Fishery Management Report No. 06-74

South Unimak and Shumagin Islands June Salmon Fisheries Report to the Alaska Board of Fisheries, 2007

by

Aaron D. Poetter

December 2006

Alaska Department of Fish and Game **Divisions of Sport Fish and Commercial Fisheries**

Symbols and Abbreviations

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

Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Measures (fisheries)

fork length	FL
mideye-to-fork	MEF
mideye-to-tail-fork	METF
standard length	SL
total length	TL

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	*e*
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	*E*
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	'
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

FISHERY MANAGEMENT REPORT NO. 06-74

SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE SALMON FISHERIES REPORT TO THE ALASKA BOARD OF FISHERIES, 2007

by

Aaron D. Poetter
Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518-1565

December 2006

The Division of Sport Fish Fishery Management Reports series was established in 1989 for the publication of an overview of Division of Sport Fish management activities and goals in a specific geographic area. Since 2004, the Division of Commercial Fisheries has also used the Fishery Management Report series. Fishery Management Reports are intended for fishery and other technical professionals, as well as lay persons. Fishery Management Reports are available through the Alaska State Library and on the Internet: http://www.sf.adfg.state.ak.us/statewide/divreports/html/intersearch.cfm. This publication has undergone regional peer review.

Aaron D. Poetter
Alaska Department of Fish and Game, Division of Commercial Fisheries,
211 Mission Road, Kodiak, AK 99615, USA

This document should be cited as:
Poetter, A. D. 2006. South Unimak and Shumagin Islands June Fisheries Report to the Alaska Board of Fisheries, 2007. Alaska Department of Fish and Game, Fishery Management Report No. 06-74, Anchorage.

TABLE OF CONTENTS

Page

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

ABSTRACT

The South Unimak and Shumagin Islands June fisheries occur along the south side of the Alaska Peninsula and Unimak Island. June commercial fisheries have existed at these locations since at least 1911. Fish traps were a major method of capturing salmon in both fisheries before statehood. Today salmon are caught by seine, drift gillnet, and set gillnet gear at South Unimak and by seine and set gillnet gear at Shumagin Islands.

The South Unimak and Shumagin Islands June fisheries from 1975 through 2000 were managed on the basis of forecasted Bristol Bay sockeye salmon *Oncorhynchus nerka* inshore harvests. These fisheries also harvest chum salmon *O. keta* which are destined for a wide range of locations, from Japan to British Columbia. Consequently, the Alaska Board of Fisheries (BOF) placed a chum salmon harvest cap on both South Peninsula June fisheries to protect Arctic-Yukon-Kuskokwim (AYK) Area chum salmon stocks in 1986 and from 1988 through 2000. In 2001, the BOF designated several AYK chum salmon stocks plus the Kvichak River sockeye salmon as stocks of concern. From 2001 to 2003, the South Peninsula June fisheries were limited to no more than nine fishing days for seine and drift gillnet gear but with no harvest limits. Prior to the 2004 fishing season, many of the restrictions in place from 2001 to 2003 were replaced by a set fishing schedule, which is currently still in effect.

Sockeye salmon harvests from 2004 through 2006 averaged 486,817 in the South Unimak and 608,103 in the Shumagin Islands June fisheries for an average total harvest of 1,094,920. This average total harvest was lower than the 1975-2000 average, but above the 2001-2003 average. Chum salmon harvests from 2004 through 2006 for the South Unimak and Shumagin Islands June fisheries averaged 123,480 and 279,842, respectively. The average chum salmon harvest was below the 1975-2000 average total harvest, and above the 2001-2003 average total.

The 2004-2006 average exvessel value for the June South Peninsula salmon fishery was $3,716,011, which was 35 percent of the 1991-2000 average exvessel value.

Key words: Pacific salmon, *Oncorhynchus*, sockeye salmon, *O. nerka*, chum salmon, *O. keta*, pink salmon, *O. gorbuscha*, South Unimak, Shumagin Islands, June fishery, commercial, Alaska Peninsula, Alaska Board of Fisheries, 2006, purse seine, drift gillnet, set gillnet.

INTRODUCTION

The purpose of this report is to provide information describing the South Unimak and Shumagin Islands June salmon fisheries including the historical harvests and regulations (Figure 1).

The South Unimak fishery occurs along the south side of the Alaska Peninsula from the Scotch Cap (Unimak Island) to the East Pavlof Bay Section (Figure 2). In 2004, the Alaska Board of Fisheries (BOF) expanded the area available to commercial fishing during the June fishery (Figure 2). The Shumagin Islands fishery takes place in the Southeastern District, primarily along Popof, Unga, and Korovin Islands in the northern portion of the Shumagin Islands (Figure 3). Figure 4 indicates the legal gear types permitted in South Peninsula waters during the June fishery. Table 1 lists the South Unimak and Shumagin Islands sockeye *Oncorhynchus nerka* and chum salmon *O. keta* catches from 1960 through 2006 and Table 2 lists sockeye salmon harvests prior to 1960. Unfortunately, June chum salmon harvest data prior to 1960 were not separated from the total season harvest figures. Detailed harvest information on the South Unimak and Shumagin Islands June fishery, from 1970 through 2006 can be found in Appendix A.

HISTORY OF THE SOUTH UNIMAK FISHERY

The South Unimak June fishery dates back to at least 1911, although documentation prior to statehood is sporadic (Table 2; Burkey et al. 2003).

Fish traps were operated in Ikatan and Morzhovoi Bays with as many as 36 traps reported in 1919 (Shaul 2000). The number of traps gradually decreased through the 1920s and 1930s and stabilized at 5-6 through the 1940s and 1950s. Records first reflect seine gear catches in 1935 (19 vessels), with approximately 12 seine vessels fishing seasonally through 1940 (Shaul 2000).

Records reflect only about six seine vessels in the fishery from the mid 1940s through the 1950s, although it is believed effort increased to around 50 vessels in the early 1950s.

From 1960 through 1975 seine effort at South Unimak ranged from 5 to 26 vessels (Shaul 2000). Since 1975 seine effort increased and peaked in 1993 when 116 vessels fished in South Unimak and Shumagin Islands (Table 3). Purse seine permit holders may move between the South Unimak and Shumagin Islands fisheries during June. Between 2001 and 2003 seine effort declined because of poor fishing, low prices, difficulty in finding crew members, and a restrictive management plan (2001-2003; Table 3 and 4). Purse seine permit activity has remained at reduced levels during the 2004 through 2006 seasons.

While records of gillnet catches prior to statehood (1959) are not reliable, the use of gillnet gear has been documented in the South Unimak fishery (drift nets beginning in the 1950s) (Shaul 2000). Gillnet effort (almost entirely drift nets) generally ranged from 20 to 45 vessels between 1960 and 1965. Drift gillnet effort increased to between 120 and 156 vessels in 1970 through 1973, fell to 81 in 1975 and increased to between 101 and 120 from 1976 through 1978 (Table 3). From 1979 through 2000 drift gillnet participation has ranged from 129 to 157 vessels, comparable to the 1970 through 1973 level. The number of drift gillnet permits participating in the South Unimak June fishery dropped in 2001, and has fluctuated between 84 to 95 permits from 2001 to 2006 (Table 3).

Set gillnet gear accounted for a small portion of the South Unimak catch prior to 2004. The set gillnet annual harvest averaged 23.7 percent of the sockeye and 3.8 percent of the chum salmon harvested in South Unimak waters from 2004 through 2006 (Tables 5 and 6). The use of set gillnet gear increased from 0 to 8 permit holders from 1971 through 1980 to between 13 and 31 permit holders during 1989-2000 (Shaul 2000; Table 3). From 2001 through 2006, set gillnet usage in the South Unimak June fishery has fluctuated between 9 and 24 permits.

HISTORY OF THE SHUMAGIN ISLANDS FISHERY

The Shumagin Islands June fishery dates back to at least 1911 (Table 2). However, records indicate that this fishery did not develop significantly until 1922 when 550,000 sockeye salmon were harvested. Similar to South Unimak, information prior to Statehood is sporadic (Shaul 2000). Traps were first recorded in the Shumagin Islands in 1919. The number of traps generally totaled 3 to 6 and peaked at 8 in 1937 (Shaul 2000). Seine catches have been recorded annually since 1911 and over 30 seine vessels fished in 1943 and 1944. From 1962 through 1975, the seine effort usually consisted of 15 to 25 vessels. During 1984 through 2000, purse seine vessels numbered from 37 to 77 in the Shumagin Islands June fishery (Shaul 2000). In the past, some fishermen have moved to South Unimak during mid and late June to avoid crowded conditions in the Shumagin Islands and to seek better fishing opportunities. However, in recent years, the fishing at South Unimak has been comparatively poor for purse seine permit holders. Tables 7 and 8 list sockeye and chum salmon harvests by gear in the Shumagin Islands from 1970 to 2006.

During 1970 through 1983 the number of set gillnet permit holders fishing in the Shumagin Islands during June ranged from 5 to 22 (Shaul 2000; Table 3). This increased to between 30 and 40 during periods when the Southeastern District Mainland fishery was closed in 1985 and 1986. Since 1987, the number of set gillnet permit holders operating during June ranged from 41 to 53, excluding 2001 when some permit holders did not fish because of a price dispute.

Drift gillnet gear is not allowed in the Shumagin Islands. The total numbers of permits by gear type, in the South Unimak and Shumagin Islands June fishery, from 1970 through 2006, are listed in Table 3.

REGULATION AND ALLOCATION HISTORY OF THE SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE FISHERIES

Prior to 1973, fishing time was liberal and was not based on the strength of the forecasted Bristol Bay sockeye salmon run (Shaul 2000; Table 4). During the late 1960s and early 1970s, controversy arose between Alaska Peninsula-Aleutians Islands and Bristol Bay fishermen concerning the South Unimak and Shumagin Islands June fisheries.

Beginning in 1975, the BOF established guideline harvest levels (GHLs) based on average historic catches (Table 4). The GHL for the Shumagin Islands was 1.5% of the latest inshore Bristol Bay projected sockeye salmon harvest, while the South Unimak fishery was allocated 6.8% of the Bristol Bay inshore projected sockeye salmon harvest. The total GHLs for each fishery were further broken down into four time period GHLs, to distribute the catches throughout the month of June (Shaul 2000).

Although chum salmon have always been caught during the June fisheries, the unusually large chum salmon catches in 1982 and 1983 caused concern by fishermen in the Arctic-Yukon-Kuskokwim (AYK) Region (Appendices A1-A3). Beginning with the 1984 season, the BOF placed a limit on fishing time, not to exceed 96 hours per week and not more than 72 consecutive hours in order to allow "escapement windows" (Table 4). The purpose of the "windows" were to limit the chum salmon harvest. Due to the high sockeye salmon catch rate (and low chum to sockeye catch ratios) during 1984 and 1985, these restrictions were not implemented because the GHLs were easily met (Shaul 2000).

In 1986, the BOF placed a 400,000 chum salmon catch ceiling on both fisheries combined, eliminated fishing during the first 10 days of June, and eliminated fishing during the last GHL time period, June 26-30 (along with the sockeye salmon allocation for that period)(Table 4). These restrictions applied to the 1986 season only. The additional restrictions during 1986 were the primary reasons for less than half of the combined South Unimak-Shumagin Islands sockeye salmon allocation being harvested in that year (Appendices A4 and A5).

The regulations for the 1987 season were the same as those used in 1985. (Table 4). However, during 1988 and 1989 the BOF placed an annual 500,000 chum salmon catch ceiling on both fisheries combined.

In 1988, the abundance of chum salmon was about equal to sockeye salmon at South Unimak. This resulted in less than 40% of the South Unimak sockeye allocation being harvested before the chum salmon ceiling was reached. The sockeye salmon abundance seemed higher in the Shumagin Islands and that fishery was able to harvest its allocation (Appendix A4).

In 1989, the sockeye salmon abundance was very high and the sockeye salmon allocations were exceeded with relatively little fishing time (Appendix A6). The Shumagin Islands sockeye salmon catch was 396,958 with an allocation of 264,000, while 1,347,547 sockeye salmon were harvested at South Unimak with an allocation of 1,199,000 fish (Burkey et al. 2003; Table 1). A total of only 72 hours fishing time was allowed in the Shumagin Islands during four days (Appendix A6). At South Unimak, 84 hours of fishing time was allowed with openings occurring during 5 separate

days. The 1989 chum salmon catch was 47,528 in the Shumagin Islands and 407,635 at South Unimak for a total of 455,163 fish (Table 1). The ratio of sockeye to chum salmon was low during the early part of the fishery and became unusually high towards the end (Shaul et al. 1990).

After the 1989 season, the BOF made the following changes in regards to the South Unimak and Shumagin Islands June fisheries (Table 4):

(1) The starting date of the fishery was delayed until June 13 because the sockeye salmon to chum salmon ratio is normally lower during early June.

(2) The chum salmon ceiling for both fisheries combined was raised from 500,000 to 600,000.

(3) The "window regulations" were eliminated as there did not seem to be a need for both a chum salmon ceiling and windows.

(4) The sockeye salmon allocation periods and allocations were changed. The percent of the total allocation by period were the same for each fishery.

Period	Allocation
June 13-18	35%
June 19-25	45%
June 26-30	20%
Total	100%

If catches in either fishery fall below the guidelines in the June 13-18 period, those unharvested sockeye salmon, up to a maximum of 5% of the total allocation for that fishery, could be harvested during the June 19-25 period. The June 26-30 period could not be used to make up for under-harvest during the first two periods. A 1987 salmon tagging study showed that the sockeye salmon stock composition between the first two periods was very similar; however, the June 26-30 stock composition at South Unimak-Shumagin Islands could be dominated by fewer and later stocks (Eggers et al. 1991).

(5) Unlimited seine leads were eliminated at South Unimak and leads of no more than 150 fathoms were determined to be the only legal lengths for the entire Alaska Peninsula.

(6) For the first time, maximum depth restrictions were placed on seine and gillnet gear. For the entire Alaska Peninsula Area seine gear could not exceed 375 meshes in depth. Seine mesh size could not exceed 3-1/2 inches except the first 25 meshes above the lead line could not be more than 7 inches (5 AAC 09.332)(a). No gillnet gear used along the South Peninsula could exceed 90 meshes in depth (5 AAC 09.331)(b)(1)(C).

(7) The area comprising the South Unimak fishery was expanded to include the following portions of the Southwestern District located outside the Ikatan Bay Section:

(a) all waters north and west of a line from Cape Pankof Light to Thin Point.

(b) all waters enclosed by a line from Thin Point to Stag Point on Deer Island to Dolgoi Cape and from Bluff Point on Dolgoi Island to Arch Point.

In 1990, sockeye salmon were not available in large numbers in the Shumagin Islands or at South Unimak despite the fact that Bristol Bay experienced one of its largest runs on record (Shaul et al. 1991). If the Bristol Bay run had been forecasted correctly the sockeye salmon GHL for the Shumagin Islands and South Unimak would have been 497,000 and 2,255,000 respectively (Shaul et al. 1991). Windy weather plagued fishing operations but fish abundance also seemed low, especially in view of the huge run that arrived in Bristol Bay.

In 1990, The Shumagin Islands sockeye salmon harvest was 255,585 fish compared to a GHL of 240,000 (Appendix A4). The Shumagin Islands were open to fishing for a total of 200 hours during nine days (Appendix A6). At South Unimak, the sockeye salmon allocation was 1,087,000 fish and the harvest was 1,088,944 (Table 1; Appendix A4). A total of 63,501 chum salmon were caught in the Shumagin Islands and 455,044 were caught at South Unimak for a combined total of 518,545 (Table 1). The South Unimak fishery was open to fishing for 281 hours during 13 days (Appendix A6).

In 1991, test fishery information indicated a high abundance of chum salmon. As a result the fisheries were delayed until June 15 in an attempt to minimize the chum salmon harvest (Shaul 2000). The sockeye salmon GHL for South Unimak was 1,573,000 fish while that of the Shumagin Islands was 347,000 fish (Appendix A4). The percentage of chum salmon in the harvest is normally high during early June and is lower when sockeye salmon runs are peaking during mid June. Test fish results during 1991 confirmed this.

The Shumagin Islands fishery harvested 333,272 sockeye salmon and 102,602 chum salmon in 1991. At South Unimak, 1,215,658 sockeye and 670,103 chum salmon were caught (Table 1). The total South Unimak and Shumagin Islands chum salmon catch of 772,705 exceeded the 600,000 chum salmon cap by 172,705 fish. The cap was exceeded due to an unexpected large number of small chum salmon migrating into the fishery at Cape Lutke and Sanak Island on June 24 and 25. The average weight of seine caught chum salmon dropped from 6.3 pounds on June 23 to 5.7 pounds on June 24 and 25 (Shaul 2000). During July, there are sometimes large numbers of chum salmon as described above in the vicinities of Sanak Island, Cape Lutke, Cape Lazaref, and in the eastern portion of the Aleutian Islands Management Area (Shaul 2000). These fish are of little or no economic value and appear in such large numbers that the department has closed these areas to commercial salmon fishing.

Since 1991, the Alaska Department of Fish and Game (ADF&G) has been much more cautious when establishing fishing periods when there is a limit to the number of salmon that can be harvested (Table 4). The department has also closed the waters around Sanak Island to commercial salmon fishing during June (Shaul 2000). The Sanak Island waters are not a major sockeye salmon harvest location and were only fished sporadically.

Harvesting the total sockeye salmon allocations in the South Unimak and Shumagin Islands June fisheries with a chum salmon cap in place was often difficult and sometimes impossible, especially when sockeye salmon allocations were large. At the fall 1991 BOF meeting, the chum salmon cap was changed to 40% of the combined South Unimak and Shumagin Islands sockeye salmon allocation, not to exceed 900,000 fish (Shaul 2000). This change generated much controversy from fishermen in the AYK Region because the chum salmon cap was likely to be 900,000 fish in 1992-1994, based on initial long range Bristol Bay sockeye salmon projections. The BOF addressed the chum salmon cap issue again at their spring 1992 meeting and changed the cap to 700,000 chum salmon, regardless of the sockeye salmon allocation (Table 4). The

BOF also stipulated that unless the chum salmon cap was in danger of being exceeded, set gillnet fishing periods would not be less than 16 hours even if it was necessary to restrict seine and drift gillnet gear periods to less than 16 hours due to chum salmon conservation. This was due to set gillnet gear selectivity favoring sockeye salmon (Appendix A7). Regardless of gear selectivity, the BOF directed ADF&G to manage the fishery so that the cap would not be exceeded.

In 1992, the respective sockeye salmon allocations were 1,959,000 and 432,000 fish for the South Unimak and Shumagin Islands fisheries (Burkey et al. 2003). The fishery was delayed until June 15 because of the high number of chum salmon caught in the Shumagin Islands test fishery. From June 15 until the end of the fishery on June 26, sockeye to chum salmon ratios were very high (Burkey et al. 2003). A total of 2,046,022 sockeye salmon were harvested at South Unimak while the Shumagin Islands harvest was 411,834 fish (Table 1). The chum salmon harvest from both fisheries combined was 426,203 fish.

In 1993, the South Unimak and Shumagin Islands sockeye salmon allocations were 2,375,000 and 524,000 fish, respectively (Burkey et al. 2003). Test fishing in the Shumagin Islands during June 7-11 indicated sockeye to chum salmon ratios greater than 2.0. Consequently, fishing began on June 13, the earliest date allowed by the South Unimak and Shumagin Islands June Management Plan. Sockeye to chum salmon ratios remained high in both fisheries until the last week in June. The Shumagin Islands sockeye to chum salmon ratio was 1.8 on June 26 as compared to 9.0 during the previous fishing day of June 21. The South Unimak sockeye to chum salmon ratio was 1.3 on June 29, down from the June 27 ratio of 8.8. The total 1993 sockeye salmon harvest was 2,366,573 fish at South Unimak and 607,171 fish in the Shumagin Islands. The combined chum salmon catch from both fisheries was 532,247 fish (Table 1).

In 1993, AYK chum salmon stocks were at low levels resulting in very little commercial fishing targeting chum salmon (Francisco et al. 1994). Subsistence fishing for AYK chum salmon was not allowed in some locations. Consequently, during 1993 and 1994, the BOF conducted two out of cycle meetings devoted to the South Unimak-Shumagin Islands June fishery. The first meeting was non regulatory but resulted in the second meeting in which regulatory changes were made.

During the spring 1994 meeting, the BOF allowed ADF&G to open the South Unimak-Shumagin Islands fisheries prior to June 13 if sockeye to chum salmon ratios were greater than 2.0, and eliminated the time period allocations (Table 4). Elimination of time period allocations would have resulted in a substantially lower harvest of chum salmon in 1993 (McCullough and Pengilly 1994).

The 1994 sockeye salmon allocations were a record high, totaling 2,938,000 fish at South Unimak and 648,000 fish in the Shumagin Islands (Burkey et al. 2003; Table 4). Test fishing in the Shumagin Islands indicated that sockeye to chum salmon ratios were low and no fishing was allowed in the Shumagin Islands until June 18. Test fishing indicated that sockeye to chum salmon ratios at South Unimak on June 15 and 16 were higher than those in the Shumagin Islands and fishing started on June 17.

The 1994 fishery was characterized by low catch rates of sockeye and chum salmon but record June pink salmon catches (Appendix A1). Sockeye to chum ratios were slightly better than two to one during most of the fishery and were lower at the end of June (Burkey et al. 2003).

The total sockeye salmon harvest was very disappointing to industry in the Alaska Peninsula Area. At South Unimak, 1,001,250 sockeye salmon (34% of allocation) were harvested. In the

Shumagin Islands 460,013 sockeye salmon (71% of allocation) were harvested. The combined chum salmon catch was 582,165 fish (Table 1).

The 1994 Bristol Bay sockeye salmon run was below forecast but still a very strong run and produced an inshore harvest of over 35 million fish (Appendix A5). However, sockeye salmon were not available in large numbers in the South Unimak and Shumagin Islands fisheries. Fishermen reported a drastic change in currents and colder inshore water temperatures, which they believe may have affected the migratory pattern of sockeye salmon.

Large numbers of chum salmon were reported to be in the South Unimak fishery throughout June but fishermen avoided areas with high chum salmon concentrations. These tactics apparently not only decreased the chum salmon catch but reduced the fleets' ability to harvest sockeye salmon because the two species were reported to be traveling together in large numbers at some locations.

Following the 1994 season, the BOF implemented the following changes to the management plan (Table 4).

1. June fishery cannot begin prior to June 11.
2. After June 24, in either the South Unimak or Shumagin Islands fisheries, if the sockeye salmon guideline harvest level and the maximum allowable harvest of chum salmon have not been attained, and if the ratio of sockeye to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration in that fishery. After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days.
3. The BOF stated its intent that keeping the chum salmon harvest below the cap supersedes any attempt to reach the sockeye salmon GHLs.
4. The BOF eliminated minimum mesh size requirements for gillnets during the June fisheries.

In 1995, the sockeye salmon GHL was 2,987,000 fish allocated to South Unimak and 659,000 fish to the Shumagin Islands for a total of 3,646,000 fish (Burkey et al. 2003; Appendix A4). Test fishing in the Shumagin Islands and at South Unimak indicated that the sockeye to chum salmon ratios were slightly higher than in 1994. Consequently both fisheries opened on June 13. However, the sockeye salmon harvest rates were again low. Virtually continuous fishing was allowed in both fisheries, through June 30 at South Unimak, and through June 29 in the Shumagin Islands where the sockeye salmon allocation was achieved. The 1995 South Unimak harvest was 1,451,490 sockeye salmon and 342,307 chum salmon; the fishery was about 1,536,000 fish under the sockeye salmon GHL (Table 1). The Shumagin Islands catch totaled 653,831 sockeye and 195,126 chum salmon and was only 5,000 fish under the sockeye salmon GHL. The combined harvest of both fisheries was 2,105,321 sockeye and 537,433 chum salmon which was 1,541,000 sockeye salmon less than the GHL (Appendix A4) and about 163,000 chum salmon less than the 700,000 cap. The combined sockeye salmon GHL was not achieved because sockeye salmon were not available in large numbers at South Unimak. The actual Bristol Bay sockeye salmon harvest was slightly larger than the forecast (Appendix A5).

The 1996 South Unimak sockeye salmon GHL was 2,564,000 fish while that of the Shumagin Islands was 566,000 fish (Burkey et al. 2003). Based on test fishing results, the South Unimak

fishery did not begin until June 15 and the Shumagin Islands did not open until June 18. The purpose of test fishing was to determine the sockeye to chum salmon ratio as an indication of when the sockeye salmon harvest could be maximized without reaching the chum salmon cap. Salmon harvest rates were extremely low in both South Unimak and Shumagin Islands fisheries and almost continuous fishing was allowed. At South Unimak, despite continuous fishing from June 18 through June 30, only 572,495 sockeye salmon (23.3% of the allocation) were harvested (Table 1). In the Shumagin Islands 456,475 sockeye salmon were caught, bringing the combined South Unimak-Shumagin Islands sockeye salmon harvest to 1,028,970 (33% of the allocation). A total of 359,820 chum salmon were harvested (129,889 at South Unimak and 229,931 in the Shumagin Islands), about 340,000 fish below the 700,000 cap (Table 1).

In 1997, the South Unimak fishery opened on June 13. Because of a price dispute, fishing effort ranged from 58 to 97 drift gillnet permit holders from June 13 through 17 (Burkey et al. 2003). The dispute was settled on June 18, and continuous fishing was allowed through June 30. The sockeye salmon harvest was 1,179,179 fish, 36% below the 1,840,000 GHL (Burkey et al. 2003). The 1997 Shumagin Islands fishery opened on June 19 and fishing was allowed daily until June 26 when the sockeye salmon GHL of 406,000 was exceeded (Burkey et al. 2003). The Shumagin Islands harvest was 449,002 sockeye salmon. A total of 322,325 chum salmon were harvested (196,016 at South Unimak and 126,309 in the Shumagin Islands), 377,675 fish below the 700,000 cap (Table 1).

After the 1997 season, the BOF lowered the chum salmon cap from 700,000 fish to a “floating cap” that could range from 350,000 to 650,000 depending on the projected strength of harvests of summer chum salmon in the AYK Area in relation to the 1970-1997 average. If the projected AYK chum salmon was less than 33% of the average catches, the South Peninsula cap would be 350,000 to 450,000 fish. If the projected AYK summer run chum salmon harvest was between 33% and 67% of the 1970-1997 average, the South Peninsula cap would be between 450,001 and 550,000 chum salmon. If the AYK summer chum salmon harvest exceeded 67% of the 1970-1997 average, the South Peninsula chum salmon cap would be 550,001 to 650,000 fish. If the department identified a summer chum salmon stock of concern, the upper end of the cap would be reduced by 50,000 fish. The earliest opening date was changed from June 11 to June 10. In the Unimak District, the shoreward end of a set gillnet had to be within one half mile of shore. All salmon caught had to be retained and reported. The use of aircraft to locate salmon was prohibited for the entire Alaska Peninsula Area for the entire season.

In 1998, the South Unimak and Shumagin Islands fisheries both opened to commercial salmon fishing on June 13. However, the entire seine fleet and approximately 80% of the set gillnet fleet did not fish because of a dispute over salmon prices. The drift gillnet fleet at South Unimak started fishing on June 13. As the fishery progressed more set gillnet permit holders participated and on June 17 the purse seine fleet and the balance of the set gillnet fleet went fishing. The 1998 sockeye salmon harvest rates were low in both the South Unimak and Shumagin Islands fisheries. Despite continuous fishing from June 13 through June 30, only 974,628 sockeye (63.7% of the allocation) and 195,454 chum salmon were harvested at South Unimak. A total of 314,097 sockeye salmon (93.5% of the allocation) and 50,165 chum salmon were harvested in the Shumagin Islands (Table 1).

In 1999, the South Unimak fishery was opened for 16 hours on June 11, reopened on June 13 and was repeatedly extended until June 21 when the sockeye salmon GHL was reached. The Shumagin Islands fishery opened on June 13 and was repeatedly extended until June 18 when the

GHL was reached (Shaul 2000). The 1999 sockeye salmon daily harvest rates were higher than in the past three years in both the South Unimak and Shumagin Islands fisheries. After nearly continuous fishing from June 11 through June 21, 1,106,208 sockeye (8.0% over the allocation) and 186,886 chum salmon were harvested at South Unimak (Table 1). A total of 269,191 sockeye (19.1% over the allocation) and 58,420 chum salmon were harvested in the 1999 Shumagin Islands fishery.

Based on the Bristol Bay forecast, the respective 2000 June GHLs were 1,650,000 and 363,000 sockeye salmon for the South Unimak and Shumagin Islands fisheries (Burkey et al. 2003). Test fishing results in the Shumagin Islands indicated that a fishing period could be allowed on June 11. However, no commercial fishing occurred during June 11 and 12 because of a price dispute between fishermen and processors and test fishing continued (Shaul 2000). The South Unimak test fish sockeye to chum salmon ratio was less than the two to one needed to justify a fishery on June 11. After the announced Shumagin Islands opening for June 11, all three of the South Unimak test fish boats quit test fishing and departed for the Shumagin Islands commercial fishery. A price settlement was reached on June 13 and commercial fishing began. During June 13, sockeye to chum salmon ratios were high and both fisheries were repeatedly extended. The South Unimak fishery remained open through June 30. The Shumagin Islands closed on June 18 when it was estimated that the sockeye salmon GHL would be reached. The 2000 South Unimak harvest was 892,016 sockeye salmon (54.1% of the GHL) and 168,888 chum salmon (Table 1). The Shumagin Islands harvest was 359,212 sockeye salmon (99.0% of the allocation) and 70,469 chum salmon. The combined South Unimak-Shumagin Islands chum salmon harvest in 2000 was 239,357 fish, well below the chum salmon GHL of 350,000 to 400,000 (Shaul 2000).

The fishing power of the fleet participating in the South Unimak and Shumagin Islands June fishery, appears to be substantially lower for all species during recent years (2001-2006) than it was during the 1980s due to the following factors:

1. The gear depth restrictions implemented in 1990.
2. Because Cape Lutke is no longer as productive an area for the purse seine and drift gillnet fleets and the prices paid for salmon during recent years have been low. The purse seine fleet is substantially smaller than the 1982-1996 fleet (Table 3).
3. Because of low salmon prices, the drift gillnet fleet has also decreased from 157 permit holders in 1991 to about 85 permit holders participating in 2006 (Table 3).
4. Salmon may have changed their migration routes and/or timing because of oceanographic or climatic factors, and may not be as abundant in areas where the June fisheries occur.

The gear depth restrictions may have reduced the harvest of chum salmon in the South Unimak fishery. From 1990 through 2003, drift gillnet permit holders generally had higher sockeye to chum salmon ratios than seine permit holders in South Unimak. Prior to 1990, and since 2004, the seine fleet often had higher ratios than the drift gillnet fleet (Appendix A7).

There have been substantial shifts in the percentage of the catches taken by various gear types over the years (Table 5). The amount of set gillnet gear and percentages of the harvests taken by set gillnets have increased since the 1970s in both fisheries. Drift gillnet gear dominated the South Unimak catches during the 1970s. Purse seiners dominated the South Unimak harvests

during most years between 1979 and 1994. Since 1995, drift gillnetters have again dominated the South Unimak fishery.

At the 2001 BOF meeting, major changes were made to the South Unimak and Shumagin Islands June Salmon Management Plan (5 AAC 09.365; Table 4). These changes included:

1. Eliminated the sockeye salmon guideline harvest levels.
2. Eliminated the chum salmon guideline harvest levels.
3. Limited fishing time to no more than 16 hours per day by any gear group.
4. Limited total fishing time by seine and drift gillnet gear to no more than 48 hours in a floating seven-day period with no more than two 16-hour periods on consecutive days in any seven-day period.
5. From June 10 through June 24 in the South Unimak and/or Shumagin Islands fisheries, set gillnet gear may fish on consecutive days for 16-hour periods as long as the set gillnet sockeye to chum salmon ratios in that fishery are equal to or greater than the recent 10-year average for that fishery. If the set gillnet sockeye to chum salmon ratio falls below the recent 10-year average in either fishery, that fishery will be closed for one period. From June 10 through June 24, daily fishing periods for set gillnet gear will be from 6:00 a.m. until 10:00 p.m.
6. Purse seine and drift gillnet fishing periods through June 24 will occur at the same time in the South Unimak and Shumagin Islands fisheries.
7. After June 24, in either the South Unimak or Shumagin Islands fishery, if the ratio of sockeye to chum salmon by all gear combined is less than 2.0 on any day, the next fishing period shall be of six hours duration for all gear in that fishery. If the sockeye to chum salmon ratio is 2.0 or greater, a six hour fishing period can be extended to a maximum of 16 hours. The South Unimak or Shumagin Islands fishery shall close for all gear groups if the ratio of sockeye to chum salmon is less than 2.0 for two consecutive fishing periods.

During the 2004 BOF meeting, the board agreed that actions restricting the June fishery taken during the 2001 board cycle were unnecessary and caused undue hardship on the fishermen of the Area M. Changes to the South Unimak and Shumagin Islands June Salmon Management Plan (5 AAC 09.365; Table 4) were adopted. These changes included:

1. Fishery to begin at 6:00 a.m. on June 7.
2. Fishing periods are 88-hours in length separated by 32-hour closures. The fishery closes at 10:00 p.m. on June 29. The last fishing period is 64-hours in duration.
3. Concurrent fishing time for all gear types.
4. Area open to fishing expanded to include the entire Unimak and Southwestern districts, East and West Pavlof Bay, Bechevin Bay and Shumagin Islands sections.
5. Eliminated all sockeye to chum salmon harvest ratio requirements.

SUMMARY OF THE 2004, 2005, AND 2006 SEASONS

Due to the regulatory changes made prior to the 2004 fishing season, fishing time in the South Unimak and Shumagin Islands June fishery has remained constant during the 2004, 2005, and 2006 seasons. The commercial salmon fishing season opened for all gear types with an 88-hour fishing period on June 7. During June, all gear types fished four 88-hour periods followed by one 64-hour period. All periods began at 6:00 a.m., and ended at 10:00 p.m., and were separated by 32-hour closures.

In 2004, 531,955 sockeye salmon and 130,626 chum salmon were harvested at South Unimak and 816,118 sockeye salmon and 351,683 chum salmon were harvested in the Shumagin Islands, respectively (Table 1).

The 2005 season began with a voluntary stand down by most of the 21 Shumagin Island purse seine permit holders before the end of the first fishing period, due to relatively large harvests of chum salmon (Burkey et al. 2006). Only four seine deliveries were made in the Shumagin Islands between June 8-10. When the purse seine permit holders resumed fishing in the Shumagin Islands on June 12, the chum salmon harvest rates had decreased significantly. A total of 437,443 sockeye and 143,799 chum salmon were harvested in the South Unimak June fishery while 566,952 sockeye and 284,031 chum salmon were taken in the Shumagin Islands (Table 1).

In 2006, 491,053 sockeye and 96,016 chum salmon were harvested at South Unimak. The Shumagin Islands fishery harvest consisted of 441,238 sockeye and 203,811 chum salmon (Table 1).

The amount of fishing days and hours were higher in 2004, 2005, and 2006 than during those years from 1975 to 2000 (Appendix A6).

The exvessel value of the South Unimak and Shumagin Islands June fisheries has fallen in recent years. From 1991 through 2000, the estimated exvessel value of these fisheries averaged approximately $10,740,744 (Appendix A8). In 2002 and 2003, the estimated average exvessel value of the South Unimak and Shumagin Islands June fisheries was about $1,745,699, or 16% of the average 1991-2000 value. The exvessel value for 2001 is not included because of a lengthy strike. The estimated average commercial salmon exvessel value for the 2004-2006 seasons was $3,716,011 or 34% of the average 1991-2000 value.

REFERENCES CITED

ADF&G (Alaska Department of Fish and Game). 1969. Cape Fisheries-Alaska Peninsula (unpublished). Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak.

Burkey, C. Jr., J. J. Dinnocenzo, M. T. Ford, and A. R. Shaul. 2003. South Peninsula annual salmon management report, 2002. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K 03-22, Kodiak.

Burkey, C. Jr., J. J. Dinnocenzo, and J. Jackson. 2006. South Alaska Peninsula annual salmon management report, 2005. Alaska Department of Fish and Game, Fishery Management Report No. 06-09, Anchorage.

Eggers, D. M., K. A. Rowell, and B. M. Barrett. 1991. Stock composition of sockeye and chum salmon catches in Southern Alaska Peninsula fisheries in June. Alaska Department of Fish and Game, Division of Commercial Fisheries, Fishery Research Bulletin 91-01 (revised March 3, 1992), Juneau.

REFERENCES CITED (Continued)

Francisco, R. K., C. Anderson, C. Burkey Jr., M. Coffing, K. Hyer, D. Molyneaux, and C. Uttermole. 1994. 1993 annual management report for the subsistence and commercial fisheries of the Kuskokwim area, 1993. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A 94-21, Anchorage.

McCullough, J. M., and D. Pengilly. 1994. An analysis of South Unimak and Shumagin Islands June fisheries sockeye salmon guideline harvest level time periods. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K 94-45, Kodiak.

Shaul, A. R., L. J. Schwarz, and A. J. Quimby. 1990. Alaska Peninsula-Aleutians Islands areas salmon and herring management report, 1989. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K 90-10, Kodiak.

Shaul, A. R., J. M. McCullough, A. J. Quimby, R. S. Berceli, and M. E. Stopha. 1991. Alaska Peninsula-Aleutian Islands areas salmon and herring annual management report, 1990. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K 91-12, Kodiak.

Shaul, A. R. 2000. South Unimak and Shumagin Islands June salmon fishery report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K00-67, Kodiak.

TABLES AND FIGURES

Table 1.-South Unimak and Shumagin Islands June sockeye and chum salmon harvest, 1960-2006.

	Sockeye[a]			Chum[a]		
Year	South Unimak	Shumagin Islands	Total	South Unimak	Shumagin Islands	Total
1960	137,000	19,000	156,000	84,000	11,000	95,000
1961	199,000	55,000	254,000	157,000	36,000	193,000
1962	272,000	54,000	326,000	209,000	61,000	270,000
1963	116,000	33,000	149,000	36,000	36,000	72,000
1964	159,000	85,000	244,000	161,000	67,000	228,000
1965	568,000	207,000	775,000	121,000	45,000	166,000
1966	528,000	54,000	582,000	215,000	17,000	232,000
1967	186,000	69,000	255,000	73,000	51,000	124,000
1968	342,000	233,000	575,000	115,000	51,000	166,000
1969	781,000	76,000	857,000	254,000	13,000	267,000
1970	1,510,373	139,735	1,650,108	391,568	44,909	436,477
1971	422,760	39,341	462,101	405,311	103,886	509,197
1972	426,799	74,398	501,197	411,000	107,810	518,810
1973	222,124	22,964	245,088	177,720	22,910	200,630
1974	0	0	0	0	0	0
1975	190,774	49,325	240,099	65,279	35,543	100,822
1976	231,568	72,016	303,584	336,161	74,109	410,270
1977	194,807	45,912	240,719	94,097	21,899	115,996
1978	418,935	67,876	486,811	103,413	18,479	121,892
1979	672,212	179,139	851,351	63,150	40,953	104,103
1980	2,731,148	475,127	3,206,275	458,499	50,366	508,865
1981	1,470,393	350,572	1,820,965	509,876	54,071	563,947
1982	1,668,153	450,548	2,118,701	933,728	161,316	1,095,044
1983	1,545,075	416,494	1,961,569	616,354	169,277	785,631
1984	1,131,365	256,838	1,388,203	227,913	109,207	337,120
1985	1,454,969	336,431	1,791,400	324,825	109,004	433,829
1986	315,370	156,027	471,397	252,721	99,048	351,769
1987	652,397	140,567	792,964	405,955	37,064	443,019
1988	474,457	282,230	756,687	464,765	61,946	526,711
1989	1,347,547	396,958	1,744,505	407,635	47,528	455,163
1990	1,088,944	255,585	1,344,529	455,044	63,501	518,545
1991	1,215,658	333,272	1,548,930	670,103	102,602	772,705
1992	2,046,022	411,834	2,457,856	323,891	102,312	426,203
1993	2,366,573	607,171	2,973,744	381,941	150,306	532,247
1994	1,001,250	460,013	1,461,263	374,409	207,756	582,165
1995	1,451,490	653,831	2,105,321	342,307	195,126	537,433
1996	572,495	456,475	1,028,970	129,889	229,931	359,820
1997	1,179,179	449,002	1,628,181	196,016	126,309	322,325
1998	974,628	314,097	1,288,725	195,454	50,165	245,619
1999	1,106,208	269,191	1,375,399	186,886	58,420	245,306

-continued-

Table 1.-Page 2 of 2

Year	Sockeye[a]			Chum[a]		
	South Unimak	Shumagin Islands	Total	South Unimak	Shumagin Islands	Total
2000	892,016	359,212	1,251,228	168,888	70,469	239,357
2001	121,547	29,085	150,632	36,099	12,251	48,350
2002	356,157	234,949	591,106	201,211	177,606	378,817
2003	335,903	117,244	453,147	121,169	161,269	282,438
2004	531,955	816,118	1,348,073	130,626	351,683	482,309
2005	437,443	566,952	1,004,395	143,799	284,031	427,830
2006	491,053	441,238	932,291	96,016	203,811	299,827
1960-1973 Average	419,290	82,960	502,250	200,757	47,680	248,437
1975-2000 Average	1,092,063	317,144	1,409,207	334,200	94,104	428,304
2001-2003 Average	271,202	127,093	398,295	119,493	117,042	236,535
2004-2006 Average	486,817	608,103	1,094,920	123,480	279,842	403,322

[a] Number of salmon does not include test fish catches.

Table 2.-South Unimak and Shumagin Islands sockeye salmon harvest, 1911-1959.

Year	South Unimak	Shumagin Islands	Total
1911	58,000	3,000	61,000
1912	144,000	31,000	175,000
1913	415,000	0	415,000
1914	610,000	0	610,000
1915	251,000	0	251,000
1916	539,000	0	539,000
1917	1,322,000	34,000	1,356,000
1918	733,000	44,000	777,000
1919	545,000	32,000	577,000
1920	954,000	60,000	1,014,000
1921	831,000	0	831,000
1922	2,775,000	550,000	3,325,000
1923	1,340,000	343,000	1,683,000
1924	971,000	237,000	1,208,000
1925	357,000	374,000	731,000
1926	1,898,000	491,000	2,389,000
1927	455,000	185,000	640,000
1928-1933		Unavailable	
1934	516,000	1,019,000	1,535,000
1935	210,000	549,000	759,000
1936	1,531,000	1,490,000	3,021,000
1937	803,000	498,000	1,301,000
1938	164,000	454,000	618,000
1939	474,000	707,000	1,181,000
1940	479,000	713,000	1,192,000
1941	206,000	294,000	496,000
1942	152,000	412,000	546,000
1943	428,000	1,356,000	1,784,000
1944	188,000	264,000	452,000
1945	218,000	375,000	593,000
1946	342,000	257,000	599,000
1947	782,000	229,000	1,011,000
1948	276,000	126,000	402,000
1949	84,000	167,000	251,000
1950	292,000	134,000	426,000
1951	82,000	35,000	117,000
1952	191,000	121,000	312,000
1953	191,000	105,000	296,000
1954	325,000	49,000	374,000
1955	315,000	52,000	367,000
1956	290,000	47,000	337,000
1957	50,000	44,000	94,000
1958	104,000	28,000	132,000
1959	58,000	78,000	136,000

Table 3.-Number of salmon permits fished by gear type in South Peninsula waters during June, 1970-2006.

	South Unimak				Shumagin Islands			Total Gear Type			
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total	Purse Seine	Set Gillnet	Total	Purse Seine	Drift Gillnet	Set Gillnet	Total
1970	25	155	2	182	27	14	41	38	155	16	209
1971	26	122	0	148	23	8	31	37	122	8	167
1972	17	150	1	168	27	5	32	32	150	6	188
1973	12	121	1	134	16	5	21	16	121	6	143
1974	0	0	0	0	0	0	0	0	0	0	0
1975	18	80	1	99	12	7	19	20	80	8	108
1976	22	108	3	133	19	11	30	25	108	14	147
1977	15	101	2	118	15	10	25	17	101	12	130
1978	15	120	5	140	19	11	30	23	120	16	159
1979	19	132	6	157	27	20	47	40	132	26	198
1980	52	129	8	189	33	21	54	68	129	29	226
1981	76	135	14	225	30	13	43	83	135	25	243
1982	77	138	10	225	35	13	48	90	138	23	251
1983	95	146	12	253	47	22	69	100	146	35	281
1984	74	147	5	226	72	27	99	101	147	32	280
1985	96	150	9	255	70	40	110	107	150	48	305
1986	70	156	10	236	39	33	72	99	156	43	298
1987	75	144	10	229	47	50	97	86	144	60	290
1988	52	148	11	211	45	52	97	90	148	63	301
1989	96	145	25	266	57	47	104	99	145	61	305
1990	94	153	19	266	51	44	95	109	153	58	320
1991	97	157	13	267	48	53	101	112	157	65	334
1992	111	141	21	273	52	51	103	112	141	68	321
1993	84	140	22	246	54	52	106	116	140	72	328
1994	97	145	23	265	60	46	106	114	145	65	324
1995	69	151	21	241	52	50	102	112	151	69	332
1996	64	147	19	230	62	49	111	99	147	67	313
1997	52	142	31	225	50	49	99	81	142	69	292
1998	27	145	24	196	38	53	91	64	145	74	283
1999	54	152	18	224	37	49	86	61	152	64	277
2000	65	149	28	242	41	45	86	70	149	59	278
2001	11	85	9	105	14	9	23	25	85	18	128
2002	17	86	16	119	19	45	64	36	86	59	181
2003	17	84	15	116	24	41	65	40	84	53	177
2004	14	95	17	126	24	43	67	38	95	57	190
2005	13	94	16	123	28	41	69	40	94	56	190
2006	12	85	24	121	25	44	69	36	85	67	188
1991-2000 Average	72	147	22	241	49	50	99	94	147	67	308
2001-2003 Average	15	85	13	113	19	32	51	34	85	43	162
2004-2006 Average	13	91	19	123	26	43	68	38	91	60	189

Table 4.-History of regulations for the South Unimak and Shumagin Islands June commercial salmon fisheries, 1962-2003.

Year	South Unimak	Shumagin Islands
1962-1966	5 days per week	5 days per week
1967-1970	7 days per week	7 days per week
	1971-726:00 A.M. Monday -	7 days per week
	6:00 A.M. Saturday	
1973[a]	Four 13 hour fishing periods per week	Four 13 hour fishing periods per week.
1974	No fishery	No fishery
1975-1983[b]	6.8% of predicted Bristol	1.5% of predicted Bristol Bay catch.
	Bay catch.	
1984-1989[b]	No more than 96 hours per 7 day period and no more than 72 hours of consecutive fishing time in each fishery (windows).	
1986[b]	6.8% allocation minus	1.5% allocation minus
	June 26-30 segment	June 26-30 segment
	Windows	Windows
	No fishing before June 11	No fishing before June 11
	A 400,000 chum salmon ceiling placed on both fisheries combined.	
1987[b]	Same as during 1984-85 for both fisheries.	
1988-1989[b]	6.8% of predicted Bristol	1.5% of predicted Bristol
	Bay catch	Bay catch
	Windows	Windows
	A 500,000 chum salmon ceiling placed on both fisheries combined.	

-continued-

Dates	South Unimak	Shumagin Islands
1990-1991	The chum salmon ceiling was increased from 500,000 to 600,000. The "Window Regulations" implemented in 1984 to limit the amount of fishing time that could be allowed were deleted. The season was delayed until June 13 and the time period sockeye allocations for both fisheries were changed as follow: June 13-18 35% June 19-25 45% June 26-30 20% The gear depth for seines was limited to 375 meshes of which mesh size may not exceed 3-1/2 inches except for the first 25 meshes above the lead line which may not exceed 7 inches. The gear depth on gillnets along the South Peninsula was limited to no more than 90 meshes. Seine leads may not exceed 150 fathoms for the entire Alaska Peninsula.	
1992-1993	The chum salmon ceiling was increased from 600,000 to 700,000 fish. Fishing time for set gillnet gear could not be less than 16 hours unless a 16 hour period would result in a harvest that exceeded the cap for chum salmon. The other regulations were the same as in effect for 1990 and 1991.	
1994	Sockeye salmon time period allocations eliminated. ADF&G given flexibility to open fishery prior to June 13 if sockeye to chum salmon ratios are favorable.	
1995-1997	The amount of fishing time for seine and drift gillnet gear after June 24 is limited if the sockeye to chum salmon ratio is two to one or less. The Board of Fisheries stated it's intent that the remaining under the chum salmon harvest ceiling supersedes attempts to reach the sockeye guideline harvest levels. The fisheries could not be extended into July regardless of weather during late June.	

-continued-

Dates	South Unimak	Shumagin Islands
	Fishery cannot begin prior to June 11.	
	Removed mesh size requirements for gillnets.	
1998-2000	The chum salmon ceiling was lowered from 700,000 to a "floating cap" that can range between 350,000 and 650,000.	
	A commercial fishery for all gear types may open on June 10 if sockeye to chum salmon ratios were greater than 2.0.	
	In the Unimak District the shoreward end of set gillnet must be within one half mile of shore.	
	All salmon caught must be retained and reported.	
	Use of aircraft to locate salmon prohibited for the entire Alaska Peninsula for the entire season	
2001-2003	Eliminated the sockeye salmon guideline harvest levels.	
	Eliminated the chum salmon guideline harvest levels.	
	Limited fishing time to no more than 16 hours per day by any gear group.	
	Limited total fishing time by seine and drift gillnet gear to no more than 48 hours in a floating seven day period with no more than two 16-hour periods on consecutive days in any seven day period.	
	From June 10 through June 24 in the South Unimak and/or Shumagin Islands fisheries, set gillnet gear may fish on consecutive days for 16-hour periods as long as the set gillnet sockeye to chum salmon ratios in that fishery are equal to or greater than the recent 10-year average for that fishery. If the set gillnet sockeye to chum salmon ratio falls below the recent 10-year average in either fishery, that fishery will be closed for one period. From June 10 through June 24, daily fishing periods for set gillnet gear will be from 6:00 AM until 10:00 PM.	
	Purse seine and drift gillnet fishing periods through June 24 will occur at the same time in the South Unimak and Shumagin Islands fisheries.	

-continued-

Table 4.-Page 4 of 4.

Dates	South Unimak	Shumagin Islands
	After June 24, in either the South Unimak or Shumagin Islands fishery if the ratio of sockeye to chum salmon by all gear combined is two to one or less on any day, the next fishing period shall be of six hours duration for all gear in that fishery. If the sockeye to chum salmon ratio is two or greater, a six hour fishing period can be extended to a maximum of 16 hours. The South Unimak or Shumagin Islands fishery shall close for all gear groups is the ratio of sockeye to chum salmon is two to one or less for two consecutive fishing periods.	
2004-present	Fishery to begin at 6:00 a.m. on June 7. Fishing periods are 88-hours in length separated by 32-hour closures. The fishery closes at 10:00 p.m. on June 29. The last fishing period is 64-hours in duration. Concurrent fishing time for all gear types. Area open to fishing expanded to include the entire Unimak and Southwestern Districts, East and West Pavlof Bay, Bechevin Bay and Shumagin Islands Sections. Eliminated all sockeye to chum salmon harvest ration requirements.	

[a] Both fisheries were closed in 1973 by emergency order during June 25-28 because of indications of the Bristol Bay run being below escapement requirements.

[b] Each sockeye allocation is broken down into time period guideline harvest levels.

Table 5.-South Unimak June fishery commercial sockeye salmon harvests in number of fish and percent by gear type and year, 1970-2006.

	Purse Seine [a]		Drift Gillnet [a]		Set Gillnet [a]		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	717,189	47.5	784,956	52.0	8,228	0.5	1,510,373
1971	107,075	25.3	315,685	74.7	0	0.0	422,760
1972	53,173	12.5	373,618	87.5	8	0.0	426,799
1973	21,364	9.6	200,258	90.2	502	0.2	222,124
1974 [b]	0	0.0	0	0.0	0	0.0	0
1975	43,703	22.9	146,918	77.0	153	0.1	190,774
1976	40,334	17.4	190,256	82.2	978	0.4	231,568
1977	29,698	15.2	164,165	84.3	944	0.5	194,807
1978	77,221	18.4	339,295	81.0	2,419	0.6	418,935
1979	474,381	70.6	196,482	29.2	1,349	0.2	672,212
1980	2,086,038	76.4	631,975	23.1	13,135	0.5	2,731,148
1981	745,747	50.7	693,166	47.1	31,480	2.1	1,470,393
1982	902,804	54.1	745,616	44.7	19,733	1.2	1,668,153
1983	935,003	60.5	599,152	38.8	10,920	0.7	1,545,075
1984	716,685	63.3	403,582	35.7	11,098	1.0	1,131,365
1985	891,775	61.3	553,558	38.0	9,636	0.7	1,454,969
1986	147,380	56.7	162,950	51.7	5,040	1.6	315,370
1987	238,193	36.5	401,215	61.5	12,989	2.0	652,397
1988	141,410	29.8	317,818	67.0	15,229	3.2	474,457
1989	800,949	59.4	512,522	38.0	34,076	2.5	1,347,547
1990 [c]	619,391	56.9	452,484	41.6	17,069	1.6	1,088,944
1991	650,461	53.5	539,490	44.4	25,707	2.1	1,215,658
1992	1,192,202	58.3	765,752	37.4	88,068	4.3	2,046,022
1993	1,397,481	59.1	902,788	38.1	66,304	2.8	2,366,573
1994	573,247	57.3	371,103	37.1	56,900	5.7	1,001,250
1995	611,453	42.1	792,940	54.6	47,097	3.2	1,451,490
1996	127,366	22.2	421,882	73.7	23,247	4.1	572,495
1997	174,536	14.8	896,638	76.0	108,005	9.2	1,179,179
1998	70,263	7.2	856,265	87.9	48,100	4.9	974,628
1999	232,779	21.0	836,876	75.7	36,553	3.3	1,106,208
2000	114,831	12.9	722,855	81.0	54,330	6.1	892,016
2001	17,159	14.1	95,547	78.6	8,841	7.3	121,547
2002	72,569	20.4	254,657	71.5	28,931	8.1	356,157
2003	58,813	17.5	245,657	73.1	31,433	9.4	335,903
2004	90,465	17.0	369,011	69.4	72,479	13.6	531,955
2005	89,607	20.5	227,206	51.9	120,630	27.6	437,443
2006	114,760	23.4	228,924	46.6	147,369	30.0	491,053
1991-2000 Average	514,462	34.8	710,659	60.6	55,431	4.6	1,280,552
2001-2003 Average	49,514	17.3	198,620	74.4	23,068	8.3	271,202
2004-2006 Average	98,277	20.3	275,047	56.0	113,493	23.7	486,817

[a] Does not include test fish harvests.

[b] No fishery because forecast was less than escapement requirements for Bristol Bay.

[c] Gear depth limitations in effect beginning in 1990.

Table 6.-South Unimak June fishery commercial chum salmon harvests in number of fish and percent by gear type and year, 1970-2006.

	Purse Seine [a]		Drift Gillnet [a]		Set Gillnet [a]		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	121,214	31.0	269,476	68.8	878	0.2	391,568
1971	79,044	19.5	326,267	80.5	0	0.0	405,311
1972	38,365	9.3	372,635	90.7	0	0.0	411,000
1973	11,746	6.6	165,753	93.3	221	0.1	177,720
1974 [b]	0	0.0	0	0.0	0	0.0	0
1975	18,833	28.9	46,446	71.1	0	0.0	65,279
1976	47,623	14.2	288,300	85.8	238	0.1	336,161
1977	9,852	10.5	84,052	89.3	193	0.2	94,097
1978	10,210	9.9	93,115	90.0	88	0.1	103,413
1979	19,007	30.1	44,051	69.8	92	0.1	63,150
1980	363,360	79.2	94,900	20.7	239	0.1	458,499
1981	323,817	63.5	184,586	36.2	1,473	0.3	509,876
1982	430,661	46.1	501,282	53.7	1,785	0.2	933,728
1983	405,903	65.9	209,600	34.0	851	0.1	616,354
1984	137,110	60.2	90,498	39.7	305	0.1	227,913
1985	125,813	38.7	198,361	61.1	651	0.2	324,825
1986	110,666	43.8	141,299	55.9	756	0.3	252,721
1987	155,447	38.3	247,934	61.1	2,574	0.6	405,955
1988	155,895	33.5	305,967	65.8	2,903	0.6	464,765
1989	212,310	52.1	192,650	47.3	2,675	0.7	407,635
1990 [c]	263,532	57.9	190,002	41.8	1,510	0.3	455,044
1991	410,034	61.2	256,132	38.2	3,937	0.6	670,103
1992	204,717	63.2	115,401	35.6	3,773	1.2	323,891
1993	252,798	66.2	120,820	31.6	8,323	2.2	381,941
1994	239,286	63.9	129,530	34.6	5,593	1.5	374,409
1995	161,199	47.1	172,715	50.5	8,393	2.5	342,307
1996	41,516	32.0	86,103	66.3	2,270	1.7	129,889
1997	58,999	30.1	127,646	65.1	9,371	4.8	196,016
1998	26,777	13.7	162,566	83.2	6,111	3.1	195,454
1999	52,314	28.0	128,723	68.9	5,849	3.1	186,886
2000	46,728	27.7	114,812	68.0	7,348	4.4	168,888
2001	5,701	15.8	28,651	79.4	1,747	4.8	36,099
2002	46,036	22.9	145,079	72.1	10,096	5.0	201,211
2003	23,435	19.3	92,730	76.5	5,004	4.1	121,169
2004	18,142	13.9	109,227	83.6	3,257	2.5	130,626
2005	26,253	18.3	112,144	78.0	5,402	3.8	143,799
2006	7,479	7.8	83,752	87.2	4,785	5.0	96,016
1986-2000 Average							
	159,481	43.9	166,153	54.3	4,759	1.8	330,394
2001-2003 Average							
	25,057	19.3	88,820	76.0	5,616	4.6	119,493
2004-2006							
	17,291	13.3	101,708	82.9	4,481	3.8	123,480

[a] Does not include test fish harvests.

[b] No fishery because forecast was less than escapement requirements for Bristol Bay.

[c] Gear depth limitations in effect beginning in 1990.

Table 7.-Shumagin Islands June fishery commercial sockeye salmon harvests in number of fish and percent by gear type and year, 1970-2006.

	Purse Seine		Set Gillnet		
Year	Number	Percent	Number	Percent	Total
1970	128,408	91.9	11,327	8.1	139,735
1971	35,176	89.4	4,165	10.6	39,341
1972	72,069	96.9	2,329	3.1	74,398
1973	20,047	87.3	2,917	12.7	22,964
1974 [a]	0	0.0	0	0.0	0
1975	48,065	97.4	1,260	2.6	49,325
1976	68,755	95.5	3,261	4.5	72,016
1977	43,579	94.9	2,333	5.1	45,912
1978	65,826	97.0	2,050	3.0	67,876
1979	165,605	92.4	13,534	7.6	179,139
1980	458,069	96.4	17,058	3.6	475,127
1981	332,300	94.8	18,272	5.2	350,572
1982	438,420	97.3	12,128	2.7	450,548
1983	405,757	97.4	10,737	2.6	416,494
1984	243,136	94.7	13,702	5.3	256,838
1985	318,878	94.8	17,553	5.2	336,431
1986	132,580	85.0	23,447	15.0	156,027
1987	106,799	76.0	33,768	24.0	140,567
1988	203,391	72.1	78,839	27.9	282,230
1989	360,860	90.9	36,098	9.1	396,958
1990 [b]	217,968	85.3	37,617	14.7	255,585
1991	268,539	80.6	64,733	19.4	333,272
1992	374,258	90.9	37,576	9.1	411,834
1993	531,258	87.5	75,913	12.5	607,171
1994	346,923	75.4	113,090	24.6	460,013
1995	532,952	81.5	120,879	18.5	653,831
1996	342,317	75.0	114,158	25.0	456,475
1997	338,803	75.5	110,199	24.5	449,002
1998	155,216	49.4	158,881	50.6	314,097
1999	200,108	74.3	69,083	25.7	269,191
2000	277,974	77.4	81,238	22.6	359,212
2001	24,705	84.9	4,380	15.1	29,085
2002	180,135	76.7	54,814	23.3	234,949
2003	82,608	70.5	34,636	29.5	117,244
2004	608,775	74.6	207,343	25.4	816,118
2005	347,114	61.2	219,838	38.8	566,952
2006	302,729	68.6	138,509	31.4	441,238
1991-2000 Average	336,835	76.8	94,575	23.3	431,410
2001-2003 Average	95,816	77.4	31,277	22.6	127,093
2004-2006 Average	419,539	68.1	188,563	31.9	608,103

[a] No fishery because forecast was less than escapement requirements for Bristol Bay.

[b] Gear depth limitations in effect beginning in 1990.

Table 8.-Shumagin Islands June fishery commercial chum salmon harvests in number of fish and percent by gear type and year, 1970-2006.

Year	Purse Seine		Set Gillnet		Total
	Number	Percent	Number	Percent	
1970	42,226	94.0	2,683	6.0	44,909
1971	100,544	96.8	3,342	3.2	103,886
1972	106,239	98.5	1,571	1.5	107,810
1973	21,605	94.3	1,305	5.7	22,910
1974 [a]	0	0.0	0	0.0	0
1975	34,614	97.4	929	2.6	35,543
1976	71,946	97.1	2,163	2.9	74,109
1977	21,678	99.0	221	1.0	21,899
1978	17,793	96.3	686	3.7	18,479
1979	39,196	95.7	1,757	4.3	40,953
1980	48,990	97.3	1,376	2.7	50,366
1981	53,351	98.7	720	1.3	54,071
1982	159,518	98.9	1,798	1.1	161,316
1983	168,618	99.6	659	0.4	169,277
1984	108,495	99.3	712	0.7	109,207
1985	104,619	96.0	4,385	4.0	109,004
1986	94,080	95.0	4,968	5.0	99,048
1987	34,617	93.4	2,447	6.6	37,064
1988	51,154	82.6	10,792	17.4	61,946
1989	44,498	93.6	3,030	6.4	47,528
1990 [b]	59,111	93.1	4,390	6.9	63,501
1991	95,756	93.3	6,846	6.7	102,602
1992	98,509	96.3	3,803	3.7	102,312
1993	147,160	97.9	3,146	2.1	150,306
1994	200,577	96.5	7,179	3.5	207,756
1995	182,894	93.7	12,232	6.3	195,126
1996	220,449	95.9	9,482	4.1	229,931
1997	118,418	93.8	7,891	6.2	126,309
1998	39,464	78.7	10,701	21.3	50,165
1999	54,439	93.2	3,981	6.8	58,420
2000	66,580	94.5	3,889	5.5	70,469
2001	11,402	93.1	849	6.9	12,251
2002	168,405	94.8	9,201	5.2	177,606
2003	154,445	95.8	6,824	4.2	161,269
2004	336,753	95.8	14,930	4.2	351,683
2005	261,261	92.0	22,770	8.0	284,031
2006	183,192	89.9	20,619	10.1	203,811
1986-2000 Average	100,514	92.8	6,318	7.2	106,832
2001-2003 Average	111,417	94.6	5,625	5.4	117,042
2004-2006 Average	260,402	92.6	19,440	7.4	279,842

[a] No fishery due to forecast of less than escapement requirements for Bristol Bay.

[b] Gear depth limitations in effect beginning in 1990.

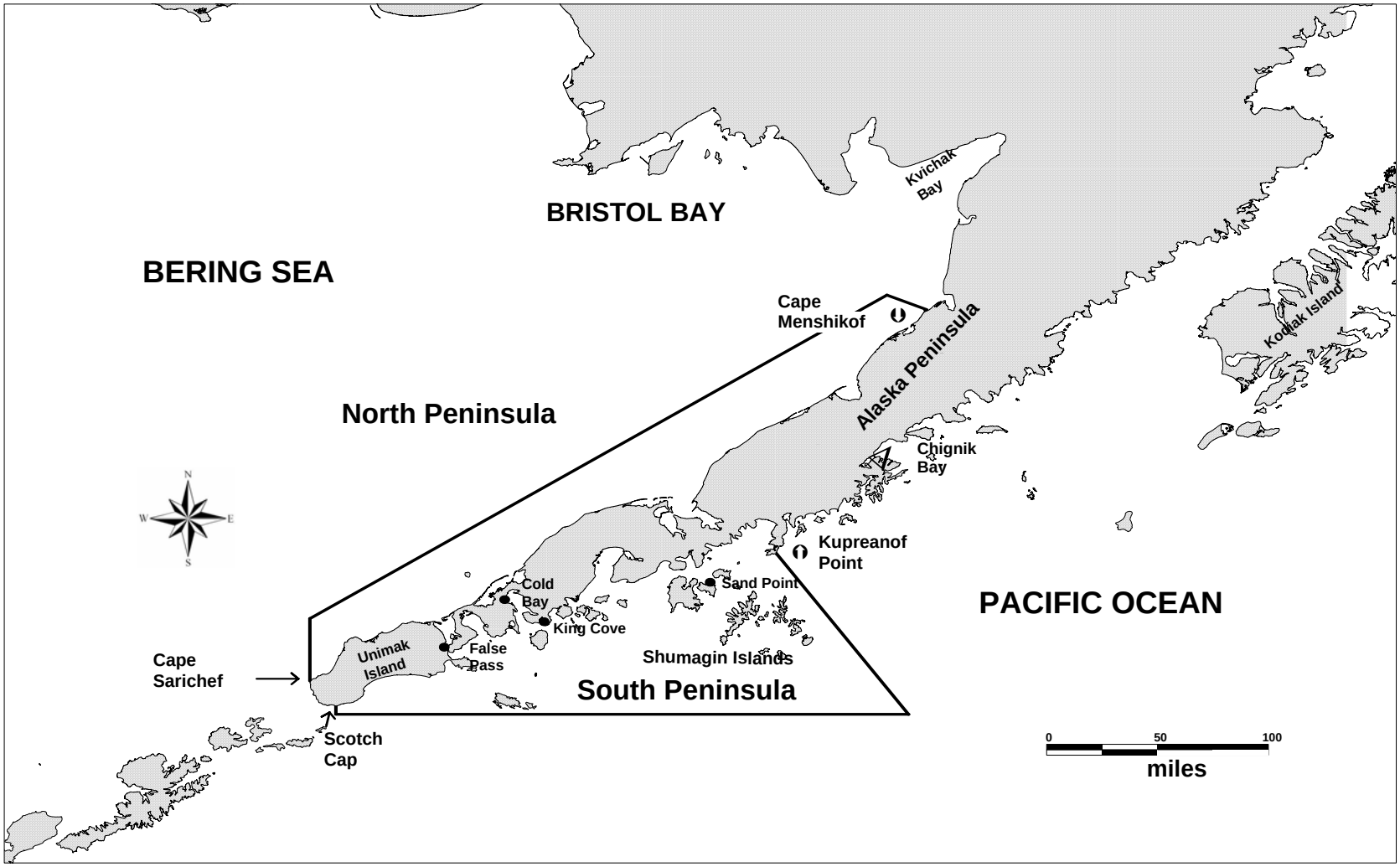

Figure 1.-The Alaska Peninsula Management Area, denoting the North and South Peninsula.

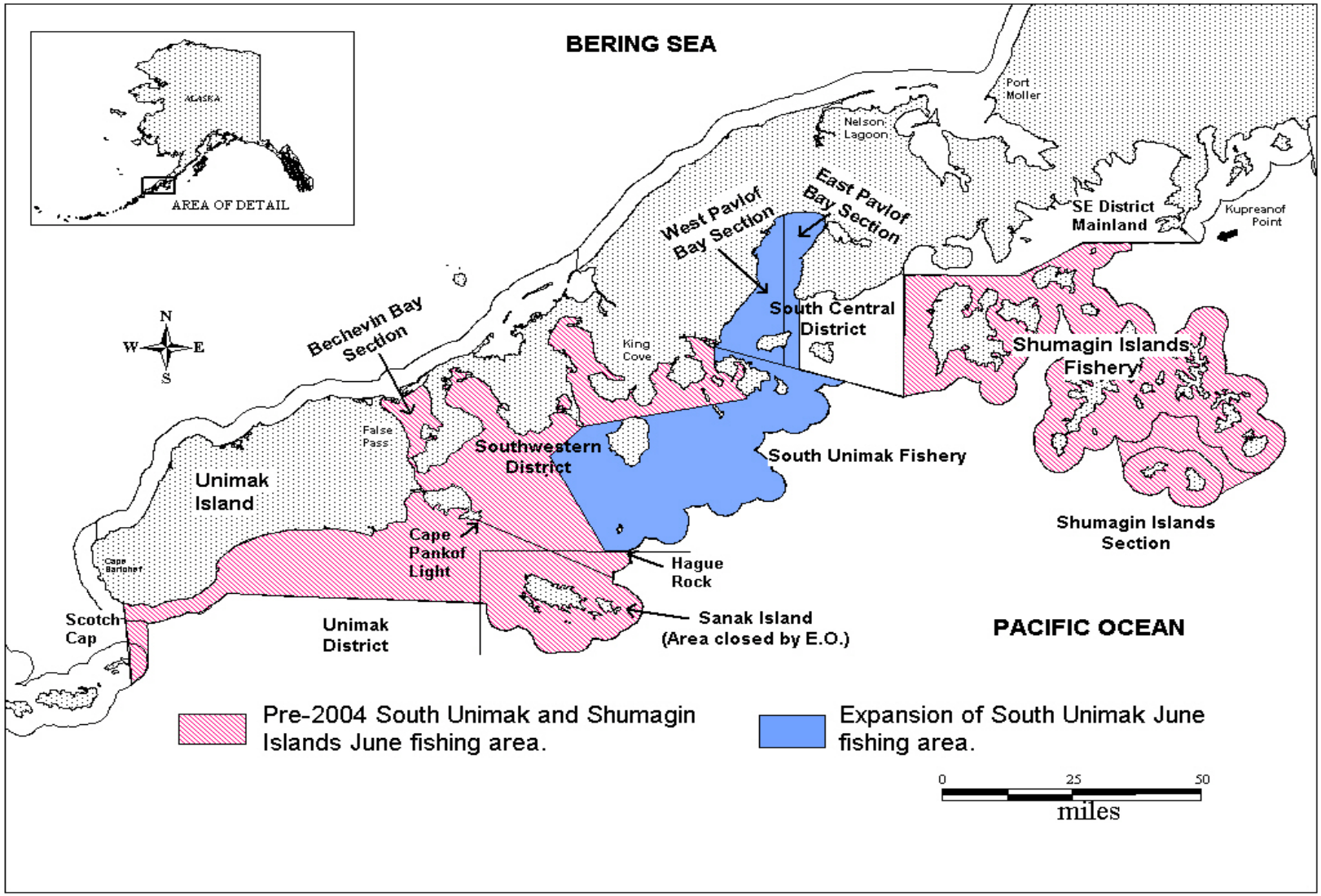

Figure 2.-Map of the South Unimak and Shumagin Islands June fishery, including the expanded area.

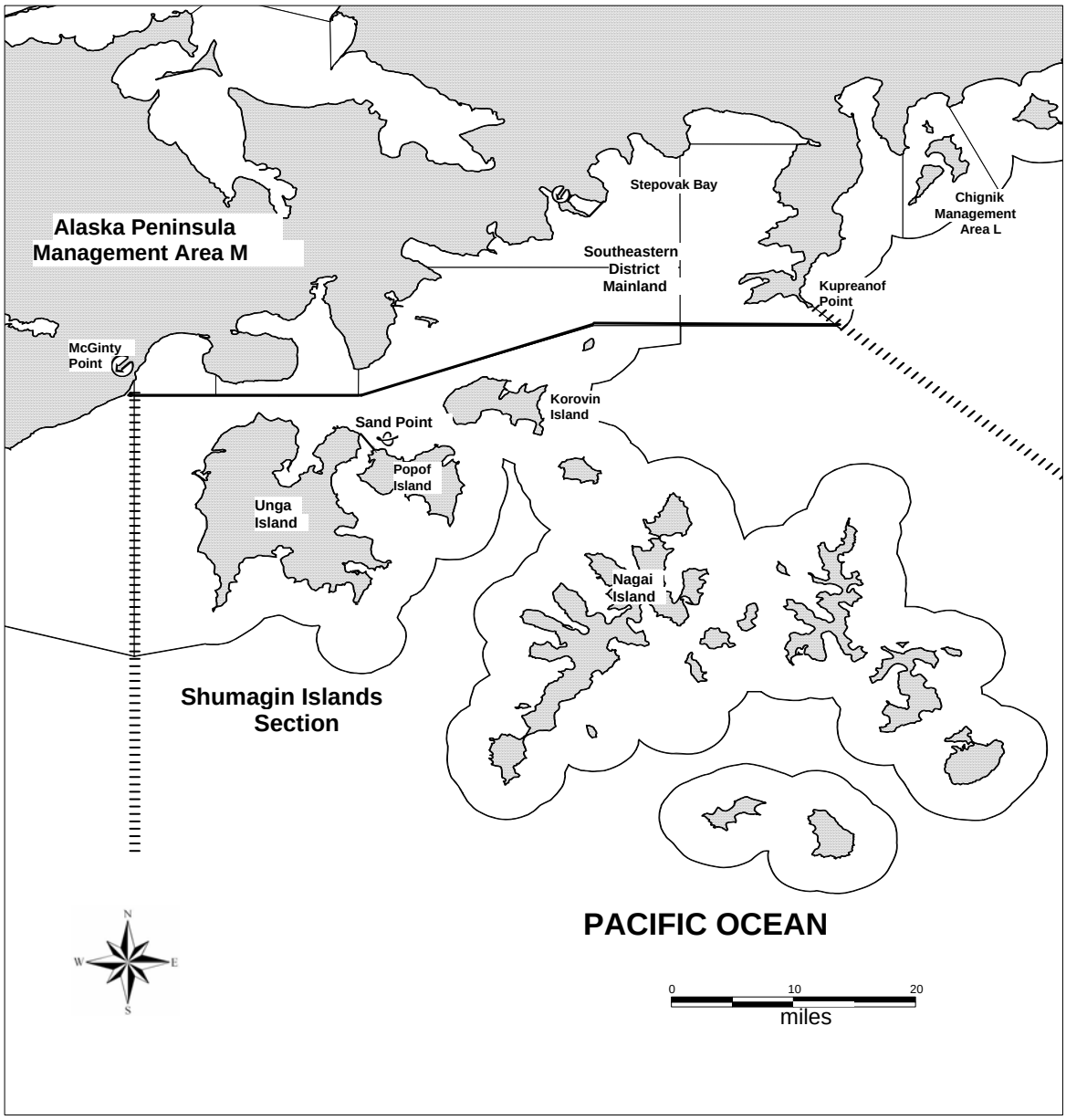

Figure 3.-Map of the Southeastern District.

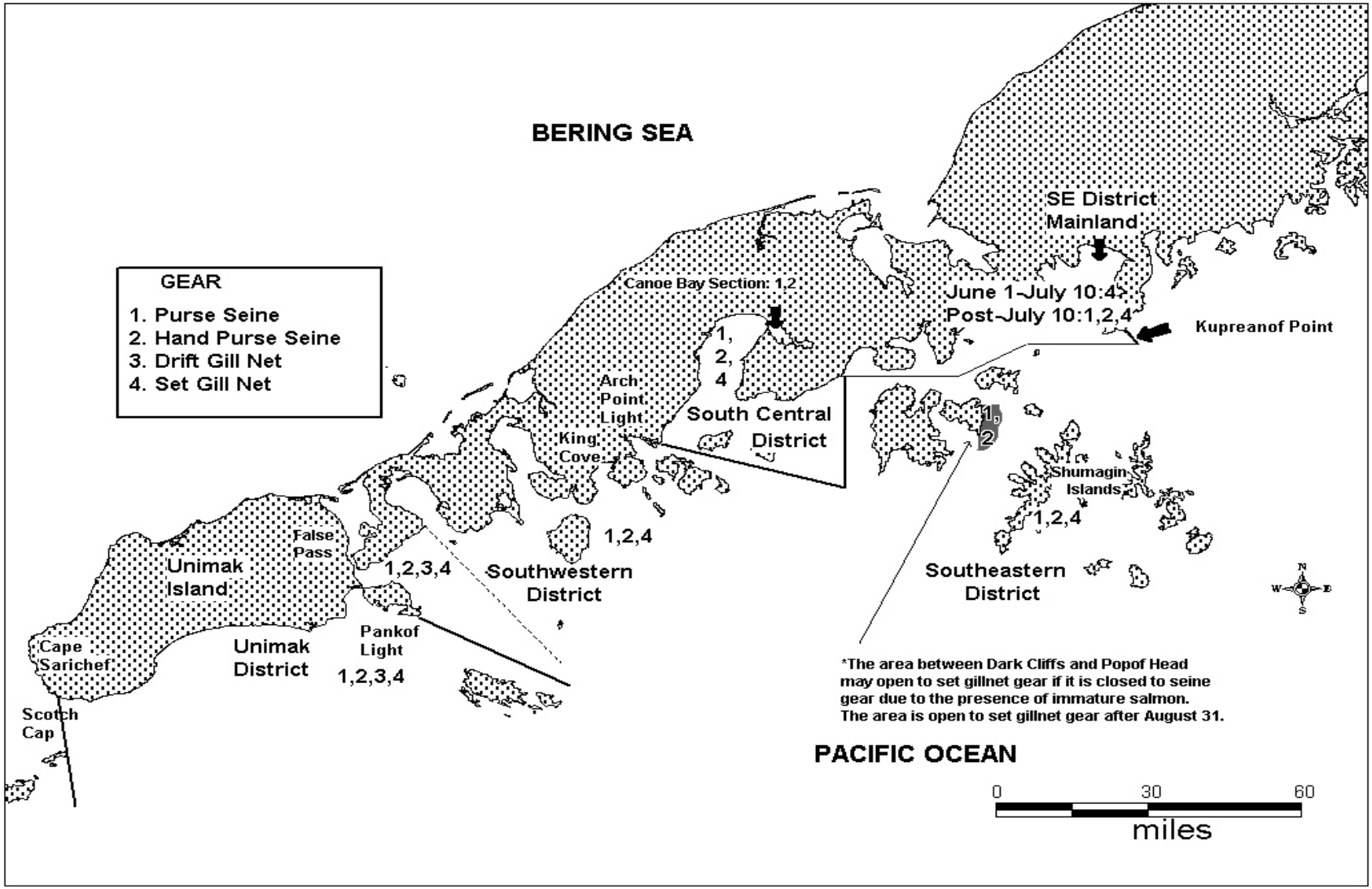

Figure 4.-Legal gear types, by district, allowed in South Peninsula waters.

APPENDIX A. JUNE SALMON FISHERY INFORMATION

Appendix A1.-South Unimak and Shumagin Islands June salmon harvest, in number of fish by species, 1970-2006.

Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	202	2,923	1,016	1,650,108	48	103,053	436,477	2,190,702
1971	166	1,986	828	462,101	1	19,240	509,197	991,367
1972	184	2,098	642	501,197	20	17,924	518,810	1,038,593
1973	141	1,042	247	245,088	28	19,430	200,630	465,423
1974	0	0	0	0	0	0	0	0
1975	108	510	117	240,099	1	5,247	100,822	346,286
1976	145	1,385	2,132	303,584	3	23,824	410,270	739,813
1977	130	817	521	240,719	0	5,398	115,996	362,634
1978	159	1,569	534	486,811	3	89,942	121,892	699,182
1979	196	1,695	1,050	851,351	290	154,813	104,103	1,111,607
1980	225	2,044	3,193	3,206,275	853	1,526,306	508,865	5,245,492
1981	243	2,400	5,672	1,820,965	320	451,250	563,947	2,842,154
1982	251	2,612	7,131	2,118,701	1,241	1,718,825	1,095,044	4,940,942
1983	281	1,721	13,456	1,961,569	4	55,875	785,631	2,816,535
1984	280	1,117	3,854	1,388,203	14	919,876	337,120	2,649,067
1985	305	2,120	5,777	1,791,400	2,468	106,615	433,829	2,340,089
1986	298	1,486	1,895	471,397	2	291,989	351,769	1,117,052
1987	290	2,019	5,163	792,964	380	16,982	443,019	1,258,508
1988	301	1,777	4,064	756,687	255	180,224	526,711	1,467,941
1989	305	1,350	2,758	1,744,505	0	199,235	455,163	2,401,661
1990	320	2,718	10,332	1,344,529	1	515,047	518,545	2,388,454
1991	334	2,025	4,473	1,548,930	12	619,137	772,705	2,945,257
1992	321	1,925	3,760	2,457,856	4	642,090	426,203	3,529,913
1993	327	2,262	9,466	2,973,744	1,233	81,136	532,247	3,597,826
1994	324	2,751	7,590	1,461,263	1,579	2,492,514	582,165	4,545,111
1995	332	3,635	14,747	2,105,321	6,042	178,635	537,433	2,842,178
1996	313	2,676	2,845	1,028,970	13,219	377,684	359,820	1,782,538
1997	292	3,174	5,811	1,628,181	560	605,937	322,325	2,562,814
1998	283	3,657	2,696	1,288,725	476	474,340	245,619	2,011,856
1999	277	2,114	3,051	1,375,399	2	30,539	245,306	1,654,297
2000	278	3,001	2,849	1,251,228	304	360,029	239,357	1,853,767
2001	128	270	345	150,632	2	39,251	48,350	238,580
2002	181	1,301	2,443	591,106	4	76,251	378,817	1,048,621
2003	177	1,170	1,323	453,147	153	217,900	282,438	954,961
2004	190	2,260	4,423	1,348,073	621	359,916	482,309	2,195,342
2005	190	2,344	3,055	1,004,395	1,919	1,654,959	427,830	3,092,158
2006	188	2,412	4,497	932,291	2,629	1,332,319	299,827	2,571,563
1991-2000 Average	308	2,722	5,729	1,711,962	2,343	586,204	426,318	2,732,556
2002-2003 Average[b]	179	1,236	1,883	522,127	79	147,076	330,628	1,001,791
2004-2006 Average	189	2,339	3,992	1,094,920	1,723	1,115,731	403,322	2,619,688

[a] Numbers of salmon do not include test fish catches.

[b] Averages do not include 2001 because of a lengthy strike.

Appendix A2.-South Unimak June salmon harvest, in number of fish by species, 1970-2006.

Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	176	2,624	868	1,510,373	46	83,325	391,568	1,986,180
1971	147	1,685	549	422,760	0	11,608	405,311	840,228
1972	165	1,771	400	426,799	4	11,906	411,000	850,109
1973	132	922	145	222,124	11	11,152	177,720	411,152
1974	0	0	0	0	0	0	0	0
1975	98	445	101	190,774	1	3,205	65,279	259,360
1976	131	1,184	1,827	231,568	3	18,181	336,161	587,740
1977	118	740	393	194,807	0	3,397	94,097	292,694
1978	140	1,337	267	418,935	3	47,380	103,413	569,998
1979	156	1,303	575	672,212	38	49,000	63,150	784,975
1980	188	1,666	2,927	2,731,148	853	1,140,611	458,499	4,334,038
1981	225	2,096	4,455	1,470,393	83	325,002	509,876	2,309,809
1982	225	2,313	5,577	1,668,153	1,241	1,032,154	933,728	3,640,853
1983	253	1,410	8,179	1,545,075	1	40,441	616,354	2,210,050
1984	226	814	2,024	1,131,365	0	470,688	227,913	1,831,990
1985	255	1,596	4,101	1,454,969	2	69,811	324,825	1,853,708
1986	236	1,093	1,363	315,370	1	150,674	252,721	720,129
1987	229	1,738	4,017	652,397	380	11,342	405,955	1,074,091
1988	211	1,144	2,125	474,457	11	86,678	464,765	1,028,036
1989	266	1,035	2,263	1,347,547	0	154,168	407,635	1,911,613
1990	266	2,133	8,464	1,088,944	1	444,249	455,044	1,996,702
1991	267	1,628	3,066	1,215,658	5	500,922	670,103	2,389,754
1992	273	1,597	2,373	2,046,022	3	501,127	323,891	2,873,416
1993	245	1,681	4,587	2,366,573	506	37,735	381,941	2,791,342
1994	265	1,927	4,468	1,001,250	1,271	1,731,741	374,409	3,113,139
1995	241	2,575	7,850	1,451,490	5,102	119,094	342,307	1,925,843
1996	230	1,797	1,228	572,495	11,730	146,799	129,889	862,141
1997	225	2,299	3,041	1,179,179	501	332,262	196,016	1,710,999
1998	196	2,432	1,259	974,628	312	125,906	195,454	1,297,559
1999	224	1,741	2,258	1,106,208	1	20,302	186,886	1,315,655
2000	242	2,587	2,064	892,016	303	210,521	168,888	1,273,792
2001	105	243	134	121,547	2	31,812	36,099	189,594
2002	119	783	433	356,157	3	33,789	201,211	591,593
2003	116	720	373	335,903	14	90,161	121,169	547,620
2004	126	1,325	670	531,955	159	78,808	130,626	742,218
2005	123	1,190	790	437,443	56	403,815	143,799	985,903
2006	121	1,239	1,472	491,053	432	186,096	96,016	775,069
1991-2000 Average	241	2,026	3,219	1,280,552	1,973	372,641	296,978	1,955,364
2002-2003 Average[b]	118	752	403	346,030	9	61,975	161,190	569,607
2004-2006 Average	123	1,251	977	486,817	216	222,906	123,480	834,397

[a] Numbers of salmon do not include test fish catches.

[b] Averages do not include 2001 because of a lengthy strike.

Appendix A3.-Shumagin Islands June salmon harvest, in number of fish by species, 1970-2006.

Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total[a]
1970	40	299	148	139,735	2	19,728	44,909	204,522
1971	31	301	279	39,341	1	7,632	103,886	151,139
1972	32	327	242	74,398	16	6,018	107,810	188,484
1973	21	120	102	22,964	17	8,278	22,910	54,271
1974	0	0	0	0	0	0	0	0
1975	20	65	16	49,325	0	2,042	35,543	86,926
1976	30	201	305	72,016	0	5,643	74,109	152,073
1977	25	77	128	45,912	0	2,001	21,899	69,940
1978	30	232	267	67,876	0	42,562	18,479	129,184
1979	48	411	475	182,816	362	107,862	43,133	334,648
1980	54	378	266	475,127	0	385,695	50,366	911,454
1981	43	304	1,217	350,572	237	126,248	54,071	532,345
1982	48	299	1,554	450,548	0	686,671	161,316	1,300,089
1983	69	311	5,277	416,494	3	15,434	169,277	606,485
1984	99	303	1,830	256,838	14	449,188	109,207	817,077
1985	110	524	1,676	336,431	2,466	36,804	109,004	486,381
1986	72	393	532	156,027	1	141,315	99,048	396,923
1987	97	281	1,146	140,567	0	5,640	37,064	184,417
1988	97	633	1,939	282,230	244	93,546	61,946	439,905
1989	104	315	495	396,958	0	45,067	47,528	490,048
1990	95	585	1,868	255,585	0	70,798	63,501	391,752
1991	101	397	1,407	333,272	7	118,215	102,602	555,503
1992	103	328	1,387	411,834	1	140,963	102,312	656,497
1993	106	581	4,879	607,171	727	43,401	150,306	806,484
1994	106	824	3,122	460,013	308	760,773	207,756	1,431,972
1995	102	1,060	6,897	653,831	940	59,541	195,126	916,335
1996	111	879	1,617	456,475	1,489	230,885	229,931	920,397
1997	99	875	2,770	449,002	59	273,675	126,309	851,815
1998	91	1,225	1,437	314,097	164	348,434	50,165	714,297
1999	86	373	793	269,191	1	10,237	58,420	338,642
2000	86	414	785	359,212	1	149,508	70,469	579,975
2001	23	27	211	29,085	0	7,439	12,251	48,986
2002	64	518	2,010	234,949	1	42,462	177,606	457,028
2003	65	450	950	117,244	139	127,739	161,269	407,341
2004	67	935	3,753	816,118	462	281,108	351,683	1,453,124
2005	69	1,154	2,265	566,952	1,863	1,251,144	284,031	2,106,255
2006	69	1,173	3,025	441,238	2,197	1,146,223	203,811	1,796,494
1991-2000 Average	99	696	2,509	431,410	370	213,563	129,340	777,192
2002-2003 Average[b]	65	484	1,480	176,097	70	85,101	169,438	432,185
2004-2006 Average	68	1,087	3,014	608,103	1,507	892,825	279,842	1,785,291

[a] Numbers of salmon do not include test fish catches.

[b] Averages do not include 2001 because of a lengthy strike.

Appendix A4.-South Unimak and Shumagin Islands June sockeye salmon allocations and harvests, 1975-2000.

	South Unimak		Shumagin Islands		Total	
Year	Allocation	Harvest	Allocation	Harvest	Allocation	Harvest
1975	165,000	190,774	50,000	49,325	215,000	240,099
1976	350,000	233,211	75,000	72,016	425,000	305,227
1977	195,000	195,680	42,000	45,912	237,000	241,592
1978	428,000	418,959	94,000	67,876	522,000	486,835
1979	900,000	672,293	200,000	179,139	1,100,000	851,432
1980	2,513,000	2,731,148	555,000	475,127	3,068,000	3,206,275
1981	1,442,000	1,470,563	318,000	350,572	1,760,000	1,821,135
1982	1,850,000	1,668,153	408,000	450,548	2,258,000	2,118,701
1983	1,469,000	1,547,369	324,000	416,494	1,793,000	1,963,863
1984	1,111,000	1,131,365	245,000	256,838	1,356,000	1,388,203
1985	1,380,000	1,454,969	305,000	336,431	1,685,000	1,791,400
1986	907,000	315,370	200,000	156,027	1,107,000	471,397
1987	635,000	653,536	140,000	140,567	775,000	794,103
1988	1,263,000	474,457	279,000	282,230	1,542,000	765,687
1989	1,199,000	1,347,547	264,000	396,958	1,463,000	1,744,505
1990	1,087,000	1,088,944	240,000	255,585	1,327,000	1,344,529
1991	1,573,000	1,215,658	347,000	333,272	1,920,000	1,548,930
1992	1,959,000	2,046,022	432,000	411,834	2,391,000	2,457,856
1993	2,375,000	2,366,573	524,000	607,171	2,899,000	2,973,744
1994	2,938,000	1,001,250	648,000	460,013	3,586,000	1,461,263
1995	2,987,000	1,451,490	659,000	653,831	3,646,000	2,105,321
1996	2,564,000	572,495	566,000	456,475	3,130,000	1,028,970
1997	1,840,000	1,179,179	406,000	449,002	2,246,000	1,628,181
1998	1,529,000	974,628	336,000	314,097	1,865,000	1,288,725
1999	1,024,000	1,106,208	226,000	269,191	1,250,000	1,375,399
2000	1,650,000	892,016	363,000	359,212	2,013,000	1,251,228

Appendix A5.-South Unimak and Shumagin Islands June fisheries, sockeye salmon allocations versus actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-2000.

Year	S. Unimak-Shumagin Islands Allocation	Actual S. Unimak-Shumagin Is. Harvest[a]	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak-Shumagin Harvest	S. Unimak-Shumagin allocation % of Combined Bristol Bay & S. Unimak-Shumagin Harvest[b]	South Unimak-Shumagin Island Harvest % of the Combined Bristol B. & S. Unimak-Shumagin Island Harvest [b]	S. Unimak Shumagin Is. Allocation if Actual Bristol Bay Harvest Was Forecasted[b]
1975	215,000	240,099	4,898,814	5,138,913	4.18	4.67	426,530
1976	425,000	303,584	5,619,292	5,922,876	7.18	5.13	491,599
1977	237,000	240,719	4,877,880	5,118,599	4.63	4.70	424,844
1978	522,000	486,811	9,928,139	10,414,950	5.01	4.67	864,441
1979	1,100,000	851,351	21,428,606	22,279,957	4.94	3.82	1,849,236
1980[c]	3,068,000	3,206,275	23,761,746	26,968,021	11.38	11.89	2,238,346
1981	1,760,000	1,820,965	25,603,081	27,424,046	6.42	6.64	2,276,196
1982	2,258,000	2,118,701	15,104,391	17,223,092	13.11	12.30	1,429,517
1983	1,793,000	1,961,569	37,372,031	39,333,600	4.56	4.99	3,264,689
1984	1,356,000	1,388,203	24,710,306	26,098,509	5.20	5.32	2,166,176
1985	1,685,000	1,791,400	23,702,883	25,494,283	6.61	7.03	2,116,025
1986[d]	1,107,000	471,397	15,776,056	16,247,453	6.81	2.90	1,348,539
1987	775,000	792,964	16,068,775	16,861,739	4.60	4.70	1,399,524
1988[d]	1,542,000	756,687	13,989,757	14,746,444	10.46	5.13	1,223,955
1989	1,463,000	1,744,505	28,735,306	30,479,811	4.80	5.72	2,529,824
1990	1,327,000	1,346,529	33,523,127	34,869,656	3.81	3.86	2,894,181
1991[d]	1,920,000	1,548,930	25,821,180	27,370,110	7.01	5.66	2,271,719
1992	2,391,000	2,457,856	31,879,676	34,337,532	6.96	7.16	2,850,015
1993	2,899,000	2,973,744	40,462,124	43,435,868	6.67	6.85	3,605,177
1994	3,586,000	1,461,263	35,224,050	36,685,313	9.78	3.98	3,044,881
1995	3,646,000	2,105,321	44,266,217	46,371,538	7.86	4.54	3,848,838
1996	3,130,000	1,028,970	29,588,297	30,617,267	10.22	3.36	2,541,233
1997	2,246,000	1,628,181	12,309,000	13,937,181	16.12	11.68	1,156,786
1998	1,865,000	1,288,725	10,035,601	11,324,326	16.47	11.38	939,919
1999	1,250,000	1,375,399	25,824,286	27,199,685	4.60	5.06	2,257,574
2000	2,013,000	1,251,228	20,532,315	21,783,543	9.24	5.74	1,808,034

[a] Salmon numbers exclude test fish harvests.

[b] These values were calculated by adding the actual Bristol Bay sockeye salmon harvest and the South Unimak and Shumagin Islands June sockeye harvests and calculating the appropriate percentages. Calculations assume all sockeye salmon caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

[c] The 1980 Bristol Bay sockeye salmon catch would have been much larger had it not been for a lengthy strike.

[d] Sockeye salmon allocations were not reached largely, due to a chum cap.

Appendix A6.-South Unimak and Shumagin Islands June fisheries, number of fishing days and hours open to commercial fishing by year and gear, 1975-2006.

	South Unimak[a,b]				Shumagin Islands[a,b]			
	Set Gillnet		Drift and Seine		Set Gillnet		Seine	
Year	Days	Hours	Days	Hours	Days	Hours	Days	Hours
1975	10	240	10	240	9	207	9	207
1976 [c]	19	456	19	456	13	312	13	312
1977	17	408	17	408	11	264	11	264
1978	23	552	23	552	23	552	23	552
1979 [d]	33	786	33	786	27	642	27	642
1980	30	720	30	720	30	720	30	720
1981	24	576	24	576	22	528	22	528
1982	30	720	30	720	24	576	24	576
1983	11	264	11	264	10	228	10	228
1984	5	110	5	110	6	134	6	134
1985	9	144	9	144	9	140	9	140
1986	8	148	8	148	8	160	8	160
1987	12	224	12	224	6	92	6	92
1988	8	112	8	112	9	153	9	153
1989	5	84	5	84	4	72	4	72
1990	13	281	13	281	9	200	9	200
1991	8	161	8	161	5	88	5	88
1992	8	139	8	139	5	42.5	5	42.5
1993	10	176	10	176	7	131	7	131
1994	14	281	14	262	13	262	13	249
1995	18	378	18	370	17	347	17	341
1996	16	378	16	372	13	306	13	276
1997	18	418	18	418	14	281	14	235
1998	18	424	18	424	18	418	16	344
1999	11	234	10	217	6	127	6	127
2000	18	426	18	426	8	176	8	176
2001 [e]								
2002	11	176	9	144	10	150	9	134
2003	12	192	9	144	10	150	9	134
2004	19	416	19	416	19	416	19	416
2005	19	416	19	416	19	416	19	416
2006	19	416	19	416	19	416	19	416
1991-2000 Average	14	302	14	297	11	218	10	201
2002-2003 Average	12	184	9	144	10	150	9	134
2004-2006 Average	19	416	19	416	19	416	19	416

-continued-

[a] From 1992-2000, set gillnet gear fishermen were guaranteed 16 hours per fishing period regardless of the other gear types. Starting in 2001, set gillnet fishing periods after June 24 could vary in length up to 16 hours.

[b] Prior to 1996, openings in the Cape Lutke Section did not coincide with periods elsewhere in the South Unimak Fishery.

[c] In 1976, the South Unimak fishery was extended through July 1 to compensate for fishing time lost at the end of June due to adverse weather conditions.

[d] In 1979, the South Unimak fishery was extended through July 3 to compensate for fishing time lost at the end of June due to adverse weather conditions.

[e] Due to lengthy price negotiations and changes in the management plan in 2001, fishing effort was absent during many of the open fishing periods. For this reason, 2001 is not included in the averages.

Appendix A7.-South Unimak and Shumagin Islands June fisheries, sockeye to chum salmon ratio by gear type, 1970-2006.

	South Unimak				Shumagin islands		
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total	Purse Seine	Set Gillnet	Total
1970	5.9	2.9	9.4	3.9	3.0	4.2	3.1
1971	1.4	1.0	0.0	1.0	0.3	1.2	0.4
1972	1.4	1.0	0.4	1.0	0.7	1.5	0.7
1973	1.8	1.2	2.3	1.2	0.9	2.2	1.0
1974	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1975	2.3	3.2	0.0	2.9	1.4	1.4	1.4
1976	0.8	0.7	4.1	0.7	1.0	1.5	1.0
1977	3.0	2.0	4.9	2.1	2.0	10.6	2.1
1978	7.6	3.6	27.5	4.1	3.7	3.0	3.7
1979	25.0	4.5	14.7	10.6	4.2	7.7	4.4
1980	5.7	6.7	55.0	6.0	9.4	12.4	9.4
1981	2.3	3.8	21.4	2.9	6.2	25.4	6.5
1982	2.1	1.5	11.1	1.8	2.7	6.7	2.8
1983	2.3	2.9	12.8	2.5	2.4	16.3	2.5
1984	5.2	4.5	36.4	5.0	2.2	19.2	2.4
1985	7.1	2.8	14.8	4.5	3.0	4.0	3.1
1986	1.3	1.2	6.7	1.2	1.4	4.7	1.6
1987	1.5	1.6	5.0	1.6	3.1	13.8	3.8
1988	0.9	1.0	5.2	1.0	4.0	7.3	4.6
1989	3.8	2.7	12.7	3.3	8.1	11.9	8.4
1990 [a]	2.4	2.4	11.3	2.4	3.7	8.6	4.0
1991	1.6	2.1	6.5	1.8	2.8	9.5	3.2
1992	5.8	6.6	23.3	6.3	3.8	9.9	4.0
1993	5.5	7.5	8.0	6.2	3.6	24.1	4.0
1994	2.4	2.9	10.2	2.7	1.7	15.8	2.2
1995	3.8	4.6	5.6	4.2	2.9	9.9	3.4
1996 [b]	3.1	4.9	10.2	4.4	1.6	12.0	2.0
1997	3.0	7.0	11.5	6.0	2.9	14.0	3.6
1998	2.6	5.3	7.9	5.0	3.9	14.8	6.3
1999	4.4	6.5	6.2	5.9	3.7	17.4	4.6
2000	2.5	6.3	7.4	5.3	4.2	20.9	5.1
2001 [c]	3.0	3.3	5.1	3.4	2.2	5.2	2.4
2002	1.6	1.8	2.9	1.8	1.1	6.0	1.3
2003	2.5	2.6	6.3	2.8	0.5	5.1	0.7
2004	5.0	3.4	22.3	4.1	1.8	13.9	2.3
2005	3.4	2.0	22.3	3.0	1.3	9.7	2.0
2006	15.3	2.7	30.8	5.1	1.7	6.7	2.2
1991-2000 Average	3.5	5.4	9.7	4.8	3.1	14.8	3.8
2002-2003 Average	2.1	2.2	4.6	2.3	0.8	5.6	1.0
2004-2006 Average	7.9	2.7	25.1	4.1	1.6	10.1	2.2

[a] Gear depth limitations in effect.

[b] Gillnet mesh size restrictions eliminated.

[c] Due to a lengthy price dispute, the 2001 figures are not comparable to other years.

Appendix A8.-Estimated exvessel value of the South Unimak and Shumagin Islands June fisheries, 1985-2006.

Year	Chinook	Sockeye	Coho	Pink	Chum	Total
1985	$175,000	$12,230,000	$15,000	$30,000	$1,185,000	$13,635,000
1986	$33,000	$3,427,000	$0	$62,000	$932,000	$4,454,000
1987	$5,580	$1,300,000	$14	$35,000	$104,753	$1,445,347
1988	$121,000	$10,216,000	$0	$99,000	$3,721,000	$14,157,000
1989	$76,000	$16,712,000	$0	$130,000	$1,530,000	$18,448,000
1990	$119,000	$14,057,000	$0	$242,000	$1,521,000	$15,939,000
1991	$65,000	$7,400,000	$40	$1,800,000	$1,200,000	$10,465,040
1992	$64,000	$21,774,000	$0	$138,000	$1,075,000	$23,051,000
1993	$126,151	$13,155,634	$3,013	$16,250	$889,534	$14,190,582
1994	$100,000	$6,382,000	$4,170	$657,500	$911,000	$8,054,670
1995	$249,000	$13,515,000	$13,400	$36,600	$935,100	$14,749,100
1996	$24,530	$4,988,500	$26,540	$47,630	$203,800	$5,291,000
1997	$47,000	$8,044,000	$500	$81,000	$163,000	$8,335,500
1998	$20,800	$7,083,000	$730	$124,370	$165,400	$7,394,300
1999	$26,000	$9,131,000	$3	$7,455	$158,100	$9,322,558
2000	$23,000	$6,262,000	$464	$86,078	$182,150	$6,553,692
2001 [a]	$1,929	$462,750	$2	$10,667	$42,216	$517,564
2002	$8,765	$1,762,000	$3	$14,742	$260,541	$2,046,051
2003	$5,580	$1,300,000	$14	$35,000	$104,753	$1,445,347
2004	$17,659	$3,784,985	$662	$71,047	$379,674	$4,254,027
2005	$15,883	$3,511,945	$644	$251,134	$286,649	$4,066,255
2006	$48,860	$2,475,640	$986	$178,990	$123,274	$2,827,750
1991-2000 Average	$74,548	$9,773,513	$4,886	$299,488	$588,308	$10,740,744
2002-2003 Average	$7,173	$1,531,000	$9	$24,871	$182,647	$1,745,699
2004-2006 Average	$27,467	$3,257,523	$764	$167,057	$263,199	$3,716,011

[a] Due to a lengthy price dispute, the 2001 figures are not comparable to other years.

Appendix A9.-South Unimak and Shumagin Islands June commercial salmon harvest, all gear combined, by species and day, 2004.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	106	110	152	27,199	0	4,992	8,692	41,035
8-Jun	94	103	156	35,846	0	4,914	7,201	48,117
9-Jun	121	126	353	70,732	8	13,687	29,555	114,335
10-Jun	140	174	494	78,501	0	13,186	53,241	145,422
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	145	154	238	56,155	0	16,757	26,400	99,550
13-Jun	135	153	267	94,031	0	27,570	40,516	162,384
14-Jun	148	175	209	91,308	2	17,062	26,122	134,703
15-Jun	137	167	504	156,694	0	39,093	47,093	243,384
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	121	133	282	73,609	3	23,470	16,140	113,504
18-Jun	114	152	71	69,992	1	8,339	14,780	93,183
19-Jun	125	140	168	105,669	7	33,906	26,905	166,655
20-Jun	115	132	192	108,263	4	43,466	41,441	193,366
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	73	81	68	46,489	1	20,761	23,763	91,082
23-Jun	87	107	287	82,093	144	30,012	38,729	151,265
24-Jun	72	91	559	89,515	137	32,180	50,695	173,086
25-Jun	55	67	126	49,075	18	14,461	11,459	75,139
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	54	64	126	27,213	43	6,401	8,401	42,184
28-Jun	48	60	98	39,379	105	4,340	6,178	50,100
29-Jun	51	71	73	46,310	148	5,319	4,999	56,849
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	190	2,260	4,423	1,348,073	621	359,916	482,310	2,195,343

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.

Appendix A10.-South Unimak June commercial salmon harvest, all gear combined, by species and day, 2004.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	80	83	61	18,253	0	1,393	4,908	24,615
8-Jun	67	72	56	19,622	0	2,699	3,861	26,238
9-Jun	83	85	50	24,693	0	3,116	7,142	35,001
10-Jun	98	120	99	33,321	0	4,264	12,657	50,341
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	98	100	61	26,969	0	6,820	11,168	45,018
13-Jun	83	89	60	32,147	0	9,978	13,207	55,392
14-Jun	97	111	36	47,345	0	4,422	15,288	67,091
15-Jun	95	116	93	64,556	0	6,415	18,686	89,750
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	71	73	23	27,644	0	3,489	5,929	37,085
18-Jun	86	109	49	54,801	0	6,617	12,846	74,313
19-Jun	85	92	31	48,710	3	8,169	10,049	66,962
20-Jun	67	72	10	35,637	3	12,050	8,439	56,139
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	44	48	3	10,524	0	2,818	1,287	14,632
23-Jun	45	55	12	20,063	24	2,373	2,441	24,913
24-Jun	25	26	1	11,232	2	1,197	749	13,181
25-Jun	13	13	0	2,482	6	197	172	2,857
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	16	17	6	8,389	23	857	372	9,647
28-Jun	17	22	2	20,748	50	576	611	21,987
29-Jun	17	22	17	24,819	48	1,358	815	27,057
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	126	1,325	670	531,955	159	78,808	130,627	742,219

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.

Appendix A11.-Shumagin Islands June commercial purse seine salmon harvest all gear combined, by species and day, 2004.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	26	27	91	8,946	0	3,599	3,784	16,420
8-Jun	27	31	100	16,224	0	2,215	3,340	21,879
9-Jun	38	41	303	46,039	8	10,571	22,413	79,334
10-Jun	42	54	395	45,180	0	8,922	40,584	95,081
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	47	54	177	29,186	0	9,937	15,232	54,532
13-Jun	52	64	207	61,884	0	17,592	27,309	106,992
14-Jun	52	64	173	43,963	2	12,640	10,834	67,612
15-Jun	43	51	411	92,138	0	32,678	28,407	153,634
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	50	60	259	45,965	3	19,981	10,211	76,419
18-Jun	28	43	22	15,191	1	1,722	1,934	18,870
19-Jun	40	48	137	56,959	4	25,737	16,856	99,693
20-Jun	48	60	182	72,626	1	31,416	33,002	137,227
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	29	33	65	35,965	1	17,943	22,476	76,450
23-Jun	42	52	275	62,030	120	27,639	36,288	126,352
24-Jun	47	65	558	78,283	135	30,983	49,946	159,905
25-Jun	42	54	126	46,593	12	14,264	11,287	72,282
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	38	47	120	18,824	20	5,544	8,029	32,537
28-Jun	31	38	96	18,631	55	3,764	5,567	28,113
29-Jun	34	49	56	21,491	100	3,961	4,184	29,792
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	67	935	3,753	816,118	462	281,108	351,683	1,453,124

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.

Appendix A12.-South Unimak and Shumagin Islands June commercial salmon harvest, all gear combined, by species and day, 2005.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	136	152	468	49,000	2	55,157	80,239	184,866
8-Jun	126	159	106	44,858	2	23,855	20,476	89,297
9-Jun	105	126	57	31,130	0	8,962	12,162	52,311
10-Jun	120	163	66	31,859	0	7,676	18,656	58,257
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	112	138	85	34,662	8	39,632	19,141	93,528
13-Jun	161	195	250	64,129	6	85,139	40,156	189,680
14-Jun	150	187	375	66,723	10	188,106	55,688	310,902
15-Jun	118	129	344	66,154	2	163,620	66,600	296,720
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	102	117	116	56,089	4	157,934	38,382	252,525
18-Jun	91	114	71	39,702	0	105,999	13,288	159,060
19-Jun	86	103	109	39,336	66	75,826	10,720	126,057
20-Jun	83	109	96	52,168	23	112,568	11,026	175,881
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	84	108	110	52,173	57	77,004	7,114	136,458
23-Jun	79	110	204	88,264	72	124,854	6,635	220,029
24-Jun	55	80	49	44,372	73	31,609	3,283	79,386
25-Jun	73	106	96	81,811	224	137,032	6,327	225,490
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	59	82	99	48,658	146	83,174	5,337	137,414
28-Jun	62	87	109	61,396	291	103,533	6,228	171,557
29-Jun	58	79	245	51,911	933	73,279	6,372	132,740
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	190	2,344	3,055	1,004,395	1,919	1,654,959	427,830	3,092,158

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.

Appendix A13.-South Unimak June commercial salmon harvest, all gear combined, by species and day, 2005.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	84	87	117	22,075	1	12,909	11,336	46,438
8-Jun	93	108	77	29,851	1	17,514	11,916	59,359
9-Jun	75	75	50	20,474	0	8,127	11,043	39,694
10-Jun	94	115	52	23,703	0	6,622	16,271	46,648
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	74	82	45	19,481	6	4,277	12,252	36,061
13-Jun	103	106	53	37,502	4	17,495	17,790	72,844
14-Jun	100	114	46	35,066	3	53,061	23,428	111,604
15-Jun	81	82	47	30,040	0	50,403	22,679	103,169
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	69	71	28	19,851	2	48,397	3,753	72,031
18-Jun	55	59	6	12,046	0	2,930	1,312	16,294
19-Jun	59	66	16	15,565	0	7,261	3,055	25,897
20-Jun	47	48	15	14,805	4	50,398	3,201	68,423
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	44	46	76	21,594	14	44,890	3,261	69,835
23-Jun	28	30	87	33,786	0	40,199	1,398	75,470
24-Jun	16	17	9	13,672	3	6,298	362	20,344
25-Jun	19	20	5	28,688	0	15,047	309	44,049
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	20	24	14	20,952	0	4,205	139	25,310
28-Jun	20	23	6	17,101	0	2,849	159	20,115
29-Jun	17	17	41	21,191	18	10,933	135	32,318
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	123	1,190	790	437,443	56	403,815	143,799	985,903

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.

Appendix A14.-Shumagin Islands June commercial purse seine salmon harvest all gear combined, by species and day, 2005.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	52	65	351	26,925	1	42,248	68,903	138,428
8-Jun	33	51	29	15,007	1	6,341	8,560	29,938
9-Jun	30	51	7	10,656	0	835	1,119	12,617
10-Jun	26	48	14	8,156	0	1,054	2,385	11,609
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	38	56	40	15,181	2	35,355	6,889	57,467
13-Jun	58	89	197	26,627	2	67,644	22,366	116,836
14-Jun	50	73	329	31,657	7	135,045	32,260	199,298
15-Jun	37	47	297	36,114	2	113,217	43,921	193,551
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	33	46	88	36,238	2	109,537	34,629	180,494
18-Jun	36	55	65	27,656	0	103,069	11,976	142,766
19-Jun	27	37	93	23,771	66	68,565	7,665	100,160
20-Jun	36	61	81	37,363	19	62,170	7,825	107,458
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	40	62	34	30,579	43	32,114	3,853	66,623
23-Jun	51	80	117	54,478	72	84,655	5,237	144,559
24-Jun	39	63	40	30,700	70	25,311	2,921	59,042
25-Jun	54	86	91	53,123	224	121,985	6,018	181,441
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	39	58	85	27,706	146	78,969	5,198	112,104
28-Jun	42	64	103	44,295	291	100,684	6,069	151,442
29-Jun	41	62	204	30,720	915	62,346	6,237	100,422
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	69	1,154	2,265	566,952	1,863	1,251,144	284,031	2,106,255

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.

Appendix A15.-South Unimak and Shumagin Islands June commercial salmon harvest, all gear combined, by species and day, 2006.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	95	105	253	28,131	1	18,552	6,278	53,215
8-Jun	106	113	223	32,887	3	14,860	9,183	57,156
9-Jun	68	80	58	16,767	0	16,376	3,828	37,029
10-Jun	78	87	80	28,003	0	19,955	6,430	54,468
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	109	154	430	37,201	15	73,104	15,584	126,334
13-Jun	127	172	564	72,045	31	133,371	31,048	237,059
14-Jun	125	154	293	53,557	5	56,890	22,064	132,809
15-Jun	84	104	139	40,226	2	33,030	17,545	90,942
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	126	143	304	52,800	23	100,561	30,855	184,543
18-Jun	133	169	410	82,906	33	206,507	37,766	327,622
19-Jun	148	189	572	87,199	97	133,083	27,105	248,056
20-Jun	148	187	327	96,571	111	155,791	35,684	288,484
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	126	152	211	51,068	102	71,939	9,348	132,668
23-Jun	90	109	218	38,286	156	58,126	9,115	105,901
24-Jun	66	98	67	40,068	114	32,835	5,384	78,468
25-Jun	72	98	60	42,565	126	38,732	4,610	86,093
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	77	103	175	62,065	602	101,045	14,189	178,076
28-Jun	66	93	63	37,958	418	41,695	6,408	86,542
29-Jun	69	102	50	31,988	790	25,867	7,403	66,098
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	188	2,412	4,497	932,291	2,629	1,332,319	299,827	2,571,563

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.

Appendix A16.-South Unimak June commercial salmon harvest, all gear combined, by species and day, 2006.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	58	60	56	10,462	0	4,801	2,214	17,533
8-Jun	72	77	56	15,890	1	1,622	2,415	19,984
9-Jun	49	56	22	10,438	0	2,465	1,803	14,728
10-Jun	57	62	36	21,365	0	8,514	3,318	33,233
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	62	68	127	15,913	0	2,536	3,966	22,542
13-Jun	77	84	265	35,610	20	7,840	10,118	53,853
14-Jun	75	83	179	33,744	0	5,001	9,492	48,416
15-Jun	51	56	51	27,789	0	4,584	9,342	41,766
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	84	87	55	27,195	0	5,425	9,209	41,884
18-Jun	81	88	79	38,035	2	27,800	7,558	73,474
19-Jun	99	109	338	52,842	83	29,142	9,833	92,238
20-Jun	101	110	111	56,991	96	44,016	16,361	117,575
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	87	92	36	29,164	8	7,520	3,372	40,100
23-Jun	42	43	11	14,397	15	2,644	2,296	19,363
24-Jun	22	26	8	24,937	9	8,550	1,581	35,085
25-Jun	32	32	19	23,655	24	9,244	838	33,780
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	28	31	8	16,830	73	3,125	638	20,674
28-Jun	29	34	9	19,439	26	8,166	962	28,602
29-Jun	29	41	6	16,357	75	3,101	700	20,239
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	121	1,239	1,472	491,053	432	186,096	96,016	775,069

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.

Appendix A17.-Shumagin Islands June commercial purse seine salmon harvest all gear combined, by species and day, 2006.

			Number of Salmon[a]					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
7-Jun	37	45	197	17,669	1	13,751	4,064	35,682
8-Jun	34	36	167	16,997	2	13,238	6,768	37,172
9-Jun	19	24	36	6,329	0	13,911	2,025	22,301
10-Jun	21	25	44	6,638	0	11,441	3,112	21,235
11-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
12-Jun	47	86	303	21,288	15	70,568	11,618	103,792
13-Jun	50	88	299	36,435	11	125,531	20,930	183,206
14-Jun	50	71	114	19,813	5	51,889	12,572	84,393
15-Jun	33	48	88	12,437	2	28,446	8,203	49,176
16-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
17-Jun	42	56	249	25,605	23	95,136	21,646	142,659
18-Jun	52	81	331	44,871	31	178,707	30,208	254,148
19-Jun	49	80	234	34,357	14	103,941	17,272	155,818
20-Jun	47	77	216	39,580	15	111,775	19,323	170,909
21-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
22-Jun	39	60	175	21,904	94	64,419	5,976	92,568
23-Jun	48	66	207	23,889	141	55,482	6,819	86,538
24-Jun	44	72	59	15,131	105	24,285	3,803	43,383
25-Jun	40	66	41	18,910	102	29,488	3,772	52,313
26-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
27-Jun	49	72	167	45,235	529	97,920	13,551	157,402
28-Jun	37	59	54	18,519	392	33,529	5,446	57,940
29-Jun	40	61	44	15,631	715	22,766	6,703	45,859
30-Jun	[b]	[b]	[b]	[b]	[b]	[b]	[b]	[b]
Total	69	1,173	3,025	441,238	2,197	1,146,223	203,811	1,796,494

[a] Does not include test fish harvest.

[b] Closed to commercial fishing.