

SOUTH UNIMAK - SHUMAGIN ISLANDS
JUNE SALMON FISHERY

Report to the Alaska Board of Fisheries

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By

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and

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INTRODUCTION

Figures 1, 2, and 3 indicate the location of the South Unimak and Shumagin Islands commercial salmon fisheries. The Shumagin Islands fishery takes place primarily along Popof, Unga, and Korovin Islands in the northern Shumagin Islands Section. Popof Head on Popof Island is usually the center of activity. The South Unimak (also called False Pass) fishery occurs in two major locations along the south side of Unimak Island. One area is from Ikatan Bay to Cape Lazaref on the southeast end of the island while the other is the vicinity of Cape Lutke on the southwest end. Table 1 lists the Shumagin Islands and South Unimak sockeye and chum salmon catches from 1960 - 1991. Table 2 lists sockeye salmon harvests prior to 1960. Unfortunately chum salmon harvest data for June prior to 1960 is not separated from the total season harvest figures.

SOUTH UNIMAK HISTORY

The South Unimak June fishery dates back to at least 1911, though records prior to Statehood are sporadic.

Traps were operated in Ikatan and Morzhovoi bays with 36 reported in 1919. The number of traps gradually decreased through the 1920's and 1930's and settled at 5-6 through the 1940's and 1950's.

Records first reflect seine gear catches in 1935 (19 vessels), and indicate a little over a dozen seine vessels seasonally through 1940. Records reflect only half-a-dozen seiners from the mid 1940's through the 1950's, although it is believed effort increased to around 50 vessels in the early 1950's.

From 1960 through 1975 seine effort ranged from 5 to 17 vessels. Since 1975 effort has risen until a total of about 98 vessels fished during one day at South Unimak (when the Shumagin Islands were closed) in 1991.

Records of gillnet catches prior to 1960 are not reliable, although according to verbal information, gillnet gear evidently was used in this fishery (drift nets beginning in the 1950's). Gillnet effort (almost entirely drift nets) generally ran between 20-45 vessels in 1960-1965, increased to 80-110 in 1970-1973 and fell to 65-72 in 1975. In 1986, the number of gillnets increased to about 153 drift gillnet and 9 set gillnet permit holders at South Unimak. In 1991, 157 drift gillnet permit holders participated in the South Unimak fishery. During most of the 1991 season, 10 set gillnet permit holders fished South Unimak.

Set gillnet gear accounts for a negligible portion (averaging less than 4%) of the South Unimak catch, although their numbers have increased from 0-1 in 1970-1973, to 5-11 in 1980-1988, and to 14 in 1989-1990 (excluding those who regularly fish in the Shumagin Islands).

SHUMAGIN ISLANDS HISTORY

The Shumagin Islands June fishery dates back to at least 1911. However this fishery seems to not have developed significantly until 1922 when 550,000 sockeye were harvested. As with the case at South Unimak, information prior to Statehood is sporadic.

Traps were first recorded in the Shumagin Islands in 1919 and generally totaled 3-6 units (peaked at 8 in 1937). Seine catches have been recorded since 1911 and over 30 seiners fished the islands in 1943 and 1944. From 1962 through 1975, the seine effort usually totaled 15-25 vessels. Due to only a few prime fishing spots in the Shumagin Islands, most of the increased effort during recent years has been concentrated at South Unimak.

During June 1990, 51 individual purse seine limited entry permit holders made at least one delivery in the Shumagin Islands Section. Some vessels move to South Unimak during mid and late June because

of crowded conditions in the Shumagin Islands and the anticipation of better fishing at Unimak by some fishermen.

Prior to 1985 the number of set gillnet permit holders fishing the Shumagin Islands during June was normally 3-8. This increased to 30-40 during periods when the Southeastern District Mainland fishery was closed in 1985 and 1986, and to 51 during 1989 (when the Southeastern District Mainland fisher was closed). The 1990 effort is believed to be similar to 1989 although fishing was so poor for set gillnet gear that some fishermen did not deliver fish. June 1990 records indicate that 44 individual set gillnet limited entry permit holders made at least one delivery in the Shumagin Islands Section. In 1991, 53 set gillnet permit holders participated in the Shumagin Islands Section June fishery.

Drift gillnet gear is not allowed in the Shumagin Islands. The total units of gear operated on the South Peninsula during June for the years 1976-90 are listed in Table 2.

REGULATIONS GOVERNING SOUTH UNIMAK AND SHUMAGIN ISLANDS FISHERIES

During the late 1960's and early 1970's much controversy arose between Peninsula-Aleutians and Bristol Bay fishermen in regard to the South Unimak and Shumagin Islands June fisheries.

Beginning in 1975, the Board of Fish and Game established guideline harvest levels (GHL's) based on average historic catch levels. The GHL for the Shumagin Islands is 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 guideline harvest levels were further broken down into four time period harvest levels so that the catches would be spread out through the month of June.

During the 17 years that the present allocation scheme has been in effect, the Bristol Bay forecast has been low 15 years, thereby causing the guideline harvest levels to be set too low. The exceptions were 1982 and 1988 (Tables 3, 4 and 5).

Although chum salmon have always been caught during the June fisheries, the unusually large catch of chum salmon in 1982 and 1983 caused concern by fishermen in the Arctic-Yukon-Kuskokwim Region. Beginning with the 1984 season, the Board of Fisheries 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". The purpose of the "windows" was to limit the chum harvest. Due to the high sockeye catch rate (and low chum to sockeye ratios) during 1984 and 1985, these restrictions did not come into use.

In 1986 the Board of Fisheries 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 quota period, June 26-30 (along with the sockeye quota for that period). These restrictions were for 1986 only. The additional restrictions during 1986 were the primary reasons for less than half of the combined South Unimak-Shumagin sockeye allocation being harvested.

In 1987, no restrictions were placed on the fishery that were additional to 1985 regulations. However, during 1988 and 1989 an annual 500,000 chum salmon catch ceiling was placed on both fisheries combined, by the Alaska Board of Fisheries.

In 1988, the abundance of chum salmon were comparable to sockeye 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 abundance seemed higher in the Shumagin Islands and that fishery was able to harvest its allocation.

In 1989, the sockeye allocations were exceeded due to a very high sockeye abundance. The Shumagin Islands Section sockeye catch was 397,000 with an allocation of 264,000, while 1,348,000 sockeye were harvested at South Unimak with an allocation of 1,199,000. A total of only 72 hours fishing time was allowed in the Shumagin Islands Section during 4 days. At South Unimak, 84 hours of fishing time was allowed with openings occurring during 5 separate days.

The 1989 chum catch was 48,000 in the Shumagin Islands Section and 408,000 at South Unimak for a total of 436,700. The ratio of chum to sockeye was high during the early part of the fishery and became unusually low towards the end.

The reason for the sockeye allocation being exceeded was a much higher number of sockeye salmon being available than anticipated. Had the Bristol Bay harvest been accurately predicted, the Shumagin Islands and South Unimak allocations would have been about 431,000 and 1,952,000 respectively.

If the 1989 Bristol Bay sockeye run had been accurately forecasted, the Shumagin Islands Section would have caught its allocation but the South Unimak fishery would have fallen approximately 620,000 sockeye short of its allocation because the 500,000 chum salmon ceiling would have been reached prior to obtaining the sockeye allocation. However, the sockeye harvest likely could have been achieved without going over the chum ceiling if other restrictions had been reduced. This would involve adjustments to the sockeye time period guideline harvest levels (basically reallocating June 1-11 sockeye to late period) and elimination of the window regulations.

After the 1989 season, the Board of Fisheries made the following changes in regards to the South Unimak and Shumagin Islands June fisheries:

- (1) The starting date of the fishery was delayed until June 13 as the chum percentage is normally higher 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 ceiling and windows.
- (4) The sockeye allocation periods and allocations were changed and are presently the same for each fishery.

June 13-18	35%
June 19-25	45%
June 26-30	<u>20%</u>
TOTAL	100%

If catches in either fishery fall below the guidelines in the June 13-18 period, those unharvested sockeye, up to a maximum of five percent of the total allocation for that fishery, may be harvested during the June 19-25 period. The June 26-30 period cannot be used to make up for underharvests during the first two periods. Available information and thinking was that the sockeye stock composition between the first two periods was very similar, however the June 26-30 stock composition at South Unimak-Shumagins may be dominated by fewer and later stocks.

- (5) Unlimited seine leads were eliminated at South Unimak and leads of 50 to 150 fathoms are 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 depth may not exceed 375 meshes in depth. Seine mesh may not exceed 3-1/2 inches except the first 25 meshes above the lead line may not be more than 7 inches. No gillnet gear used along the South Peninsula may exceed 90 meshes in depth.
- (7) The area comprising the South Unimak fishery was extended 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 were not available in large numbers at either the Shumagin Islands Section or South Unimak despite the fact that Bristol Bay experienced one of its largest runs on record. Windy weather plagued fishing operations but fish abundance also seemed low, especially in view of the huge run that arrived in Bristol Bay. The Shumagin Islands sockeye harvest was 256,000 compared to a guideline harvest level of 240,000. The Shumagin Islands Section was open to fishing for a total of 184 hours during 9 days. At South Unimak, the harvest was 1,091,000 (1,087,000 allocation). The South Unimak fishery was open to fishing for 269 hours during 13 days.

A total of 64,000 chum salmon were caught in the Shumagin Islands Section and 455,000 were caught at South Unimak for a combined total of 519,000.

If the Bristol Bay sockeye run had been accurately forecasted, the Shumagin Islands and South Unimak quotas would have been 497,000 and 2,255,000 respectively. However, due to the 600,000 chum ceiling, the Shumagin Islands fishery would have fallen approximately 35,000 sockeye short of its corrected quota while South Unimak would have fallen approximately 1,050,000 sockeye short.

With no chum salmon ceiling, the Shumagin Islands fishery would have easily taken its sockeye allocation with a total chum catch of approximately 135,000.

Even without a chum ceiling, the South Unimak fishery would have only taken about 1.6 million of its corrected allocation while

catching approximately 700,000 chums. This was due to the apparent low sockeye abundance at South Unimak. Apparently a large portion of the Bristol Bay sockeye run passed through the Aleutian Islands west of Unimak Pass.

The harvest from the area in the Southwestern District opened by the Board of Fisheries for the 1990 season totaled only 1,800 sockeye and 200 chum salmon.

1991 SEASON SUMMARY

In 1991, the fisheries were delayed until June 15 in an attempt to minimize the chum harvest. Test fishing in the Shumagin Islands Section on June 9 gave a sockeye to chum salmon ratio of 1.1 to 1.0. The ratio of sockeye to chum salmon improved to 4.7 to 1.0 by June 13. The percentage of chum salmon is normally high during early June and is lower when the sockeye runs are peaking during mid and late June. The Shumagin Islands Section fishery was open during five days and harvested 333,300 sockeye and 102,600 chum salmon through June 22. The in-season verbal reports indicated that the June catch was 342,000 which was too close to the quota of 347,000 to allow an additional fishing period.

At South Unimak, the sockeye harvest through June 20 was 618,000 with a chum catch of 295,000. The June 20 daily harvest was 225,000 sockeye and 115,000 chum salmon. At this point, it was obvious that the 1,573,000 South Unimak sockeye salmon quota would not be taken without first reaching the 600,000 chum salmon cap, unless the ratio of sockeye to chum salmon drastically improved. The next fishing period was delayed until 6:00 A.M. June 23 to run through 3:00 P.M. June 24 in hopes that sockeye abundance would greatly increase and the chum salmon catch would drop. The June 23 harvest was 189,000 sockeye and 49,000 chum salmon, for a sockeye to chum ratio of 3.9 to 1.0, by far the best the ratio had been all season.

The cumulative South Unimak-Shumagin Islands Section chum salmon harvest through June 23 was 447,000. It was decided to extend the fishing period an additional 24 hours until 3:00 P.M. June 25. It was believed that even if the chum salmon harvest doubled the June 23 catch, the 600,000 cap would not be exceeded. Another factor was taken into consideration in extending this fishery was the large number of chum salmon that may appear during the end of June. Large numbers of chum salmon appeared at Cape Lutke in 1981 during the end of June (the June 27-30, 1981 sockeye to chum salmon ratio was 0.5 to 1.0). Because of the potential of larger numbers of chum salmon late in June, it seemed safer to be more liberal earlier and try to minimize or avoid fishing at the end of June.

After receiving processor reports, it was discovered during the morning of June 25, that the June 24 catch was 262,000 sockeye and 188,000 chum salmon. The fishery was closed at noon, three hours prior to the scheduled 3:00 P.M. closure. The combined June 24-25 catch was 408,600 sockeye and 324,700 chum salmon. The cumulative South Unimak sockeye catch was 1,215,658 (357,342 under the quota) while the South Unimak-Shumagin Islands chum catch of 771,390 was 171,390 over the cap. If the Bristol Bay sockeye catch had been accurately forecasted, the actual South Unimak sockeye harvest would have fallen 568,000 short of the allocation due to the chum cap.

The Cape Lutke-Sanak Island catch during June 24-25 was 239,000 sockeye and 256,000 chum salmon for a sockeye to chum salmon ratio of 0.9 to 1.0. The sockeye to chum salmon ratio for the balance of the area during the same period was 2.5 to 1.0.

At Cape Lutke during June 24-25, purse seine fishermen caught 164,000 sockeye and 194,000 chum salmon, for a sockeye to chum salmon ratio of 0.9 to 1.0, while drift gillnet fishermen caught 64,000 sockeye and 44,000 chum salmon (1.5 sockeye to 1.0 chum salmon). There were no drift gillnet landings from Sanak Island.

Average weight of seine caught chum salmon dropped from 6.3 pounds on June 23 to 5.7 pounds of June 24-25. Some of the seine caught chum salmon on June 24-25 were said to be "skinny snakelike fish with no roe". 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 Area. These fish are of little or no value and of such numbers that the Department has had to close these areas. Past closures include: Cape Lutke in 1983, so many small chums were caught in such a short time that the Department has not reopened this location in July during subsequent years. Akutan District in 1985, the only time that commercial salmon effort was reported in this district during July. The Otter Cove and Sanak Islands Sections were closed to seining in 1989 and 1990.

For the June fishery, the percentage of the harvest by gear type for sockeye and chum salmon are as follows:

	<u>South Unimak</u>		<u>Shumagin Islands</u>	
	Sockeye	Chum	Sockeye	Chum
Seine	53.5	61.1	80.6	93.3
Drift Gillnet	44.4	38.3	-	-
Set Gillnet	2.1	0.6	19.4	6.7

Table 8 shows the 1977-1991 percentage of the total catch by gear type for sockeye and chum salmon for both South Unimak and the Shumagin Islands Section.

The impact of the gear depth limitation on gear efficiency is not known at this time. It is also not known the amount, if any, reallocation between gear types due to depth restrictions. Factors such as weather, fish distribution, and fish abundance can

influence the catch between gear types to a greater degree than two year's catch data is able to reflect.

1991 SOCKEYE ALLOCATIONS

Based on the Bristol Bay forecast released in October, the 1992 June sockeye allocations will range between the following figures pending the 1991 Kvichak River escapement goal:

South Unimak	1,822,000 to 2,094,000
Shumagin Islands	402,000 to 462,000

**Figure 1. ALASKA PENINSULA AREA
AND UNALASKA ISLAND**

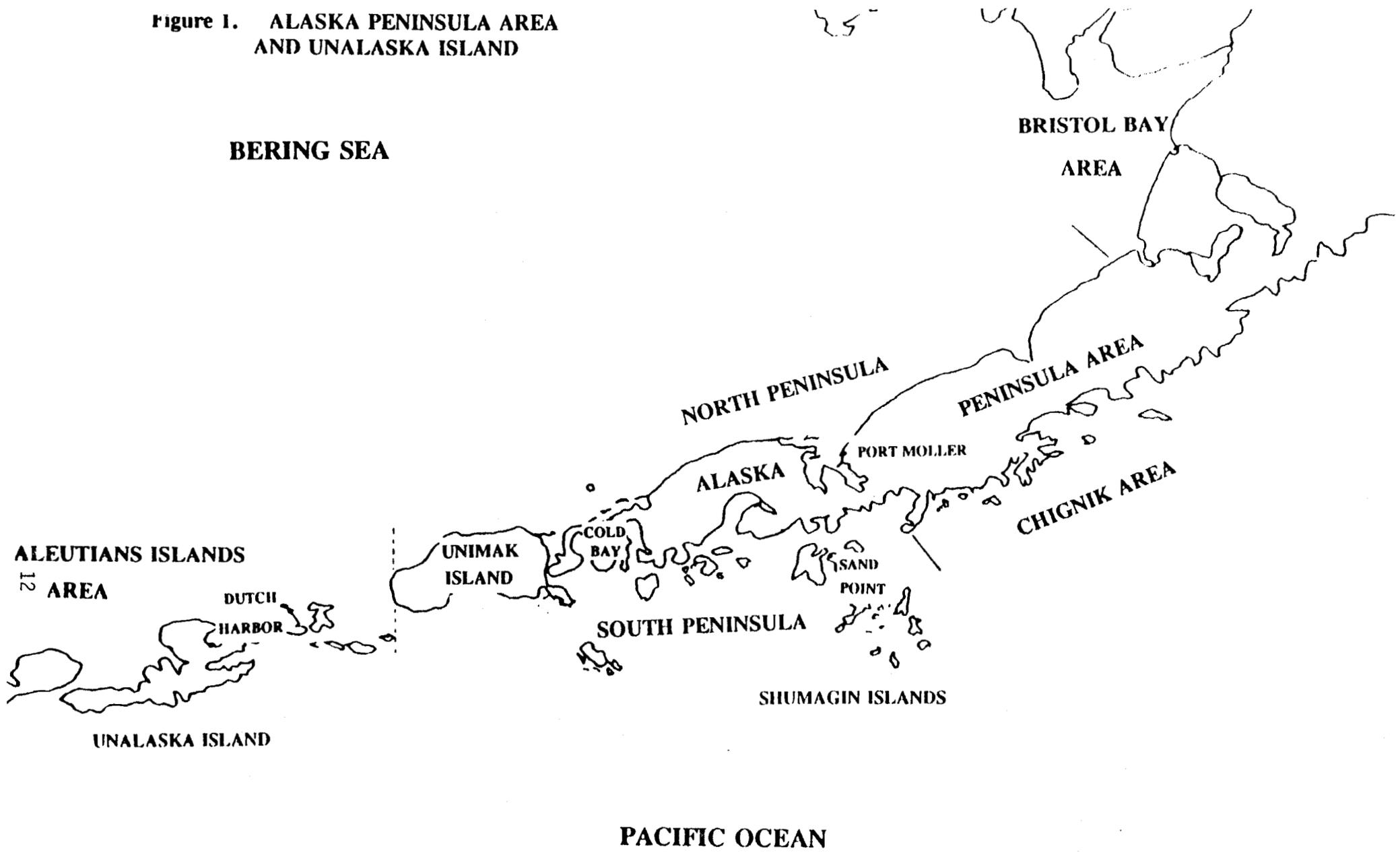
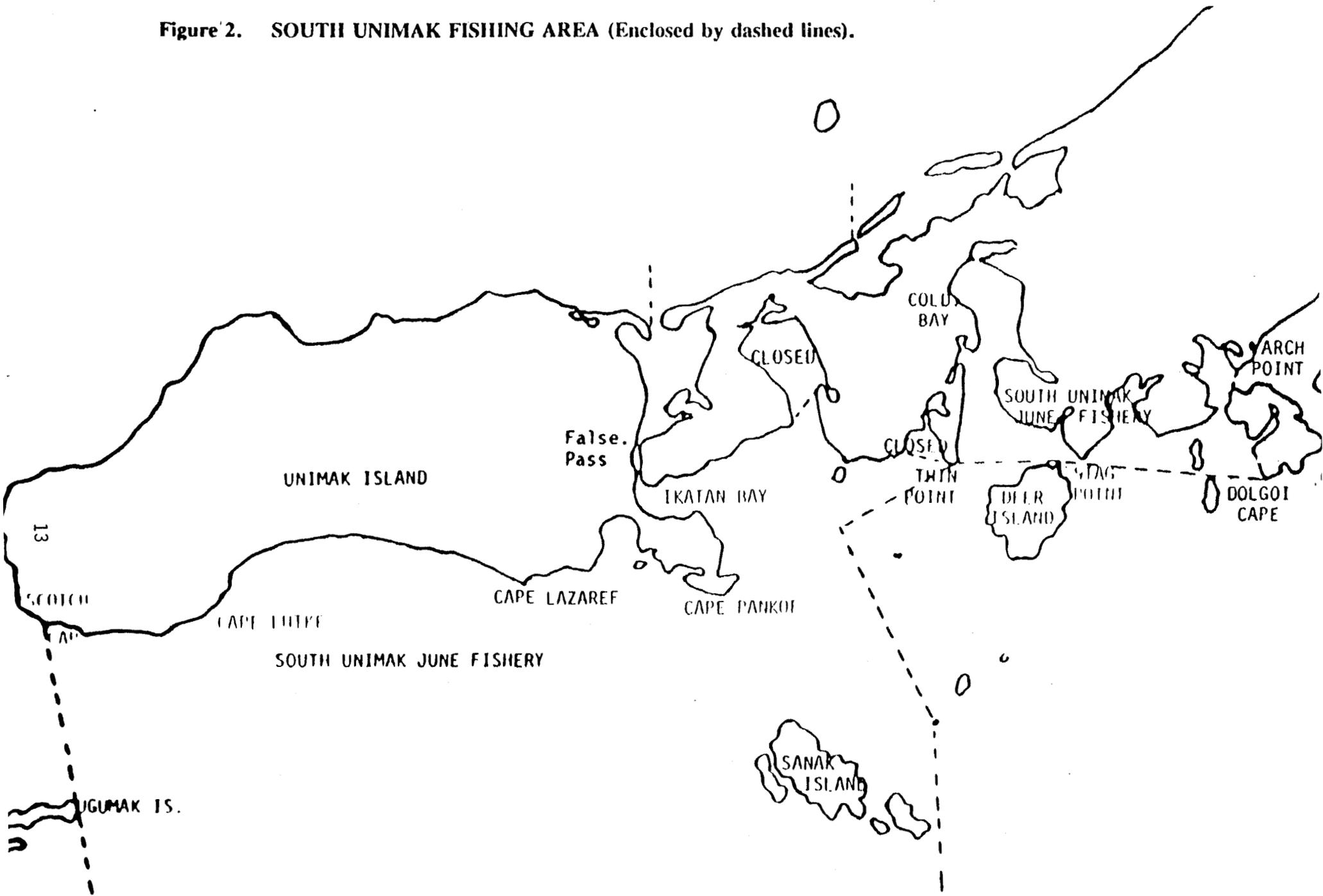


Figure 2. SOUTH UNIMAK FISHING AREA (Enclosed by dashed lines).



SOUTHEASTERN DISTRICT

STEPPOVAK FLORIS SEC.

NORTHWEST STEPOVAK SEC.

EAST STEPOVAK SEC.

BALBOA BAY SEC.

SOUTHWEST STEPOVAK SEC.

BEAVER BAY SEC.

SHUMAGIN ISLANDS SECTION

KOROVIN ISLAND

CAPE DEVINE

BAY PT.

SAND POINT

DARK CLIFFS

UNGA ISLAND

POPOF HEAD

KELLY ROCK

ACHEREDIN PT.

UNGA CAPE

SHUMAGIN ISLANDS SECTION

BIG KONJI ISLAND

NAGAI ISLAND

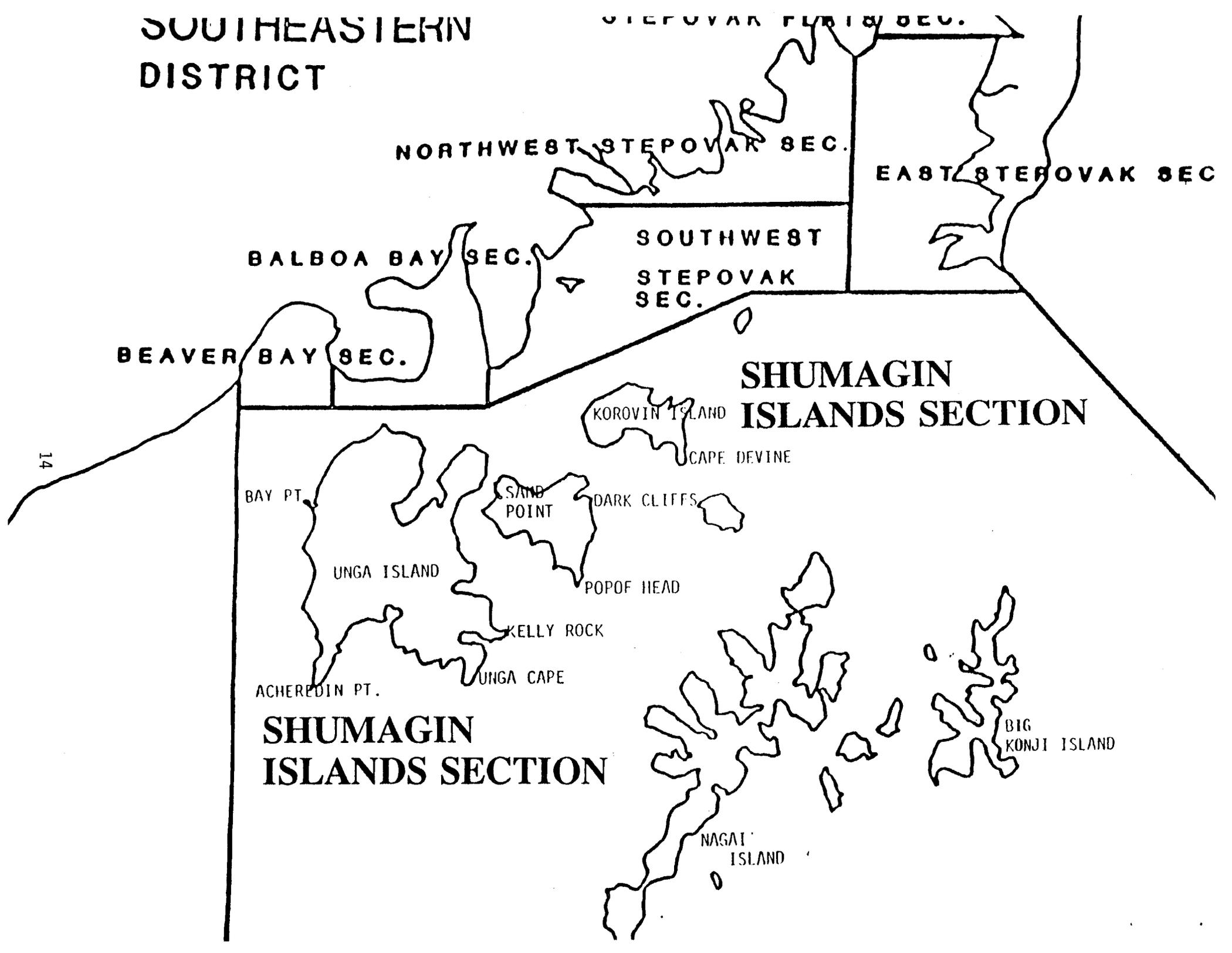


Table 1. Shumagin Island and South Unimak June fisheries harvests, in numbers of fish, 1960-1991^a.

Year	Sockeye			Chum		
	Shumagins	South Unimak	Total	Shumagins	South Unimak	Total
1960	19,000	137,000	156,000	11,000	84,000	95,000
1961	55,000	199,000	254,000	36,000	157,000	193,000
1962	54,000	272,000	326,000	61,000	209,000	270,000
1963	33,000	116,000	149,000	36,000	81,000	117,000
1964	85,000	159,000	244,000	67,000	161,000	228,000
1965	207,000	568,000	775,000	45,000	121,000	166,000
1966	54,000	528,000	582,000	17,000	215,000	232,000
1967	69,000	186,000	255,000	51,000	73,000	124,000
1968	233,000	342,000	575,000	51,000	115,000	166,000
1969	76,000	781,000	857,000	13,000	254,000	267,000
1970	153,000	1,530,000	1,683,000	49,000	403,000	452,000
1971	45,000	565,000	610,000	115,000	554,000	669,000
1972	76,000	443,000	519,000	108,000	468,000	576,000
1973	23,000	239,000	263,000	23,000	189,000	212,000
1974	0	0	0	0	0	0
1975	49,000	190,000	239,000	36,000	65,000	101,000
1976	72,000	235,000	307,000	74,000	327,000	401,000
1977	46,000	193,000	239,000	22,000	93,000	115,000
1978	68,000	419,000	487,000	18,000	105,000	123,000
1979	179,000	683,000	862,000	41,000	64,000	105,000
1980	572,000	2,731,000	3,303,000	71,000	457,000	528,000
1981	351,000	1,474,000	1,825,000	54,000	521,000	575,000
1982	451,000	1,670,000	2,121,000	160,000	934,000	1,094,000
1983	416,000	1,545,000	1,961,000	169,000	615,000	784,000
1984	257,000	1,131,000	1,388,000	109,000	228,000	337,000
1985	367,000	1,495,000	1,862,000	134,000	345,000	479,000
1986	156,000	314,000	470,000	99,000	252,000	351,000
1987	141,000	652,000	793,000	37,000	406,000	443,000
1988	282,000	474,000	756,000	62,000	465,000	527,000
1989	397,000	1,348,000	1,745,000	48,000	408,000	456,000
1990	256,000	1,091,000	1,347,000	64,000	455,000	519,000
1991	333,000	1,216,000	1,549,000	102,000	669,000	771,000

^aPre 1981 South Unimak figures include some early July catches.

Table 2. Shumagin Islands and South Unimak sockeye salmon harvests, in thousands of fish, 1911 - 1959.

Year	Shumagin Islands	South Unimak	Total
1911	3	58	61
1912	31	144	175
1913	0	415	415
1914	0	610	610
1915	0	251	251
1916	0	539	539
1917	34	1,322	1,356
1918	44	733	777
1919	32	545	577
1920	60	954	1,014
1921	0	831	831
1922	550	2,775	3,325
1923	343	1,340	1,683
1924	237	971	1,208
1925	374	357	731
1926	491	1,898	2,389
1927	185	455	640
1928 - 1933 Unavailable			
1934	1,019	516	1,535
1935	549	210	759
1936	1,490	1,531	3,021
1937	498	803	1,301
1938	454	164	618
1939	707	474	1,181
1940	713	479	1,192
1941	294	206	496
1942	412	152	564
1943	1,356	428	1,784
1944	264	188	452
1945	375	218	593
1946	257	342	599
1947	229	782	1,011
1948	126	276	402
1949	167	84	251
1950	134	292	426
1951	35	82	117
1952	121	191	312
1953	105	191	296
1954	49	325	374
1955	52	315	367
1956	47	290	337
1957	44	50	94
1958	28	104	132
1959	78	58	136

Table 3. Salmon gear on south side of Alaska Peninsula Area during June, 1976-1991^a.

Year	Purse Seine	Drift Gill Net	Set Gill Net
1976	25	94	16
1977	15	98	16
1978	22	106	17
1979	33	100	22
1980	51	123	24
1981	74	126	32
1982	85	126	33
1983	92	139	41
1984	104	143	52
1985	105	140	51
1986	102	153	50
1987	84	140	62
1988	89	147	63
1989	96	144	65
1990	109	153	65
1991	117	157	57

^a During the peak of the South Unimak-Shumagin Island Sections June fishery (June 12-25), approximately 30-40 seiners fish the Shumagin Islands Section. During the few occasions when South Unimak is open and the Shumagin Islands Section closed, nearly the entire purse seine fleet is at Unimak. Drift net effort declines after June 20 as the fleet begins moving to Port Moller.

Table 4. South Peninsula June fishery vs. actual Bristol Bay harvest, sockeye salmon, 1975-1991.

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual S. Peninsula Catch	South Peninsula % of Actual Bristol Bay Catch	Actual Bristol Bay Catch	South Peninsular GHL if Actual Bristol Bay Catch Was Forecasted
1975	215,000	4.39	239,000	4.88	4,899,000	407,000
1976	425,000	7.56	307,000	5.46	5,619,000	466,000
1977	237,000	4.86	239,000	4.90	4,878,000	405,000
1978	522,000	5.26	487,000	4.91	9,928,000	824,000
1979	1,100,000	5.13	862,000	4.02	21,429,000	1,779,000
1980 ^a	3,068,000	12.91	3,303,000	13.90	23,762,000	1,972,000
1981	1,760,000	6.87	1,825,000	7.13	25,503,000	2,125,000
1982	2,258,000	14.95	2,121,000	14.04	15,104,000	1,254,000
1983	1,793,000	4.80	1,961,000	5.25	37,372,000	3,102,000
1984	1,356,000	5.49	1,389,000	5.62	24,710,000	2,051,000
1985	1,685,000	7.11	1,862,000	7.86	23,703,000	1,967,000
1986 ^b	1,107,000	7.02	470,000	2.98	15,776,000	1,310,000
1987	775,000	4.82	793,000	4.93	16,069,000	1,334,000
1988 ^{b,c}	1,542,000	11.01	756,000	5.40	14,006,000	1,162,000
1989 ^c	1,463,000	5.10	1,745,000	6.08	28,710,000	2,383,000
1990 ^{b,c}	1,327,000	4.00	1,347,000	4.06	33,165,000	2,752,000
1991 ^{b,c}	1,920,000	7.32	1,549,000	5.90	26,233,000	2,177,000

^a 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

^b The guideline harvest level if chum salmon restrictions were not placed on the fishery. Includes only South Unimak and Shumagin Islands Section June fisheries. Target percentage is 8.3

^c Bristol Bay catch figures are preliminary.

Table 5. South Unimak June fishery vs. actual Bristol Bay harvest, sockeye salmon, 1975-1991.

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual S. Unimak Catch	South Unimak % of Actual Bristol Bay Catch	Actual Bristol Bay Catch	S. Unimak GHL if Actual Bristol Bay Catch Was Forecasted
1975	165,000	3.37	190,000	3.88	4,899,000	333,000
1976	350,000	6.23	235,000	3.18	5,619,000	382,000
1977	195,000	4.00	193,000	3.96	4,878,000	332,000
1978	428,000	4.31	419,000	4.22	9,928,000	675,000
1979	900,000	4.20	683,000	3.19	21,429,000	1,457,000
1980 ^a	2,513,000	10.58	2,731,000	11.49	23,762,000	1,616,000
1981	1,442,000	5.63	1,474,000	5.76	25,603,000	1,741,000
1982	1,850,000	12.21	1,670,000	11.03	15,146,000	1,030,000
1983	1,469,000	3.93	1,545,000	4.13	37,372,000	2,541,000
1984	1,111,000	4.50	1,132,000	4.58	24,710,000	1,680,000
1985	1,380,000	5.82	1,495,000	6.31	23,703,000	1,612,000
1986 ^b	907,000	5.75	314,000	1.99	15,776,000	1,073,000
1987	635,000	3.95	652,000	4.06	16,069,000	1,093,000
1988 ^{bc}	1,263,000	9.02	474,000	3.38	14,005,000	952,000
1989 ^c	1,199,000	4.18	1,348,000	4.70	28,710,000	1,952,000
1990 ^c	1,087,000	3.28	1,091,000	3.29	33,165,000	2,255,000
1991 ^{b,c}	1,573,000	6.00	1,216,000	4.64	26,233,000	1,784,000

^a 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

^b The guideline harvest level if chum salmon restrictions were not placed on the fishery. Target percentage is 6.8

^c 1988 through 1990 Bristol Bay catch figures are preliminary.

Table 6. Shumagin Islands June fishery vs. actual Bristol Bay harvest, sockeye salmon, 1975-1991.

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual S. Unimak Catch	Shumagin % of Actual Bristol Bay Catch	Actual Bristol Bay Catch	Shumagin GHL if Actual Bristol Bay Catch Was Forecasted
1975	50,000	1.02	49,000	1.00	4,899,000	73,000
1976	75,000	1.33	72,000	1.28	5,619,000	84,000
1977	42,000	0.86	46,000	0.94	4,878,000	73,000
1978	94,000	0.95	68,000	0.68	9,928,000	149,000
1979	200,000	0.93	179,000	0.84	21,429,000	321,000
1980 ^a	555,000	2.34	572,000	2.41	23,762,000	356,000
1981	318,000	1.24	351,000	1.37	25,603,000	384,000
1982	408,000	2.70	451,000	2.99	15,104,000	227,000
1983	324,000	0.87	416,000	1.11	37,372,000	561,000
1984	245,000	0.99	257,000	1.04	24,710,000	371,000
1985	305,000	1.29	367,000	1.55	23,703,000	356,000
1986 ^{b,c}	200,000	1.27	156,000	0.99	15,776,000	237,000
1987 ^b	140,000	0.87	141,000	0.88	16,069,000	241,000
1988 ^{b,c}	279,000	1.99	282,000	2.01	14,005,000	210,000
1989 ^c	264,000	0.92	397,000	1.38	28,710,000	431,000
1990 ^c	240,000	0.72	256,000	0.77	33,165,000	497,000
1991 ^c	347,000	1.32	333,000	1.27	26,233,000	393,000

^a 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

^b The guideline harvest level if chum salmon restrictions were not placed on the fishery. Target percentage is 1.5.

^c Bristol Bay catch figures are preliminary.

Table 7. Shumagin Islands Section and South Unimak sockeye and chum salmon catches - all gear combined, 1991.

	<u>Shumagin Islands</u>		<u>South Unimak</u>	
	Sockeye	Chum	Sockeye	Chum
June 1 - 12	Closed to Commercial Salmon Fishing			
June 13				
14				
15	36,992	10,882	123,658	46,321
16				
17	38,144	7,633	52,940	26,892
18	98,164	25,095	106,169	49,912
19			110,093	56,602
20	51,403	14,194	225,484	115,088
21				
22	108,569	44,798		
23			188,681	49,283
24			262,423	188,052
25			146,210	136,638
26				
27				
28				
29				
30				
Total	333,272	102,602	1,215,658	668,788

Table 8. Percent composition of sockeye and chum salmon catches by gear type, 1977-1991.

	Sockeye			Chum		
	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet
SOUTH UNIMAK JUNE FISHERY						
1977	15.0	84.5	0.5	10.8	89.0	0.2
1978	18.1	81.4	0.5	9.9	90.0	0.1
1979	71.0	28.8	0.2	31.0	68.9	0.1
1980	76.0	23.5	0.5	79.0	20.9	0.1
1981	51.0	46.9	2.1	64.0	35.7	0.3
1982	54.0	44.8	1.2	46.0	53.8	0.2
1983	60.0	39.3	0.7	66.0	33.9	0.1
1984	64.0	35.0	1.0	60.0	39.9	0.2
1985	62.0	37.3	0.7	42.0	57.8	0.2
1986	46.7	51.7	1.6	43.8	55.9	0.3
1987	36.5	61.4	2.1	38.4	60.9	0.7
1988	29.8	67.0	3.2	33.6	65.8	0.6
1989	59.4	38.1	2.5	52.1	47.3	0.6
1990	56.8	41.5	1.7	57.9	41.7	0.4
1991	53.5	44.4	2.1	61.1	38.3	0.6
Average	50.2	48.4	1.4	46.4	53.3	0.3

	Sockeye		Chum	
	Seine	Set Gillnet	Seine	Set Gillnet
SHUMAGIN ISLANDS JUNE FISHERY				
1977	94.9	5.1	99.0	1.0
1978	97.2	2.8	96.3	3.7
1979	92.4	7.6	95.7	4.3
1980	96.4	3.6	96.7	3.3
1981	94.8	5.2	98.7	1.3
1982	97.3	2.7	98.9	1.1
1983	97.4	2.6	99.6	0.4
1984	94.7	5.3	99.3	0.7
1985	95.2	4.8	97.0	3.0
1986	85.0	15.0	95.0	5.0
1987	75.5	24.5	93.0	7.0
1988	62.8	37.2	69.7	30.3
1989	90.9	9.1	93.6	6.4
1990	85.3	14.7	93.1	6.9
1991	80.6	19.4	93.3	6.7
Average	89.4	10.6	94.6	5.4

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