2013	66	1,385	157.05	85.9	25.73	14.1	182.78	3.00
2014	63	1,768	256.13	92.0	22.23	8.0	278.37	1.05
2015	60	1,746	243.92	83.4	48.46	16.6	292.38	0.96
2016	62	1,415	210.70	86.2	33.85	13.8	244.55	0.54
2017	54	1,503	283.95	96.8	9.30	3.2	293.25	1.37
2018	60	1,435	246.28	94.5	14.34	5.5	260.63	2.28
2019	59	1,279	180.05	92.9	13.8	7.1	193.88	2.25

Notes: Harvest reported in whole fish pounds; discards at sea excluded from all columns except the *Discards at sea* column.

Table 27.—Western Gulf of Alaska (WGOA) walleye pollock effort and harvest, in millions of pounds, 1995–2019.

Year	Vessels	Landings	Federal waters		State waters		Total harvest	Discards at sea
			Harvest	% of total	Harvest	% of total		
1995	92	351	43.36	66.0	22.32	34.0	65.69	0.84
1996	56	319	20.83	40.0	31.23	60.0	52.06	0.77
1997	84	333	42.56	68.1	19.90	31.9	62.47	0.71
1998	84	362	27.31	41.6	38.40	58.4	65.70	0.12
1999	80	432	24.86	47.1	27.96	52.9	52.82	0.25
2000	49	419	9.99	21.1	37.34	78.9	47.33	0.11
2001	51	548	17.53	26.0	50.00	74.0	67.53	0.07
2002	45	316	19.46	51.0	18.69	49.0	38.14	0.21
2003	41	262	16.86	45.5	20.18	54.5	37.04	0.12
2004	32	350	19.89	39.1	30.97	60.9	50.86	0.08
2005	36	502	34.36	50.6	33.50	49.4	67.85	0.12
2006	38	499	20.54	38.2	33.25	61.8	53.80	0.18
2007	38	413	18.03	47.3	20.12	52.7	38.15	0.05
2008	29	340	21.55	65.8	11.20	34.2	32.75	0.00
2009	35	309	9.74	31.8	20.93	68.2	30.68	0.11
2010	38	561	23.83	41.8	33.22	58.2	57.05	0.06
2011	35	502	21.34	47.4	23.64	52.6	44.98	0.15
2012	45	696	16.47	27.4	43.68	72.6	60.15	0.31
2013	40	402	7.23	43.0	9.58	57.0	16.81	0.17
2014	34	586	16.76	58.3	12.00	41.7	28.75	0.36
2015	33	790	45.34	72.0	17.67	28.0	63.01	0.04
2016	39	1155	98.42	73.2	35.97	26.8	134.39	0.14
2017	42	785	99.24	91.6	9.10	8.4	108.34	0.52
2018	36	554	57.03	84.9	10.14	15.1	67.17	0.72
2019	36	382	43.33	90.2	4.7	9.8	48.01	0.27

Notes: Harvest reported in whole fish pounds; discards at sea excluded from all columns except the *Discards at sea* column.

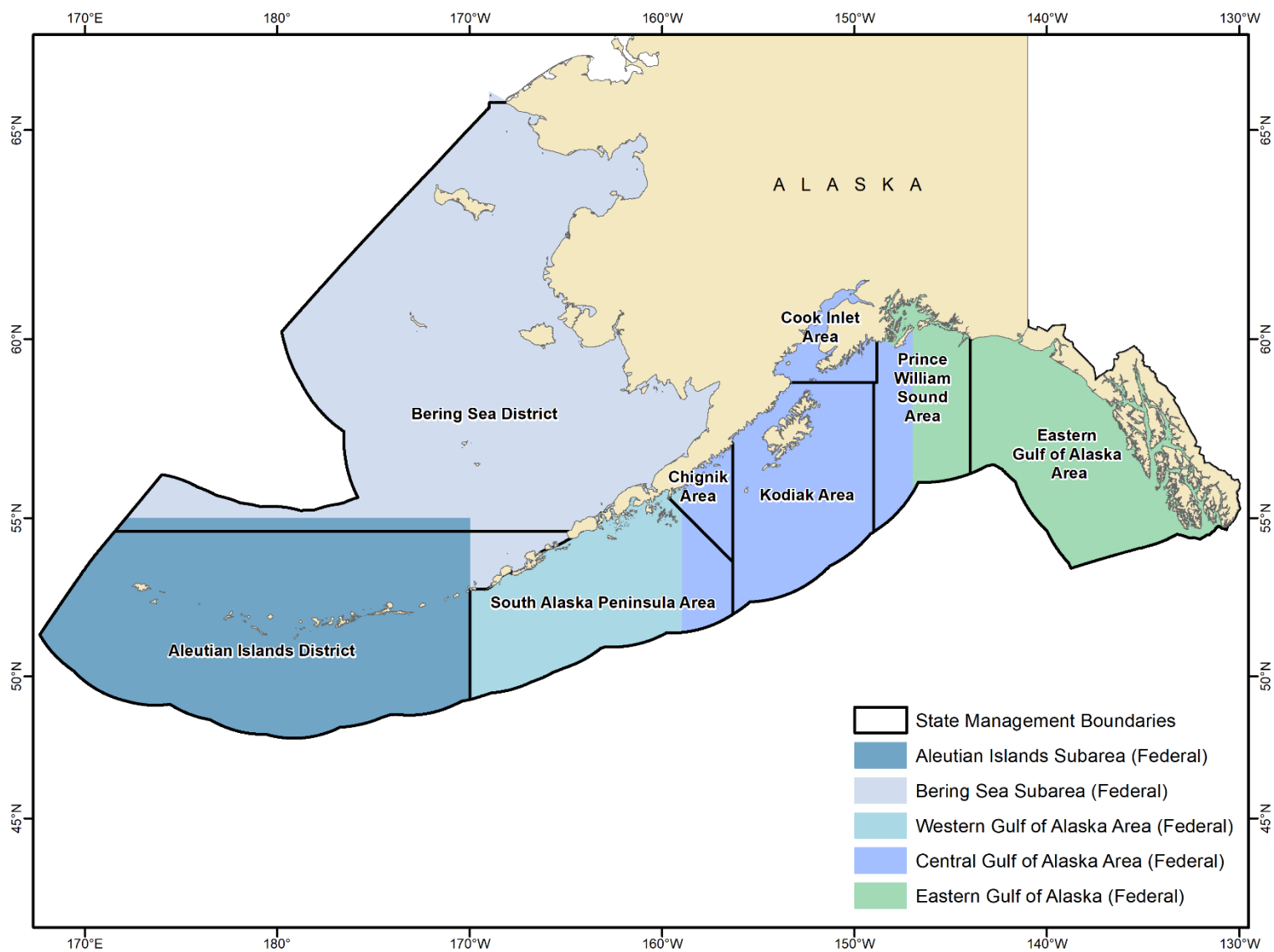


Figure 1.—Alaska Department of Fish and Game and National Marine Fisheries Service groundfish management areas.

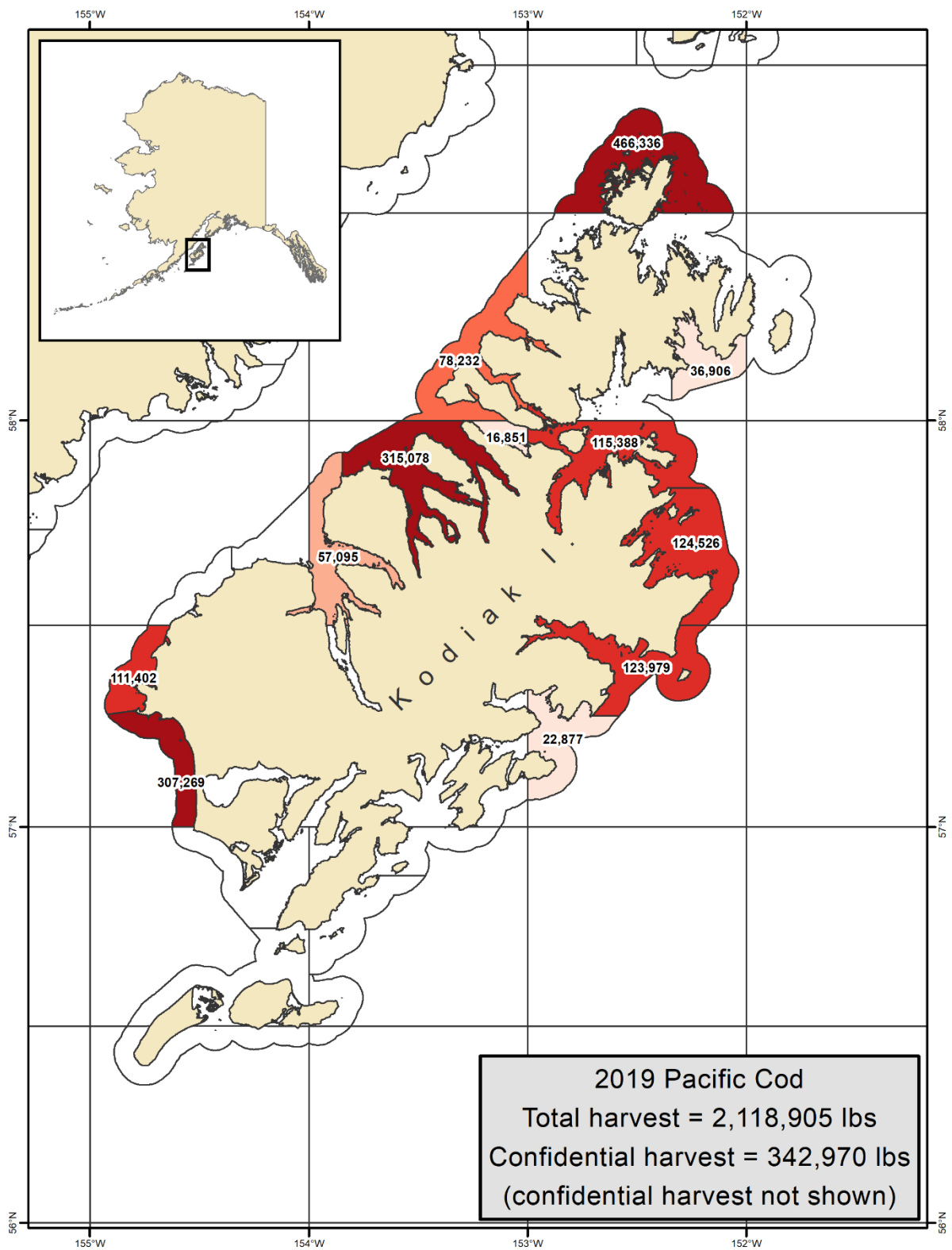


Figure 2.—Kodiak Area state-waters Pacific cod harvest, in pounds, by statistical area, 2019.

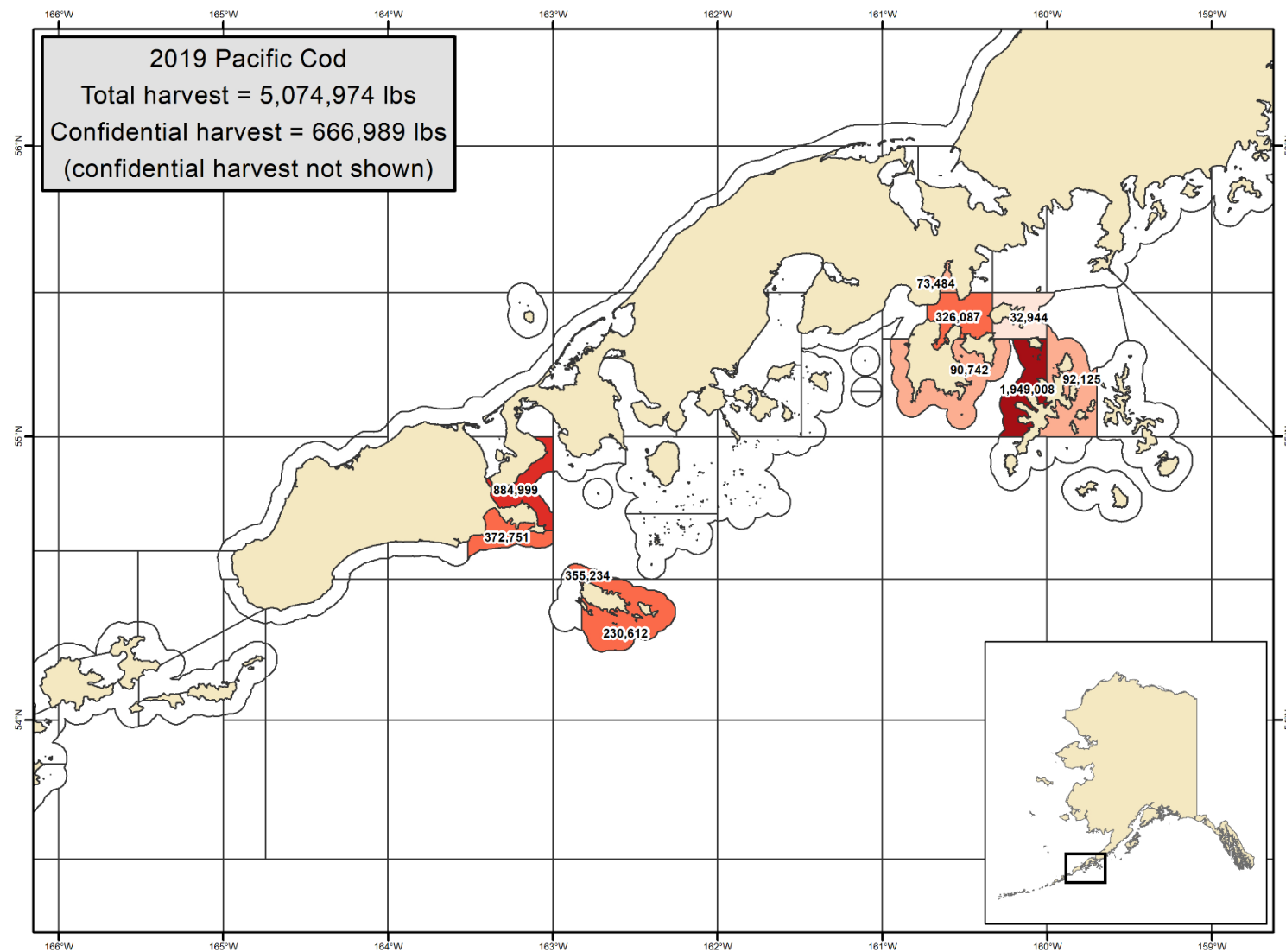


Figure 3.—South Alaska Peninsula state-waters Pacific cod harvest, in pounds, by statistical area, 2019.

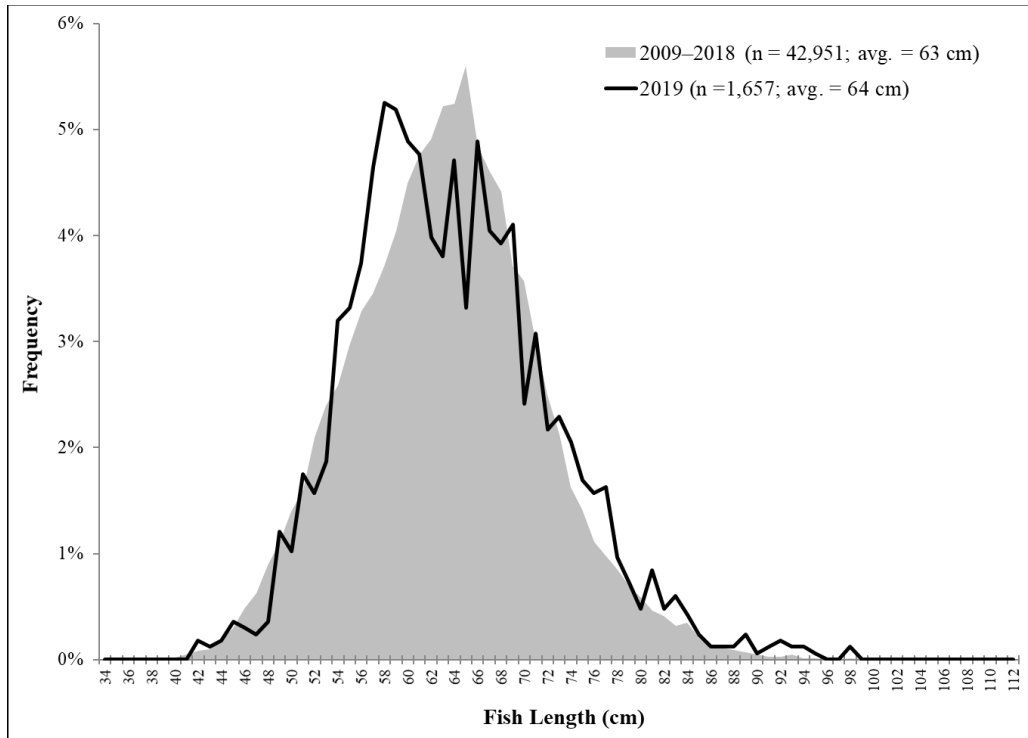


Figure 4.—Kodiak Area Pacific cod length frequency from state-waters fisheries, 2009–2019.

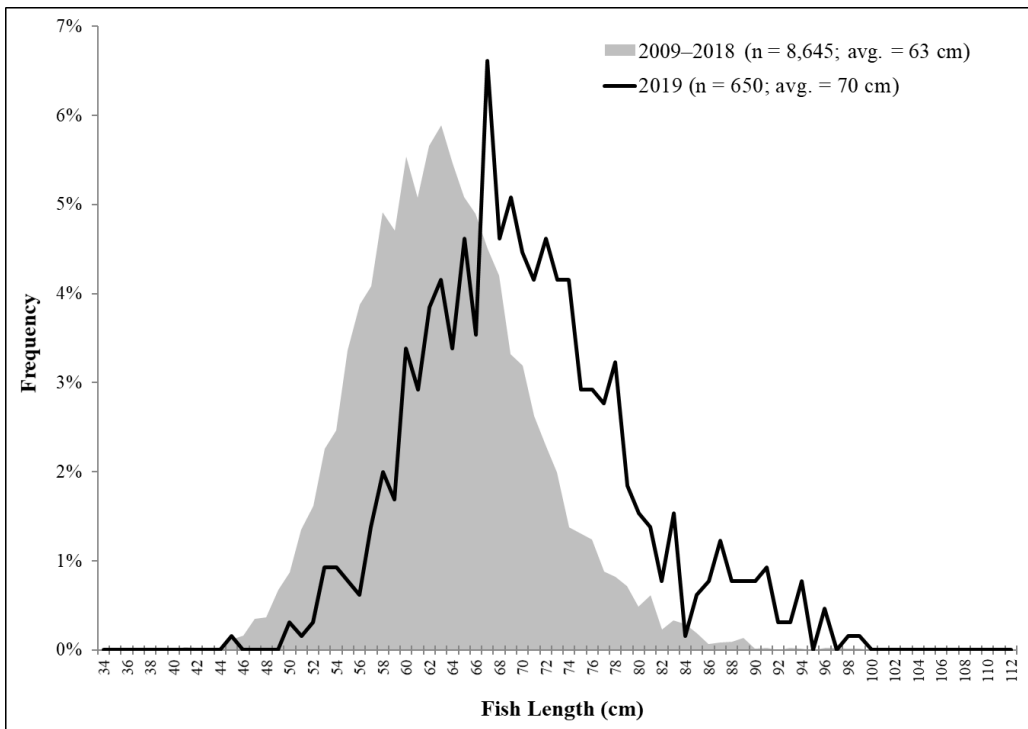


Figure 5.—Chignik Area Pacific cod length frequency from state-waters fisheries, 2009–2019.



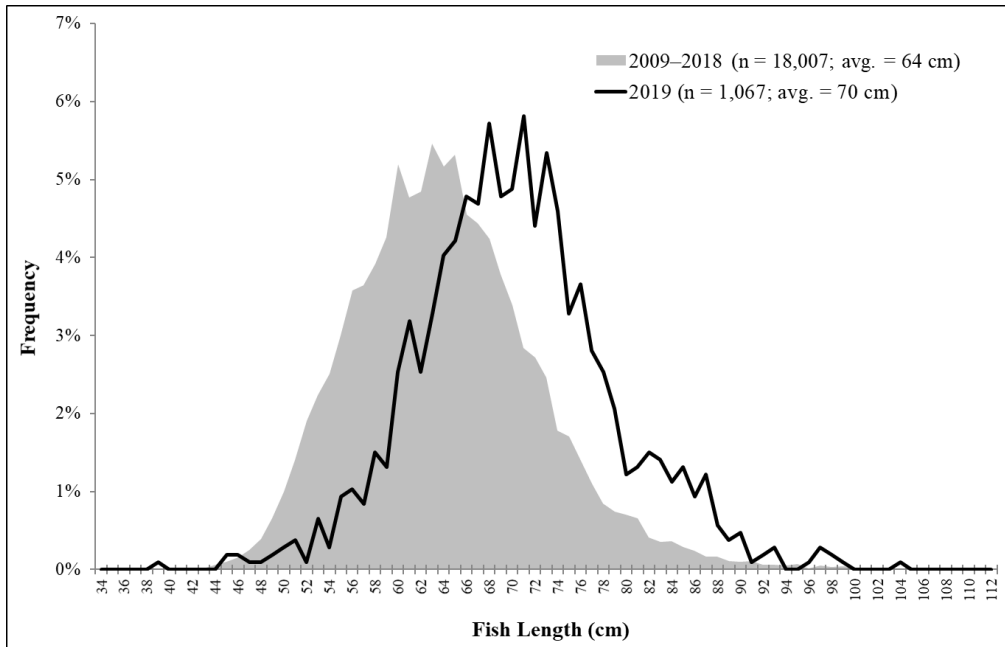


Figure 6.—South Alaska Peninsula Area Pacific cod length frequency from state-waters fisheries, 2009–2019.

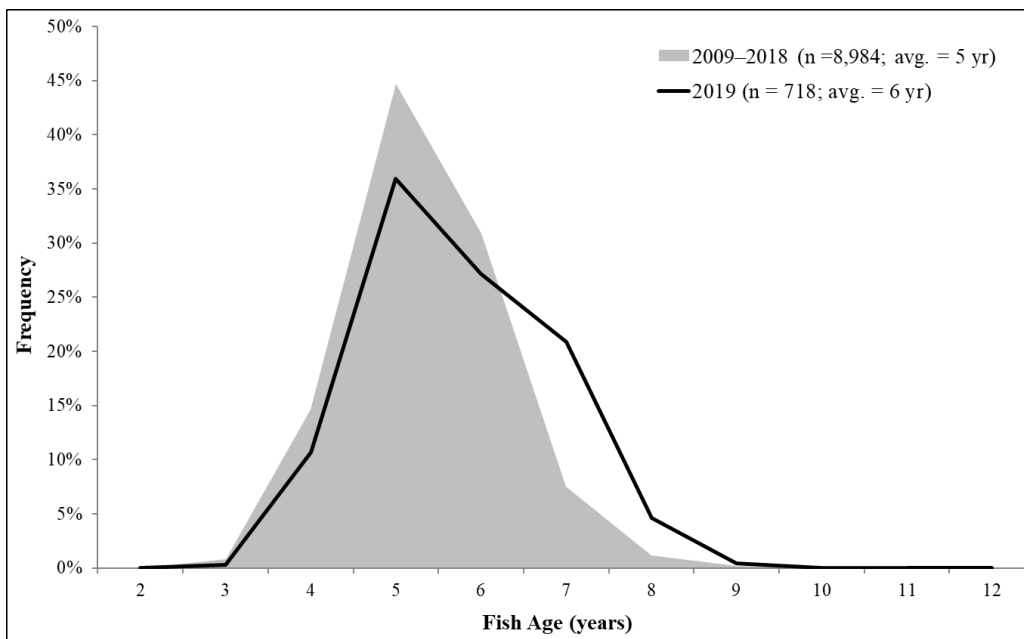


Figure 7.—Kodiak Area Pacific cod age composition from the state-waters fisheries, 2009–2019.

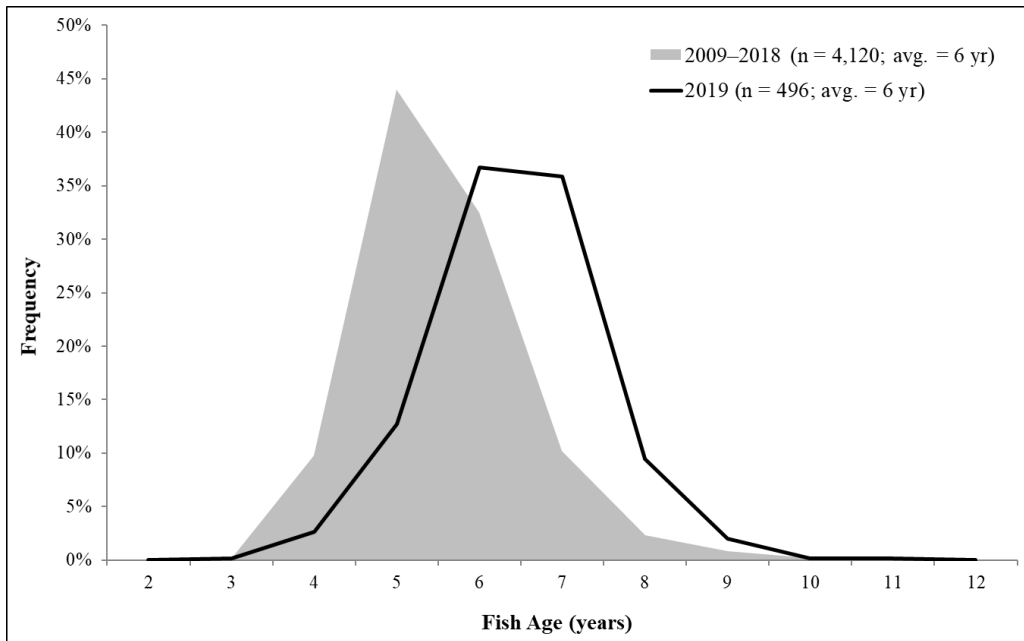


Figure 8.—Chignik Area Pacific cod age composition from the state-waters fisheries, 2009–2019.

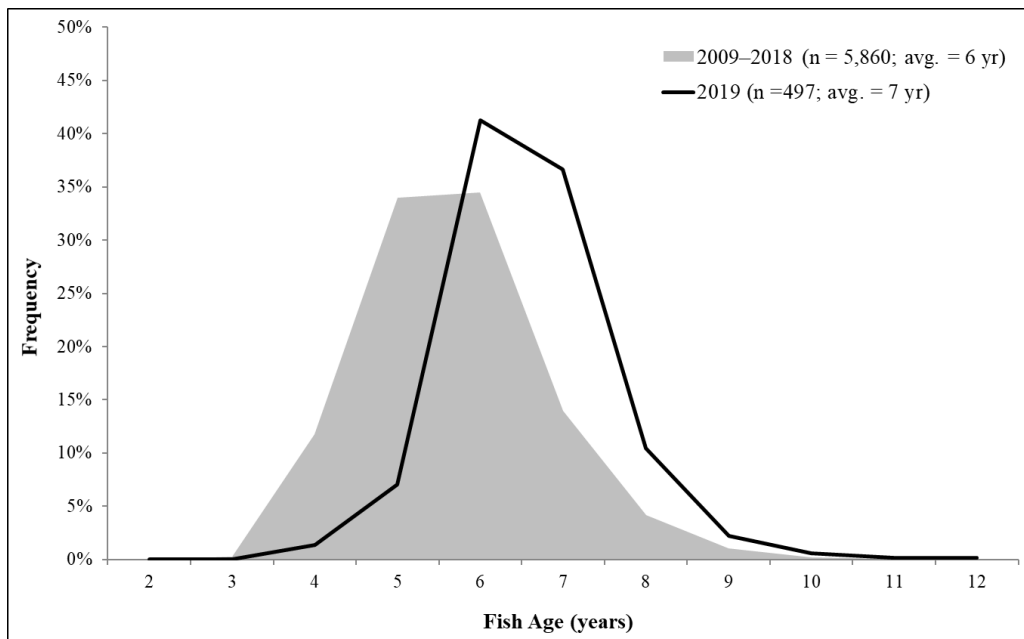


Figure 9.—South Alaska Peninsula Area Pacific cod age composition from the state-waters fisheries, 2009–2019.

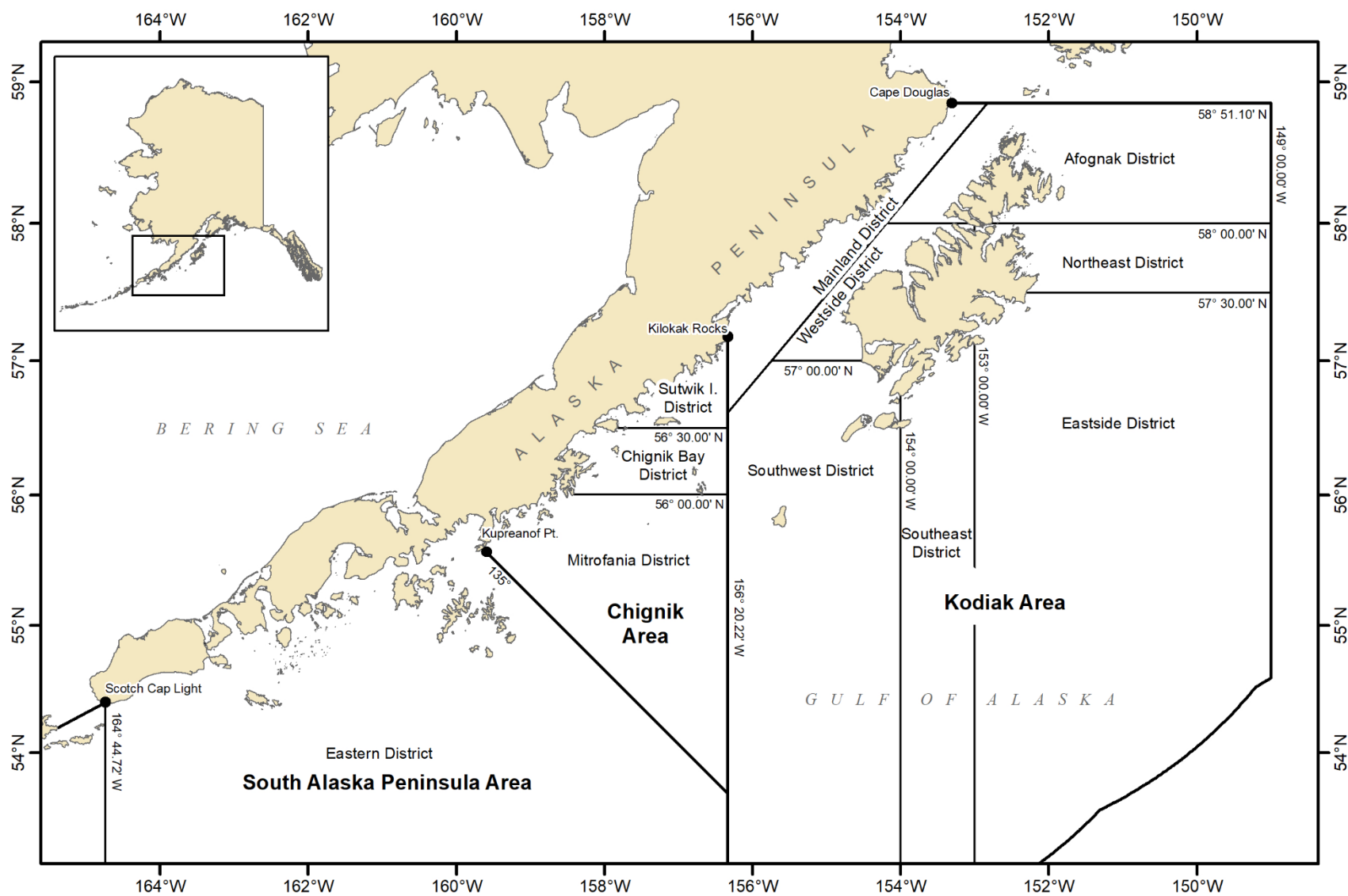


Figure 10.—Kodiak, Chignik, and South Alaska Peninsula black rockfish management areas and districts.

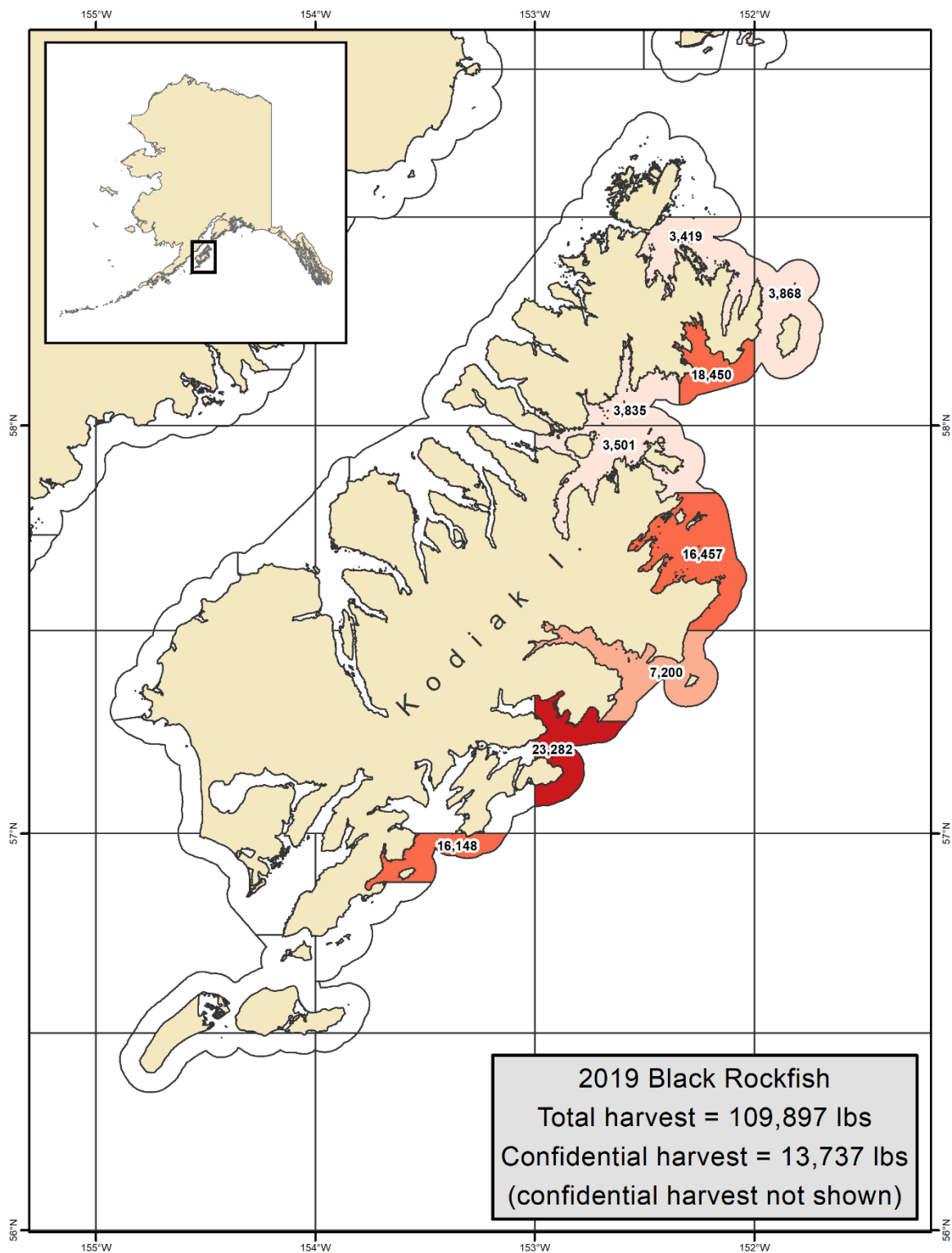


Figure 11.—Kodiak Area black rockfish harvest, in pounds, by statistical area, 2019.

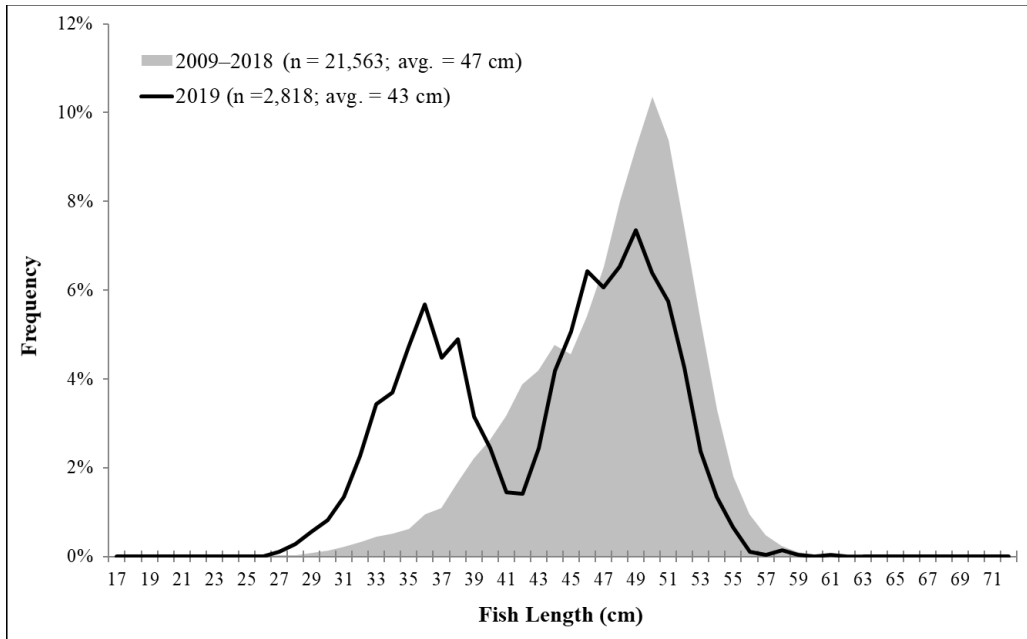


Figure 12.—Kodiak Area black rockfish length frequency from directed fisheries, 2009–2019.

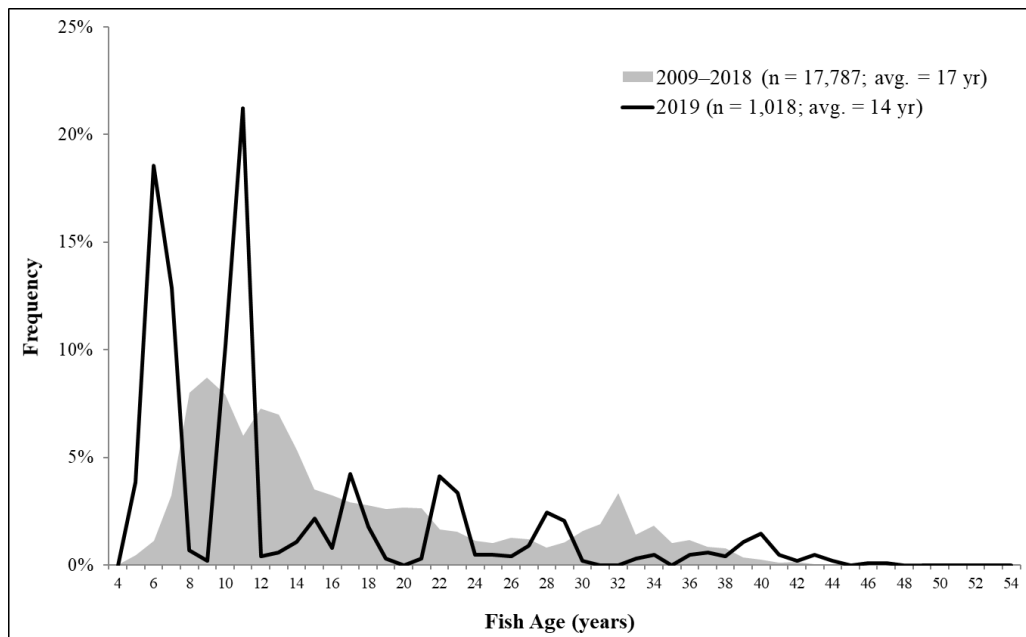


Figure 13.—Kodiak Area black rockfish age composition from directed fisheries, 2009–2019.



## **APPENDIX A. FREQUENTLY USED ACRONYMS AND KEY WORDS**

Appendix A1.–Frequently used acronyms and key words.

Acronym	Definition
ABC	Acceptable Biological Catch, stock specification as set by NPFMC on an annual basis
ADF&G	Alaska Department of Fish and Game
BOF	Alaska Board of Fisheries
BSAI	Bering Sea-Aleutian Islands Area, state management area or federal management area
CGOA	Central Gulf of Alaska, federal management areas 620 and 630
EEZ	Exclusive Economic Zone, federal waters from 3 to 200 nautical miles offshore
EGOA	Eastern Gulf of Alaska, federal management areas 640 and 650
EO	Emergency Order, management action taken by ADF&G to affect regulatory change
FFP	Federal Fisheries Permit
GHL	Guideline Harvest Level
GOA	Gulf of Alaska
LLP	Federal License Limitation Program
mt	Metric ton (1 mt = 2,204.6 lb)
NMFS	National Marine Fisheries Service
NPFMC	North Pacific Fishery Management Council
OAL	Overall length
Parallel fishery	Fishery occurring from 0 to 3 nautical miles opened by the state under federal rules while a federal fishery is ongoing from 3 to 200 nautical miles
SAP	South Alaska Peninsula
SSL	Steller sea lion
State waters	Territorial sea from 0 to 3 nautical miles offshore
State-waters fishery	Fishery occurring from 0 to 3 nautical miles open under Alaska Board of Fisheries regulations and managed exclusively by Alaska Department of Fish and Game
TAC	Total Allowable Catch, final federal harvest specification for directed fishing as recommended by NPFMC and set by NMFS
WGOA	Western Gulf of Alaska, federal management area 610



**APPENDIX B. PACIFIC COD FISHERY SEASON AND  
MANAGEMENT ACTION DATES**

Appendix B1.—Summary of the Kodiak, Chignik, and South Alaska Peninsula parallel and state-waters Pacific cod pot gear seasons and management action dates.

<b>Pacific Cod Season Opening Dates</b>	<b>Kodiak Area</b>	<b>Chignik Area</b>	<b>South Alaska Peninsula Area</b>
<b>Federal/Parallel A Season</b>	January 1	January 1	January 1
<b>State-Waters GH L Season</b>	7 days after closure of federal CGOA pot gear A season	March 1 or 7 days after closure of CGOA pot gear A season, whichever is later	March 7 or 7 days after closure of WGOA pot gear A season, whichever is later
<b>Federal/Parallel B Season</b>	September 1	September 1 <sup>a</sup>	September 1
<b>State-Waters GH L Rollover</b>	Following federal CGOA pot gear B season	August 14	Following federal WGOA pot gear B season

Notes: CGOA = Federal Central Gulf of Alaska Management Area; WGOA = Federal Western Gulf of Alaska Management Area

<sup>a</sup> If the state-waters GH L has not been achieved by September 1, the parallel B season will open 48 hours after the state-waters GH L is achieved or on October 30, whichever occurs first

Appendix B2.—Summary of the Kodiak, Chignik, and South Alaska Peninsula parallel and state-waters Pacific cod jig gear seasons and management action dates.

<b>Pacific Cod Season Opening Dates</b>	<b>Kodiak Area</b>	<b>Chignik Area</b>	<b>South Alaska Peninsula Area</b>
<b>Federal/Parallel A Season</b>	January 1	January 1	January 1
<b>State-Waters GHL Season</b>	48 hours after closure of federal CGOA jig gear A season <sup>a</sup>	March 15	48 hours after closure of federal WGOA jig gear A season <sup>b</sup>
<b>Federal/Parallel B Season</b>	June 10	June 10	June 10
<b>State-Waters GHL Rollover</b>	Following federal CGOA pot gear B season	August 14	Following federal WGOA pot gear B season

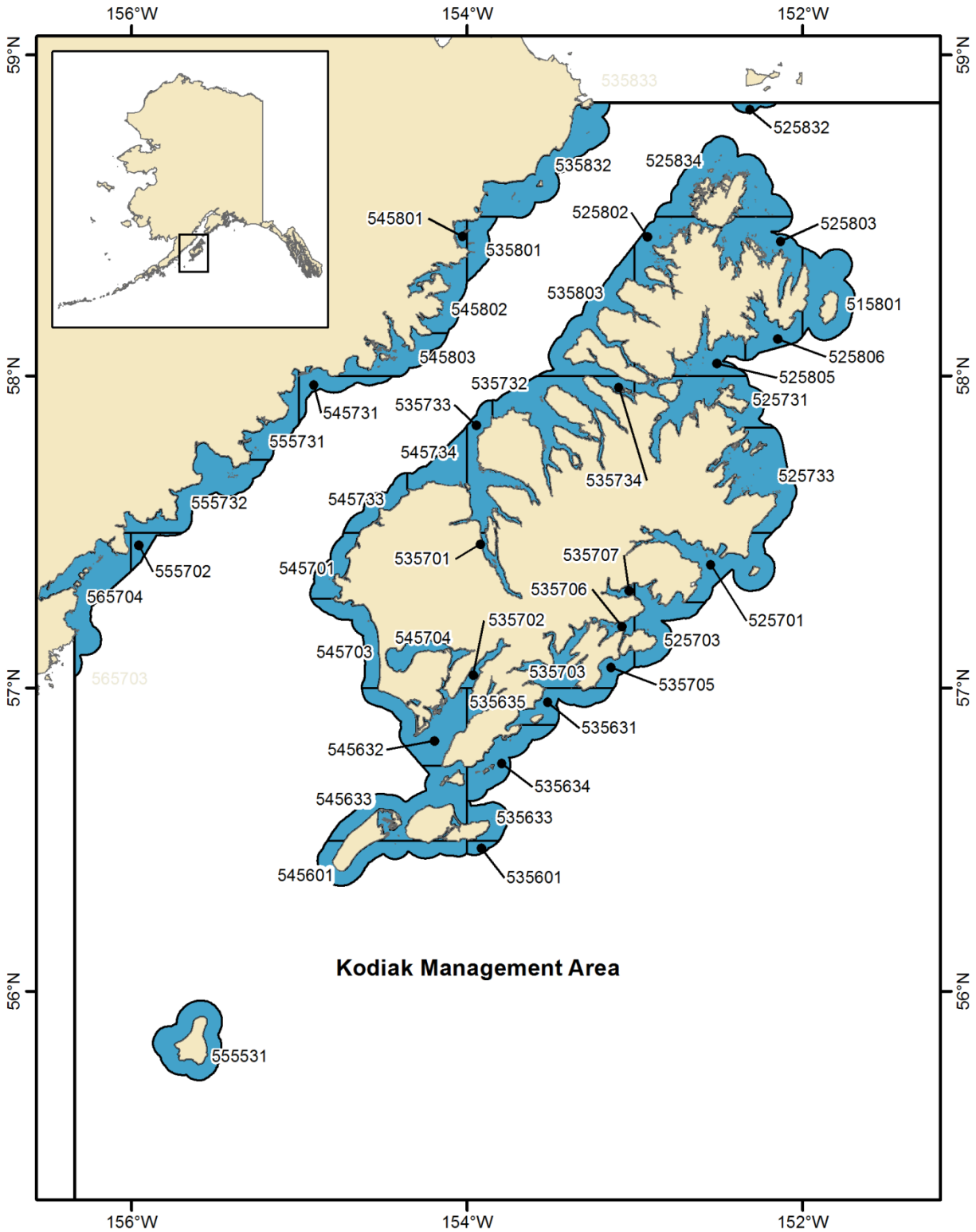
*Notes:* CGOA = Federal Central Gulf of Alaska Management Area; WGOA = Federal Western Gulf of Alaska Management Area

<sup>a</sup> If the CGOA federal/parallel A-season jig sector harvest allocation has not been achieved by March 15, the parallel (0–3 nmi) jig gear sector A season may close and the Kodiak Area state-waters season for jig gear may open on March 15 or later depending on ADF&G's ability to provide for orderly fisheries based on inseason assessment of effort, harvest rate, or remaining federal jig quota.

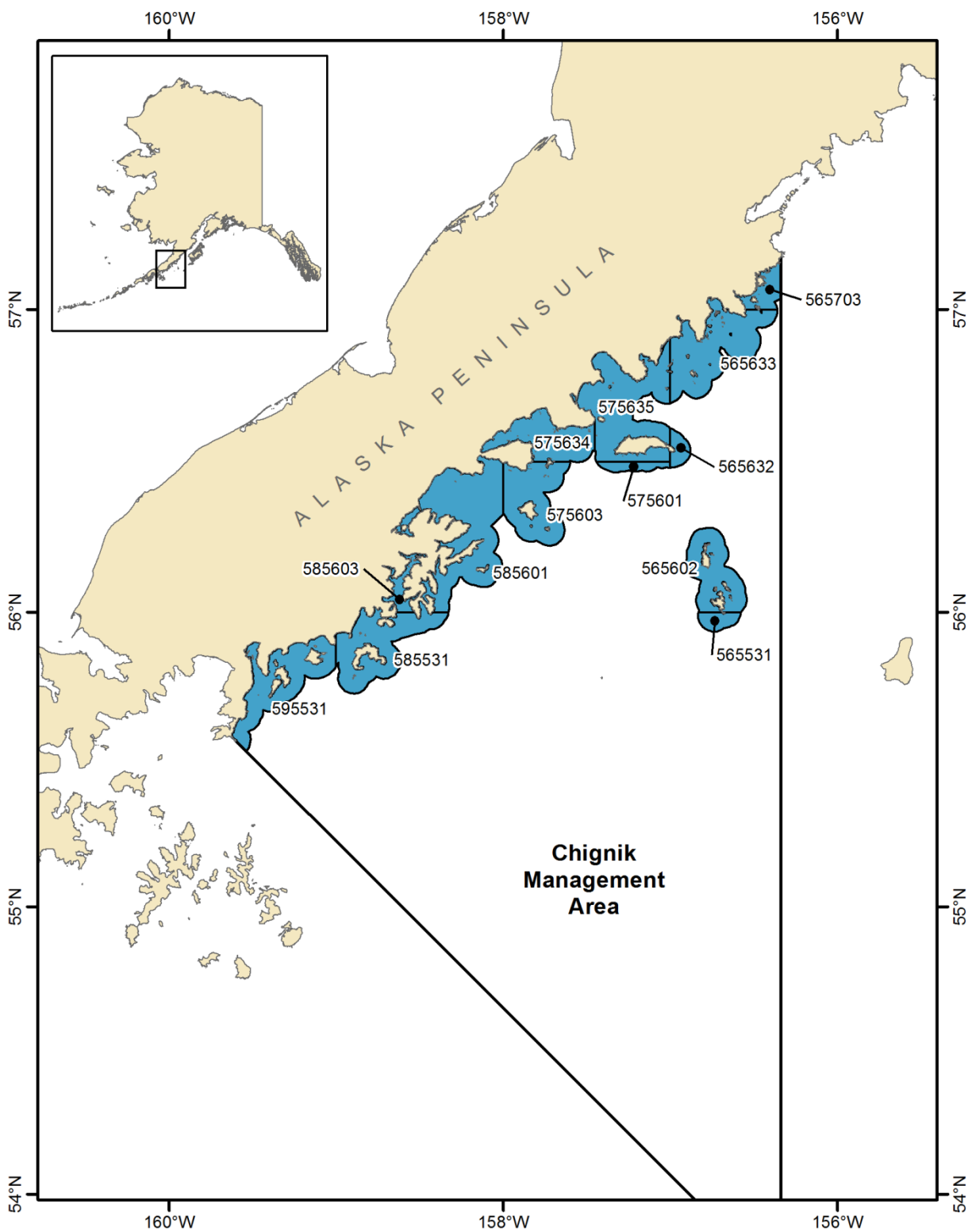
<sup>b</sup> If the WGOA federal/parallel A-season jig sector harvest allocation has not been achieved by March 15, the parallel (0–3 nmi) jig gear sector A season may close and the South Alaska Peninsula Area state-waters season for jig gear may open on March 15 or later depending on ADF&G's ability to provide for orderly fisheries based on inseason assessment of effort, harvest rate, or remaining federal jig quota.



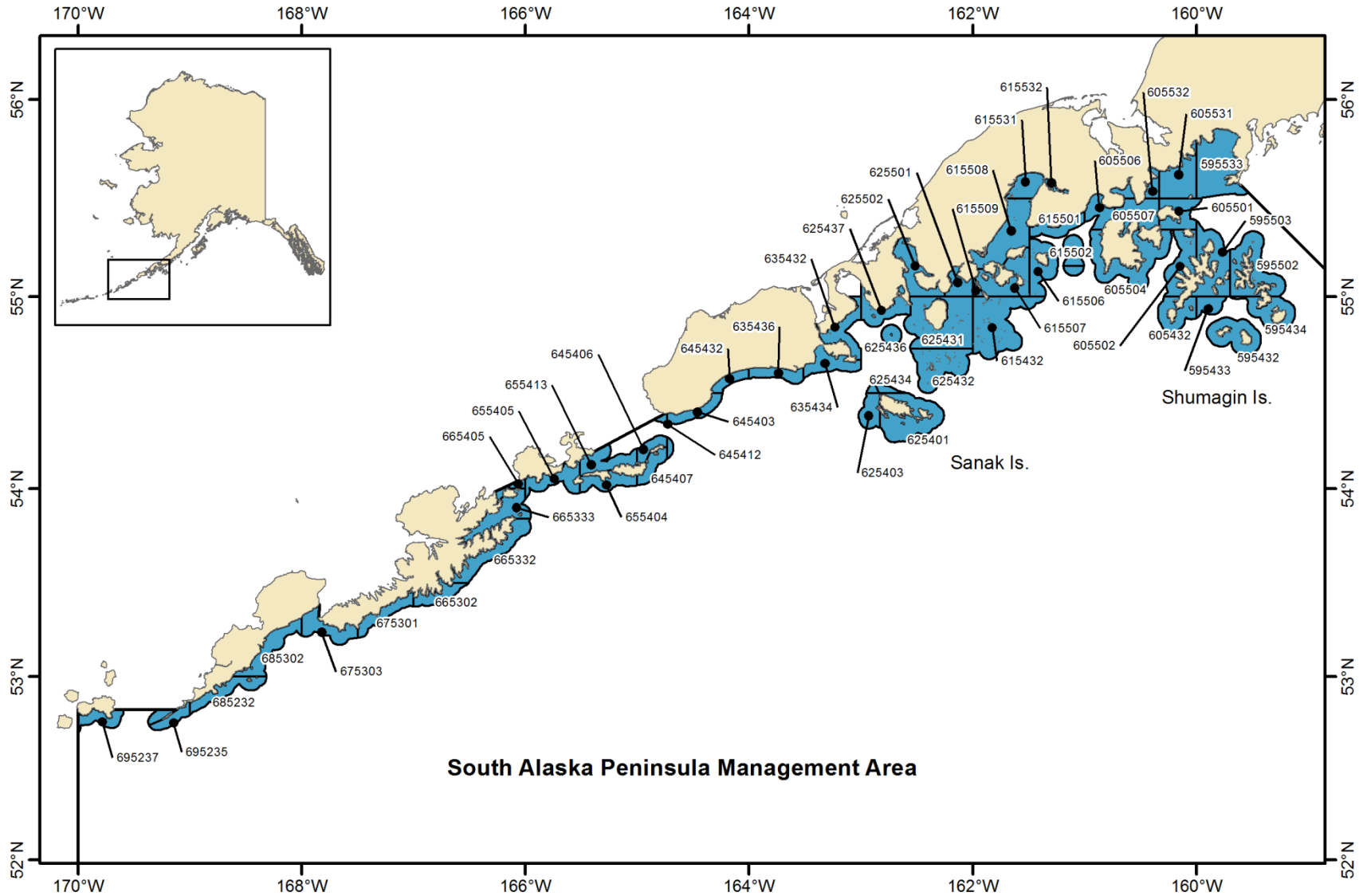
**APPENDIX C. KODIAK, CHIGNIK, AND SOUTH ALASKA  
PENINSULA MANAGEMENT AREAS STATE-WATERS  
STATISTICAL AREAS FOR GROUND FISH**



Appendix C1.—Kodiak Management Area state-waters statistical areas for groundfish.



Appendix C2.—Chignik Management Area state-waters statistical areas for groundfish.



Appendix C3.—South Alaska Peninsula Management Area state-waters statistical areas for groundfish.