

Fishery Management Report No. 09-31

**Annual Management Report for the Bering Sea-Aleutian
Islands Area State-Waters Groundfish Fisheries and
Groundfish Harvest from Parallel Seasons in 2008**

by

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June 2009

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



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

FISHERY MANAGEMENT REPORT NO. 09-31

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ISLANDS AREA STATE-WATERS GROUND FISH FISHERIES AND
GROUND FISH HARVEST FROM PARALLEL SEASONS IN 2008**

by

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ABSTRACT

During 2008 the Alaska Department of Fish and Game (ADF&G) managed state-waters fisheries for sablefish *Anoplopoma fimbria* and black rockfish *Sebastes melanops* in the Aleutian Islands, and Pacific cod *Gadus macrocephalus* in the Aleutian Islands west of 170° W longitude. State waters include all waters within three nautical miles of shore. This report reviews the harvest and management of state-waters sablefish, black rockfish, and Pacific cod in the Aleutian Islands.

For all other groundfish fisheries that occur within state waters in the Bering Sea-Aleutian Islands Area, ADF&G adopts the seasons, bycatch limits, and allowable gear types in the adjacent Exclusive Economic Zone (EEZ) and promulgated by the National Marine Fisheries Service (NMFS), except where Alaska Board of Fisheries regulations take precedent. ADF&G issues a global emergency order (EO) at the beginning of each year to establish the commercial parallel groundfish seasons, bycatch limits, closed waters, and gear types for those fisheries not actively managed by the State of Alaska to coincide with federal regulations of the adjacent EEZ. This report summarizes the harvest of groundfish from the Bering Sea-Aleutian Islands Area in those parallel fisheries from 1995 to 2008. Parallel fishery harvest and effort for Pacific cod and rockfish in state waters for the vessel length and gear restriction zones of the central Aleutian Islands near Adak Island are summarized.

Key words: Bering Sea, Aleutian Islands, BSAI, sablefish, *Anoplopoma fimbria*, black rockfish, *Sebastes melanops*, parallel season, Exclusive Economic Zone, EEZ, National Marine Fisheries Service, NMFS, Pacific cod, *Gadus macrocephalus*, walleye pollock.

INTRODUCTION

Commercial groundfish harvests in the Exclusive Economic Zone (EEZ) of the Bering Sea and Aleutian Islands (BSAI) are managed by the National Marine Fisheries Service (NMFS) under guidelines developed by the North Pacific Fishery Management Council (NPFMC). Authorization for federal control of resources in the EEZ from 3-200 nmi (nautical miles) offshore comes from the Fishery Conservation and Management Act, now known as the Magnuson-Stevens Act, originally passed by the United States Congress in 1976 (MSFCMA 1996). Many of the species managed by NMFS also occur in state waters (0-3 nmi offshore); however, the State of Alaska has full management authority for all groundfish resources within state waters.

The Alaska Department of Fish and Game (ADF&G) issues an emergency order (EO) at the beginning of each year, creating parallel fishing seasons for groundfish species that are actively managed by NMFS inside state waters. Parallel fisheries mirror the seasons, gear, and bycatch limits of the federal season in the adjacent EEZ unless superseded by Alaska Board of Fisheries (BOF) regulation. During the parallel fisheries NMFS area closures, including Steller sea lion areas and the Aleutian Islands Habitat Conservation Area, are in effect. ADF&G and NMFS regulations coordinate the closure of six coral garden areas (Figure 1) in the Aleutian Islands to commercial fishing.

Exceptions to parallel fishing seasons occur for those fisheries that ADF&G has established separate harvest quotas, seasons, and/or regulations for state waters. ADF&G actively manages three groundfish fisheries which do not fall under parallel fishing rules in the BSAI Area (Figure 2; Appendix A). Those fisheries are Aleutian Islands sablefish *Anoplopoma fimbria*, Aleutian Islands black rockfish *Sebastes melanops* (ADF&G has full management authority for black rockfish in the Gulf of Alaska from 0-200 nmi), and Aleutian Islands Pacific cod *Gadus macrocephalus*. This report describes the sablefish fishery from 1995 through 2008, the black rockfish fishery from 1994 through 2008, and the Aleutian Islands Pacific cod fishery from 2006 through 2008. In 2007 a State of Alaska management plan was in place for an Aleutian Islands walleye pollock *Theragra chalcogramma* fishery which is also covered in this report.

In 2006 and 2007 NMFS issued exempted fishing permits (EFP) allowing vessels to harvest walleye pollock inside of Steller sea lion critical habitat. ADF&G issued commissioner's permits to allow vessels to harvest walleye pollock inside of state waters in accordance with terms of the EFP fishery.

In March 2000, the BOF established vessel length and gear restrictions for vessels fishing Pacific cod and all rockfish in state waters of the central Aleutian Islands between 175° 30' W and 177° W long. This report summarizes those regulations, which became effective in July 2000, as well as the harvest and effort.

Groundfish harvests in this report are based on the ADF&G fish ticket database and the fish ticket software program *Neptune* as of March 2009, and reflect the most recent additions and corrections to that database. The statistical harvest reporting area surrounding Bobrof Island in the central Aleutian Islands contained both state and federal waters until 2000. Sablefish harvest from this area was considered state-waters harvest unless verified as federal waters by interview of the vessel captain or by logbook examination. In 2001, statistical areas were revised, and the territorial waters surrounding Bobrof Island are now entirely comprised of state-waters statistical areas.

ALEUTIAN ISLANDS STATE-WATERS SABLEFISH FISHERY

HISTORICAL BACKGROUND

In 1995, NMFS implemented an individual fishing quota (IFQ) system for the harvest of sablefish. The Alaska Department of Law advised that the harvest of sablefish in the state waters of Alaska could not be limited to only IFQ permit holders, therefore any valid Commercial Fisheries Entry Commission (CFEC) interim use permit holder for sablefish could participate. Sablefish fisheries were established in state waters of Alaska where the historical harvest was of sufficient quantity to allow for a manageable fishery. ADF&G determined that historical harvest of sablefish was of sufficient quantity in the Aleutian Islands and that a state-waters sablefish fishery was manageable. A fishery was then established. The Aleutian Islands state-waters sablefish fishery includes all state waters of the Aleutian Islands south of the latitude of Cape Sarichef (54° 36' N lat.), and west of the longitude of Scotch Cap Light (164° 44' W long.), (Figure 3).

The BOF originally established the sablefish season from March 15 to November 15, unless the guideline harvest level (GHL) was reached and the fishery was closed by EO. The state-waters sablefish season was concurrent with the federal IFQ sablefish season. In 2001 the BOF changed the season opening for sablefish in the state-waters fishery to May 15. Historically most fishing occurred in late spring and summer. The later season opening was requested by the public to provide small vessel operators an opportunity to take advantage of potentially better weather conditions.

Based on historical state-waters sablefish harvest in the Aleutian Islands, the state-waters sablefish GHL is calculated at approximately five percent of the federal BSAI total allowable catch (TAC) for sablefish. However adjustments are sometimes made based on recent and historic state-waters fishery performance. In past years the calculated state GHL has occasionally been lowered due to poor fishing performance in the previous year or to compensate for harvest occurring after the fishery closure.

ADF&G does not conduct stock assessment of sablefish in the Aleutian Islands. Instead ADF&G relies primarily on NMFS longline surveys to set the GHL. As a result of longline surveys conducted from 1995 to 2007, NMFS TACs for the Bering Sea and Aleutian Islands areas have ranged from 5.1 million pounds¹ to 13.2 million pounds (Table 1). State-waters Aleutian Islands sablefish GHGs have ranged from 250,000 pounds to 660,000 pounds.

From 1995 to 2000, all legal groundfish gear types could be used to harvest sablefish in state waters. Effective 2001, longline, pot, jig, and hand troll became the only legal gear types. Vessel operators are required to register for the sablefish fishery and complete logbooks.

Historical harvest has ranged from a low of 177,935 pounds in 2006 to a high of 477,970 pounds in 2002 (Table 1). From 1995 to 2008 over 150 vessels harvested 4.5 million pounds, for an estimated exvessel fishery value of approximately \$8.1 million (Table 2).

Since the 1995 fishery, most of the harvest has occurred west of 170° W long. Reports of orca *Orcinus orca* predation on the fishers' catch east of 170° W long., and the establishment of a new processor on Adak Island in 1999 may help to explain the increased effort in western areas.

The Aleutian Islands state-waters sablefish fishery is open to all fishers with a valid CFEC interim use permit for statewide sablefish. There has been a misconception by some Community Development Quota (CDQ) and IFQ fishers who believe their federal permit allows fishing in state waters without registration and regardless of closures of state waters. Documentation of all violations has been provided to the Alaska Wildlife Troopers (AWT) for further action. ADF&G and NMFS have continued to educate the fishing fleet about state registration requirements.

2008 FISHERY

ADF&G announced a GHG of 584,000 pounds on April 4 (Table 1). This GHG represents a decrease from the 2007 fishery GHG of 8%.

The 2008 harvest of sablefish in state waters was 146,741 pounds. The fishery opened May 15 and was managed by reviewing weekly processor catch reports and fish tickets, monitoring the average size of each delivery, and by plotting logbook data to verify harvest location. Fishing effort began in May and deliveries began the week after the opening. Harvest peaked in June and was variable throughout the season. Effort throughout the fishery was sporadic ranging from zero to five vessels participating during any week. The fishery closed by regulation November 15. This was the eighth season and the sixth consecutive year that the fishery closed by regulation since the inception of the fishery (Table 2).

During the 2008 fishery, 24 vessels (21 catcher vessels and three catcher-processors) harvested state-waters sablefish. Three of the vessels were not registered and documentation of these violations has been provided to AWT. Five longline vessels harvested sablefish incidentally while participating in other fisheries inside state waters. Two vessels fished state waters exclusively. Longline gear accounted for 114,152 pounds (78%) of the total harvest and pot gear accounted for 32,589 pounds (22%) (Table 3). The non-IFQ vessels made 12 landings of state-waters sablefish, delivering 8,081 pounds, or 6% of the harvest (Table 4). Fourteen IFQ vessels made 40 landings totaling 135,095 pounds, or 92% of the harvest. In addition, the three unregistered vessels made three IFQ landings during the fishery totaling 3,565 pounds or 2% of the harvest.

¹ All weights refer to whole pounds.

The average exvessel price for the 2008 fishery was \$3.85 per pound dressed weight (Table 2). The estimated fishery value was approximately \$380,000.

Most of the fishery occurred in waters west of 170° W long., which is consistent with previous years (Figure 4).

STATUS OF STOCK

NMFS has conducted annual longline surveys covering portions of the Aleutian Islands sablefish fishery area since 1978. Initially, the survey was a cooperative effort with Japan and covered the Gulf of Alaska. The survey was expanded to include the Aleutian Islands in 1980 and the eastern Bering Sea in 1982.

In 1987, NMFS began conducting an independent annual longline survey in the Gulf of Alaska. The survey was expanded to include biennial sampling of the eastern Aleutian Islands beginning in 1996 and the eastern Bering Sea beginning in 1997. The survey, which covers a portion of the state-waters fishery area, shows that relative to 1986 and 1987, sablefish abundance currently appears moderate (Hanselman et al. 2007). Abundance is expected to continue declining until 2012 due to a lack of strong year classes contributing to recruitment.

ALEUTIAN ISLANDS BLACK ROCKFISH FISHERY

HISTORICAL BACKGROUND

ADF&G established a directed fishery for nearshore pelagic shelf rockfish in state waters of the eastern Aleutian Islands in December 1994. The State of Alaska pelagic shelf rockfish group includes black *Sebastes melanops*, blue *S. mystinus*, widow *S. entomelas*, yellowtail *S. flavidus*, dusky *S. variabilis*, and dark *S. ciliatus*² rockfish. In the eastern Aleutian Islands, black, dusky, and dark rockfish are the only species of the pelagic shelf rockfish group known to be present.

This fishery was established in response to local public inquiries requesting a state-managed black rockfish fishery. Under federal management black and other pelagic shelf rockfish were included in the “other rockfish” assemblage. This assemblage includes all rockfish species in the Bering Sea and Aleutian Islands except shortraker *S. borealis*, rougheye *S. aleutianus*, sharpchin *S. zacentrus*, northern *S. polyspinis* rockfish, and Pacific ocean perch *S. alutus*.

Directed fisheries in both state and federal waters for the “other rockfish” assemblage occurred prior to 1994, but were of progressively shorter duration. The fisheries were open to all gear types; however, they were managed as trawl fisheries since the harvest was predominantly by trawl vessels. Black and other pelagic shelf rockfish were available to the local fleet primarily as bycatch in jig and longline fisheries for other groundfish.

The “other rockfish” assemblage was managed as bycatch-only by NMFS through November of 1994, at which time only 43% of the allowable catch of this assemblage had been taken. According to ADF&G fish ticket data, approximately 4% of that harvest was pelagic shelf rockfish, of which less than 1% was black rockfish. ADF&G, with notification to NMFS and the

² In March of 2008 the BOF modified the definition of pelagic shelf rockfish by splitting out the species commonly known as dusky *S. ciliatus* into two groups; dusky *S. variabilis* and dark *S. ciliatus*. This was done in anticipation of ADF&G taking over management authority of dark rockfish in 2009.

NPFMC, assumed management authority of nearshore pelagic shelf rockfish for a state-waters fishery by EO on December 21, 1994.

In 1994, ADF&G established two areas of harvest in the eastern Aleutian Islands: the state waters around Unalaska, Sedanka, and Unalga islands, and the state waters around Akutan and Akun islands (Figure 5). A GHL of 100,000 pounds was established, with 50,000 pounds for each area (Tables 5 and 6). This harvest level was deemed sufficient to provide an economically viable fishery, yet conservative enough to prevent overharvest. A conservative management policy for these slow-growing and long-lived species was considered necessary to prevent overexploitation.

Registration for the black rockfish fishery is similar to other groundfish fisheries, except vessels are registered for only one month at a time. The short duration of the registration allows ADF&G greater control of the fishery and to be able to track actual participation each month. Handlines and mechanical jigging machines are stipulated by the ADF&G registration as the only legal gear types. These gear types have a low harvest potential compared to most gear types, reducing incidental harvest of other species so as not to exceed the federal TAC in the “other rockfish” category. These gear types also serve to slow the pace of the directed fishery.

The 1994 fishery opened at noon on December 21; only one vessel registered for the fishery. No harvest of pelagic shelf rockfish occurred in 1994 subsequent to the establishment of the directed fishery. In 1995, all harvest was incidental to the parallel Pacific cod jig fishery. Fishing effort was minimal and sporadic throughout 1995. In 1996, landings increased in the Unalaska, Sedanka, and Unalga islands area. The principle area of harvest was from the waters just north of Unalaska Island. The primary species of harvest was black rockfish, although dark and dusky rockfish were also harvested. No effort was reported from the Akutan and Akun islands area in 1996 (Table 6).

Fishing effort, in terms of number of landings and amount harvested, increased during 1997, but the number of participating vessels decreased. The majority of effort took place along the outer coast of Akutan Island and along the southern Unalaska Island coast. Black, dark, and dusky rockfish were landed. Logbook data submitted by one operator showed that dusky and dark rockfish made up 28% of their harvest, however fish ticket data reflected that dusky and dark rockfish made up a small percentage of the total rockfish landings. Area processors were notified of the possible misidentification and were asked to provide positive identification of rockfish purchased. In addition, ADF&G provided identification information to processing personnel.

The nearshore black rockfish fishery changed with the 1998 season when the area ADF&G was actively managing was expanded to include all state waters of the Aleutian Islands south of Cape Sarichef and west of Scotch Cap Light, and all federal waters of the Pacific Ocean between Scotch Cap Light and 170° W long. (Figure 6). In addition, the public expressed interest in a black rockfish fishery in the vicinity of Atka Island, and GHGs were established which provided 40,000 pounds for both the Akutan and Unalaska sections, and 20,000 pounds for the area west of 168° W long. Concurrently, ADF&G also assumed management responsibility for black and blue rockfish in the waters of the EEZ in the Gulf of Alaska as the NPFMC passed Amendment 46 to the Groundfish Fishery Management Plan, delegating management to the State of Alaska. Black and blue rockfish are shallow water, nearshore pelagic shelf species that are not well assessed by federal surveys and not well addressed by existing federal management practices. This action was limited to the harvest of black rockfish in the Aleutian Islands since blue

rockfish have a limited distribution in Alaska and do not occur in the Aleutian Islands. NMFS retained management authority over other species of pelagic shelf rockfish (widow, yellowtail, dark, and dusky rockfish) in federal waters.

In 1998 fleet composition changed and vessel operators began to make short day trips and small deliveries. The average delivery in 1998 was smaller compared to previous years, the average vessel length decreased from 36 feet to 23 feet, and the average trip length was less than one day compared to approximately two days in prior years. All fishing effort occurred in the Akutan area.

ADF&G reduced the 1999 GHL from 40,000 pounds to 35,000 pounds in the Akutan and Unalaska sections (Table 6). This reduction was due to concern of potential localized depletion of the black rockfish stock around Akutan Island and the eastern part of Unalaska Island. The GHL for the Western Section remained at 20,000 pounds. Since 1995, approximately 60% of the black rockfish harvest was from two statistical areas, one just south of Akutan Island and the other off the outer coast of Sedanka Island. In the Akutan Section between 1997 and 1999, 61% of the harvest was from the area just south of Akutan Island. In 1999, 62% of the harvest was from just south of Akutan Island, and most of it was from the waters between Talus Point and Green Bight. In 2000 this area was closed to the retention of black rockfish to prevent localized depletion in this heavily fished area. In 2000 the Akutan and Unalaska sections were divided into subsections, each with a separate GHL to disperse fishing effort (Table 7). These GHLs were based on potential black rockfish habitat as determined by the amount of coastline.

Most of the black rockfish harvest has come from the Akutan Section, accounting for 70% of the overall harvest in the last ten years. The Western Section accounts for less than 1% of black rockfish harvest in the last ten years, all of which was harvested incidentally in trawl and longline gear. Participation in the fishery has fluctuated widely throughout the years with a low of no vessels in 1994 to a high of 15 vessels in 2004. In recent years fishers have reported difficulties in selling black rockfish because many processors are not willing to purchase the fish in small quantities. Participants from past years also cited difficulty distinguishing black rockfish from dark and dusky rockfish which have a much lower commercial value.

2008 FISHERY

ADF&G announced the 2008 GHL by news release on December 27, with 35,000 pounds available in both the Akutan and Unalaska sections and 20,000 pounds available in the Western Section (Table 7). The waters from the south end of Green Bight to Talus Point remained closed for the 2008 fishery.

The 2008 fishery was managed by reviewing weekly processor reports and fish tickets, plotting logbook data, and maintaining contact with processors. Two vessels registered for the 2008 fishery but did not make landings. Fishers may retain up to 5% black rockfish as bycatch to other fisheries. Four vessels made landings of black rockfish as bycatch. Harvest information is confidential due to a limited number of participating processors. No subsection GHLs were attained during the 2008 fishery.

STATUS OF STOCK

The black rockfish stock in the Aleutian Islands is managed conservatively because ADF&G does not conduct extensive surveys and because the species is long-lived and slow-growing. ADF&G established a dockside sampling program in 1999. Information obtained through this program is

providing ADF&G with basic biological data that may assist in future management decisions and stock status determinations. Average length of black rockfish and average age through otolith analysis can be determined by the data collected through the sampling program.

Dockside samplers obtain black rockfish lengths and otoliths from commercial fisheries, sports fishermen, independently fishing from docks as well as from vessels chartered to survey black rockfish in small areas in the Aleutian Islands. Sampling took place in 1997, 1999, 2000, 2002, and 2004 through 2006 (Table 8). The groundfish port sampler position was vacant during 2001, 2007, and 2008; therefore, sampling did not occur during those seasons. Due to low fishing effort, no sampling occurred during the 2003 season. Commercial catches were sampled in 1997, 1999, and 2000. After 2001 no commercial deliveries of black rockfish occurred in Dutch Harbor. No dockside samplers were sent to other ports because deliveries were spread throughout the year and were unpredictable.

In 2006 samples were obtained during an age-structure study conducted in Unalaska Bay. Black rockfish were found in small numbers throughout the bay. Of the 338 fish sampled only 27 were black rockfish and the remaining 311 were dark rockfish.

In 2004 and 2005 ADF&G conducted several surveys of black rockfish as a continuation of previous Nearshore Marine Fisheries Research grants which attempted to increase knowledge of black rockfish stocks in the western Gulf of Alaska including the Chignik area, Shumagin Islands, and eastern Aleutian Islands. Chartered vessels were used to locate areas of black rockfish concentrations, gather specimens for determination of growth parameters, and continue mapping of prime habitat areas. Hydroacoustics were used to document the size and location of specific rockfish schools. Emphasis was placed on gathering information on black rockfish younger than 5 years old and also comparing the fish densities in a closed area near Akutan Island in the Eastern Aleutian Islands with other areas which are open to fishing.

Density estimates were made in 2005 from the Akutan study and compared to areas around the Shumagin Islands and Chignik. The densities in the areas around Akutan were comparable to or slightly higher than the Shumagin Islands and Chignik areas (Unpublished 2007 National Oceanic and Atmospheric Administration Final Comprehensive Performance Report, Black Rockfish Surveys in the Western Gulf of Alaska, Dan Urban, ADF&G, Kodiak, AK).

ALEUTIAN ISLANDS DISTRICT STATE-WATERS PACIFIC COD FISHERY

HISTORICAL BACKGROUND

In February of 2006 the BOF approved regulations for a nonexclusive Aleutian Islands District, west of 170° W longitude, state-waters Pacific cod fishery (Figure 7). The fishery was established in response to the community of Adak's desire for a fishery that would provide economic opportunities to the community.

The fishery GHL was set by regulation at three percent of the federal BSAI TAC with a maximum of 70% of the GHL available before June 10. By regulation the fishery opened on or after March 15, at the conclusion of the initial parallel catcher vessel trawl fishery for Pacific cod in the federal BSAI Area. Non-pelagic trawl, longline, jig, and pot gear were all permissible in the 2006 fishery and there were no vessel size limits. Trawl and longline gear could not be used from May 1 through September 15, unless operating in the Adak vessel length and gear

restriction zones. The Fishery Management Plan stipulated a daily harvest limit of 150,000 pounds and a 300,000 pound trip limit. All Pacific cod was required to be retained and any overage was required to be immediately reported to ADF&G, with proceeds from the overage forfeited to the state. In addition all fishers were required to report daily to ADF&G the pounds of Pacific cod taken by the vessel.

All NMFS Steller sea lion closures, Aleutian Islands Habitat Conservation Area closures, and coral garden closures that are in effect during the parallel season remain closed during the state-waters Pacific cod fishery.

The first state-waters fishery occurred in 2006 with a GHL of 12,830,772 pounds (Table 9). The first portion of the fishery (constituting 70% of the total GHL) was conducted from March 15 to March 24, a nine day fishery. The second portion of the fishery, which opened on June 10, had very low participation and the GHL was not expected to be achieved by December 31. In order to maximize harvest opportunities, ADF&G, in accordance with the BOF management plan, made 3.5 million pounds of unharvested Pacific cod available to NMFS effective September 1 and closed the state-waters fishery. ADF&G retained a small portion of the GHL (approximately 0.5 million pounds) in reserve allowing for the ability to reopen the state-waters fishery later in the year if the parallel season closed. However, the state-waters fishery never reopened.

In October of 2006 the BOF made several changes to the Aleutian Islands Pacific cod management plan. The management plan defined the portion of the GHL available before June 10 as the A season, and the portion available after June 10 as the B season. The A season opening date was changed to four days after the closure of the initial parallel catcher vessel trawl fishery for Pacific cod in the federal BSAI Area. Vessel size limits of 125' or less overall length (OAL) for pot vessels, 100' or less OAL for trawl vessels, and 58' or less OAL for longline and jig vessels were adopted. In addition, the trip limit was lowered to 150,000 pounds. The vessel size limits and smaller trip and daily harvest limits were adopted in part as an effort to slow the pace of the fishery during the A season. The BOF repealed the regulations applying to the Adak vessel length and gear restriction zones for the duration of the state-waters fishery. The regulation which allowed unharvested state-waters Pacific cod to be utilized by NMFS was repealed as well. The new regulations took effect beginning in the 2007 fishery.

In 2007 the A season opened on March 16 and closed on March 23 for a seven day fishery. A total of 29 vessels participated, including seven vessels utilizing pot gear and 22 vessels using trawl gear. The A season GHL was exceeded by 81,729 pounds which was deducted from the B season GHL.

The 2007 B season opened on June 10 and closed on September 1 by regulation. The fishery reopened on October 1 and closed on December 3 after the GHL was achieved. A total of twelve vessels participated, including five vessels utilizing pot gear and seven vessels using longline gear. One longline vessel utilized jig gear as well.

2008 FISHERY

The 2008 state-waters Pacific cod GHL for the Aleutian Islands west of 170° W long. was 11,640,288 pounds (Table 9). The GHL was apportioned so that a maximum of 70% (8,148,202 pounds) was available for the A season, and 30% (3,492,086 pounds) plus any rollover (up to a maximum of 70% of the overall) was available for the B season.

The A season opened at noon on March 10 and closed at midnight on March 18 (Table 10). The fishery was managed in season using a combination of mandatory daily catch reports from vessel operators and daily production reports from processors. Thirty vessels participated in the fishery including 22 trawl catcher vessels (CVs), four pot CVs, two pot catcher-processors (CPs) and two longline CVs. One trawl vessel also acted as a CP during some trips. In addition, four floating processors (FPs) and two shorebased processors participated. During the eight day fishery 116 deliveries were made and 7,477,507 pounds of Pacific cod were harvested, predominately by trawl vessels (Table 11). The trip limit of 150,000 pounds was exceeded five times, all by different vessels. The average exvessel price for the A season was \$0.63 per pound (Table 10) and the estimated fishery value for the A season based on landed pounds was approximately \$4.5 million.

The state-waters Pacific cod B season opened on June 10 with a GHL of 4,162,781 (3,492,086 pounds plus 670,695 pounds rolled over from the A season). The B season closed on July 9 (Table 10) after 4,241,692 pounds were harvested. As a result the 2008 GHL was exceeded by 78,911 pounds.

During the 2008 B season 18 vessels participated. Eight of the participating vessels utilized pot gear, including four CPs. Seven longline vessels participated, including one CP. Two of the longline vessels also utilized jig gear. Three additional vessels also utilized jig gear. Seven processors participated in the fishery, including five CPs utilizing pot gear, one shore-based processor and one FP. The five CPs harvested 3.4 million pounds of the B season GHL, accounting for 80% of the total pounds harvested. Fishers were paid an average of \$0.57 per pound for an approximate exvessel fishery value of \$1.8 million (Table 10). The season was managed using weekly harvester catch reports and fish ticket information provided by processors through the Interagency Electronic Reporting System.

PORT SAMPLING

A port sampler was sent to Adak during the 2008 A season. This is the first time sampling has occurred during the Aleutian Islands state-waters Pacific cod fishery. Duties included conducting confidential interviews (CIFs) with skippers, collecting otoliths for aging, recording maturity, and collecting length and weight data. The sampler conducted 47 CIFs, collected otoliths from 161 fish, recorded maturity of 397 fish, and collected 183 weights and 487 lengths.

Sampled Pacific cod averaged 87 cm in length and 18.7 pounds. Of the 487 lengths recorded, 60 were from longline gear for an average of 84 cm, 40 were from pot gear for an average of 85 cm, and 387 were from trawl gear for an average of 88 cm. Of the 183 weights collected, 40 were from fish harvested in longline gear, 40 from pot gear, and 103 from trawl gear. The average weight was 14.5 lbs for longline gear, 16.7 lbs for pot gear, and 21.1 lbs for trawl gear. Analysis of otolith data is not yet complete.

2006-2007 EXEMPTED FISHING PERMIT WALLEYE POLLOCK FISHERY

Historical walleye pollock harvest in the Aleutian Islands was located primarily inside designated Steller sea lion critical habitat. Walleye pollock is an essential prey species for sea lions and in 1999 NMFS closed the Aleutian Islands to fishing for walleye pollock as a Steller sea lion conservation measure. In 2004 the U.S. Congress passed a law requiring that any directed fishing allowance of pollock in the Aleutian Islands subarea be allocated to the Aleut

Corporation (71 *Fed. Reg.* 14, 23 January 2006). In 2005, NMFS established a 19,000 metric ton TAC for a directed pollock harvest in the Aleutian Islands which was allocated to the Aleut Enterprise Corporation (AEC). The TAC was only available to be taken outside of Steller sea lion critical habitat. The fleet reported difficulties in finding pollock outside of critical habitat and very little harvest occurred in 2005.

Beginning in 2006, NMFS issued exempted fishing permits (EFP) to AEC which allowed harvesting of Aleutian Islands walleye pollock inside critical habitat. Participating vessels were required to conduct acoustic surveys of walleye pollock in the area. The purpose of the EFP was to assess the feasibility of collecting acoustic data of sufficient quality using commercial fishing vessels and to apply that data to management practices.

The state issued a commissioner's permit allowing fishing inside of state waters during the EFP federal fishery. The permit stipulated that no more than 10 metric tons of groundfish were allowed to be harvested in a tow within 3 nmi of a sea lion haulout. The permit also stated that all participants must adhere to the NMFS approved study plan for the EFP and be willing to release confidential fish ticket harvest information for any landings made during the study.

The 2006 Aleutian Islands walleye pollock EFP was for 1,000 metric tons with a harvest of 965 metric tons, most of which occurred in federal waters. A commissioner's permit was issued to one vessel. The permit was valid in state waters of the central Aleutian Islands near Atka Island (173° 30' W long. to 175° 15' W long.) and near Kanaga Island (176° 45' W long. to 178° 15' W long.) in the Aleutian Islands District of the BSAI Area (Figure 8). The permit stated the vessel may harvest inside of state waters March 12 until April 30. The vessel harvested 9,381 pounds of pollock from state waters, accounting for less than 1% of the total federal EFP harvest.

The 2007 Aleutian Islands walleye pollock EFP was for 3,000 metric tons with a harvest of 1,170 metric tons. ADF&G issued a commissioner's permit valid from February 15 through April 30 to three vessels. The permit was valid in state waters from 173° W long. to 179° W long. (Figure 9). One vessel harvested 51,234 pounds of pollock from state waters, accounting for 2% of the total federal EFP harvest.

2007 ALEUTIAN ISLANDS DISTRICT STATE-WATERS WALLEYE POLLOCK FISHERY

In October 2006 the Alaska Board of Fisheries developed an Aleutian Islands district state-waters walleye pollock fishery (174° W to 178° W longitude) for trawl vessels 58 feet and under OAL (Figure 10). The fishery was developed in order to provide greater fishing opportunities to small vessels. The state-waters walleye pollock fishery season was set from January 20 through June 10 or until the GHL was achieved. The GHL was 3,000 metric tons; however, the GHL would be reduced by the amount of walleye pollock authorized to be taken by the federal EFP fishery. The BOF retained Steller sea lion closed-water restrictions within 20 nmi of rookeries (except for the NW side of Kanaga Island) and three nmi of haulouts. In December 2006 the BOF changed the opening date to seven days after the beginning of the EFP fishery or on March 1 if the EFP fishery did not occur. As the 2007 Aleutian Islands walleye pollock EFP was fully authorized by NMFS, the state did not have a state-waters walleye pollock fishery. In November of 2007 the BOF repealed the walleye pollock fishery due to NMFS concerns regarding the apparent low abundance of pollock in the area and the potential adverse effects on Steller sea lion populations.

ADAK VESSEL LENGTH AND GEAR RESTRICTION ZONES

In March of 2000 the BOF established gear and vessel length restrictions for Pacific cod and rockfish fisheries in the central Aleutian Islands. The areas affected by these regulations are part of the nonexclusive BSAI Area. BOF defined two zones, each with different restrictions (Figure 11).

Zone 1 includes state waters between Adak, Great Sitkin, and Tagalak islands, and waters adjacent to Adak Island in the Bay of Islands and between Boot Point and Cape Kagigikak on Adak Island. In this zone the following regulation is in effect year-round: only vessels less than or equal to 60 feet OAL may be used to take Pacific cod or rockfish. Legal gear types for targeting Pacific cod and rockfish within this area are pot, longline, mechanical jig, and hand troll, except when targeting black rockfish for which jig and handline are the only legal gear types. In 2005 trawl also became a legal gear type when targeting Pacific cod in Zone 1.

Zone 2 encompasses all state waters between 175° 30' W and 177° W longitude exclusive of all waters defined in Zone 1. In this zone, only vessels less than or equal to 60 feet OAL may be used to take Pacific cod from May 1 to September 15. Legal gear types within this area are pot, longline, mechanical jig, and hand troll.

Within the two zones there are no restrictions on the amount of hand troll, longline, or pot gear. A maximum of five mechanical jig machines may be operated from a vessel. The vessel length and gear restrictions do not apply to fisheries for other species in these two zones.

When the vessel size and gear restrictions around Adak were established in 2000, interest in the area was high. However, ADF&G statistical areas did not provide adequate detail to determine the exact participation and harvest in the fisheries affected by these regulations. New statistical areas became valid January 2001 allowing ADF&G to better track harvest in these zones.

ADF&G manages state-waters fisheries in the Aleutian Islands for black rockfish and Pacific cod; all vessels participating in state-waters fisheries for these species must be registered with ADF&G. All other fisheries are managed as parallel fisheries, and vessels participating in those fisheries must be registered under a parallel registration to fish in state waters of the Westward Region. During parallel fishing the state mirrors the seasons, bycatch limits, and gear types in adjacent federal waters.

From 2001 through 2008 the majority of the Pacific cod harvest from the Adak Vessel Length and Gear Restriction Zone occurred from January 1 through May 14 when the restrictions of Zone 2 were not in effect. Approximately 86% of the 37,114,700 lbs of Pacific cod harvested in Zone 1 and 2 from 2001-2008 was taken by trawl gear (Table 12). Longline fishermen harvested nearly 6% of the overall harvest of Pacific cod in both zones during 2001-2008.

During the 2006 Aleutian Islands state-waters Pacific cod fishery the Adak Vessel Length and Gear Restriction Zone was in effect and fishers harvested 2,070,734 pounds from the two zones. The remaining 1,913,226 pounds of Pacific cod in 2006 were harvested from these zones during the parallel fisheries. In 2007 the regulation pertaining to the Adak Vessel Length and Gear Restriction Zones during the state-waters Pacific cod fishery was repealed by the BOF and was no longer in effect during the state fishery. However, the regulation continues to remain in effect during parallel fisheries.

The majority of the rockfish harvested in the area between 2001 and 2008 was harvested by trawl gear, predominantly in the area of Zone 2 during the time of year the vessel length and gear restrictions are not in effect. All trawl harvest of rockfish was incidental to other fisheries. The majority of the remaining rockfish harvest occurred during longline fisheries.

GROUND FISH HARVEST FROM PARALLEL SEASONS IN THE BERING SEA-ALEUTIAN ISLANDS AREA

Other groundfish fisheries that occur in state waters are managed as parallel fisheries, where the state generally mirrors the seasons, bycatch and legal gear types of the adjacent federal waters. However, legal gear types in the Adak Vessel Length and Gear Restriction Zones have been modified by the BOF. Several state-waters areas remain closed to non-pelagic trawling (5 AAC 39.164 (4)-(7)). Parallel fisheries occur for Pacific cod, walleye pollock, Atka mackerel *Pleurogrammus monopterygius*, Pacific ocean perch, red rockfish (shortraker, rougheye, sharpchin, and northern rockfish), Greenland turbot *Reinhardtius hippoglossoides*, arrowtooth flounder *Atheresthes stomias*, flathead sole *Hippoglossoides elassodon*, yellowfin sole *Pleuronectes asper*, rock sole *P. bilineatus*, an aggregated rockfish species complex, and an aggregated flatfish species complex. Although these fisheries take place primarily in waters of the EEZ, some of the harvest occurs in waters under the jurisdiction of the State of Alaska. The term “discarded” in the following discussion refers to harvested fish discarded at sea or at the dock; utilized fish are those retained for any product including fish meal, bait, personal use, or by an observer for biological sampling.

Harvest of Pacific cod from the parallel fishery in state waters of the BSAI Area during 2008 was approximately 10.0 million pounds taken by 108 vessels with most of the harvest taken by pot vessels (Tables 13 and 14). The overall number of vessels and deliveries has decreased since 1995, due in part to Steller sea lion protection measures enacted in the Aleutian Islands. In addition, a state-waters Pacific cod fishery was established in the Aleutian Islands District in 2006. During the state-waters fishery the Aleutian Islands parallel fishery is closed west of 170° W long. and may have contributed to the decreased parallel harvest. The 2008 harvest distribution of Pacific cod from state waters was predominately from the Aleutian Islands District of the BSAI Area. Virtually all of the Pacific cod harvested was utilized.

Walleye pollock harvest from state waters of the BSAI Area in 2008 was 5.9 million pounds and was taken by 37 vessels (Tables 13 and 14). Walleye pollock harvest was primarily in directed fisheries. Virtually all of the pollock harvested was utilized. Approximately 62% of pollock harvested during the 2008 fishery was taken from the Aleutian Islands District.

Atka mackerel harvest in state waters of the BSAI in 2008 was 1.56 million pounds (Tables 13 and 14). All harvest of Atka mackerel occurred in the Aleutian Islands District of the BSAI Area. All of the harvest was utilized. The 2008 harvest of Atka mackerel from state waters was the highest it has been since 1995 and almost doubled from 2007, the previous highest year. Atka mackerel is primarily harvested in a NMFS directed fishery.

There are 34 species of rockfish in Alaskan waters, of which 13 occur in the BSAI Area (Kramer and O’Connell, 1988). For management purposes these species are divided into five groups. One group is Pacific ocean perch. In the Aleutian Islands, shortraker and rougheye rockfish are considered as a group, while sharpchin and northern rockfish form another group. In the Bering

Sea shortraker, rougheye, sharpchin, and northern rockfish are combined to form the “other red rockfish” group. All remaining rockfish species comprise the “other rockfish” group.

Harvest of Pacific ocean perch from state waters during 2008 occurred entirely in the Aleutian Islands District. Twenty-three vessels harvested 170,298 pounds from state waters (Tables 13 and 14), 85% of which was utilized. The species can be harvested in a directed NMFS fishery but is also commonly harvested as bycatch during the Atka mackerel fishery.

Twenty vessels harvested 5,497 pounds of shortraker and rougheye rockfish in state waters during 2008 (Tables 13 and 14). Almost all of the state-waters harvest was in the Aleutian Islands District and was incidentally harvested to other fisheries. Sixty-nine percent of the harvest was utilized.

Seventeen vessels harvested 95,441 pounds of sharpchin and northern rockfish in 2008 (Tables 13 and 14). The harvest from state waters in the 2008 season was the highest it has been since 1995. All state-waters harvest was in the Aleutian Islands District. Eighteen percent of this harvest was discarded.

Harvest of the “other” rockfish group has varied over the last seven years. Although the number of vessels remained relatively constant, the number of deliveries has not. Thirty-three vessels harvested 31,831 pounds in state waters during 2008 (Tables 13 and 14), all of which was caught in the Aleutian Islands District incidental to other fisheries. Ninety-seven percent taken from state waters was utilized. Harvest included yelloweye *S. ruberrimus* and thornyhead *Sebastolobus* sp. Dark rockfish, dusky rockfish, Redbanded *Sebastes babcocki*, copper rockfish *S. caurinus*, and darkblotched *S. crameri* rockfish were also harvested in this area from 1995 through 2007. ADF&G fish ticket database also contains records of harvest for yellowmouth *Sebastes reedi*, greenstripe *S. elongatus*, rosethorn *S. helvomaculatus*, and tiger rockfish *S. nigrocinctus*, although their occurrence in the BSAI Area is questionable and could have been misidentified at the dock.

There are 30 species of flatfish in Alaskan waters, 26 of which occur in the BSAI Area (Kramer et al. 1995). For management purposes these species are split into five fisheries. There are fisheries for Greenland turbot, yellowfin sole, rock sole, arrowtooth flounder, and flathead sole. All remaining flatfish species are harvested in a fishery for the species complex called “other flatfish”.

Sixteen vessels harvested 8,167 pounds of Greenland turbot from the BSAI Area in 2008 (Tables 14 and 15). Approximately 84% of the harvest was utilized. Ninety-six percent of the harvest came from the Aleutian Islands District. The harvest from state waters in the 2008 season was one of the lowest since 1995. The harvest of Greenland turbot in state waters has varied in recent years.

State-waters harvest of arrowtooth flounder in 2008 was 39,181 pounds taken by thirty-seven vessels (Tables 14 and 15). Ninety-six percent of the harvest was from Aleutian Islands District. Eighty-three percent of the harvest was utilized, 87% as fish meal.

Thirty-three vessels harvested 66,009 pounds of rock sole in 2008 (Tables 14 and 15). Thirty-two percent of the harvest was utilized and 81% came from the Aleutian Islands District.

State-waters harvest of yellowfin sole in 2008 was 3,141 pounds taken by five vessels (Tables 14 and 15). Eighty percent of the harvest occurred in the Aleutian Islands District. Over 80% was discarded at-sea or onshore.

Twenty-one vessels harvested 24,775 pounds of flathead sole in 2008 (Tables 14 and 15). Seventy-eight percent of the state-waters harvest came from the Aleutian Islands District, and the remainder from the Bering Sea District. Ninety-six percent of the harvest in 2008 was utilized, most of which was processed into fishmeal.

Harvest of fish in the “other flatfish” group has varied greatly from 1995 through 2008. In 2008 27 vessels harvested 72,952 pounds (Tables 14 and 15), of which 99% of the state-waters harvest came from the Aleutian Islands District. Eighty-eight percent of the harvest was utilized. Harvest included rex sole *Errex zachirus*, English sole *Parophrys vetulus*, starry flounder *Platichthys stellatus*, butter sole *Isopsetta isolepis*, and Alaska plaice *Pleuronectes quadrituberculatus*.

Harvest of groundfish from the state waters of the BSAI area of Alaska during parallel fisheries from 1995 through 2008 has averaged approximately 25 million pounds per year and totaled more than 360 million pounds. The total harvest for that period included 155 million pounds of walleye pollock, 193 million pounds of Pacific cod, 4.3 million pounds of Atka mackerel, and approximately 1.9 million pounds of all rockfish species, including Pacific ocean perch. Greenland turbot harvest during the fourteen-year period was 1.5 million pounds, arrowtooth flounder was approximately 1.4 million pounds, and rock sole was approximately 1.8 million pounds. The remaining flatfish species harvest totaled 1.2 million pounds. The harvest of walleye pollock and Pacific cod from state waters generally varies according to the available NMFS TAC. Other groundfish harvest in state waters is generally independent of the NMFS TAC, and is probably due more to species distribution, prey distribution, weather, and other environmental factors.

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TABLES AND FIGURES

Table 1.—Aleutian Islands state-waters sablefish fishery guideline harvest levels (GHLs) compared to the federal total allowable catch (TAC), state-waters harvest, and number of vessels and deliveries, 1995–2008.

Year	Federal TAC ^{a,b}	GHL as Percent of Federal TAC	State-waters GHL ^a	Harvest ^a	Number of	
					Vessels	Deliveries
1995	8,377,556	4.8%	400,000	269,220	35	59
1996	5,070,626	5.5%	280,000	401,463	35	67
1997	5,070,626	5.3%	270,000	317,562	37	75
1998	5,908,382	4.6%	270,000	254,578	38	101
1999	5,996,566	4.2%	250,000	279,778	24	38
2000	8,598,018	4.7%	400,000	446,560	28	59
2001	8,950,757	4.7%	425,000	464,241	31	99
2002	9,873,920	4.7%	460,000	477,970	24	59
2003	13,227,720	4.8%	630,000	473,426	39	102
2004	13,227,720	5.0%	660,000	323,969	26	67
2005	11,155,377	4.9%	550,000	203,498	25	67
2006	12,830,888	5.0%	640,000	177,935	16	54
2007	12,764,750	5.0%	638,000	272,556	26	62
2008	11,684,380	5.0%	584,000	146,741	24	55

^a In whole pounds.

^b Total allowable catch for the federal Bering Sea and Aleutian Islands.

Table 2.—Aleutian Islands state-waters sablefish fishery economic performance, season length, and season dates, 1995–2008.

Year	Fishery Value	Average Price per Pound ^a	Season Length ^b	Season Dates	
				Opened	Closed
1995	\$502,000	\$2.96	245	15-March	15-Nov
1996	\$642,000	\$2.54	133	15-March	26-Jul
1997	\$710,000	\$3.55	127	15-March	20-Jul
1998	\$350,000	\$2.18	245	15-March	15-Nov
1999	\$474,000	\$2.69	154	15-March	16-Aug
2000	\$855,000	\$3.04	122	15-March	15-Jul
2001	\$788,000	\$2.85	85	15-May	8-Aug
2002	\$876,000	\$2.95	63	15-May	16-Jul
2003	\$915,000	\$3.58	184	15-May	15-Nov
2004	\$470,000	\$2.69	184	15-May	15-Nov
2005	\$268,000	\$2.79	184	15-May	15-Nov
2006	\$296,000	\$3.50	184	15-May	15-Nov
2007	\$620,000	\$3.47	184	15-May	15-Nov
2008	\$380,000	\$3.85	184	15-May	15-Nov

^a Per pound dressed weight.

^b In days.

Table 3.—Aleutian Islands state-waters directed and bycatch harvest of sablefish in whole pounds by gear type, 1995–2008.

Year	Longline	Trawl	Pot	Total
1995	227,917	41,303	0	269,220
1996	401,429	26	8	401,463
1997	312,506	20	5,036	317,562
1998	252,398	2,180	0	254,578
1999	272,240	6,268	1,270	279,778
2000	446,112	0	448	446,560
2001	439,612	210	24,419	464,241
2002	456,632	1,126	20,212	477,970
2003	426,679	270	46,477	473,426
2004	273,807	129	50,033	323,969
2005	182,348	58	21,092	203,498
2006	128,764	1,207	47,964	177,935
2007	190,174	4,255	78,127	272,556
2008	114,152	0	32,589	146,741
Total	4,124,770	57,052	327,675	4,509,497

Table 4.—Aleutian Islands state-waters sablefish fishery percentage of vessels, deliveries, and harvest attributed to quota and non-quota vessels, 1995–2008.

Year	Non-IFQ ^a			IFQ ^b		
	Fleet	Deliveries	Harvest	Fleet	Deliveries	Harvest
1995	23%	51%	38%	77%	49%	62%
1996	26%	49%	57%	74%	51%	43%
1997	43%	63%	53%	57%	37%	47%
1998	55%	74%	42%	45%	26%	58%
1999	29%	39%	53%	71%	61%	47%
2000	14%	41%	80%	86%	59%	20%
2001	74%	85%	93%	26%	15%	7%
2002	75%	86%	95%	25%	14%	5%
2003	46%	54%	64%	54%	46%	36%
2004	38%	49%	59%	62%	51%	41%
2005	20%	43%	49%	80%	57%	51%
2006	19%	37%	41%	81%	63%	59%
2007	27%	42%	24%	73%	58%	76%
2008	29%	22%	6%	71%	78%	94%

^a Vessels without federal individual fishing quota or Community Development Quota.

^b Vessels with federal individual fishing quota or Community Development Quota.

Table 5.—Aleutian Islands state-waters black rockfish fishery harvest statistics and economic performance, 1994–2008.

Year	Guideline Harvest Level ^a	Number of		Harvest ^a	Exvessel Value ^b	Fishery Value
		Vessels	Deliveries			
1994 ^c	100,000	0	0	0	0	0
1995 ^c	100,000	CF	CF	CF	CF	CF
1996 ^c	100,000	CF	CF	CF	CF	CF
1997 ^c	100,000	3	18	102,746	\$0.34	\$35,000
1998 ^d	100,000	CF	CF	CF	CF	CF
1999 ^d	90,000	8	41	20,889	\$0.35	\$7,200
2000 ^d	90,000	CF	CF	CF	CF	CF
2001 ^d	90,000	CF	CF	CF	CF	CF
2002 ^d	90,000	CF	CF	CF	CF	CF
2003 ^d	90,000	CF	CF	CF	CF	CF
2004 ^{d,e}	90,000	15	33	2,801	\$0.19	\$530
2005 ^{d,e}	90,000	CF	CF	CF	CF	CF
2006 ^{d,e}	90,000	CF	CF	CF	CF	CF
2007 ^{d,e}	90,000	CF	CF	CF	CF	CF
2008 ^{d,f}	90,000	CF	CF	CF	CF	CF

Note: CF = Confidential.

^a In whole pounds.

^b Per pound whole weight.

^c Harvests include black, dark and dusky rockfish. In the early years of the fishery, dusky, and dark rockfish may have been misidentified as black rockfish; therefore harvest totals include both species.

^d Harvests include black rockfish only.

^e Harvest includes bycatch allowance harvest taken during trawl operations.

^f All black rockfish harvest was taken as bycatch allowance to other directed groundfish fisheries.

Table 6.—Aleutian Islands state-waters black rockfish fishery harvest by section, 1994–2008.

Year	Akutan Section		Unalaska Section		Western Section	
	GHL ^a	Harvest ^b	GHL ^a	Harvest ^b	GHL ^a	Harvest ^b
1994 ^c	50,000	0	50,000	0	NA	0
1995 ^c	50,000	0	50,000	CF	NA	0
1996 ^c	50,000	0	50,000	CF	NA	0
1997 ^c	50,000	CF	50,000	CF	NA	0
1998 ^d	40,000	CF	40,000	0	20,000	0
1999 ^d	35,000	13,465	35,000	CF	20,000	CF
2000 ^d	35,000	CF	35,000	CF	20,000	CF
2001 ^d	35,000	CF	35,000	CF	20,000	CF
2002 ^d	35,000	CF	35,000	CF	20,000	CF
2003 ^d	35,000	CF	35,000	0	20,000	CF
2004 ^d	35,000	CF	35,000	CF	20,000	0
2005 ^d	35,000	CF	35,000	CF	20,000	0
2006 ^d	35,000	CF	35,000	CF	20,000	CF
2007 ^d	35,000	CF	35,000	CF	20,000	CF
2008 ^d	35,000	CF	35,000	CF	20,000	CF

Note: NA = Not Applicable. CF = Confidential.

^a Guideline harvest level in whole pounds.

^b In whole pounds.

^c Harvest totals include black, dark, and dusky rockfish. In the early years of the fishery, dusky and dark rockfish may have been misidentified as black rockfish; therefore harvest totals include both species.

^d Harvest totals include black rockfish only.

Table 7.—Aleutian Islands state-waters black rockfish fishery guideline harvest level (GHL) in whole pounds, by section and subsection for the 2008 fishery.

Section	Subsection	GHL (Pounds)
Akutan	Akutan Island	10,000
	Akun Island	10,000
	Rootok Island	5,600
	Tigalda Island	9,400
	Total:	35,000
Unalaska	Unalaska Bay/Wislow	3,000
	Cape Kalekta/Unalga Island	3,600
	West Unalaska	12,850
	South Unalaska	12,300
	Beaver Inlet/Sedanka Island	3,250
Total:	35,000	
Western	No Subsections	20,000

Table 8.—Aleutian Islands black rockfish age (from otoliths) and length data, 1997–2008.

Year	Sample Location	Sample Size	Age ^a		Length ^b	
			Average	Range	Average	Range
1997	Unalaska Island	9	17.1	11 to 32	43.9	35 to 49
1998		ND	ND	ND	ND	ND
1999	Unalaska Island	92	15.9	8 to 30	45.3	37 to 51
2000	Unalaska Island	10	8.8	7 to 10	41.0	37 to 45
2001		ND	ND	ND	ND	ND
2002	Akutan Island	531	16.5	4 to 52	45.8	26 to 54
2003		ND	ND	ND	ND	ND
2004	Akutan Island	287	19	5 to 41	43.6	20 to 56
2005	Akutan Island	244	11	2 to 28	40.7	16 to 56
2006	Unalaska Island	27	13.8	6 to 29	45.1	38 to 52
2007		ND	ND	ND	ND	ND
2008		ND	ND	ND	ND	ND

Note: ND = No data.

^a In years (from otoliths).

^b In centimeters.

Table 9.—Aleutian Islands state-waters Pacific cod fishery guideline harvest level (GHL) and harvest apportionment by season, 2006-2008.

Year	Season	Initial GHL ^a	Harvest ^a	Number of	
				Vessels	Deliveries
2006	A season	8,981,540	8,502,781	26	68
	B season	3,849,232 ^b	CF	5	CF
	TOTAL	12,830,772	CF	30 ^c	CF
2007	A season	8,148,202	8,229,931	27	97
	B season	3,492,086 ^d	3,409,070	15	106
	TOTAL	11,640,288	11,639,001	41 ^c	203
2008	A season	8,148,202	7,477,507	30	116
	B season	3,492,086 ^e	4,241,692	18	77
	TOTAL	11,640,288	11,719,199	45 ^c	193

Note: CF = Confidential.

^a In whole pounds.

^b ADF&G transferred 3.5 million pounds of the GHL to National Marine Fisheries Service effective on September 1, 2006.

^c Some vessels participated in both the A and B season.

^d 81,729 pounds were deducted from the B season due to an overage during the A season. As a result the GHL at the opening of the B season was 3,410,357 pounds.

^e 670,695 pounds remained from the A season and was rolled into the B season. As a result the GHL at the opening of the B season was 4,162,781 pounds.

Table 10.—Aleutian Islands state-waters Pacific cod fishery economic performance, season length and dates, 2006-2008.

Year	Season	Season Dates		Season Length ^a	Fishery Value ^b	Average Price per Pound ^c
		Opened	Closed			
2006	A season	15-March	24-March	9	\$1.3	\$0.23
	B season	10-June	1-Sep	84	CF	CF
2007	A season	16-March	23-March	7	\$3.6	\$0.45
	B season	10-June	1-Sep	83	\$0.9	\$0.52
	B season	1-Oct	3-Dec	63	\$0.4	\$0.52
2008	A season	10-March	18-March	8	\$4.5	\$0.63
	B season	10-June	9-Jul	29	\$1.8	\$0.57

Note: CF = Confidential.

^a In days.

^b In millions of dollars.

^c Per pound dressed weight.

Table 11.—Aleutian Islands state-waters Pacific cod fishery harvest in whole pounds by gear type, 2006-2008.

Year	Season	Longline	Trawl	Pot	Jig	Total
2006	A season	CF	7,053,035	CF	0	8,502,781
	B season	CF	0	CF	0	CF
2007	A season	0	6,998,224	1,231,707	0	8,229,931
	B season	CF	0	2,383,163	CF	3,409,070
2008	A season	CF	6,130,304	CF	0	7,477,507
	B season	362,410	0	3,786,710	92,572	4,241,692

Note: CF = Confidential.

Table 12.—Adak Vessel Length and Gear Restriction Zones harvest of Pacific cod and rockfish by gear type, 2001–2008.

Year	Zone	Vessels	Pacific Cod ^a						Rockfish ^{a,b}						
			Trawl ^c	Longline	Pot	Jig	Hand Troll	Total	Vessels	Trawl	Longline	Pot	Jig	Hand Troll	Total
2001	1 ^d	10	131,412	36,400	0	15,483	526	183,822	3	0	219	0	0	0	219
	2 ^e	7	0	17,893	0	18,806	0	36,699	6	0	5,978	5	0	0	5,982
	2 ^f	24	4,378,165	55,460	51,165	29,698	0	4,514,488	11	31,432	5,978	5	234	0	37,649
	Total ^g							4,698,310							37,867
2002	1 ^d	5	253,151	97,841	0	0	100	351,092	3	CF	CF	CF	CF	CF	956
	2 ^e		CF	CF	CF	CF	CF	CF	3	0	2,616	0	0	0	2,616
	2 ^f	17	8,054,430	585	0	0	0	8,055,015	8	5,946	2,616	0	0	0	8,562
	Total ^g							8,406,107							9,518
2003	1 ^d	3	412,132	0	0	0	0	412,132	3	CF	CF	CF	CF	CF	7,612
	2 ^e	3	CF	CF	CF	CF	CF	265	9	0	8,865	131	0	0	8,996
	2 ^f	22	8,547,369	116	0	149	0	8,547,634	20	15,496	8,865	131	0	0	24,492
	Total ^g							8,959,766							32,104
2004	1 ^d	6	268,421	6,318	0	4,271	0	279,011	3	CF	CF	CF	CF	CF	6,251
	2 ^e	2	CF	CF	CF	CF	CF	CF	6	0	2,815	0	0	0	2,815
	2 ^f	20	4,890,615	24,481	0	0	0	4,915,096	18	7,873	3,602	0	0	0	11,475
	Total ^g							5,194,107							17,726
2005	1 ^d	6	CF	CF	CF	CF	CF	435,149	3	CF	CF	CF	CF	CF	CF
	2 ^e	3	CF	CF	CF	CF	CF	C	4	CF	CF	CF	CF	CF	CF
	2 ^f	14	1,896,825	828,842	0	0	0	2,725,668	7	CF	CF	CF	CF	CF	CF
	Total ^g							3,160,817							24,867
2006	1 ^d	11	CF	CF	CF	CF	CF	401,624	2	CF	CF	CF	CF	CF	CF
	2 ^e	4	0	49,824	0	0	0	49,824	4	0	1,372	0	0	0	1,372
	2 ^f	24	CF	CF	CF	CF	CF	3,582,336	10	6,513	1,688	0	0	0	8,201
	Total ^g							3,983,960 ^h							CF

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Table 12.–Page 2 of 2.

Year	Zone	Vessels	Pacific Cod ^a						Rockfish ^{a,b}						
			Trawl ^c	Longline	Pot	Jig	Hand Troll	Total	Vessels	Trawl	Longline	Pot	Jig	Hand Troll	Total
2007 ⁱ	1 ^d	3	CF	CF	CF	CF	CF	20,350	7	181	CF	CF	CF	CF	
	2 ^e	2	CF	CF	CF	CF	CF	CF	3	0	5,243	0	0	0	5,243
	2 ^f	15	CF	CF	CF	CF	CF	1,652,679	19	22,484	5,843	0	0	0	28,327
	Total ^g							1,673,029						CF	
2008 ⁱ	1 ^d	10	CF	CF	CF	CF	CF	64,921	5	CF	CF	CF	CF	CF	409
	2 ^e	7	CF	CF	CF	CF	CF	239,656	3	CF	CF	CF	CF	CF	403
	2 ^f	29	773,595	299,493	455,034	152,350	0	1,680,471	17	9,851	CF	CF	CF	CF	10,253
	Total ^g							1,745,392						10,662	

Note: CF = Confidential.

^a In pounds.

^b Includes all species of rockfish commercially harvested.

^c From 2001 – 2004, in Zone 1 from May 1 to September 15 trawl was an illegal gear-type for targeting Pacific cod while gear restrictions in Zone 2 were in effect. Beginning in 2005 trawl became a legal gear-type for targeting Pacific cod in Zone 1 year-round.

^d Zone 1 includes the waters of Sitkin Sound, the Bay of Islands, nearshore waters inside a line from Boot Point to Cape Kagigikak on Adak Island, and inside waters between Adak, Kagalaska, Little Tanaga, Umak, Great Sitkin, and Tagalak islands.

^e Zone 2 gear restrictions are in effect only from May 1 to September 15. Zone 2 includes state waters of Alaska between 175° 30' W longitude and 177° W longitude surrounding Zone 1 waters.

^f Includes harvest for the entire year within waters encompassed by Zone 2.

^g Includes harvest for the entire year within waters encompassed by Zone 1 and Zone 2.

^h Pacific cod harvest does include harvest which occurred during the state-waters Pacific cod fishery in 2006.

ⁱ Pacific cod harvest does not include harvest which occurred during the state-waters Pacific cod fishery.

Table 13.—Bering Sea-Aleutian Islands Area harvest, number of vessels, and deliveries from state waters in the parallel seasons for Pacific cod, walleye pollock, Atka mackerel, Pacific ocean perch, shortraker/rougheye rockfish, sharpchin/northern rockfish, and other rockfish fisheries, 1995–2008.

Year		Pacific Cod ^a	Walleye Pollock	Atka Mackerel	Pacific Ocean Perch ^a	Shortraker and Rougheye Rockfish ^a	Sharpchin and Northern Rockfish ^a	Other Rockfish ^{a,b}
1995	Harvest	20,539,276	28,412,682	440,476	33,883	14,080	2,186	27,128
	Vessels	155	46	36	18	19	5	38
	Deliveries	955	91	84	30	22	5	96
1996	Harvest	18,257,947	21,318,035	103,040	68,784	10,765	57,767	43,909
	Vessels	162	55	13	24	22	9	33
	Deliveries	893	103	22	37	27	12	59
1997	Harvest	4,574,911	18,739,072	17,710	10,532	8,325	0	21,198
	Vessels	108	36	7	17	23	0	32
	Deliveries	386	70	8	24	26	0	59
1998	Harvest	11,939,929	13,547,679	11,276	95,113	5,238	9,658	31,203
	Vessels	111	48	11	22	6	6	35
	Deliveries	374	93	15	36	11	8	105
1999	Harvest	18,307,994	1,509,911	534,477	44,082	11,299	23,128	26,013
	Vessels	136	24	14	13	9	14	31
	Deliveries	545	40	18	21	20	20	49
2000	Harvest	15,617,783	3,661,579	170,830	4,730	15,542	23,741	51,961
	Vessels	164	36	17	8	22	15	35
	Deliveries	580	53	26	10	28	25	77
2001	Harvest	15,234,235	5,541,310	96,915	8,894	8,730	33,500	65,809
	Vessels	132	49	16	7	24	7	42
	Deliveries	415	75	25	11	40	10	116
2002	Harvest	16,503,559	11,240,922	26,326	6,666	1,169	8,460	57,678
	Vessels	113	36	16	14	12	14	41
	Deliveries	375	63	30	22	15	20	89
2003	Harvest	19,385,195	10,946,365	41,033	19,377	3,708	26,337	62,716
	Vessels	116	41	34	21	13	19	47
	Deliveries	459	92	94	48	24	32	126
2004	Harvest	19,205,950	20,220,871	175,879	8,555	3,858	36,892	39,114
	Vessels	121	55	42	28	16	29	51
	Deliveries	578	147	131	72	29	62	140
2005	Harvest	9,945,055	5,309,503	78,602	57,498	1,355	18,955	26,798
	Vessels	95	31	16	11	10	9	41
	Deliveries	389	54	38	28	14	16	94
2006	Harvest	6,907,898	2,937,559	211,432	44,509	5,065	4,791	19,858
	Vessels	105	42	15	16	16	9	34
	Deliveries	346	67	37	31	22	20	85

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Year		Pacific Cod ^a	Walleye Pollock	Atka Mackereel	Pacific Ocean Perch ^a	Shortraker and Rougheye Rockfish ^a	Sharpchin and Northern Rockfish ^a	Other Rockfish ^{a,b}
2007	Harvest	7,035,356	5,841,139	792,572	291,117	12,935	33,282	33,463
	Vessels	109	44	29	34	20	17	43
	Deliveries	341	102	57	82	38	46	107
2008	Harvest	10,395,221	5,859,283	1,557,163	170,298	5,497	95,441	31,831
	Vessels	108	37	20	23	20	17	33
	Deliveries	379	76	40	49	36	39	43

Note: All harvests are in whole pounds and include discards at sea.

^a Pacific cod and rockfish harvest information includes harvest from the Adak Vessel Length and Gear Restriction Zones.

^b Other rockfish species include: dusky *S. variabilis*, dark *S. ciliatus*, yelloweye *S. ruberrimus*, thornyhead *Sebastolobus spp.*, redbanded *Sebastes babcocki*, copper *S. caurinus* rockfish, and darkblotched *S. crameri* rockfish.

Table 14.—Bering Sea-Aleutian Islands Area harvest in whole pounds by gear type from state waters in the parallel seasons for Pacific cod, walleye pollock, Atka mackerel, Pacific ocean perch, shortraker/rougheye rockfish, sharpchin/northern rockfish, other rockfish, Greenland turbot, arrowtooth flounder, rock sole, yellowfin sole, flathead sole, and other flatfish fisheries, 1995–2008.

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Pacific Cod ^a						
	1995	12,265,060	2,003,742	5,496,569	769,828	4,077
	1996	5,857,109	446,532	11,546,495	393,159	CF
	1997	814,481	1,476,499	2,073,538	208,215	CF
	1998	3,975,800	4,128,820	3,624,994	209,937	CF
	1999	8,963,778	1,447,771	7,542,991	353,454	0
	2000	5,378,628	3,612,076	6,524,176	102,063	CF
	2001	7,940,213	3,974,965	3,146,501	172,030	CF
	2002	13,768,587	484,612	1,887,114	363,146	CF
	2003	13,456,640	855,270	4,928,807	144,478	0
	2004	12,272,028	1,852,962	4,616,764	464,196	0
	2005	4,056,394	2,538,128	3,116,586	233,947	0
	2006	2,500,127	1,267,485	2,997,594	142,692	0
	2007	3,922,331	1,425,124	1,507,579	180,322	0
	2008	2,526,207	2,567,251	4,974,251	327,512	0
Pollock						
	1995	28,411,848	CF	171	648	0
	1996	21,220,981	0	97,055	0	0
	1997	18,736,861	CF	CF	2,165	0
	1998	13,540,291	6,114	1,274	0	0
	1999	1,508,674	918	319	0	0
	2000	3,650,800	5,825	4,954	0	0
	2001	5,512,961	27,487	862	0	0
	2002	11,240,481	CF	CF	CF	0
	2003	10,943,622	2,722	CF	0	0
	2004	20,211,288	9,463	CF	0	0
	2005	5,307,986	69	CF	0	0
	2006	2,927,421	702	CF	0	0
	2007	5,838,877	348	1,914	0	0
	2008	5,852,253	7,007	CF	0	0

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Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Atka Mackerel						
	1995	434,834	CF	4,447	1,193	0
	1996	102,296	0	744	0	0
	1997	CF	C	43	0	0
	1998	11,161	0	CF	0	0
	1999	533,652	CF	150	0	0
	2000	164,118	5,930	782	0	0
	2001	91,093	5,058	CF	0	0
	2002	26,325	CF	0	0	0
	2003	32,941	CF	7,976	0	0
	2004	174,701	0	CF	0	0
	2005	78,600	CF	0	0	0
	2006	208,352	0	3,080	0	0
	2007	792,428	8	CF	0	0
	2008	1,557,108	0	CF	0	0
Pacific Ocean Perch ^a						
	1995	33,728	0	CF	CF	0
	1996	68,784	0	0	0	0
	1997	6,838	CF	0	0	0
	1998	95,113	0	0	0	0
	1999	43,177	CF	CF	0	0
	2000	4,290	440	0	0	0
	2001	8,894	0	0	0	0
	2002	6,666	0	0	0	0
	2003	19,377	0	0	0	0
	2004	8,555	0	0	0	0
	2005	57,498	0	0	0	0
	2006	44,503	CF	0	0	0
	2007	291,083	0	CF	0	0
	2008	170,298	0	0	0	0

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Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Shortraker-Rougheye Rockfish ^a						
	1995	241	13,645	0	CF	0
	1996	519	10,246	0	0	0
	1997	1,078	7,247	0	0	0
	1998	CF	3,506	0	0	0
	1999	CF	10,092	0	0	0
	2000	CF	12,976	0	0	0
	2001	0	8,592	CF	CF	0
	2002	CF	1,163	0	0	0
	2003	CF	3,208	452	0	0
	2004	246	3,509	CF	0	0
	2005	CF	1,321	0	0	0
	2006	353	3,909	CF	0	0
	2007	834	12,101	0	0	0
	2008	457	4,935	CF	0	0
Sharpchin-Northern Rockfish ^a						
	1995	2,186	0	0	0	0
	1996	57,746	0	CF	0	0
	1997	0	0	0	0	0
	1998	9,658	0	0	0	0
	1999	22,682	CF	CF	0	0
	2000	16,065	7,592	CF	CF	0
	2001	29,011	4,489	0	0	0
	2002	8,382	CF	0	0	0
	2003	26,241	CF	0	0	0
	2004	36,460	CF	0	0	0
	2005	18,955	0	0	0	0
	2006	4,791	0	0	0	0
	2007	33,268	CF	0	0	0
	2008	93,160	CF	0	0	0

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Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Other Rockfish ^{a,b}						
	1995	1,376	25,402	CF	330	0
	1996	125	43,613	CF	CF	0
	1997	757	20,115	CF	CF	0
	1998	5,455	25,590	CF	0	0
	1999	9,308	16,525	180	0	0
	2000	CF	50,780	24	CF	0
	2001	7,056	58,461	292	0	0
	2002	985	56,354	0	339	0
	2003	1,214	60,928	574	0	0
	2004	3,512	35,428	174	0	0
	2005	459	26,314	CF	0	0
	2006	3,479	15,621	758	0	0
	2007	11,541	21,597	CF	CF	0
	2008	526	31,305	0	0	0
Greenland Turbot						
	1995	174,281	111,906	CF	CF	0
	1996	760	175,618	0	0	0
	1997	1,417	93,250	0	0	0
	1998	1,022	338,314	0	0	0
	1999	11,138	74,419	CF	0	0
	2000	CF	124,187	CF	0	0
	2001	CF	150,332	2,179	0	0
	2002	CF	45,849	CF	0	0
	2003	CF	53,083	1,216	0	0
	2004	107	16,891	CF	0	0
	2005	CF	6,889	CF	0	0
	2006	2,112	18,521	1,315	0	0
	2007	CF	28,965	936	0	0
	2008	849	7,303	CF	0	0

-continued-

Table 14.–Page 5 of 7.

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Arrowtooth Flounder						
	1995	11,484	9,009	CF	CF	0
	1996	33,038	1,451	27	0	0
	1997	16,035	4,882	CF	0	0
	1998	30,340	832	0	0	0
	1999	749,169	3,458	0	0	0
	2000	11,520	14,905	CF	0	0
	2001	19,152	18,889	2,797	0	0
	2002	35,546	2,058	CF	CF	0
	2003	41,647	4,370	70	0	0
	2004	124,363	3,627	CF	0	0
	2005	35,766	2,483	CF	0	0
	2006	23,301	7,799	1,123	0	0
	2007	112,298	20,469	2,746	0	0
	2008	33,003	5,294	884	0	0
Rock Sole						
	1995	52,460	0	CF	0	0
	1996	121,696	0	CF	0	0
	1997	63,863	0	CF	0	0
	1998	135,519	0	CF	0	0
	1999	210,956	CF	0	0	0
	2000	94,228	CF	24	0	0
	2001	178,694	CF	75	0	0
	2002	161,290	0	0	0	0
	2003	206,561	0	0	0	0
	2004	290,436	CF	0	0	0
	2005	50,446	CF	CF	0	0
	2006	98,964	CF	0	0	0
	2007	75,192	CF	CF	0	0
	2008	65,973	CF	CF	0	0

-continued-

Table 14.–Page 6 of 7.

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Yellowfin Sole						
	1995	CF	0	2,887	0	0
	1996	87,333	0	CF	0	0
	1997	CF	0	83	0	0
	1998	9,694	0	CF	0	0
	1999	55,521	CF	1,164	0	0
	2000	CF	CF	CF	0	0
	2001	61,307	0	CF	0	0
	2002	27,144	0	0	0	0
	2003	24,569	0	CF	0	0
	2004	1,233	CF	CF	0	0
	2005	4,620	CF	CF	0	0
	2006	282	CF	741	0	0
	2007	CF	CF	CF	0	0
	2008	CF	0	3,075	0	0
Flathead Sole						
	1995	2,064	0	CF	0	0
	1996	70,285	0	CF	0	0
	1997	27,332	0	0	0	0
	1998	39,119	0	CF	0	0
	1999	77,466	CF	CF	0	0
	2000	10,895	CF	CF	0	0
	2001	20,837	747	11	0	0
	2002	70,209	0	CF	0	0
	2003	34,952	CF	36	0	0
	2004	28,410	352	CF	0	0
	2005	9,620	0	CF	0	0
	2006	13,769	CF	CF	CF	CF
	2007	37,142	CF	79	0	0
	2008	24,553	222	0	0	0

-continued-

Table 14.–Page 7 of 7.

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Other Flatfish ^c						
	1995	854	0	357	0	0
	1996	39,658	CF	CF	0	0
	1997	30,836	0	CF	0	0
	1998	59,618	CF	1,017	0	0
	1999	46,405	0	0	0	0
	2000	3,011	CF	CF	0	0
	2001	21,236	0	CF	0	0
	2002	5,504	0	0	0	0
	2003	4,805	0	35	0	0
	2004	14,344	0	CF	0	0
	2005	11,492	0	0	0	0
	2006	15,153	CF	CF	0	0
	2007	81,803	CF	CF	0	0
	2008	72,665	CF	228	0	0

Note: All harvests are in whole pounds and include discards at sea.

Note: CF = Confidential.

^a Pacific cod and rockfish harvest information includes harvest from the Adak Vessel Length and Gear Restriction Zones.

^b Other rockfish species include: dusky *S. variabilis*, dark *S. ciliatus*, yelloweye *S. ruberrimus*, thornyhead rockfish *Sebastolobus spp.*, Redbanded *Sebastes babcocki*, copper *S. caurinus* rockfish, and darkblotched *S. crameri* rockfish.

^c Other Flatfish species include: rex sole *Errex zachirus*, butter sole *Isopsetta isolepsis*, Alaska plaice *Pleuronectes quadrituberculatus*, English sole *Parophrys vetulus*, dover sole *Microstomus pacificus*, and starry flounder *Platichthys stellatus*.

Table 15.—Bering Sea-Aleutian Islands Area harvest, number of vessels and deliveries from state waters in the parallel seasons for Greenland turbot, arrowtooth flounder, rock sole, yellowfin sole, flathead sole, and other flatfish fisheries, 1995–2008.

Year		Greenland Turbot	Arrowtooth Flounder	Rock Sole	Yellowfin Sole	Flathead Sole	Other Flatfish ^a
1995	Harvest	286,209	20,802	52,570	3,057	2,119	1,211
	Vessels	24	31	12	7	10	10
	Deliveries	40	61	23	14	17	17
1996	Harvest	176,378	34,516	121,708	88,002	70,290	39,670
	Vessels	33	29	24	17	22	26
	Deliveries	49	43	41	24	36	37
1997	Harvest	94,667	20,947	63,913	93	27,332	30,917
	Vessels	26	18	12	5	9	12
	Deliveries	47	31	21	7	20	26
1998	Harvest	339,336	31,172	135,536	9,771	41,887	60,640
	Vessels	26	17	25	12	19	29
	Deliveries	81	31	48	15	37	52
1999	Harvest	86,608	752,627	211,227	56,688	78,197	46,405
	Vessels	17	19	20	9	13	13
	Deliveries	34	39	46	12	28	17
2000	Harvest	125,715	26,510	94,254	1,126	11,216	3,052
	Vessels	22	29	24	5	20	10
	Deliveries	43	45	45	5	26	11
2001	Harvest	152,566	40,838	178,785	61,319	21,595	21,240
	Vessels	31	44	23	8	26	13
	Deliveries	74	73	39	11	29	17
2002	Harvest	46,690	37,721	161,290	27,144	70,223	5,504
	Vessels	19	40	21	4	31	18
	Deliveries	43	77	48	5	44	23

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Table 15.–Page 2 of 2.

Year		Greenland Turbot	Arrowtooth Flounder	Rock Sole	Yellowfin Sole	Flathead Sole	Other Flatfish ^a
2003	Harvest	54,316	46,087	206,561	25,021	34,994	4,840
	Vessels	20	50	28	9	34	21
	Deliveries	45	110	98	15	57	43
2004	Harvest	18,316	139,853	290,582	1,846	28,784	14,354
	Vessels	23	58	36	8	41	29
	Deliveries	41	159	98	13	106	77
2005	Harvest	8,137	38,398	50,783	4,741	9,667	11,492
	Vessels	10	38	21	10	26	16
	Deliveries	14	70	33	12	42	39
2006	Harvest	21,948	32,223	99,238	1,038	13,996	15,227
	Vessels	23	48	29	11	27	22
	Deliveries	33	86	59	13	41	39
2007	Harvest	66,056	135,513	75,231	5,621	37,223	82,459
	Vessels	12	40	40	6	30	18
	Deliveries	21	100	115	8	56	47
2008	Harvest	8,167	39,181	66,009	3,141	24,775	72,952
	Vessels	16	37	33	5	21	27
	Deliveries	18	42	41	5	22	70

Note: All harvests are in whole pounds and include discards at sea.

^a Other Flatfish species include: rex sole *Errex zachirus*, butter sole *Isopsetta isolepsis*, Alaska plaice *Pleuronectes quadrituberculatus*, English sole *Parophrys vetulus*, Dover sole *Microstomus pacificus*, and starry flounder *Platichthys stellatus*.

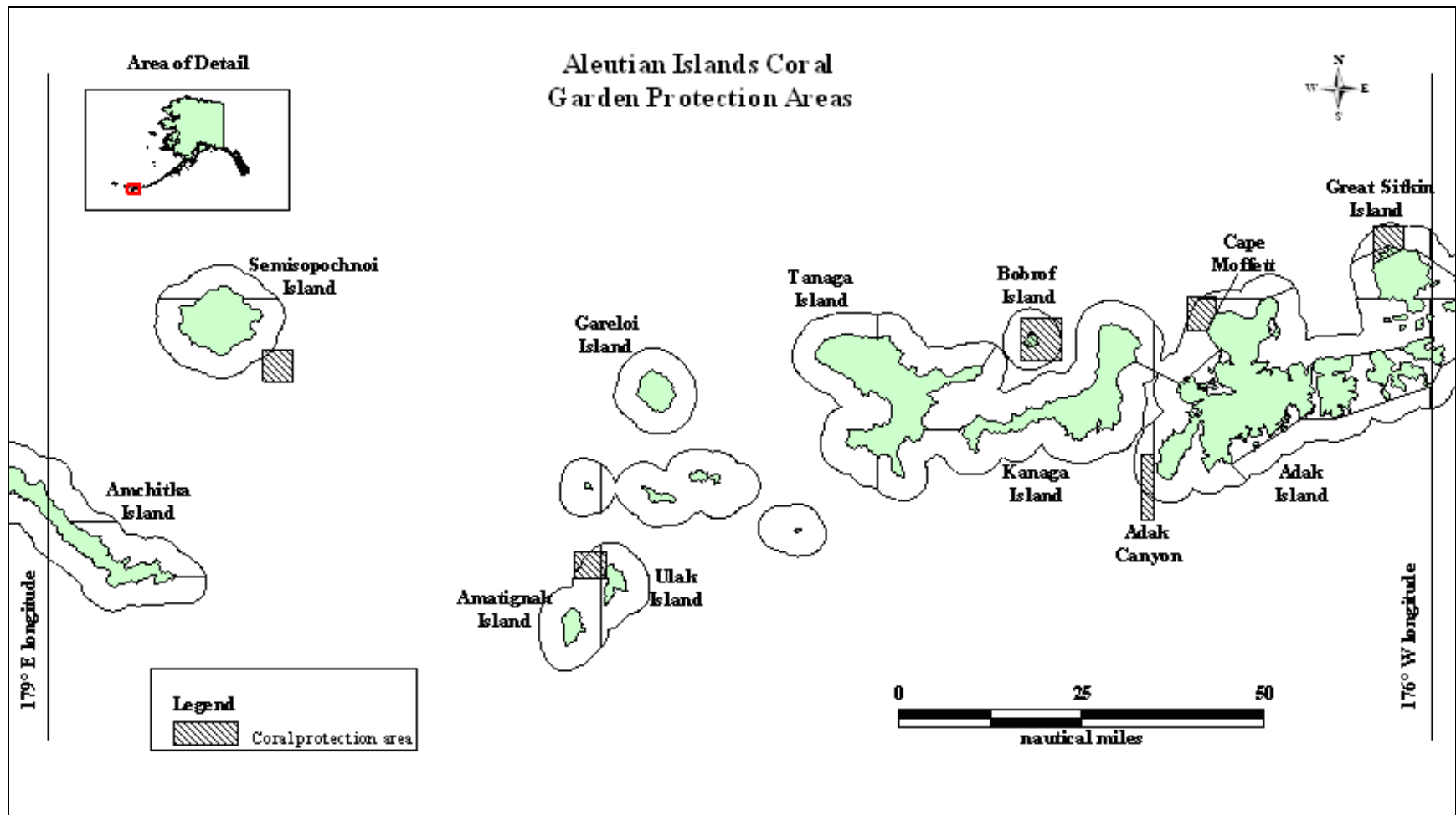


Figure 1.—Aleutian Islands Coral Garden Protection Areas closed to fishing.

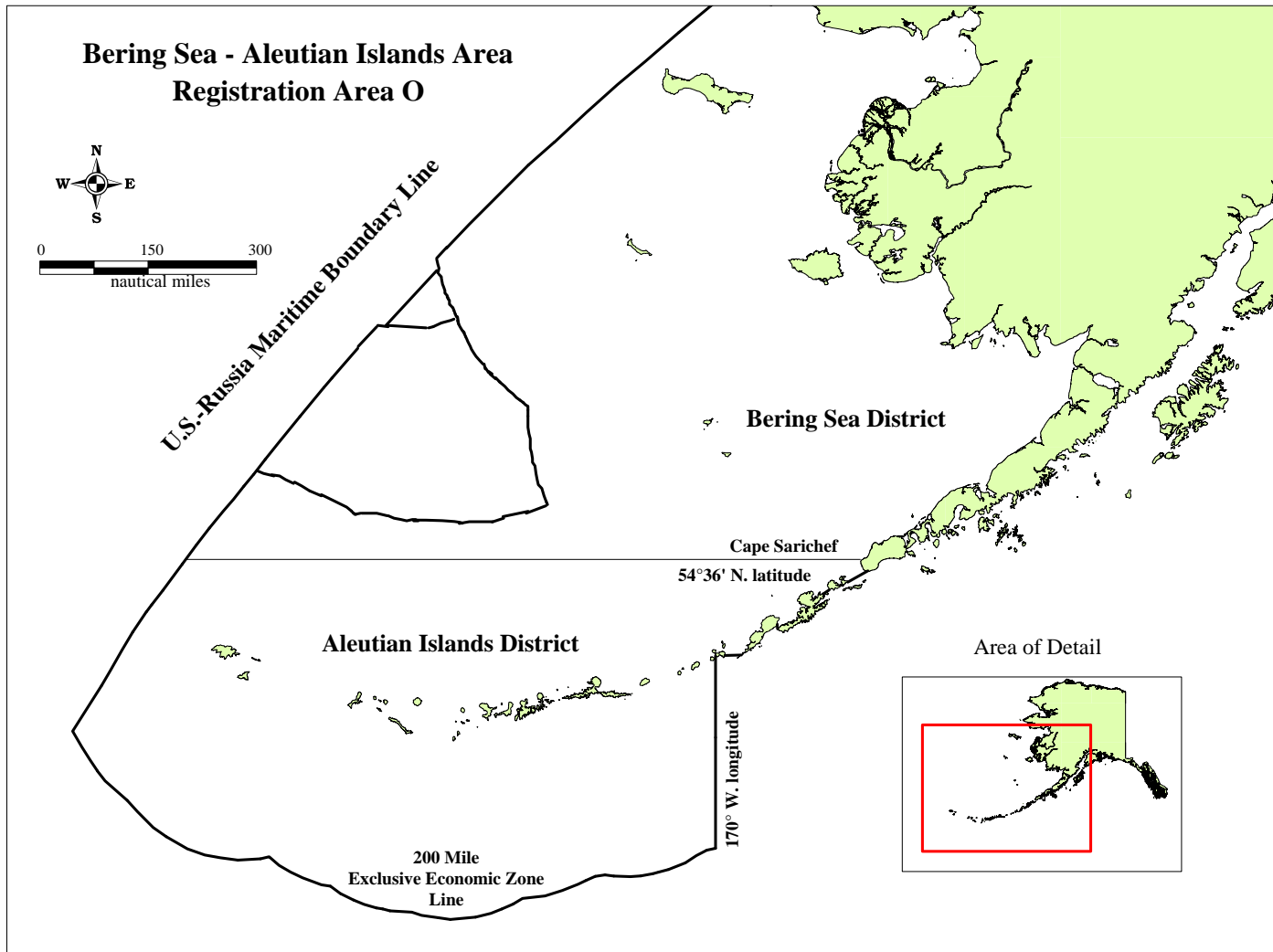


Figure 2.—The Bering Sea-Aleutian Islands Area for groundfish management.

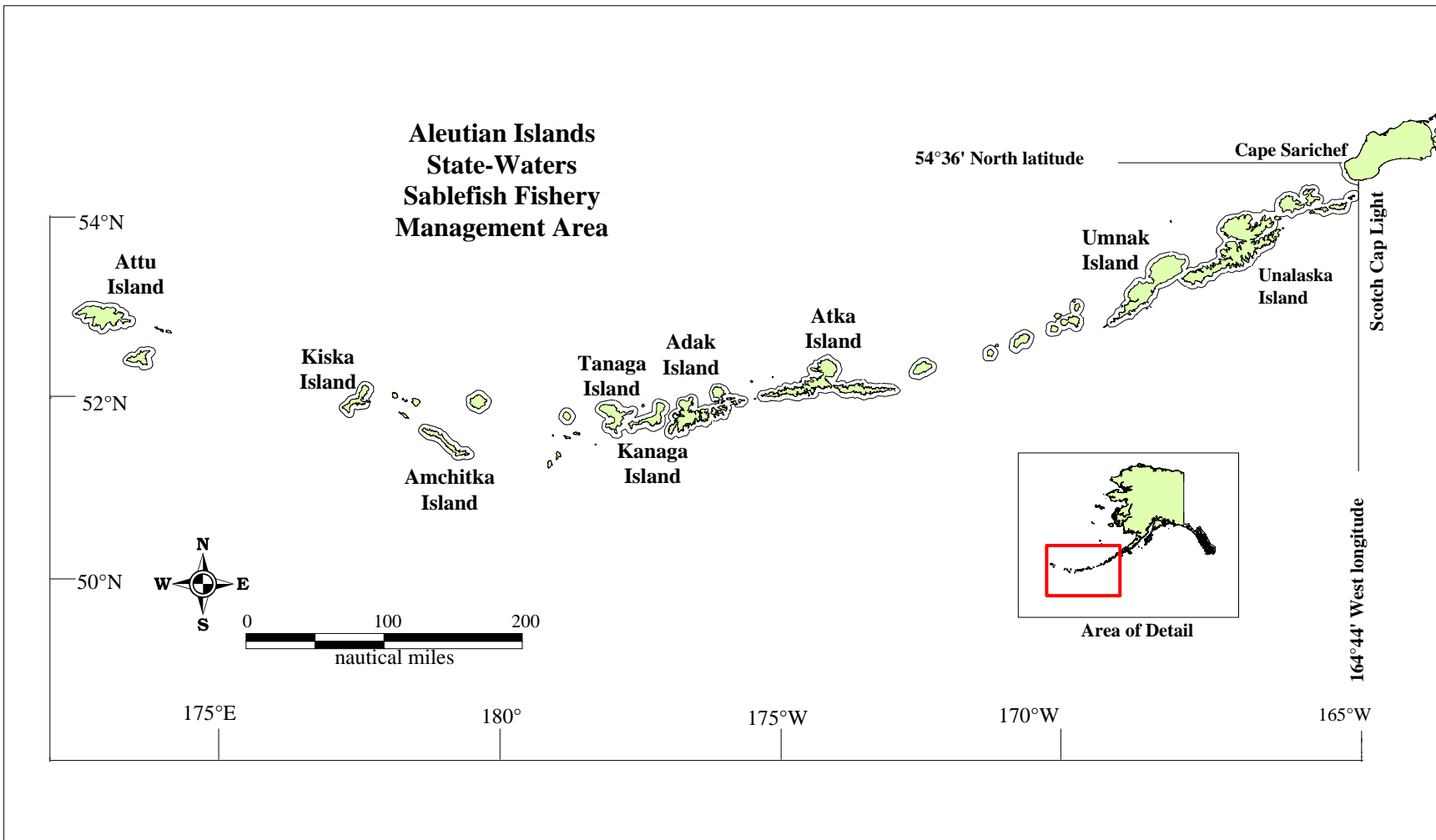


Figure 3.—The Aleutian Islands state-waters sablefish fishery management area.

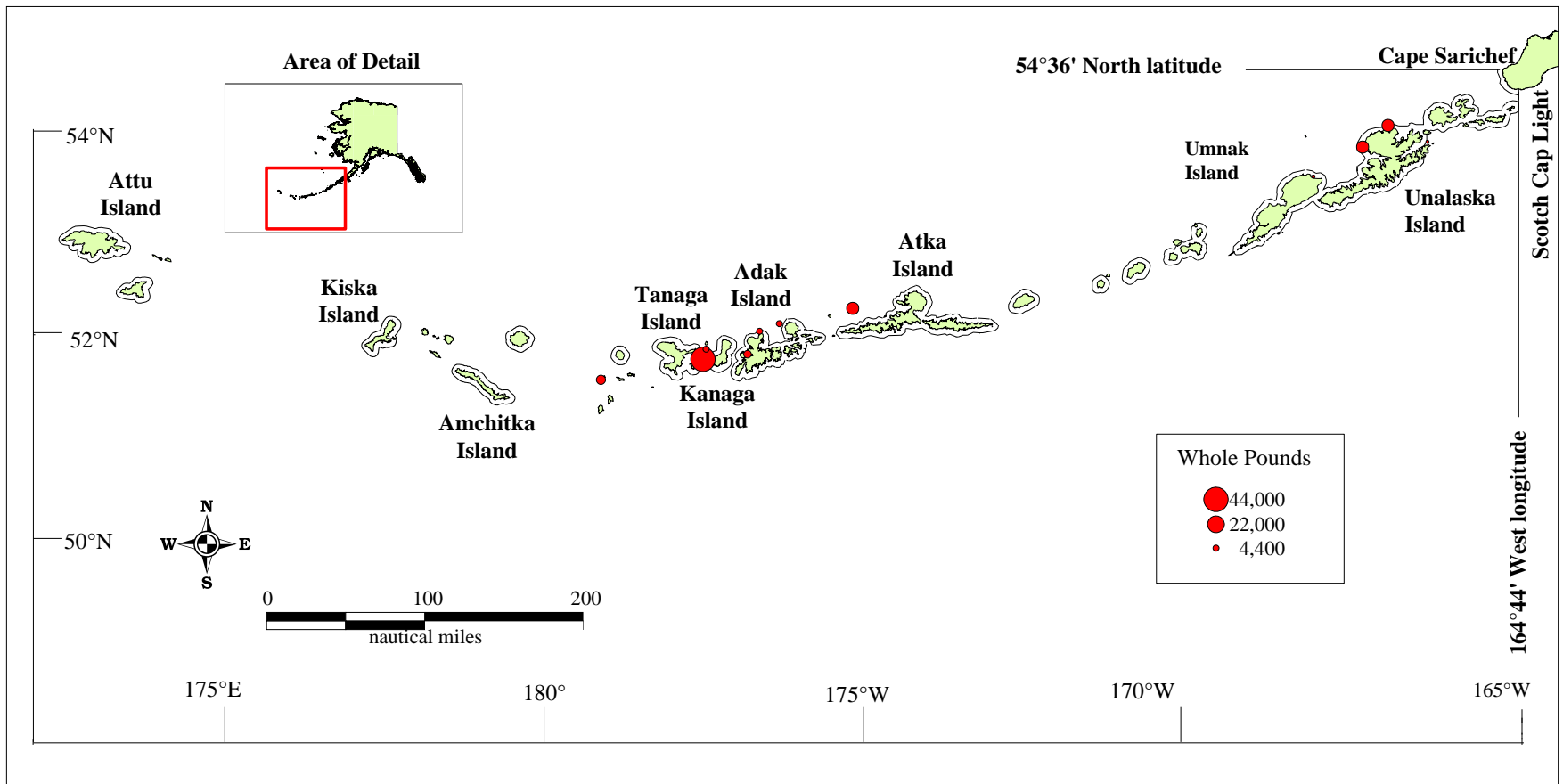


Figure 4.—Harvest of Aleutian Islands state-waters sablefish in 2008 showing statistical areas where harvest over 1,000 pounds occurred.

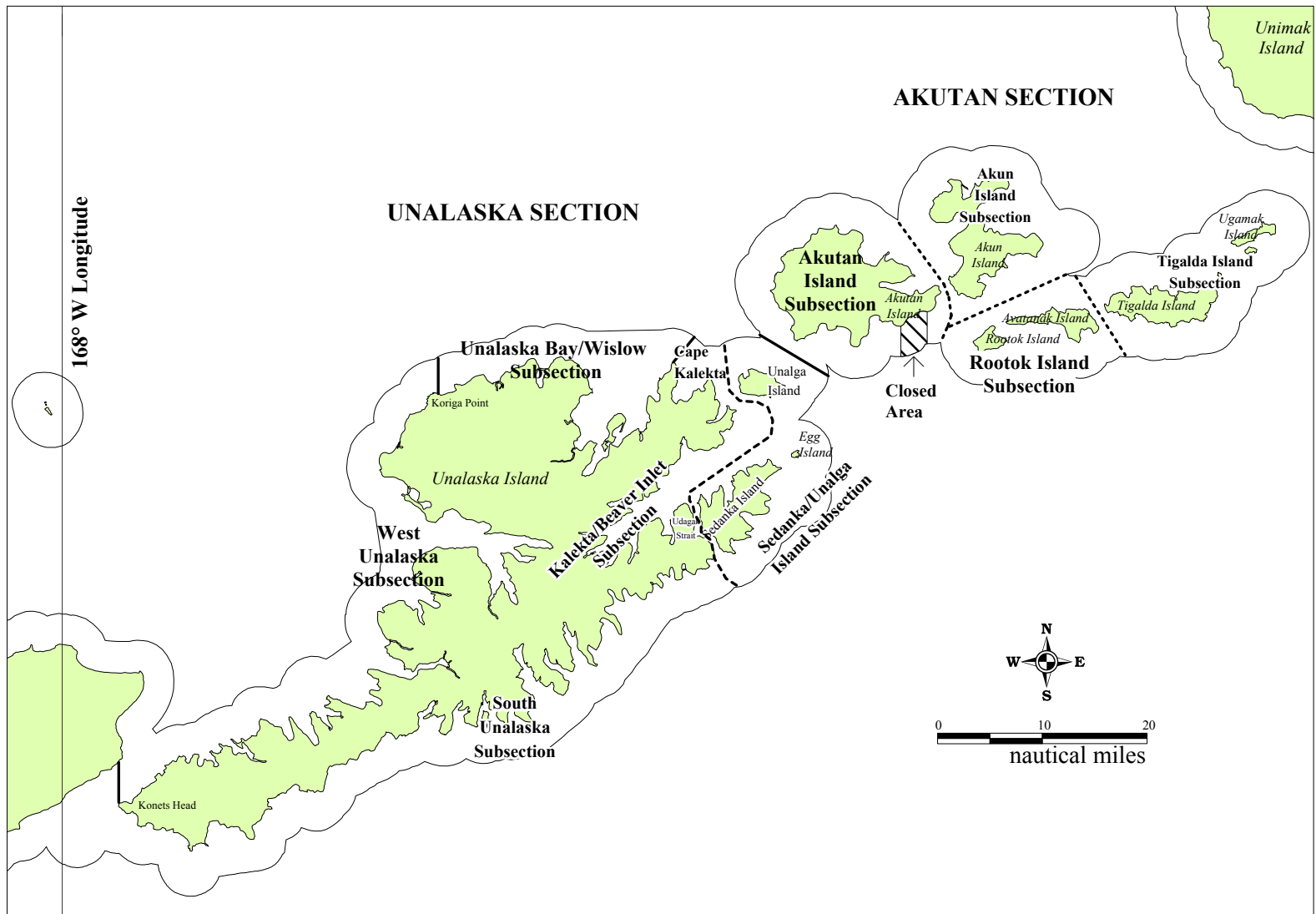


Figure 5.—Subsections of the Unalaska and Akutan Sections of the Aleutian Islands state-waters black rockfish fishery.

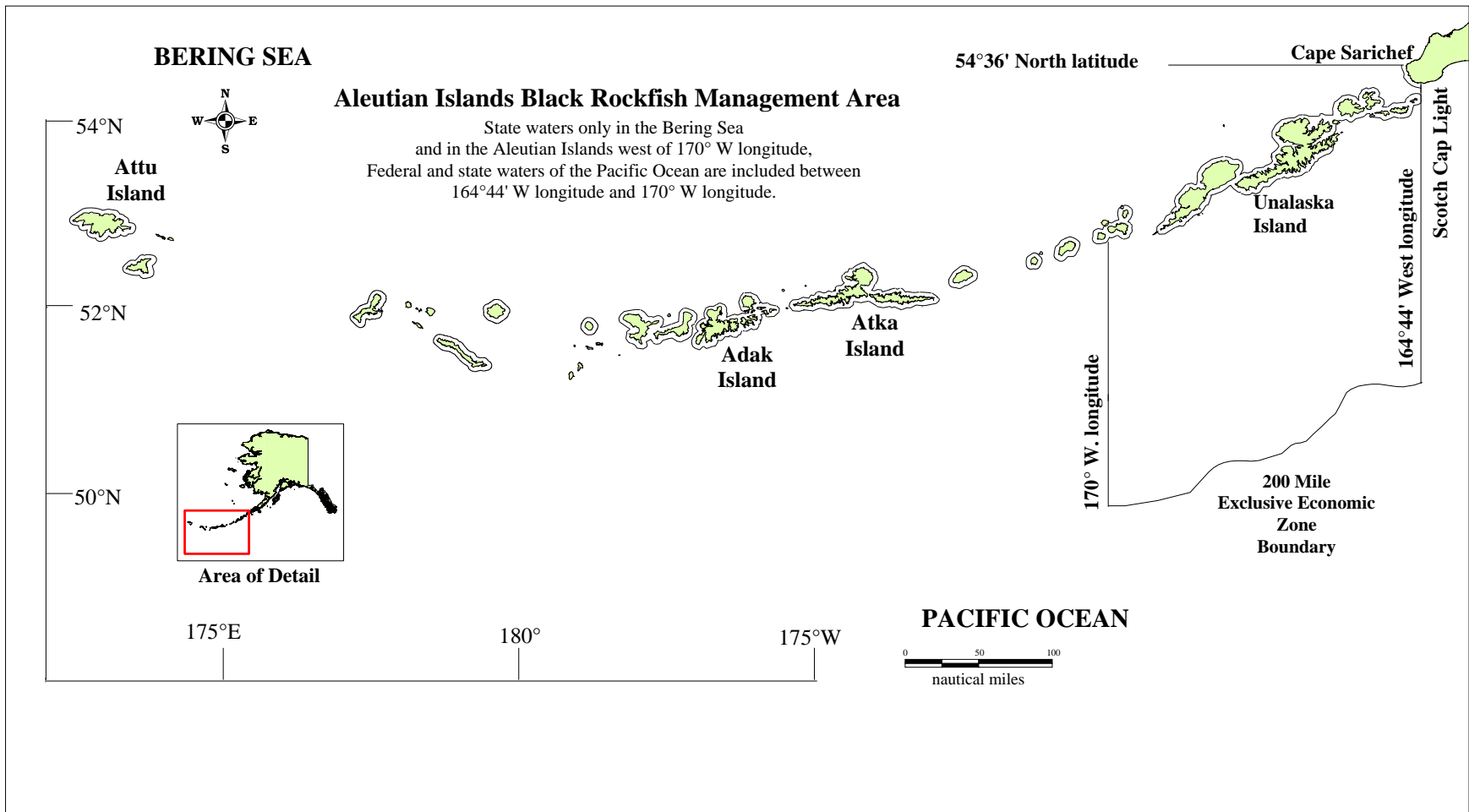


Figure 6.—The Aleutian Islands state-waters black rockfish management area.

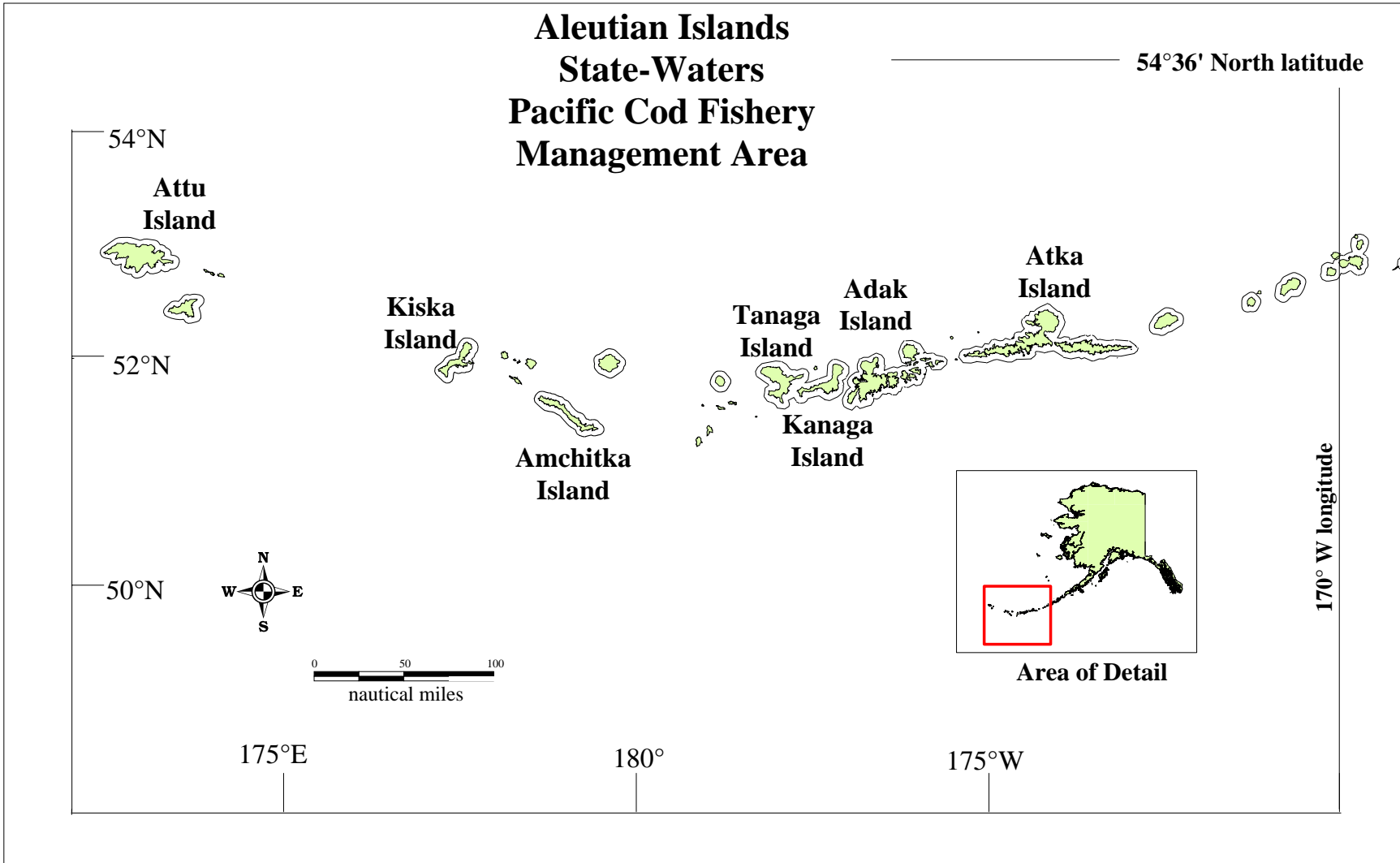


Figure 7.—The Aleutian Islands state-waters Pacific cod fishery management area.

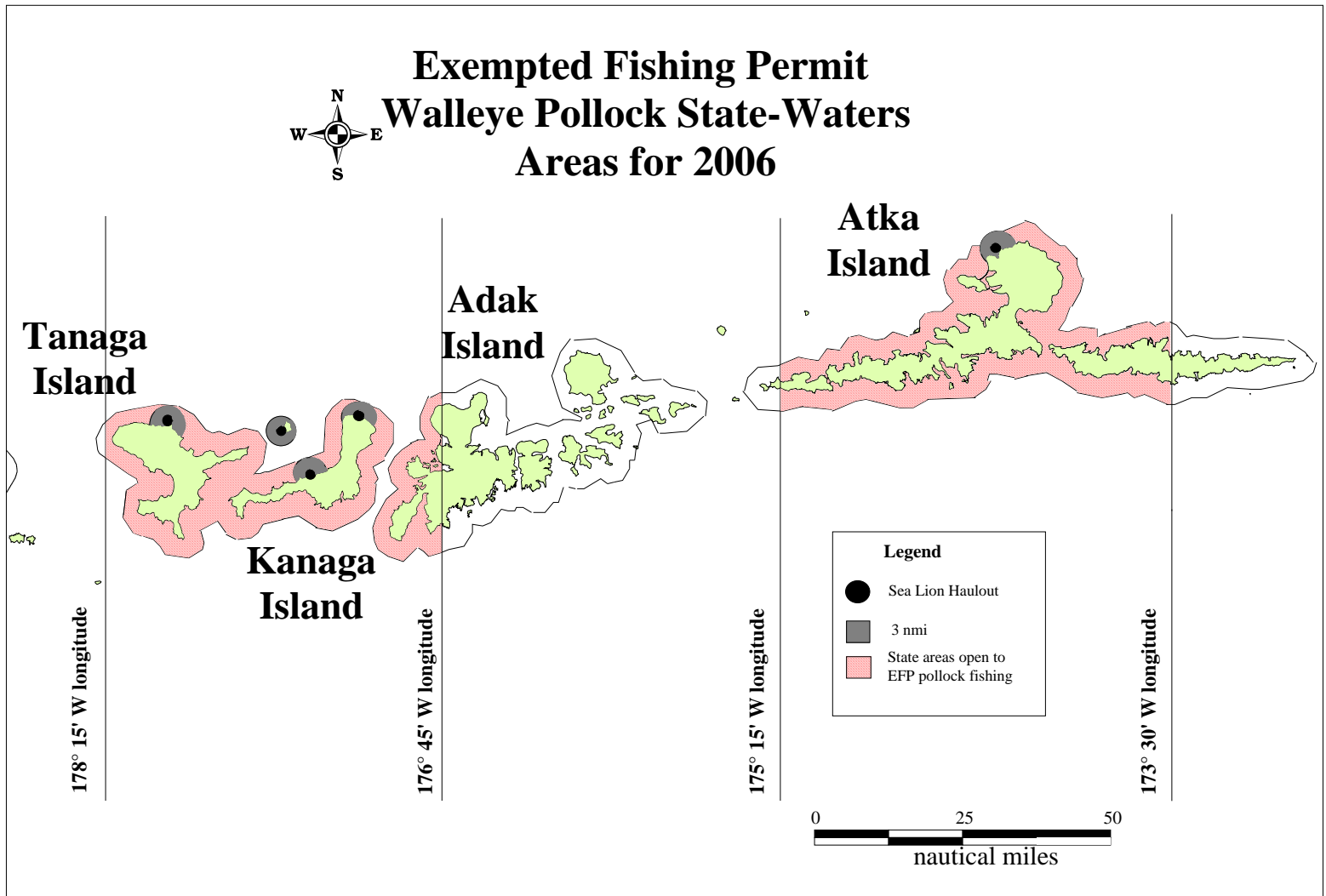


Figure 8.—The Aleutian Islands state-waters areas open to a commissioner’s permit for walleye pollock to coincide with the Federal Exempted Fishing Permit in adjacent federal waters in 2006.

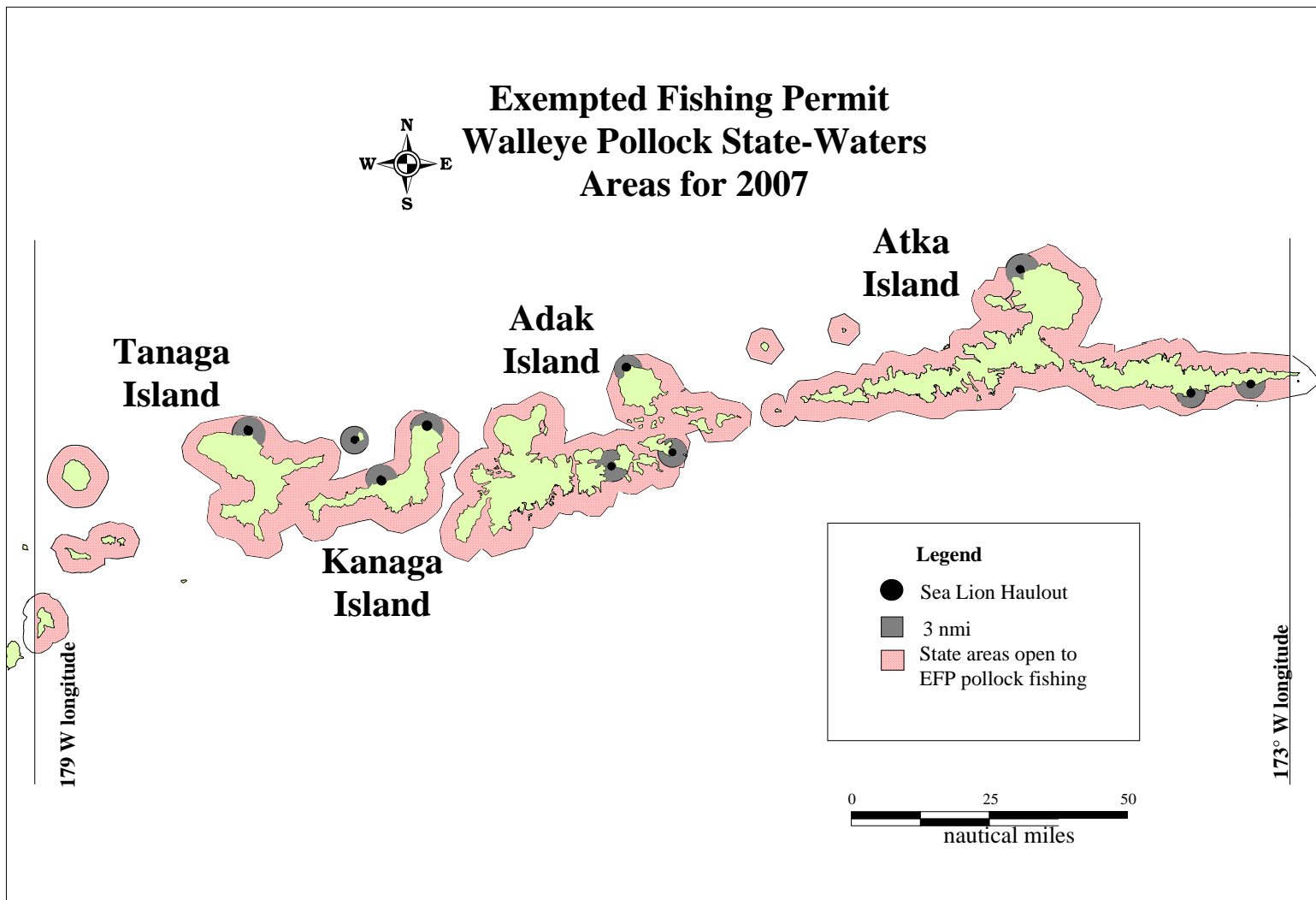


Figure 9.—The Aleutian Islands state-waters areas open to a commissioner’s permit for walleye pollock to coincide with the Federal Exempted Fishing Permit in adjacent federal waters in 2007.

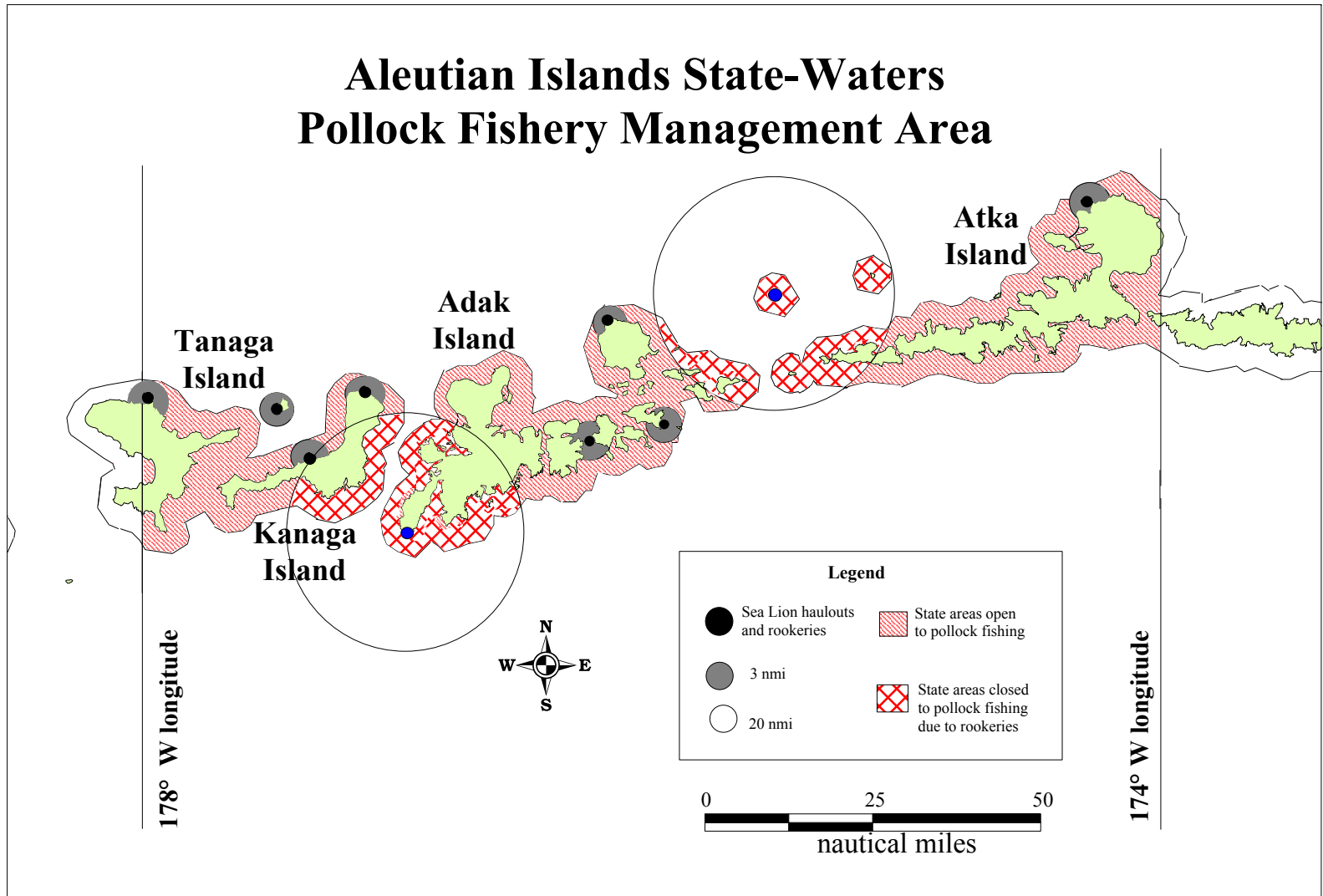


Figure 10.—The Aleutian Islands state-waters walleye pollock fishery management area.

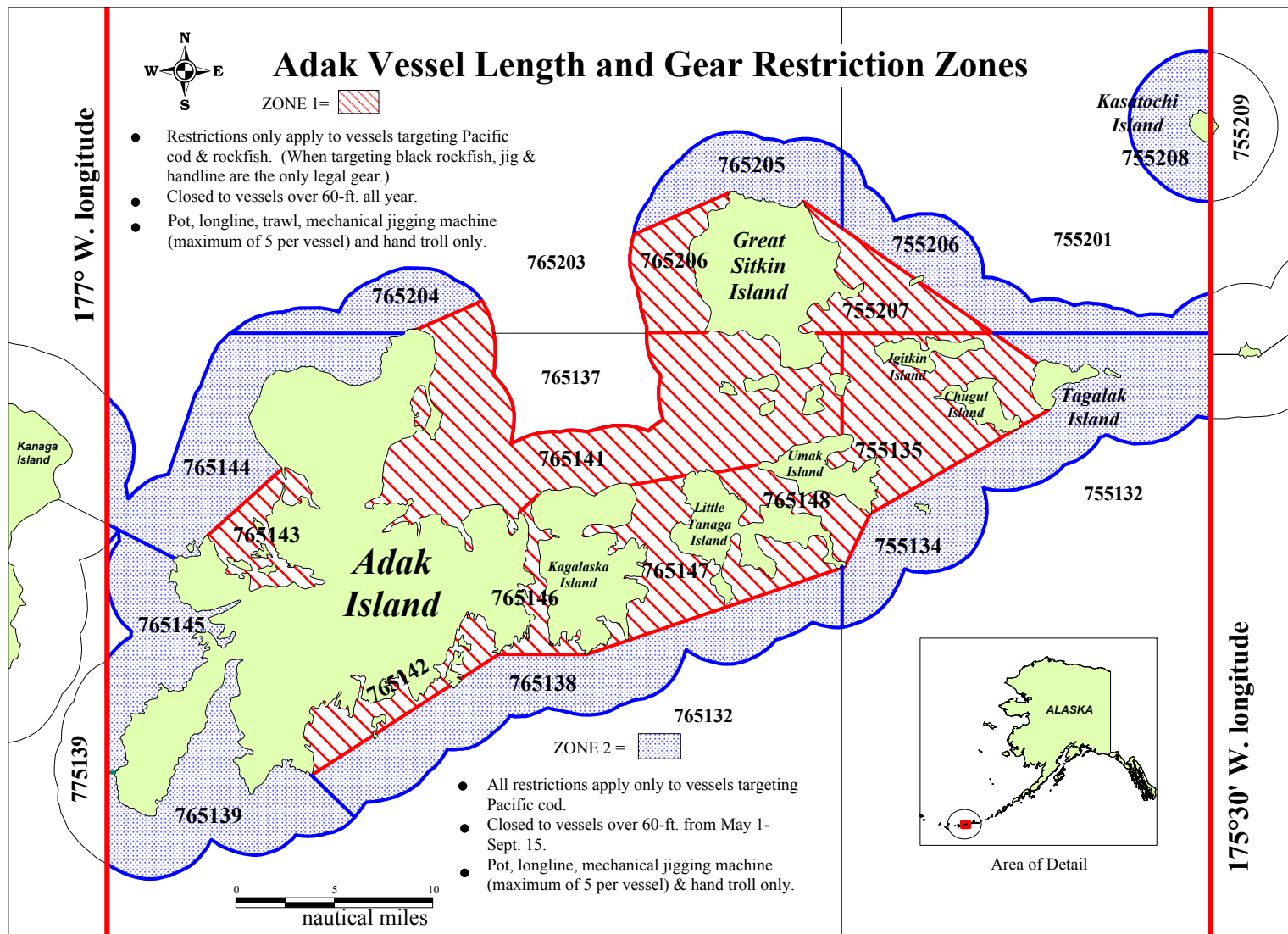
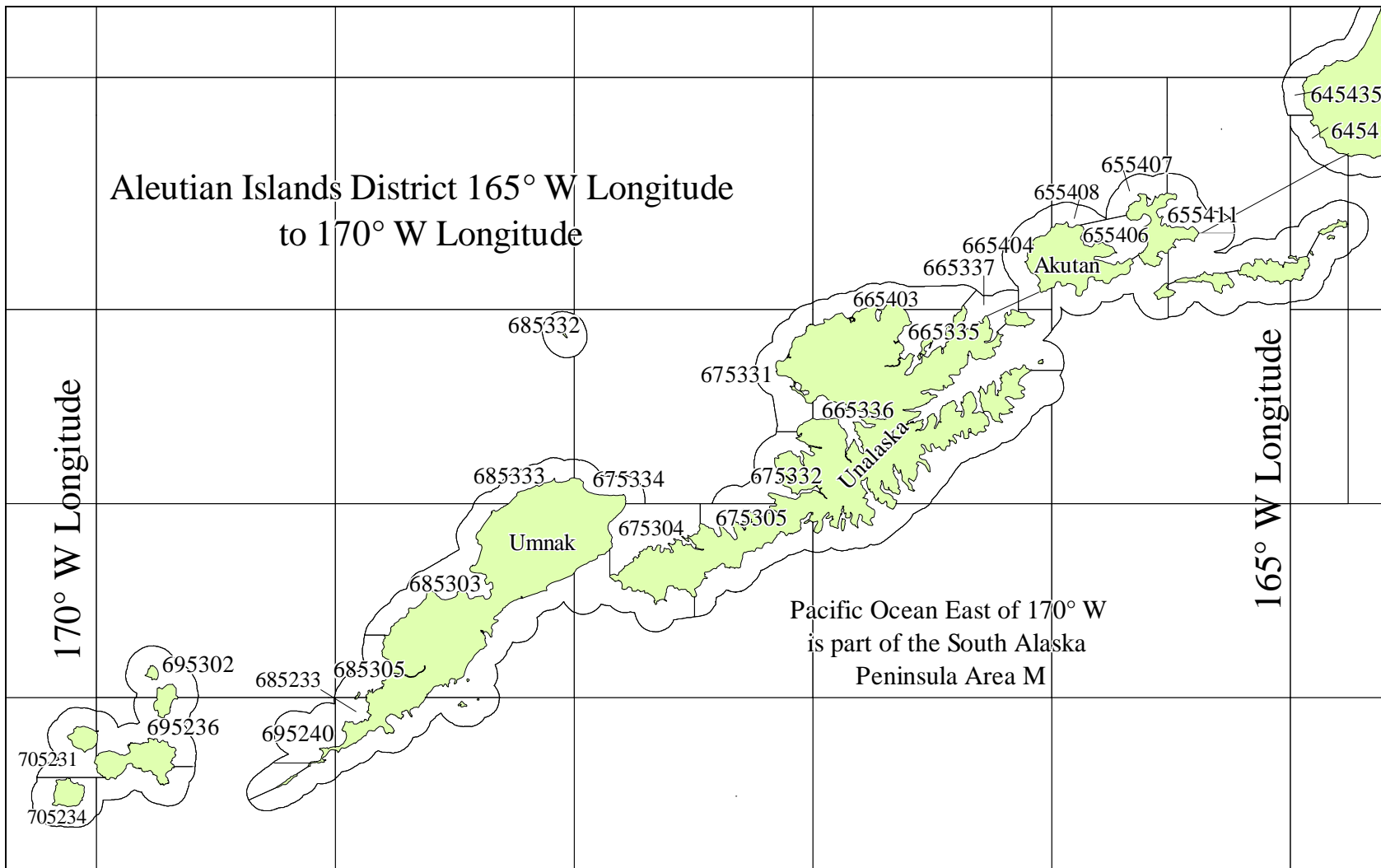
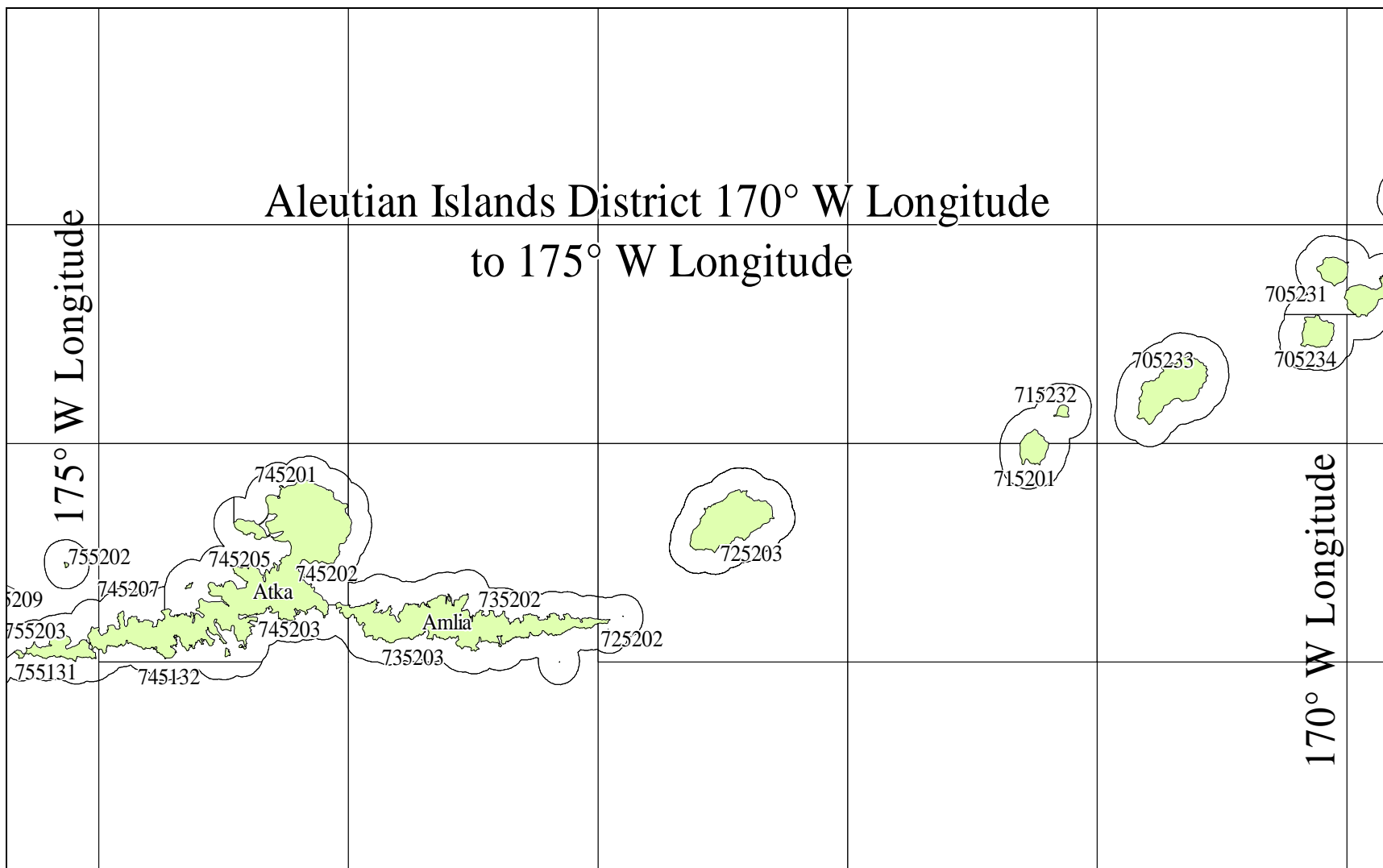


Figure 11.—Adak Vessel Length and Gear Restriction Zones and statistical reporting areas.

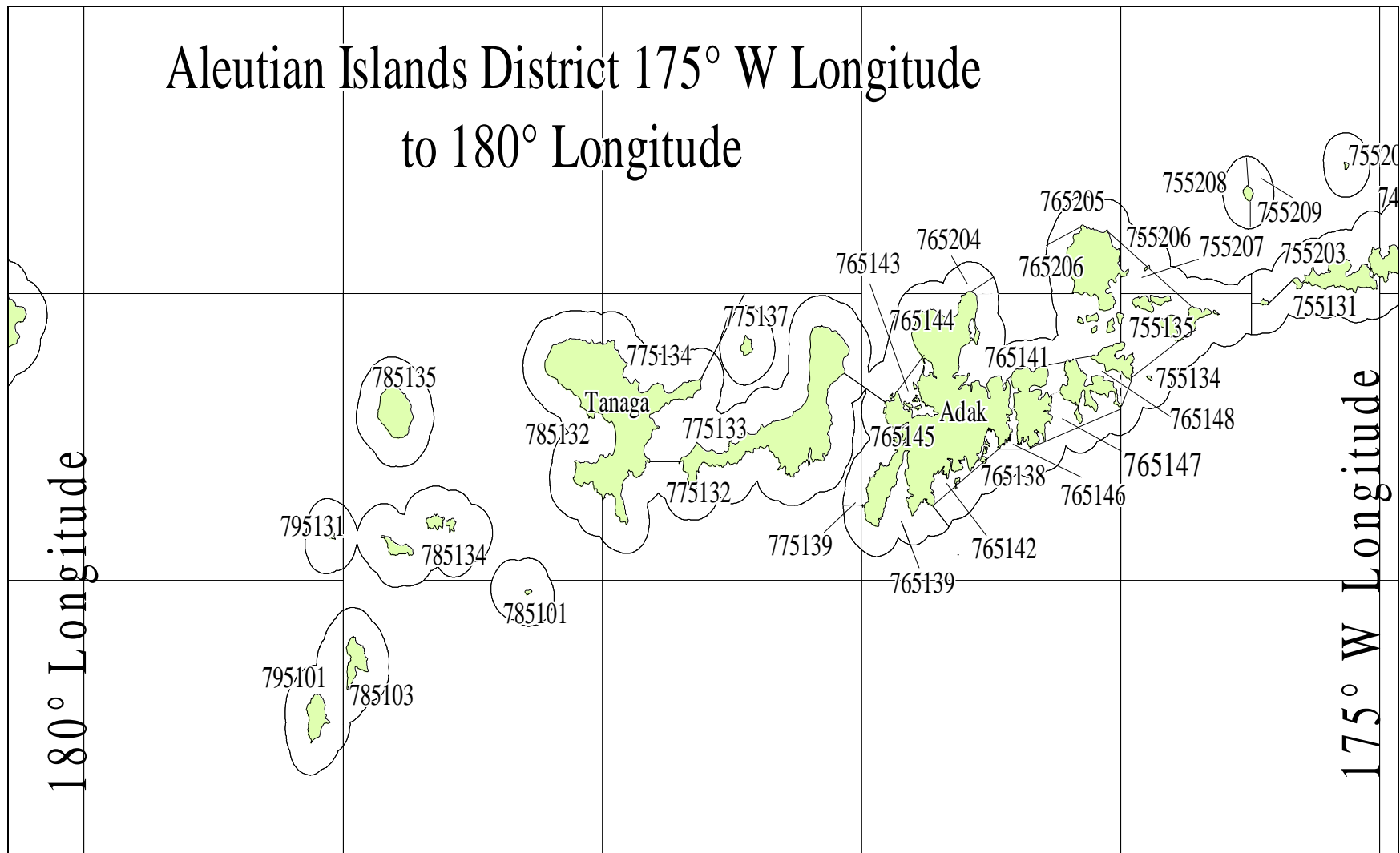
**APPENDIX A. ALEUTIAN ISLANDS DISTRICT STATE-
WATERS STATISTICAL AREAS FOR GROUND FISH**



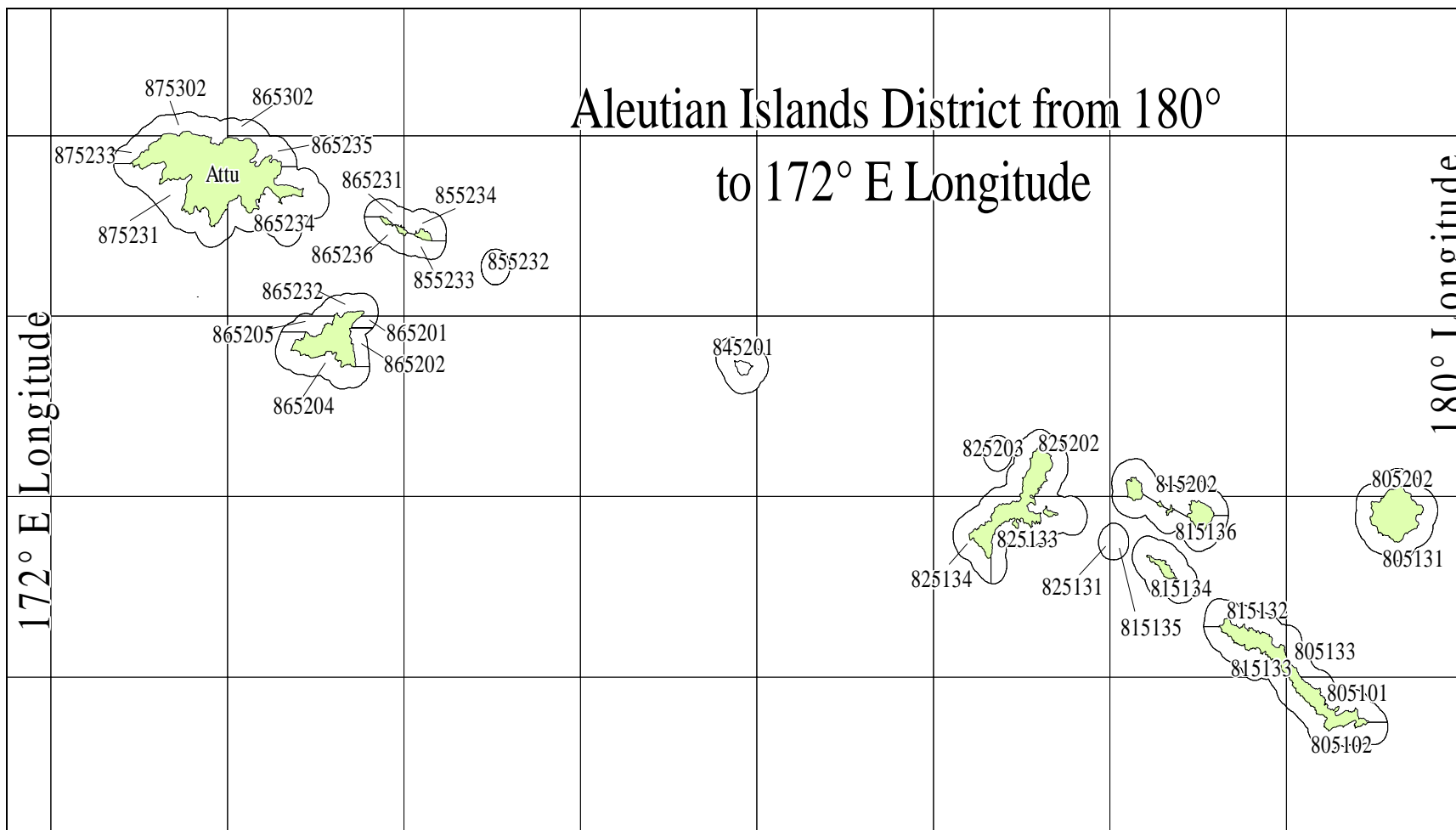
Appendix A1.—Aleutian Islands District state-waters statistical areas for groundfish from 165° W longitude to 170° W longitude.



Appendix A2.—Aleutian Islands District state-waters statistical areas for groundfish from 170° W longitude to 175° W longitude.



Appendix A3.—Aleutian Islands District state-waters statistical areas for groundfish from 175° W longitude to 180° longitude.



Appendix A4.-Aleutian Islands District state-waters statistical areas for groundfish from 180° longitude to 172° E longitude.