

ANNUAL MANAGEMENT REPORT FOR THE
GROUNDFISH FISHERIES IN THE KODIAK, CHIGNIK,
AND SOUTH ALASKA PENINSULA MANAGEMENT AREAS, 2002



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ABSTRACT

This report provides a summary of the 2002 state managed, state-waters, and parallel commercial groundfish fisheries that occur in the Kodiak, Chignik, and South Alaska Peninsula Areas. In the 2002 state-waters Pacific cod *Gadus macrocephalus* fisheries in the Westward Region, 25.3 million pounds (11,476 mt) were harvested by 219 vessels for an estimated exvessel fishery value of \$6.1. Additional details concerning the 2002 state-waters Pacific cod fisheries are provided, including season dates, effort, harvest, and value by gear type and area. Biological data collected from Pacific cod during the state-waters fishery is summarized for 2002. Effort and harvest from the parallel Pacific cod and walleye pollock *Theragra chalcogramma* fisheries are summarized.

Information from the 2002 black rockfish *Sebastes melanops* fisheries is also reported. Forty-two vessels harvested black rockfish in the three management areas during 2002. The total harvest was 0.38 million pounds (172 mt) for an estimated exvessel value of \$0.15 million. Biological data gathered during the black rockfish fishery are summarized.

Minor harvests of lingcod *Ophidion elongatus* and sablefish *Anoplopoma fimbria* occurred in 2002. Information on the participation and value of these fisheries is reported in summary format. General information is provided on other groundfish species harvested in state waters, and a historic summary of non-pelagic trawl closures in the state waters of the Kodiak, Chignik, and South Alaska Peninsula Areas is provided.

INTRODUCTION

Groundfish harvests in the Exclusive Economic Zone (EEZ, 3 to 200 nautical miles offshore) of the Gulf of Alaska (GOA) and Bering Sea/Aleutian Islands (BSAI) are primarily managed by the National Marine Fisheries Service (NMFS) under guidelines developed by the North Pacific Fishery Management Council (NPFMC). The NPFMC establishes Acceptable Biological Catch (ABC) specifications for each species. The ABC may be reduced due to biological, economic, and social considerations to the level available for directed fishing, the Total Allowable Catch (TAC). Appendix A contains frequently used acronyms and key words.

Authorization for federal control of resources in the Exclusive Economic Zone (EEZ) from three-200 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). Areas used for federal groundfish fisheries management are shown in Figure 1. Many of the species managed by NMFS also occur in the territorial waters (0-3 nautical miles offshore).

The State of Alaska has management authority for groundfish resources within territorial waters; from the coast to three nautical miles offshore. For consistency, the territorial sea waters will be referred to as state waters for the remainder of this report. Commercial fishery registration areas established by the state differ from the federal management areas. State designated registration areas include the Eastern Gulf of Alaska, Prince William Sound, Cook Inlet, Kodiak, Chignik, South Alaska Peninsula, Bering Sea-Aleutian Islands, and Chukchi-Beaufort Sea Areas (Figure 2). These registration areas extend to the outer boundary of the EEZ. The Alaska Department of Fish & Game (ADF&G) offices in Southeastern Alaska, primarily the office in Sitka, manage fisheries in the Eastern Gulf of Alaska. Prince William Sound and Cook Inlet are managed by offices in Cordova and Homer and are part of the ADF&G Central Region. The latter five areas are part of ADF&G's Westward Region. The office in Kodiak manages Kodiak, Chignik, and the South Alaska Peninsula Areas. The office in Dutch Harbor manages the Bering Sea-Aleutian Islands fisheries. Historically, little to no groundfish harvest has occurred in the Chukchi-Beaufort Sea Areas. The Dutch Harbor office would manage any fishery that did occur within that area.

For most groundfish fisheries, ADF&G issues an emergency order (EO) at the beginning of each year, creating what are referred to as parallel fishing seasons. During parallel seasons, NMFS management, allowable gear, bycatch levels, and fishing season actions promulgated in state-waters by authority of an annually issued global EO.

Exceptions to the parallel fishing seasons occur where the state has established separate harvest quotas and seasons for state waters. In the Westward Region, these are fisheries for sablefish *Anoplopoma fimbria*, lingcod *Ophidion elongatus*, Pacific cod *Gadus macrocephalus*, black rockfish *Sebastes melanops*, and blue rockfish *Sebastes mystinus*¹. These fisheries are actively managed by ADF&G and are referred to as state-managed fisheries for lingcod and rockfish and

¹ Blue rockfish are not found in the Westward Region, however management is delegated to the State of Alaska in all waters from shore to 200 nautical miles.

state-waters seasons for Pacific cod and sablefish. For lingcod and the two rockfish species, the state has full management authority from shore to the 200 nautical mile boundary of the EEZ. State-waters seasons for sablefish and Pacific cod occur within three nautical miles of shore. Specific details on the structure of both the state-managed and state-waters seasons are contained in the introduction sections of each species group.

Pacific cod and walleye pollock comprise the largest volume of groundfish harvested from Kodiak, Chignik, and South Alaska Peninsula Areas state waters. All directed walleye pollock harvest occurs during parallel seasons while Pacific cod is harvested in both the parallel and state-waters seasons. Fish ticket records show nearly 50 million pounds of walleye pollock taken in 2002 (Figure 3). Various species of flatfish, skates, rockfish and other groundfish were also harvested (Table 1, Figure 4). Sixteen emergency orders were issued for the groundfish fisheries in the Kodiak, Chignik, and South Alaska Peninsula Areas in 2002 (Table 2).

STATE-WATERS FISHERIES

Pacific Cod

Historic Background

In 1996, the Alaska Board of Fisheries (BOF) adopted state-waters Pacific cod management plans for fisheries in three groundfish areas in the Westward Region. The first state-water Pacific cod seasons occurred in 1997. Management areas are outlined in chapter 5 of the Alaska Administrative Code (AAC) section 28.081; Kodiak as outlined in 5 AAC 28.467; Chignik in 5 AAC 28.537, and South Alaska Peninsula in 5 AAC 28.577. In addition, the BOF defined terms to distinguish state-waters, federal, and parallel fishing seasons (Appendix A). These definitions can also be found in 5 AAC 28.081.

Eligibility for participation in these state-waters seasons was not restricted to vessels qualified under the federal moratorium or license limitation programs (LLP). The management plans included specifications on fishing season, allowable gear, and harvest allocation. State-waters seasons generally occur after the parallel season, which typically close in late winter/early spring. Exclusive registration areas were established and the state-waters seasons were restricted to pot, hand troll, and mechanical jig gear. Further limitations were established for the amount of gear that could be used in the state-waters seasons. A pot limit of 60 per vessel was established. No more than five jig machines could be used per vessel.

Other regulations adopted in 1996 included a 58-foot overall-length size limit for vessels in the Chignik and South Alaska Peninsula Areas and harvest allocations between pot and jig gear types in the Kodiak Area. The fishery management plans also provided for removal of certain restrictions on exclusive area registration, vessel size, and gear limits after October 31 to increase late season harvest if the season guideline harvest level (GHL) was not expected to be attained before the December 31 regulatory closure date.

GHLs for each area are set as a percentage of the estimated ABC of Pacific cod as established by the NPFMC. Initial GHLs were set at 15% of the Western Gulf ABC for the South Alaska Peninsula Area, and 15% of the Central Gulf ABC apportioned between the Kodiak, Chignik, and Cook Inlet Areas. GHLs from the Central and Western Gulf were scheduled to step up to 20% and 25% of the area ABC's if annual harvest was within 10% of the established state-waters GHL.

Since their initial inception, the state-water season management plans have undergone several revisions at various BOF meetings. In 1998, the BOF added an 85% harvest allocation to the pot fleet in the South Alaska Peninsula with no specified jig allocation. The Chignik Area was designated as a superexclusive registration area for the state-waters Pacific cod season.

In 1999, the BOF restricted pot vessels greater than 58 feet in length to 25% of the total Kodiak Area GHL before September 1. Also in 1999, the BOF established a 15% allocation for jig gear in the Chignik Area and an April 15 fishery opening date to both pots and jigs with an August 15 rollover to pot gear for any unharvested portion of the jig allocation. Clarification was added to the gear definitions of hand troll and jig gears. Jig gear was limited to no more than five lines with a maximum of 30 hooks per line or no more than 150 hooks on one line used in a continuous loop.

In 2001, uncertainty about how federal fisheries might be restructured following release of the Endangered Species Act Section 7 consultation; Biological Opinion and Incidental Take Statement (BiOp) on Steller sea lions (SSL) prompted the BOF to restructure the state-waters Pacific cod seasons. The BOF mandated that state-waters seasons would remain open after their regulatory opening in the spring until area GHLs were fully attained or the season closed by regulation on December 31. State waters would not reopen to a parallel season if a federal fishery opening occurred and there was still state-waters GHL available. The state continued to recognize federally listed SSL rookery locations and related no transit/no fishing zones surrounding them. The state had more liberal restrictions on designated SSL haul out locations, allowing fishing within these locations. These measures were adopted as an interim measure for 2001 and were retained for 2002. The BOF also began requiring vessel monitoring systems (VMS) in state waters during parallel seasons in 2002. VMS are not required during state-waters seasons. In 2002, the BOF also liberalized the pot tag and storage requirements in the first seven days of the state-waters seasons in Kodiak and Chignik Areas. Vessels are now allowed to have untagged pots onboard or in shallow water storage during the first week of the fishery; a similar proposal is scheduled to be addressed by the BOF in 2004 for the South Alaska Peninsula Area.

2002 Westward Region State-waters Pacific Cod Fisheries

The 2002 season was the sixth year of fishing under the state-waters Pacific cod management plans in the Westward Region. Two hundred nineteen vessels harvested over 25.3 million pounds (11,500 mt)² of Pacific cod. The 12.4 million pound GHL in the South Alaska Peninsula Area was attained while fisheries in the Kodiak and Chignik Areas did not achieve their GHLs. The approximate total exvessel fishery value was \$6.1 million (Table 3). The largest catches came from waters adjacent to Sanak Island, southwest of the Ikatan Peninsula, and Nagai Island

² All weights refer to landed round pounds; at-sea and dockside discards are not included in harvest totals.

in the South Alaska Peninsula Area, Mitrofanina Island in the Chignik Area, and from the west side of Kodiak Island in the Kodiak Area (Figure 5).

Kodiak Area. A GHL of 8.7 million pounds (3,946 mt) of Pacific cod for the Kodiak Area state-waters fishery was announced by news release on February 25, 2002. The fishery began March 16, 2002, seven days after the closure of the federal and parallel Central Gulf of Alaska (CGOA) Pacific cod inshore processing component fishery. The opening date of the Kodiak Area fishery has varied over the course of the state-water seasons; the 2002 season opened five days later than the 2001 season (Table 4).

In general, the 2002 state-waters season had similar levels of participation by pot fishers as the 2001 season. The number of fishers using jig gear declined from 2001 levels. The number of participants in 2002 remained well below the number that participated in the seasons from 1998-2000 (Table 5). Pacific cod biomass within the CGOA has continued in a downward trend for the past four years (Thompson et al. 2001). This paired with decreased fishery performance has decreased the number of vessels participating in the past two seasons.

Pot gear harvest averaged slightly over 540,000 pounds (245 mt) per week for the first month of the fishery (Figure 6). Pot vessels harvested roughly 1.5 million pounds (680 mt) during the first month of the fishery. Harvest peaked in the second week of April, when 18 landings occurred for 737,000 pounds (334 mt). Harvest decreased slightly in the next two weeks, averaging approximately 675,000 pounds per week (306 mt). By the end of April, pot harvest totaled approximately 3.5 million pounds (1,587 mt). These early-season weekly catch rates were much improved over the 2001 season but still below those that occurred in the late 1990s and 2000.

The component of the fleet greater than 58 feet in overall length approached the 2.17 million pound (984 mt) harvest cap in late April. Large-vessel harvest through April 29 indicated pot boats greater than 58 feet in overall length harvested 1.6 million pounds (725 mt). However, many of the larger vessels quit or would quit fishing over the next few days. It appeared that the total pot allocation of 4.35 million pounds (1,973 mt) would be reached before the large vessels attained their cap. Based on harvest rates in the fishery of approximately 25,000 pounds (11 mt) per vessel, per delivery and the number of boats participating, it appeared the total 4.35 million pounds allocated to pot vessels before September 1 would be taken in the first few days of May.

A closure for pot gear was announced for May 4, 62 advanced notice was provided for the closure. It was expected that the fleet would 'fish up' during this lengthy period before the closure. If the fleet did fish more intensely during the remaining 62 hours before the fishery closure, the average of 25,000 pounds per delivery would be met or exceeded, ensuring that the 50% of the GHL initially allocated to pots would be taken. However, many vessels quit fishing when the closure announcement was issued. The decreased harvest rate resulted in the initial pot harvest coming in below the 50% allocation. The initial pot harvest was approximately 4.0 million pounds (1,805 mt), roughly 350,000 pounds (158 mt) below the pot allocation.

Jig harvest began when the state-waters season opened in early March. As had been the case in previous years, harvest was modest in the first several weeks of the season. The weekly average was approximately 20,000 pounds (9 mt) from an average of nine landings. Harvest and

participation steadily increased in late April into early May. In most years, May was the peak of jig gear harvest. Some of the highest weekly harvests by jig fishers occurred during May in the late 1990s when over 400,000 pounds were landed (181 mt). Though the strongest harvest was in May during 2002, the overall number of participants was down from 74 vessels in 2001 to 54 in 2002. As in 2001, some vessels home ported in Kodiak chose to participate in state-waters jig seasons in other registration areas. Other usual participants simply did not participate in the 2002 fishery. Weekly harvest peaked in mid-May at 225,000 pounds (102 mt) (Figure 6). Both harvest and participation tapered off quickly over the course of the month. By early June, weekly harvest had fallen below 20,000 pounds (9 mt) and by July, the jig fleet had ceased Pacific cod fishing operations for the summer. Minor effort and harvest occurred in fall.

The provisions of the Kodiak Area state-waters season management plan allows the fishery to be reopened to pot gear on September 1 if it appears that the total GHL will remain unharvested by December 31. The total jig gear harvest was approximately 1.2 million pounds (544 mt) on August 31. The Kodiak state-waters season was reopened to pot gear with the remaining 3.15 million pounds (1,428 mt) available to both pot and jig gears. The 60 pot limit and exclusive area designation remained in effect at the reopening.

Few vessels of either gear type re-entered the fishery in early September. By late in the month, pot vessels had landed 310,000 pounds (140 mt); jig gear harvest was less than 10,000 pounds (5 mt). The pot limit and exclusive area designation were lifted on October 31 in accordance with the Kodiak Area management plan. Harvest improved dramatically by mid-November. Vessels using pot gear were harvesting approximately 45,000 pounds (20 mt) per three to four day fishing trip. This level of catch was not quite comparable to the late winter/early spring pot gear rate of catch, but was certainly the strongest fall fishery performance in the Kodiak Area since the late 1990s. Pot harvest continued to be strong through the end of the year. Periodic harvest by jig vessels occurred, however in most weeks less than 20,000 pounds (9 mt) were harvested by jig fishers. The fishery closed by regulation to both gear types at midnight on December 31.

The total 2002 harvest of Pacific cod in the Kodiak Area from the state-waters fishery was 8.4 million pounds (3,830 mt) taken with 86 unique vessels. Two vessels used both gear types. The estimated exvessel fishery value was \$2.4 million. There were 7.1 million pounds (3,200 mt) taken with 34 pot vessels and 1.4 million pounds (560 mt) taken by 54 jig vessels (Table 5). Two vessels fished both gear types. Fishers harvested Pacific cod from 35 separate statistical areas during the 2002 state-waters season. The largest harvests came from Kodiak's westside capes, the Alitak Bay area, and from Chiniak Bay near the city of Kodiak (Table 6, Appendix B).

The Kodiak Area attained the final GHL step-up increment in the 1999 fishery; therefore, the Kodiak Area will receive 12.5% of the 2003 CGOA Allowable Biological Catch for the 2003 fishery. This will result in a GHL of 8.0 million pounds (3,629 mt).

Chignik Area. A GHL of 4.9 million pounds (2,223 mt) of Pacific cod was set for the Chignik Area and announced by news release on February 25, 2002. The fishery opened by emergency regulation on March 1 (Table 7). Much of the state and federal waters in the Chignik Area were closed during federal season as a result of SSL protection measures in 2001. These closures were retained for the 2002 fisheries. An agenda change request was submitted to the BOF requesting

that the state-waters season be opened on March 1 regardless of the status of the parallel season. This would allow fishing to occur in state waters under the state-waters season management plan, even if the parallel seasons and subsequent closures were still in effect in federal waters. This request was granted and the state-waters season opened on March 1, even though the federal fishery in the CGOA did not close in adjacent waters until March 9.

As had been the case in many of the previous state-waters seasons in Chignik, a local processor for Pacific cod was not available until mid-April. Early season harvest was delivered to a processor in Sand Point either by direct landing or by tender. Less than three pot fishing vessels participated in the first weeks of the fishery and the harvest data is confidential. Vessels using jig gear did not enter the fishery until mid-April.

In late March, additional pot vessels entered the fishery. Weekly harvest in the first week of April was roughly 278,000 pounds (126 mt) from 5 landings. Weekly rates averaged 365,000 pounds (165 mt) from 15 deliveries per week over the course of April (Figure 6). Participation in the pot fishery increased in May with a total of 12 vessels participating. Harvest peaked in mid-May when 615,000 pounds (279 mt) were landed from 21 pot gear deliveries. It appeared that the 4.2 million pounds (1,905 mt) allocated to pot gear would be reached sometime in June if vessels remained active. However, effort declined rapidly when salmon fisheries opened in June. Four vessels landed approximately 77,000 pounds (35 mt) in the first week of June; no additional pot landings occurred in Chignik until mid-November. At that time, one vessel made a single, confidential landing. The final pot harvest was 3.8 million pounds (1,732 mt) from 134 landings (Table 8). This was approximately 400,000 pounds (181 mt) below the 4.2 million pound (1,905 mt) pot gear allocation.

Jig gear harvest began in late April when a local processor began accepting Pacific cod deliveries in Chignik. Harvest information remained confidential until May, when more than three vessels entered the fishery. Sixteen vessels landed slightly more than 100,000 pounds (45 mt) in the second week of May. These were record numbers for both participation and a single week's harvest in the Chignik state-waters jig gear season. Catches and participation would quickly taper after that banner week, reaching a low of three vessels landing 15,000 pounds (7 mt) in the first week of June. One jig vessel did continue to make periodic landings throughout June, however, that catch information remains confidential. No other jig landings occurred after June in the 2002 Chignik Area jig gear season. The final jig gear harvest was approximately 311,000 pounds (141 mt) from 55 landings (Table 8).

The 2002 Chignik Area Pacific cod fishery harvest totaled 4.1 million pounds (1,880 mt) from both gear types combined (Table 9). This is approximately 84% of the preseason GHIL. The fishery did not achieve the harvest necessary to receive a larger percentage of the federal ABC in 2002. Under the provisions of the state-waters management plans, harvest must meet or exceed 90% of the preseason GHIL to be eligible for an incremental 'step-up' in the following year. The majority of harvest came from the vicinity of Mitrofanina Island (Table 9; Appendix C). The 2003 GHIL will again be 7% of the Central Gulf ABC as set by the NPFMC or 4.5 million pounds (2,041 mt).

South Alaska Peninsula Area. A GHL of 12.4 million pounds (5,625 mt) of Pacific cod was set for the South Alaska Peninsula Area and announced by news release on February 25, 2002. The state-waters Pacific cod fishery opened on March 5, 2002, seven days following the closure of the Western Gulf of Alaska (WGOA) parallel Pacific cod season (Table 10).

The South Alaska Peninsula Area state-waters season has attained both the pot and jig allocations very quickly during 2000-2002. The 2002 season was no exception. The pot season lasted 20 days and harvested 10.7 million pounds (4,853 mt) from 269 landings (Table 11). As the fishery occurred so quickly, weekly harvest rates are not particularly meaningful to illustrate how the harvest progressed over the course of the pot season. Individual landings averaged slightly less than 40,000 pounds (18 mt) each. Some individual vessels had single landings greater than 100,000 pounds (45 mt). The daily harvest of the fleet exceeded 1.0 million pounds (454 mt) per day on several occasions during the 2002 pot gear season.

Unlike other state-waters pot gear seasons, inclement weather slowed the fleet only once. Typically, several periods of stormy weather slow the daily harvest rates of the pot fleet over the course of the season. The pot season transpired very quickly due to a combination of favorable weather and strong harvest rates. The number of vessels participating in 2002 (50 vessels) declined from the previous two years (57 and 68 vessels).

The South Alaska Peninsula Area jig season opened concurrently with pot gear on March 5. Unlike previous seasons, jig effort occurred immediately. In previous seasons, the majority of jig effort occurred after the closure of the pot season. Sixty-eight vessels registered to participate in the jig fishery. Harvest and participation by jig fishers were both relatively low during the pot fishery. Jig fishers harvested approximately 20,000 pounds (9 mt) while the pot fishery was ongoing. In the first week following the closure of the pot season, harvest increased to approximately 100,000 pounds (45 mt). Jig gear harvest peaked in mid-April when over 480,000 (218 mt) were harvested from 76 landings (Figure 6). The jig season was closed on April 26 when the harvest reached slightly more than 1.9 million pounds (861 mt). The final harvest with jig gear was 2.0 million pounds from 309 landings (Table 11).

Total harvest for both gear types for the South Alaska Peninsula Pacific cod fishery was 12.7 million pounds (6,129 mt) from 578 landings by 109 vessels. Nine vessels were used in both the pot and jig seasons. The approximate exvessel fishery value was \$2.8 million. Landings were reported from 31 statistical areas with major catches harvested near Sanak Island, southwest of the Ikaton Peninsula, and dispersed around the Shumagin Islands near Sand Point (Table 12, Appendix D). The South Alaska Peninsula Area fishery achieved the final GHL step up increment in 2001, and the GHL in subsequent years will be 25% of the Western Gulf ABC for Pacific cod. The GHL for the 2003 fishery is set at 11.4 million pounds.

Harvest Monitoring

ADF&G monitored the state-waters Pacific cod harvest in 2002 in the same manner as in previous years. Dockside sampling in the ports of King Cove, Sand Point, and Chignik during the first few months of the season when fishing effort and harvest rates were highest and in Kodiak during the entire season. Port samplers conducted confidential interviews with vessel

operators to obtain information on catch location, catch per unit effort, bycatch, and fishing effort. Samplers recorded data on fish length, reproductive status, and average weight. Otoliths were removed for later analysis in the aging laboratory. ADF&G personnel were also opportunistically placed on commercial vessels as observers to collect biological data and bycatch information.

Length frequency data has been collected every year during the state-waters fisheries. Data collected in 2002 did not differ greatly from data collected in previous years. In the Kodiak Area, sampled Pacific cod averaged 64.5 centimeters (cm) in length (Figure 7). Fish sampled from the Chignik Area averaged 64.9 cm in length. The average length for Pacific cod that were sampled in the 2002 South Alaska Peninsula Area was 65.0 cm. Pacific cod lengths sampled within all three management areas from jig gear averaged 64.4 cm in length while fish sampled from pot gear averaged 65.9 cm in length (Figure 8).

Average fish weights were calculated from data collected by dockside samplers. Sampled Pacific cod harvested with pot gear in the South Alaska Peninsula averaged 7.6 pounds; average weights for jig gear was 6.2 pounds. Average weights for the Kodiak Area harvest were 7.3 pounds for pot gear and 8.4 pounds for jig gear. Chignik Area fish harvested in pots averaged 7.0 pounds while a sample from the jig catch averaged 5.7 pounds.

Otolith were collected from 2,223 Pacific cod for aging from the Kodiak, Chignik, and South Alaska Peninsula Areas during the 2002 state-waters Pacific cod seasons. Analysis of the 2002 otolith age data has not been completed. Analysis of otolith data from the 1999 state-waters fishery shows that ages for Pacific cod ranged from 1 to 13 years with average ages of 5.8 for Kodiak, 6.6 for Chignik, and 6.5 for South Alaska Peninsula. The five and six-year old age classes were the predominant age classes sampled from Kodiak, while in Chignik and the South Alaska Peninsula age seven was predominant. Age analysis of subsequent collections is ongoing.

Reproductive condition of Pacific cod has been assessed during each state-waters fishery since 1997 by ADF&G dockside samplers. The height of the 2002 Kodiak Area spawning period appeared to be later in the year and more protracted than in 1997 and 1998 and was very similar to the period seen in 1999 and 2000 (Figure 9). Spawning in the Chignik Area was similar to that seen in Kodiak, however caution must be taken when interpreting the Chignik data, as there are weeks where no samples were taken. In both the Kodiak and Chignik Areas, the spawn timing of Pacific cod may have influenced catch rates for pot gear. In 1997 and 1998, spawning events appear to be strongly correlated to higher harvest rates in the Kodiak and Chignik Areas. Data from the South Alaska Peninsula shows the 2002 pot fishery was conducted while approximately 24% of the fish sampled were in spawning condition with ripe milt and eggs. However, harvest rates in the South Alaska Peninsula and Kodiak Areas differed substantially although the spawn timing appears to be similar. This suggests that spawning aggregations alone are not the only factors that influence harvest rates of Pacific cod.

Black Rockfish

Historic Background

Black rockfish were of low market value and not generally harvested commercially in the Kodiak Area until 1990. The catch increased to 874,718 pounds (381 mt) in 1991 as operators fished previously unexploited populations (Table 13). Fishers primarily targeted black rockfish with jig gear but some bycatch occurred in longline and trawl fisheries. Effort was concentrated in areas easily accessible to the city of Kodiak. Fishery production fell sharply in the following years, presumably due to lower abundance in areas that were previously unexploited. Lower prices and alternative fisheries may have been additional factors that limited production after 1991. ADF&G was concerned that localized depletion could easily occur on this long-lived, low-fecundity species.

Stocks along the Alaska Peninsula were initially targeted in 1995. Fishers worked in areas near the port of Sand Point and east to Mitrofanina Island. The highest catch occurred in 1996 with over 360,000 pounds (157 mt) taken from the Chignik and South Alaska Peninsula Areas (Tables 14 and 15).

Black rockfish fisheries were managed by NMFS prior to 1997 as part of the pelagic shelf rockfish group that included dusky *Sebastes ciliatus*, yellowtail *S. flavidus*, and widow rockfish *S. entomelas*. The dusky rockfish is the most abundant species in the group and predominated NMFS survey catches in the GOA. An annual ABC largely supported by dusky rockfish biomass estimates was assigned to the entire group, placing few restrictions on the take of individual species within the group. ADF&G was concerned with the harvest of black rockfish during that period; in some cases ADF&G closed state waters by emergency order, but adjacent federal waters did not close in these instances. Although the majority of the black rockfish resource is in state waters, enforcement of closures became a problem. Landings continued with federal statistical areas reported on fish tickets. Those reports were not always considered credible.

ADF&G submitted a Fisheries Management Plan amendment to the NPFMC that would relinquish black rockfish management within state waters and the EEZ of the GOA to the state. This amendment was passed and implemented effective April 5, 1998. As an interim measure, the NPFMC separated black rockfish from the pelagic shelf group in 1997. This enabled federal fishery managers to place a 573,201 pound (260 mt) ABC on black rockfish in the CGOA. The ABC was based on the council's Tier 6 guidelines, which apply to fisheries with little stock assessment information. Harvest limits were set at 75% of average production from 1978-1995.

ADF&G fishery managers applied this limit to fisheries in Cook Inlet, Kodiak, and Chignik Areas when setting preseason guidelines in 1997. The NPFMC was in the process of delegating authority to the state, so these limits were set as an interim measure. They were, however only enforceable in state waters. Harvest levels were set low enough to accommodate potential black rockfish bycatch³ in other fisheries and not exceed the 573,201 pound (260 mt) total. Assigning GHs to areas within the CGOA was aimed at distributing effort and avoiding intense localized fishing that could lead to long-term harm to the stocks. In 1997, the GH for the Kodiak Area

³ Black rockfish bycatch is allowed at 5% of the target species weight in all fisheries.

was set at 170,000 pounds (77 mt). The GHL was further divided into four sections; three that encompassed the areas of historic harvest and one additional section for the rest of the area with a low GHL to allow for exploratory fishing. The Chignik Area GHL was set at 100,000 pounds (45 mt). The South Alaska Peninsula Area was assigned a 100,000 pound GHL (45 mt) as well.

In 1998, the Kodiak Area was further subdivided into seven sections with individual directed GHLs. The areas were loosely based on existing Tanner crab management sections with modification to divide the area into sections that equally divided the highest historic effort. The Chignik and South Alaska Peninsula Areas remained as individual management units.

In 2001, the BOF adopted several new measures for the black rockfish fisheries in the Kodiak and Chignik Areas. These regulations will not become effective until the 2003. In the Kodiak Area, vessels will be required to register specifically for the black rockfish fishery. This will preclude vessel operators from participating in a Pacific cod and black rockfish fishery simultaneously. In recent years, it has been difficult to assess which vessel operators might be involved in harvesting black rockfish at any given time because they could target both Pacific cod and rockfish under a general groundfish registration. Also in the Kodiak Area fishery, a 5,000 pound per 5 day harvest and landing trip limit will be implemented. This, paired with registration requirements, will allow ADF&G to more effectively manage the small GHLs for the sections in the Kodiak Area. The descriptions of the black rockfish fishing sections were also formally adopted in regulation as groundfish registration districts. In the Chignik Area, superexclusive registration for black rockfish was adopted. The area was subdivided into three districts for management purposes as well. ADF&G has existing authority to require district registration. This may be implemented in 2003 should the need arise to monitor participation and harvest rates more closely in season.

2002 Kodiak Area Fishery

The fishery opened on January 1, 2002. ADF&G issued a news release on January 30, 2002 specifying a directed fishing GHL of 185,000 pounds (83 mt) for the Kodiak Area. The seven fishing sections established in 1998 to distribute the catch were again utilized for the fishery (Figure 10).

As was the case in 2001, fishers began harvesting black rockfish in January. Weather and poor initial catches resulted in a somewhat slower paced initial fishery than in 2001. Some sections in close proximity to Kodiak closed before the opening of the state-waters Pacific cod fishery in 2001; despite some harvests early in the year, all black rockfish sections were still open when the 2002 state-waters season began. The Eastside Section closed on March 21, 2002 (Table 16). Directed landings of black rockfish totaled 28,415 pounds (13 mt).

The Northeast and Southeast Sections closed on April 2. The directed harvest in the Northeast Section was 35,395 pounds (16 mt). This exceeded the section GHL by roughly 15,000 pounds (7 mt). Unexpected participation by vessels in the state-waters Pacific cod season and larger than expected deliveries once the closure had been announced caused the overage. Some additional nondirected harvest occurred throughout the remainder of the year in the Northeast Section. The directed harvest in the Southeast Section was 28,962 pounds (13 mt).

The Afognak Section closed next on April 16. The directed harvest was 53,320 pounds (24 mt). This was substantially over the amount of the section GHL of 35,000 pounds. Again, some vessels registered for the state-waters Pacific cod season that had not been targeting black rockfish made large landings of rockfish when the closure was announced. These landings were unexpected and drove the directed harvest substantially higher than the GHL. The Southwest Section closed on June 7. The directed harvest was 21,293 pounds (10 mt).

Periodic effort continued in the Mainland and Westside Sections throughout the remainder of the year. Final directed harvest in the Mainland Section totaled 4,778 pounds (2 mt). Directed harvest in the Westside Section totaled 20,590 pounds (9 mt). Both sections remained open until the regulatory closure date of December 31.

Previous Kodiak Area black rockfish fisheries were characterized by a large number of vessels with small average deliveries, often less than 500 pounds (0.2 mt). Much of the black rockfish quota was harvested during the state-waters Pacific cod fishery. Beginning with the 2001 fishery and continuing into the 2002 season, there were fewer participants with an increase in the average pounds per landing. Vessel operators also began targeting rockfish earlier in the year, some beginning operations before the state-waters Pacific cod fisheries opened. As in 2001, several vessels were able to make very large individual landings in a short period. Predicting these landings was not possible as vessels fishing for black rockfish were not required to register for sections nor was it possible to keep a radio schedule with the fleet to obtain updated information from the grounds. On any day, it was not known what portion of the jig fleet was targeting black rockfish. Many of the participating vessels were small and did not have single side band radios. In some cases, periods of short, intense harvest caused section GHLS to be exceeded even when checking with processors on a daily basis. The 2002 Kodiak black rockfish harvest totaled 196,166 pounds (89 mt) taken by 26 vessels. The harvest came from 27 statistical areas throughout the area (Table 17; Figure 11).

2002 Chignik Area Fishery

The first reported landings in the 2002 Chignik Area black rockfish fishery occurred in late April. Vessel operators that previously participated in the Kodiak Area made many of the early deliveries in the fishery. Many landings exceeded 5,000 pounds (2 mt). Harvest in the area totaled approximately 28,000 pounds by the end of April (13 mt).

Some jig vessels participating in the Chignik Area state-waters Pacific cod fishery began making small landings of black rockfish in May. These landings were often less than 500 pounds (<1 mt). Vessel operators targeting black rockfish began making larger deliveries in May. On several occasions, daily landings exceeded 10,000 pounds (4 mt).

Inseason harvest estimates indicated approximately 90,000 pounds (39 mt) had been harvested by May 15. It was expected that the 2002 GHL of 100,000 pounds would be fully attained at the time of the closure. There were no additional landings of black rockfish after the closure announcement, vessels that had been participating in the area moved to the South Alaska Peninsula Area around the time of the closure. Also, a revision on a fish ticket resulted in a

10,000 pound (4 mt) delivery believed to be black rockfish during the inseason management being changed to a Pacific cod landing by a processor. The final harvest was 81,015 pounds (35 mt) (Table 16).

The 2002 Chignik Area black rockfish fishery, which closed on May 19, was the earliest closure of the area since the state assumed full management authority. The closure was several weeks earlier than the 2001 fishery, which closed on June 5. Participants directing their efforts towards black rockfish accounted for 97% of the 2002 harvest (Table 16). This was similar to the 2001 fishery. Prior to that season, vessels simultaneously participating in the state-waters Pacific cod fishery had taken a large portion of the black rockfish GHL. Only six separate statistical areas were fished in the 2002 Chignik Area black rockfish fishery (Table 17; Figure 11).

Several vessels simultaneously participated in the South Alaska Peninsula Area and in the Chignik Area. These same vessels often delivered in different locations than they fished, making it difficult to predict harvest patterns. Registration requirements for 2003 will help address these issues.

ADF&G received several accusations concerning vessel operators that may have misreported harvest locations. These instances were brought to the attention of the Division of Public Safety, Fish and Wildlife Protection (FWP), however no citations were issued.

2002 South Alaska Peninsula Area Fishery

The first reported landings in the 2002 South Alaska Peninsula black rockfish fishery occurred in early January as incidental harvest in other fisheries. Directed effort on rockfish began in late March. The number of vessels participating in the black rockfish fishery increased in April, concurrent with the ongoing state-waters Pacific cod season. The GHL for the area remained 100,000 pounds (45 mt). The GHL has been the same since 1997.

The fishery in the South Alaska Peninsula was very similar to the fishery in the Chignik Area. Most participating vessels, some of which also fished in the Chignik Area, made large directed landings that exceeded 5,000 pounds (2 mt). The remaining landings were made by vessels that were targeting Pacific cod and landing minor amounts of black rockfish, typically less than 1,000 pounds (<1 mt) as bycatch.

By the end of April, the cumulative harvest was approximately 25,000 pounds (12 mt). Effort and landings had been sporadic. Both became more regular in May when fourteen landings occurred totaling slightly more than 60,000 pounds (28 mt). Landings ranged from 600 to 10,000 pounds (0.3 to 5 mt).

Although several participating vessels fished in both the Chignik and South Alaska Peninsula Areas, the late May closure of Chignik simplified management of the remaining GHL in the South Alaska Peninsula. Prior to this time, vessels often moved back and forth across the boundary line at Kupreanof Point. It was not possible to anticipate when landings would occur from one area or the other, much less how large those landings would be. Some accusations that

vessels had fished in both areas but intentionally misreported where their catches came from could not be substantiated during the season.

The remaining 15,000 pounds (7 mt) on the 2002 GHF were taken by the middle of June. The fishery closed on June 15. The final harvest for the 2002 fishery was 102,114 pounds (46 mt). Vessels directing their efforts on black rockfish took over 96% of the GHF (Table 16). Only 9 vessels made landings in 2002, a large decrease from the 32 in 2001. Thirteen statistical areas were fished in the 2002 fishery (Table 17). Most of the catch came from the areas adjacent to the Shumagin Islands (Figure 11).

The South Alaska Peninsula Area is open for groundfish management proposals during the 2003/04 BOF cycle. ADF&G intends to submit proposals similar to those developed for the Kodiak and Chignik Areas to establish registration requirements, districts, and logbooks.

Harvest Monitoring

Black rockfish harvests are monitored through fish ticket records and dockside sampling of commercial catches. Information collected by dockside samplers includes fishing location and effort as well as fish length, sex, reproductive maturity, and otoliths for aging. The 2002 harvest was spread throughout the region with catch recorded from 46 statistical areas (Table 17). Harvests were higher off the eastside of Kodiak Island, east of Chignik Bay and near the Shumagin Islands (Figure 11). Mean size of black rockfish sampled from landings in the region was 46.3 cm. The largest fish were harvested in the Kodiak area (Figure 12).

Sablefish

Sablefish in state waters are managed separately from the federal sablefish IFQ program. Habitat for mature sablefish is extremely limited in much of the Westward Region state waters. Sablefish stocks are not abundant in state waters east of Unimak Pass in the Westward Region. Most state waters are relatively shallow and contain a high percentage of juvenile sablefish. Mature fish are found in deeper waters such as those at the break of the continental shelf. The notable exception to this is in the Aleutian Islands and South Alaska Peninsula Western District where state waters encompass some of the shelf break and deep-water passes of the Aleutian Island chain. A state-waters season has been established for sablefish in those areas since 1995. Details of this fishery are reported in the annual management report for groundfish fisheries in the Bering Sea and Aleutian Islands.

A directed fishery in the state waters of the Kodiak, Chignik, and South Alaska Peninsula, Eastern District management areas has not been allowed. In 2002, the BOF adopted language prohibiting directed sablefish fisheries in the state waters of the Kodiak and Chignik Areas. The directed fishery for sablefish in the South Alaska Peninsula Area, Eastern District was closed for the by emergency order authority. New regulations adopted by the BOF in 2002 adopted these closures on a permanent basis. A 1% bycatch allowance with certain restrictions on gear types has been allowed in other fisheries; this allocation is managed by NMFS in both state and federal waters. The 2002 harvest of sablefish taken as bycatch from state waters in the three areas,

excluding the South Alaska Peninsula, Western District directed fishery totaled 3,033 pounds (1 mt).

Lingcod

Current commercial regulations in the Kodiak and Chignik Areas restrict lingcod harvest to the period from July 1 to December 31 and require fish to be a minimum of 35 inches in total length. These regulations are designed to eliminate fishing during the nest-guarding period and to ensure that only mature fish that have had at least one spawning opportunity are harvested. There are no similar regulations in the South Alaska Peninsula Area as the abundance of lingcod appears significantly lower in that area and is along the western boundary of the species range (Mecklenburg et al 2002). Currently, all commercial gear types are legal to use in the take of lingcod. Regional registration is required for vessels intending to target lingcod. Harvest primarily occurs in rocky, reef areas, although large catches are periodically taken in offshore trawl fisheries. Lingcod are an important species to sport fisheries in the Kodiak Area and annual sport harvest is approximately 1,700 fish (Donn Tracy, ADF&G, Division of Sportfish, personal communication).

Lingcod have generally not been the target of directed fishing in the Westward Region. Most of the harvest occurs as bycatch in other fisheries, although directed harvest with jig gear has occurred sporadically. The 2002 harvest was 14,290 pounds (6 mt). Lingcod catch occurs in jig, pot, longline, and trawl gear (Table 18). The highest harvest 136,000 pounds (60 mt) was taken in 1988 in the Kodiak Area (Table 18).

Data are needed on the distribution and catch per unit effort for lingcod in the commercial fishery. ADF&G has set a short-term goal of conservative management until further information of the sustainability of lingcod harvest can be determined. A long-term goal is to determine an acceptable biological catch level.

PARALLEL PACIFIC COD FISHERIES

Introduction

State waters were opened for a parallel Pacific cod fishing season concurrent with the federal season managed by NMFS. Pot, longline, and jig gears were legal gear types beginning January 1. Trawl gear was allowed beginning January 20, however trawl operators generally target walleye pollock in January and early February. In addition, most state waters in the Westward Region are closed to non-pelagic trawling, the trawl type used to direct effort on Pacific cod. During directed fishery openings, 100% of Pacific cod and walleye pollock must be retained under state regulation 5 AAC 28.075 UTILIZATION OF POLLOCK AND PACIFIC COD TAKEN IN A COMMERCIAL FISHERY. Federal regulation, 50 CFR 679.B.27 INCREASED RETENTION/INCREASED UTILIZATION PROGRAM, contains similar language requiring full retention of these species during directed fisheries (Beardon 1999). During directed fishery closures, maximum allowable Pacific

cod and walleye pollock bycatch percentages must be retained under a prohibited species designation by NMFS, typically set at 20% by target species weight.

During the parallel season, vessels that are not LLP eligible may participate inside state waters. However, to participate beyond three nautical miles, vessels must have a specific species, gear, and area endorsement from NMFS.

Several actions were taken by NMFS and the NPFMC during 2001 in response to the Steller sea lion (SSL) BiOp issued in November of 2001. Actions taken to mitigate the effect of commercial fishing effort on SSL changed widely over the course of the year and are best understood by referencing the appropriate federal documents. The State of Alaska sought to minimize the impact of the SSL measures in the parallel fishery by endorsing all sea lion rookery closures but not recognizing all haul out listings. Federal fisheries were split into two seasons, designated “A” and “B” seasons. NMFS released 60% of the federal ABC for the “A” season on January 1. The remaining 40% of the annual ABC was made available on September 1. Both state and federal regulations for 2002 were the same as in later 2001.

Fishery statistics compiled by NMFS show Pacific cod landings from the GOA beginning in 1964. The highest harvests occurring during the early 1990s. Catches since 1977 have averaged approximately 97.5 million pounds (44,223 mt) per year. Harvest figures for 2002 show a Central and Western GOA catch of approximately 107.9 million pounds (42,317 mt) with 60% coming from the CGOA and 40% from the WGOA (Table 20, Figure 13). The harvest of Pacific cod from state waters during parallel seasons within the CGOA and WGOA has ranged from 12.2 million pounds (5,500 mt) in 1989 to 53.8 million pounds (24,410 mt) in 1999. The 2002 state waters harvest was 39.0 million pounds (17,690 mt) from the Central and Western GOA areas (Table 20). The 2002 ABC for Pacific cod in the Gulf of Alaska was reduced 15% from the previous year (Thompson et al, 2001).

2002 Kodiak Area Fishery

The waters of the Kodiak Area, part of the CGOA, closed to directed fishing for the inshore processing component on March 9, 2002. The state-waters Pacific cod fishery opened seven days following and remained open to December 31. The federal CGOA reopened to Pacific cod fishing on September 1, 2002. However, as the total state-waters GHF had not been harvested, state waters did not reopen to a parallel fishery as stipulated in the Pacific cod management plan. The harvest of Pacific cod from state waters of the Kodiak Area in the 2002 parallel fishery totaled 3.9 million pounds (1,786 mt; Table 21). Pot gear accounted for the majority of harvest in the Kodiak fishery, with approximately 2.3 million pounds (1,052 mt). Longline gear also contributed a significant portion of the Pacific cod production, harvesting 1.3 million pounds (598 mt). The trawl harvest of Pacific cod was well below levels taken prior to the implementation of SSL measures. In addition to SSL restrictions, additional areas of state waters were closed to non-pelagic trawling beginning in 1999 by the BOF. The majority of Pacific cod harvest with trawls occurred as bycatch during directed flatfish fisheries on the westside of Kodiak Island where there are two seasonal non-pelagic trawl areas.

2002 Chignik Area Fishery

The majority of the productive Pacific cod fishing grounds in the Chignik Area are closed to all fishing during federal fisheries. These closures include state and federal waters. The closures were implemented in 2001 as part of the SSL actions and remained in effect for the 2002 fisheries. The parallel season in the Chignik Area closed to directed fishing for the inshore processing component on March 9, 2002. As was the case in the Kodiak Area, the state-waters GHL had not been fully attained when the scheduled federal reopening of the CGOA occurred on September 1. Therefore, state waters remained under state-waters rules while the federal fishery opened beyond three nautical miles from shore in those waters not closed for SSL conservation reasons. The 2002 parallel fishery catch from state waters of the Chignik Area was 0.3 million pounds (134 mt) (Table 22). Pot gear accounted for the majority of harvest in the Chignik Area (113 mt).

2002 South Alaska Peninsula Area Fishery

The inshore processing component of the “A” season directed Pacific cod fishery in the federal WGOA, which includes the South Alaska Peninsula Area, closed on February 26, 2002. The state-waters fishery GHL was fully attained by September 1, so state waters reopened to a parallel fishery on that date. The total 2002 harvest of Pacific cod from state waters during the parallel fishery was 7.2 million pounds (3,277 mt; Table 23). A significant reduction in Pacific cod harvest with trawl gear occurred in 2002. The 2001 harvest by trawls was 2.3 million pounds (1,063); in 2002 this dropped to 0.7 million pounds (345 mt). Pot gear harvested approximately 83% of the cod taken in state waters during parallel fisheries. The majority of vessels in the South Alaska Peninsula parallel fishery were 58 feet overall length or smaller.

PARALLEL WALLEYE POLLOCK FISHERIES

State waters opened for a parallel walleye pollock season concurrent with federal seasons managed by NMFS. Harvest quotas were released in four openings during 2002 and were designated A, B, C and D seasons (Table 24). The catch was primarily retained with pelagic trawl gear, although other types of gear are legal. State water harvest of pollock from the CGOA increased to 43% of the total harvest up from only 21% in 2001 and 4% in 2000. (Table 25). The proportion of Western GOA harvest that came from State waters was 49% in 2002, slightly more than half the previous year’s percentage of 74%. The harvest of pollock from state waters in the Kodiak and Chignik Areas both rose in 2002 from their 2001 levels. Harvest in the Kodiak Area increased to 23.1 million pounds (10,478 mt) in 2002 from the 17.7 million pounds (8,028 mt) taken in state waters in 2001 (Table 26). Chignik Area state water harvest increased to 7.7 million pounds (3,493 mt) in 2002 up from 0.4 million pounds (181 mt) harvested in 2001. The 2002 state water harvest of pollock fell in the South Alaska Peninsula Area. The 2001 harvest was 48.9 million (22,181 mt) and was the highest take of pollock from state waters since 1989. The 2002 harvest decreased to 18.5 million pounds (8,392 mt). Figure 14 illustrates walleye pollock harvest by statistical area for the three management areas.

MISCELLANEOUS GROUND FISH

Other species of groundfish harvested 1.6 million pounds (725 mt) in state waters of the Kodiak, Chignik, and South Alaska Peninsula Areas during 2002 parallel fisheries. Species harvested include Atka mackerel, Pacific Ocean perch, dusky rockfish, flathead sole, arrowtooth flounder, yellowfin sole, rock sole, English sole, and various skate and shark species (Table 1). These fish were primarily taken in trawl fisheries but were occasionally captured incidentally by other gear types.

Exploitation for flatfish was limited primarily because non-pelagic trawls are prohibited in most state waters. Other harvest methods have not proven economically effective to capture flatfish.

Several vessel operators and processors expressed an interest in targeting skates with longlines in 2002. Longline halibut bycatch allowances were achieved during the Pacific cod “A season” fishery, effectively closing down longline operations until the fall release of halibut bycatch during the “B season” cod on September 1.

Some incidental catch of other species occurred during pot and jig fisheries. In most instances, fish with a high market value, such as rockfish or lingcod, are retained and sold along with the target species. Those that are not marketable, such as sculpins and arrowtooth flounder, are released at sea. Many of these fish are not reported as discarded at sea on fish tickets.

NON-PELAGIC TRAWL CLOSURES

There is a patchwork of time and area closures to non-pelagic trawl gear around Kodiak Island and along the Alaska Peninsula. Generally, bays have been closed year round since 1986 (Figure 15). Modifications occurred in 1993, when the BOF created a non-pelagic trawl fishery that required 100% observer coverage in Marmot Bay and South Sitkalidak Strait. Crab bycatch limits were established and vessels were required to report to ADF&G daily. Additional changes occurred in 1994 and 1995 when the BOF opened state waters near Castle Rock and Sanak Island.

Non-pelagic trawling was considered again during 1999 with public proposals to close all state waters in the Kodiak and Chignik Areas. The BOF adopted those proposals with the exception of a strip along the westside of Kodiak Island, which was left open seasonally. This seasonal opening of state waters was left in place to allow non-pelagic trawls access to flatfish resources during parallel seasons. Additional closure areas in 1999 included state waters along the Alaska Peninsula from Cape Kumlik to Cape Douglas, Marmot Bay and South Sitkalidak on Kodiak Island, and areas off Sitkinak and Ugak Islands. No additional closures were implemented for the 2002 fisheries.

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Table 1. Kodiak, Chignik, and South Alaska Peninsula Areas state water groundfish harvest in whole pounds as reported on fish tickets, 2002.

Species	Kodiak				Chignik				South Alaska Peninsula				Total ^a			
	Vessels	Total Harvest	Discards		Vessels	Total Harvest	Discards		Vessels	Total Harvest	Discards		Vessels	Total Harvest	Discards	
			at sea	shore ^b			at sea	shore ^b			at sea	shore ^b			at sea	shore ^b
Walleye pollock	65	23,067,572	1,000	84,860	22	7,684,760	3,000	0	32	18,519,695	35,401	45	119	49,272,027	39,401	84,905
Pacific cod	86	12,372,196	0	0	24	4,442,615	0	0	109	19,938,041	25	0	219	36,752,852	25	0
Arrowtooth flndr.	43	670,604	62,349	280	21	50,196	901	0	32	110,458	536	1,492	96	831,258	63,786	1,772
Black rockfish ^{c,e}	26	196,166	0	18	7	81,015	0	0	9	102,114	0	869	42	379,295	0	887
Flathead sole	30	220,387	132	343	18	26,791	0	0	29	110,410	155	2,386	77	357,588	287	2,729
Other ^d	14	4,451	83	0	3	65	45	0	15	4,720	934	35	32	9,236	1,062	35
Rock sole	15	324,825	0	2,090		Confidential			12	2,366	113	76	27	327,191	113	2,166
Skate	31	49,336	4,327	2,736	5	0	17,929	0	7	0	2,505	0	43	49,336	24,761	2,736
Pac. Ocean perch	14	5,419	0	0	3	13	0	0	4	549	0	0	21	5,981	0	0
Dusky rockfish	25	27,366	0	0		Confidential			7	2,102	16	617	32	29,468	16	617
Lingcod ^c	53	18,233	3,943	29		Confidential			0	0	0	0	53	18,233	3,943	29
Rex sole	16	1,508	0	0	7	512	0	0	12	543	0	72	35	2,563	0	72
Sablefish ^e	18	2,501	889	0	6	532	527	0		Confidential			24	3,033	1,416	0
Shark	26	115,828	100,983	0	11	9,600	8,009	1,153	10	13,220	12,287	933	47	138,648	121,279	2,086
Yelloweye rkfsh.	27	11,426	0	0	7	483	2	0	4	184	155	0	38	12,093	157	0
Sculpins	16	5,851	1,015	0	4	0	2,056	0	15	4,796	3,984	4	35	10,647	7,055	4
Lumpsucker	21	17,225	177	0	17	1,856	0	873	17	1,157	0	1,150	55	20,238	177	2,023
Starry flounder	11	13,762	1,680	0	0	0	0	0	0	0	0	0	11	13,762	1,680	0
Shortraker rkfsh.	7	2,263	3	0		Confidential				Confidential			7	2,263	3	0
Rougheye rkfsh.	12	940	0	0		Confidential				Confidential			12	940	0	0
Butter sole	4	2,417	0	0	0	0	0	0	0	0	0	0	4	2,417	0	0
Yellowfin Sole	4	3,996	6	0	0	0	0	0	3	213	166	3	7	4,209	172	3
Dover sole	4	547	0	0	0	0	0	0		Confidential			4	547	0	0
Northern rkfsh.	3	331	0	0	0	0	0	0		Confidential			3	331	0	0
Total	556	37,135,150	176,587	90,356	113	12,298,438	32,469	2,026	317	38,810,568	56,277	7,682	986	88,244,156	265,333	100,064

^aConfidential harvest not reflected in total.

^bDiscarded on shore after delivery, before processing.

^cADF&G manages black rockfish and lingcod in state and federal waters, therefore all harvest is reported here.

^dIncludes 14 miscellaneous species of groundfish.

^eDoes not include Western District of the South Alaska Peninsula Area.

Source: Alaska Department of Fish & Game fish ticket database.

Table 2. Groundfish emergency orders issued for the Kodiak, Chignik, and South Alaska Peninsula Areas, 2002.

Emergency Order	Effective Date	Explanation
4-GF-01-02	January 1, 2002	Established commercial groundfish fishing seasons and bycatch limits for species managed by the state of Alaska in the Kodiak, Chignik, South Alaska Peninsula, Bering Sea-Aleutian Islands and Chukchi-Beaufort Areas.
4-GF-02-02	March 1, 2002	Opened the Chignik Area state-waters Pacific cod season.
4-GF-03-02	March 5, 2002	Opened the South Alaska Peninsula state-waters Pacific cod season.
4-GF-04-02	March 16, 2002	Opened the Kodiak Area state-waters Pacific cod season.
4-GF-05-02	March 21, 2002	Closed the Eastside District of the Kodiak Area to directed black rockfish fishing.
4-GF-06-02	March 24, 2002	Closed the state-waters Pacific cod fishery to pot gear in the South Alaska Peninsula Area.
4-GF-07-02	April 2, 2002	Closed the Northeast and Southeast Districts of the Kodiak Area to directed black rockfish fishing.
4-GF-08-02	April 16, 2002	Closed the Afognak District of the Kodiak Area to directed black rockfish fishing.
4-GF-09-02	April 26, 2002	Closed the state-waters Pacific cod fishery to jig gear in the South Alaska Peninsula Area.
4-GF-10-02	May 4, 2002	Closed the state-waters Pacific cod fishery to pot gear in the Kodiak Area.
4-GF-12-02	May 19, 2002	Closed the Chignik Area to directed black rockfish fishing.
4-GF-13-02	June 7, 2002	Closed the Southwest District of the Kodiak Area to directed black rockfish fishing.
4-GF-14-02	June 15, 2002	Closed the South Alaska Peninsula Area to directed black rockfish fishing.
4-GF-16-02	August 15, 2002	Closed and immediately reopened the state-waters Pacific cod fishery in the Chignik and Kodiak Areas, and removed all allocations by gear type in both areas.
4-GF-17-02	September 1, 2002	Opened a parallel fishery for Pacific cod in the state waters of the South Alaska Peninsula Area.
4-GF-19-02	October 30, 2002	Closed and immediately reopened the state-waters Pacific cod fishery in the Kodiak and Chignik Areas. Removed restrictions on the number of groundfish pots and jig machines; removed the vessel size limit in the Chignik Area, and designated the Kodiak Area as a nonexclusive registration area for Pacific cod.

Note: Emergency orders 11, 15, and 18 were issued for groundfish fisheries in the Bering Sea/Aleutian Islands Area.

Table 3. Catch, effort, value, and average weight from the Westward Region state-waters Pacific cod fisheries, 1997-2002.

Year	Vessels ^a	Landings	GHL ^b	Pounds harvested	Price/Pound	Fishery value	Avg. Weight (lbs.)
<u>Kodiak Area</u>							
1997	105	710	8.5	7,600,571	\$0.23	\$1,748,131	9.1
1998	129	979	8.1	8,279,269	\$0.23	\$1,904,232	8.5
1999	179	1,284	11.7	10,781,817	\$0.36	\$3,881,454	8.1
2000	216	1,824	12.0	8,635,207	\$0.38	\$3,281,379	7.5
2001	109	732	10.6	5,033,781	\$0.38	\$1,912,837	7.0
2002	86	537	8.7	8,434,181	\$0.29	\$2,445,912	7.8
<u>Chignik Area</u>							
1997	12	74	5.9	1,143,261	\$0.18	\$205,787	7.5
1998	44	297	5.7	5,609,498	\$0.20	\$1,121,900	6.3
1999	43	450	8.2	6,454,215	\$0.22	\$1,419,927	6.4
2000	22	158	6.7	1,775,779	\$0.30	\$532,734	6.1
2001	34	192	6.0	4,145,094	\$0.27	\$1,119,175	7.9
2002	24	189	4.9	4,145,594	\$0.20	\$829,119	6.9
<u>South Alaska Peninsula Area</u>							
1997	88	642	9.4	9,370,498	\$0.18	\$1,686,690	7.0
1998	69	421	9.0	8,639,769	\$0.17	\$1,468,761	7.3
1999	75	552	13.0	11,880,116	\$0.26	\$3,088,830	11.3
2000	94	671	15.1	15,133,686	\$0.29	\$4,388,769	6.8
2001	127	727	13.4	12,713,370	\$0.29	\$3,686,877	7.2
2002	109	578	12.4	12,713,370	\$0.22	\$2,796,941	6.7
<u>Westward Region Total</u>							
1997	205	1,426	23.8	18,114,330	\$0.20	\$3,640,608	
1998	242	1,697	22.8	22,528,536	\$0.20	\$4,494,892	
1999	297	2,286	32.9	29,116,148	\$0.29	\$8,390,212	
2000	332	2,653	33.8	25,544,672	\$0.32	\$8,202,881	
2001	270	1,651	30.0	21,892,245	\$0.31	\$6,718,889	
2002	219	1,304	26.0	25,293,145	\$0.24	\$6,071,972	

^aSome vessels used both gear types.

^bGuideline harvest level in millions of pounds.

Source: Alaska Department of Fish and Game fish ticket database.

Table 4. Kodiak Area state-waters Pacific cod fishery openings, 1997-2002.

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

Table 5. Catch and effort by gear type from the Kodiak Area state-waters Pacific cod fishery, 1997-2002.

Year	Gear	Vessels	Landings	Pounds	Price per pound
1997	Jig	69	472	1,961,800	\$0.23
	Pot	38	226	5,458,536	\$0.23
1998	Jig	88	656	2,104,995	\$0.23
	Pot	50	311	6,316,635	\$0.22
1999	Jig	115	781	2,274,991	\$0.40
	Pot	84	475	8,541,161	\$0.34
2000	Jig	144	1,124	2,811,157	\$0.37
	Pot	72	479	5,726,905	\$0.38
2001	Jig	74	495	1,433,256	\$0.37
	Pot	35	237	3,600,525	\$0.38
2002	Jig	54	328	1,377,921	\$0.28
	Pot	34	209	7,056,259	\$0.29

Source: Alaska Department of Fish and Game fishticket database.

Table 6. Catch by statistical area from the state-waters Pacific cod fishery in the Kodiak Area, 2002.

Statistical Area	Pounds	Vessels	Landings ^b
515801	65,636	3	18
525701	200,215	19	49
525703	46,059	7	12
525731	79,158	16	40
525733	116,073	23	77
525805	25,179	4	6
525806	4,080	4	4
535601	20,914	4	4
535631	21,780	6	7
535633	156,939	5	12
535634	407,631	8	18
535701	49,406	4	7
535732	1,006,903	24	65
535733	242,035	5	13
535734	105,755	14	21
535803	381,189	13	32
535832	287,527	4	7
545601	92,365	6	12
545632	477,509	9	34
545633	98,731	5	15
545701	1,269,492	10	27
545703	140,828	4	6
545733	1,264,025	6	40
545734	482,906	5	16
545802	166,670	5	8
545803	393,491	5	15
Other ^a	831,687	13	37
Total	8,434,183		

^aTotal of 9 statistical areas, combined to maintain confidentiality.

^bSome landings involve multiple statistical areas.

Source: Alaska Department of Fish and Game fish ticket database.

Table 7. Chignik Area state-waters Pacific cod fishery openings, 1997-2002.

	Pot Gear	Jig Gear
	<i>Fishery Dates:</i>	
1997	April 15 - June 15 August 1 - September 30 October 28- December 31	April 15 - June 15 August 1 - September 30 October 28- December 31
	<i>Management Actions:</i> October 31 allocation rollover-vessel size limit, gear limits, exclusive registration area lifted.	
	<i>Fishery Dates:</i>	
1998	April 1 - April 26	April 1- April 26 May 20 - December 31
	<i>Management Actions:</i> May 20 reopened to jig gear. October 31 allocation rollover - gear limits lifted.	
	<i>Fishery Dates:</i>	
1999	April 15 - September 1 October 5 - December 31	April 21 - September 1 October 5 - December 31
	<i>Management Actions:</i> October 31 allocation rollover - limits on number of pots, jigs, and vessel size removed, exclusive area designation lifted.	
	<i>Fishery Dates:</i>	
2000	April 15 - December 31	April 15 - December 31
	<i>Management Actions:</i> October 31 - limits on number of pots, jigs, and vessel size removed.	
	<i>Fishery Dates:</i>	
2001	March 11 - December 31	March 11 - December 31
	<i>Management Actions:</i> October 31 - limits on number of pots, jigs, and vessel size removed.	
	<i>Fishery Dates:</i>	
2002	March 1 - December 31	March 1 - December 31
	<i>Management Actions:</i> October 31 - limits on number of pots, jigs, and vessel size removed.	

Table 8. Catch and effort by gear type from the Chignik Area state-waters Pacific cod fishery, 1997-2002.

Year	Gear	Vessels	Landings	Pounds	Price per pound
1997	Jig	4	14	35,002	\$0.18
	Pot	10	59	1,081,193	\$0.18
1998	Jig	12	58	158,076	\$0.22
	Pot	32	217	5,451,422	\$0.18
1999	Jig	11	54	204,716	\$0.26
	Pot	30	346	6,249,499	\$0.18
2000	Jig	5	12	38,453	N/A
	Pot	19	146	1,693,069	\$0.30
2001	Jig	18	73	377,355	N/A
	Pot	16	119	2,236,269	\$0.27
2002	Jig	13	55	311,417	\$0.20
	Pot	12	134	3,834,176	\$0.20

Table 9. Catch by statistical area from the state-waters Pacific cod fishery in the Chignik Area, 2002.

Statistical Area	Pounds	Vessels	Landings ^a
565633		Confidential ^b	
585531	2,727,125	16	88
585601	89,666	3	3
585603	120,812	3	7
595531	1,207,490	20	90
Total	4,145,093		

^aSome landings involve multiple statistical areas.

^bLess than three vessels landed Pacific cod from this area.

Source: Alaska Department of Fish and game fish ticket database.

Table 10. South Alaska Peninsula Area state-waters Pacific cod fishery openings, 1997-2002.

	Pot Gear	Jig Gear
1997	<p><i>Fishery Dates:</i> April 4 -December 22</p> <p><i>Management Actions:</i> October 31 allocation rollover- vessel size limit, gear limits, exclusive registration area lifted.</p>	<p>April 4 -December 22</p>
1998	<p><i>Fishery Dates:</i> March 10 - April 14</p> <p><i>Management Actions:</i> October 31 allocation rollover- No action taken; federal WGOA reopened Oct. 9 - Dec 31.</p>	<p>March 10 - October 9</p>
1999	<p><i>Fishery Dates:</i> March 15 - April 11 October 31- December 31</p> <p><i>Management Actions:</i> October 31 allocation rollover- Reopened to pot gear. November 10- Number of pots and jig machine limits lifted.</p>	<p>March 15 - December 31</p>
2000	<p><i>Fishery Dates:</i> March 11 - April 8</p> <p><i>Management Actions:</i> Fishery closed when GHM allocations were attained.</p>	<p>March 11 - September 19</p>
2001	<p><i>Fishery Dates:</i> March 6 - April 13</p> <p><i>Management Actions:</i> Fishery closed when GHM allocations were attained.</p>	<p>March 6 - June 12</p>
2002	<p><i>Fishery Dates:</i> March 5 - March 24</p> <p><i>Management Actions:</i> Fishery closed when GHM allocations were attained.</p>	<p>March 5 - April 26</p>

Table 11. Catch and effort by gear type from the South Alaska Peninsula Area state-waters Pacific cod fishery, 1997-2002.

Year	Gear	Vessels	Landings	Pounds	Price per pound
1997	Jig	44	178	350,069	\$0.18
	Pot	53	474	9,119,779	\$0.19
1998	Jig	29	125	426,916	\$0.16
	Pot	61	342	8,699,338	\$0.17
1999	Jig	25	165	706,131	\$0.28
	Pot	60	397	11,473,971	\$0.24
2000	Jig	28	145	757,953	\$0.30
	Pot	68	505	14,286,151	\$0.28
2001	Jig	70	417	3,121,161	\$0.30
	Pot	57	310	10,390,827	\$0.28
2002	Jig	68	309	2,042,198	\$0.24
	Pot	50	269	10,671,172	\$0.21

Table 12. Catch by statistical area from the state-waters Pacific cod fishery in the South Alaska Peninsula Area, 2002.

Statistical Area	Pounds	Vessels	Landings ^b
595432	486,043	12	29
595433	31,920	3	4
595434	274,184	13	29
595502	1,072,949	11	29
595503	503,216	7	24
595533	472,470	3	8
605432	1,556,383	18	43
605501	76,293	7	8
605502	1,314,091	26	68
605504	699,687	29	77
625401	2,753,323	28	87
625431	1,473	3	3
625434	245,235	13	21
625502	64,017	3	10
635432	731,266	18	49
635434	1,718,504	27	90
635436	477,887	3	11
Other ^a	234,429	10	21
Total	12,713,370		

^aTotal of 8 statistical areas, combined to maintain confidentiality.

^bSome landings involve multiple statistical areas.

Source: Alaska Department of Fish and Game fish ticket database.

Table 13. Catch and effort, Kodiak Area black rockfish fishery, 1990-2002.

Year	Vessels	Landings	Directed GHL	Total Harvest	Price per pound
1990	12	NA	NA	66,709	\$0.22
1991	58	NA	NA	874,718	\$0.29
1992	45	NA	NA	487,208	\$0.25
1993	18	NA	NA	107,825	\$0.22
1994	19	NA	NA	128,507	\$0.25
1995	41	NA	NA	320,899	\$0.36
1996	52	NA	NA	311,992	\$0.32
1997	65	NA	NA	224,237	\$0.27
1998	74	277	190,000	201,318	\$0.32
1999	92	320	185,000	135,589	\$0.40
2000	95	346	185,000	256,266	\$0.41
2001	55	236	185,000	225,877	\$0.40
2002	26	121	185,000	196,166	\$0.43

Table 14. Catch and effort, Chignik Area black rockfish fishery, 1990-2002.

Year	Vessels	Landings	Directed GHL	Total Harvest	Price per pound
1990	0	0	NA	0	NA
1991	0	0	NA	0	NA
1992	0	0	NA	0	NA
1993	4	NA	NA	357	\$0.26
1994	0	0	NA	0	NA
1995	12	NA	NA	28,668	NA
1996	12	NA	NA	201,828	NA
1997	10	NA	NA	80,742	NA
1998	15	30	100,000	87,912	\$0.23
1999	15	41	100,000	11,437	\$0.25
2000	13	24	100,000	95,747	\$0.41
2001	14	35	100,000	102,904	\$0.35
2002	7	13	100,000	81,015	\$0.41

Table 15. Catch and effort, South Alaska Peninsula Area black rockfish fishery, 1990-2002.

Year	Vessels	Landings	Directed GHL	Total Harvest	Price per pound
1990	*** ^a	NA	NA	*** ^a	NA
1991	6 ^a	NA	NA	145 ^a	NA
1992	0	0	NA	0	NA
1993	*** ^b	NA	NA	*** ^b	NA
1994	1 ^b	NA	NA	2,118 ^b	NA
1995	14	NA	NA	120,971	NA
1996	26	NA	NA	165,496	NA
1997	15	NA	NA	184,697	NA
1998	18	277	100,000	90,267	\$0.23
1999	23	320	100,000	71,241	\$0.37
2000	27	346	100,000	95,605	\$0.35
2001	32	85	100,000	105,896	\$0.35
2002	9	29	100,000	102,114	\$0.32

^aSouth Alaska Peninsula data from 1990 and 1991 combined to maintain confidentiality.

^bSouth Alaska Peninsula data from 1992 and 1994 combined to maintain confidentiality.

NA=Not Available

Table 16. Black rockfish harvest from the Kodiak, Chignik, and South Alaska Peninsula Areas, 2002.

Area/District	Guideline	Total Harvest ^a	Directed Fishery Closure Date	Pounds	
	Harvest Level			Directed Harvest	Incidental Harvest
Kodiak Area					
Afognak	35,000	53,326	Apr 16	53,320	6
Northeast	20,000	36,005	Apr 02	35,395	610
Eastside	30,000	31,084	Mar 21	28,415	2,669
Southeast	30,000	29,090	Apr 02	28,962	128
Southwest	20,000	21,293	Jun 07	21,293	0
Westside	30,000	20,590	Dec 31	18,260	2,330
Mainland	20,000	4,778	Dec 31	4,778	0
Total (Kodiak Area)	185,000	196,166		190,423	5,743
Chignik Area	100,000	81,015	May 19	78,387	2,628
South Alaska Peninsula Area	100,000	102,114	Jun 15	98,709	3,405

^aIncludes incidental harvest.

Source: Alaska Department of fish and Game fish ticket database.

Table 17. Harvest, vessels, and landings by statistical area from the black rockfish fisheries in the Kodiak, Chignik, and South Alaska Peninsula Areas, 2002.

Kodiak Area

Stat area	Pounds	Vessels	Landings
525701	19,071	6	15
525703	11,237	5	11
525731	4,733	11	14
525732	516	3	3
525733	30,756	12	29
525806	22,646	7	15
535631	7,964	3	8
535634	12,993	4	7
535732	4,553	7	9
Other ^a	81,697	26	40
Total	196,166		

^aTotal of 18 statistical areas, combined to maintain confidentiality.

Chignik Area

Stat area	Pounds	Vessels	Landings
565633	47,323	3	4
595531	8,221	3	4
Other ^b	25,471	6	8
Total	81,015		

^bTotal of 4 statistical areas, combined to maintain confidentiality.

South Alaska Peninsula Area

Stat area	Pounds	Vessels	Landings
595502	16,474	3	4
605432	15,948	3	6
605504	8,511	5	8
Other ^c	61,181	12	18
Total	102,114		

^cTotal of 10 statistical areas, combined to maintain confidentiality.

Note: some vessels made multiple landings and participated in multiple areas.

Source: Alaska Department of Fish and Game fish ticket database.

Table 18. Lingcod harvest by gear type from the Kodiak, Chignik, and South Alaska Peninsula Areas, 1988-2002.

Year	Gear type ^a				Total
	Jig	Longline	Pot	Trawl	
1988	Confidential	43	0	Confidential	136,294 ^b
1989	Confidential	0	0	13,819	14,394 ^b
1990	1,418	Confidential	Confidential	8,869	11,846 ^b
1991	8,375	501	Confidential	739	10,001 ^b
1992	5,569	4,269	Confidential	10,959	20,875 ^b
1993	Confidential	1,161	0	4,778	6,149 ^b
1994	4,820	803	0	329	5,952 ^b
1995	34,573	3,567	1,143	1,996	41,280
1996	43,334	7,898	0	10,929	62,229
1997	12,637	6,499	Confidential	5,267	28,635 ^b
1998	5,756	1,714	Confidential	3,514	11,241 ^b
1999	1,358	4,293	11,185	5,002	21,870
2000	3,400	8,993	3,280	4,511	20,184
2001	527	6,753	5,822	7,272	20,374
2002	-----6,131----- ^b		2,465	5,380	14,290

^aData combined due to confidentiality standards.

^bData combined due to confidentiality standards.

Source: Alaska Department of Fish and Game fish ticket database.

Table 19. Lingcod harvest from the Kodiak, Chignik, and South Alaska Peninsula Areas, 1988-2002.

Year	Kodiak	Chignik	South Alaska Peninsula	Total Pounds
1988	136,294	0	0	136,290
1989	13,888	Confidential	Confidential	12,194 ^a
1990	11,846	0	0	9,144
1991	9,956	Confidential	Confidential	10,028 ^a
1992	20,807	Confidential	Confidential	20,753 ^a
1993	4,739	Confidential	Confidential	6,143 ^a
1994	5,952	0	0	5,949
1995	33,826	4,313	4,640	42,779
1996	55,000	7,119	Confidential	62,197 ^a
1997	28,654	Confidential	0	28,635 ^a
1998	11,185	Confidential	Confidential	9,091 ^a
1999	21,560	Confidential	Confidential	21,869 ^a
2000	17,013	-----3,171 ^a -----		20,183 ^a
2001	20,328	Confidential	0	12,686
2002	14,290	0	0	14,290

^aData combined due to confidentiality standards.

Weight does not include discards at sea.

Source: Alaska Department of Fish and Game fish ticket database.

Table 20. Pacific cod harvest in millions of pounds from the Central and Western Gulf of Alaska, 1989-2002.

Year	NMFS Area	Vessels	Landings	Pounds	State Waters	
					Pounds ^a	%
1989	Central	236	1,460	60.4	4.4	7%
	Western	137	598	31.1	7.8	25%
1990	Central	595	3,222	92.4	11.8	13%
	Western	165	985	85.7	13.1	15%
1991	Central	908	4,389	101.2	19.4	19%
	Western	280	1,380	76.5	4.8	6%
1992	Central	1093	5,115	89.9	16.3	18%
	Western	296	1,452	73.7	13.2	18%
1993	Central	727	3,347	72.1	11.5	16%
	Western	166	987	39.8	1.9	5%
1994	Central	632	2,825	63.5	12.9	20%
	Western	208	1,150	32.4	7.4	23%
1995	Central	907	4,369	97.1	21.7	22%
	Western	266	1,115	42.3	9.0	21%
1996	Central	655	3,916	91.7	16.9	18%
	Western	231	1,336	46.2	12.9	28%
1997	Central	581	5,589	102.9	24.5	24%
	Western	216	1,631	59.8	18.8	31%
1998	Central	575	6,225	96.7	24.3	25%
	Western	202	1,637	54.9	17.5	32%
1999	Central	644	6,309	103.0	32.8	32%
	Western	197	1,859	58.1	21.0	36%
2000	Central	674	6,334	78.4	21.6	28%
	Western	214	1,916	60.7	27.4	45%
2001	Central	487	4,183	64.8	14.1	22%
	Western	306	1,962	42.8	19.8	46%
2002	Central	431	3,678	61.4	17.8	29%
	Western	241	1,738	46.5	21.2	46%

^aTotal for all gear types, state-waters and parallel fisheries.

Source: Alaska Department of Fish and Game fish ticket database.

Table 21. Pacific cod harvest by gear type from Kodiak Area during parallel seasons, 1997-2002.

Year	Gear Type				Total
	Pots	Longline	Trawl	Jig	
1997	8,408,596	1,918,998	954,239	13,683	11,295,516
1998	4,674,372	2,169,287	824,080	5,457	7,673,196
1999	5,925,404	2,563,187	1,219,321	14,084	9,721,996
2000	4,335,868	3,574,916	249,225	78,876	8,238,885
2001	2,951,937	2,494,328	222,454	58,455	5,727,174
2002	2,320,078	1,319,290	292,995	5,652	3,938,015

Table 22. Pacific cod harvest by gear type from Chignik Area during parallel seasons, 1997-2002.

Year	Gear Type				Total
	Pots	Longline	Trawl	Jig	
1997	541,102	3,939	99,761	22	644,824
1998	1,424,592	9,226	192,673	0	1,626,491
1999	585,239	3,623	39,704	1,875	630,441
2000	334,494	46,807	53,513	0	434,814
2001	237,722	48,856	12,957	2,564	302,099
2002	263,644	9,783	23,594	0	297,021

Table 23. Pacific cod harvest by gear type from South Alaska Peninsula Area during parallel seasons, 1997-2002.

Year	Gear Type				Total
	Pots	Longline	Trawl	Jig	
1997	1,693,527	246,467	7,665,722	5,768	9,611,484
1998	4,357,072	429,139	3,867,735	23,083	8,677,029
1999	3,076,651	33,934	5,306,891	10,172	8,427,648
2000	5,329,545	242,233	6,635,160	11,499	12,218,437
2001	3,269,714	79,392	2,342,551	347,792	6,039,449
2002	6,035,141	9,225	761,609	418,696	7,224,671

Note: weight includes all discards.

Source: Alaska Department of Fish and Game fish ticket database.

Table 24. Central and Western Gulf of Alaska walleye poll0ck fishery openings, 1998-2002.

1998	1999	2000	2001	2002
<u>Area 630</u>	<u>Area 630</u>	<u>Area 630</u>	<u>Area 630</u>	<u>Area 630</u>
Jan 20 - Feb 02	Jan 20 - Jan 27	Jan 20 - Jan 25	Jan 20 - Feb 14	Jan 20 - Jan 21
Jun 01 - Jun 12	Jun 01 - Jun 10	Mar 15 - Mar 17	Mar 15 - Mar 17	Jan 29 - Jan 30
Sep 01 - Sep 16	Sep 01 - Sep 02	Aug 20 - Aug 29	Aug 20 - Sep 10	Mar 10 - Mar 11
Sep 26 (<i>12 hour opening</i>)	Sep 14 - Sep 16	Oct 01 - Nov 01	Oct 01 - Nov 01	Mar 19 - Mar 20
	Sep 21 - Sep 24 (<i>39 hours</i>)			Aug 25 - Sep 04
				Oct 01 - Oct 02
<u>Area 620</u>	<u>Area 620</u>	<u>Area 620</u>	<u>Area 620</u>	<u>Area 620</u>
Jan 20 - Feb 07	Jan 20 - Feb 17	Jan 20 - Jan 27	Jan 20 - Bycatch status only	Jan 20 - Feb 25
Jun 01 - Jul 01	Jun 01 - Jun 11	Mar 15 - Mar 15	Mar 15 - Bycatch status only	Mar 10 - Mar 26
Sep 01 - Oct 12	Sep 01 - Sep 02	Aug 20 - Sep 15	Aug 20 - Sep 15	Aug 25 - Sep 15
Oct 27 - Oct 30	Sep 14 - Oct 01	Oct 01 - Nov 01	Oct 01 - Nov 01	Oct 01 - Nov 01
	Oct 06 - Oct 12			
	Oct 14 - Oct 15 (<i>36 hour opening</i>)			
<u>Area 610</u>	<u>Area 610</u>	<u>Area 610</u>	<u>Area 610</u>	<u>Area 610</u>
Jan 20 - Jan 26	Jan 20 - Jan 31	Jan 20 - Jan 31	Jan 20 - Jan 29	Jan 20 - Jan 23
Jun 01 - Jun 03	Jun 01 - Jun 07	Mar 15 - Mar 18	Mar 15 - Mar 16	Mar 10 - Mar 12
Jun 08 - Jun 19	Sep 01 (<i>6 hour opening</i>)	Aug 20 - Sep 15	Mar 21 - Mar 21 (<i>12 hour opening</i>)	Aug 25 - Aug 30
Sep 01 - Sep 02	Sep 14 - Sep 20	Oct 01 - Nov 01	Aug 20 - Sep 07	Oct 01 - Oct 05
Sep 09 - Sep 14	Sep 23 (<i>12 hour opening</i>)		Oct 01 - Oct 13	
Sep 24 - Sep 25				
		<u>Shelikof Strait Harvest Area</u>	<u>Shelikof Strait Harvest Area</u>	
		Jan 20 - Feb 10	Jan 20 - Mar 01	
		Mar 15 - Mar 25	Mar 15 - Mar 31	

Source: National Marine Fisheries Service Alaska Region Homepage.

Table 25. Walleye pollock harvest in millions of pounds from the Central and Western Gulf of Alaska, 1989-2002.

Year	NMFS Area	Vessels	Landings	Pounds ^a	State Waters	
					Pounds ^a	%
1989	Central	117	672	117.5	15.3	13%
	Western	30	61	28.9	0	0%
1990	Central	210	1,423	154.1	6.2	4%
	Western	80	231	23.2	0.9	4%
1991	Central	245	1,359	111.7	14.5	13%
	Western	120	353	77.7	0.8	1%
1992	Central	436	1,880	147.6	7.4	5%
	Western	173	530	39.0	3.9	10%
1993	Central	332	1,753	196.3	27.5	14%
	Western	93	511	45.3	11.3	25%
1994	Central	312	1,609	176.0	66.9	38%
	Western	97	449	47.7	15.3	32%
1995	Central	336	1,175	75.4	9.0	12%
	Western	161	502	65.9	22.4	34%
1996	Central	394	1,551	50.0	12.5	25%
	Western	190	451	53.0	31.3	59%
1997	Central	570	2,446	115.2	34.6	30%
	Western	231	420	62.1	19.3	31%
1998	Central	458	2,562	207.2	70.6	34%
	Western	143	387	65.8	38.1	58%
1999	Central	394	1,560	139.4	40.0	29%
	Western	115	443	52.6	27.9	53%
2000	Central	263	1,395	107.0	4.6	4%
	Western	99	422	39.0	28.9	74%
2001	Central	329	1,558	87.0	18.0	21%
	Western	91	587	66.0	49.0	74%
2002	Central	142	1,092	71.0	30.8	43%
	Western	56	329	39.0	19.0	49%

^aTotal weight for all gear types, weight includes all discards.

Source: Alaska Department of Fish and Game fish ticket database.

Table 26. Walleye pollock harvest in millions of pounds from Kodiak, Chignik and South Alaska Peninsula state waters, 1989-2002.

Year	Millions of Pounds		
	Kodiak	Chignik	South Alaska Peninsula
1989	14.9	0	0
1990	6.6	<0.1	0.4
1991	14.3	**a	0.3
1992	7.8	<0.1	3.6
1993	28.1	**a	11.2
1994	66.7	**a	15.3
1995	7.4	2.1	22.4
1996	12.5	0	30.5
1997	19.6	15.8	19.3
1998	24.8	36.1	38.1
1999	30.4	5.7	27.7
2000	4.6	<0.1	28.9
2001	17.7	0.4	48.9
2002	23.1	7.7	18.5

^aSmall harvest combined with Kodiak due to confidentiality restraints.
Weight includes all discards.

Source: Alaska Department of Fish and Game fish ticket database

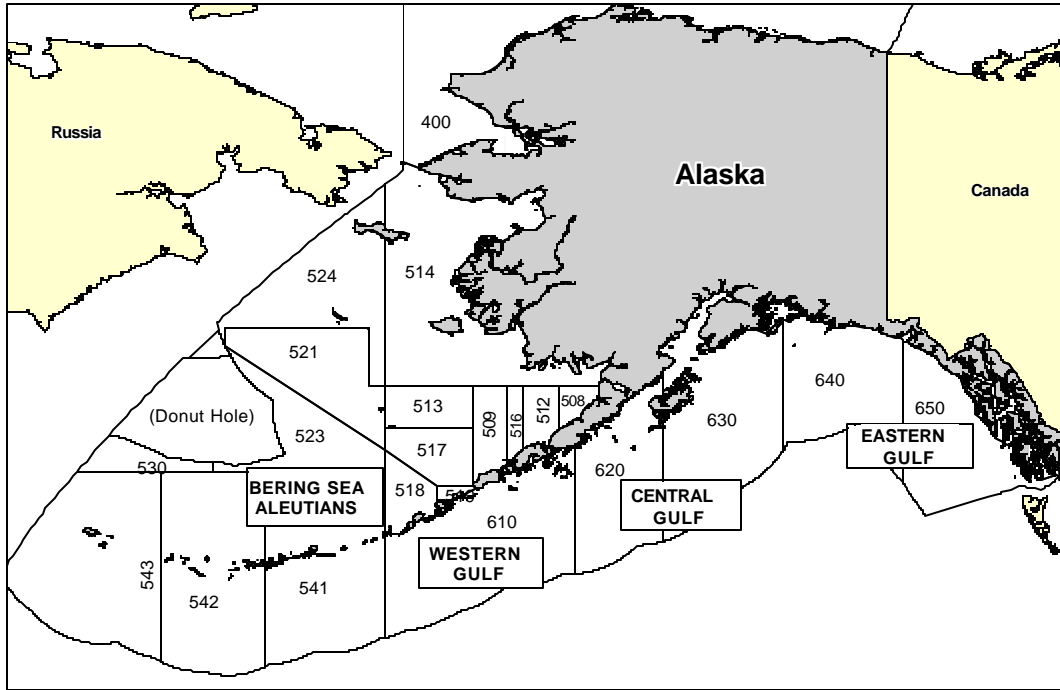


Figure 1. National Marine Fisheries Service statistical and reporting areas.

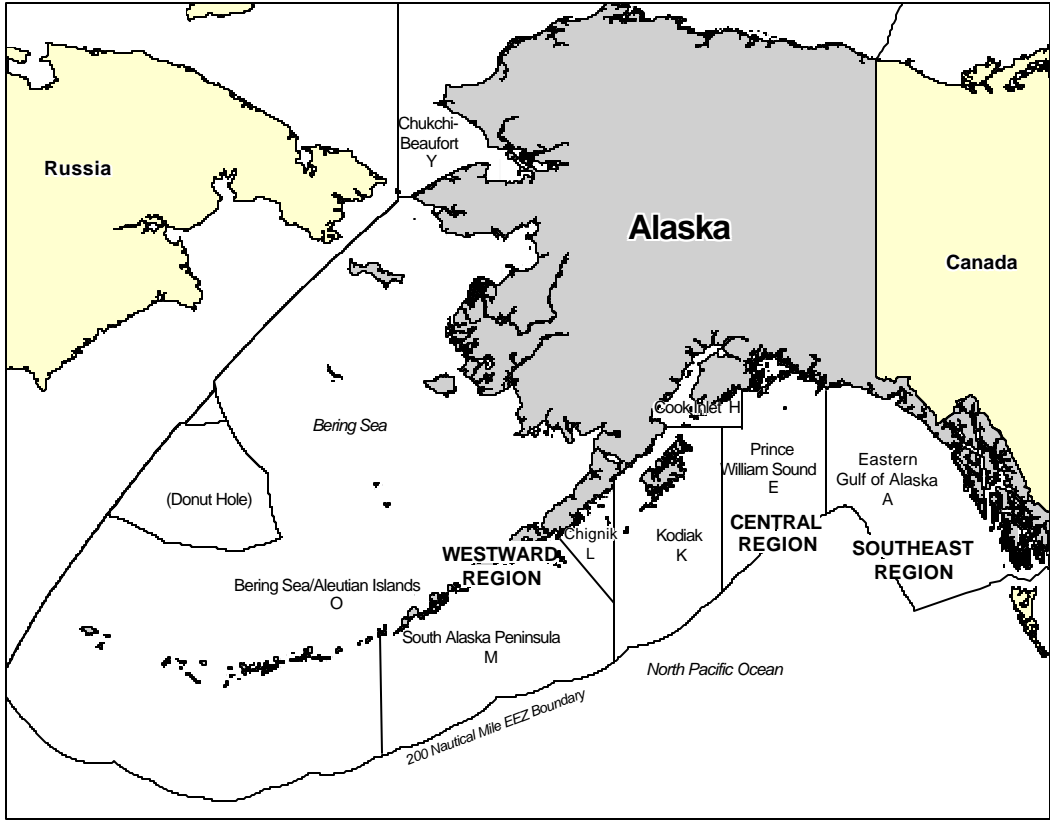


Figure 2. Alaska Department of Fish and Game groundfish registration areas and regions.

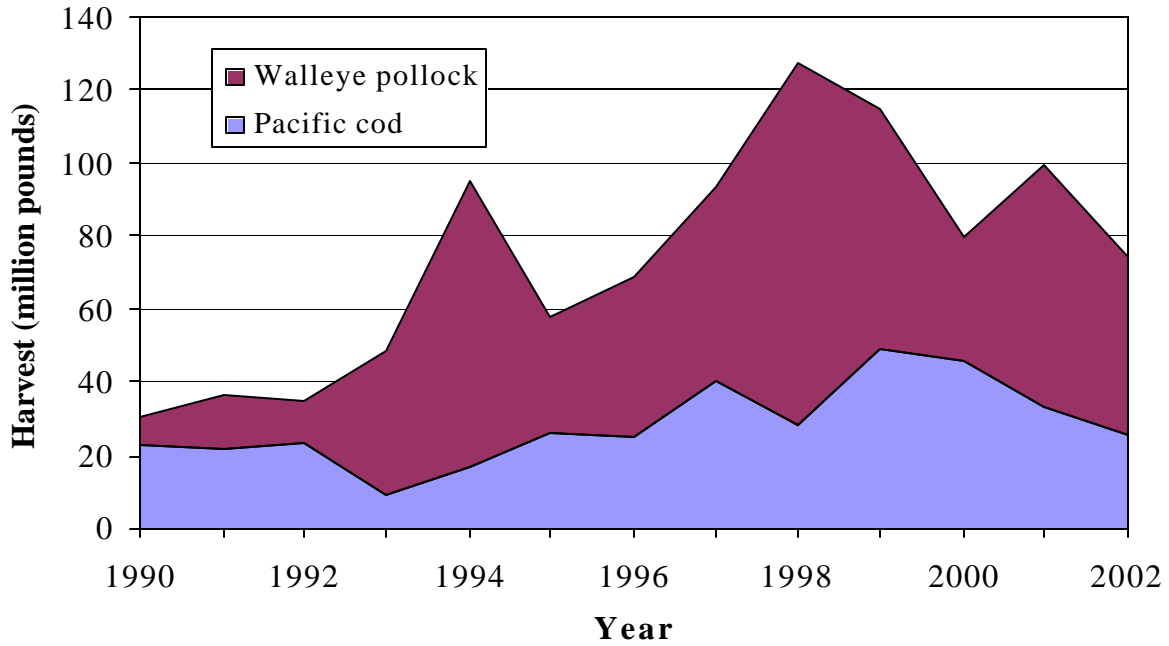


Figure 3. Kodiak, Chignik, and South Alaska Peninsula Areas harvest of Pacific Cod and walleye pollock from state waters, 1990-2002.

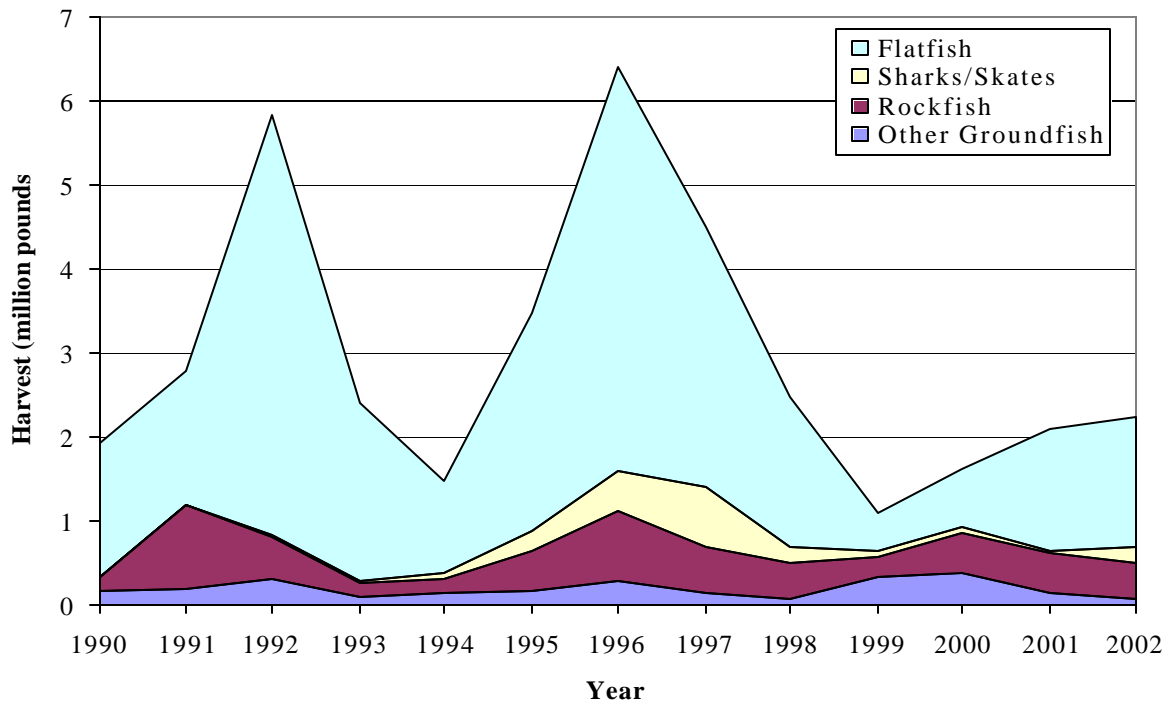


Figure 4. Kodiak, Chignik, and South Alaska Peninsula Areas harvest of flatfish, sharks/skate, rockfish, and other groundfish species from state waters, 1990-2002.

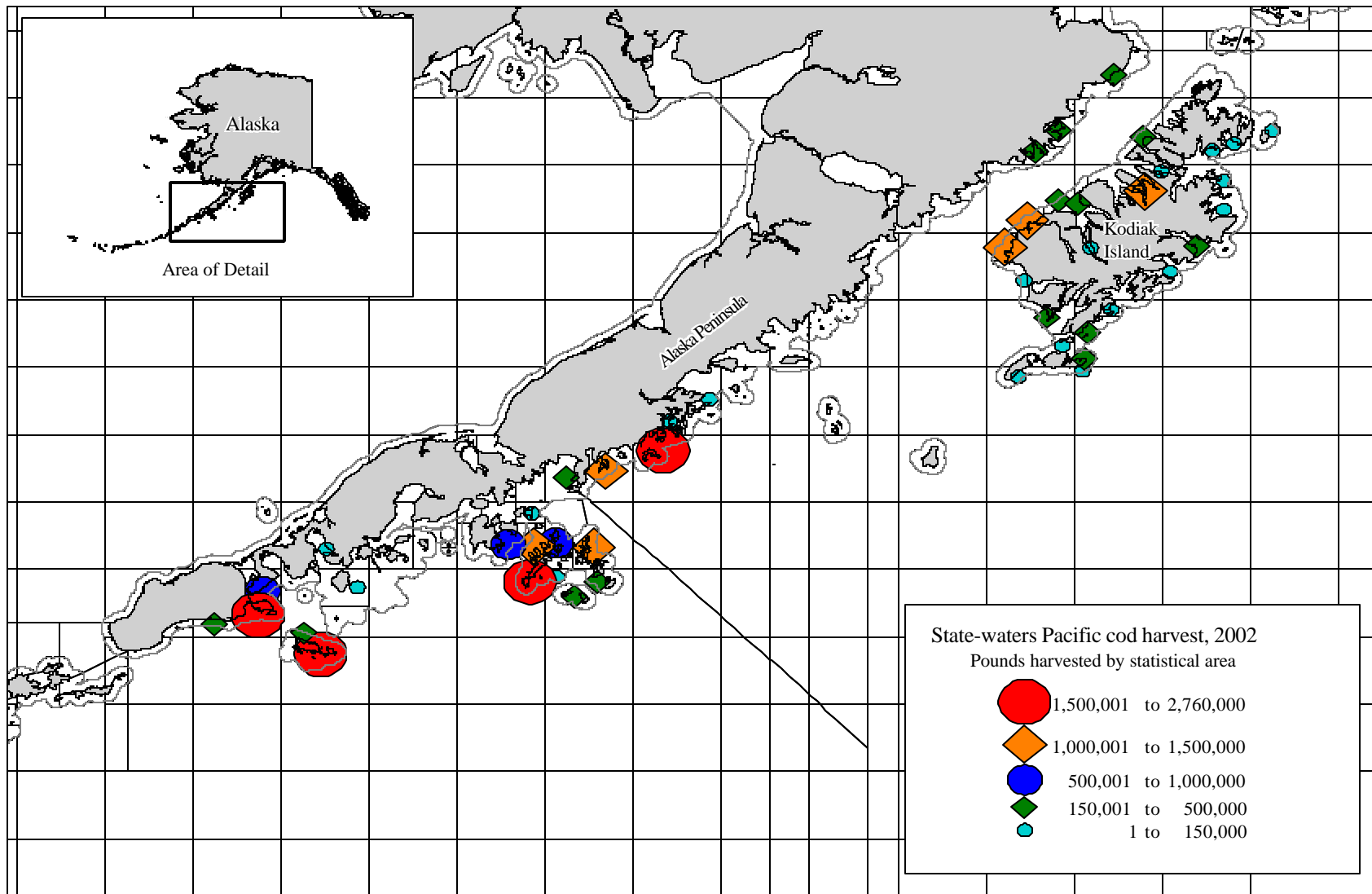


Figure 5. Pacific cod harvest by statistical area from the Kodiak, Chignik, and South Alaska Peninsula Areas state-waters fisheries, 2002.

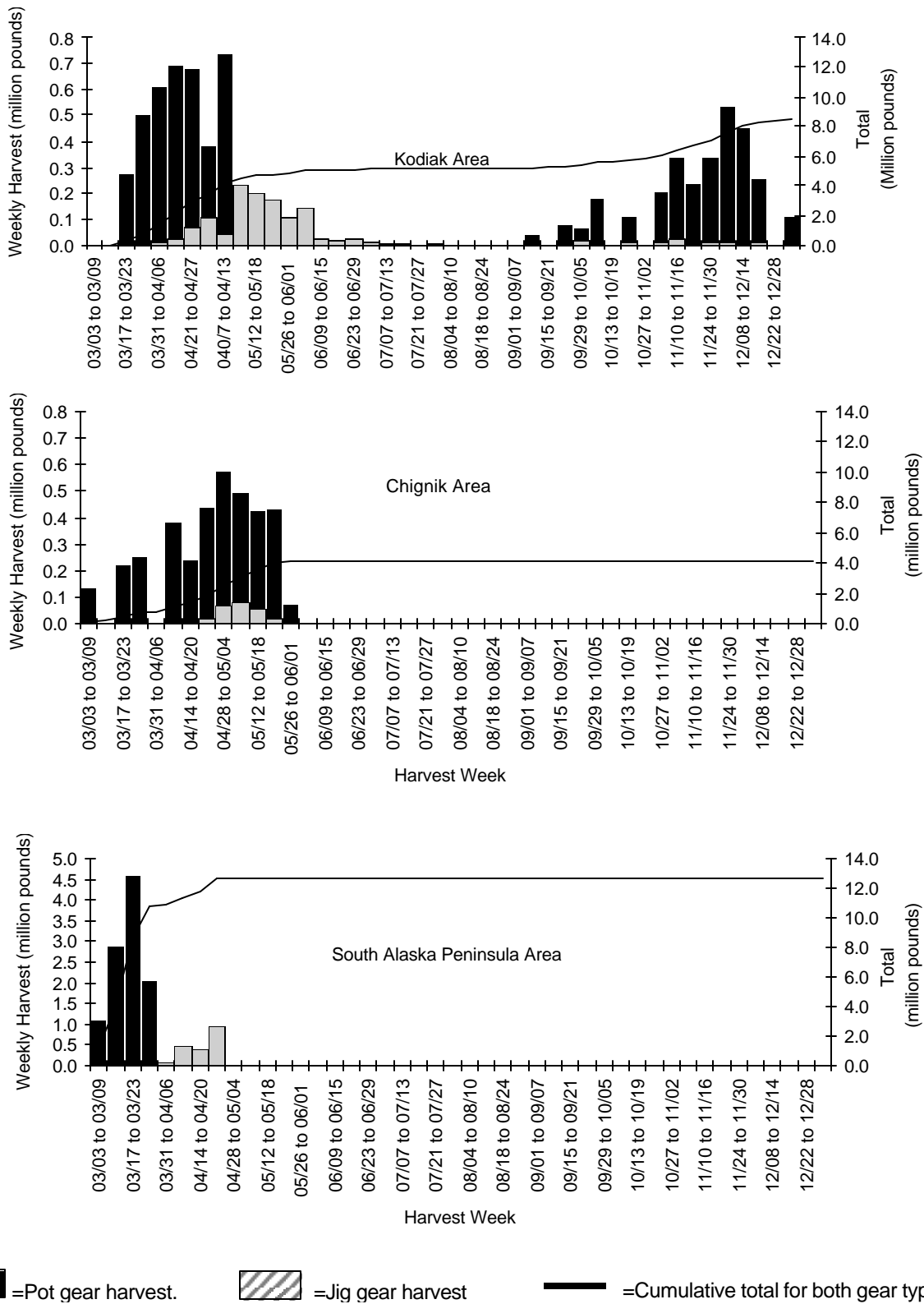


Figure 6. Pacific cod harvest by week and gear type for the Kodiak, Chignik, and South Alaska Peninsula state-waters fisheries, 2002.

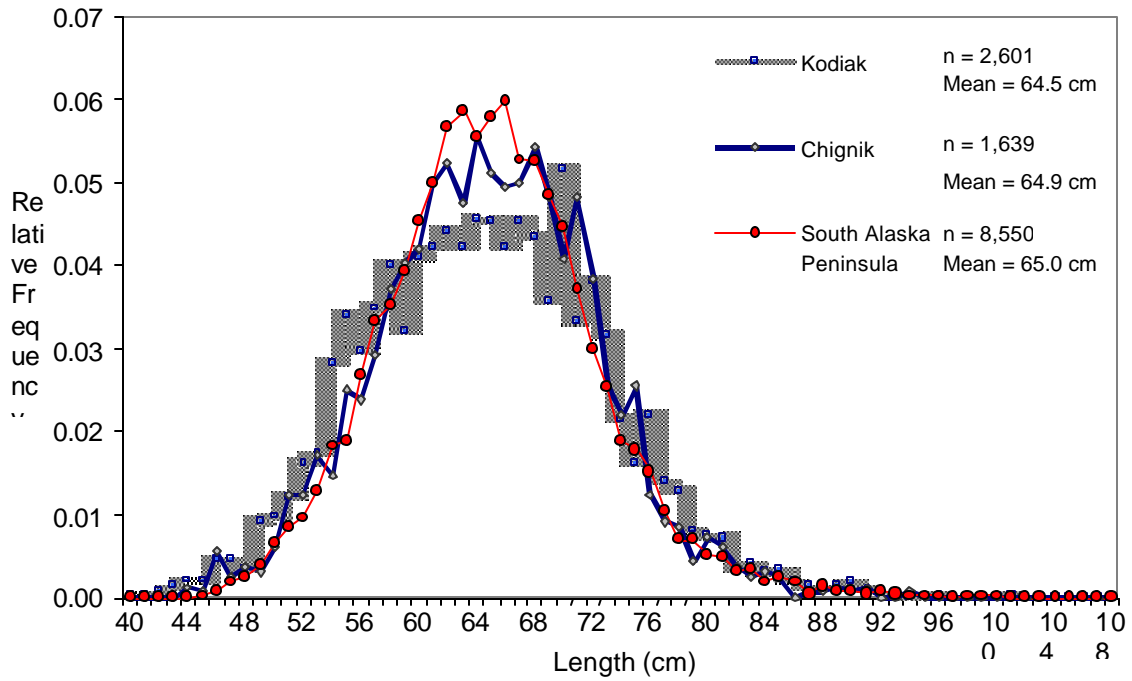


Figure 7. Pacific cod lengths by area collected from the 2002 state-waters fisheries in the Westward Region.

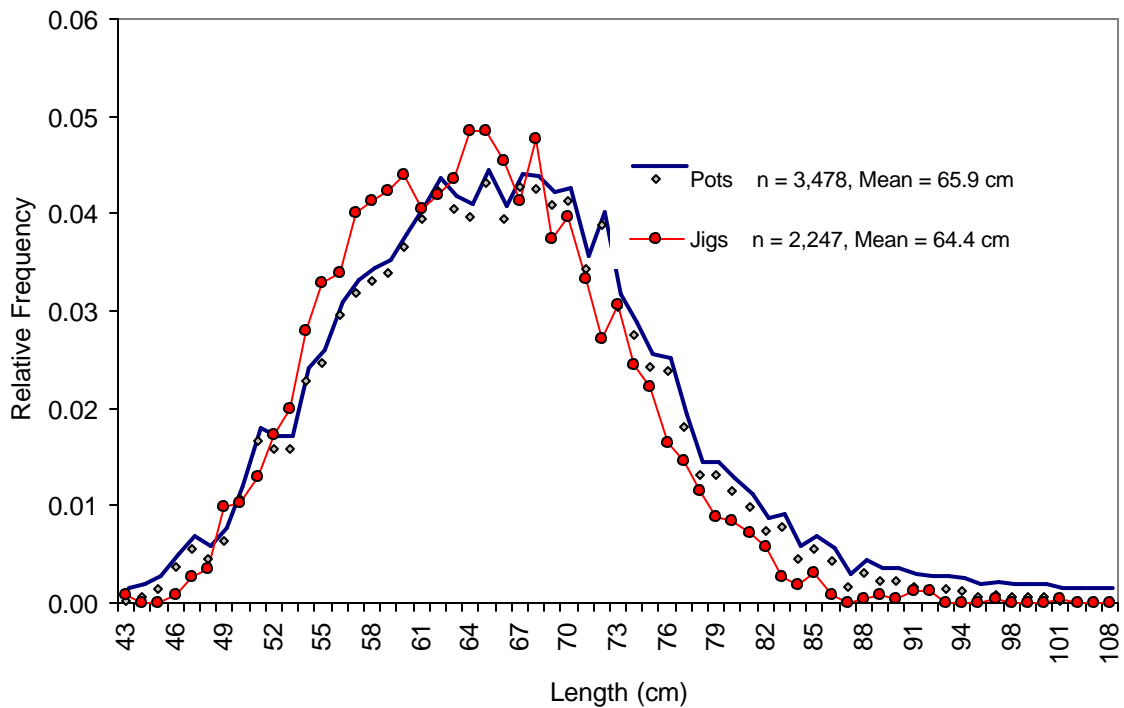


Figure 8. Pacific cod lengths by gear type collected from the 2002 state-waters fisheries in the Westward Region.

Note: samples without a specific gear type are not included.

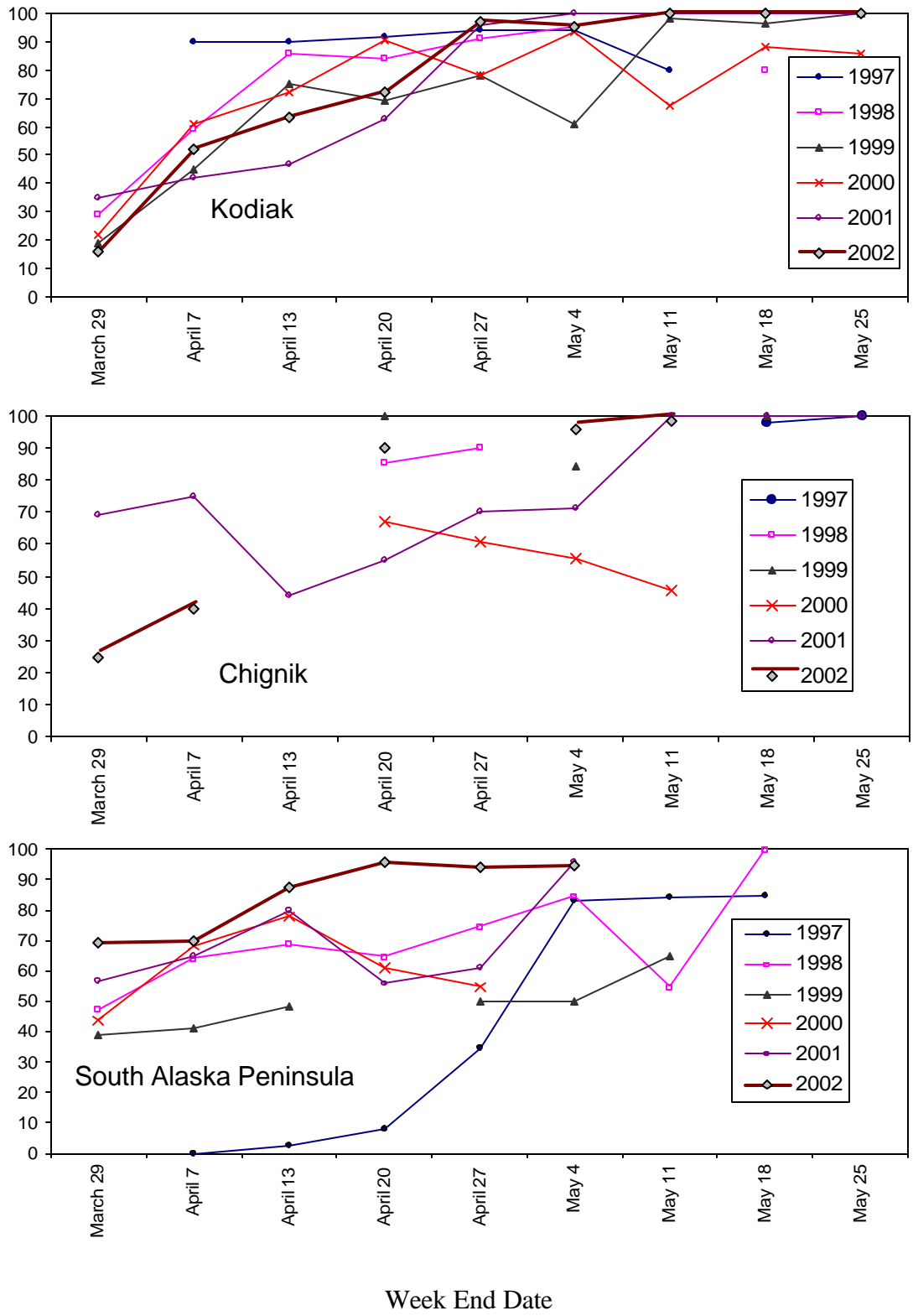


Figure 9. Estimated percentage of spawned Pacific cod by week from the Kodiak, Chignik, and South Alaska Peninsula Areas, 1997-2002.

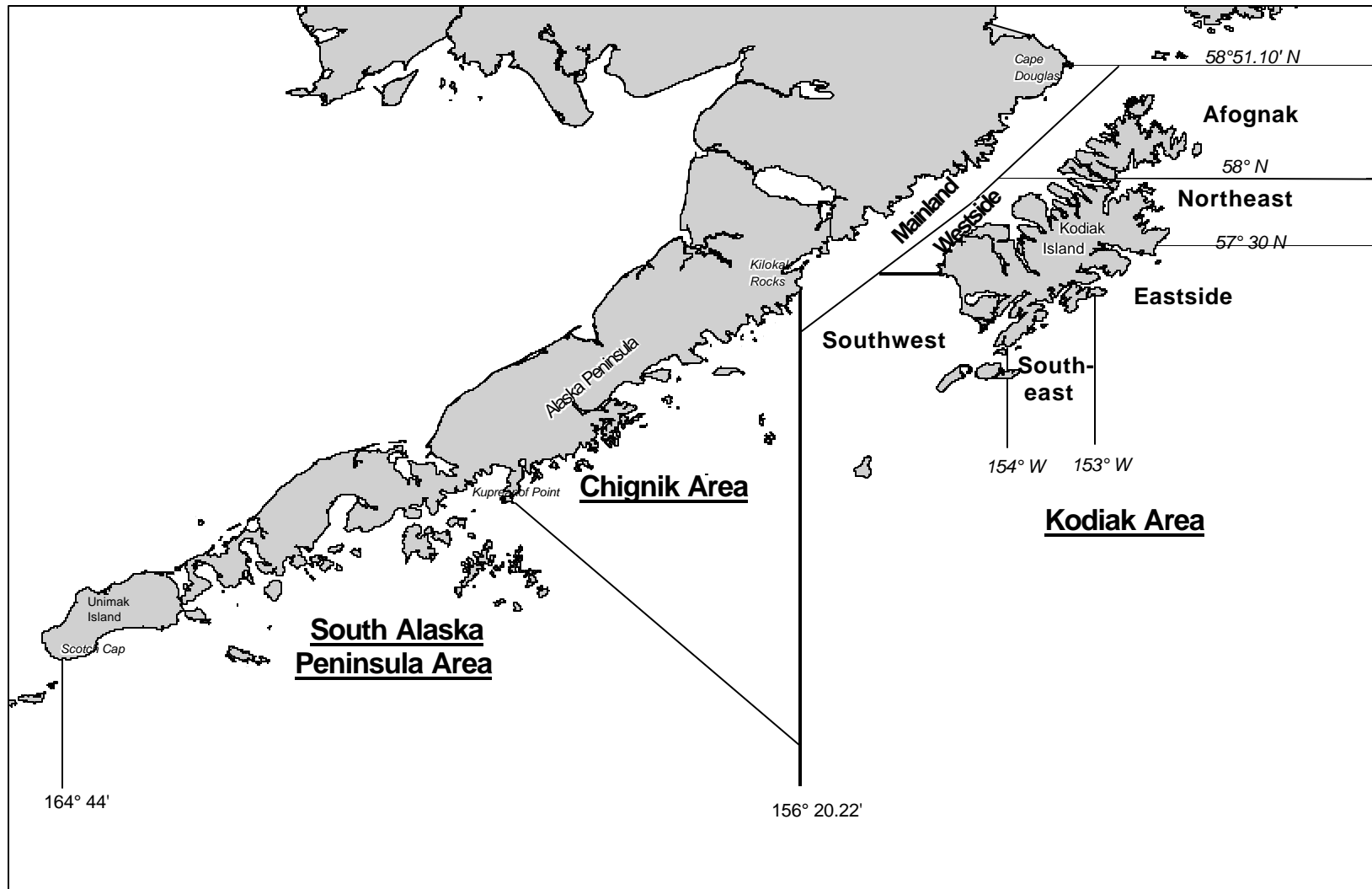


Figure 10. Kodiak, Chignik, and South Alaska Peninsula black rockfish management areas, 2002.

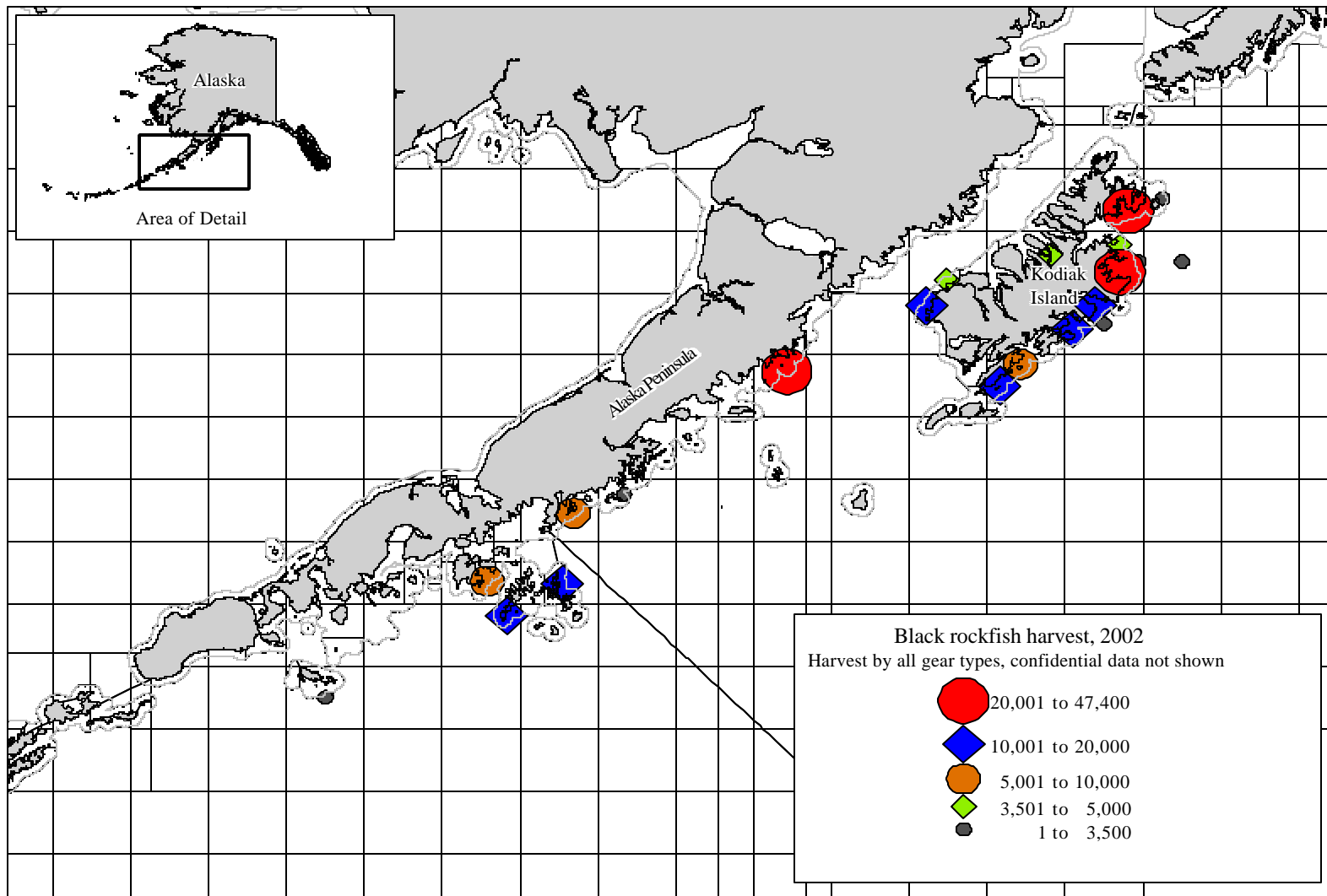


Figure 11. Black rockfish harvest by statistical area from the Kodiak, Chignik, and South Alaska Peninsula Areas, 2002.

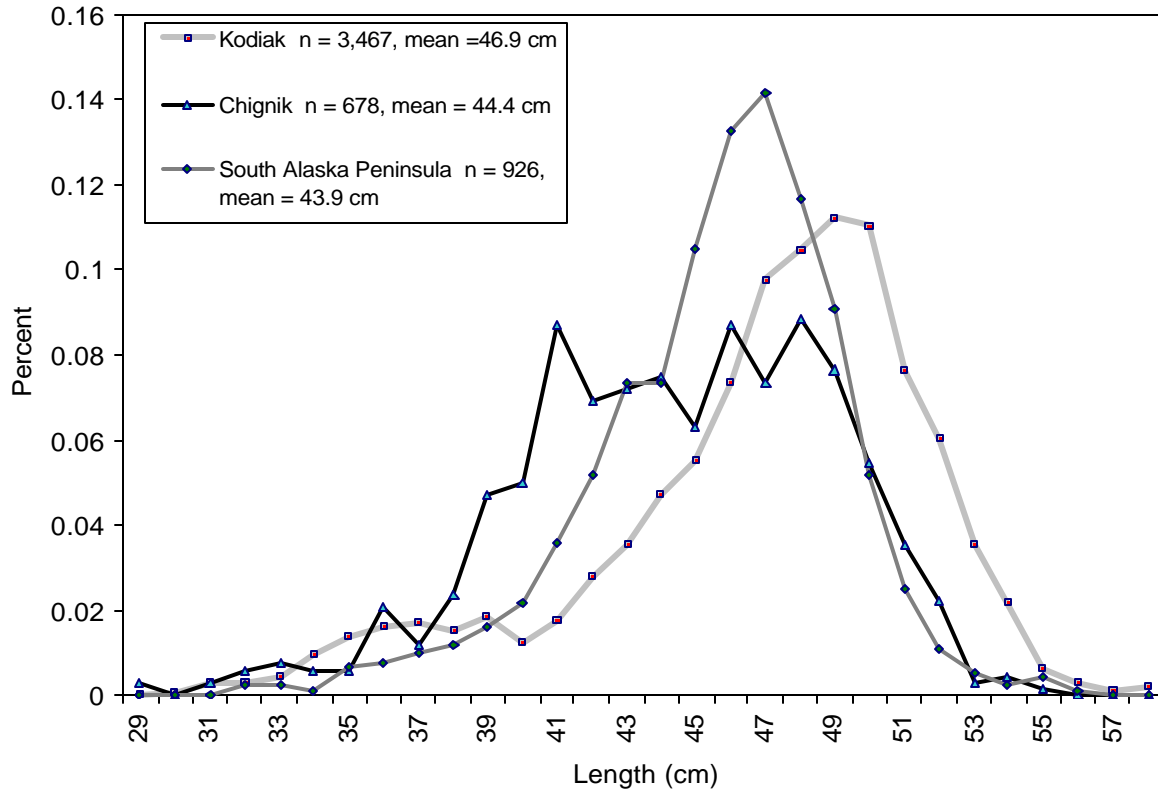


Figure 12. Size composition of black rockfish sampled from the 2002 fishery in the Kodiak, Chignik, and South Alaska Peninsula Areas.

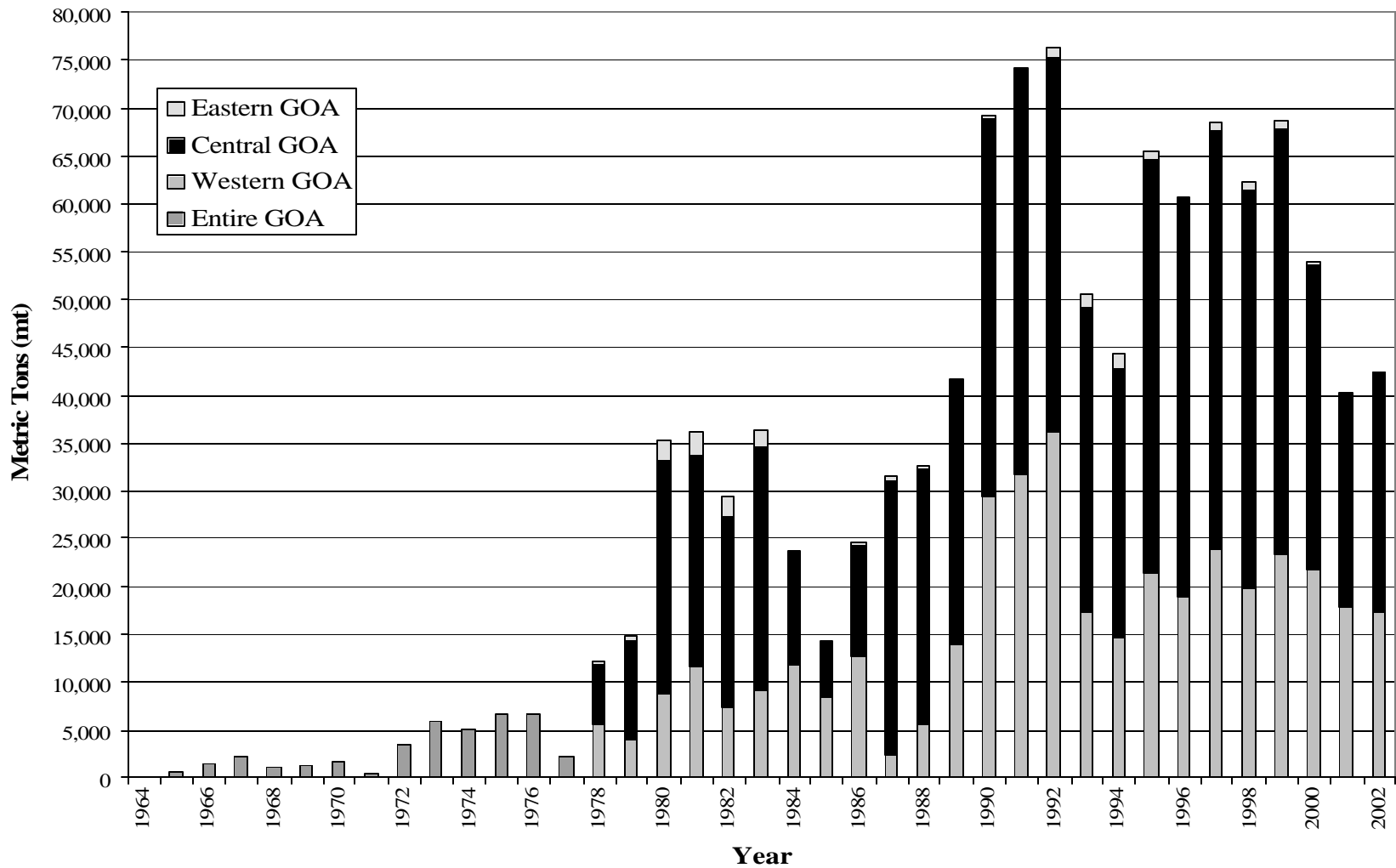


Figure 13. Pacific cod harvest from the Gulf of Alaska, 1964-2002.
 Source: National Marine Fisheries Service Alaska Region home page (<http://www.fakr.noaa.gov>)

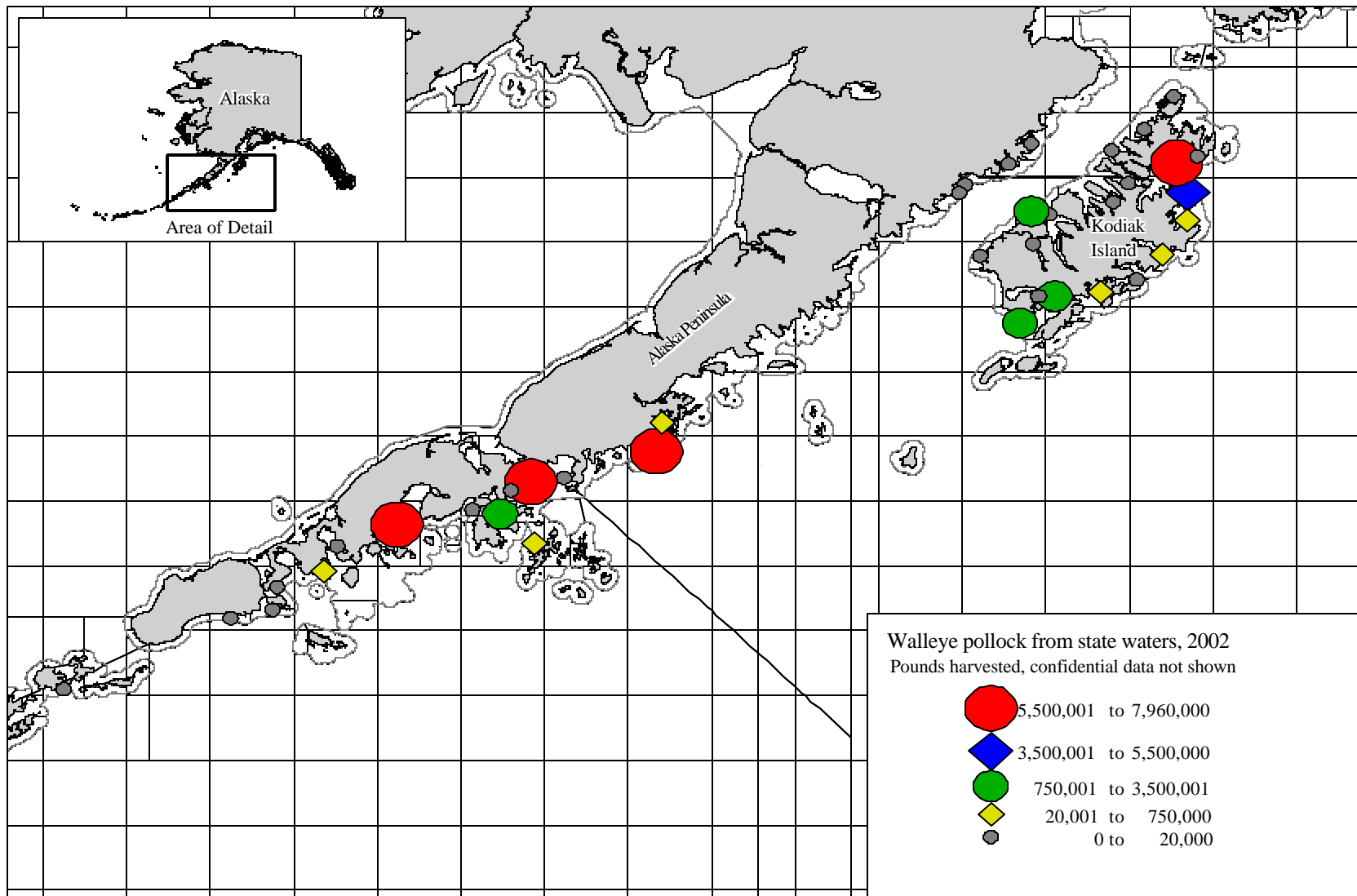


Figure 14. Walleye pollock harvest by statistical area from the Kodiak, Chignik, and South Alaska Peninsula Areas parallel fishery, 2002.

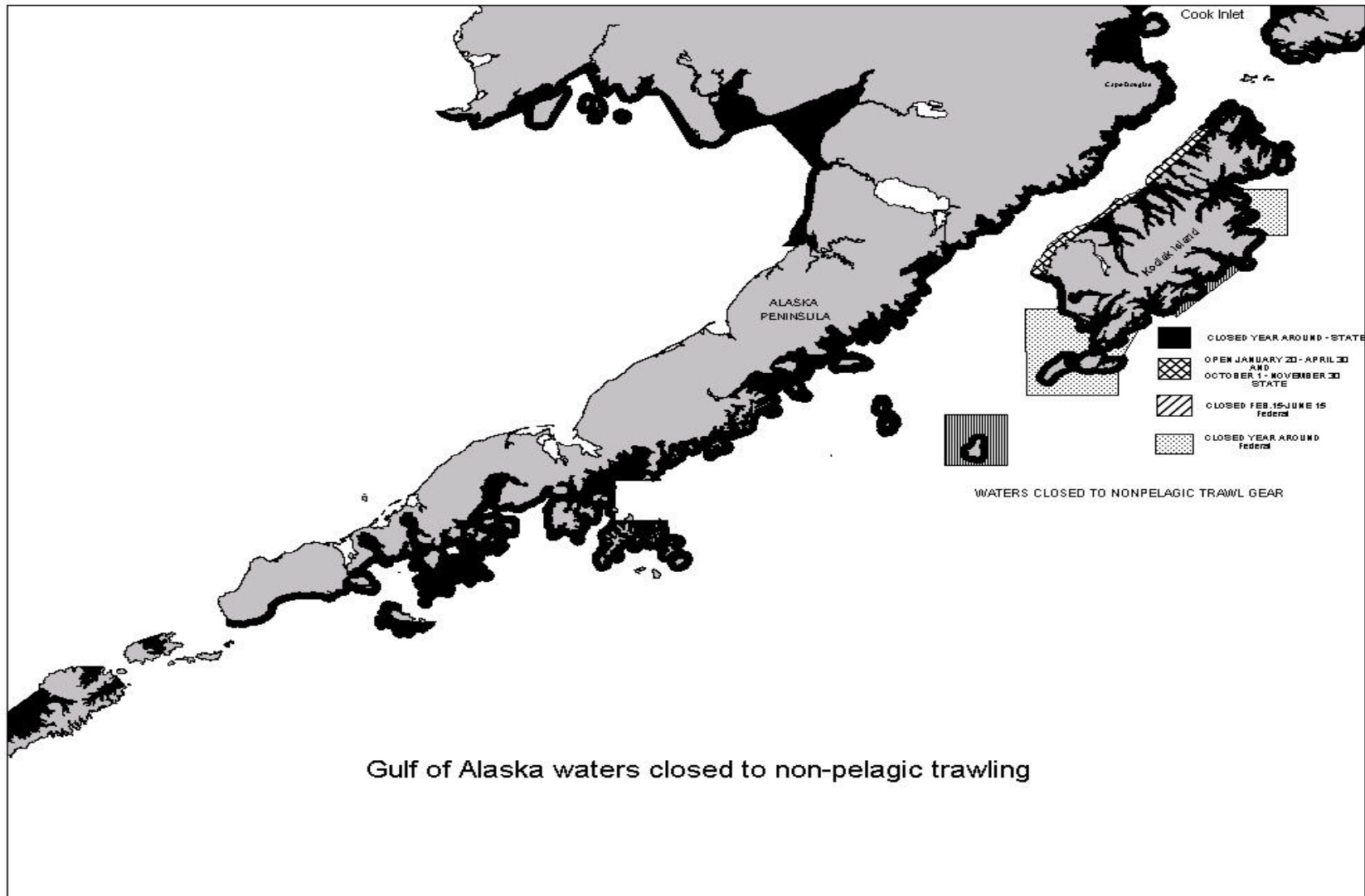


Figure 15. Selected Westward Region non-pelagic trawl gear closures, 2002.

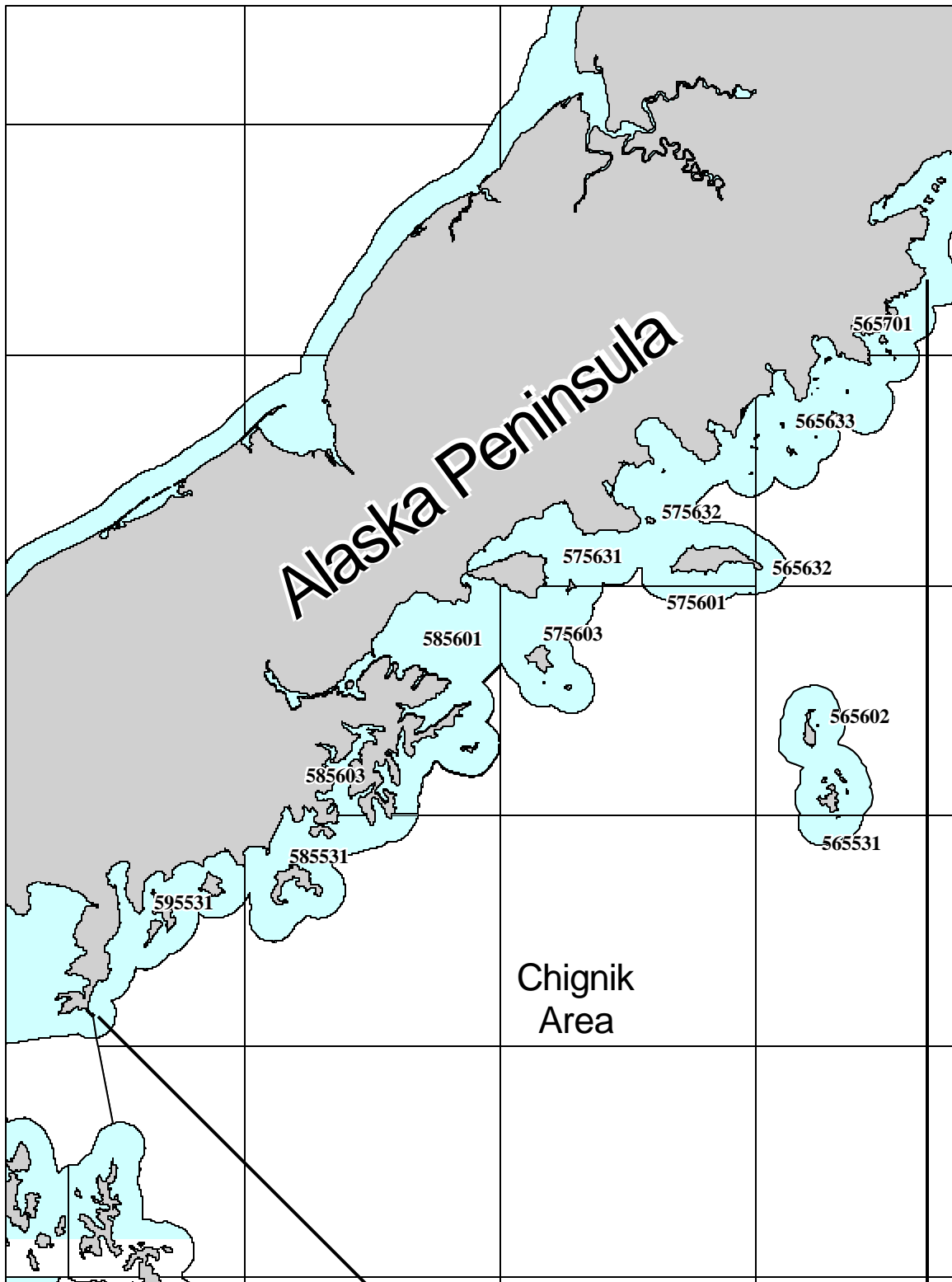
APPENDIX

Appendix A. Frequently used acronyms and key words.

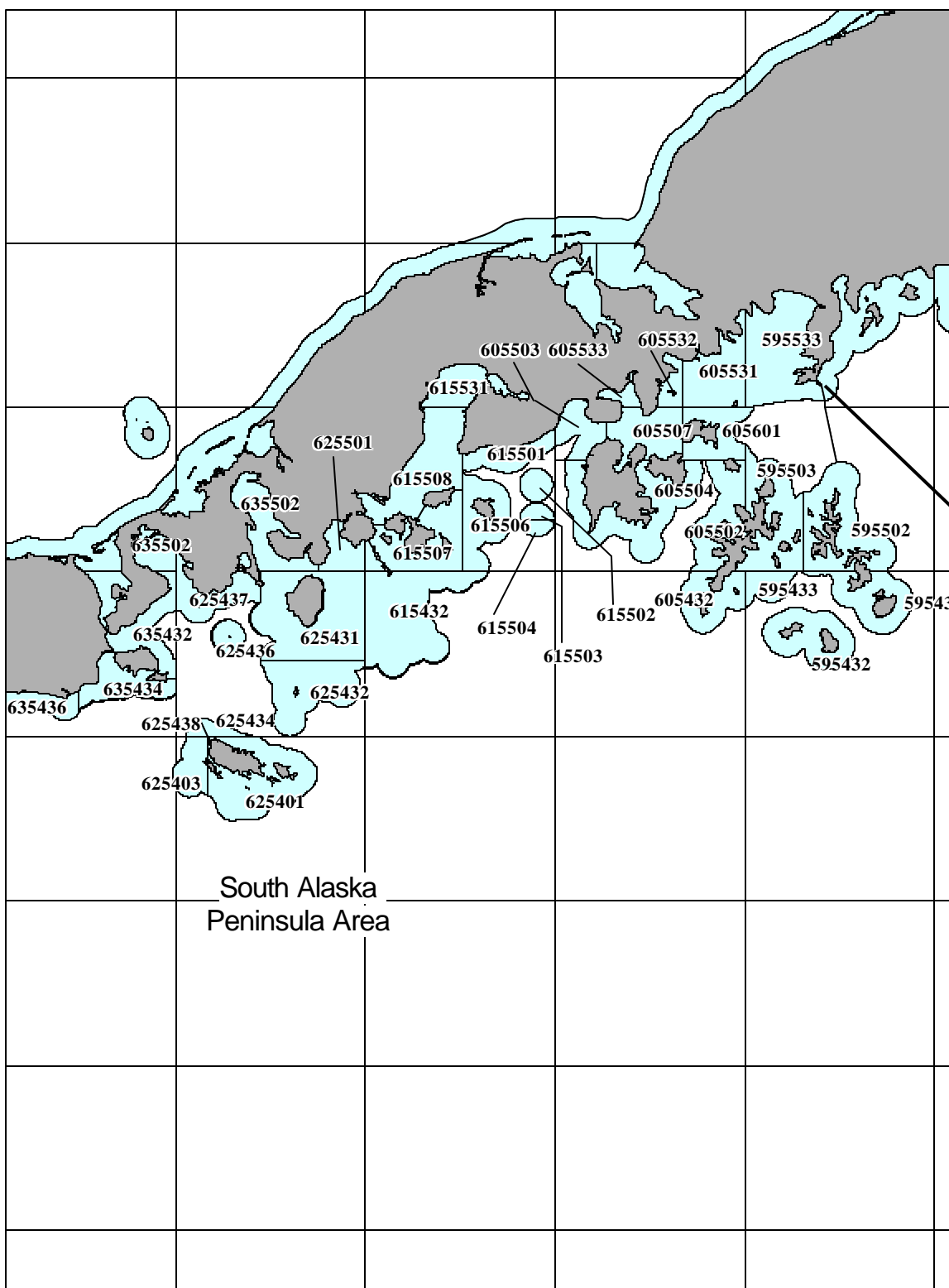
Acronym	Definition
ABC	Acceptable Biological Catch, stock specification as set by the NPFMC on an annual basis
ADF&G	Alaska Department of Fish and Game
BOF	The Alaska Board of Fisheries
BSAI	Bering Sea/Aleutian Islands Areas, state management area and federal management area composed of several sub areas.
CGOA	Central Gulf of Alaska, federal management areas 620 and 630
EEZ	Exclusive Economic Zone, from 3 to 200 nautical miles offshore
EGOA	Eastern Gulf of Alaska, federal management areas 640 and 650
EO	Emergency order, management action taken by ADF&G to effect regulatory change
GOA	Gulf of Alaska
LLP	Federal License Limitation Program
mt	metric tons (equal to 2,204.62 pounds)
NMFS	National Marine Fisheries Service
NPFMC	North Pacific Fishery Management Council
Parallel fishery	State waters from 0 to 3 nautical miles open under federal rules while a federal fishery is ongoing from 3 to 200 nautical miles
State waters	Territorial sea from shore to three nautical miles
State-waters fishery	Fishery occurring from shore to 3 nautical miles open under state rules and managed exclusively by the Alaska Department of Fish and Game
State managed fishery	Fishery occurring from shore to 200 nautical miles and managed exclusively by the Alaska Department of Fish and Game
TAC	Total Allowable Catch, final federal harvest specification for directed fishing as recommended by the NPFMC and set by NMFS
WGOA	Western Gulf of Alaska, federal management area 610
Kodiak Area Chignik Area South Alaska Peninsula Area	Westward Region groundfish areas with specific state-waters Pacific cod and sablefish and state managed black and blue rockfish and lingcod management plans in the Alaska Administrative Code (AAC)



Appendix B. Kodiak Management Area state water statistical areas for groundfish.



Appendix C. Chignik Management Area state water statistical areas for groundfish.



Appendix D. South Alaska Peninsula Area state water statistical areas for groundfish.

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