

BERING SEA - ALEUTIAN ISLANDS AREA STATE-WATERS GROUND FISH  
FISHERIES AND GROUND FISH HARVEST FROM PARALLEL SEASONS IN 2003



By

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## ABSTRACT

The Alaska Department of Fish and Game manages fisheries for sablefish *Anoplopoma fimbria* and black rockfish *Sebastes melanops* in state waters of the Aleutian Islands. State waters include all waters within three nautical miles of shore. This report reviews the harvest and management of these fisheries since their inception, 1995 for sablefish and 1994 for black rockfish, through the 2003 season.

The Alaska Board of Fisheries instituted vessel length and gear restriction zones in 2000 for state waters of the central Aleutian Islands near Adak. These regulations are summarized and harvest and effort are provided.

For all other groundfish fisheries that occur within 3 nautical miles of shore in the Bering Sea-Aleutian Islands Area, the state 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 Board of Fisheries regulations take precedent. ADF&G issues an emergency order (global EO) on an annual basis to establish the commercial parallel groundfish seasons, bycatch limits and gear types in state waters for those fisheries not actively managed by the State of Alaska to coincide with federal regulations in waters of the adjacent EEZ, 3 to 200 nautical miles offshore. This report summarizes the harvest of groundfish from state waters of the Bering Sea – Aleutian Islands Area in those parallel fisheries from 1995 to 2003.

## INTRODUCTION

The Alaska Department of Fish and Game (ADF&G) actively manages three groundfish fisheries in state waters of the Bering Sea – Aleutian Islands (BSAI) Area (Figure 1) and the Western District of the South Alaska Peninsula Area. Those fisheries are Aleutian Islands sablefish *Anoplopoma fimbria*, Aleutian Islands black rockfish *Sebastes melanops*, and South Alaska Peninsula, Western Subdistrict Pacific cod *Gadus macrocephalus*. Waters under the jurisdiction of the State of Alaska are from shore to 3 nautical miles (nm) offshore, however ADF&G has full management authority for black rockfish in the Gulf of Alaska (from 0-200 nm). This report describes the sablefish fishery from 1995 through 2003 and the black rockfish fishery from 1994 through 2003. A separate ADF&G Regional Informational Report (Ruccio *et al.* 2004) covers the state-waters Pacific cod fishery in the Western District of the South Alaska Peninsula Area.

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

Parallel groundfish fisheries occur in state waters for all other groundfish. Parallel fisheries are defined as those mirroring the season, gear and bycatch limits of the federal season in adjacent federal waters unless superceded by other BOF regulation. This report summarizes the harvest from state waters in parallel fisheries from 1995 through 2003.

Groundfish harvests in this report are based on the ADF&G fish ticket database and the fish ticket software program *Neptune* as of August 2004, and reflects the most recent additions and corrections to that database. The statistical area surrounding Bobrof Island in the central Aleutian Islands contained both state and federal waters until 2000. Sablefish harvest from this area was considered as state-waters harvest unless verified from 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 represented by state-waters statistical areas.

## ALEUTIAN ISLANDS STATE-WATERS SABLEFISH FISHERY

### *Historic Background*

In 1995, the National Marine Fisheries Service (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 statewide sablefish could participate. A sablefish fishery was established in state waters of Alaska where the historical harvest was of sufficient quantity to allow for a manageable fishery. 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 2).

ADF&G originally established the sablefish season as March 15 to November 15, unless the guideline harvest level (GHL) was obtained and the fishery was closed earlier by emergency order (EO). The opening and closing dates were chosen to run concurrent with the federal IFQ sablefish fishery. In 2001 the BOF changed the season opening for sablefish fishing in the state-waters fishery to May 15. Historically most fishing occurred in late spring and summer. The later season was requested by the public to provide small vessel operators an opportunity to take advantage of potentially better weather conditions. The initial GHL was set according to recent state-waters harvest history, thus the 1995 season opened with a GHL of 400,000 pounds<sup>1</sup>. 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. Vessels were required to register for the sablefish fishery.

ADF&G does not conduct stock assessment of sablefish. ADF&G relies primarily on NMFS longline surveys to set the GHL. NMFS surveys in 1995 and 1996 showed sablefish stock reductions in the federal Bering Sea, Aleutian Islands, and Western Gulf of Alaska Sablefish Regulatory Areas, therefore lower state-waters GHLs were established for the 1996 and 1997 state-waters fisheries. In 1998 the total allowable catch (TAC) for the federal Bering Sea and Aleutian Islands Sablefish Regulatory Areas increased by 16.5 percent (Table 1). However, the department did not increase the quota in state waters in order to help mitigate the over harvest, which occurred during the previous two seasons primarily by IFQ vessels. The federal TAC increased slightly in 1999; however, due to poor fishery performance during the previous year, ADF&G decreased the GHL by 7%. Based on recent fishery performance, historic fishery harvest, and the federal TAC, the GHL for the 2000 fishery was set at 400,000 pounds, an increase of 60% over the 1999 fishery. This trend continued with a GHL for the 2001 fishery of 425,000 pounds, an increase of 6% over the 2000 fishery and a 2002 fishery GHL of 460,000 pounds.

Since the 1995 fishery, most of the harvest has occurred west of 170° W long. Problems with killer whale (*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 general shift in effort to western areas.

The Aleutian Islands state-waters 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 the federal permit allows them to fish in state waters without registration and regardless of closures of state waters. Documentation of all violations has been provided to the Department of Public Safety, Bureau of Wildlife Enforcement (ABWE) for further action. ADF&G and NMFS have continued to increase efforts to educate the fishing fleet about state registration requirements.

The Aleutian Islands state-waters sablefish fishery started in 1995. Harvest in the state-managed fishery was 269,220 pounds during the first year, and has ranged from a low of 254,578 pounds

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<sup>1</sup> All weights refer to whole pounds.

in 1998 to a high of 477,970 pounds in 2002 (Table 1). During the previous eight years over 150 vessels have harvested over 3.3 million pounds, for an estimated exvessel fishery value of over \$6.1 million.

### *2003 Fishery*

ADF&G announced a GHL of 630,000 pounds on March 3<sup>rd</sup> (Table 1). This GHL represents nearly a 37% increase over the 2002 fishery and was based on recent fishery performance, historic fishery harvest and the federal TAC. Harvest of sablefish in state waters in 2003 was approximately 3.6% of the federal TAC and since 1990 has averaged approximately 5% of the TAC established by the NMFS survey for the Eastern Bering Sea and Aleutian Islands Sablefish Regulatory Areas.

The fishery opened May 15, and was managed p 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 occurred within a week of the opening. Harvest peaked at the beginning of June and slowly tapered off. Effort throughout the fishery was sporadic ranging from zero to eight vessels participating during any week. The fishery closed by regulation November 15. This was the third time that the fishery closed by regulation since the inception of the fishery. During the 2003 fishery, 39 vessels landed 473,426 pounds of sablefish from state waters. Longline-gear accounted for 426,679 pounds (90%) of the total harvest, pot-gear accounted for 46,477 pounds (9%), and 270 pounds (less than 1%) was landed as bycatch by trawl vessels (Table 2). Two catcher-processors (CPs) registered for the fishery and both made landings in state waters. Of the 58 vessels registered for the fishery, 26 never fished state waters. Fifteen non-quota vessels made 56 landings of state-waters sablefish, delivering 307,856 pounds, or 65% of the harvest (Table 3). Seventeen quota vessels made 38 landings totaling 165,249 pounds, or 34% of the harvest. During the fishery, 7 unregistered vessels made 8 landings totaling 321 pounds or less than 1% of the harvest. Documentation of these violations has been provided to ABWE.

The average exvessel price for the 2003 fishery was \$1.93 per pound (Table 4). The estimated fishery value was approximately \$914,800, the highest on record.

Most of the fishery occurred in waters west of 175° W long., which is consistent with previous years (Figure 3). The 2003 fishery lasted 184 days and had the highest state-waters GHL.

### *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 started an independent annual longline survey in the Gulf of Alaska. That 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 appears low, but slowly increasing (Sigler et al, 2003).

## **ALEUTIAN ISLANDS BLACK ROCKFISH FISHERY**

### ***Historic Background***

ADF&G established a directed fishery for nearshore pelagic shelf rockfish in state waters of the eastern Aleutian Islands in December 1994. The pelagic shelf rockfish group includes black *Sebastes melanops*, blue *S. mystinus*, widow *S. entomelas*, yellowtail *S. flavidus* and dusky *S. ciliatus* rockfish. In the eastern Aleutian Islands, this group is represented by black and dusky rockfish due to the limited distribution of the other species.

This fishery was established in response to local public inquiries regarding the possibility of 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*, roughey *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 had become available to the local fleet primarily as bycatch in jig and longline fisheries for other groundfish.

In 1994 the “other rockfish” assemblage was managed as bycatch-only by NMFS; through November 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 North Pacific Fishery Management Council (NPFMC), assumed management authority of nearshore pelagic shelf rockfish for a state-waters fishery by EO on December 21, 1994.

Registration for the black rockfish fishery was similar to other groundfish fisheries, except vessels were registered for only one month at a time. The short duration of the registration was to allow ADF&G greater control of the fishery and to be able to track actual participation each month. All legal groundfish gear types, except seines, were allowed by regulation (pots, trawls, longlines, mechanical jigging machines, hand troll, and dinglebar troll gear). However, handlines and mechanical jigging machines were stipulated, by permit, as the only legal gear types. These gear types have a low harvest potential that would not threaten to exceed the federal TAC for the other rockfish category.

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 4). A GHL of 100,000 pounds was established, with 50,000 pounds for each area (Tables 5 & 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, long-lived, and non-migratory species was considered necessary to prevent overexploitation.

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 5). The public expressed interest in a rockfish fishery in the vicinity of Atka Island. GHLS 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. At this time ADF&G also assumed management responsibility for black and blue rockfish in the waters of the Exclusive Economic Zone (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 were 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, and dusky rockfish) in federal waters.

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 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 dusky rockfish was 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. Both black and dusky rockfish were landed. Logbook data submitted by one operator showed that dusky rockfish made up 28% of their harvest, however fish ticket data reflected that dusky 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 fishery changed in 1998. The fishery was now dominated by short day trips and small deliveries. The average delivery in 1998 was lower 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 departmental concerns of possible 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 harvested came from two statistical areas, one just south of Akutan Island and the other off the outer coast of Sedanka Island. Fishers were encouraged at that time to spread out their effort from previously fished areas to lessen the impact on those local populations. Of the Harvest from the Akutan Section between 1997 and 1999, 61% has come from the area just south of Akutan Island. In 1999, 62% of the harvest came 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 due to concerns of localized depletion. 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.

Total harvest since 1995 is approximately 220,000 pounds. Most of that harvest came from the area just south of Akutan Island and from the outside waters of Sedanka Island (Figure 4). The average yearly value of the fishery over the last five years is in excess of \$6,000. The fishery area expanded in 1998 to include all state waters of the Aleutian Islands west of Unalaska Island and federal waters of the Gulf of Alaska between 164°44' and 170° W long. The GHL was reduced by 10,000 pounds in 1999 due to concerns of local depletion, and in 2000, the Akutan and Unalaska Sections were divided into several subsections in an attempt to disperse fishing effort.

### *2003 Fishery*

ADF&G announced the 2003 GHL by news release on February 12, with 35,000 pounds available in each, the Akutan and Unalaska Sections and 20,000 pounds available in the Western Section, the same as the 2000 through 2002 fisheries. The waters from the south end of Green Bight to Talus Point remained closed for the 2003 fishery.

The 2003 fishery was managed by reviewing weekly processor reports and fish tickets, plotting logbook data and maintaining contact with processors. Twelve vessels registered for the 2003 fishery, a decrease from the 2002 fishery. Landings occurred March through August; however, all harvest is confidential since less than three processors received deliveries. Harvest of black rockfish was primarily as directed effort; the remainder was incidental to Pacific cod fishing. Most of the harvest came from the Akutan Section. Harvest was landed primarily with jig gear, with the remainder landed incidental to trawl gear. None of the subsection GHLs of the subsections were attained during the 2003 fishery.

### *Status of Stock*

Black rockfish have not been assessed by ADF&G in the Aleutian Islands. ADF&G established a dockside-sampling program in 1999. Information obtained through this program will provide ADF&G with basic biological data, which may provide information for future management decisions. Sampling efforts to obtain average length of black rockfish and average age through otolith analysis took place during 1997, 1999, 2000 and 2002 (Table 8). The groundfish port sampler position was vacant during 2001, therefore, sampling did not occur during that season. Department personnel sampled 496 black rockfish in 2002; however, length-frequency and otolith data are not yet available. Due to low fishing effort, no sampling occurred during the 2003 season.

### **ADAK VESSEL LENGTH AND GEAR RESTRICTION ZONES**

In March of 2000, 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 6). 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. In this zone the following regulations are in effect year-round, only vessels less than 60 feet in length overall 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.

Zone 2 encompasses all state waters between 175° 30' and 177° W longitude exclusive of all waters defined in Zone 1. In this zone, only vessels less than 60 feet in overall length 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.

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.

ADF&G manages the black rockfish fishery in state waters; all vessels targeting this species must be registered with the department for this fishery. All other fisheries are managed as parallel fisheries, and vessels participating in those fisheries must be registered 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.

When the vessel size and gear restrictions around Adak were established, interest in the area was high, however, ADF&G did not have statistical areas 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. In 2001, sixteen vessels 60 feet or less harvested 1,270,393 pounds of Pacific cod, and six vessels harvested 5,476 pounds of

rockfish (Table 9). In 2002, eleven vessels 60 feet or less harvested 5,801,293 pounds of Pacific cod and three vessels harvested 3,397 pounds of rockfish. In 2003, harvest of Pacific cod in Zone 1 was all by trawl gear, an illegal gear type in this section, most of which was taken by vessels over 60 feet in length. Over five million pounds of Pacific cod was taken by fourteen vessels under 60 feet in length during 2003, and 10 vessels 60 feet and less harvested over 4,500 pounds of rockfish.

### **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” are set by the BOF and some areas remain closed to non-pelagic trawling (5 AAC 39.164 (4)-(7)). Parallel fisheries occur for Pacific cod, walleye pollock *Theragra chalcogramma*, 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 federal 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.

Harvest of Pacific cod from state waters of the BSAI Area during 2003 was 19.3 million pounds taken by 116 vessels with most of the harvest by trawl vessels (Tables 10 & 11). The overall number of vessels and deliveries has decreased since 1995, probably due in part to Stellar sea lion no-fishing and no-transit areas in the Aleutians. Harvest of Pacific cod was predominately from the Aleutian Islands District. Virtually all of the Pacific cod harvested was utilized. The 2003 harvest was above the previous eight-year (1995-2002) average harvest of 15 million pounds.

Walleye pollock harvest from state waters of the BSAI Area in 2003 was 10.9 million pounds and was taken by 41 vessels (Table 10). Walleye pollock harvest was primarily in directed fisheries with over 99% of the harvest taken by trawl vessels (Table 11). Virtually all of the pollock harvested was utilized. The harvest of walleye pollock in 2003 was predominantly from the waters of the Aleutian Islands District which fall within the federal Bering Sea Management Area.

Atka mackerel harvest in state waters around the Aleutian Islands District in 2003 was 41,033 pounds. All harvest of Atka mackerel occurred in the Aleutian Islands District and was harvested primarily by trawl gear (Table 11). Most of the harvest was incidental to other fisheries, and only 35% of the harvest was utilized.

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. Pacific ocean perch is one group; 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 2003 occurred entirely in the Aleutian Islands District. Twenty-one vessels harvested 19,377 pounds from state waters (Table 10). All harvest was incidental to other fisheries, 30% of which was discarded at sea or at shore prior to being processed, and the remainder was processed as fishmeal. Trawl vessels accounted for all of the harvest (Table 11).

Thirteen vessels harvested 3,708 pounds of shortraker and rougheye rockfish in state waters during 2003, harvested primarily with longline gear (Tables 10 & 11). All harvest was in the Aleutian Islands District and was incidental harvest to other fisheries. Forty-two percent of the harvest was utilized.

Nineteen vessels harvested 26,337 pounds of sharpchin and northern rockfish in 2003, which is approximately three-times the harvest in 2002, and is above the previous eight-year average of 19,000 pounds. Trawl vessels took over 99% percent of the harvest and longline vessels took the remainder (Tables 10 & 11). All harvest was in the Aleutian Islands District. Over 96% 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. Forty-seven vessels harvested 62,716 pounds in state-waters during 2003 (Table 10), all of which was caught in the Aleutian Islands District. Over 97% of the harvest was taken by longline vessels incidental to other fisheries (Table 11). Ninety-three percent taken from state waters was utilized. Harvest included the following species of rockfish: dusky, yelloweye *S. ruberrimus* and thornyhead rockfish *Sebastobius* spp. Redbanded *Sebastes babcocki*, and darkblotched *S. crameri* rockfish were also harvested in this area from 1995 through 1999. ADF&G fish ticket database also contains records of harvest for yellowmouth *Sebastes reedi*, greenstripe *S. elongatus*, rosethorn *S. helvomaculatus*, tiger *S. nigrocinctus* and copper *S. caurinus* rockfish 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, and flathead sole. All remaining flatfish species are harvested in a fishery for the species complex called "other flatfish".

The 2003 state-waters harvest of Greenland turbot from the BSAI Area was entirely from the Aleutian Islands District. Twenty vessels harvested 54,316 pounds, primarily with longline gear (Tables 11 & 12). Approximately eighty-eight percent of the harvest was utilized. The harvest of Greenland turbot in state waters has varied in recent years.

State-waters harvest of arrowtooth flounder in 2003 was 45,931 pounds taken by fifty vessels, primarily trawl vessels (Tables 11 & 12). All harvest was incidental to other fisheries, and only 45% of the harvest was utilized. Ninety-eight percent of the harvest was from Aleutian Islands District.

Twenty-eight vessels harvested 206,152 pounds of rock sole in 2003 (Table 11 & 12). Trawl vessels harvested 100% of the rock sole; of which only 31% was utilized (Table 11). Approximately 17% of the rock sole harvest occurred on the north side of the Alaska Peninsula, and the remainder was harvested from the waters of the Aleutian Islands.

State-waters harvest of yellowfin sole in 2003 was 25,021 pounds taken by nine vessels by trawl and pot gear (Tables 11 & 12). All harvest was incidental to other fisheries and over 99% was discarded onshore. Almost all of the harvest came from the Bering Sea District.

Thirty-four vessels harvested 34,823 pounds of flathead sole in 2003, primarily by trawl gear (Tables 11 & 12). Most of the harvest, which occurred incidental to other fisheries, came from the Bering Sea District. Only 16% of the harvest in 2003 was utilized, all of which was processed into fishmeal.

Harvest of fish in the “other flatfish” group has varied greatly from 1995 through 2003. In 2003 twenty-one vessels harvested 4,840 pounds (Table 11 & 12), of which 70% came from the Aleutian Islands District. All harvest was incidental to other fisheries, and 65% of the harvest was utilized, half of which was processed into fishmeal. Harvest included rex sole *Errex zachirus*, butter sole *Isopsetta isolepsis*, Alaska plaice *Pleuronectes quadrituberculatus*, English sole *Parophrys vetulus*, and starry flounder *Platichthys stellatus*. In previous years Dover sole *Microstomus pacificus* was also harvested.

Harvest of groundfish from the state waters of Alaska, during parallel fisheries, from 1995 through 2003 has averaged approximately 29 million pounds per year and totaled more than 262 million pounds. The total harvest for that period included 114 million pounds of walleye pollock, 140 million pounds of Pacific cod, 1.4 million pounds of Atka mackerel, and approximately 936,000 pounds of all rockfish species, including Pacific ocean perch. Greenland turbot harvest during the eight-year period was 1.3 million pounds, arrowtooth flounder was approximately one million pounds and rock sole was approximately 1.2 million pounds. The remaining flatfish species harvest totaled just over 843,000 pounds. The harvest of walleye pollock from state waters generally varies according to the available TAC. Pacific cod and other groundfish harvest in state waters is generally independent of the TAC, and is probably due more to species distribution, prey distribution, weather, and other environmental factors.

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Table 1. Aleutian Islands state-waters sablefish fishery GHLs compared to the federal TAC, state-waters harvest, and number of vessels and deliveries, 1995 - 2003.

Year	Federal TAC <sup>ab</sup>	GHL as Percent of Federal TAC	State-waters GHL <sup>a</sup>	Harvest <sup>a</sup>	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

<sup>a</sup> In whole pounds.

<sup>b</sup> Total allowable catch for the federal Bering Sea-Aleutian Islands Area.

Table 2. Harvest in whole pounds by gear type in the Aleutian Islands state-waters sablefish fishery, 1995-2003.

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
Total	3,235,525	51,403	97,870	3,384,798

Table 3. Percentage of vessels, deliveries and harvest attributed to Quota and Non-quota vessels in the Aleutian Islands state-waters sablefish fishery, 1995-2003.

Year	Non-quota <sup>a</sup>			Quota <sup>b</sup>		
	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 <sup>c</sup>	38%	55%	65%	44%	37%	34%

<sup>a</sup> Vessels without federal individual fishing quota or community development quota.

<sup>b</sup> Vessels with federal individual fishing quota or community development quota.

<sup>c</sup> Unregistered vessels accounted for 18% of vessels, 8% of deliveries, and less than 1% of the harvest.

Table 4. Economic performance, season length and dates of the Aleutian Islands state-waters sablefish fishery, 1995 - 2003.

Year	Fishery Value	Price per Pound <sup>a</sup>	Season Length <sup>b</sup>	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	\$914,800	\$1.93	184	15-May	15-Nov

<sup>a</sup> Per pound dressed weight.

<sup>b</sup> In days.

Table 5. Aleutian Islands state-waters black rockfish fishery harvest statistics and economic performance, 1994 – 2003.

Year	Guideline Harvest Level <sup>a</sup>	Number of		Harvest <sup>a</sup>	Exvessel Value <sup>b</sup>	Fishery Value
		Vessels	Deliveries			
1994 <sup>c</sup>	100,000			NO COMMERCIAL HARVEST		
1995 <sup>c</sup>	100,000			CONFIDENTIAL		
1996 <sup>c</sup>	100,000			CONFIDENTIAL		
1997 <sup>c</sup>	100,000	3	18	102,746	\$0.34	\$35,000
1998 <sup>d</sup>	100,000			CONFIDENTIAL		
1999 <sup>de</sup>	90,000	8	41	20,889	\$0.35	\$7,200
2000 <sup>d</sup>	90,000			CONFIDENTIAL		
2001 <sup>d</sup>	90,000			CONFIDENTIAL		
2002 <sup>d</sup>	90,000			CONFIDENTIAL		
2003 <sup>d</sup>	90,000			CONFIDENTIAL		

<sup>a</sup> In whole pounds.

<sup>b</sup> Per pound whole weight.

<sup>c</sup> Totals include black and dusky rockfish. In the early years of the fishery, dusky rockfish may have been misidentified as black rockfish; therefore harvest totals include both species.

<sup>d</sup> Black rockfish only.

<sup>e</sup> Eight pounds were harvested from the EEZ.

Table 6. Aleutian Islands state-waters black rockfish fishery harvest by section, 1994 – 2003.

Year	Akutan Section		Unalaska Section		Western Section	
	GHL <sup>a</sup>	Harvest	GHL <sup>a</sup>	Harvest	GHL <sup>a</sup>	Harvest
1994 <sup>b</sup>	50,000	0	50,000	0	NA	0
1995 <sup>b</sup>	50,000	0	50,000	Confidential	NA	0
1996 <sup>b</sup>	50,000	0	50,000	Confidential	NA	0
1997 <sup>b</sup>	50,000	Confidential	50,000	Confidential	NA	0
1998 <sup>c</sup>	40,000	Confidential	40,000	0	20,000	0
1999 <sup>cd</sup>	35,000	13,465	35,000	Confidential	20,000	Confidential
2000 <sup>c</sup>	35,000	Confidential	35,000	Confidential	20,000	Confidential
2001 <sup>c</sup>	35,000	Confidential	35,000	Confidential	20,000	Confidential
2002 <sup>c</sup>	35,000	Confidential	35,000	Confidential	20,000	Confidential
2003 <sup>c</sup>	35,000	Confidential	35,000	0	20,000	Confidential

<sup>a</sup> Guideline harvest level in whole pounds.

<sup>b</sup> Totals include black and dusky rockfish. In the early years of the fishery, dusky rockfish may have been misidentified as black rockfish; therefore harvest totals include both species.

<sup>c</sup> Black rockfish only.

<sup>d</sup> Eight pounds were harvested from the EEZ.

NA = Not applicable.

Table 7. Aleutian Islands state-waters black rockfish fishery guideline harvest level (GHL) in whole pounds, by section and subsection for the 2003 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. Black rockfish age (from otoliths) and length data, 1997 - 2003.

Year	Sample Size	Age <sup>a</sup>		Length <sup>b</sup>	
		Average	Range	Average	Range
1997	9	17.1	11 to 32	43.9	35 to 49
1998			NO DATA COLLECTED		
1999	92	15.9	8 to 30	45.3	37 to 51
2000	10	8.8	7 to 10	41.0	37 to 45
2001			NO DATA COLLECTED		
2002			DATA NOT YET AVAILABLE		
2003			NO DATA COLLECTED		

<sup>a</sup> In years.

<sup>b</sup> In centimeters.

Table 9. Number of vessels and harvest of Pacific cod and rockfish in the “Adak Vessel Length and Gear Restriction Zones” since its inception, 2000-2003.

Year	Zone	Pacific Cod <sup>a</sup>						Rockfish <sup>a,b</sup>								
		Vessels	Trawl	Longline	Pot	Jig Hand Troll	Total	Vessels	Trawl	Longline	Pot	Jig Hand Troll	Total			
2001	1 <sup>c</sup>	10	131,412	36,400	0	15,483	526	183,822	3	0	219	0	0	0	219	
	2 <sup>d</sup>	7	0	17,893	0	18,806	0	36,699	6	0	5,978	5	0	0	5,982	
	2 <sup>e</sup>	24	4,378,165	55,460	51,165	29,698	0	4,514,488	11	31,432	5,978	5	234	0	37,649	
2002	1 <sup>c</sup>	5	253,151	97,841	0	0	100	351,092	3	12	944	0	0	0	956	
	2 <sup>d</sup>			Confidential						3	0	2,616	0	0	0	2,616
	2 <sup>e</sup>	17	8,054,430	585	0	0	0	8,055,015	8	5,946	2,616	0	0	0	8,562	
2003	1 <sup>c</sup>	3	412,132	0	0	0	0	412,132	3	7,114	498	0	0	0	7,612	
	2 <sup>d</sup>	3	0	116	0	149	0	265	9	0	8,865	131	0	0	8,996	
	2 <sup>e</sup>	22	8,547,369	116	0	149	0	8,547,634	20	15,496	8,865	131	0	0	24,492	

<sup>a</sup> In pounds.

<sup>b</sup> Includes all species of rockfish commercially harvested.

<sup>c</sup> Zone 1 waters include 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.

<sup>d</sup> Zone 2 waters include state waters of Alaska between 175.30 degrees W. longitude and 177 degrees W. longitude surrounding Zone 1 waters from May 1 to September 15 of each year.

<sup>e</sup> Includes harvest for the entire year within waters encompassed by Zone 2

Table 10. Harvest, number of vessels and deliveries from state waters of the Bering Sea-Aleutian Islands Area in the parallel seasons for Pacific cod, walleye pollock, Atka mackerel, Pacific Ocean perch, shortraker/rougheye rockfish, sharpchin/northern rockfish, and other rockfish fisheries, 1995-2003.

Year		Pacific Cod	Walleye Pollock	Atka Mackerel	Pacific Ocean Perch	Shortraker Rougheye Rockfish	Sharpchin Northern Rockfish	Other Rockfish <sup>a</sup>
1995	Harvest <sup>b</sup>	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	29	22	5	96
1996	Harvest <sup>b</sup>	18,257,947	21,318,035	103,040	68,784	10,765	57,767	43909
	Vessels	162	55	13	24	22	9	33
	Deliveries	893	103	22	37	27	12	59
1997	Harvest <sup>b</sup>	4,550,359	18,739,072	17,710	10,532	8,325	0	21,198
	Vessels	108	36	7	17	23	0	32
	Deliveries	368	70	8	24	26	0	59
1998	Harvest <sup>b</sup>	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 <sup>b</sup>	18,340,012	1,509,911	534,477	38,743	11,299	22,257	26,013
	Vessels	138	24	14	13	9	14	31
	Deliveries	520	40	18	21	20	20	49

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Table 10. (Page 2 of 2)

Year		Pacific Cod	Walleye Pollock	Atka Mackerel	Pacific Ocean Perch	Shortraker Rougheye Rockfish	Sharpchin Northern Rockfish	Other Rockfish <sup>a</sup>
2000	Harvest <sup>b</sup>	15,617,783	3,593,603	170,830	4,672	15,542	23,741	51,592
	Vessels	164	36	17	8	22	15	35
	Deliveries	580	53	26	10	28	25	77
2001	Harvest <sup>b</sup>	15,234,235	5,541,310	96,915	8,894	8,730	33,500	65,803
	Vessels	132	49	16	7	24	7	42
	Deliveries	415	75	25	10	40	10	116
2002	Harvest <sup>b</sup>	16,570,583	11,240,922	26,236	6,666	1,169	8,460	57,678
	Vessels	113	36	16	14	12	14	41
	Deliveries	374	63	30	22	15	20	89
2003	Harvest <sup>b</sup>	19,382,235	10,945,245	41,033	19,377	3,708	26,337	62,716
	Vessels	116	41	34	21	13	19	47
	Deliveries	460	91	94	48	24	32	126

<sup>a</sup> Other Rockfish species include: dusky, yelloweye *S. ruberrimus* and thornyhead rockfish *Sebastolobus* spp. Redbanded *Sebastes babcocki*, and darkblotched *S. crameri* rockfish.

<sup>b</sup> In whole pounds

Table 11. Harvest in whole pounds by gear type from state waters of the Bering Sea-Aleutian Islands Area 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, 1995-2003.

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Pacific Cod						
	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	14,652
	1997	814,481	1,476,499	2,048,986	208,215	2,178
	1998	3,975,800	4,128,820	3,624,994	209,937	379
	1999	8,995,797	1,447,771	7,542,991	353,454	0
	2000	5,378,628	3,612,076	6,524,176	102,063	840
	2001	7,940,213	3,974,965	3,146,501	172,030	526
	2002	13,768,587	551,636	1,887,114	363,146	100
	2003	13,453,680	855,270	4,928,807	144,478	0
Pollock						
	1995	28,411,848	15	171	648	0
	1996	21,220,981	0	97,055	0	0
	1997	18,736,861	3	43	2,165	0
	1998	13,540,291	6,114	1,274	0	0
	1999	1,508,674	918	319	0	0
	2000	3,583,310	5,339	4,954	0	0
	2001	5,512,961	27,487	862	0	0
	2002	11,240,481	6	424	10	0
	2003	10,942,502	2,722	21	0	0
Atka Mackerel						
	1995	434,834	2	4,447	1,193	0
	1996	102,296	0	744	0	0
	1997	17,664	3	43	0	0
	1998	11,161	0	115	0	0
	1999	533,652	675	150	0	0
	2000	164,118	5,930	782	0	0
	2001	91,093	5,058	764	0	0
	2002	26,325	1	0	0	0
	2003	32,941	116	7,976	0	0

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Table 11. (Page 2 of 5)

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Pacific ocean perch						
	1995	33,728	0	93	62	0
	1996	68,784	0	0	0	0
	1997	6,838	3,694	0	0	0
	1998	95,113	0	0	0	0
	1999	37,838	9	896	0	0
	2000	4,290	382	0	0	0
	2001	8,894	0	0	0	0
	2002	6,666	0	0	0	0
	2003	19,377	0	0	0	0
Shortraker-Rougheye Rockfish						
	1995	241	13,645	0	194	0
	1996	519	10,246	0	0	0
	1997	1,078	7,247	0	0	0
	1998	1,732	3,506	0	0	0
	1999	1,207	10,092	0	0	0
	2000	169	12,976	0	0	0
	2001	0	8,592	63	75	0
	2002	6	1,163	0	0	0
	2003	48	3,208	452	0	0
Sharpchin-Northern Rockfish						
	1995	2,186	0	0	0	0
	1996	57,746	0	21	0	0
	1997	0	0	0	0	0
	1998	9,658	0	0	0	0
	1999	21,811	184	262	0	0
	2000	16,065	7,592	5	80	0
	2001	29,011	4,489	0	0	0
	2002	8,382	78	0	0	0
	2003	26,241	96	0	0	0

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Table 11. (Page 3 of 5)

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Other Rockfish <sup>a</sup>						
	1995	1,376	25,402	20	330	0
	1996	125	43,613	81	90	0
	1997	757	20,115	26	300	0
	1998	5,455	25,590	158	0	0
	1999	9,308	16,525	180	0	0
	2000	1,072	50,409	24	87	0
	2001	7,056	58,455	292	0	0
	2002	985	56,354	0	339	0
	2003	1,214	60,928	574	0	0
Greenland turbot						
	1995	174,281	111,906	18	4	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	1,051	0	0
	2000	1,523	123,453	5	0	0
	2001	55	150,332	2,179	0	0
	2002	52	45,849	789	0	0
	2003	17	53,083	1,216	0	0
Arrowtooth flounder						
	1995	11,484	9,009	26	283	0
	1996	33,038	1,451	27	0	0
	1997	16,035	4,882	30	0	0
	1998	30,340	832	0	0	0
	1999	749,169	3,458	0	0	0
	2000	11,520	14,905	85	0	0
	2001	19,152	18,889	2,797	0	0
	2002	35,546	2,058	97	20	0
	2003	41,491	4,194	246	0	0

-Continued-

Table 11. (Page 4 of 5)

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Rock sole						
	1995	52,460	0	110	0	0
	1996	121,696	0	12	0	0
	1997	63,863	0	50	0	0
	1998	135,519	0	17	0	0
	1999	210,956	271	0	0	0
	2000	94,228	1	24	0	0
	2001	178,694	17	75	0	0
	2002	161,290	0	0	0	0
	2003	206,152	0	0	0	0
Yellowfin sole						
	1995	170	0	2,887	0	0
	1996	87,333	0	669	0	0
	1997	10	0	83	0	0
	1998	9,694	0	77	0	0
	1999	55,521	3	1,164	0	0
	2000	452	636	38	0	0
	2001	61,307	0	12	0	0
	2002	27,144	0	0	0	0
	2003	24,569	0	452	0	0
Flathead sole						
	1995	2,064	0	55	0	0
	1996	70,285	0	5	0	0
	1997	27,332	0	0	0	0
	1998	39,119	0	2,768	0	0
	1999	77,466	431	300	0	0
	2000	10,895	240	81	0	0
	2001	20,837	747	11	0	0
	2002	70,209	0	14	0	0
	2003	34,781	6	36	0	0

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Table 11. (Page 5 of 5)

Fishery	Year	Trawl	Longline	Pot	Mechanical Jig	Hand Troll
Other Flatfish <sup>b</sup>						
	1995	854	0	357	0	0
	1996	39,658	10	2	0	0
	1997	30,836	0	81	0	0
	1998	59,618	5	1,017	0	0
	1999	46,405	0	0	0	0
	2000	3,011	1	40	0	0
	2001	21,236	0	4	0	0
	2002	5,504	0	0	0	0
	2003	4,805	0	35	0	0

<sup>a</sup> Other Rockfish species include: dusky, yelloweye *S. ruberrimus* and thornyhead rockfish *Sebastolobus* spp. Redbanded *Sebastes babcocki*, and darkblotched *S. crameri* rockfish.

<sup>b</sup> Other Flatfish species include: rex sole *Errex zachirus*, butter sole *Isopsetta isolepsis*, Alaska plaice *Pleuronectes quadrituberculatus*, English sole *Parophrys vetulus*, and starry flounder *Platichthys stellatus*.

Table 12. Harvest, number of vessels and deliveries from state waters of the Bering Sea-Aleutian Islands Area in the parallel seasons for Greenland turbot, arrowtooth flounder, rock sole, yellowfin sole, flathead sole, and other flatfish fisheries, 1995 - 2003.

Year		Greenland Turbot	Arrowtooth Flounder	Rock Sole	Yellowfin Sole	Flathead Sole	Other Flatfish <sup>a</sup>
1995	Harvest <sup>b</sup>	286,209	20,802	52,570	3,057	2,119	1,211
	Vessels	24	31	12	7	10	10
	Deliveries	40	60	23	14	17	17
1996	Harvest <sup>b</sup>	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 <sup>b</sup>	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 <sup>b</sup>	339,336	31,172	135,536	9,771	41,887	60,640
	Vessels	26	17	25	12	19	29
	Deliveries	81	31	48	15	36	52
1999	Harvest <sup>b</sup>	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

-Continued-

Table 12. (Page 2 of 2)

Year		Greenland Turbot	Arrowtooth Flounder	Rock Sole	Yellowfin Sole	Flathead Sole	Other Flatfish <sup>a</sup>
2000	Harvest <sup>b</sup>	124,981	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 <sup>b</sup>	152,566	40,838	178,785	61,319	21,595	21,240
	Vessels	31	44	23	8	26	13
	Deliveries	74	71	39	11	29	17
2002	Harvest <sup>b</sup>	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
2003	Harvest <sup>b</sup>	54,316	45,931	206,152	25,021	34,823	4,840
	Vessels	20	50	28	9	34	21
	Deliveries	45	109	97	15	56	43

<sup>a</sup> Other Flatfish species include: rex sole *Errex zachirus*, butter sole *Isopsetta isolepsis*, Alaska plaice *Pleuronectes quadrituberculatus*, English sole *Parophrys vetulus*, and starry flounder *Platichthys stellatus*.

<sup>b</sup> In whole pounds.

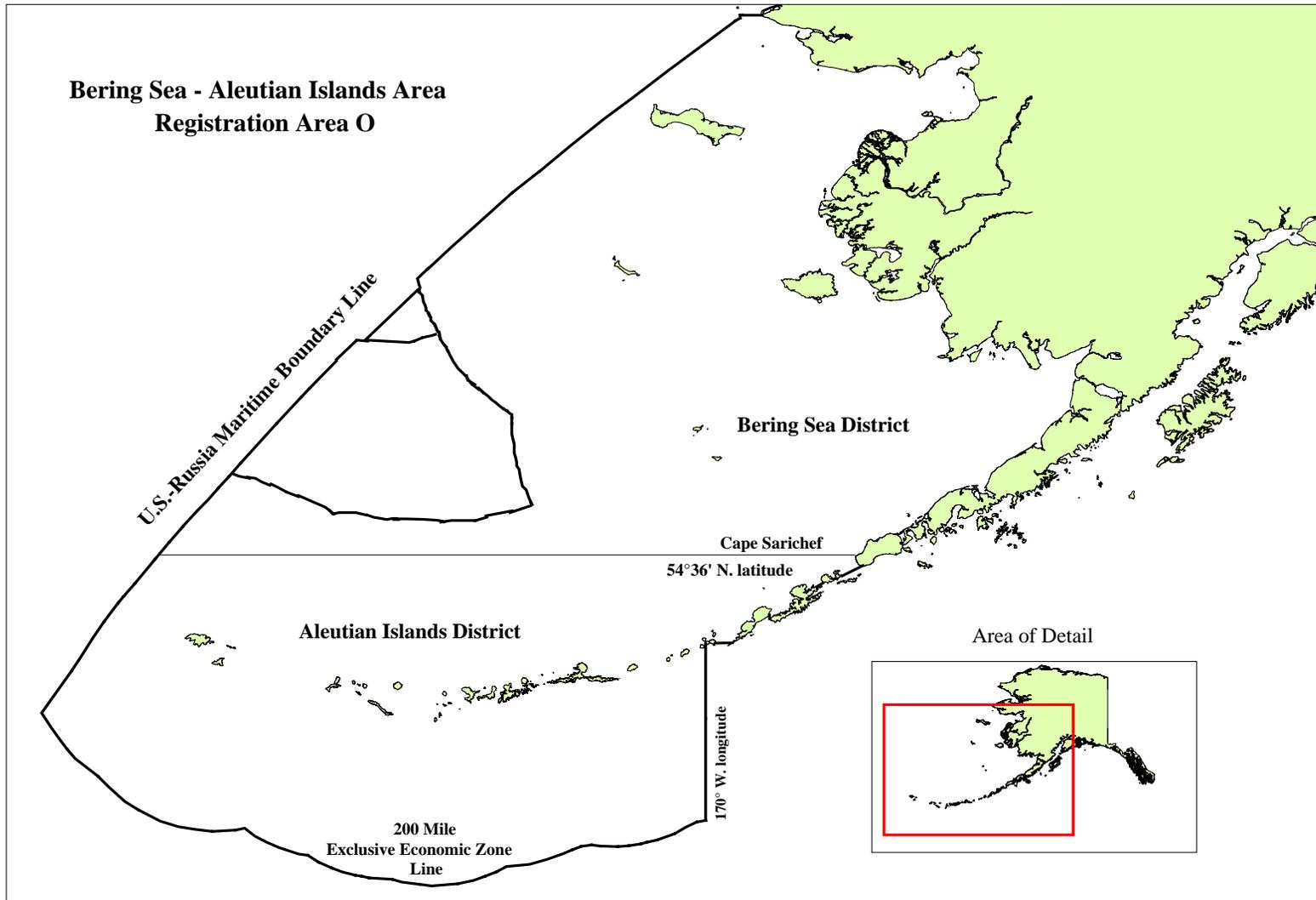


Figure 1. The Bering Sea – Aleutian Islands Area for groundfish management.

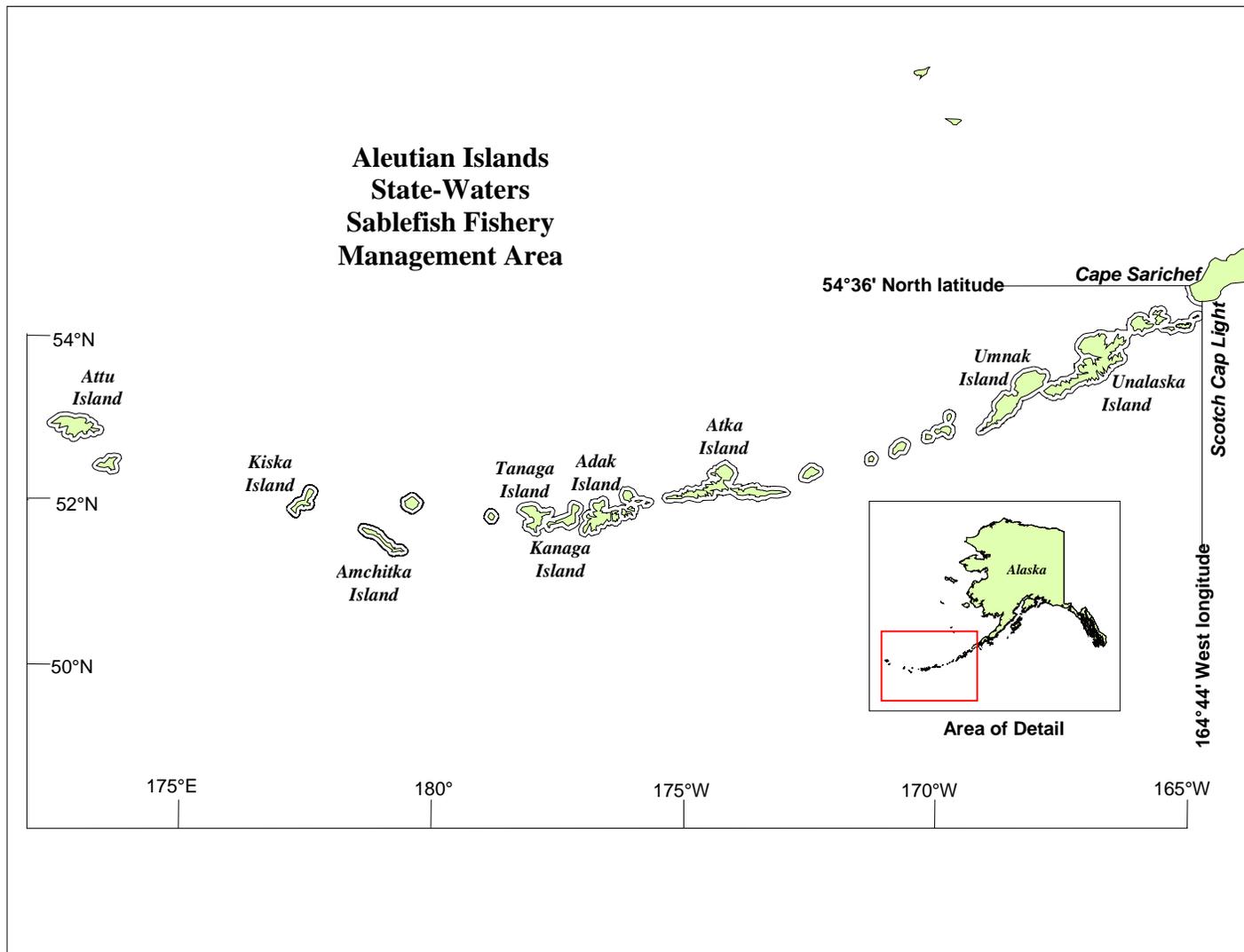


Figure 2. The Aleutian Islands state-waters sablefish fishery management area.

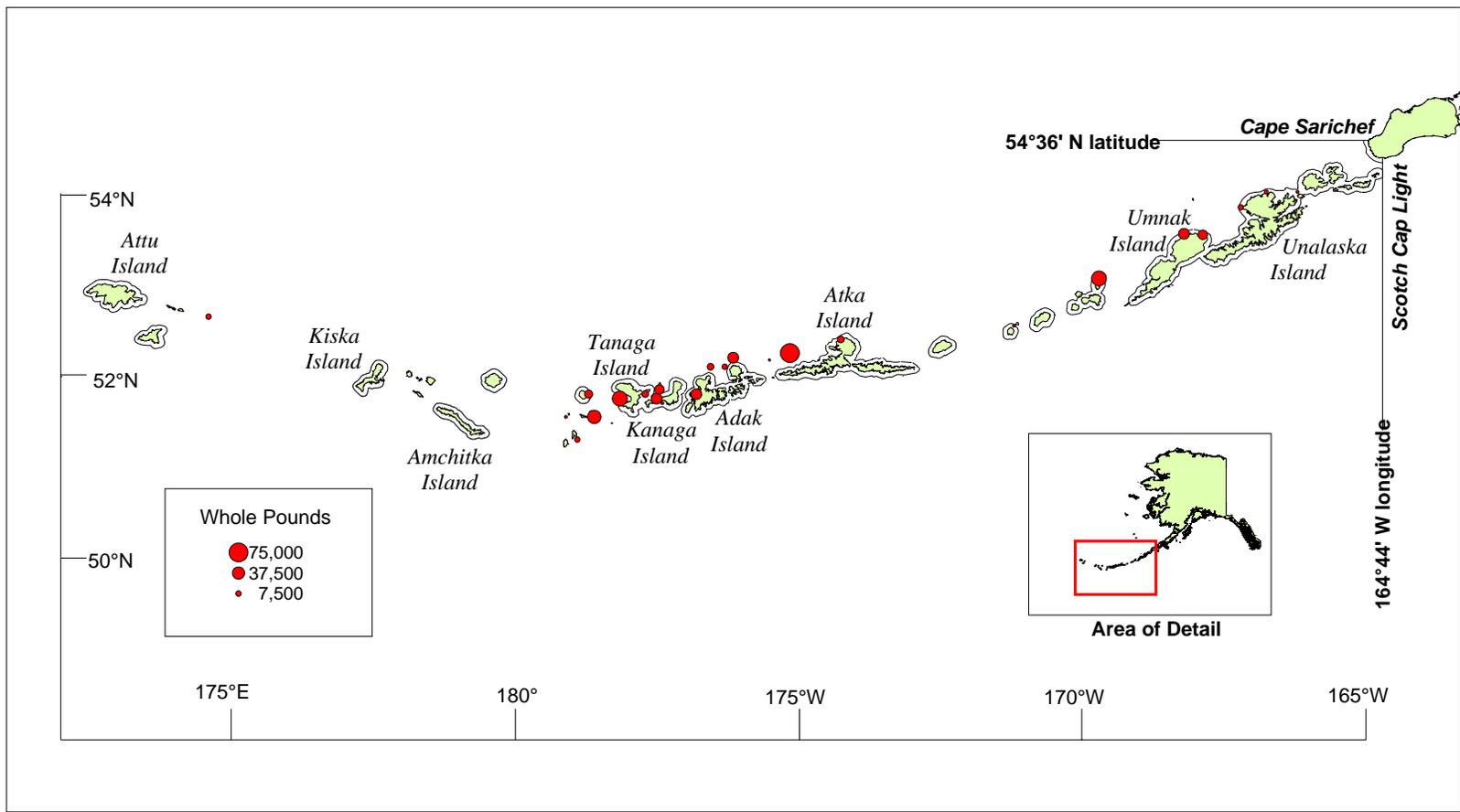


Figure 3. Harvest of Aleutian Islands state-waters sablefish in 2003 showing statistical areas where harvest over 1,000 pounds occurred.

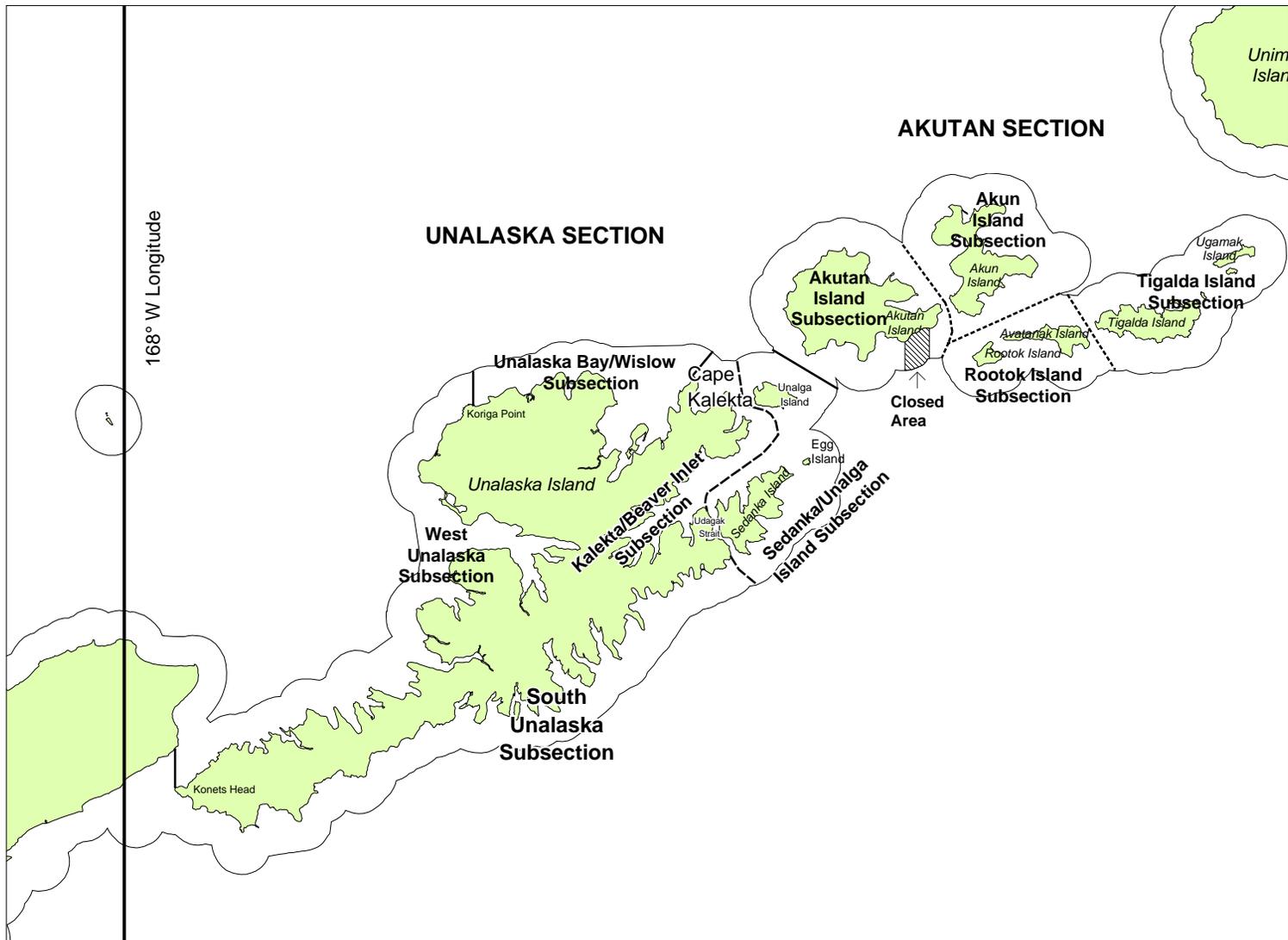


Figure 4. Subsections of the Unalaska and Akutan Sections of the 2003 Aleutian Islands state-waters black rockfish fishery.

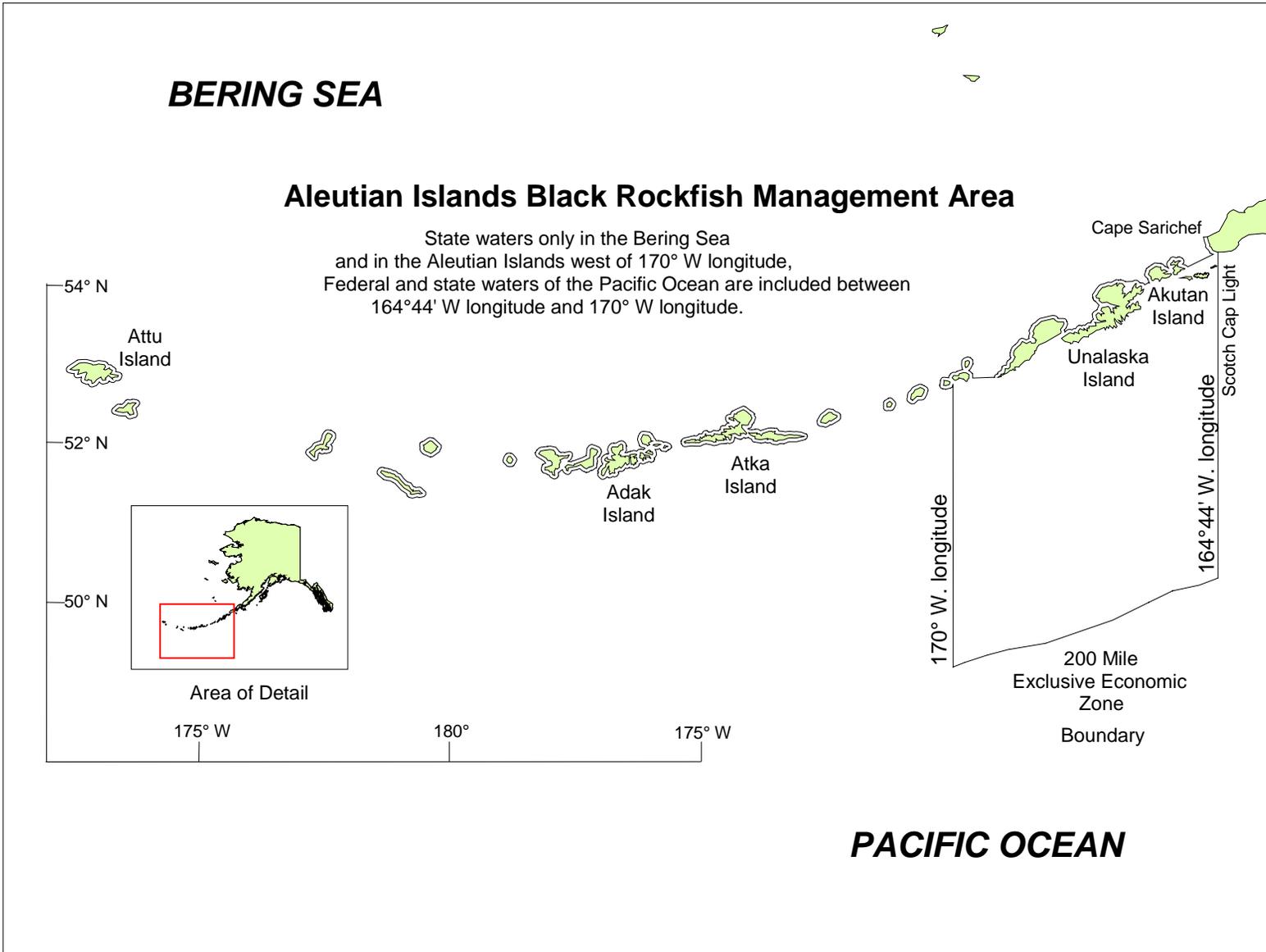


Figure 5. The Aleutian Islands state-waters black rockfish management area.

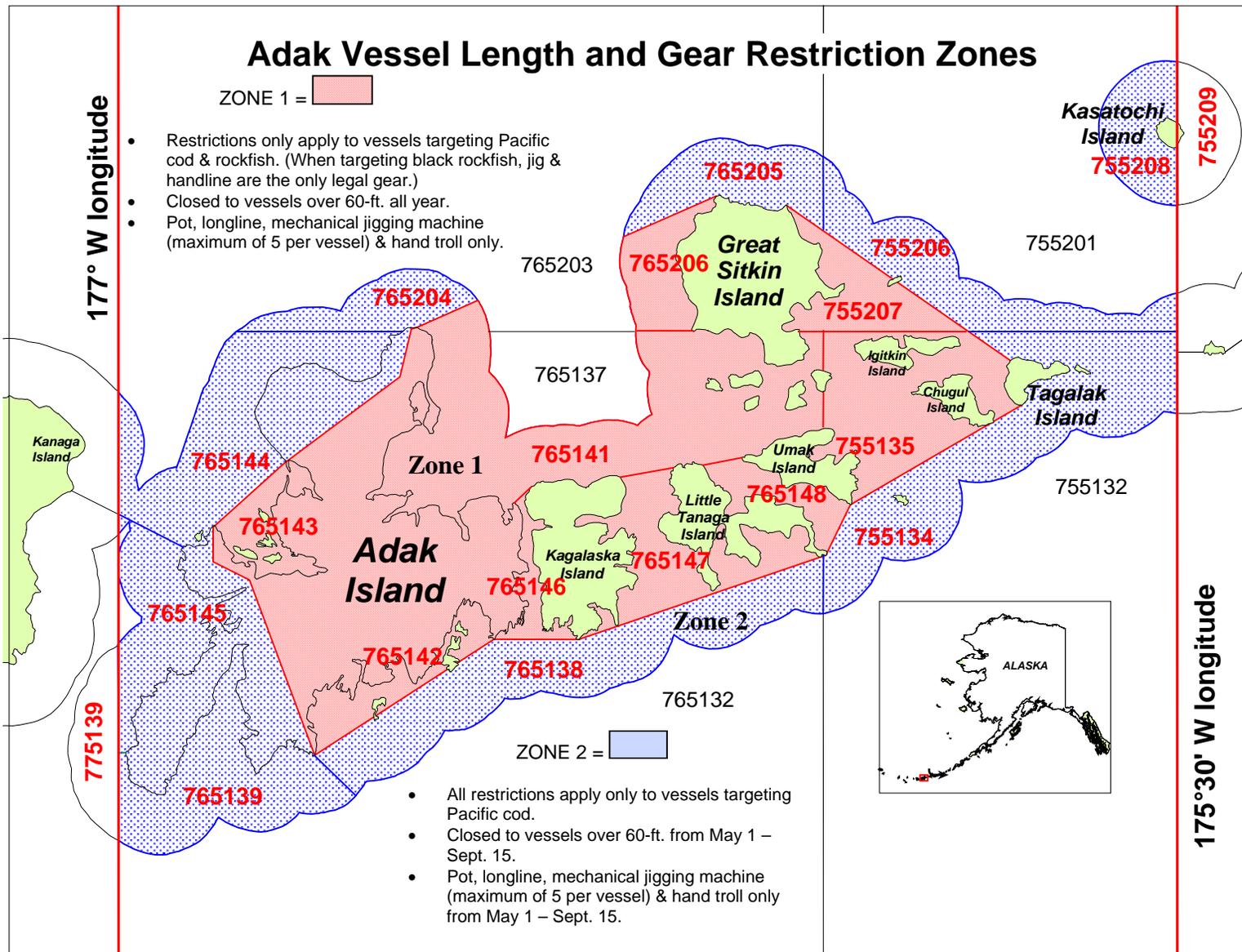


Figure 6. Adak vessel length and gear restriction zones and statistical reporting areas.

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