

**Annual Management Report for Groundfish Fisheries
in the Kodiak, Chignik, and South Alaska Peninsula
Management Areas, 2010**

by

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Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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

FISHERY MANAGEMENT REPORT NO. 11-44

**ANNUAL MANAGEMENT REPORT FOR
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AND SOUTH ALASKA PENINSULA MANAGEMENT AREAS, 2010**

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ABSTRACT

This report summarizes effort, harvest, 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 areas during 2010. The principal state-waters fisheries include Pacific cod *Gadus macrocephalus* and black rockfish *Sebastes melanops*. Walleye pollock *Theragra chalcogramma* and Pacific cod are the dominant species harvested during parallel fisheries. The 2010 harvest of Pacific cod during state-waters fisheries totaled 38.0 million pounds from 199 vessels, for an estimated exvessel fishery value of \$9.86 million. Black rockfish were predominantly harvested in the Kodiak Area. Kodiak black rockfish harvest totaled 103,629 pounds for an estimated exvessel value of approximately \$50,000. During parallel fisheries, ADF&G adopts most seasons, bycatch limits, and allowable gear types established by the National Marine Fisheries Service for federal fisheries that occur in the adjacent exclusive economic zone.

Key words: Westward Region, Kodiak, Chignik, South Alaska Peninsula, groundfish, Pacific cod, black rockfish, state-waters, parallel, commercial fisheries, exvessel, trawl, Annual Management Report, AMR.

INTRODUCTION

Commercial groundfish fisheries that occur inside state-waters (0–3 nmi) are managed by the Alaska Department of Fish and Game (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 is delegated to the 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 in the EEZ also occur inside state waters (Figures 1 and 2). ADF&G issues an emergency order (EO) creating parallel groundfish seasons to facilitate consistency of state and federal regulations for specific transboundary species. Unless superseded by BOF regulations, the state adopts most NMFS rules during parallel fisheries such that seasons, gear, bycatch limits, and inseason management actions mirror federal regulations of the adjacent federal fisheries.

State-waters seasons occur when the State of Alaska establishes harvest quotas, seasons, or regulations independent of federal/parallel fisheries. In the Westward Region, ADF&G establishes state-waters seasons for Pacific cod *Gadus macrocephalus*, sablefish *Anoplopoma fimbria*, lingcod *Ophiodon elongates*, black rockfish *Sebastes melanops*, and dark rockfish *Sebastes ciliatus*. State-waters seasons for Pacific cod and sablefish are prosecuted exclusively within State of Alaska management boundaries (0–3 nmi). The state has full management authority from shore to the 200 nautical mile boundary of the EEZ for lingcod, dark rockfish, and black rockfish.

During 2010, Pacific cod and walleye pollock *Theragra chalcogramma* comprised the largest volume of groundfish harvested from state waters in the Kodiak, Chignik, and South Alaska Peninsula areas (Table 1). All directed walleye pollock harvest occurred during parallel seasons while Pacific cod were harvested during parallel and state-waters seasons. In 2010, 21 emergency orders were issued to enact inseason regulatory changes to groundfish fisheries in the Kodiak, Chignik, and South Alaska Peninsula management areas (Table 2).

This report provides an overview of commercial groundfish fisheries in the Kodiak, Chignik, and South Alaska Peninsula areas and summarizes commercial catch information and regulations that guide management of groundfish resources. Appendix A defines frequently used acronyms and key words associated with Westward Region groundfish fisheries.

PACIFIC COD

Pacific cod are considered a transoceanic species and are managed by NMFS as a single Gulf of Alaska (GOA) stock (Shimada and Kimura 1994). The 2010 GOA Pacific cod Acceptable Biological Catch (ABC) of 174.38 pounds (Thompson et al. 2010) was apportioned 62 percent to the Central Gulf of Alaska (CGOA; 108.12 million pounds), 35 percent to the Western Gulf of Alaska (WGOA; 61.03 million pounds), and 3 percent to the Eastern Gulf of Alaska (EGOA 5.23 million pounds) federal management areas.

Within the CGOA and WGOA, the ABC is further apportioned such that 75 percent of the annual ABC is allocated as total allowable catch (TAC) while 25 percent of the annual ABC is allocated as guideline harvest level (GHL). The TAC limits catch in federal and parallel Pacific cod fisheries and apportions resources among federal management areas to distribute fishing effort. Harvest from federal and parallel seasons are subtracted from the same TAC. The GHL limits catch during state-waters Pacific cod fisheries and apportions Pacific cod resources among state management areas and legal gear types.

The 2010 CGOA Pacific cod harvest, including federal, parallel, and state-waters seasons, totaled 99.08 million pounds (Table 3), which was 9 percent under the CGOA ABC. Approximately 36 percent of the CGOA total harvest was taken from state waters (Table 3). Total Pacific cod harvest from the WGOA during 2010 totaled 59.16 million pounds (Table 3), or 3 percent under the WGOA ABC. Approximately 56 percent of the total WGOA harvest was taken from state waters.

PARALLEL SEASON

Background

ADF&G annually issues an emergency order creating parallel Pacific cod seasons inside state waters (0–3 nmi) of the Kodiak, Chignik, and South Alaska Peninsula management areas. Emergency orders establishing parallel Pacific cod seasons adopt from federal fishing regulations gear and vessel restrictions, area closures, bycatch limits, or other regulations the commissioner determines reasonably necessary to accommodate federal fishery management measures inside state waters. NMFS area closures, including Steller sea lion areas, 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. Vessels participating in parallel Pacific cod fisheries are not required to possess a federal License Limitation Program (LLP) permit.

Most state waters in the Westward Region are closed to non-pelagic trawling (Figures 9 and 10). During directed parallel Pacific cod seasons, all Pacific cod and walleye pollock must be retained under state regulation 5 AAC 28.075 *Utilization Of Pollock And Pacific Cod Taken In A Commercial Fishery*. Federal regulation, 50 CFR 679.B.27 *Increased Retention/Increased Utilization Program*, contains similar language requiring full retention of these species during directed fisheries occurring in federal waters (Beardon 1999). Pacific cod retained as bycatch are typically established at 20 percent by target species weight as designated by NMFS.

Several actions were taken by NMFS and NPFMC in response to the Steller sea lion (SSL) Biological Opinion and Incidental Take Statement (BiOp) issued in November of 2001. Actions taken to mitigate the effects of commercial fishing effort on SSLs are best understood by

referencing the appropriate federal documents (National Marine Fisheries Service 2000, 2001a, 2001b). Notable actions included closing historical fishing grounds adjacent to sea lion rookeries and haulouts and dividing the federal Pacific cod fishery into two distinct seasons. Restructured season dates resulted in the designation of “A” and “B” seasons. Annually, NMFS allocates 60 percent of the federal TAC to the “A” season which begins January 1 for fixed gear vessels and January 20 for trawl vessels. Incidental harvest of Pacific cod that occurs after closure of the “A” season is deducted from the remaining 40 percent of the annual TAC. If sufficient TAC remains for a commercial fishery the remaining TAC is made available for the “B” season beginning September 1.

2010 Central Gulf of Alaska Parallel Season

The parallel CGOA “A” season opened January 1, 2010 and closed January 31, 2010 when the “A” season TAC was achieved. The CGOA parallel Pacific cod “B” season opened September 1 and closed September 13 when the “B” season TAC was harvested.

Harvest of Pacific cod within the Kodiak Management Area during the 2010 parallel season totaled 8.59 million pounds (Table 4). The majority of Pacific cod were harvested using pot gear (5.14 million pounds) and longline gear (3.21 million pounds).

The Chignik Management Area is predominantly located within the CGOA although a small portion of the Chignik Area lies within the WGOA federal management area. Most productive Pacific cod fishing grounds in the Chignik Area are closed to all fishing during federal and parallel Pacific cod fisheries due to closures implemented in 2001 as part of the SSL BiOp. As a result, Chignik Area parallel season Pacific cod harvests have generally been less than 500,000 pounds annually. During 2010, approximately 565,000 pounds were harvested by pot vessels (Table 5).

2010 Western Gulf of Alaska Parallel Season

The WGOA “A” season opened January 1, 2010 and closed on February 19, 2010. The WGOA “B” season opened September 1, 2011 and closed November 17, 2010. Harvest of Pacific cod from South Alaska Peninsula Area during the 2010 parallel season totaled 16.93 million pounds (Table 6). The majority of Pacific cod were harvested by vessels using pot gear (13.23 million pounds).

STATE-WATERS SEASON

Background

In 1996, the BOF developed state-waters Pacific cod management plans for fisheries in three Westward Region groundfish areas: Kodiak, Chignik, and South Alaska Peninsula. The management plans defined season dates, legal gear types, GHF allocation and rollover provisions, vessel registration requirements, and gear storage regulations for each management area (Table 7). Allowable gear types (pot and jig only) and gear limits (60 pots and 5 jig machines) were common across the three newly adopted management plans. Regulations concerning season dates, vessel size and registration limits, GHF allocation and rollover, and gear storage were unique to each management area. The first state-waters Pacific cod seasons occurred in 1997.

GHFs for each management area are set as a percentage of the annual federal Pacific cod ABC. State-waters GHFs were initially capped at 15 percent of the ABC established for the federal

WGOA and CGOA management areas. GHLs were structured to increase incrementally to 20 percent and then 25 percent of federal ABCs if harvest in any year was within 10 percent of the established state-waters GHL. By 2003, each management area achieved the maximum GHL increment such that GHLs were fixed at 25 percent for the South Alaska Peninsula, 12.50 percent for the Kodiak Area, 8.75 percent for the Chignik Area, and 3.75 percent for the Cook Inlet Area.

2010 State-Waters Pacific Cod Season Overview

Over 38 million pounds of Pacific cod were harvested from Kodiak, Chignik, and South Alaska Peninsula areas by 199 vessels during 2010 (Table 8). Total exvessel fishery value was approximately \$9.86 million. The 2010 harvest exceeded the total 2009 Pacific cod state-waters by approximately 12 million pounds (Table 8).

Kodiak Area

The 2010 Kodiak Area GHL was based on 12.5 percent of the 2010 CGOA ABC resulting in a GHL of 13.51 million pounds. Pot and jig gear vessels were each allocated 50 percent of the total GHL or 6.75 million pounds. Within the pot allocation, vessels larger than 58 feet in overall length were restricted to 25 percent of the total state-waters GHL, or 3.71 million pounds, before September 1. The state-waters season began February 7, 2010, seven days after the closure of the parallel CGOA Pacific cod “A” season (Table 9).

Total 2010 harvest of Pacific cod from the Kodiak Area state-waters season was 13.56 million pounds taken by 114 vessels (Table 8). By gear type, 36 pot vessels harvested 7.06 million pounds while 81 jig vessels harvested 6.50 million pounds (Table 10). The estimated exvessel fishery value was \$3.79 million (Table 8). Fishermen harvested Pacific cod from 28 statistical areas during the season (Table 11). Notable harvests occurred in Chiniak Bay (525733), Ugak Bay (525701), and Kiluda Bay (525703) on the eastside of Kodiak Island as well as Malina Bay (535803) on the westside of Afognak Island (Table 11; Appendix B1).

Kodiak Pot Gear Season

The Kodiak Area state-waters pot season for Pacific cod opened February 7, 2010. A total of 36 vessels registered 2,115 pots for the 2010 season. Harvest totaled 7.06 million pounds which exceeded the pot gear allocation by approximately 310,000 pounds (4.6 percent). The exvessel value of the 2010 pot gear season was \$1.77 million based on an initial average price of \$0.25 per pound (Table 10)

Similar to past seasons, harvest rates generally increased as the season progressed. Through the midpoint of the season, daily vessel harvest averaged approximately 12,000 pounds. Average daily harvest increased to over 16,000 pounds per vessel during the last week of the season. Vessels over 58 feet in overall length harvested approximately 46 percent of the total pot gear GHL. The season for all pot vessels closed February 23 after the pot GHL was attained (Table 9). The 2010 pot gear season was open for 17 days.

Kodiak Jig Gear Season

The Kodiak Area state-waters jig season for Pacific cod opened February 7, 2010. The jig season closed on June 5, 2010 when the total Kodiak Area state-waters Pacific cod GHL was attained. A total of 81 jig vessels landed 6.5 million pounds (Table 10). The exvessel fishery value for the Kodiak Area state-waters jig fishery totaled approximately \$1.95 million based on an initial

average price of \$0.30 per pound. Through mid March, weekly harvest averaged approximately 86,000 pounds. As weather improved and additional vessels entered the fishery, the average harvest increased to approximately 541,000 pounds per week for the remainder of the season.

Chignik Area

The 2010 Chignik Area GHL was based on 8.75 percent of the 2010 CGOA ABC resulting in a GHL of 9.46 million pounds. The season for pot and jig gear opened by regulation on March 1 (Table 12). Vessels using pot gear were allocated 90 percent of the GHL or 8.51 million pounds. Vessels using jig gear were allocated 10 percent or 946,040 pounds (Table 14).

The total 2010 Chignik Area state-waters season Pacific cod harvest was 9.15 million pounds taken by 16 vessels (Table 8); due to the limited number of participants jig harvest is confidential. Estimated exvessel value of the fishery was \$2.19 million. Most harvest occurred in statistical areas around Mitrofanina Island (585531), Chiginagak Bay (565633), and near the Semidi Islands (565602; Table 13; Appendix B2).

Chignik Pot Gear Season

A total of 16 vessels registered 960 pots for the 2010 season. Harvest totaled 9.38 million pounds¹ of Pacific cod (Table 13). The majority of catch was tendered to shore-based processors outside of the Chignik Area.

Poor weather conditions limited effort during the first two weeks of the season. From March 1 through 14, six vessels harvested approximately 900,000 pounds. For the week beginning March 15, weather conditions improved and three additional vessels entered the fishery increasing the weekly catch to approximately 1.4 million pounds. Five additional vessels entered the fishery by March 26 resulting in average harvests that ranged between 1.8 and 2.4 million pounds per week for the final three weeks of the season. The pot gear season closed April 6 when the pot GHL was achieved (Table 12).

Weekly harvest rates throughout the 2010 Chignik Area pot season were among the highest on record since the state-waters Pacific cod fishery was created in 1997. Although the 2009 and 2010 Chignik pot gear season lengths were identical in duration, 3.47 million additional pounds of Pacific cod were harvested during the 2010 season (Table 14).

Chignik Jig Gear Season

Minimal jig effort occurred in the Chignik Area during 2010. Similar to past seasons, limited market availability in the Chignik Area likely limited effort. Since 2007, fewer than three jig vessels have participated in the fishery. Due to low effort, harvest information for jig gear remains confidential. The final jig delivery for the 2010 season occurred on August 6, 2010 and the jig season closed by regulation on December 31, 2010.

Allocation Rollover

Several provisions in the *Chignik Area Pacific Cod Management Plan* (5 AAC 28.537) provide additional harvest opportunity if ADF&G determines GHLs will not be attained by the regulatory closure date of December 31. The management plan allows unharvested jig GHL to be taken by either pot or jig gear beginning August 15 (Table 12). ADF&G reopened the Chignik

¹ Total includes Pacific cod harvested after the August 15 GHL allocation rollover date.

Area to both pot and jig gear by EO on August 16 after determining the 2010 jig GHL would not be achieved. No jig effort occurred following the rollover date. Pot effort resumed mid September after closure of the CGOA federal/parallel Pacific cod “B” season and continued into November. Harvest information from the rollover period is confidential due to the limited number of participating vessels.

South Alaska Peninsula Area

The 2010 South Alaska Peninsula Area GHL was based on 25 percent of the 2010 WGOA ABC of 61.03 million pounds resulting in a state-waters GHL of 15.26 million pounds. The state-waters season began March 5, 2010 fourteen days after the closure of the parallel WGOA Pacific cod season (Table 15). Vessels using pot gear were capped at 85 percent of the total GHL or 12.97 million pounds (Table 16). The remaining GHL (2.29 million pounds) was available to jig vessels.

The 2010 total state-waters season Pacific cod harvest was 15.29 million pounds taken by 69 vessels (Table 8). By gear type, 38 pot vessels harvested 12.97 million pounds while 34 jig vessels harvested 2.32 million pounds (Table 16). The estimated exvessel fishery value was \$3.87 million (Table 8). Harvest occurred in 28 distinct statistical areas during the 2010 state-waters season (Table 17). Notable harvests occurred near Sanak Island (625401) and around the Shumagin Islands (605502 and 605504; Table 17; Appendix B3).

South Alaska Peninsula Pot Gear Season

A total of 40 vessels registered 2,400 pots for the 2010 season. Thirty-eight vessels actively participated in the fishery. The 2010 pot gear harvest totaled 12.97 million pounds which exceeded the pot gear allocation by approximately 3,200 pounds (<1 percent). The preliminary exvessel value of the 2010 pot gear season was \$3.24 million based on an initial average price of \$0.25 per pound. Historically, Pacific cod effort is concentrated around the Shumagin Islands near the eastern boundary of the management area and further west near Sanak Island (Appendix B3).

A total of 19 vessels targeted Pacific cod with pot gear in the proximity of the Shumagin Islands. Harvest totaled 7.5 million pounds which accounted for 58 percent of the total 2010 South Alaska Peninsula state-waters Pacific cod catch. Most pot vessels began fishing on the first day of the season (March 4). Daily harvest during the first 10 days of the fishery averaged 280,000 pounds. Approximately half of the Pacific cod vessels subsequently exited the fishery March 9–14 to participate in the federal Western Gulf of Alaska walleye pollock trawl fishery. With the return of the walleye pollock vessels on March 15, average daily harvest increased to approximately 581,000 pounds for the remainder of the season.

Most pot vessels fishing adjacent to Sanak Island concentrated on Pacific cod throughout the season. Nineteen vessels landed approximately 5.44 million pounds accounting for 42 percent of the total South Alaska Peninsula Area state-waters season pot gear harvest. Daily harvests rates increased as the season progressed. From the beginning of the season through March 15 harvests averaged approximately 155,000 pounds per day. For the remainder of the season, vessels operating near Sanak Island harvested an average of approximately 447,000 pounds per day.

The state-waters season for all pot gear vessels closed March 23, 2010. The 2010 South Alaska Peninsula state-waters Pacific cod season for pot gear was open for 18 days (Table 15).

South Alaska Peninsula Jig Gear Season

The 2010 jig season opened concurrently with pot gear on March 5, 2010. Thirty four jig vessels harvested 2.32 million pounds for an estimated exvessel fishery value of \$579,000 based on an initial price of \$0.25 per pound (Table 16). During the month of March effort was sporadic, largely due to weather and a limited number of participants. Following closure of the pot season, jig effort increased and average harvests ranged from 118,000 to over 427,000 pounds per week for the remainder of the season. The jig season closed on May 27, 2010 when the jig gear GHL allocation of 2.29 million pounds was attained. The 2010 South Alaska Peninsula state-waters jig season was open for a total of 84 days (Table 15). Most effort was focused around the Shumagin Islands near the community of Sand Point.

Pacific Cod Harvest Monitoring and Dockside Sampling

ADF&G monitored state-waters Pacific cod harvests during 2010 in the same manner as previous years. Participating processors reported landing information daily to ADF&G management staff. Daily harvest reports were additionally obtained from vessel operators using pot gear. Daily pot vessel harvest reports included the 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 months when fishing effort and harvest rates were high. Dockside samplers conducted confidential interviews with vessel operators to obtain information on catch location, catch per unit effort, bycatch, and fishing effort. Samplers also collected data on fish length, weight, sex, reproductive status, and age.

Dockside sampling staff in Kodiak, King Cove, and Sand Point conducted 165 skipper interviews and collected biological samples from 177 deliveries from the Kodiak, South Alaska Peninsula, and Chignik management areas. During 2010, samplers collected 8,556 fish lengths, 2,211 fish individual weights, 2,200 observations of sex and maturity and extracted 2,200 otolith pairs for aging.

Average fish length varied slightly across areas and gear types. Average Pacific cod length was 67 cm in the Kodiak and Chignik areas and 65 cm in the South Alaska Peninsula area. Among gear types Kodiak Area Pacific cod lengths sampled from jig gear averaged 66 cm in length, while fish sampled from pot gear averaged 67 cm in length (Figure 4). Due to the limited number of sampled jig landings in Chignik and South Alaska Peninsula areas during 2010, biological samples were not available.

Preliminary analysis indicates the age of Pacific cod harvested in 2010 ranged from 3 to 10 years. Pacific cod were predominantly ages-4 and 5 in the Kodiak Area, and predominantly age-5 in the Chignik and South Alaska Peninsula areas (Figure 5).

BLACK ROCKFISH

Background

Black rockfish had limited market value and generally were not harvested commercially in the Kodiak Area until 1990. Harvests increased considerably in 1991 as markets emerged and fishermen began to target previously unexploited populations (Table 18). Fishermen primarily

targeted black rockfish with jig gear, although some black rockfish were incidentally harvested during longline and trawl fisheries. Effort was concentrated in areas easily accessible from the city of Kodiak. Fishery production fell sharply following 1991, presumably due to over exploitation of localized populations. Lower prices and other emerging fisheries may have been additional factors that limited production after 1991. Stocks were similarly targeted along the Alaska Peninsula and adjacent to Chignik in 1995 (Tables 19 and 20). Fishermen predominantly targeted black rockfish in waters near the community of Sand Point.

Prior to 1997 black rockfish fisheries were managed by NMFS as part of the pelagic shelf rockfish group that included dusky *Sebastes variabilis* (previously *S. ciliates*), yellowtail *S. flavidus*, and widow *S. entomelas* rockfish. Annually, a single ABC was established for all species combined in the pelagic shelf rockfish group. However, dusky rockfish were the dominant species in the pelagic shelf group and were the most frequently observed species during NMFS rockfish assessment surveys. As a result, the ABC was largely based on dusky rockfish biomass estimates, resulting in few restrictions on the take of the other species within the group. Under this management strategy, ADF&G was concerned about localized depletion given black rockfish are long-lived near shore species that tend to be unevenly distributed. During some years ADF&G closed state waters by emergency order to prevent overexploitation of the stock although the adjacent federal waters would remain open to directed fishing.

Given the majority of black rockfish were believed to reside inside state waters, ADF&G submitted a fisheries management plan amendment to the NPFMC in 1997 requesting that NMFS relinquish black rockfish management within the EEZ of GOA to the state. The amendment passed and was implemented effective April 5, 1998. From 1997 to the time the amendment was implemented in April 1998, the NPFMC separated black rockfish from the larger pelagic shelf rockfish group, enabling federal fishery managers to place a 573,201 pound ABC on black rockfish in the CGOA. The ABC was based on NPFMC's Tier 6 guidelines, which apply to fisheries with little stock assessment information. Harvest limits were set at 75 percent of average production from 1978–1995.

ADF&G fishery managers applied the 75 percent Tier 6 catch limit to fisheries in the Cook Inlet, Kodiak, and Chignik areas when setting preseason guidelines in 1997. Given the NPFMC was in the process of delegating authority to the state, limits were set as interim measures and were only enforceable in state waters. Harvest levels for the directed fishery were set low enough to accommodate potential black rockfish bycatch² in other fisheries and not exceed the 573,201 pound total. During this time, ADF&G began assigning GHGs to state groundfish management areas within the CGOA to better distribute effort and discourage localized fishing effort. As a result, the 1997 GHG for the Kodiak Area was set at 170,000 pounds (Table 21). The GHG was further divided into four sections: three sections that encompassed the areas of historical harvest and one section with a low GHG for the remainder of the Kodiak Area to allow exploratory fishing. In 1998, the Kodiak Area was further subdivided into seven districts each with separate GHGs (Figure 6). The Chignik and South Alaska Peninsula Area Eastern District GHGs were established at 100,000 pounds each.

The BOF adopted several measures for black rockfish fisheries in the Kodiak and Chignik areas that became effective prior to the start of the 2003 fisheries (Table 21). Kodiak Area vessel operators were required to register specifically for the black rockfish fishery preventing

² Black rockfish bycatch is allowed at 5% of the target species weight in all fisheries.

simultaneous participation during Pacific cod and black rockfish seasons. Prior to this action management staff were often unable to assess effort given that vessels could target Pacific cod and rockfish under a common groundfish registration. The BOF also implemented a 5,000-pound per 5-day harvest and landing trip limit in the Kodiak Area designed to slow the pace of harvest and provide ADF&G more time to effectively manage small GHs at the district level. Descriptions of black rockfish fishing districts, previously called sections, were also formally adopted in regulation as groundfish registration districts. Likewise, superexclusive registration was adopted for the Chignik Area, and the area was subdivided into three districts for management purposes.

Prior to 2003, processors often neglected to sort black rockfish from dark and dusky rockfish. Species identification can be challenging, and fishermen generally lacked incentive to distinguish dark or dusky rockfish from black rockfish as they were often paid a higher price for black rockfish. Starting in 2003, ADF&G increased efforts to educate processors and fishermen on proper species identification.

In 2005, the BOF divided the South Alaska Peninsula Eastern District into three management sections in an effort to distribute harvest throughout the district. Harvest was additionally limited to no more than 45,000 pounds from any Eastern District section. Also during 2005, the BOF adopted a regulation in the Kodiak Management Area allowing jig vessels registered for directed groundfish fisheries, other than black rockfish, to register for incidental black rockfish harvest of up to 2,500 pounds per trip in the Kodiak Area, with a 5-day landing limit of 5,000 pounds (Table 21).

During 2006 and 2007, approximately 30,000 pounds of black rockfish were reported annually as bycatch to non-jig fisheries (Table 22). The majority of reported bycatch occurred during federally managed trawl fisheries in the EEZ. In response, ADF&G began monitoring rockfish deliveries from 2008 federal trawl fisheries. ADF&G personnel concluded the elevated black rockfish bycatch levels were a result of misidentification or misreporting on fish tickets, and that most fish identified as black rockfish by processing plants were either dark or dusky rockfish. ADF&G has continued limited federal rockfish bycatch monitoring since that time.

2010 Black Rockfish Overview

GHs were attained in three of seven districts in Kodiak Area during 2010. The GH was not met in the South Alaska Peninsula or Chignik areas.

Kodiak Area Fishery

ADF&G issued a news release on January 29, 2010 specifying a directed fishing GH of 175,000 pounds for the Kodiak Area. The fishery opened on January 1, 2010. Effort and harvest primarily occurred in the Northeast, Eastside, Afognak, and Southwest districts from March through October. Similar to previous years, little fishing effort occurred in Southwest, Westside, or Mainland districts (Table 23). A total of 12 vessels harvested 103,630 pounds black rockfish during 2010, which was the lowest annual harvest since 2003 (Table 18). The exvessel value of the fishery was \$39,379 based on an average price of \$0.38 per pound.

Chignik Area Fishery

ADF&G issued a news release on January 29, 2010 specifying a Chignik Area directed fishing GH of 100,000 pounds. Harvest was additionally capped at 45,000 pounds per district to

distribute harvest throughout the management area. The fishery opened on January 1, 2010. A single vessel participated in the fishery resulting in confidential harvest information (Table 19). Processor interest and market availability likely limited participation in the fishery.

South Alaska Peninsula Area Eastern District Fishery

ADF&G issued a news release on January 29, 2010 specifying a directed fishing GHL of 75,000 pounds for the South Alaska Peninsula Area Eastern District. Similar to the Chignik Area, a single vessel participated in the fishery and harvest information is confidential (Table 20).

Black Rockfish Harvest Monitoring

Black rockfish harvests are monitored through fish ticket records and dockside sampling of commercial catches. Information collected by dockside samplers includes fishing location and effort (days fished) as well as fish length, weight, sex, and reproductive maturity. Additionally, otoliths are collected for age determination. Due to limited participation in the Chignik and South Alaska Peninsula areas, 2010 black rockfish dockside data collection was limited to the Kodiak Area.

Mean size of black rockfish sampled from landings in the Kodiak Area during 2010 was 47 cm in length (Figure 7). Otoliths were collected from 934 black rockfish for aging during the 2010 season. Ages for black rockfish in 2010 ranged from 6 to 49 years, with an average age of 15 (Figure 8).

SKATES

Background

Prior to 2003, skates were managed by NMFS under the ‘other species’ assemblage that also included sharks, sculpins, squid, and octopi (Gaichas et al. 2003). The annual TAC for the assemblage was based on 5 percent of the sum of all other GOA fishery management plan (FMP) target species TACs. In 2004, all skates were separated from the ‘other species’ assemblage, and managed as a single complex.

Skates are predominantly harvested incidentally during longline and trawl fisheries in the Kodiak Area. Traditionally, most skates harvested in the Kodiak Area were discarded at sea, ground into fishmeal, or discarded onshore once delivered to shore-based processors in unsorted catches from trawl fisheries. The majority of historic harvests occurred in federal waters, although large harvests inside state waters have occurred (Table 24).

Skates have been managed in state waters under parallel rules since the late 1980s. In 1998, the BOF required a commissioner’s permit to target skates in state waters. This regulation gave ADF&G the authority to restrict fishing depth, define seasons, specify fishing areas, establish minimum sizes, specify legal gear, and require harvest logbooks and other conditions determined necessary for conservation and management purposes. At that time the state did not establish separate state-waters harvest quotas or separate state-waters seasons. Thus, when the skate assemblage closed in federal waters, that closure was also in effect for state waters under the parallel structure of the global EO.

Beginning in 2003, emerging markets for skate products, primarily in the Republic of Korea, resulted in increased interest and price for GOA skates. At times, skates are more valuable than some species of salmon and several other species of groundfish. Additionally, fishermen

targeting skates were able to retain Pacific cod up to 20 percent of their retained skate weight, making even relatively small amounts of bycatch lucrative for participants. As a result, the skate harvest increased significantly in the CGOA (Table 24).

In 2006, NMFS placed skates in bycatch status and disallowed directed fishing due to concerns of overfishing and the lack of information on skate biology or population size. At that time, ADF&G discontinued issuing commissioner's permits allowing for directed harvest of skates within state waters.

2010 Skate Fisheries

The 2010 CGOA state and federal waters harvest of skates as bycatch totaled 5.17 million pounds harvested by 173 vessels. Approximately 8 percent of all CGOA harvest occurred inside state waters of the CGOA (Table 24). A total of 48 vessels harvested 305,718 pounds of skates in the WGOA. Approximately 6 percent of the total harvest occurred in state waters (Table 24). Most skates were harvested during trawl and longline fisheries.

SABLEFISH

Sablefish in state waters are managed separately from the federal sablefish individual fishing quota (IFQ) program. Known habitat for mature sablefish is limited in most state waters of the Westward Region. Most sablefish in the Westward Region are typically associated with deeper waters near the continental shelf and abundance is limited inside state waters east of Unimak Pass.

The BOF prohibited directed state-waters sablefish fisheries in the Kodiak and Chignik areas in 2002 and in the Eastern District of South Alaska Peninsula Area in 2003. Since that time, sablefish may only be retained with certain restrictions as bycatch (1 percent) to other commercial groundfish fisheries. Sablefish bycatch is managed by NMFS under federal rules which are adopted inside state waters by ADF&G through the global groundfish EO. The 2010 sablefish bycatch harvest in state waters of the Kodiak, Chignik, and South Peninsula Eastern District totaled 17,924 pounds (Table 1).

LINGCOD

Commercial regulations in the Kodiak and Chignik areas prohibit retention of lingcod prior to July 1 and require all retained lingcod to be a minimum of 35 inches in total length. These regulations prevent commercial exploitation during nest-guarding and ensure only mature fish are harvested. The South Alaska Peninsula Area is believed to be the western boundary of lingcod distribution range (Mecklenburg et al. 2002), therefore, seasonal retention and size limit regulations are not in place to further limit harvest.

All legal commercial gear types may be used to harvest lingcod, although regional registration is required for vessels intending to target lingcod. Harvests of lingcod in the Westward Region have generally remained below 100,000 pounds annually since 1988 and most harvest occurs as bycatch subsequent to other commercial groundfish fisheries. During 2008, harvest increased considerably to 521,257 pounds largely due to increased retention by trawl vessels (Table 25). In response, ADF&G reduced the allowable lingcod bycatch rate from 20 percent to 5 percent prior to the start of the 2009 season. Harvest declined to 97,281 pounds in 2009 and 67,429 pounds in 2010 (Table 25).

PARALLEL WALLEYE POLLOCK FISHERIES

State waters are opened for parallel walleye pollock seasons concurrent with federal seasons managed by NMFS. Annually, harvest quotas are released in four openings designated A, B, C, and D seasons (Table 26). In some areas more than one opening occurred within a season to ensure the full seasonal allocation was harvested. Walleye pollock were primarily harvested with pelagic trawl vessels.

Harvest of walleye pollock in 2010 totaled 101.6 million pounds in the CGOA and 57.1 million pounds in the WGOA (Table 27). Approximately 23 percent of the total CGOA walleye pollock harvest and 58 percent of total the WGOA harvest occurred in state waters (Table 27).

NON-PELAGIC TRAWL CLOSURES

The history of non-pelagic trawl closures around Kodiak Island and along the Alaska Peninsula is variable. Generally, bays have been closed year-round since 1986. Additional changes occurred in 1994 and 1995 when the BOF opened state waters to non-pelagic trawling near Castle Rock and Sanak Island in the South Alaska Peninsula Area (Figure 9).

Non-pelagic trawling was considered again during 1999 in response to public proposals that sought to close all state waters within the Kodiak and Chignik areas to non-pelagic trawling. The BOF adopted the proposals with the exception of an area along the west side of Kodiak Island, which remains open on a seasonal basis (Figure 10). Seasonal openings were designed to allow non-pelagic trawl vessels access to flatfish resources during parallel fisheries. The remainder of state-waters within the Kodiak and Chignik areas were closed to non-pelagic trawl gear. No additional trawl closures were implemented during 2010.

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TABLES AND FIGURES

Table 1.—Harvest of the top 30 species, by total weight, from state waters of Kodiak, Chignik, and South Alaska Peninsula areas, as reported on groundfish fish tickets, 2010.

Species	Kodiak	Chignik	South Alaska Peninsula	Total Weight (Pounds)
Pacific Cod	22,375,372	10,027,789	32,578,403	64,981,565
Walleye Pollock	23,681,528	34	33,219,751	56,901,313
Pacific Halibut	2,906,888	702,406	1,793,562	5,402,856
Arrowtooth Flounder	389,041		1,539,626	1,928,667
Flathead Sole	126,203		295,009	421,212
Big Skate	230,426	1,246	1,218	232,890
Octopus, unidentified	65,992	28,257	132,756	227,004
Rock Sole	121,677		3,091	124,769
Longnose Skate	94,001	2,026	12,149	108,176
Black Rockfish	103,710	Confidential	Confidential	103,710
Eulachon Smelt	49,873		1,640	51,512
Jellyfish	1,110		38,743	39,854
Chinook Salmon	6,473		31,557	38,030
Squid	20,408		6	20,414
Dusky Rockfish	17,104	2,979	113	20,195
Rex Sole	9,925		8,745	18,669
Sablefish	2,970		14,954	17,924
Sleeper Shark			15,572	15,572
Lumpsucker	1,435		13,227	14,661
Dark Rockfish	12,547	1,051		13,598
Starry Flounder	11,013		334	11,347
Skate, unidentified	6,593	230	4,220	11,042
Yelloweye Rockfish	7,230	2,515	1,095	10,840
Lingcod	10,015	798		10,814
Spiny Dogfish Shark	8,983		992	9,975
Capelin Smelt	4,569		2,739	7,308
Giant Grenadier	305		4,671	4,976
Thornyhead Rockfish	249		3,739	3,987
Sculpin, unidentified	1,838		1,734	3,572
Butter Sole	3,101		3	3,104

Notes: Weights reported in whole pounds. Discards at sea excluded.

Data are confidential in cases where fewer than 3 vessels or processors participated.

Table 2.—Groundfish emergency orders issued for the Kodiak, Chignik, and South Alaska Peninsula areas, 2010.

Emergency Order	Effective Date	Explanation
4-GF-01-10	January 1, 2010	Established parallel commercial groundfish fishing seasons and bycatch limits in the Kodiak, Chignik, and South Alaska Peninsula, Bering Sea-Aleutian Islands, and Chukchi-Beaufort Areas.
4-GF-02-10	February 7, 2010	Opened Kodiak Area state-waters Pacific cod season.
4-GF-03-10	February 23, 2010	Closed Kodiak Area state-waters Pacific cod season to pot gear.
4-GF-04-10	February 26, 2010	Opened South Alaska Peninsula Area state-waters Pacific cod season.
4-GF-05-10	February 26, 2010	Delayed South Alaska Peninsula Area state-waters Pacific cod season for 24 hours.
4-GF-06-10	February 27, 2010	Delayed South Alaska Peninsula Area state-waters Pacific cod season for 24 hours.
4-GF-07-10	February 28, 2010	Delayed South Alaska Peninsula Area state-waters Pacific cod season for 24 hours.
4-GF-08-10	March 1, 2010	Delayed South Alaska Peninsula Area state-waters Pacific cod season for 24 hours.
4-GF-09-10	March 2, 2010	Delayed South Alaska Peninsula Area state-waters Pacific cod season for 24 hours.
4-GF-11-10	March 3, 2010	Delayed South Alaska Peninsula Area state-waters Pacific cod season for 24 hours.
4-GF-12-10	March 5, 2010	Opened South Alaska Peninsula Area state-waters Pacific cod season.
4-GF-13-10	March 23, 2010	Closed South Alaska Peninsula Area state-waters Pacific cod season to pot gear.
4-GF-14-10	March 28, 2010	Closed the directed black rockfish fishery in the Kodiak Area Northeast District.
4-GF-15-10	April 4, 2010	Closed the incidental black rockfish fishery in the Kodiak Area Northeast District.
4-GF-16-10	April 6, 2010	Closed Chignik Area state-waters Pacific cod season to pot gear.
4-GF-17-10	May 27, 2010	Closed South Alaska Peninsula Area state-waters Pacific cod season to jig gear.
4-GF-18-10	June 5, 2010	Closed Kodiak Area state-waters Pacific cod season to jig gear.
4-GF-20-10	June 28, 2010	Closed the black rockfish fishery in the Kodiak Area Eastside District.
4-GF-21-10	August 16, 2010	Removed GHL allocation between pot and jig gear in the Chignik Area state-waters Pacific cod fishery.
4-GF-22-10	September 1, 2010	Closed Chignik Area state-waters Pacific cod season to pot and jig gear.
4-GF-24-10	September 13, 2010	Reopened Chignik Area state-waters Pacific cod season to pot and jig gear.

Notes: Omitted emergency orders (e.g., 4-GF-10-10) enacted for management areas outside of Kodiak, Chignik, and South Alaska Peninsula.

GH L = guideline harvest level.

Table 3.–Pacific cod harvest, in millions of pounds, from Central and Western Gulf of Alaska Management areas, 1990–2010.

NMFS Area	Year	Federal Waters		State Waters		Total	Discards	
		Harvest	% of Total	Harvest	% of Total	Harvest	ABC	at Sea
Central GOA	1990	79.79	87	11.82	13	91.61	130.95	0.58
	1991	81.24	81	19.55	19	100.79	106.48	0.51
	1992	73.12	82	16.53	18	89.65	85.40	0.46
	1993	60.31	84	11.60	16	71.91	77.50	0.66
	1994	50.28	80	12.89	20	63.16	68.89	0.81
	1995	72.84	77	21.76	23	94.60	100.69	0.79
	1996	71.93	81	16.76	19	88.70	94.58	3.22
	1997	76.64	76	24.59	24	101.24	113.20	1.83
	1998	72.63	74	24.90	26	97.53	108.20	0.39
	1999	71.03	68	34.08	32	105.11	117.22	0.17
	2000	56.32	72	21.71	28	78.03	96.01	0.45
	2001	50.00	78	14.08	22	64.08	85.20	0.80
	2002	42.44	70	18.18	30	60.62	69.84	1.11
	2003	41.97	68	20.14	32	62.11	64.02	0.99
	2004	47.26	66	24.19	34	71.45	78.93	0.49
	2005	38.94	62	24.00	38	62.94	73.01	0.24
	2006	37.21	63	22.29	37	59.50	83.49	0.14
	2007	43.53	65	23.02	35	66.55	83.49	0.41
	2008	45.21	64	25.84	36	71.05	83.56	1.16
	2009	35.20	60	23.70	40	58.80	69.50	1.16
	2010	63.34	64	35.74	36	99.08	108.10	0.94
Western GOA	1990	72.20	85	13.13	15	85.33	65.48	0.74
	1991	71.95	94	4.29	6	76.24	56.67	0.32
	1992	59.73	82	13.15	18	72.87	51.80	0.74
	1993	37.90	95	1.88	5	39.78	41.25	0.18
	1994	24.88	77	7.32	23	32.20	36.67	0.15
	1995	35.68	80	8.99	20	44.67	44.24	0.20
	1996	35.28	73	12.92	27	48.20	41.56	0.29
	1997	47.34	71	19.55	29	66.88	62.89	0.37
	1998	39.98	69	18.06	31	58.04	60.11	0.08
	1999	39.73	65	21.16	35	60.90	65.12	0.04
	2000	33.73	55	27.90	45	61.63	60.64	0.07
	2001	23.02	54	19.97	46	42.99	53.81	0.03
	2002	26.32	55	21.22	45	47.54	49.52	0.07
	2003	17.55	40	25.93	60	43.48	45.40	0.07
	2004	17.11	38	28.16	62	45.27	49.85	0.05
	2005	16.49	43	22.29	57	38.77	46.11	0.05
	2006	11.23	29	27.74	71	38.96	59.21	0.07
	2007	15.83	42	22.31	58	38.14	59.21	0.05
	2008	21.58	50	21.47	50	43.05	57.17	0.06
	2009	15.40	40	23.30	60	38.60	47.50	0.10
	2010	26.00	44	33.16	56	59.16	61.00	0.36

Notes: Weights are reported in whole pounds. Discards at sea are excluded from all columns except the Discards at Sea column. State and federal harvests may not add to total due to rounding.

GOA = Gulf of Alaska, ABC= Acceptable Biological Catch, NMFS = National Marine Fisheries Service.

Table 4.—Kodiak Area state-waters Pacific cod harvest by gear type, during parallel Pacific cod seasons, 1997–2010.

Year	Gear Type				Total
	Pot	Longline	Trawl	Jig	
1997	8,496,557	1,849,832	571,786	526	10,918,701
1998	4,998,323	2,113,533	500,663	27,246	7,639,765
1999	8,093,984	2,474,068	1,158,941	27,963	11,754,956
2000	4,463,886	3,512,904	198,805	79,365	8,254,960
2001	2,800,868	2,235,004	140,043	22,414	5,198,329
2002	2,324,281	1,275,408	14,173	5,926	3,619,788
2003	3,104,572	2,580,771	21,051	13,737	5,720,131
2004	2,329,223	3,767,088	12,433	237,555	6,346,299
2005	3,890,960	3,488,159	305,997	292,559	7,977,675
2006	4,430,232	5,377,684	137,566	190,037	10,135,519
2007	5,013,162	3,361,989	95,449	63,432	8,534,032
2008	3,317,365	1,897,939	31,460	38,267	5,285,031
2009	2,741,107	2,831,913	19,641	71,071	5,663,732
2010	5,142,268	3,212,528	10,620	223,647	8,589,063

Note: Weights are reported in whole pounds. Discards at sea are excluded.

Table 5.—Chignik Area state-waters Pacific cod harvest by gear type, during parallel Pacific cod seasons, 1997–2010.

Year	Gear Type				Total
	Pot	Longline	Trawl	Jig	
1997	Confidential - All Gear Types				555,718
1998	Confidential - All Gear Types				409,669
1999	Confidential - All Gear Types				852,408
2000	Confidential - All Gear Types				426,788
2001	Confidential - All Gear Types				135,999
2002	Confidential - All Gear Types				264,836
2003	Confidential - All Gear Types				211,531
2004	Confidential - All Gear Types				157,008
2005	Confidential - All Gear Types				62,891
2006	Confidential - All Gear Types				62,324
2007	Confidential - All Gear Types				38,500
2008	Confidential - All Gear Types				175,908
2009	239,584	45,136	0	0	284,720
2010	564,567	Confidential	0	0	564,567 ^a

Note: Weights are in reported whole pounds. Discards at sea are excluded. Data are confidential in cases where fewer than 3 vessels participated.

^a Total excludes confidential harvest.

Table 6.—South Alaska Peninsula Area state-waters Pacific cod harvest by gear type, during parallel Pacific cod seasons, 1997–2010.

Year	Gear Type				Total ^a
	Pot	Longline	Trawl	Jig	
1997	1,998,742	21,268	6,275,699	Confidential	8,295,709
1998	3,974,919	511,388	3,536,321	Confidential	8,022,628
1999	2,841,596	Confidential	5,145,488	0	7,987,084
2000	5,699,112	219,195	6,342,383	Confidential	12,260,690
2001	3,272,010	44,507	2,289,085	339,940	5,945,543
2002	6,051,920	Confidential	643,287	398,623	7,093,830
2003	12,966,344	46,165	160,705	92,528	13,265,743
2004	12,882,834	15,069	919,244	397,702	14,214,849
2005	6,128,240	536,983	2,826,290	100,691	9,595,204
2006	9,319,648	216,514	6,252,940	Confidential	15,789,102
2007	6,370,559	399,170	2,462,186	Confidential	9,235,215
2008	6,387,463	555,457	744,439	114,599	7,846,360
2009	8,054,281	2,280,326	333,954	417,515	11,086,076
2010	13,229,552	1,559,375	1,383,756	756,920	16,929,603

Note: Weights are reported in whole pounds. Discards at sea are excluded. Data are confidential in cases where fewer than 3 vessels participated.

^a Totals exclude confidential harvest.

Table 7.—Regulatory development of the state-waters Pacific cod seasons in the Kodiak, Chignik, and South Alaska Peninsula (SAP) areas.

YEAR	REGULATION
1996	<ul style="list-style-type: none"> ● Alaska Board of Fisheries adopts state-waters Pacific cod management plans for Kodiak, Chignik, and South Alaska Peninsula (SAP) areas. ● All areas established as exclusive registration. ● Gear restricted to mechanical jigging machines (5 machines), hand troll (5 lines), or pots (60 pots). ● Kodiak and SAP open 14 days after federal closure; Chignik opens April 15. ● Vessel size restricted to 58' in Chignik and SAP. ● Jig/pot allocation (50:50) in Kodiak; no allocation by gear type in Chignik or SAP. ● Gear allocation rollover September 1 in Kodiak. Gear limits and exclusive registration may be removed October 31 in all areas; vessel size limits may be removed October 31 for Chignik and SAP.
1997	<ul style="list-style-type: none"> ● Prosecution of the first state-waters Pacific cod fishery in Kodiak, Chignik and SAP areas.
1998	<ul style="list-style-type: none"> ● Kodiak and SAP change opening date to 7 days after federal closure ● Chignik opening date changed to April 1 ● SAP adopts gear allocation rollover September 1. ● SAP caps pot harvest at 85% of the guideline harvest level (GHL).
1999	<ul style="list-style-type: none"> ● Chignik opening date changed to April 15. ● Chignik GHL allocation (jig/pot) established at 15% jig and 85% pot ● Chignik adopts gear allocation rollover on August 15. ● Chignik Area changed to superexclusive registration. ● Kodiak adopts large vessel (> 58') cap of 25% of GHL prior to September 1.
2001	<ul style="list-style-type: none"> ● State regulation adopted recognizing Steller sea lion haulouts during parallel Pacific cod, walleye pollock and Atka mackerel seasons.
2002	<ul style="list-style-type: none"> ● Vessel monitoring system (VMS) rules implemented during parallel Pacific cod, walleye pollock, and Atka mackerel seasons. ● Pot storage requirement liberalized in Kodiak and Chignik areas for transition between parallel and state-waters seasons. ● Chignik opening date changed to March 1.
2004	<ul style="list-style-type: none"> ● Pot storage liberalized in SAP Area for transition between parallel and state-waters seasons.
2005	<ul style="list-style-type: none"> ● Chignik allocation (jig/pot) allocation changed in Chignik (10:90).
2007	<ul style="list-style-type: none"> ● SAP adopts 24-hour weather delay prior to fishery opening. ● SAP mandatory inseason catch reporting by vessels. ● SAP Area registration requirements changed, prohibiting fishing in another groundfish fishery outside of SAP and a portion of the Chignik Area.
2010	<ul style="list-style-type: none"> ● SAP adopts 58' vessels size limit for parallel Pacific cod fishery.

Table 8.—Harvest, effort, and value from Kodiak, Chignik, and South Alaska Peninsula areas state-waters Pacific cod seasons, 2000–2010.

				Pounds	Price Per	
	Year	Vessels	Landings	GHL ^a	Harvested ^b	Pound ^c Fishery Value ^d
Kodiak Area						
	2000	204	1,707	12.0	8,562,816	\$0.39 \$3,335,844
	2001	103	669	10.6	4,843,741	\$0.34 \$1,638,642
	2002	82	552	8.7	8,825,851	\$0.29 \$2,556,887
	2003	128	837	8.0	8,154,867	\$0.33 \$2,685,922
	2004	156	1,122	9.9	10,033,889	\$0.31 \$3,102,824
	2005	158	1,011	9.1	8,548,163	\$0.32 \$2,734,882
	2006	113	646	10.4	6,330,518	\$0.42 \$2,657,285
	2007	95	643	10.4	6,406,965	\$0.51 \$3,278,695
	2008	111	988	10.4	10,548,875	\$0.59 \$6,217,710
	2009	130	971	8.7	8,591,477	\$0.32 \$2,233,575
	2010	114	880	13.5	13,566,306	\$0.28 \$3,796,186
Chignik Area						
	2000	25	163	6.7	1,794,759	\$0.30 \$538,414
	2001	26	179	6.0	2,648,655	\$0.26 \$688,645
	2002	25	199	4.9	4,227,547	\$0.20 \$832,946
	2003	28	257	4.5	4,467,571	\$0.27 \$1,206,244
	2004	28	297	5.8	5,750,461	\$0.23 \$1,322,156
	2005	22	248	6.4	5,787,467	\$0.25 \$1,446,687
	2006	12	202	7.3	3,439,521	\$0.34 \$1,169,437
	2007	16	242	7.3	5,699,461	\$0.45 \$2,564,576
	2008	23	262	7.3	6,838,934	\$0.56 \$3,829,803
	2009	12	123	6.1	5,681,230	\$0.24 \$1,363,034
	2010	16	160	9.5	9,153,719	\$0.24 \$2,195,007
South Alaska Peninsula Area						
	2000	90	650	15.1	15,044,104	\$0.30 \$4,476,218
	2001	121	727	13.4	13,464,020	\$0.25 \$3,362,729
	2002	107	598	12.4	12,716,258	\$0.22 \$2,792,697
	2003	92	604	11.4	11,560,663	\$0.27 \$3,117,330
	2004	88	595	12.5	12,514,240	\$0.23 \$2,869,261
	2005	73	528	11.5	11,436,172	\$0.25 \$2,846,795
	2006	54	386	14.8	11,739,736	\$0.36 \$4,215,888
	2007	60	465	14.8	12,678,151	\$0.47 \$5,940,742
	2008	97	700	14.3	13,302,050	\$0.57 \$7,547,258
	2009	72	514	11.9	11,594,124	\$0.26 \$3,011,443
	2010	69	534	15.3	15,288,266	\$0.25 \$3,877,227

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Table 8.—Page 2 of 2.

	Year	Vessels	Landings	GHL ^a	Pounds Harvested ^b	Price Per Pound ^c	Fishery Value ^d
Total							
	2000	314	2,519	33.8	25,401,678	\$0.33	\$8,350,476
	2001	246	1,574	30.0	20,956,415	\$0.27	\$5,690,016
	2002	209	1,348	26.0	25,769,656	\$0.23	\$6,182,531
	2003	248	1,698	23.9	24,183,101	\$0.28	\$7,009,496
	2004	272	2,014	28.2	28,298,589	\$0.26	\$7,294,241
	2005	253	1,787	27.0	25,771,801	\$0.27	\$7,028,363
	2006	180	1,234	32.5	21,509,775	\$0.37	\$8,042,610
	2007	232	1,348	32.5	24,817,369	\$0.47	\$11,784,013
	2008	230	1,939	32.0	30,671,115	\$0.57	\$17,594,770
	2009	213	1,608	26.7	25,866,831	\$0.27	\$6,608,052
	2010	199	1,574	38.3	38,008,291	\$0.26	\$9,868,420

Note: Weights are in whole pounds. Discards at sea are excluded. Totals by area may not match number of vessels by gear type in Tables 10, 12, and 16 because a vessel may have used more than one gear type.

^a GHL = guideline harvest level (millions of pounds).

^b Pounds harvested for Chignik exclude jig harvest in 2006 and 2008 due to confidentiality; jig vessel numbers and jig landing data are also excluded for these years.

^c Price per pound calculated from whole pounds sold excluding bait and meal.

^d Value calculated by multiplying pounds of sold product (not pounds harvested) by price per pound.

Table 9.–Kodiak Area state-waters Pacific cod season openings, 1997–2010.

	Pot Gear	Jig Gear
1997	<i>Fishery Dates:</i> April 4 - May 4 September 1 - September 30 October 28 - December 31 <i>Management Actions:</i> September 1 - reopened to pot gear October 31 allocation rollover - gear limits, exclusive registration area lifted.	April 4 - December 31 October 28- December 31
1998	<i>Fishery Dates:</i> March 17 - April 27 September 1 - December 31 <i>Management Actions:</i> September 1 - reopened to pot gear October 31 vessel size limit - gear limits, exclusive registration area lifted.	March 17 - December 31
1999	<i>Fishery Dates:</i> March 21 - April 29 October 5 - December 31 <i>Management Actions:</i> October 6 - reopen to pot gear. (following CGOA opening) October 31 - gear limits lifted, exclusive registration area lifted.	March 21 - August 31 October 6 - December 31
2000	<i>Fishery Dates:</i> March 11 - December 31 <i>Management Actions:</i> October 31 - limits on pots, jigs, and vessel size removed, exclusive registration area lifted.	March 11 - December 31
2001	<i>Fishery Dates:</i> March 11 - December 31 <i>Management Actions:</i> September 1 - reopen to pot gear. October 31 - limits on pots, jigs, and vessel size removed, exclusive registration area lifted.	March 11 - December 31
2002	March 16 - May 4 September 1 - December 31 <i>Management Actions:</i> September 1 - reopen to pot gear. October 31 - limits on pots, jigs, and vessel size removed, exclusive registration area lifted.	March 16 - December 31
2003	<i>Fishery Dates:</i> February 16 - March 2 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	February 16 - May 9

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Table 9.–Page 2 of 2.

	Pot Gear	Jig Gear
2004	<i>Fishery Dates:</i> February 7 - February 22 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	February 7 - April 20
2005	<i>Fishery Dates:</i> February 2 - February 13 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	February 2 - April 21
2006	<i>Fishery Dates:</i> March 7 - March 29 <i>Management Actions:</i> Pot gear closed when GHL was attained. Jig season closed on 9/1 for parallel season (B-season).	March 7 - September 1
2007	<i>Fishery Dates:</i> March 6 - April 8 <i>Management Actions:</i> Pot gear closed when GHL was attained. Jig season closed on 9/1 for parallel season (B-season).	March 6 - September 1
2008	<i>Fishery Dates:</i> February 27 - March 26 October 5 - November 22 <i>Management Actions:</i> Pot gear closed when GHL was attained. Jig season closed on 9/1 for parallel season (B-season). October 5 - reopen to pot and jig gear (following federal CGOA closure).	February 27 - September 1 October 5 - November 22
2009	<i>Fishery Dates:</i> February 3 - February 18 <i>Management Actions:</i> Pot gear closed when GHL was attained. Jig season closed on 9/1 for parallel season (B-season). October 3 - reopen to jig gear (following federal CGOA closure).	February 3 - September 1 October 3 - December 31
2010	<i>Fishery Dates:</i> February 7 - February 23 <i>Management Actions:</i> Pot gear closed when GHL was attained. Jig season closed when GHL was attained.	February 7 - June 5

Note: GHL = guideline harvest level.
CGOA = Central Gulf of Alaska.

Table 10.—Kodiak Area state-waters Pacific cod harvest and effort by gear type, 1997–2010.

Year	Gear	GHL ^a	Vessels	Landings	Pounds	Price Per Pound ^b
1997	Jig	4.25	73	482	1,978,772	\$0.23
	Pot	4.25	40	232	5,580,372	\$0.22
1998	Jig	4.05	91	661	2,112,817	\$0.23
	Pot	4.05	49	310	6,070,140	\$0.22
1999 ^c	Jig	5.85	118	793	2,294,837	\$0.38
	Pot	5.85	79	462	8,400,138	\$0.32
2000	Jig	6.00	143	1,226	2,814,481	\$0.40
	Pot	6.00	69	481	5,748,334	\$0.39
2001	Jig	5.30	69	433	1,252,692	\$0.36
	Pot	5.30	34	236	3,591,049	\$0.33
2002	Jig	4.35	51	340	1,389,838	\$0.28
	Pot	4.35	33	212	7,436,013	\$0.29
2003	Jig	4.00	102	688	3,195,605	\$0.35
	Pot	4.00	42	149	4,959,262	\$0.32
2004	Jig	4.95	124	961	4,210,284	\$0.34
	Pot	4.95	47	161	5,823,605	\$0.29
2005	Jig	4.56	122	849	4,570,327	\$0.33
	Pot	4.56	51	162	3,977,835	\$0.30
2006	Jig	5.21	79	477	1,446,881	\$0.43
	Pot	5.21	41	169	4,883,637	\$0.41
2007	Jig	5.21	63	457	1,249,753	\$0.52
	Pot	5.21	33	182	5,157,212	\$0.50
2008	Jig	5.22	76	647	2,042,082 ^d	\$0.61
	Pot	5.22	37	341	8,506,792 ^d	\$0.59
2009	Jig	4.35	94	833	4,450,423	\$0.32
	Pot	4.35	38	138	4,141,054	\$0.32
2010	Jig	6.75	81	707	6,504,733	\$0.30
	Pot	6.75	36	173	7,061,573	\$0.25

Note: Weights are reported in whole pounds. Discards at sea are excluded.

^a GHL = guideline harvest level (millions of pounds).

^b Price per pound calculated from whole pounds sold excluding bait and meal.

^c Beginning in 1999, vessels > 58' using pot gear were capped at 25% of the total GHL.

^d Pot harvest prior to the allocation rollover (September 1) was 5.42 million pounds. Jig harvest prior to the allocation rollover was 1.98 million pounds.

Table 11.—Pacific cod harvest from the Kodiak Area state-waters season by statistical area, 2010.

Statistical Area	Pounds	Vessels	Landings ^b
515801	647,288	14	36
525701	1,475,630	37	121
525703	1,413,158	20	44
525731	742,579	45	155
525733	1,457,532	66	235
525802	40,520	4	5
525803	38,849	5	5
525805	104,311	6	7
525806	568,947	22	45
525834	531,086	3	9
535631	836,600	20	52
535633	415,893	3	9
535634	344,875	9	28
535703	199,902	3	13
535732	838,187	28	52
535733	541,455	9	19
535734	134,208	8	11
535803	1,253,943	25	68
545632	213,944	4	17
545633	113,248	4	8
545734	234,644	5	10
Other ^a	1,419,509	9	30
Total	13,566,308		

Note: Weights are reported in whole pounds. Discards at sea are excluded.

^a A total of 7 statistical areas were combined due to confidentiality.

^b Some landings involve multiple statistical areas.

Table 12.–Chignik Area state-waters Pacific cod season openings, 1997–2010.

	Pot Gear	Jig Gear
1997	<i>Fishery Dates:</i> April 15 - June 15 August 1 - September 30 October 28 - December 31 <i>Management Actions:</i> October 31 allocation rollover - vessel size limit, gear limits, exclusive registration area lifted.	April 15 - June 15 August 1 - September 30 October 28 - December 31
1998	<i>Fishery Dates:</i> April 1 - April 26 <i>Management Actions:</i> May 20 reopened to jig gear. October 31 allocation rollover - gear limits lifted.	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> October 31 allocation rollover - limits on number of pots, jigs, and vessel size removed.	April 21 - September 1 October 5 - December 31
2000	<i>Fishery Dates:</i> April 15 - December 31 <i>Management Actions:</i> October 31 - limits on number of pots, jigs, and vessel size removed.	April 15 - December 31
2001	<i>Fishery Dates:</i> March 11 - December 31 <i>Management Actions:</i> October 31 - limits on number of pots, jigs, and vessel size removed.	March 11 - December 31
2002	<i>Fishery Dates:</i> March 1 - December 31 <i>Management Actions:</i> October 31 - limits on number of pots, jigs, and vessel size removed.	March 1 - December 31
2003	<i>Fishery Dates:</i> March 1 - April 11 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	March 1 - June 4
2004	<i>Fishery Dates:</i> March 1 - May 13 <i>Management Actions:</i> August 15 jig GHL rollover - jig quota harvestable by either jig or pot gear. October 31 - limits on number of pots, jigs, and vessel size removed.	March 1 - December 31

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Table 12.–Page 2 of 2.

	Pot Gear	Jig Gear
2005	<i>Fishery Dates:</i> March 1 - May 10 <i>Management Actions:</i> August 15 jig GHL rollover - jig quota harvestable by either jig or pot gear October 31 - limits on number of pots, jigs, and vessel size removed.	March 1 - December 31
2006	<i>Fishery Dates:</i> March 1 - September 1 <i>Management Actions:</i> August 15 jig GHL rollover - jig quota harvestable by either jig or pot gear September 1 - state-waters season (jig and pot) closed and parallel season opened.	March 1 - September 1
2007	<i>Fishery Dates:</i> March 1 - September 1 <i>Management Actions:</i> August 15 jig GHL rollover - jig quota harvestable by either jig or pot gear. September 1 - state-waters season (jig and pot) closed and parallel season opened.	March 1 - September 1
2008	<i>Fishery Dates:</i> March 1 - September 1 October 5 - December 31 <i>Management Actions:</i> August 15 jig GHL rollover - jig quota harvestable by either jig or pot gear. September 1 - state-waters season (jig and pot) closed and parallel season opened. October 5 - reopen to pot and jig gear after federal CGOA closure. November 4 - Vessel size limits and gear limits removed.	March 1 - September 1 October 5 - December 31
2009	<i>Fishery Dates:</i> March 1 - April 8 October 3 - December 31 <i>Management Actions:</i> August 15 jig GHL rollover - jig quota harvestable by either jig or pot gear. September 1 - state-waters season (jig and pot) closed and parallel season opened. October 3 - reopen to pot and jig gear after federal CGOA closure.	March 1 - September 1 October 3 - December 31
2010	<i>Fishery Dates:</i> March 1 - April 6 September 13 - December 31 <i>Management Actions:</i> August 15 - jig GHL rollover; jig quota harvestable by either jig or pot gear. September 1 - state-waters season (jig and pot) closed and parallel season opened. September 13 - reopen to pot and jig gear after federal CGOA closure.	March 1 - September 1 September 13 - December 31

Note: GHL = guideline harvest level.
CGOA = Central Gulf of Alaska.

Table 13.—Pacific cod harvest from the Chignik Area state-waters season by statistical area, 2010.

Statistical Area	Pounds	Vessels	Landings ^b
565602	1,362,587	4	11
565633	2,264,443	5	55
575635	660,208	3	19
585531	2,138,879	4	21
585601	766,037	3	26
Other ^a	2,204,160	7	59
Total	9,396,314		

Note: Weights are in whole pounds. Discards at sea are excluded.

^a Total of 5 statistical area combined due to confidentiality.

^b Some landings involve multiple statistical areas.

Table 14.—Chignik Area state-waters Pacific cod harvest and effort by gear type, 1997–2010.

Year	Gear	GHL ^a	Vessels	Landings	Pounds	Price Per Pound ^b
1997	Jig	2.95	4	14	35,002	\$0.18
	Pot	2.95	10	60	1,098,970	\$0.18
1998	Jig	2.85	11	59	167,283	\$0.18
	Pot	2.85	44	236	5,440,796	\$0.17
1999	Jig	4.10	11	56	218,408	\$0.32
	Pot	4.10	32	396	6,207,176	\$0.29
2000	Jig	1.01	5	12	38,453	\$0.35
	Pot	5.70	20	151	1,756,305	\$0.30
2001	Jig	0.90	13	55	277,411	\$0.27
	Pot	5.10	15	124	2,371,243	\$0.26
2002	Jig	0.74	14	60	324,227	\$0.20
	Pot	4.17	12	139	3,903,320	\$0.20
2003	Jig	0.68	16	106	433,067	\$0.28
	Pot	3.83	15	151	4,034,504	\$0.26
2004	Jig	1.10	14	53	141,697	\$0.24
	Pot	5.80	17	244	5,608,763	\$0.23
2005	Jig	0.63	8	42	136,872	\$0.24
	Pot	5.75	15	206	5,650,595	\$0.25
2006	Jig	0.73	1	2	Confidential	Confidential
	Pot	6.57	12	202	3,439,521	\$0.34
2007	Jig	0.73	0	0	0	ND
	Pot	6.57	16	242	5,700,861	\$0.45
2008	Jig	0.73	2	3	Confidential	Confidential
	Pot	6.58	23	262	6,838,934 ^c	\$0.56
2009	Jig	0.61	1	1	Confidential	Confidential
	Pot	5.47	11	122	5,679,678	\$0.24
2010	Jig	0.95	1	20	Confidential	Confidential
	Pot	8.51	16	160	9,153,719 ^d	\$0.24

Note: Weights are in whole pounds. Discards at sea are excluded. Data are confidential in cases where fewer than 3 vessels participated.

^a GHL = guideline harvest level (millions of pounds).

^b Price per pound calculated from whole pounds sold excluding bait and meal.

^c Pot harvest prior to the allocation rollover (August 15) was 6.69 million pounds.

^d Pot harvest prior to the allocation rollover (August 15) was 8.49 million pounds.

Table 15.–South Alaska Peninsula Area state-waters Pacific cod season openings, 1997–2010.

	Pot Gear	Jig Gear
1997	<i>Fishery Dates:</i> April 4 - December 22 <i>Management Actions:</i> October 31 allocation rollover - vessel size limit, gear limits, exclusive registration recinded.	April 4 - December 22
1998	<i>Fishery Dates:</i> March 10 - April 14 <i>Management Actions:</i> October 31 allocation rollover - No action; federal WGOA reopened October 9 - December 31.	March 10 - October 9
1999	<i>Fishery Dates:</i> March 15 - April 11 October 31- December 31 <i>Management Actions:</i> October 31 allocation rollover - Reopened to pot gear. November 10 - Gear limits recinded.	March 15 - December 31
2000	<i>Fishery Dates:</i> March 11 - April 8 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	March 11 - September 19
2001	<i>Fishery Dates:</i> March 6 - April 13 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	March 6 - June 12
2002	<i>Fishery Dates:</i> March 5 - March 24 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	March 5 - April 26
2003	<i>Fishery Dates:</i> February 24 - March 11 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	February 24 - April 22
2004	<i>Fishery Dates:</i> March 2 - March 24 <i>Management Actions:</i> Fishery closed when GHL allocations were attained.	March 2 - April 14
2005	<i>Fishery Dates:</i> March 3 - March 24 <i>Management Actions:</i> Pot fishery closed when GHL allocation was attained. Jig fishery closed August 31, parallel portion of WGOA reopened September 1 - December 31.	March 3 - August 31

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Table 15.–Page 2 of 2.

	Pot Gear	Jig Gear
2006	<i>Fishery Dates:</i> March 9 - March 29 April 4 - April 8 <i>Management Actions:</i> Pot fishery closed when GHL allocation was attained. Jig fishery closed August 31, parallel portion of WGOA reopened September 1 - December 31.	March 9 - September 1
2007	<i>Fishery Dates:</i> March 15 - April 17 <i>Management Actions:</i> Pot fishery closed when GHL allocation was attained. Jig fishery closed August 31, parallel portion of WGOA reopened September 1 - December 31.	March 15 - September 1
2008	<i>Fishery Dates:</i> March 7 - April 1 <i>Management Actions:</i> Pot fishery closed when GHL allocation was attained. Jig fishery closed August 31, parallel portion of WGOA reopened September 1 - December 31.	March 7 - September 1
2009	<i>Fishery Dates:</i> March 4 - April 4 <i>Management Actions:</i> Pot fishery closed when GHL allocation was attained. Jig fishery closed August 31, parallel portion of WGOA reopened September 1 - December 31.	March 4 - September 1
2010	<i>Fishery Dates:</i> March 5 - March 23 <i>Management Actions:</i> Pot fishery closed when GHL allocation was attained. Jig fishery closed when GHL was attained.	March 5 - May 27

Note: GHL = guideline harvest level.
WGOA = Western Gulf of Alaska.

Table 16.—South Alaska Peninsula Area state-waters Pacific cod harvest and effort by gear type, 1997–2010.

Year	Gear	GHL ^a	Vessels	Landings	Pounds	Price Per Pound ^b
1997	Jig	4.70	45	178	349,468	\$0.17
	Pot	4.70	55	477	9,132,055	\$0.18
1998	Jig	1.35	28	124	437,708	\$0.16
	Pot	7.65	51	309	8,192,804	\$0.17
1999	Jig	1.95	27	166	706,952	\$0.29
	Pot	11.05	53	388	11,115,028	\$0.26
2000	Jig	2.28	28	145	757,953	\$0.28
	Pot	12.90	65	505	14,286,151	\$0.30
2001	Jig	2.01	69	417	3,402,427	\$0.24
	Pot	11.39	55	311	10,421,593	\$0.25
2002	Jig	1.86	66	322	2,046,686	\$0.24
	Pot	10.50	50	276	10,669,572	\$0.21
2003	Jig	1.80	65	413	3,633,007	\$0.27
	Pot	9.69	41	191	7,927,656	\$0.27
2004	Jig	1.90	51	317	1,671,461	\$0.24
	Pot	10.60	44	278	10,842,778	\$0.23
2005	Jig	1.73	39	261	1,229,832	\$0.25
	Pot	9.80	39	267	10,206,340	\$0.25
2006	Jig	2.22	12	36	99,552	\$0.36
	Pot	12.58	43	350	11,640,183	\$0.36
2007	Jig	2.22	14	59	254,178	\$0.47
	Pot	12.58	46	406	12,423,973	\$0.47
2008	Jig	2.14	51	299	1,382,268	\$0.57
	Pot	12.15	48	390	11,901,039	\$0.57
2009	Jig	1.78	26	185	1,093,382	\$0.23
	Pot	10.11	47	329	10,500,742	\$0.26
2010	Jig	2.29	34	294	2,315,081	\$0.25
	Pot	12.96	38	240	12,973,186	\$0.25

Note: Weights are reported in whole pounds. Discards at sea are excluded.

^a GHL = guideline harvest level (millions of pounds).

^b Price per pound calculated from whole pounds sold excluding bait and meal.

Table 17.—Pacific cod harvest from the South Alaska Peninsula Area state-waters season by statistical area, 2010.

Statistical Area	Pounds	Vessels	Landings ^b
595502	1,747,130	4	19
595503	493,889	4	11
605432	621,605	5	10
605501	330,657	9	18
605502	2,439,727	12	44
605504	2,631,260	30	204
605506	397,645	4	9
605507	585,180	19	51
605531	224,067	6	8
605532	132,768	9	14
615508	280,403	6	16
625401	3,032,335	8	60
625431	302,208	3	15
625501	377,408	5	10
635434	1,021,889	5	29
655405	88,506	3	13
Other ^a	581,589	17	28
Total	15,288,266		

Note: Weights are reported in whole pounds. Discards at sea are excluded.

^a Total of 12 statistical area combined due to confidentiality.

^b Some landings include multiple statistical areas.

Table 18.—Kodiak Area black rockfish jig season harvest and effort, 1990–2010.

Year ^a	Vessels	Landings	Directed GHL ^b	Pounds	Price Per Pound ^c
1990	2	8	-	Confidential	Confidential
1991	55	317	-	782,133	\$0.25
1992	34	167	-	476,623	\$0.24
1993	14	58	-	105,244	\$0.24
1994	23	126	-	116,724	\$0.37
1995	33	183	-	311,455	\$0.44
1996	43	167	-	301,798	\$0.46
1997	51	297	-	221,167	\$0.38
1998	64	348	190,000	196,548	\$0.33
1999	70	300	185,000	128,008	\$0.42
2000	72	260	185,000	245,891	\$0.44
2001	36	168	185,000	213,629	\$0.50
2002	25	123	185,000	196,166	\$0.43
2003	33	90	185,000	84,237	\$0.36
2004	37	124	185,000	122,180	\$0.39
2005	23	85	175,000	116,726	\$0.40
2006	25	97	175,000	123,443	\$0.42
2007	21	96	175,000	135,386	\$0.41
2008	17	91	175,000	132,325	\$0.53
2009	18	90	175,000	122,249	\$0.41
2010	12	74	175,000	103,630	\$0.38

Note: Weights are reported in whole pounds. Discards at sea are excluded. Data are confidential in 1990 because fewer than 3 vessels participated. GHLs were not established prior to 1998 because black rockfish were managed with the federal pelagic shelf rockfish complex.

^a From 1990 to 1997 black rockfish were federally managed. After 1997, the State of Alaska assumed management responsibility from 0–200 nmi. Only mechanical jig and hand jig are allowed for directed fishing.

^b GHL = guideline harvest level.

^c Price per pound calculated from whole pounds sold excluding bait and meal.

Table 19.—Chignik Area black rockfish jig season harvest and effort, 1990–2010.

Year ^a	Vessels	Landings	Directed GHL ^b	Pounds	Price Per Pound ^c
1990	0	0	-	0	na
1991	0	0	-	0	na
1992	0	0	-	0	na
1993	0	0	-	0	na
1994	0	0	-	0	na
1995	5	6	-	25,125	\$0.49
1996	11	25	-	201,825	\$0.36
1997	9	39	-	80,741	\$0.23
1998	10	30	100,000	87,712	\$0.28
1999	10	30	100,000	11,305	\$0.25
2000	7	14	100,000	95,572	\$0.43
2001	13	33	100,000	102,316	\$0.41
2002	7	15	100,000	81,015	\$0.41
2003	10	40	100,000	46,598	\$0.42
2004	6	26	100,000	99,122	\$0.27
2005	7	16	100,000	49,721	\$0.40
2006	2	4	100,000	Confidential	Confidential
2007	2	7	100,000	Confidential	Confidential
2008	1	4	100,000	Confidential	Confidential
2009	2	2	100,000	Confidential	Confidential
2010	1	5	100,000	Confidential	Confidential

Note: Weights are reported in whole pounds. Discards at sea are excluded. Data are confidential in 1990 because fewer than 3 vessels participated. GHLs were not established prior to 1998 because black rockfish were managed with the federal pelagic shelf rockfish complex.

^a From 1990 to 1997 black rockfish were federally managed. After 1997, the State of Alaska assumed management responsibility from 0–200 nmi. Only mechanical jig and hand jig are allowed for directed fishing.

^b GHL = guideline harvest level.

^c Price per pound calculated from whole pounds sold excluding bait and meal.

Table 20.—South Alaska Peninsula Area Eastern District black rockfish jig season harvest and effort, 1990–2010.

Year ^a	Vessels	Landings	Directed GHL ^b	Pounds	Price Per Pound ^c
1990	0	0	-	0	na
1991	1	1	-	Confidential	Confidential
1992	0	0	-	0	na
1993	0	0	-	0	na
1994	0	0	-	0	na
1995	8	49	-	120,745	\$0.33
1996	19	79	-	151,633	\$0.25
1997	11	43	-	182,862	\$0.34
1998	10	43	100,000	105,135	\$0.29
1999	13	68	100,000	71,100	\$0.40
2000	21	75	100,000	95,520	\$0.37
2001	30	83	100,000	105,863	\$0.38
2002	12	49	100,000	116,721	\$0.32
2003	6	9	100,000	6,638	\$0.21
2004	17	29	100,000	9,329	\$0.26
2005	12	27	100,000	60,359	\$0.36
2006	3	8	75,000	7,015	\$0.37
2007	2	9	75,000	Confidential	Confidential
2008	0	0	75,000	0	na
2009	3	3	75,000	705	\$0.25
2010	1	1	75,000	Confidential	Confidential

Note: Weights are reported in whole pounds. Discards at sea are excluded. Data are confidential in 1990 because fewer than 3 vessels participated. GHLs were not established prior to 1998 because black rockfish were managed with the federal pelagic shelf rockfish complex.

^a From 1990 to 1997 black rockfish were federally managed. After 1997, the State of Alaska assumed management responsibility from 0–200 nmi. Only mechanical jig and hand jig are allowed for directed fishing.

^b GHL = guideline harvest level.

^c Price per pound calculated from whole pounds sold excluding bait and meal.

Table 21.—Regulation development of the black rockfish fishery in the Westward Region.

YEAR	REGULATION
Pre-1997	<ul style="list-style-type: none"> ● Black rockfish managed by NMFS.
1997	<ul style="list-style-type: none"> ● NPFMC removes black rockfish from Pelagic Shelf Rockfish Group. ● State-waters managed separately from federal waters: <ul style="list-style-type: none"> ○ Kodiak Area managed for 170,000 pounds. ○ Chignik Area managed for 100,000 pounds. ○ South Alaska Peninsula Eastern District managed for 100,000 pounds.
1998	<ul style="list-style-type: none"> ● State receives management authority from NMFS for black rockfish in the Exclusive Economic Zone. ● Kodiak and Chignik areas and South Alaska Peninsula Eastern District established as non-exclusive registration. ● Kodiak Area divided into seven districts each with a separate guideline harvest level (GHL).
1999	<ul style="list-style-type: none"> ● ADF&G reduces the GHL for Northeast District of Kodiak Area from 25,000 pounds to 20,000 pounds.
2003	<ul style="list-style-type: none"> ● Kodiak Area requires specific black rockfish area registration. ● Kodiak Area trip limit of 5,000 pounds per 5 days. ● Chignik Area designated superexclusive registration. ● Chignik Area divided into 3 management districts; ADF&G establishes an inseason GHL cap of 45,000 pounds from any one district.
2004	<ul style="list-style-type: none"> ● ADF&G reduces the GHL for Westside District of Kodiak Area from 30,000 pounds to 20,000 pounds.
2005	<ul style="list-style-type: none"> ● South Alaska Peninsula Eastern District divided into 3 management sections, ADF&G establishes an inseason GHL cap of 45,000 pounds from any one section. ● 2,500 pound "incidental" trip limit implemented for vessels fishing during other directed jig groundfish fisheries in Kodiak Area. ● Logbook made mandatory for Kodiak Area black rockfish
2006	<ul style="list-style-type: none"> ● ADF&G reduces the GHL in the South Alaska Peninsula Eastern District to 75,000 pounds and section caps removed.
2007	<ul style="list-style-type: none"> ● Incidental trip limit in Northeast, Afognak, and Southeast Districts reduced to 1,000 pounds.

Table 22.—Jig and non-jig harvest of black rockfish from the Kodiak, Chignik, and South Alaska Peninsula Eastern District, 1990–2010.

Year	Jig			Non-Jig			Total Pounds	Discard at Sea
	Vessels	Landings	Pounds	Vessels	Landings	Pounds		
1990	2	8	Confidential	10	36	69,390	Confidential	889
1991	56	318	Confidential	11	24	86,464	Confidential	66
1992	34	167	476,623	13	16	10,528	487,151	100
1993	14	58	105,244	12	22	2,767	108,011	332
1994	23	126	116,724	8	10	2,767	119,491	10,980
1995	40	238	457,325	15	17	4,336	461,661	3,660
1996	62	271	655,256	18	20	7,483	662,738	13,027
1997	66	377	484,770	20	22	3,970	488,740	750
1998	82	421	389,395	24	33	9,771	399,166	5
1999	93	398	210,413	25	40	4,252	214,664	3,615
2000	93	348	436,983	26	30	9,386	446,369	1,250
2001	68	279	421,807	20	29	7,862	429,669	5,005
2002	35	183	393,902	22	27	9,251	403,153	0
2003	49	139	137,473	24	25	5,788	143,261	44
2004	57	179	230,631	31	41	1,982	232,613	942
2005	40	128	226,806	22	25	1,326	228,133	492
2006	28	109	Confidential	29	37	29,410	Confidential	607
2007	22	112	243,172	63	139	34,758	277,930	995
2008	17	95	Confidential	31	53	5,130	Confidential	7,078
2009	21	95	136,272	23	30	1,033	137,305	319
2010	13	80	150,949	60	108	15,776	166,725	13,463

Note: Weights are reported in whole pounds. Discards at sea are excluded from all but the discard at sea column. Prior to 1998, there were no guideline harvest levels (GHLs) established for black rockfish; they were managed as part of the federal Pelagic Shelf complex. Data in some years are confidential to maintain confidentiality in the individual area tables (Tables 18, 19, and 20).

Table 23.—Jig harvest of black rockfish from Kodiak, Chignik, and South Alaska Peninsula areas by district, 2010.

Area/District	GHL ^a	Pounds ^b	Directed Fishery Closure Date	Pounds	
				Directed ^c	Other ^d
Kodiak Area					
Afognak	35,000	34,583	October 11	Confidential	Confidential
Northeast	20,000	19,444	March 28	Confidential	Confidential
Eastside	30,000	30,068	June 28	15,331	14,738
Southeast	30,000	18,943	December 31	18,262	681
Southwest	20,000	0	December 31	0	0
Westside	20,000	Confidential	December 31	0	Confidential
Mainland	20,000	0	December 31	0	0
Total	175,000	103,630		Confidential	Confidential
Chignik Area					
Sutwik Island	45,000 ^e	0	December 31	0	0
Chignik Bay	45,000 ^e	Confidential	December 31	Confidential	0
Mitrofanina	45,000 ^e	Confidential	December 31	Confidential	0
Total	100,000	Confidential		Confidential	0
South Alaska Peninsula Area - Eastern District					
Total	75,000	Confidential	December 31	0	Confidential

Note: Weights are in whole pounds. Discards at sea excluded.

^a GHL = guideline harvest level.

^b Total pounds of black rockfish harvested by jig gear.

^c Total pounds of black rockfish harvested by jig gear in the directed black rockfish fishery.

^d Total pounds of black rockfish harvested by jig gear as bycatch or as incidental harvest.

^e No more than 45,000 pounds may be taken out of any one Chignik Area District. Total Chignik Area harvest capped at 100,000 pounds.

Table 24.—All skate species harvest from the Central and Western Gulf of Alaska, 1995–2010.

NMFS Area	Year	Vessels	Landings	Pounds	State Waters Harvest (%) ^a	Discards at Sea
Central GOA	1995	73	315	839,907	21	884,503
	1996	143	696	2,221,465	20	952,429
	1997	159	1085	3,372,641	21	664,707
	1998	104	342	843,694	16	779,203
	1999	65	152	210,579	4	734,344
	2000	77	505	1,304,898	3	722,677
	2001	107	486	968,027	13	775,142
	2002	68	369	1,285,419	4	309,661
	2003	136	755	7,040,060	17	367,715
	2004	102	501	3,260,089	6	311,868
	2005	96	554	2,644,925	8	462,275
	2006	98	1,111	2,784,218	14	726,444
	2007	116	1,305	2,585,795	11	654,771
	2008	184	1,534	3,193,782	11	680,498
	2009	161	1,296	4,243,774	13	1,257,932
	2010	173	1,354	5,167,043	8	1,541,934
NMFS Area	Year	Vessels	Landings	Pounds	State Waters Harvest (%) ^a	Discards at Sea
Western GOA	1995	17	23	975	71	9,214
	1996	9	13	343	59	104,237
	1997	6	6	110	42	66,276
	1998	16	17	840	38	55,505
	1999	20	30	1,397	49	93,235
	2000	15	22	11,826	5	217,239
	2001	14	23	6,665	22	52,760
	2002	13	24	182,071	<1	34,360
	2003	30	92	318,171	3	77,368
	2004	22	34	130,139	<1	36,294
	2005	17	24	17,386	3	44,792
	2006	16	25	77,212	<1	37,804
	2007	23	103	69,970	3	53,312
	2008	43	89	132,175	5	59,028
	2009	47	132	151,272	51	235,706
	2010	48	236	305,718	6	603,681

Notes: Weights are reported in whole pounds. Discards at sea are excluded from all but the Discards at Sea column.

GOA = Gulf of Alaska.

^a Percent of total skate harvest taken from state waters (0 to 3 nmi).

Table 25.–Lingcod harvest from Kodiak, Chignik, and South Alaska Peninsula areas, 1988–2010.

Year	Jig	Longline	Pot	Trawl	Total
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	28,163	32,024	45,419	105,641
2008	1,518	31,637	21,278	466,824	521,257
2009	373	28,112	3,614	65,182	97,281
2010	812	31,089	1,935	33,594	67,429

Note: Weights are reported in whole pounds. Discards at sea excluded.

Table 26.—Central and Western Gulf of Alaska walleye pollock fishery openings, 2005–2010.

NMFS Area	2005	2006	2007	2008	2009	2010
Area 630	Jan 20- Jan 29	Jan 20 - Feb 15	Jan 20 - Jan 22	Jan 20 - Jan 22	Jan 20 - Jan 22	Jan 20 - Jan 22
	Feb 6- Feb 14	Mar 10 (<i>12 hrs</i>)	Feb 6 - Feb 8	Mar 3 - Mar 4	Feb 11 - Feb 11	Feb 11 - Feb 11
	Mar 10 (<i>12 hrs</i>)	Aug 25 - Sep 27	Feb 12 - Feb 14	Mar 7 - May 31	Mar 9 - Mar 11	Mar 9 - Mar 11
	Aug 25- Aug 27	Oct 1 - Nov 1	Feb 20 -Feb 22	Aug 25 - Sep 4	Aug 25 - Aug 26	Aug 25 - Aug 26
	Sep 8- Sep 10		Mar 1 - Mar 2	Oct 1 - Oct 6	Sep 29 - Oct 1	Sep 29 - Oct 1
	Sep 15- Sep 16		Mar 10 - Mar 11	Oct 12 -Oct 14		
	Sep 22- Sep 23		Aug 25 - Aug 28			
	Oct 1- Oct 8		Sept 15 - Sep 18			
	Oct 17- Oct 19		Sep 21 - Sep 23			
	Oct 27- Oct 28		Sep 25 - Nov 1			
Area 620	Jan 20- Mar 2	Jan 20 - March 21	Jan 20 - Mar 27	Jan 20 - Mar 26	Jan 20 - Mar 6	Jan 20 - Mar 6
	Mar 10- Mar 20	Aug 25- Aug 28	Aug 25 - Sep 10	Aug 25 - Sep 6	Mar 10 - Mar 14	Mar 10 - Mar 14
	Aug 25- Aug 29	Aug 31 - Sep 3	Sep 21 - Sep 28	Oct 1 - Nov 1	Aug 25- Aug 26	Aug 25- Aug 26
	Sep 8- Sep 12	Sep 6 - Nov 1	Oct 1 - Nov 1		Sep 29 - Oct 4	Sep 29 - Oct 4
	Sep 15- Sep 19					
	Sep 22- Nov 1					
Area 610	Jan 20- Jan 23	Jan 20 - Jan 22	Jan 20 - Jan 22	Jan 20 - Jan 22	Jan 20 - Jan 22	Jan 20 - Jan 22
	Mar 10- Mar 12	Jan 26 - Jan 27	Feb 5 - Feb 7	Mar 3 - Mar 4	Mar 1 - Mar 3	Mar 1 - Mar 3
	Aug 25- Sep 3	Mar 10 - Mar 14	Feb 8 - Feb 10	Mar 7 - Mar 31	Mar 10 - Mar 12	Mar 10 - Mar 12
	Oct 1- Oct 14	Aug 25 - Aug 28	Mar 10 - Mar 13	Aug 25 - Sep 4	Aug 25 - Aug 31	Aug 25 - Aug 31
		Sep 6 - Sep 27	Mar 16 - Mar 18	Oct 1 - Oct 6	Oct 1 - Oct 6	Oct 1 - Oct 6
		Oct 1 - Nov 1	Mar 21 - Mar 23	Oct 12 - Oct 14		
			Aug 25 - Nov 1			

Table 27.—Walleye pollock harvest in millions of pounds from the Central and Western Gulf of Alaska, 1995–2010.

NMFS Area	Year	Vessels	Landings	Pounds	State Waters	Discards at Sea
					Harvest (%) ^a	
Central GOA	1995	162	934	74.0	12	1.3
	1996	134	1,035	50.4	28	1.6
	1997	190	1,782	121.4	31	1.9
	1998	166	1,847	206.8	34	0.4
	1999	164	1,484	148.2	27	0.5
	2000	137	1,328	106.2	4	0.5
	2001	157	1,421	87.0	21	0.3
	2002	135	1,095	71.0	43	0.2
	2003	120	945	71.8	23	0.2
	2004	108	895	86.7	37	0.4
	2005	105	937	102.9	23	0.3
	2006	123	1,388	96.9	29	0.2
	2007	165	1,635	73.0	26	0.3
	2008	175	1,578	71.5	31	1.0
	2009	167	1,351	53.8	35	0.6
	2010	164	1,477	101.6	23	1.0
10-Yr Average		142	1,272	81.6	29	0.4
NMFS Area	Year	Vessels	Landings	Pounds	State Waters	Discards at Sea
					Harvest (%) ^a	
Western GOA	1995	101	361	65.7	34	0.8
	1996	59	322	52.2	60	0.8
	1997	85	334	62.5	32	0.7
	1998	94	381	65.7	58	0.1
	1999	90	454	52.8	53	0.3
	2000	74	474	47.3	79	0.1
	2001	68	582	67.5	74	0.1
	2002	53	334	38.2	49	0.2
	2003	55	280	37.1	54	0.1
	2004	59	415	50.9	61	0.1
	2005	60	584	67.9	49	0.1
	2006	64	664	53.8	62	0.2
	2007	62	633	38.2	53	0.1
	2008	57	491	32.8	34	0.0
	2009	64	416	30.7	68	0.1
	2010	67	642	57.1	58	0.1
10-Yr Average		61	504	47.4	56	0.1

Notes: Harvest reported in (millions) whole pounds. Discards at sea are excluded from all but the Discards at Sea column.

GOA = Gulf of Alaska.

^a Percent of total walleye pollock harvested in state waters (0 to 3 nmi).

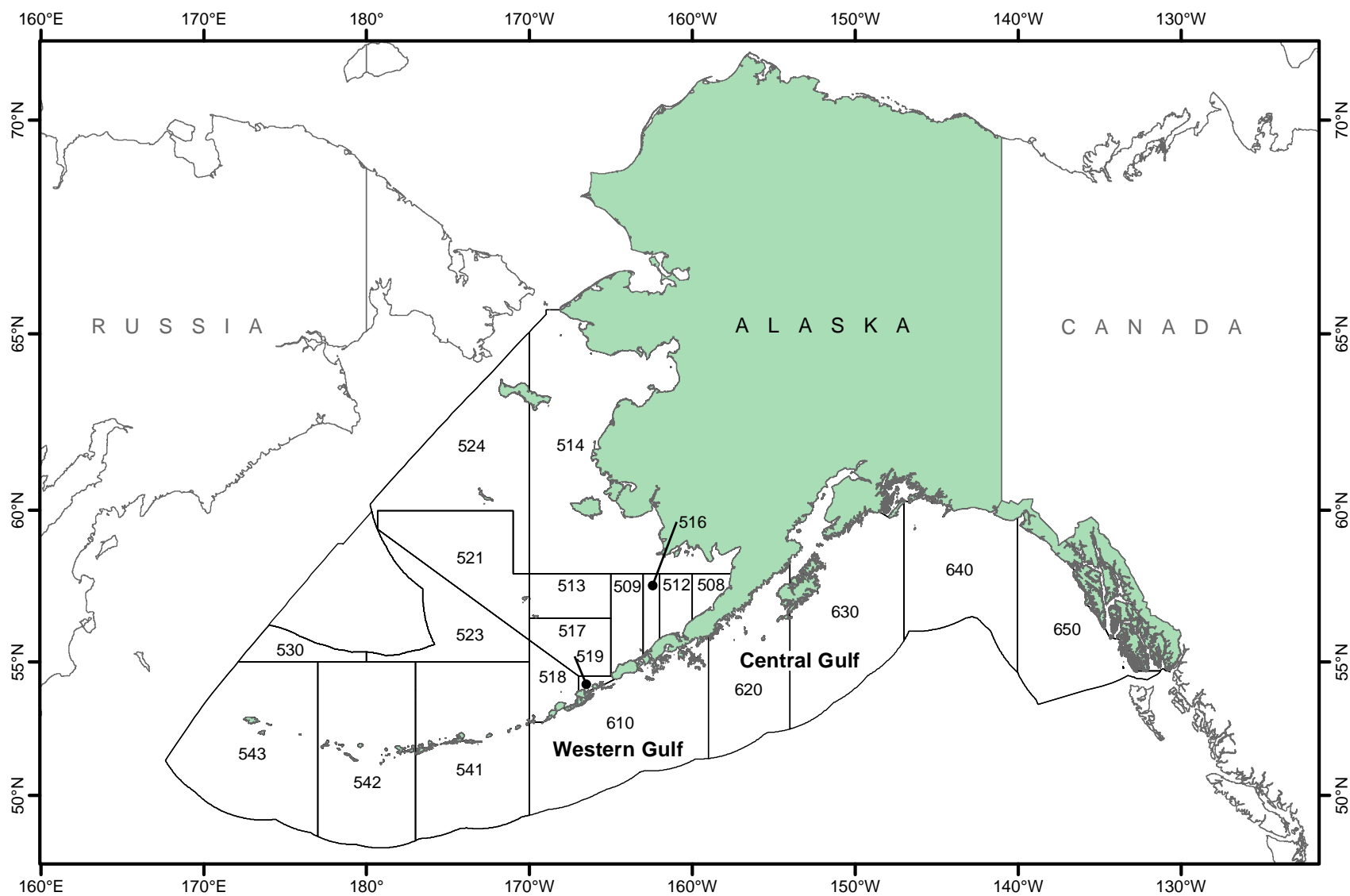


Figure 1.—National Marine Fisheries Service statistical and reporting areas.

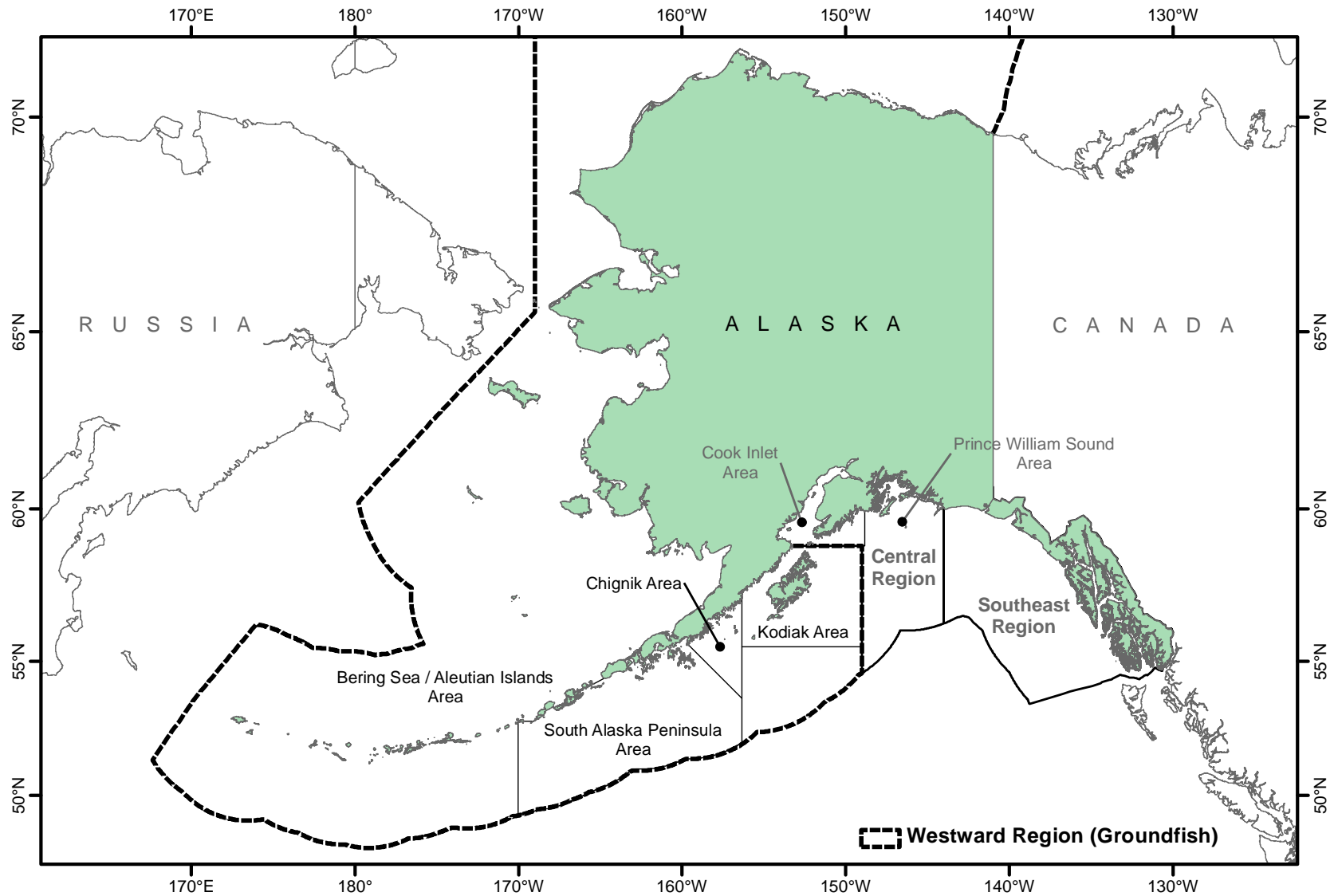


Figure 2.—Alaska Department of Fish and Game groundfish registration areas and regions.

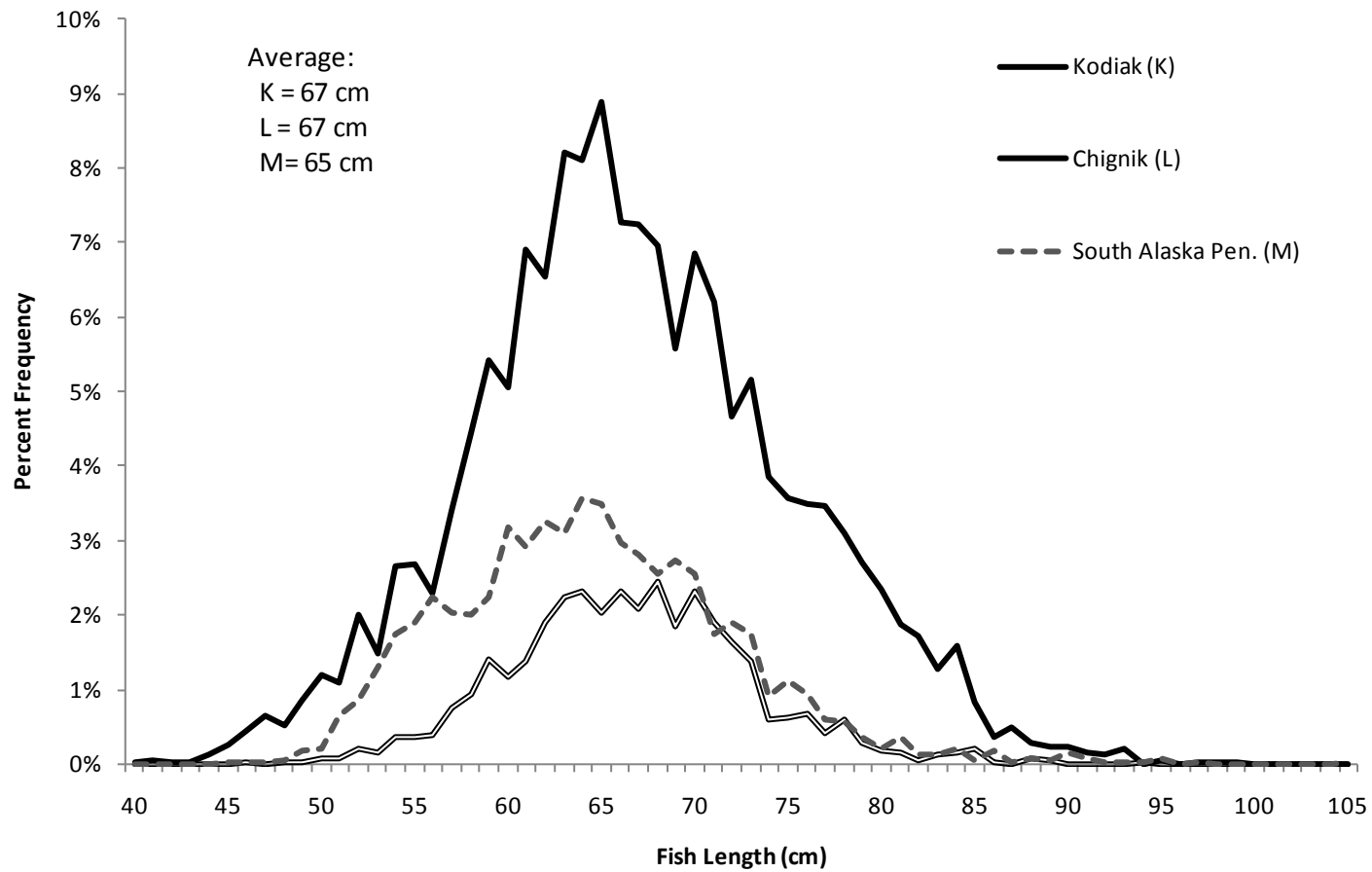


Figure 3.—Pacific cod lengths by area from the 2010 state-waters fisheries in Kodiak (pot and jig), Chignik (pot only), and South Alaska Peninsula (pot only) areas.

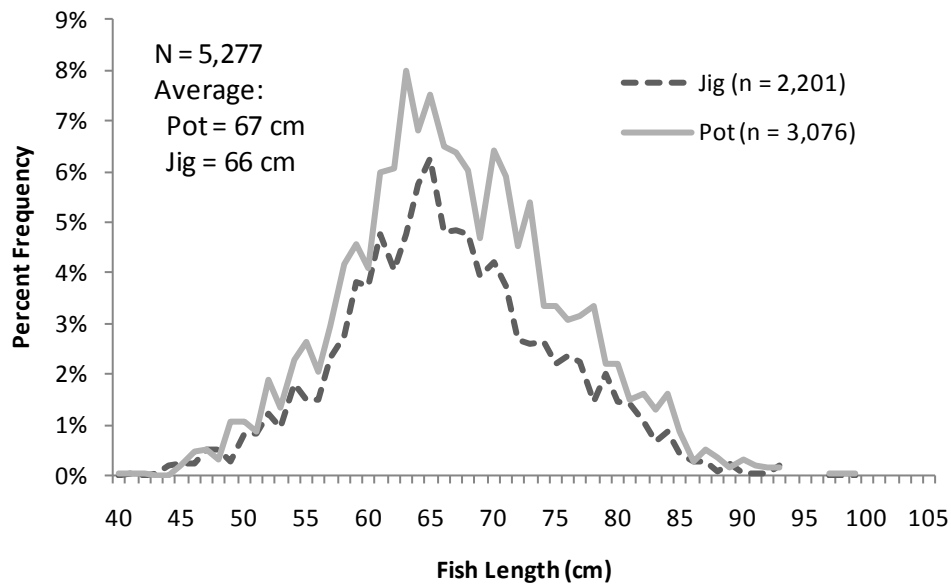


Figure 4.—Pacific cod lengths by gear type from the 2010 state-waters fisheries in the Kodiak Area.

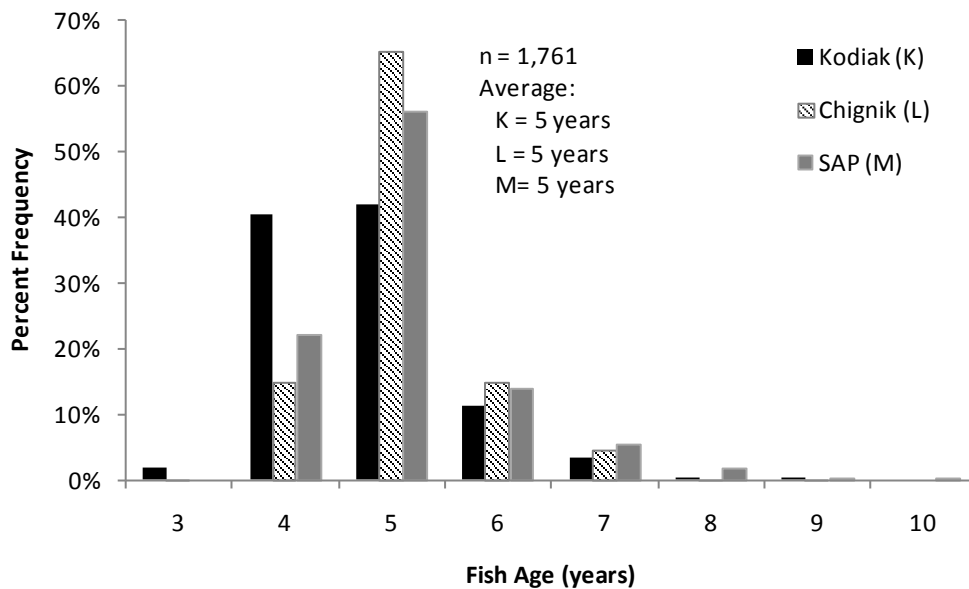


Figure 5.—Age composition of Pacific cod sampled from the 2010 state-waters fishery in Kodiak (pot and jig), Chignik (pot only), and South Alaska Peninsula (SAP; pot only) areas.

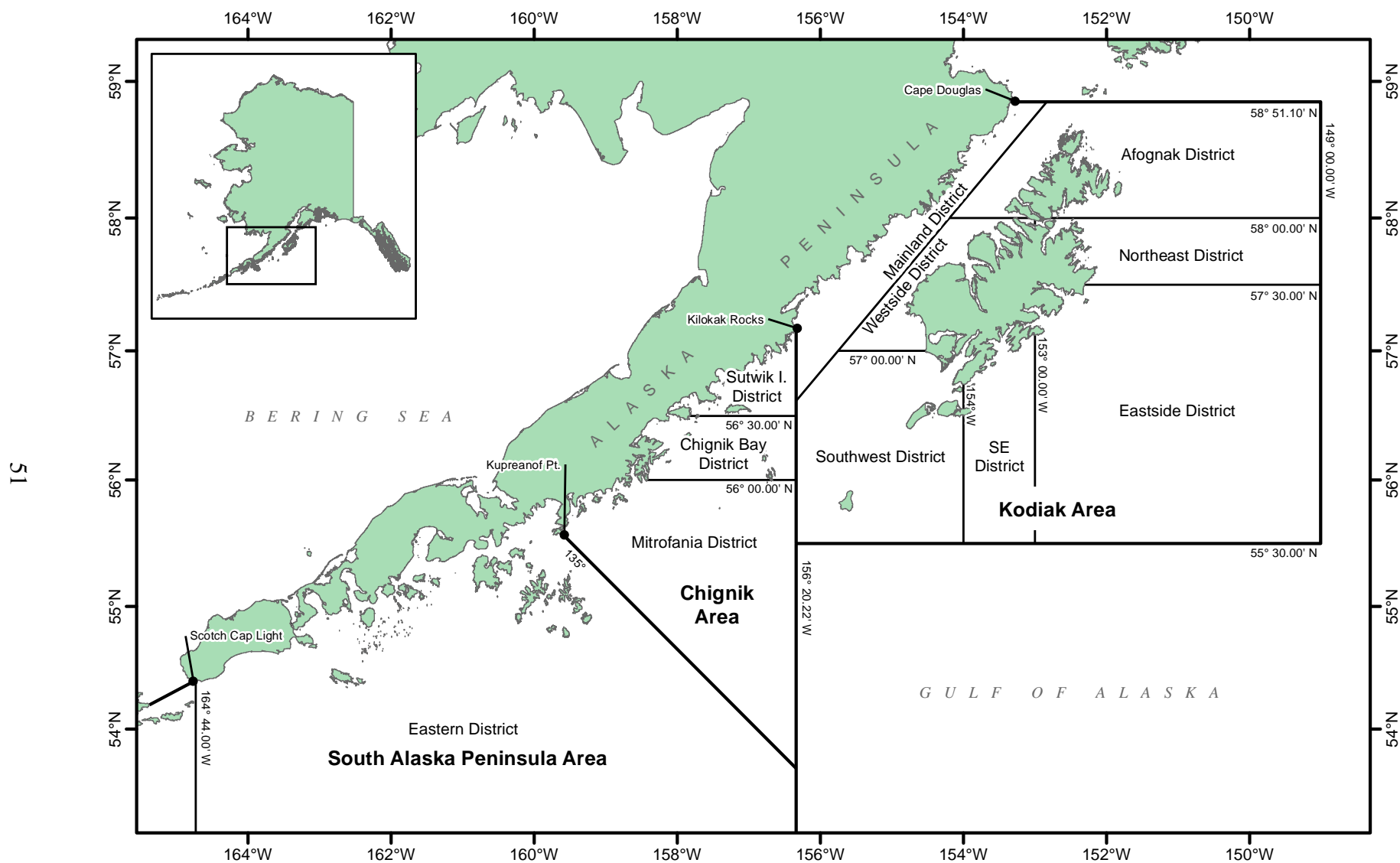


Figure 6.—Kodiak, Chignik, and South Alaska Peninsula black rockfish management areas and districts, 2010.

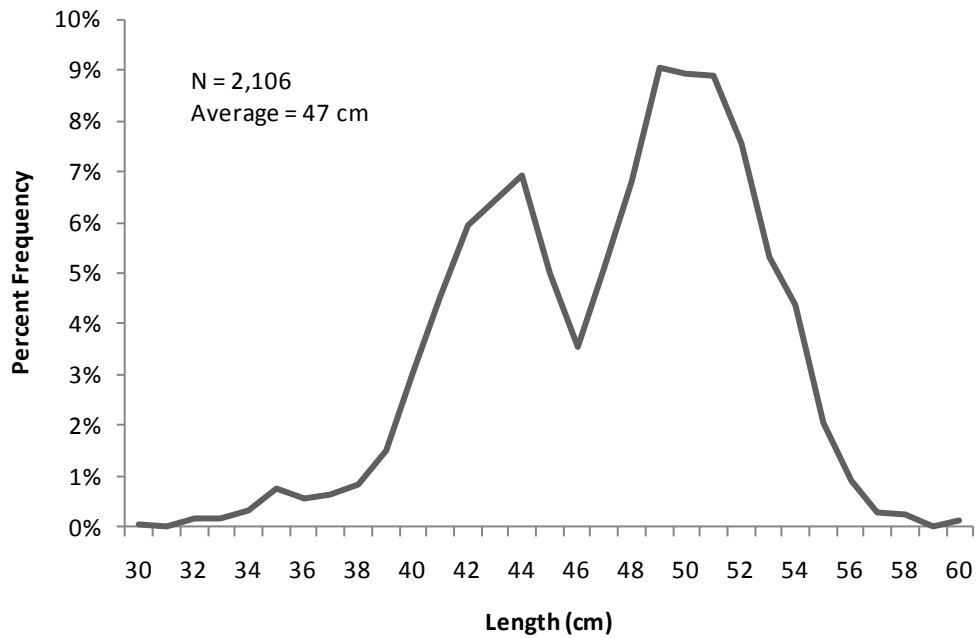


Figure 7.—Size composition of black rockfish sampled from the 2010 fishery in the Kodiak Area.

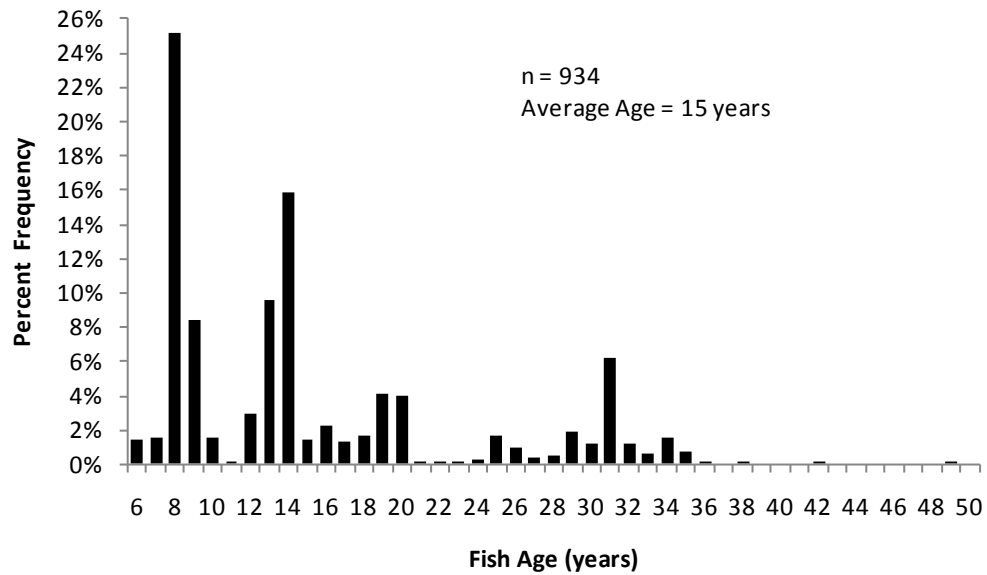


Figure 8.—Age composition of black rockfish sampled from the 2010 fishery in the Kodiak Area.

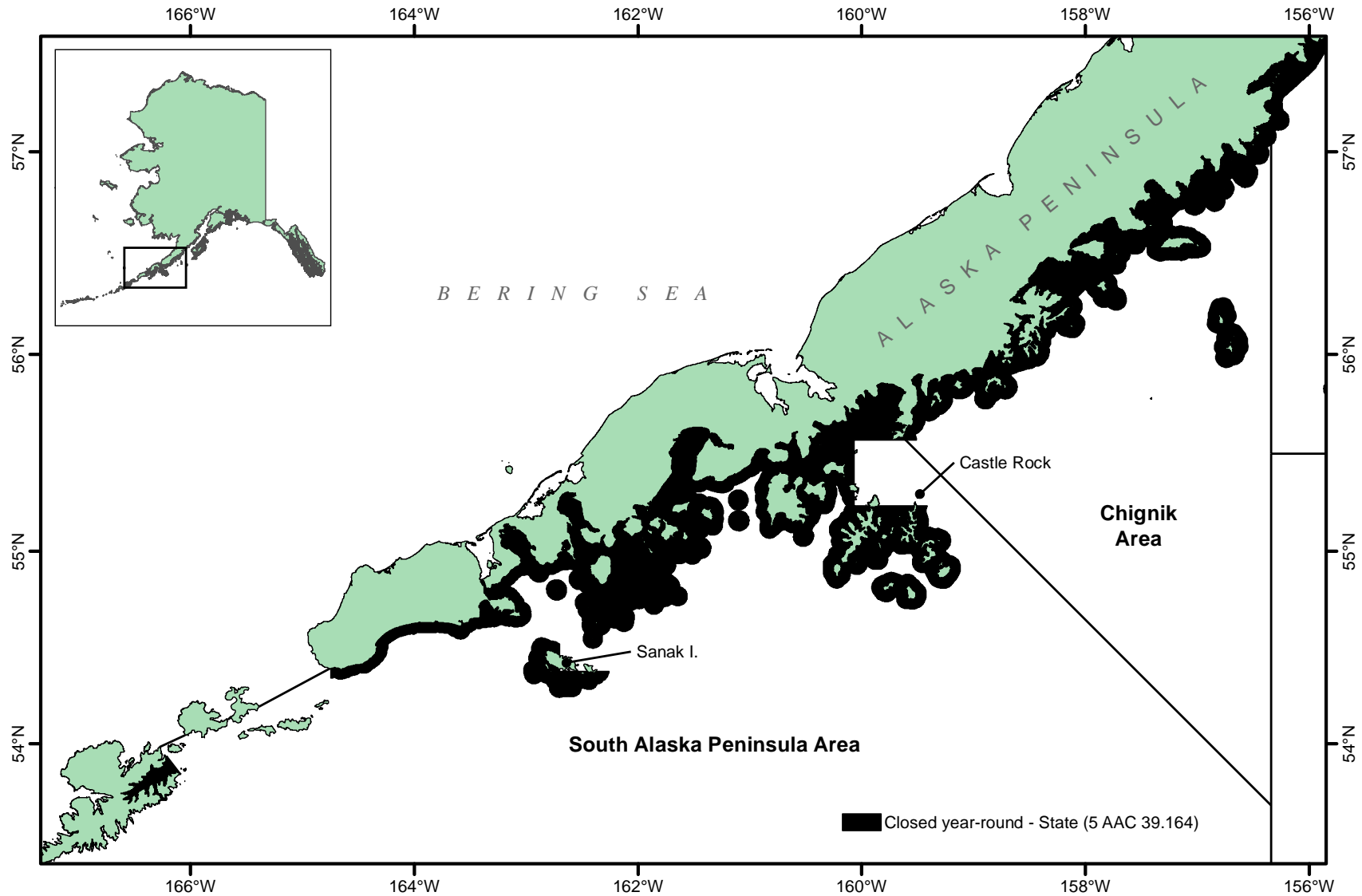


Figure 9.—Chignik and South Alaska Peninsula area non-pelagic trawl gear closures, 2010.

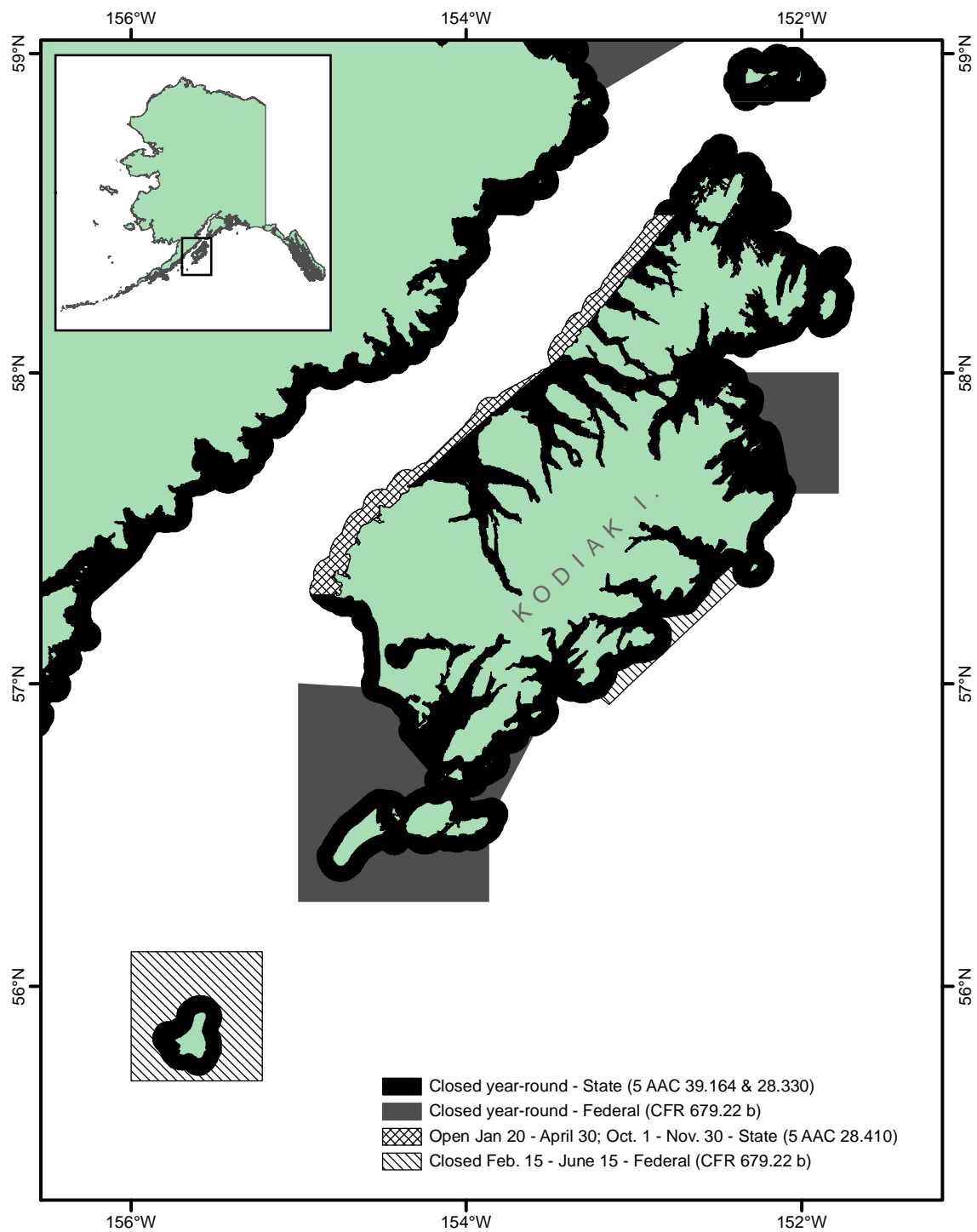


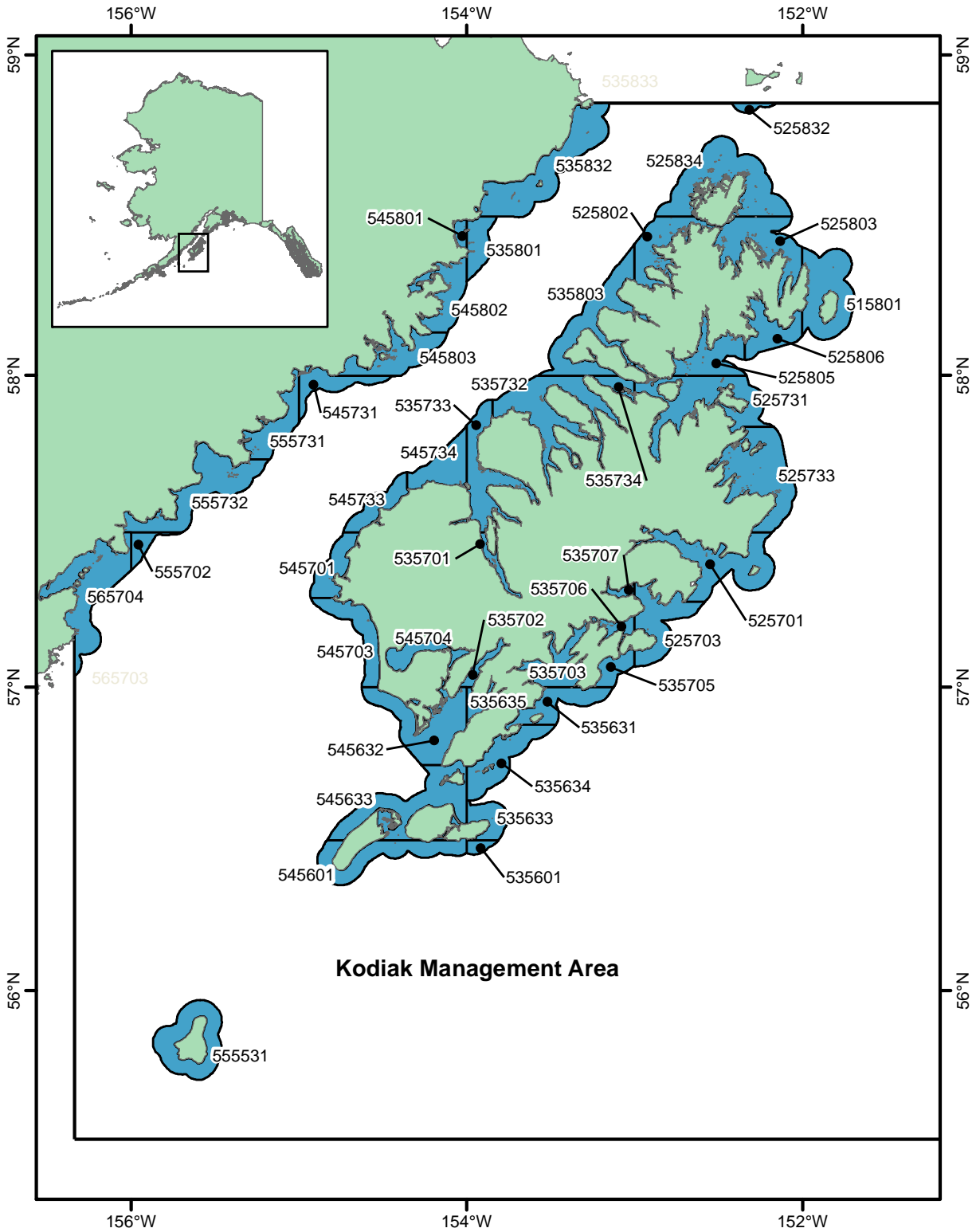
Figure 10.—Kodiak Area non-pelagic trawl gear closures, 2010.

APPENDIX A. FREQUENTLY USED ACRONYMS AND KEY WORDS

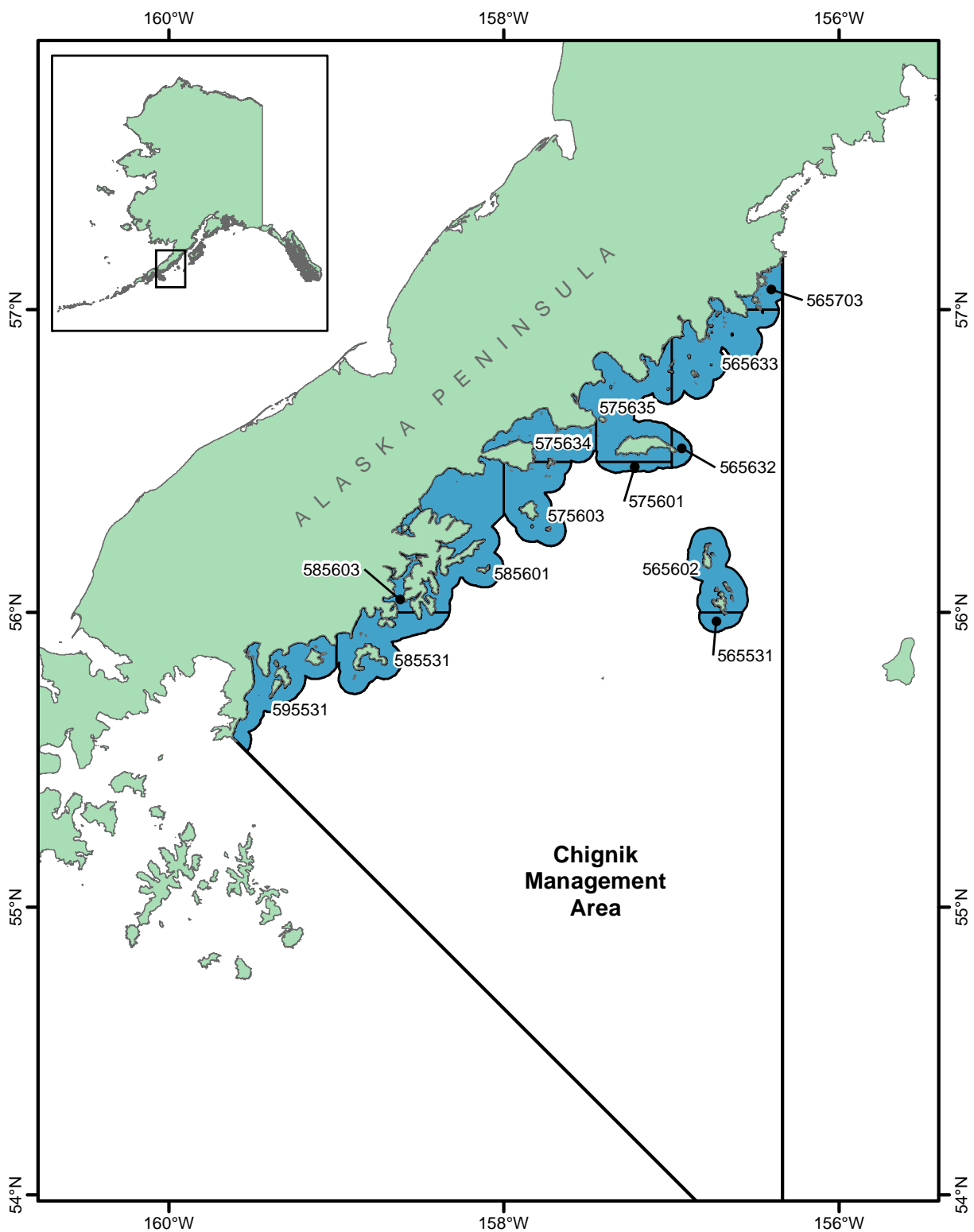
Appendix A1.–Frequently used acronyms and key words.

Acronym	Definition
ABC	Acceptable Biological Catch, stock specification as set by NPFMC on an annual basis
BOF	Alaska Board of Fisheries
BSAI	Bering Sea-Aleutian Islands Area, state management area or federal management area
CGOA	Central Gulf of Alaska, comprised of federal management areas 620 and 630
EEZ	Exclusive Economic Zone, federal waters from 3 to 200 nautical miles offshore
EGOA	Eastern Gulf of Alaska, comprised of federal management areas 640 and 650
EO	Emergency order, management action taken by ADF&G to effect regulatory change
GOA	Gulf of Alaska
LLP	Federal License Limitation Program
mt	metric ton (equal to 2,204.62 pounds)
NMFS	National Marine Fisheries Service
NPFMC	North Pacific Fishery Management Council
Parallel fishery	State waters 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
SSL	Steller Sea Lion
State waters	Territorial sea from shore to three nautical miles
State-waters fishery	Fishery occurring from shore to 3 nautical miles open under Alaska Board of Fisheries regulations and managed exclusively by Alaska Department of Fish and Game
State-managed fishery	Fishery occurring from shore to 200 nautical miles 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

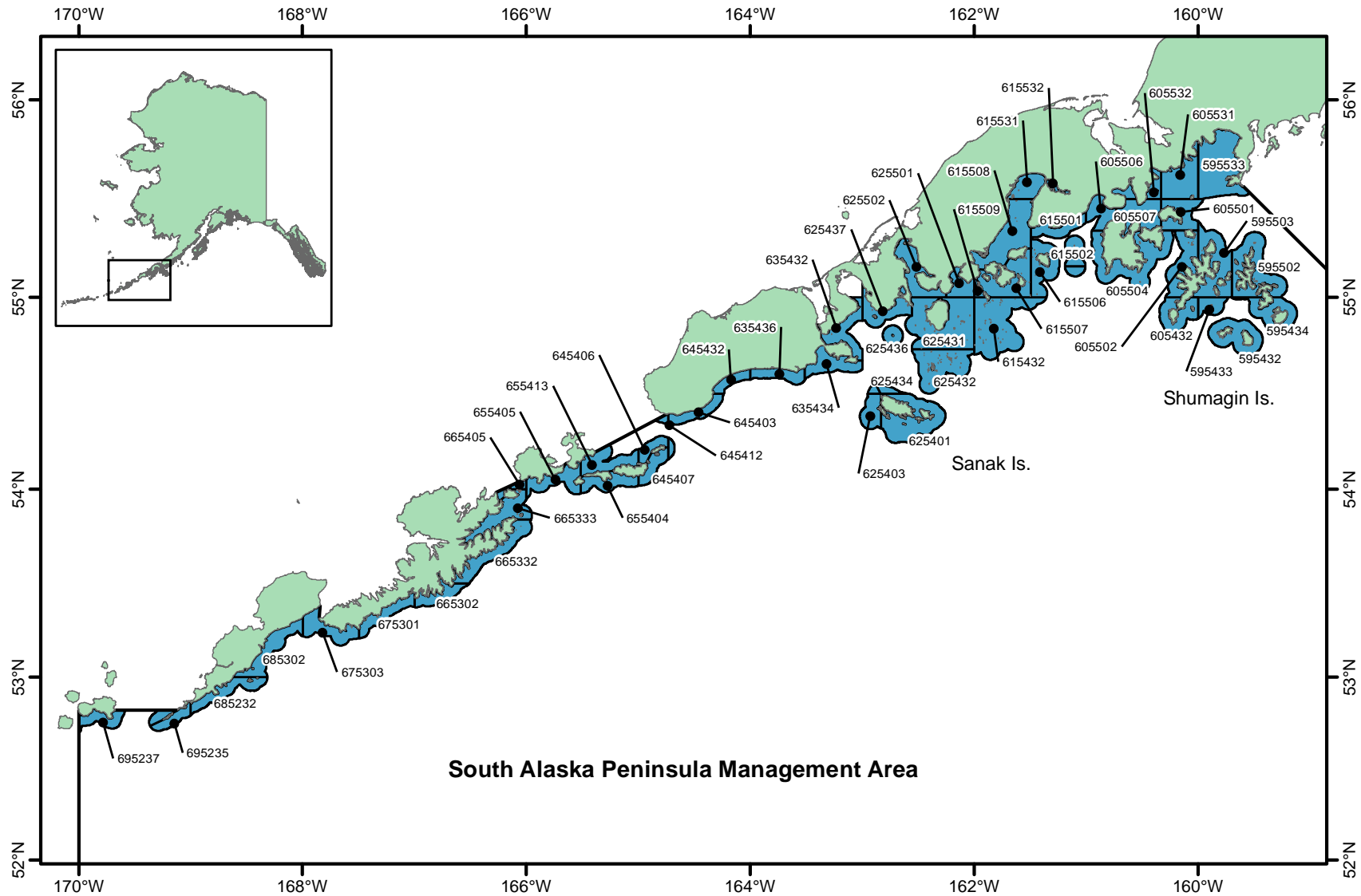
**APPENDIX B. KODIAK, CHIGNIK, AND SOUTH ALASKA
PENINSULA MANAGEMENT AREAS STATE-WATER
STATISTICAL AREAS FOR GROUND FISH**



Appendix B1.—Kodiak Management Area state-waters statistical areas for groundfish.



Appendix B2.—Chignik Management Area state-waters statistical areas for groundfish.



Appendix B3.—South Alaska Peninsula Area state-waters statistical areas for groundfish.