10

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ALASKA PENINSULA - ALEUTIAN ISLANDS AREAS

SALMON AND HERRING ANNUAL MANAGEMENT REPORT

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INTRODUCTION

The Alaska Peninsula-Aleutian Islands Area includes all of the Aleutian Islands, the Bering Sea (north) side of the Alaska Peninsula west of Cape Menshikof and the Pacific (south) side of the Alaska Peninsula located west of Kupreanof Point. No commercial salmon or herring fishing effort presently occurs west of Unalaska Island.

The area constitutes permit Area M for both salmon and herring. During January through June, Area T (Bristol Bay) salmon fishermen are allowed to fish during the open season in the Port Heiden and Cinder River Sections. During August through December Area T fishermen can commercially fish in the Ilnik, Port Heiden, and Cinder River Sections.

Unlike salmon which is under limited entry to commercial fishing, herring fishing is open to anyone wishing to purchase an Area M herring interim use permit from the state.

The Alaska Peninsula Area headquarters is located at Cold Bay with other field offices located at Sand Point and Port Moller. Beginning in 1989, the Dutch Harbor office assumed Aleutian Islands salmon and herring management responsibilities. Previously, the Cold Bay office handled the Aleutians, with assistance from the Dutch Harbor Shellfish Management Staff. Assistance in monitoring the Port Heiden and Cinder River stocks is given by the Chignik Area salmon staff.

Two salmon weirs are used to manage parts of the North Peninsula. One weir is located at the outlet of Bear Lake. In 1989, a floating weir was installed in the Nelson (Sapsuk) River approximately 1/2 mile above the counting tower location. The floating weir worked well during 1989, although it was not tested by floods.

TABLE OF CONTENTS

SALMON

GENERAL BACKGROUND

The salmon fisheries in the Alaska Peninsula Area date back to at least 1888 when canneries were constructed (but remained for a very brief period of time) at Orzinski Bay (Orzenoi Bay) and Thin Point Cove. However, the earliest catch records for the Alaska Peninsula Area date back only to 1906. The first Aleutian Islands Area salmon catches were in 1911.

Early catches were dominantly sockeye with a few king and coho salmon. The first year in which pink and chum salmon catches exceeded 500,000 each was 1916. Area wide historical catches are listed in Table 1.

A large portion of fishermen's earnings along the South Peninsula come from harvesting migrant salmon. The South Peninsula interception fisheries include the South Unimak (also known as False Pass) June fishery, the Shumagin Islands June fishery, and the Southeastern District Mainland (also known as Balboa-Stepovak or just Stepovak) fishery.

Southeastern District Mainland Fishery

Tables 6-9 contain data regarding the Southeastern District Mainland fishery.

The Southeastern District Mainland fishery (Figure 2) includes the Beaver Bay, Balboa Bay, Southwest Stepovak, Northwest Stepovak, East Stepovak, and Stepovak Flats Sections. Effort during June and most of July is primarily targeted on Chignik destined sockeye. There is also a local sockeye run (Orzenoi or Orzinski Bay run) in the Northwest Stepovak Section and early July chums in the Stepovak Flats Section. Therefore the Northwest Stepovak and Stepovak Flats Sections are managed on a local stock basis throughout the season. After July 25, the entire area is managed for local stocks.

For the 1978 season, the Board of Fisheries allowed three days per week in the Southeastern District Mainland fishery through July 10 and made set gillnets the only legal gear during that period (both seines and set gillnets are still legal after July 10). Interception rates were low despite strong Chignik runs and catches were poor for the few set gillnetters in the Southeastern Mainland fishery. Up through 1978 a maximum of 12-15 gillnetters participated in this fishery.

During the winter of 1978-79, the Board of Fisheries increased fishing time to five days per week but specified that not more than 60,000 estimated Chignik sockeye could be harvested through July 10. However, the fishery could be closed if it became apparent that a closure was needed to assure the attainment of Chignik sockeye escapement needs. Also, if the Chignik Area sockeye harvest exceeded 1,000,000 sockeye before July 10, the Southeastern District Mainland fishery could continue beyond he 60,000 harvest ceiling. This provision was a major factor during the 1984 season.

During 1979 through 1982 Southeastern District Mainland fishermen experienced good seasons even though closures were needed at times because of weak Chignik escapements. During this period, the gear level increased to 20-25.

During 1983, the gear level did not change drastically but the fishery demonstrated its ability to catch a large number of fish during a short period of time when the July 7-8 total sockeye catch was approximately 49,000. The 1983 season was an outstanding one for Southeastern District Mainland fishermen with the season estimated interception of Chignik destined sockeye reaching 217,000. Most of the sockeye were taken between July 10 and August 10.

The 1984 season saw a dramatic increase of set gillnet gear, with the total reaching approximately 48. Several of the units of

DISTRICT SALMON MANAGEMENT PLAN later in this report (under Commercial Fishing Regulations).

South Unimak-Shumagin Islands June Fishery

Tables 10-28 contain data regarding the South Unimak and Shumagin Islands June fisheries and the amount of gear used in the Alaska Peninsula and Aleutian Islands Areas.

The South Unimak and Shumagin Islands June fisheries date back to at least 1911. The dominant stocks targeted by these fisheries are Bristol Bay bound sockeye, which has caused controversy between Peninsula-Aleutian and Bristol Bay fishermen for many years. During the late sixties, the South Unimak-Shumagin fisheries were open to fishing seven days per week regardless of Bristol Bay run strength. This caused many debates at Fish and Game Board meetings, with special meetings occurring over this one issue during the early seventies. South Unimak-Shumagin June management strategy was decided on a year by year basis during 1972-74 due to very low anticipated Bristol Bay sockeye returns.

Beginning in 1975, the Alaska Board of Fisheries implemented an allocation plan where the South Unimak-Shumagin June fisheries would be managed on guideline harvest levels allocated on the basis of predicted Bristol Bay inshore sockeye harvests. Based on historical catch information, 6.8 percent of the forecasted inshore Bristol Bay harvest was allocated to the South Unimak June fishery and 1.5 percent allocated to the Shumagin Islands. To reduce the possibility of overharvesting any segment of the Bristol Bay run, the guideline harvest level is allocated to discrete time periods based on historical catch data. The allocation by time period from 1975-89 is listed as follows:

	South Unimak	Shumagin Islands
June 1 - 11	5%	9%
12 - 18	29%	28%
19 - 25	51%	41%
26 - 30	15%	22%
Totals	100%	100%

During the spring 1988 meeting, the Board of Fisheries placed a 500,000 (fish) chum salmon cap on the South Unimak-Shumagin Islands June fisheries (once a total of 500,000 chums are harvested the fishery will be closed). It would be very difficult or impossible to harvest the sockeye allocation during many years due to the chum cap.

In 1988, the South Unimak sockeye harvest was reduced by approximately 669,000 fish due to the 500,000 chum cap. This reduction is in addition to the estimated reduction of 117,000 sockeye that would have been lost by other restrictions (no more than 96 hours to be fished in any 7 day period nor more than 72 consecutive hours). The Shumagin fishery harvested its 1988 sockeye allocation.

In 1989, South Unimak and Shumagin Islands fishermen did harvest their June sockeye allocations. However, this was due to the Bristol Bay forecast (and consequently the South Unimak and Shumagin quotas) being low. If the Bristol Bay inshore sockeye harvest had been accurately predicted, the South Unimak fishery would have fallen approximately 620,000 fish short of it's sockeye allocation, due to the 500,000 chum cap. Sockeye catch rates were so high in the Shumagins, that this fishery could have easily taken it's allocation if the Brisol Bay harvest had been accurately forecasted before the chum ceiling was reached.

For more details regarding regulations dealing with the South Unimak-Shumagin Islands June fisheries during 1989, check the regulations under 5 AAC 09.365. **SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE SALMON MANAGEMENT PLAN** later in this report (under Commercial Fishing Regulations). Regulation changes to be in effect after the 1989 season are also listed later in this report.

produce substantially larger runs through supplemental methods exists. Orzinski (Orzenoi) Lake is an important contributor to Southeastern District catches.

Post June South Peninsula sockeye catches are often substantial. Many of the fish are taken in the Balboa-Stepovak fishery which targets on Chignik destined sockeye. However, a substantial number (50,000 to 400,000) are taken annually in the Shumagins and lesser numbers taken throughout the balance of the area. Many of these fish are undoubtedly bound for other areas, although South and North Peninsula streams are contributors.

Most South Peninsula coho are taken while the fishery is targeted on pink and chum salmon during mid July to mid August and a smaller amount harvested during September. Commercial fishing is usually closed during late August to achieve good pink and chum escapements.

Historically South Peninsula coho catches have demonstrated long periods of different abundance levels (Figure 3). From 1923 through 1946 catches remained at a high level, averaging 148,000 fish annually. During 1947 through 1958 the average fell to 50,000. The 1959-77 average South Peninsula coho catch was only 12,000. However, catches jumped to an average of 261,000 during 1978-89 (Table 1). The record high catch of 505,500 coho occurred during 1988. It should be pointed out that the Aleutian Islands catches were combined with the South Peninsula during 1928 through 1950, however, the Aleutian contribution was probably insignificant based on years when Aleutian catches were kept separate. The record Aleutian Islands Area documented coho catch was 4,400 fish in 1918 and the catch is less than 200 during most years.

King salmon are of minor importance along the South Peninsula averaging only 10,400 fish harvested during 1980-89 (Table 1). There are no king salmon streams along the south side of the

Pink salmon runs are very unstable in the Aleutians. They produce legendary high returns at times and then collapse for no apparent reason.

Aleutian pinks and sockeyes (within a given age group) tend to be of smaller size than those of Alaska Peninsula stocks.

Prior to 1979, markets were a limiting factor at Unalaska. There was often no market unless pink salmon abundance warranted sending tenders from False Pass or King Cove. Some fish (usually sockeye) were salted by the fishermen. From 1979 to the present, most fish have been processed by buyers at Unalaska-Dutch Harbor or Akutan.

The record Aleutian pink salmon catch was approximately 2.6 million fish during 1980 (roughly 2 million were taken out of Makushin Bay alone).

Unalaska pink runs seem to arrive about the same time as those of the South Peninsula. However, there is considerable variation from year to year as to when pinks enter Unalaska streams as well as timing between various streams. This is a different situation than found on the South Peninsula where pink salmon entry into streams is less variable. During large runs, Unalaska pinks may trickle in throughout September.

North Peninsula

Tables 32-46 contain historical catch and total run information regarding North Peninsula salmon.

It should be noted, that except for Bear River sockeye, Sapsuk River sockeye, and Sapsuk River kings and chums from 1962 through 1985, all escapement figures used in this report are indexed totals. The indexed totals are likely close to but a little lower than the actual totals. Consequently there will be differences after 1984 between figures used in Area Management

Cove and Warm Springs chum returns occur during August through early September.

Coho are the third most important commercial salmon species on the North Peninsula. Due to the lateness of the runs, virtually no fishing effort was directed towards North Peninsula coho until 1948, and then only in limited locations. During recent years, more stocks have been exploited. However, there are undoubtedly stocks on both sides of the Alaska Peninsula which have not been identified nor exploited. Escapement information is very limited.

North Peninsula coho catches averaged 33,500 fish per year from 1948 through 1978. The catch jumped dramatically to a 170,300 average during 1979-89, with catches ranging from 75,100 during 1983 to 238,000 in 1982 (Table 1).

Nelson Lagoon is the largest North Peninsula coho producer. Other major runs include Port Heiden, Cinder River, Ilnik, and Swanson Lagoon.

There is some variation in run timing among stocks, however coho returns generally begin about August 1, peak during the last two weeks in August and the first week in September, and are essentially over by September 15. However, there are exceptions. For example, the Ocean River coho run seems to peak during late September. There is a lot to be learned concerning North Peninsula coho stocks.

King salmon are the fourth ranked salmon species in commercial importance along the North Peninsula. However, they are extremely important to some individual fishermen. For example, kings are one of the two most important species at Port Heiden and are an important contributor to the Nelson Lagoon economy. The record catch was 44,200 fish during 1916. The harvest has

1989 SALMON SEASON

An 11,000,000 gallon oil spill off the tanker EXXON VALDEZ in Prince William Sound caused cancellation or curtailment of most salmon fisheries in the Prince William Sound, Cook Inlet, Kodiak and Chignik Areas. The risk of contaminating gear and/or product was too great to allow commercial fishing. The Chignik fishery was essentially confined only to Chignik Lagoon. Small amounts of oil were found on the Chignik side of Kupreanof Point. Fortunately no EXXON VALDEZ oil was found in the Alaska Peninsula and Aleutian Islands Areas which allowed fisheries in these areas to be prosecuted in the normal manner.

In 1989, the early Chignik run was much weaker than predicted. A 16 hour fishing period was allowed in the Southeastern District Mainland on June 16, resulting in an estimated harvest of 3,400 Chignik destined sockeye. No additional fishing time was allowed in that portion of the Southeastern District Mainland managed for Chignik stocks (1,100 Chignik destined sockeye were taken in the Stepovak Flats Section in mid July when that location was being managed for chums) until July 26 when the area is managed for local stocks. The percent of the estimated Chignik destined sockeye harvested in the Southeastern District Mainland fishery through July 25 was 0.99%. The Chignik Area did not harvest 600,000 sockeye prior to July 26.

Table 7 lists the percentages of Chignik destined sockeye catches harvested by Chignik, Cape Igvak, and Southeastern District Mainland fisheries.

In 1989, the sockeye allocations were exceeded due to a very high sockeye abundance. The Shumagin Islands sockeye catch was 397,000 with an allocation of 264,000 while 1,347,600 sockeye were harvested at South Unimak with an allocation of 1,199,000. A total of only 72 hours (fishing occurred on 4 days) fishing time was allowed in the Shumagins. At South Unimak, openings occurred on 5 different days for a total of 84 hours fishing

The number of purse seiners participating in the South Peninsula June fisheries totaled 96 as compared to 89 in 1988. The highest number was 105 in 1985. A total of 144 drift gill-net vessels fished at South Unimak during June as compared to 147 in 1988.

The number of set gill-net permits being fished at South Unimak and in the Shumagins during June was 65, an increase of two over 1988. Fourteen set gill-netters fished South Unimak during the June 10, 16, 19, and 20 fishing periods with the balance fishing in the Shumagins (and June 16 Southeastern District Mainland fishery). During June 23, when the Shumagins were closed, nine set gillnetters who fished in the Shumagins earlier participated in the South Unimak fishery. This brought the South Unimak June 23 total to 23 which was far more set gillnetters than had ever participated during previous years. June 23, 1989 was the first time that a substantial number of set gillnetters have moved between the Shumagins and South Unimak (seiners normally move between the two fisheries).

Table 26, lists the approximate amount of gear fishing along the South Peninsula during June 1976-89.

The total South Peninsula 1989 July-August catch (including Chignik sockeye interception along the Southeastern District Mainland) was 4,300 kings, 876,000 sockeyes, 428,000 cohos, 7,094,000 pinks, and 528,000 chums. The pink catch was much stronger than anticipated and was one of the three highest catches during the past 75 years. However, the chum catch was the weakest since 1979.

The July-August 1989 coho catch was the second (to 1988) highest on record. Major coho harvest areas were the Shumagins 243,000, South Unimak 108,000, and Balboa-Stepovak 70,000. Pink catches in the above locations were Shumagins 2,027,000, South Unimak 108,000, and Balboa-Stepovak 3,005,000. South Unimak is basically a gillnet fishery, an even year pink producer, and has

been receiving increased effort during recent years. The Shumagin coho catch likely would have gone another 60,000 had seining not been closed due to the presence of immature salmon during July 13-24. Approximately 266,000 (64%) of the South Peninsula July-August coho catch was taken during July 25-August 5 when about 65% of the season pink harvest was taken.
South Peninsula coho catches (Figure 3) were generally at a high level during 1923-49, declined to a much lower level during 1947-58, and to an extremely low level during 1959-78. During 1979-89 coho catches jumped to record high levels.

Large numbers of immature sockeye salmon were reported in the Shumagins during late June 1989. However, monitoring by a Department of Public Safety vessel indicated that the number of immature salmon was low (25-20 per set) during the July 6-7 fishery. During July 12, however, large numbers (200 per set) of immature sockeye were observed by ADF&G, resulting in the closure of the Shumagin Islands seine fishery. Test fishing results indicated a high number of immature salmon present through July 23. However, the July 23 result showed a substantial decrease in immatures when compared to earlier test fishing. During earlier years when immature salmon were present they had disappeared about July 23. It was decided to allow a closely monitored seine opening on July 25. If a large number of immatures were present, the seine fishery would be closed on very short notice. During July 25 approximately 15 immatures were observed per set and it was decided to allow the fishery to continue. This was the first time since 1979 that immature salmon being gilled in seines was a problem in the Shumagin Islands. Years previous to 1979, when immature salmon plagued the Shumagin purse seine fishery were 1963, 1968, 1969, and 1974.

During July and August 1989, sockeye salmon were caught in high abundance throughout the Shumagins (401,000), Balboa-Stepovak (260,000), Outer Pavlof Bay (50,000), and at South Unimak (121,000).

Factors contributing to the high incidental catches of sockeye and coho during July and August were:

1. A very high abundance of both sockeye and coho along the South Peninsula.

2. The large pink salmon return to South Peninsula streams, resulting in liberal fishing time during late July and August.

3. A total of 86,000 sockeye were taken along the west side of Unga Island and 34,000 taken along Southwest Nagai Island. Very little fishing effort, if any, occurred in these areas prior to 1986. However, the West Unga-S.W. Nagai coho catch was only 10,000 as compared to 233,000 in the more traditional Shumagin fishing areas. The West Unga-S.W. Nagai post June pink and chum salmon harvests were 496,000 and 21,000 respectively.

Except for West Unga-S.W. Nagai, the Shumagin sockeye and coho catches came from the same locations fished extensively during the previous 70 to 80 years. Fishing along the South Peninsula capes enables the fleet to harvest pinks and chums while fish quality is still high, prevents processors from being glutted, and allows assessment of stock strength of fish.

In 1986, a substantial amount of fishing effort was exerted on the west side of Unga Island. Catch statistics for West Unga are not accurate for 1986, but the sockeye catch was probably in the vicinity of 50,000 fish. In 1987, fishing occurred near the Southwest end of Nagai Island, as well as West Unga. The 1987 post-June West Unga-S.W. Nagai catch was 90,000 sockeye, 1,000 coho, 35,000 pinks, and 71,000 chums. An additional 15,000 sockeye and 1,000 chums were taken in June.

In 1988, the West Unga-S.W. Nagai post-June harvest was 155,000 sockeye, 29,000 cohos, 899,000 pinks, and 92,000 chums. The June catch totaled less than one thousand fish of each species.

The West Unga-S.W. Nagai 1988 sockeye and coho harvest greatly exceeded that of 1987 due to the much larger pink salmon runs which resulted in more fishing time allowed in 1988. Pink salmon and not sockeye attracted much of the 1988 August effort.

Based on Department observations of fishing activity, salmon seem to be traveling in a southeasterly direction when arriving at West Unga, but are traveling west out of the north side of Saddler's Mistake when caught along S.W. Nagai.

In 1987 the entire post-June salmon catch at West Unga-S.W. Nagai was taken during July. In 1988, 59% of the sockeye, 24% of the coho, 32% of the pinks, and 61% of the chums were taken in July. In 1989, 84% of the sockeye, 62% of the coho, 68% of the pinks, and 72% of the chums were harvested during July.

Figures 4 and 5 show the 1979-89 Shumagin Islands and South Unimak catch by species.

The fall (September) South Peninsula salmon catch was 35,000 sockeye, 16,000 coho, and 10,000 chums. Only part of the area was open in September due to poor chum escapements.

The 1989 indexed total pink salmon escapement of 1,871,000 was slightly above the average 1979-87 odd year average of 1,789,000 and well above the 1987 parent escapement of 1,541,000. The indexed total chum escapement totaled 310,000, the lowest since 1975 and well below the previous 10 year average of 485,000. Chum escapements were good in the majority of the early systems but were very poor in some of the late systems where the fishery was managed for pinks. The indexed total sockeye escapement of 78,000 was the highest since 1974 and well over the previous 10

year average of 52,000. Having Department personnel on the grounds to protect Thin Point Lagoon and Middle Lagoon (Morzhovoi Bay) is greatly benefiting South Peninsula's sockeye escapements. Coho escapement information is very incomplete, however based on what information that was collected, the total 1989 escapement was probably in the 25,000 to 75,000 range.

The 1989 Aleutian Islands salmon catch totaled only 8,000 sockeye and 7,000 pinks. The Aleutians is an even year pink salmon producer, however Unalaska Bay occasionally produces substantial runs (the last being in 1981) during the odd year cycle. This year was disappointing as it appears that the 1989 escapement was lower than in 1987. Escapement data in 1989 at Unalaska was incomplete due to weather and lack of aircraft. Most information was obtained from foot surveys. However, the data which was collected looked bleak.

The 1989 North Peninsula harvest figures are 11,000 kings, 1,719,000 sockeyes, 228,000 cohos, 4,000 pinks, and 157,000 chums.

Approximately 1.3 million sockeye were harvested between Port Moller and Strogonof Point. The Nelson Lagoon catch of 325,000 was the third highest since 1960.

The peak (early July) portion of the Bear River run seemed to be missing while Nelson Lagoon was enjoying an excellent run. Generally when Nelson Lagoon is strong, so is Bear River. Bear River was strong early and late, but very weak during what should have been the peak. The Ilnik and Port Heiden runs started out strong and then fell off abruptly. A long closure of the Bear River fishery greatly benefited the Sandy River escapement.

Prior to the last week of July, the Ilnik Section (of which Strogonof Point is a part) opened outside of Ilnik Lagoon for

only 18 hours (resulting in a catch of 104,000 sockeye). It was closed due to weak Ilnik and Bear River escapements and remained closed until July 24 (when the Ilnik sockeye run was finished and Bear River escapements were good).

Salmon escapements in major North Peninsula sockeye systems during 1989 are as follows:

		Goal
Bear River	451,000	(250,000, majority of the escapement received late with the fishery wide open.)
Nelson (Sapsuk) R.	193,000	(100,000 - 150,000)
Urilia Bay	47,000	(25,000 - 50,000)
Sandy River	36,000	(20,000 - 30,000)
Ilnik	16,000	(20,000 - 40,000)
Port Heiden	11,000	(6,000 - 20,000)

All escapements except Nelson and Bear Rivers are indexed totals. Nelson and Bear have weirs and are subject to slight adjustments in estimated escapements after the weir projects were closed.

North Peninsula 1989 indexed total sockeye escapement was 814,000 salmon.

The North Peninsula chum runs were weak except for those of two Herendeen Bay streams. The catch of 157,000 was the lowest since 1979 and far below the previous 10 year average of 466,000. The indexed total escapement of 212,000 was the lowest since 1975 and was less than half the 1979-88 average of 493,000.

The coho harvest of 227,600 was the third highest on record. Coho escapement data is incomplete but based on the available data, the escapement was probably in the 150,000 to 250,000 range.

A total of 10,900 kings were harvested on the North Peninsula, which is only about half the previous 10 year average of 20,200. The indexed total escapement was 5,600, far below the 1979-88 average of 14,700.

The North Peninsula is not an important pink salmon producer. The 1989 catch was only 4,100 fish.

During August and September, a total of 29 Area T drift gillnetters (exclusive of the Inner Port Heiden fleet, which is made up of dominantly local fishermen) fished the Ilnik and Outer Port Heiden Sections, harvesting approximately 12,000 sockeye and 19,000 coho. Area T fishermen exclusive of the Inner Port Heiden spring drift-net fleet began fishing in what is now the Ilnik and Outer Port Heiden Sections in 1986 (Table 7). After the 1989 season, the Alaska Board of Fisheries limited locations in the Alaska Peninsula Area that Area T permit holders could operate in Ilnik Lagoon, Inner Port Heiden Section, and Cinder River Section.

SUBSISTENCE SALMON FISHERY

Subsistence salmon catches are estimated from permit return information. Information from returned permits are used to extrapolate catches for all permits issued. There are undoubtedly many fish kept from commercial catches and not reported.

Permits are not required to subsistence fish in the Akutan and Umnak Districts. Consequently no catch estimates are made by the Commercial Fisheries Division for those districts.

Subsistence salmon fishing is not allowed in the Adak District. However a personal use salmon fishery is allowed on Adak and Kagalaska Islands for Alaska residents and military personnel (and their dependents) who have been stationed in Alaska for the preceding 12 months.

1989 subsistence and personal use catch information is contained in Tables 62-67.

METHODS OF CALCULATING INDEXED TOTAL ESCAPEMENTS

Unusual circumstances may cause occasional deviation, but basically the methods of calculating estimated indexed total escapements without the use of a weir or tower are as follows:

King, Sockeye, Coho: These species tend to have a much longer stream life than pink and chum salmon. Therefore, the estimated total escapement is usually the peak escapement. Carcasses are included. However, it is recognized that there are problems in large systems such as Ilnik and Caribou-David's Rivers. The basic problem on large systems is the length of time, expense, and fuel needed to do a thorough survey yet meet more pressing obligations.

The Caribou and David's River complex (including Coastal and other nearby lakes) is so massive a system for the size of its runs that complete surveys will probably never be done. The timing if such surveys would have to coincide with the peak of the South Peninsula pink and chum fisheries.

In the case of Ilnik, numerous management surveys are done while the fishery is being managed for the Ilnik stocks. However, the peak surveys occur after the fishery has tapered off and most effort must be devoted to South Peninsula runs. However, Ilnik is a very important run and more effort is being made to accurately monitor it. The Ilnik sockeye run is of longer duration than the majority of unweired (or towered) North Peninsula sockeye streams. Ilnik sockeye also seem to have a shorter stream life than those in most other shallow water systems. Consequently, Ilnik requires at least two complete surveys or at least one complete survey with fish in the lower area during subsequent surveys being added to a peak count for the system. Again this system justifies more effort and is probably a larger producer than a number of weired systems in other portions of the state. Many of the Ilnik figures listed in this publication are minimal.

Pink and Chum Salmon: A 21-day stream life is used to calculate total pink and chum escapements. Fish in saltwater during the final survey are added:

EXAMPLE

Survey Date	Pinks	Chums	Fish at Mouth
July 10	5,000	0	5,000P
17	25,000	0	10,000P
August 1	100,000	0	10,000P
15	150,000	0	12,000P
			1,000CH
September 1	150,000	5,000	2,000CH
Estimated Total	255,000	7,000	

The estimate of 21 days stream life was used because significant numbers of carcasses seem to appear about three weeks after adult pinks and chums first appear in Alaska Peninsula streams. It is recognized that stream life can vary, however this method is easily duplicated and is comparable from year to year. Variation in stream life is likely a much smaller factor than variation between observers.

With the exception of several small streams, there are no problems of streams being obscured by brush or trees in the Alaska Peninsula and Aleutian Islands Areas. With several exceptions, visibility of spawning grounds is outstanding during periods of normal water flow and clear weather.

Table 1. ALASKA PENINSULA – ALEUTIAN ISLANDS SALMON CATCHES (Fish in Thousands)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1906	South Peninsula	0	0	0	0	0	0
	North Peninsula	1.5	135.0	0	0	0	136.5
	Aleutians	0	0	0	0	0	0
	Total	**1.5**	**135.0**	**0**	**0**	**0**	**136.5**
1907	South Peninsula	0	0	0	0	0	0
	North Peninsula	1.7	66.5	3.2	1.5	0	72.9
	Aleutians	0	0	0	0	0	0
	Total	**1.7**	**66.5**	**3.2**	**1.5**	**0**	**72.9**
1908	South Peninsula	0	69.4	0	0	0	69.4
	North Peninsula	1.5	166.9	0	0	0	168.4
	Aleutians	0	0	0	0	0	0
	Total	**1.5**	**236.3**	**0**	**0**	**0**	**237.8**
1909	South Peninsula	0	108.4	7.2	0	0	115.6
	North Peninsula	1.5	143.0	0	0	1.0	145.5
	Aleutians	0	0	0	0	0	0
	Total	**1.5**	**251.4**	**7.2**	**0**	**1.0**	**261.1**
1910	South Peninsula	0	46.3	5.5	0	0	51.8
	North Peninsula	0	0	0	0	0	0
	Aleutians	0	0	0	0	0	0
	Total	**0**	**46.3**	**5.5**	**0**	**0**	**51.8**
1911	South Peninsula	0	240.8	12.4	25.2	83.0	361.4
	North Peninsula	0	129.6	0	0	0	129.6
	Aleutians	0	9.3	0	0	0	9.3
	Total	**0**	**379.7**	**12.4**	**25.2**	**83.0**	**500.3**
1912	South Peninsula	0	334.4	27.0	40.4	195.0	596.8
	North Peninsula	0.9	252.7	11.0	0	2.4	267.0
	Aleutians	0	0	0	0	0	0
	Total	**0.9**	**587.1**	**38.0**	**40.4**	**197.4**	**863.8**
1913	South Peninsula	1.8	299.7	0	0	7.0	308.5
	North Peninsula	0.6	888.8	18.7	0	2.0	910.1
	Aleutians	0	0	0	0	0	0
	Total	**2.4**	**1,188.5**	**18.7**	**0**	**9.0**	**1,218.6**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1914	South Peninsula	0.6	628.9	9.9	311.0	221.1	1,171.5
	North Peninsula	8.1	1,325.1	0	0	0	1,333.2
	Aleutians	0	0	0	0	0	0
	Total	**8.7**	**1,954.0**	**9.9**	**311.0**	**221.1**	**2,504.7**
1915	South Peninsula	4.8	367.9	16.2	120.1	333.1	842.1
	North Peninsula	14.0	1,974.3	0	0	54.8	2,043.1
	Aleutians	0	0	0	0	0	0
	Total	**18.8**	**2,342.2**	**16.2**	**120.1**	**387.9**	**2,885.2**
1916	South Peninsula	6.8	730.9	34.1	576.1	508.9	1,856.8
	North Peninsula	44.2	1,974.7	0	2.6	191.4	2,212.9
	Aleutians	0	76.5	1.2	180.3	0.1	258.1
	Total	**51.0**	**2,782.1**	**35.3**	**759.0**	**700.4**	**4,327.8**
1917	South Peninsula	6.4	1,486.1	4.6	72.1	415.5	1,984.7
	North Peninsula	20.0	679.6	6.8	0.6	90.3	797.3
	Aleutians	0	70.4	3.8	0.6	23.1	97.9
	Total	**26.4**	**2,236.1**	**15.2**	**73.3**	**528.9**	**2,879.9**
1918	South Peninsula	8.7	1,014.1	16.3	2,150.0	1,501.0	4,690.9
	North Peninsula	9.7	1,208.5	0	1.2	252.3	1,471.7
	Aleutians	0	55.2	4.4	75.6	135.2	270.4
	Total	**18.4**	**2,277.8**	**20.7**	**2,227.6**	**1,888.5**	**6,433.0**
1919	South Peninsula	9.6	619.1	56.1	80.2	921.4	1,686.4
	North Peninsula	19.6	389.2	0	12.0	143.5	564.3
	Aleutians	0	3.9	0.8	4.0	0	8.7
	Total	**29.2**	**1,012.2**	**56.9**	**96.2**	**1,064.9**	**2,259.4**
1920	South Peninsula	7.8	1,142.3	47.7	2,109.8	934.0	4,241.6
	North Peninsula	19.0	1,371.9	0	0	37.0	1,427.9
	Aleutians	0	10.1	2.8	0	0	12.9
	Total	**26.8**	**2,524.3**	**50.5**	**2,109.8**	**971.0**	**5,682.4**
1921	South Peninsula	0.7	830.7	1.5	47.3	84.6	964.8
	North Peninsula	12.5	1,746.5	0	0	32.8	1,791.8
	Aleutians	0	0	0	0	0	0
	Total	**13.2**	**2,577.2**	**1.5**	**47.3**	**117.4**	**2,756.6**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1922	South Peninsula	6.9	3,376.8	2.2	756.7	349.3	4,491.9
	North Peninsula	10.4	667.9	0	0	42.9	721.2
	Aleutians	0	14.0	0	0	0	14.0
	Total	**17.3**	**4,058.7**	**2.2**	**756.7**	**392.2**	**5,227.1**
1923	South Peninsula	4.1	1,827.2	75.3	143.6	538.9	2,589.1
	North Peninsula	9.1	731.7	0.1	0	25.8	766.7
	Aleutians	0	0	0	0	0	0
	Total	**13.2**	**2,558.9**	**75.4**	**143.6**	**564.7**	**3,355.8**
1924	South Peninsula	3.9	1,352.0	127.3	3,931.3	1,330.7	6,745.2
	North Peninsula	10.5	701.7	0	0	48.4	760.6
	Aleutians	0	24.9	0	673.8	0.1	698.8
	Total	**14.4**	**2,078.6**	**127.3**	**4,605.1**	**1,379.2**	**8,204.6**
1925	South Peninsula	10.7	820.5	127.1	382.1	1,116.8	2,457.2
	North Peninsula	10.6	400.2	0	0	53.9	464.7
	Aleutians	0	18.6	0	3.8	9.1	31.5
	Total	**21.3**	**1,239.3**	**127.1**	**385.9**	**1,179.8**	**2,953.4**
1926	South Peninsula	9.5	3,071.5	193.8	3,719.7	1,179.8	8,174.3
	North Peninsula	23.9	672,9	0	0	71.5	768.3
	Aleutians	0	1.3	0	521.7	7.8	530.8
	Total	**33.4**	**3,745.7**	**13.8**	**4,241.4**	**1,259.1**	**9,473.4**
1927	South Peninsula	9.6	714.7	125.3	1,455.5	1,299.7	3,604.8
	North Peninsula	16.5	230.6	0.1	0	87.0	334.2
	Aleutians	0	17.3	0	334.6	0	351.9
	Total	**26.1**	**962.6**	**125.4**	**1,790.1**	**1,386.7**	**4,290.9**
1928	S.Pen & Aleutians	7.7	971.5	96.6	900.9	2,416.3	4,393.0
	North Peninsula	4.6	855.6	0	0	83.5	943.7
	Total	**12.3**	**1,827.1**	**96.6**	**900.9**	**2,499.8**	**5,336.7**
1929	S.Pen & Aleutians	10.5	935.8	84.5	1,793.5	2,429.0	5,253.3
	North Peninsula	4.1	878.0	0	0	145.2	1,027.3
	Total	**14.6**	**1,813.8**	**84.5**	**1,793.5**	**2,574.2**	**6,280.6**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1930	S.Pen & Aleutians	10.9	935.2	161.1	6,094.8	1,278.1	8,480.1
	North Peninsula	3.8	167.7	0	0	93.4	265.2
	Total	**14.7**	**1,102.9**	**161.1**	**6,094.8**	**1,371.8**	**8,745.3**
1931	S.Pen & Aleutians	11.0	1,863.2	128.7	997.9	1,216.0	4,211.8
	North Peninsula	1.3	761.0	0	0	54.9	817.2
	Total	**12.3**	**2,624.2**	**128.7**	**997.9**	**1,265.9**	**5,029.0**
1932	S.Pen & Aleutians	17.4	2,977.3	112.3	3,604.8	817.3	7,529.1
	North Peninsula	3.2	977.1	0	0	56.3	1,036.6
	Total	**20.6**	**3,954.4**	**112.3**	**3,604.8**	**873.6**	**8,565.7**
1933	S.Pen & Aleutians	12.6	1,996.7	190.0	3,109.2	1,173.9	6,482.4
	North Peninsula	1.1	350.1	0	0	16.0	367.2
	Total	**13.7**	**2,346.8**	**190.0**	**3,109.2**	**1,189.9**	**6,849.6**
1934	S.Pen & Aleutians	17.6	1,372.4	247.1	6,538.5	1,940.3	10,115.9
	North Peninsula	1.6	1,091.3	0	0.4	13.0	1,106.3
	Total	**19.2**	**2,463.7**	**247.1**	**6,538.9**	**1,953.3**	**11,222.2**
1935	S.Pen & Aleutians	13.9	978.4	117.2	5,386.2	2,003.1	8,498.8
	North Peninsula	1.0	479.2	0	0.1	33.8	514.1
	Total	**14.9**	**1,457.6**	**117.2**	**5,386.3**	**2,036.3**	**9,012.9**
1936	S.Pen & Aleutians	14.4	3,662.6	284.6	9,471.0	2,310.9	15,743.5
	North Peninsula	1.0	610.7	0	2.8	19.0	633.5
	Total	**15.4**	**4,273.3**	**284.6**	**9,473.8**	**2,329.9**	**16,377.0**
1937	S.Pen & Aleutians	9.3	1,558.0	73.9	9,302.0	1,506.7	12,449.9
	North Peninsula	1.6	860.9	0	0.1	65.6	928.2
	Total	**10.9**	**2,418.9**	**73.9**	**9,302.1**	**1,572.3**	**13,378.1**
1938	S.Pen & Aleutians	6.4	772.1	220.7	7,169.1	1,476.6	9,644.9
	North Peninsula	5.9	1,009.6	0	0	34.7	1,050.2
	Total	**12.3**	**1,781.7**	**220.7**	**7,169.1**	**1,511.3**	**10,695.1**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1939	S.Pen & Aleutians	16.5	1,881.7	98.9	6,005.3	1,440.6	9,443.0
	North Peninsula	3.9	746.2	0	0	82.2	882.3
	Total	**20.4**	**2,627.9**	**98.9**	**6,005.3**	**1,522.8**	**10,275.3**
1940	S.Pen & Aleutians	9.1	1,040.3	184.2	7,182.8	2,326.3	10,472.7
	North Peninsula	0.7	678.9	0	0	65.6	745.2
	Total	**9.8**	**1,719.2**	**184.2**	**7,182.8**	**2,391.9**	**11,487.9**
1941	S.Pen & Aleutians	13.0	1,072.0	183.0	5,347.0	1,542.0	8,157.8
	North Peninsula	0.7	491.7	0	3.2	30.2	525.8
	Total	**13.7**	**1,563.7**	**183.0**	**5,350.2**	**1,572.2**	**8,682.8**
1942	S.Pen & Aleutians	4.8	810.1	123.0	6,762.6	1,321.1	9,021.6
	North Peninsula	0	0	0	0	0	0
	Total	**4.8**	**810.1**	**123.0**	**6,762.6**	**1,321.1**	**9,021.6**
1943	S.Pen & Aleutians	21.7	2,397.7	90.6	4,360.2	924.5	7,794.7
	North Peninsula	0.2	567.4	0	1.3	50.4	619.3
	Total	**21.9**	**2,965.1**	**90.6**	**4,361.5**	**974.9**	**8,414.0**
1944	S.Pen & Aleutians	9.9	538.6	238.7	2,653.8	985.6	4,426.6
	North Peninsula	0.1	414.7	0	2.6	157.9	575.3
	Total	**10.0**	**953.3**	**238.7**	**2,656.4**	**1,143.5**	**5,001.9**
1945	S.Pen & Aleutians	21.4	813.4	116.1	3,639.6	948.9	5,539.4
	North Peninsula	0.1	394.4	0	2.5	335.1	732.1
	Total	**21.5**	**1,207.8**	**116.1**	**3,642.1**	**1,284.0**	**6,271.5**
1946	S.Pen & Aleutians	6.1	752.3	151.4	1,964.0	1,219.9	4,093.7
	North Peninsula	2.5	697.7	0.3	0	36.0	736.5
	Total	**8.6**	**1,450.0**	**151.7**	**1,964.0**	**1,255.9**	**4,830.2**
1947	S.Pen & Aleutians	3.4	1,137.1	55.8	2,319.6	1,219.2	4,735.1
	North Peninsula	0.1	357.7	0.1	0.1	75.0	433.0
	Total	**3.5**	**1,491.8**	**55.9**	**2,319.7**	**1,294.2**	**5,168.1**
1948	S.Pen & Aleutians	1.2	285.9	39.2	1,683.7	1,139.6	3,149.6
	North Peninsula	1.2	477.6	17.2	0	161.7	658.7
	Total	**3.4**	**763.5**	**56.4**	**1,683.7**	**1,301.3**	**3,808.3**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1949	S.Pen & Aleutians	3.8	637.5	19.5	1,544.0	560.9	2,765.7
	North Peninsula	0.7	137.1	25.7	0	40.7	204.2
	Total	**4.5**	**774.6**	**45.2**	**1,544.0**	**601.6**	**2,969.9**
1950	S.Pen & Aleutians	4.0	1,745.3	70.7	1,613.7	562.5	3,996.2
	North Peninsula	1.1	127.8	37.8	0	217.6	284.3
	Total	**5.1**	**1,873.1**	**108.5**	**1,613.7**	**780.1**	**4,380.5**
1951	South Peninsula	1.5	264.2	55.7	2,844.8	683.1	3,849.3
	North Peninsula	1.2	358.9	32.9	20.4	203.0	616.4
	Aleutians	0	11.7	0.4	0.5	94.5	107.1
	Total	**2.7**	**634.8**	**89.0**	**2,865.7**	**980.6**	**4,572.8**
1952	South Peninsula	9.2	894.5	39.2	908.5	1,040.8	2,892.2
	North Peninsula	0.7	354.8	54.2	1.4	246.9	658.0
	Aleutians	0.2	42.8	0	31.8	25.7	100.5
	Total	**10.1**	**1,292.1**	**93.4**	**941.7**	**1,313.4**	**3,650.7**
1953	South Peninsula	7.2	1,039.2	47.9	2,743.9	1,464.6	5,302.8
	North Peninsula	0.8	537.3	26.2	18.3	224.4	807.0
	Aleutians	0	4.2	0.5	69.2	0.8	74.7
	Total	**8.0**	**1,580.7**	**74.6**	**2,831.4**	**1,689.8**	**6,184.5**
1954	South Peninsula	4.2	636.3	49.4	2,033.3	1,413.4	4,136.6
	North Peninsula	3.4	354.7	35.0	18.5	405.0	816.6
	Aleutians	0	6.3	0.8	566.5	0.2	573.8
	Total	**7.6**	**997.3**	**85.2**	**2,618.3**	**1,818.6**	**5,527.0**
1955	South Peninsula	5.4	550.1	44.8	2,529.2	688.2	3,817.7
	North Peninsula	4.1	586.6	6.2	0.9	129.6	727.4
	Aleutians	0	12.6	0.1	31.1	0.4	44.2
	Total	**9.5**	**1,149.3**	**51.1**	**2,561.2**	**818.2**	**4,589.3**
1956	South Peninsula	4.8	641.4	61.9	2,740.7	1,618.7	5,067.5
	North Peninsula	4.2	1,370.9	8.2	28.5	427.4	1,839.2
	Aleutians	0	0.4	0	33.9	0	34.3
	Total	**9.0**	**2,012.7**	**70.1**	**2,803.1**	**2,046.1**	**6,941.0**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1957	South Peninsula	5.8	341.9	49.9	913.1	1,281.4	2,592.1
	North Peninsula	1.0	327.9	18.3	3.3	274.9	625.4
	Aleutians	2.3	27.3	0.1	0.5	13.9	44.1
	Total	**9.1**	**697.1**	**68.3**	**916.9**	**1,570.2**	**3,261.6**
1958	South Peninsula	0.8	186.1	70.6	1,385.2	841.0	2,483.7
	North Peninsula	15.0	473.8	57.1	60.4	254.8	861.1
	Aleutians	0	0.3	0	613.2	3.7	617.2
	Total	**15.8**	**660.2**	**127.7**	**2,058.8**	**1,099.5**	**3,962.0**
1959	South Peninsula	0.9	217.5	8.5	915.6	711.7	1,854.2
	North Peninsula	28.7	634.9	59.1	9.6	404.7	1,137.0
	Aleutians	0	6.1	0	12.0	0.1	18.2
	Total	**29.6**	**858.5**	**67.6**	**937.2**	**1,116.5**	**3,009.4**
1960	South Peninsula	1.7	379.0	1.8	1,197.5	904.4	2,484.4
	North Peninsula	10.4	692.8	44.0	34.7	607.2	1,389.1
	Aleutians	0	7.6	0	444.9	0.3	452.8
	Total	**12.1**	**1,079.4**	**45.8**	**1,677.1**	**1,511.9**	**4,326.3**
1961	South Peninsula	0.9	456.8	10.4	1,727.8	748.6	2,944.5
	North Peninsula	6.1	387.7	24.6	3.0	153.3	574.7
	Aleutians	0	2.7	0	94.0	0.2	96.9
	Total	**7.0**	**847.2**	**35.0**	**1,824.8**	**902.1**	**3,616.1**
1962	South Peninsula	3.3	420.0	12.5	1,965.5	824.8	3,226.1
	North Peninsula	5.4	249.7	35.2	31.2	34.9	356.4
	Aleutians	0	5.5	0.1	2,001.7	1.2	2,008.5
	Total	**8.7**	**675.2**	**47.8**	**3,998.4**	**860.9**	**5,591.0**
1963	South Peninsula	1.9	204.4	16.5	2,367.7	461.3	3,051.8
	North Peninsula	3.6	225.2	40.5	6.9	49.9	326.1
	Aleutians	0	4.5	0	93.9	0.3	98.7
	Total	**5.5**	**434.1**	**57.0**	**2,468.5**	**511.5**	**3,476.6**
1964	South Peninsula	2.0	370.8	13.6	2,740.4	751.0	3,877.8
	North Peninsula	3.6	250.8	36.6	6.8	139.0	436.8
	Aleutians	0	0.2	0	194.1	2.3	196.6
	Total	**5.6**	**621.7**	**50.2**	**2,941.3**	**892.3**	**4,511.2**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1965	South Peninsula	2.1	915.7	34.2	2,884.1	556.4	4,392.5
	North Peninsula	6.1	199.5	34.5	2.1	69.7	311.9
	Aleutians	0	0	0	0	0	0
	Total	**8.2**	**1,115.2**	**68.7**	**2,886.2**	**626.1**	**4,704.4**
1966	South Peninsula	1.4	606.2	6.3	302.3	494.4	1,410.6
	North Peninsula	5.6	245.3	37.3	16.0	82.8	387.0
	Aleutians	0	1.0	0	63.5	0.7	65.2
	Total	**7.0**	**852.5**	**43.6**	**381.8**	**577.9**	**1,862.8**
1967	South Peninsula	1.6	294.1	2.9	77.8	245.2	621.6
	North Peninsula	5.5	224.7	46.8	0.7	41.3	319.0
	Aleutians	0	0.2	0	7.9	0	8.1
	Total	**7.1**	**519.0**	**49.7**	**86.4**	**286.5**	**948.7**
1968	South Peninsula	1.4	699.8	31.1	1,287.1	325.3	2,344.7
	North Peninsula	4.5	237.1	64.9	0.2	73.5	380.2
	Aleutians	0	2.0	0.1	902.8	0.8	905.7
	Total	**5.9**	**938.9**	**96.1**	**2,190.1**	**399.6**	**3,630.6**
1969	South Peninsula	1.9	912.8	10.9	1,219.4	389.2	2,534.2
	North Peninsula	4.8	321.3	49.1	0.1	28.1	403.4
	Aleutians	0	1.9	0	242.2	1.5	245.6
	Total	**6.7**	**1,236.0**	**60.0**	**1,461.7**	**418.8**	**3,183.2**
1970	South Peninsula	1.8	1,794.6	32.2	1,723.4	981.7	4,533.7
	North Peninsula	3.2	213.0	26.4	7.8	50.2	300.6
	Aleutians	0	0.2	0.1	672.5	3.3	676.1
	Total	**5.0**	**2,007.8**	**58.7**	**2,403.7**	**1,035.2**	**5,510.4**
1971	South Peninsula	2.2	715.5	16.8	1,450.1	1,366.6	3,551.2
	North Peninsula	2.2	354.2	8.2	0.3	64.2	429.1
	Aleutians	0	0.3	0	45.5	0.1	45.9
	Total	**4.4**	**1,070.0**	**25.0**	**1,495.9**	**1,430.9**	**4,026.2**
1972	South Peninsula	1.3	557.8	8.0	78.0	727.5	1,372.6
	North Peninsula	1.8	179.5	9.6	0	84.7	275.6
	Aleutians	0	0.1	0	2.8	0	2.9
	Total	**3.1**	**737.4**	**17.6**	**80.8**	**812.2**	**1,651.1**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1973	South Peninsula	0.4	330.2	6.6	58.0	293.0	688.2
	North Peninsula	4.4	171.8	26.9	0.3	155.7	359.1
	Aleutians	0	0.1	0	7.0	0	7.1
	Total	**4.8**	**502.1**	**33.5**	**65.3**	**448.7**	**1,054.4**
1974	South Peninsula	0.5	204.7	9.4	99.7	71.5	385.8
	North Peninsula	5.1	247.9	24.0	10.5	35.3	322.8
	Aleutians	0	0	0	0	0	0
	Total	**5.6**	**452.6**	**33.4**	**110.2**	**106.8**	**708.6**
1975	South Peninsula	0.1	268.4	0	61.7	132.9	463.1
	North Peninsula	2.1	233.5	28.2	0.3	8.7	272.8
	Aleutians	0	0	0	0	0	0
	Total	**2.2**	**501.9**	**28.2**	**62.0**	**141.6**	**735.9**
1976	South Peninsula	2.1	375.0	0.2	2,367.0	532.5	3,276.8
	North Peninsula	4.9	641.1	26.0	0.6	73.6	746.2
	Aleutians	0	0	0	0	0	0
	Total	**7.0**	**1,016.1**	**26.2**	**2,367.6**	**606.1**	**4,023.0**
1977	South Peninsula	0.5	311.7	2.1	1,448.6	243.2	2,006.1
	North Peninsula	5.5	471.1	34.1	0.9	129.1	640.7
	Aleutians	0	0	0	0	0	0
	Total	**6.0**	**782.8**	**36.2**	**1,449.5**	**372.3**	**2,646.8**
1978	South Peninsula	0.8	579.5	60.7	5,608.8	547.0	6,796.8
	North Peninsula	14.2	896.2	63.3	466.6	163.2	1,603.5
	Aleutians	0	1.8	0	38.1	0	39.9
	Total	**15.0**	**1,477.5**	**124.0**	**6,113.5**	**710.2**	**8,440.2**
1979	South Peninsula	2.1	1,149.7	356.5	6,570.5	483.0	8,561.8
	North Peninsula	17.1	1,979.5	112.8	5.0	65.7	2,180.1
	Aleutians	0	12.2	0	539.4	0.2	551.8
	Total	**19.2**	**3,141.4**	**469.3**	**7,114.9**	**548.9**	**11,293.7**
1980	South Peninsula	4.8	3,613.0	274.2	7,961.5	1,351.2	13,104.7
	North Peninsula	16.8	1,397.1	127.9	301.7	700.2	2,543.7
	Aleutians	0	9.2	0	2,597.5	4.9	2,611.6
	Total	**21.6**	**5,019.3**	**402.1**	**10,760.7**	**2,056.3**	**18,260.0**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1981	South Peninsula	10.2	2,255.2	162.2	5,035.9	1,770.3	9,233.8
	North Peninsula	18.3	1,844.9	155.4	11.2	706.8	2,736.6
	Aleutians	0	5.4	0.2	302.8	6.6	315.0
	Total	**28.5**	**4,105.5**	**317.8**	**5,349.9**	**2,483.7**	**12,285.4**
1982	South Peninsula	9.8	2,346.0	256.0	6,734.9	2,272.5	11,619.2
	North Peninsula	30.1	1,435.3	238.0	12.3	331.1	2,046.8
	Aleutians	0	2.7	0	1,447.8	6.1	1,456.6
	Total	**39.9**	**3,784.0**	**494.0**	**8,195.0**	**2,609.7**	**15,122.6**
1983	South Peninsula	26.9	2,556.6	127.7	2,827.6	1,707.1	7,245.9
	North Peninsula	29.5	2,093.4	75.1	3.4	348.7	2,550.1
	Aleutians	0	4.4	0	2.0	11.4	17.8
	Total	**56.4**	**4,654.4**	**202.8**	**2,833.0**	**2,067.2**	**9,813.8**
1984	South Peninsula	9.2	2,318.0	309.1	11,589.3	1,656.5	15,882.1
	North Peninsula	23.0	1,734.9	198.6	27.4	796.7	2,780.6
	Aleutians	0	67.2	0	2,309.7	33.9	2,410.8
	Total	**32.2**	**4,120.1**	**507.7**	**13,926.4**	**2,487.1**	**21,073.5**
1985	South Peninsula	7.9	2,214.6	172.5	4,433.7	1,393.1	8,221.8
	North Peninsula	23.5	2,600.5	167.8	3.1	671.1	3,466.0
	Aleutians	0	2.8	0	0.1	14.2	17.1
	Total	**31.4**	**4,817.9**	**340.3**	**4,436.9**	**2,078.4**	**11,704.9**
1986	South Peninsula	5.6	1,223.0	235.9	4,031.5	1,749.7	7,245.7
	North Peninsula	11.7	2,436.7	164.1	22.6	271.2	2,933.3
	Aleutians	0	7.7	0.1	42.6	38.8	89.2
	Total	**17.3**	**3,694.4**	**400.1**	**4,096.7**	**2,059.7**	**10,268.2**
1987	South Peninsula	9.2	1,449.8	224.7	1,208.6	1,376.3	4,268.6
	North Peninsula	14.2	1,209.4	171.8	3.5	368.7	1,767.6
	Aleutians	0	0.1	0	0	0	0.1
	Total	**23.4**	**2,659.3**	**396.5**	**1,212.1**	**1,745.0**	**6,036.3**
1988	South Peninsula	11.1	1,472.9	505.5	7,044.8	1,905.2	10,939.5
	North Peninsula	16.8	1,528.1	234.0	65.2	393.5	2,237.6
	Aleutians	0	4.3	0	183.1	0.5	187.9
	Total	**27.9**	**3,005.3**	**739.5**	**7,293.1**	**2,299.2**	**13,365.0**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1989	South Peninsula	7.0	2,660.7	443.8	7,292.7	994.2	11,398.4
	North Peninsula	10.9	1,718.7	227.6	4.1	157.2	2,118.5
	Aleutians	0	8.2	0	6.7	0	14.9
	Total	17.9	4,387.6	671.4	7,303.5	1,151.4	13,531.8

Table 2. 1989 Alaska Peninsula-Aleutian Islands Salmon Catch by Statistical Area, Section and District (Figures in Fish).

SOUTH PENINSULA

Southeastern District

Area	Kings	Sockeyes	Cohos	Pinks	Chums	Total
281-35 East Stepovak Section	535	114,359	59,882	644,275	56,139	875,190
281-33 Stepovak Flats Section	44	1,815	253	208,383	6,268	216,763
281-32 Grub Gulch/Clark Bay	50	24,671	217	322,625	12,084	359,647
281-31 Orzinski & American Bays	14	18,476	133	26,198	2,377	47,198
281-20 Chichagof Bay/West Cove	116	63,001	2,829	529,346	10,018	605,310
281-10 Dorenoi Bay	3	2,904	805	173,971	5,626	183,309
Northwest Stepovak Section Total	**183**	**109,052**	**3,984**	**1,052,140**	**30,105**	**1,195,464**
283-90 Southwest Stepovak Section	212	23,995	5,115	345,948	15,064	390,334
283-80 Balboa Bay Section	174	29,659	3,460	500,333	21,048	554,674
283-75 Beaver Bay Section	69	3,378	1,627	254,007	3,555	262,636
281-11 Popof, Korovin, S. Unga	2,747	686,095	239,418	1,400,831	260,851	2,589,942
282-12 Zachary Bay	1	4,586	320	203,999	4,657	213,563
282-13 Bay Point	0	2,046	103	339	112	2,600
282-14 W. Unga Island	150	85,852	5,733	263,780	12,201	367,716
282-22 W. Nagai	77	34,914	5,407	203,056	8,332	251,786
282-23 E. Nagai	5	1,589	225	58	741	2,618
Shumagin Island Section Total	**2,980**	**815,082**	**251,206**	**2,072,063**	**286,894**	**3,428,225**
SOUTHEASTERN DISTRICT TOTAL	**4,197**	**1,097,340**	**325,527**	**5,077,149**	**419,073**	**6,923,286**

South Central District

283-62 Mino Creek-Coal Bay Section	52	26,353	613	284,501	5,217	316,736
283-63 East Pavlof Bay	10	4,000	503	236,796	3,380	244,689
283-65 Chinaman Lagoon	0	155	0	490	30	675
283-61 Long Beach	30	27,620	2,525	17,283	3,636	51,094
Pavlof Section Total	**40**	**31,775**	**3,028**	**254,569**	**7,046**	**296,458**

Table 2. 1989 Alaska Peninsula-Aleutian Islands Salmon Catch by Statistical Area, Section and District (Figures in Fish). (Continued)

SOUTH PENINSULA – continued

South Central District-continued

Area	Kings	Sockeyes	Cohos	Pinks	Chums	Total
283-64 Canoe Bay Section	3	78	1	11,122	37,598	48,802
SOUTH CENTRAL DISTRICT TOTAL	95	58,206	3,642	550,192	49,861	661,996
Southwestern District						
283-52 Volcano Bay	0	2	0	13,000	4	13,006
283-51 Dolgoi Island	23	22,847	1,673	27,327	2,962	54,832
Volcano Bay Section Total	23	22,849	1,673	40,327	2,966	67,838
283-42 Belkofski Bay	6	3,292	27	444,976	9,643	457,944
283-33 King Cove	0	21	6	27,960	2,222	30,209
Belkofski Bay Section Total	6	3,313	33	472,936	11,865	488,153
283-31 Deer Island Section	6	2,435	27	882,655	1,188	886,311
283-32 Cold Bay Section	0	270	0	2,405	3,185	5,860
283-20 Thin Point Section	2	2,614	3,872	2,447	348	9,283
283-12 Morzhovoi Bay Section	12	4,903	1,433	2,045	1,641	10,034
284-60 Ikatan Bay Section	628	387,513	95,852	101,505	84,312	669,810
SOUTHWESTERN DISTRICT TOTAL	677	423,897	102,890	1,504,320	105,505	2,137,289
Unimak District						
283-10 Sanak Island Section	56	4,890	6,116	3,949	24,281	39,292
284-50 Bird Island	260	190,198	4,675	33,642	90,704	319,479
284-40 Cape Lazaref	209	146,658	993	12,841	81,091	241,792

Table 2. 1989 Alaska Peninsula-Aleutian Islands Salmon Catch by Statistical Area, Section and District (Figures in Fish). (Continued)

SOUTH PENINSULA – continued

Unimak District-continued

Area	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Otter Cove Section Total	469	336,856	5,668	46,483	171,795	561,271
284-20 Cape Lutke Section	1,553	739,517	0	110,565	223,716	1,075,351
UNIMAK DISTRICT TOTAL	**2,078**	**1,081,263**	**11,784**	**160,997**	**419,792**	**1,675,914**
SOUTH PENINSULA TOTAL	**7,047**	**2,660,706**	**443,843**	**7,292,658**	**994,231**	**11,398,485**

ALEUTIAN ISLANDS AREA

Unalaska District

Area	Kings	Sockeyes	Cohos	Pinks	Chums	Total
302-22 Kashega Bay District	0	8,248	0	6,700	0	14,948
UNALASKA DISTRICT TOTAL	**0**	**8,248**	**0**	**6,700**	**0**	**14,948**
ALEUTIAN ISLANDS TOTAL	**0**	**8,248**	**0**	**6,700**	**0**	**14,948**

NORTH PENINSULA

Northwestern District

311-32 Urilia Bay Section	11	27,922	0	0	760	28,693
311-52 Swanson Lagoon Section	1	13,324	7,003	32	3,209	23,569
311-60 Bechevin Bay Section	5	2,734	1,494	3,163	7,315	14,711

Table 2. 1989 Alaska Peninsula-Aleutian Islands Salmon Catch by Statistical Area, Section and District (Figures in Fish). (Continued)

NORTH PENINSULA - continued

Northwestern District-continued

Area	Kings	Sockeyes	Cohos	Pinks	Chums	Total
312-10 Outside Izembek	0	50	2	0	220	272
312-20 Izembek Lagoon	0	379	115	0	635	1,129
312-40 Moffet Bay	6	8,181	24	0	13,603	21,814
Izembek-Moffet Bay Section Total	**6**	**8,610**	**141**	**0**	**14,458**	**23,215**
NORTHWESTERN DISTRICT TOTAL	**23**	**52,590**	**8,638**	**3,195**	**25,742**	**90,188**

Northern District

313-10 Black Hills Section	983	14,266	16	14	1,881	17,160
313-30 Nelson Lagoon Section	3,822	324,979	119,335	33	5,018	453,187
314-20 Herendeen Bay	2	1,348	1	82	53,212	54,645
314-12 Port Moller Bight	333	4,322	5	14	12,836	17,510
Herendeen-Moller Bay Section Total	**335**	**5,670**	**6**	**96**	**66,048**	**72,155**
315-11 Bear & Sandy Rivers	1,906	421,642	14,246	460	35,093	473,347
315-20 Muddy River	341	136,173	280	35	5,244	142,073
Bear River Section Total	**2,247**	**557,815**	**14,526**	**495**	**40,337**	**615,420**
316-10 Three Hills Section	383	599,588	1,417	82	14,102	615,572
316-20 Outside Ilnik	57	71,420	5,428	138	1,582	78,625
316-22 Ilnik Lagoon	11	2,751	16,556	6	3	19,327
316-25 Strogonof Point	39	75,228	3,990	25	1,232	80,514
Ilnik Section Total	**107**	**149,399**	**25,974**	**169**	**2,817**	**178,466**

Table 2. 1989 Alaska Peninsula-Aleutian Islands Salmon Catch by Statistical Area, Section and District (Figures in Fish). (Continued)

NORTH PENINSULA - continued

Northern District-continued

Area	Kings	Sockeyes	Cohos	Pinks	Chums	Total
317-10 Outer Port Heiden Section	1	2,227	14,273	14	55	16,570
317-20 Inner Port Heiden Section	2,927	11,362	25,899	0	1,150	41,338
318-20 Cinder River Section	118	793	17,467	5	27	18,410
NORTHERN DISTRICT TOTAL	10,923	1,666,099	218,913	908	131,435	2,028,278
NORTH PENINSULA TOTAL	10,946	1,718,689	227,551	4,103	157,177	2,118,466
TOTAL ALASKA PENINSULA-ALEUTIAN ISLANDS AREA TOTAL	17,993	4,387,643	671,394	7,303,461	1,151,408	13,531,899

TABLE 3. ESTIMATED VALUE OF 1989 COMMERCIAL SALMON FISHERY

	SALMON EX-VESSEL					
South Peninsula	Kings	Sockeye	Cohos	Pinks	Chums	Total
Poundage	130,060	15,386,570	2,984,843	27,372,311	6,772,311	52,646,398
Average Weight	18.5	5.8	6.7	3.8	6.8	
Value $$$	145,000	24,592,000	2,388,000	9,529,000	2,755,000	39,409,000
Aleutian Islands						
Poundage	0	41,088	0	21,993	0	63,081
Average Weight	-	5.0	-	3.3	-	
Value $$$	0	58,000	0	7,000	0	65,000
Northwestern District						
Poundage	415	307,937	72,192	10,096	201,872	592,512
Average Weight	18.0	5.9	8.4	3.2	7.8	
Value $$$	1,000	416,000	61,000	4,000	67,000	549,000
Northern District						
Poundage	191,626	9,810,253	1,818,040	3,167	875,725	12,698,811
Average Weight	17.5	5.9	8.3	3.5	6.7	
Value $$$	220,000	14,225,000	1,545,000	1,000	289,000	16,280,000
North Peninsula Total						
Poundage	192,041	10,118,190	1,890,232	13,263	1,077,597	13,291,323
Average Weight	17.5	5.9	8.3	3.2	6.9	
Value $$$	221,000	14,641,000	1,606,000	5,000	356,000	16,829,000
TOTAL ALASKA PENINSULA-ALEUTIAN ISLANDS AREAS						
Poundage	322,101	25,545,848	4,875,075	27,407,567	7,850,211	66,000,802
Average Weight	17.9	5.8	7.3	3.8	6.8	
Value $$$	366,000	39,291,000	3,994,000	9,541,000	3,111,000	56,303,000
ESTIMATED VALUE OF SOUTH UNIMAK AND SHUMAGIN ISLAND JUNE FISHERY (These figures are included above)						
Poundage	60,570	9,549,443	0	519,181	3,059,288	13,188,482
Average Weight	22.0	5.5	-	2.6	6.7	
Value $$$	76,000	16,712,000	0	130,000	1,530,000	18,448,000

Table 3. (continued)

SALMON FIRST WHOLESALE

	King	Sockeye	Coho	Pink	Chum	Total
Fish	$ 850,000	78,000,000	9,000,000	53,000,000	13,000,000	153,850,000
Roe	150,000	11,000,000	2,000,000	7,000,000	4,000,000	24,150,000
	$1,000,000	89,000,000	11,000,000	60,000,000	17,000,000	178,000,000

HERRING

	Ex-Vessel	Wholesale
South Peninsula Food/Bait	$ 0	$ 0
South Peninsula Sac-Roe	305,000	2,350,000
North Peninsula Sac-Roe	113,000	1,000,000
Eastern Aleutians Food/Bait	873,000	2,900,000
Total	$1,291,000	6,250,000

Values are obtained by selecting a price that approximates an average and multiplying the price by the number of pounds. Because prices fluctuate throughout the year and between buyers and sections, the values listed are estimates.

Table 4. 1989 SALMON CATCHES (NUMBERS OF FISH) BY SPECIES, WEEK, AND AREA (All Gear)

281 - SITKOVAK

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
24 6/16	12	3,330	0	0	108
27 7/06-07	18	6,718	41	9,266	554
28 7/09-15	28	12,812	124	4,049	2,863
29 7/16-22	59	52,940	984	108,350	2,488
30 7/23-29	291	55,528	26,054	224,334	13,614
31 7/30-8/05	265	46,850	19,769	931,001	30,123
32 8/06-12	69	22,356	6,549	556,246	28,794
33 8/13-14	11	10,119	6,922	71,540	6,203
35 9/01-02	0	3,526	1,116	12	3,076
36 9/03-09	0	5,059	1,174	0	2,701
37 9/10-16	8	5,552	1,272	0	1,857
38 9/17-23	1	436	114	0	131
Total	762	225,226	64,119	1,904,798	92,512

283-80 and 90 - RENSHAW POINT TO POINT ALIAKSIN

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
24 6/16	13	1,772	0	0	23
30 7/23-29	2	10,368	892	43,737	1,918
31 7/30-8/05	246	20,176	4,417	505,821	16,894
32 8/06-12	120	16,180	2,050	260,278	13,658
33 8/13-14	5	2,423	700	35,180	2,908
35 9/01-02	0	519	217	1,265	292
36 9/03-09	0	1,612	207	0	376
37 9/10-16	0	457	70	0	40
38 9/17-23	0	147	22	0	3
Total	386	53,654	8,575	846,281	36,112

Table 4. (Continued)

282 - SHUMAGIN ISLANDS

Week*		Kings	Sockeyes	Cohos	Pinks	Chums
23	6/10	188	54,362	0	4,324	22,737
24	6/16	138	89,165	0	12,688	6,308
25	6/19-20	161	253,431	0	28,055	18,483
27	7/06-07	298	63,879	9,267	50,681	38,030
28	7/09-15	398	106,896	14,086	67,670	36,340
29	7/16-22	83	38,744	9,377	35,964	4,035
30	7/23-29	960	77,626	90,456	486,759	54,023
31	7/30-8/05	552	66,558	89,270	839,076	66,334
32	8/06-12	171	34,107	23,066	435,887	30,106
33	8/13-14	28	12,677	7,971	110,520	8,775
35	9/01-02	0	5,139	1,873	298	790
36	9/03-09	2	7,244	3,743	131	595
37	9/10-16	1	4,053	1,981	10	319
38	9/17-23	0	830	112	0	17
39	9/24-30	0	171	0	0	0
40	10/01-07	0	200	4	0	2
Total		2,980	815,082	251,206	2,072,063	286,894

POINT ALIAKSIN TO BLACK POINT

Week*		Kings	Sockeyes	Cohos	Pinks	Chums
24	6/16	1	101	0	0	21
27	7/06-07	2	900	0	39	1,517
28	7/09-15	11	3,389	42	5,498	10,593
29	7/16-22	37	16,790	774	73,566	14,911
30	7/23-29	7	4,721	7	82,903	1,113
31	7/30-8/05	73	4,805	1,226	483,532	14,217
32	8/06-12	0	3,158	695	109,893	7,408
33	8/13-14	3	100	0	31,485	0
Total		134	33,964	2,744	786,916	49,780

Table 4. (Continued)

BLACK POINT TO VODAPOINT POINT (INCLUDING DEER ISLAND)

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
27 7/06-07	5	7,221	333	1,358	254
28 7/09-15	21	26,646	1,349	45,742	4,321
29 7/16-22	25	13,648	2,027	45,622	2,939
30 7/23-29	2	1,805	213	178,054	326
31 7/30-8/05	12	4,429	319	602,955	3,870
32 8/06-12	0	2,262	17	501,795	7,945
33 8/13-14	0	206	0	37,675	0
Total	65	56,217	4,258	1,413,201	19,655

COLD BAY SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
29 7/16-22	0	140	0	140	2,565
31 7/30-8/05	0	130	0	2,265	620
Total	0	270	0	2,405	3,185

THIN POINT SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
31 7/30-8/05	0	60	0	82	143
32 8/06-12	2	2,549	102	2,365	180
36 9/03-09	0	0	2,025	0	22
37 9/10-16	0	5	1,745	0	5
Total	2	2,614	3,872	2,447	350

Table 4 (Continued)

MORZHOVOI BAY SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
28 7/09-15	1	940	63	75	245
29 7/16-22	5	1,055	530	165	99
30 7/23-29	0	1,498	392	554	332
31 7/30-8/05	4	1,020	278	826	415
32 8/06-12	2	390	170	425	550
Total	12	4,903	1,433	2,045	1,641

KENMORE HEAD TO SCOTCH CAP (INCLUDING SANAK ISLAND)

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
23 6/10	384	146,972	0	7,628	82,690
24 6/16	760	361,781	0	44,082	146,231
25 6/19-23	1,119	838,794	0	102,458	178,714
27 7/06-07	42	22,954	3,086	7,469	23,926
28 7/09-15	69	32,394	12,791	3,829	24,195
29 7/16-22	184	21,997	38,339	8,157	14,338
30 7/23-29	65	20,959	27,399	54,660	15,410
31 7/30-8/05	68	17,289	17,124	26,162	13,782
32 8/06-12	15	5,631	8,822	8,057	4,807
36 9/03-09	0	5	75	0	11
Total	2,706	1,468,776	107,636	262,502	504,104

UNALASKA ISLAND

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
27 7/02-08	0	265	0	0	0
28 7/09-15	0	883	0	0	0
29 7/16-22	0	900	0	200	0
30 7/23-29	0	4,500	0	500	0
31 7/30-8/05	0	1,700	0	6,000	0
Total	0	8,248	0	6,700	0

Table 4. (Continued)

URILIA BAY

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
23 6/05-08	1	3,499	0	0	60
24 6/12-13	2	7,077	0	0	28
26 6/26-28	7	17,116	0	0	247
29 7/17-18	1	230	0	0	425
Total	11	27,922	0	0	760

SWANSON LAGOON SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
24 6/11-17	0	153	0	0	186
26 6/25-7/01	0	550	0	0	450
27 7/02-08	1	4,913	4	28	1,296
28 7/09-15	0	2,430	1	4	907
29 7/17	0	1,630	0	0	370
32 9/03-09		3,648	6,998	0	0
Total	1	13,324	7,003	32	3,209

BECHEVIN BAY SECTION

27 7/03-05	0	715	23	483	2,336
28 7/10-12	0	265	10	6	2,545
29 7/17-19	5	1,530	1,461	321	1,223
32 8/10-11	0	224	0	2,353	1,211
Total	5	2,734	1,494	3,163	7,315

Table 4. (Continued)

312 - IZEMBEK-MOFFET BAY SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
24 6/11-17	0	16	0	0	230
26 6/25-7/01	5	985	0	0	605
27 7/02-08	1	2,679	0	0	2,976
28 7/09-15	0	2,630	0	0	5,990
29 7/16-22	0	2,300	2	0	4,280
36 9/03-09	0	0	139	0	377
Total	6	8,610	141	0	14,458

BLACK HILLS SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
25 6/18-24	20	1,484	0	0	25
26 6/25-7/01	79	2,395	0	0	76
27 7/02-08	741	4,885	0	1	431
28 7/09-15	143	5,502	16	13	1,349
Total	983	14,266	16	14	1,881

NELSON LAGOON SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
23 6/04-10	456	1,176	0	0	1
24 6/11-17	1,355	6,794	0	0	0
25 6/18-24	193	650	0	0	1
26 6/25-7/01	886	76,847	0	0	1
27 7/02-08	552	116,709	0	0	28
28 7/09-15	331	62,012	0	0	467
29 7/16-22	27	24,747	12	5	590
30 7/23-29	9	9,893	39	13	1,282
31 7/30-8/05	2	10,141	361	3	1,497
32 8/06-12	6	7,856	2,209	2	812
33 8/13-19	2	3,705	5,296	3	230
34 8/20-26	3	2,608	22,102	3	69
35 8/27-9/02	0	874	42,686	2	16
36 9/03-09	0	717	37,305	0	2
37 9/10-16	0	250	9,325	2	22
Total	3,822	324,979	119,335	33	5,018

Table 4. (Continued)

314-20 - HERENDEEN BAY

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
26 6/25-7/01	0	40	0	0	190
28 7/09-15	0	28	0	3	12,394
29 7/16-22	2	1,280	1	79	40,628
Total	2	1,348	1	82	53,212

PORT MOLLER TO CAPE SENTAVIN

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
21 5/21-27	17	0	0	0	0
22 5/28-6/03	288	101	0	0	207
23 6/04-10	499	364	0	0	1,131
24 6/11-17	753	8,191	1	3	4,367
25 6/18-24	394	29,176	0	0	4,657
26 6/25-7/01	374	114,382	0	20	6,609
27 7/02-08	6	1,587	0	0	935
28 7/09-15	48	37,508	4	14	8,130
29 7/16-22	36	27,445	53	63	14,223
30 7/23-29	52	35,102	53	82	3,722
31 7/30-8/05	41	57,832	134	88	4,197
32 8/06-12	27	67,471	451	68	2,892
33 8/13-19	25	68,427	1,493	73	1,108
34 8/20-26	13	65,807	4,472	53	580
35 8/27-9/02	6	28,425	4,457	24	196
36 9/03-09	1	15,286	2,879	3	49
37 9/10-16	0	5,033	534	18	170
Total	2,580	562,137	14,531	509	53,173

Table 4. (Continued)

316 – THREE HILLS AND UNIK SECTIONS

Week*		Kings	Sockeyes	Cohos	Pinks	Chums
24	6/11–17	3	205	0	0	0
25	6/18–24	1	248	0	0	1
26	6/25–7/01	220	450,345	1	1	1,349
27	7/02–08	82	129,382	0	0	1,911
28	7/09–15	109	79,238	36	13	4,247
29	7/16–22	20	29,441	33	26	5,592
30	7/23–29	24	20,851	102	1	1,894
31	7/30–8/05	13	20,115	929	24	1,140
32	8/06–12	8	9,561	1,102	98	288
33	8/13–19	6	7,807	2,942	51	70
34	8/20–26	3	1,148	6,486	24	23
35	8/27–9/02	0	492	7,950	4	0
36	9/03–09	0	0	5,569		0
37	9/10–16	1	154	2,242	9	44
Total		490	748,987	27,391	251	16,919

INNER AND OUTER PORT HEIDEN SECTIONS

Week*		Kings	Sockeyes	Cohos	Pinks	Chums
23	6/04–10	705	5	0	0	10
24	6/11–17	1,503	79	0	0	37
25	6/18–24	700	712	0	0	512
26	6/25–7/01	4	4,734	0	0	0
27	7/02–08	7	4,831	0	0	306
28	7/09–15	6	874	0	0	278
32	8/06–12	2	940	1,360	0	46
33	8/13–19	0	1,002	8,167	7	12
34	8/20–26	1	231	18,103	7	4
35	8/27–9/02	0	181	12,542	0	0
Total		2,928	13,589	40,172	14	1,205

Table 4. (Continued)

CINDER RIVER SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
23 6/04-10	48	0	0	0	0
24 6/11-17	68	5	0	0	6
32 8/06-12	0	38	316	2	4
33 8/13-19	2	93	2,024	0	7
34 8/20-26	0	516	8,882	3	10
35 8/27-9/02	0	141	6,245	0	0
Total	118	793	17,467	5	27

*The weeks listed here do not necessarily include the entire statistical week. Complete statistical weeks are listed in the back of this report.

Table 5. 1989 Salmon Catches in Numbers of Fish by Gear

SOUTHEASTERN DISTRICT

	King	Sockeye	Coho	Pink	Chum	Total
Seine	3,846	743,253	292,333	4,741,679	350,817	6,131,928
Set Gillnet	351	354,087	33,194	335,470	68,256	791,358
Total	**4,197**	**1,097,340**	**325,527**	**5,077,149**	**419,073**	**6,923,286**

SOUTH CENTRAL DISTRICT

	King	Sockeye	Coho	Pink	Chum	Total
Seine	89	52,114	3,638	550,108	49,240	655,189
Set Gillnet	6	6,092	4	84	621	6,807
Total	**95**	**58,206**	**3,642**	**550,192**	**49,861**	**661,996**

SOUTHWESTERN AND UNIMAK DISTRICTS

	King	Sockeye	Coho	Pink	Chum	Total
Seine	1,812	836,868	9,587	1,556,163	275,772	2,680,202
Drift Gillnet	803	598,865	88,376	86,259	237,255	1,011,558
Set Gillnet	140	69,427	16,711	22,895	12,270	121,443
Total	**2,755**	**1,505,160**	**114,674**	**1,665,317**	**525,297**	**3,813,203**

SOUTH PENINSULA TOTAL

	King	Sockeye	Coho	Pink	Chum	Total
Seine	5,747	1,632,235	305,558	6,847,950	675,829	9,467,319
Drift Gillnet	803	598,865	88,376	86,259	237,255	1,011,558
Set Gillnet	497	429,606	49,909	358,449	81,147	919,608
Total	**7,047**	**2,660,706**	**443,843**	**7,292,658**	**994,231**	**11,398,485**

ALEUTIAN ISLANDS AREA

	King	Sockeye	Coho	Pink	Chum	Total
Seine	0	8,248	0	6,700	0	14,948
Total	**0**	**8,248**	**0**	**6,700**	**0**	**14,948**

NORTHWESTERN DISTRICT

	King	Sockeye	Coho	Pink	Chum	Total
Seine	6	25,881	2,361	2,990	23,253	54,491
Drift Gillnet	5	13,072	1,040	48	941	15,106
Set Gillnet	12	13,637	5,237	157	1,548	20,591
Total	**23**	**52,590**	**8,638**	**3,195**	**25,742**	**90,188**

NORTHERN DISTRICT

	King	Sockeye	Coho	Pink	Chum	Total
Seine	22	340	0	60	21,627	22,049
Drift Gillnet	7,014	1,426,404	127,776	807	91,364	1,653,365
Set Gillnet	3,887	239,355	91,137	41	18,444	352,864
Total	**10,923**	**1,666,099**	**218,913**	**908**	**131,435**	**2,028,278**

NORTH PENINSULA TOTAL

	King	Sockeye	Coho	Pink	Chum	Total
Seine	28	26,221	2,361	3,050	44,880	76,540
Drift Gillnet	7,019	1,439,476	128,816	855	92,305	1,668,471
Set Gillnet	3,899	252,992	96,374	198	19,992	373,455
Total	**10,946**	**1,718,689**	**227,551**	**4,103**	**157,177**	**2,118,466**

ALASKA PENINSULA-ALEUTIAN ISLANDS AREA TOTAL

	King	Sockeye	Coho	Pink	Chum	Total
Seine	5,775	1,666,704	307,919	6,857,700	720,709	9,558,807
Drift Gillnet	7,822	2,038,341	217,192	87,114	329,560	2,680,029
Set Gillnet	4,396	682,598	146,283	358,647	101,139	1,293,063
Total	**17,993**	**4,387,643**	**671,394**	**7,303,461**	**1,151,408**	**13,531,899**

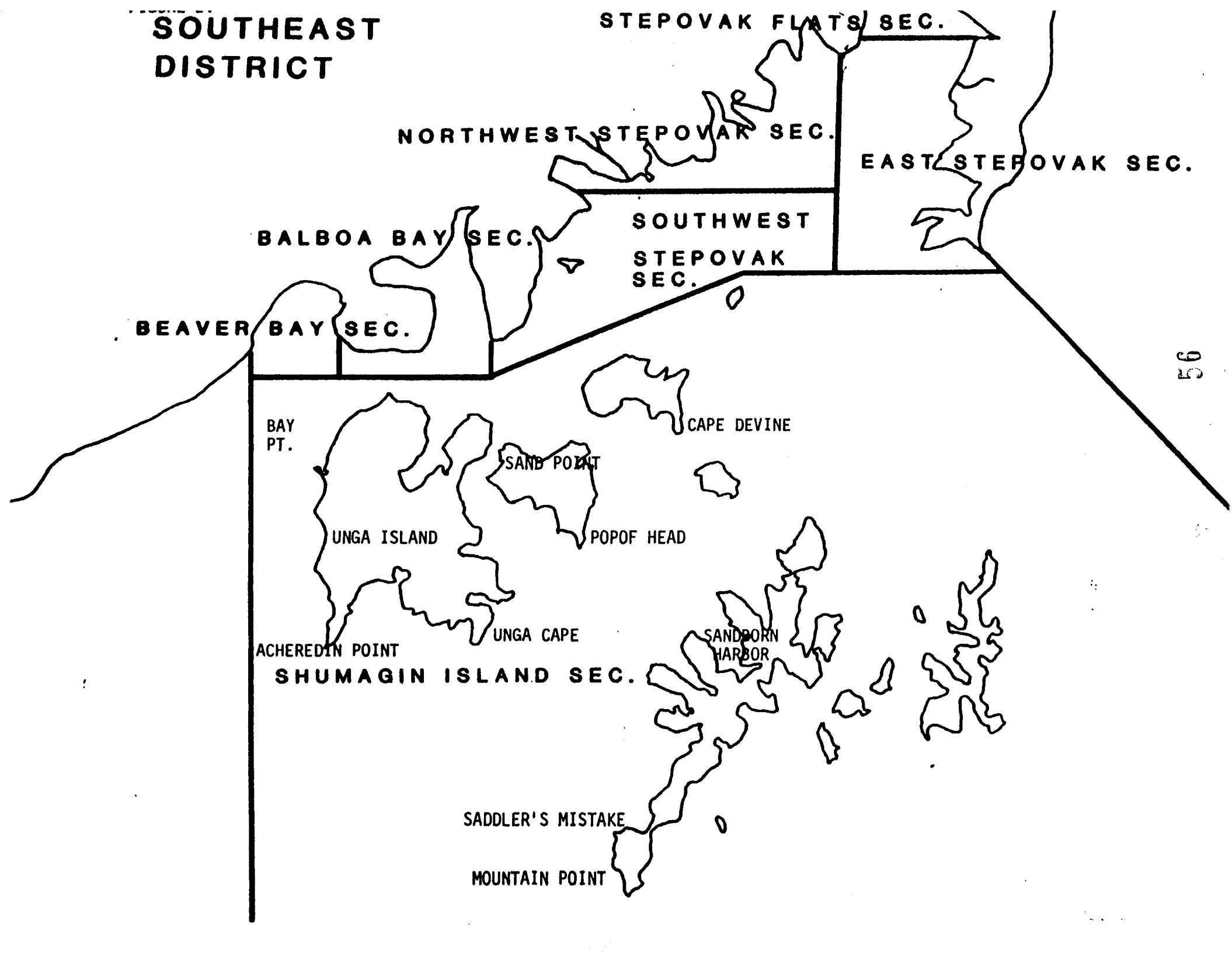
SOUTHEAST DISTRICT
STEPOVAK FLATS SEC.
NORTHWEST STEPOVAK SEC.
EAST STEPOVAK SEC.
SOUTHWEST STEPOVAK SEC.
BALBOA BAY SEC.
BEAVER BAY SEC.
BAY PT.
CAPE DEVINE
SAND POINT
UNGA ISLAND
POPOF HEAD
ACHEREDIN POINT
UNGA CAPE
SANDBORN HARBOR
SHUMAGIN ISLAND SEC.
SADDLER'S MISTAKE
MOUNTAIN POINT

Table 6. 1989 SOUTHEASTERN DISTRICT MAINLAND FISHERY ESTIMATED INTERCEPTION OF CHIGNIK DESTINED SOCKEYE

Time Period*	Fish	Percent	Subtotal**
June 16	3,381	(2)	3,381
July 12 - 14	1,138	(1)	4,519
July 26 - August 14	122,703	(87)	127,222
September	13,814	(10)	141,036

*Fishing is not allowed every day of period. Figures include sockeye taken in the Stepovak Flats Section when chums were the target species during July.

**Figures represent 80% of total sockeye taken. The other 20% are not considered to be Chignik bound.

Purse seiners	64,189	(45.5%)
Set gillnet	76,847	(54.5%)
	141,036	

Total Suzy Creek to Dent Point catch 106,148. Sockeye taken in this area are considered to be local Orzinski Lake fish and are not included in the figures above.

Table 7. CHIGNIK SOCKEYE RUN CATCHES[1/] 1964 - 1989 (Numbers of Fish in Thousands)

Table corrected 3/12/90.

	Chignik Area		Cape Igvak		Balboa-Stepovak[8/]		
	Catch	%	Catch	%	Catch	%	Total Catch
1964[2/]	557	90.57	15	2.44	43	7.00	615
1965[2/]	600	89.94	11	1.65	56	8.40	667
1966[2/]	220	87.99	18	7.21	12	4.81	250
1967[2/]	462	91.48	23	4.56	20	3.96	505
1968[2/]	977	82.53	136	11.48	71	5.99	1,184
1969[2/]	394	78.96	98	19.63	7	1.41	499
1970[2/]	1,326	72.79	427	23.46	68	3.74	1,821
1971[2/]	1,016	76.97	253	19.97	51	3.86	1,320
1972[2/]	379	86.32	42	9.58	18	4.10	439
1964-72 catch and percentage figures are total for the entire season. Catch figures and percentages after 1972 are only through July 25.							
1973[3/]	769	89.00	57	6.60	38	4.40	864
1974[3/]	530	73.61	121	16.81	69	9.58	720
1975[3/]	116	81.69	24	16.90	2	1.41	142
1976[3/]	792	82.93	118	12.36	45	4.71	955
1977[3/]	1,547	90.36	129	7.54	36	2.10	1,712
1978[4/5/]	1,454	85.48	225	13.23	22	1.29	1,701
1979[4/6/]	795	91.80	14	1.62	57	6.58	866
1980[4/6/]	670	91.28	0	0.00	64	8.72	734
1981[4/6/]	1,606	79.86	282	14.02	123	6.12	2,011
1982[4/6/]	1,251	84.47	166	11.21	64	4.32	1,481
1983[4/6/]	1,451	72.70	318	15.93	227	11.37	1,996
1984[4/6/]	2,474	73.94	449	13.42	423	12.64	3,346
1985[4/7/]	696	80.18	124	14.29	48	5.53	868
1986[4/7/]	1,457	82.64	188	10.66	118	6.69	1,763
1987[4/7/]	1,660	78.04	321	15.09	146	6.86	2,127
1988[4/7/]	679	95.77	11	1.55	19	2.68	709
1989[4/7/]	502	99.01	0	0.00	5	0.99	507

Footnotes are listed on following page.

Table 7. (Continued) CHIGNIK SOCKEYE RUN CATCH FOOTNOTES

1/The Cape Igvak and Balboa-Stepovak figures represent 80% of the total sockeye catches for those areas as it is estimated that roughly 80% of the sockeye caught in the Cape Igvak section and Balboa-Stepovak are destined for Chignik.

2/Prior to 1973, Cape Igvak and Balboa-Stepovak fisheries were regulated by set weekly fishing periods in the regulation book, usually 5 days per week. The situation was sometimes modified due to poor escapements at Chignik.

3/During 1973 through 1977 all three fisheries were managed on a day for day basis.

4/Beginning with the 1978 season, the current Cape Igvak Fishery Management Plan still in effect today was implemented. The Cape Igvak fishery was allocated 15 percent of the total Chignik destined sockeye catch.

5/During 1978, seining prior to July 11 was disallowed in Beaver, Balboa, and Stepovak Bays. The set gillnet fishery was allowed to fish 3 days per week thorough July 10 after which the fishery was managed on the basis of local stocks.

6/During 1979-1984, 5 days per week were allowed at Balboa-Stepovak (including Beaver Bay) with a ceiling of 60,000 estimated Chignik destined sockeye, prior to July 11. If the Chignik Area sockeye catch was 1,000,000 or more before July 11, the 60,000 ceiling was to be dropped.

7/Beginning in 1985, Balboa-Stepovak was placed on an allocation of 6.2 percent of the total estimated Chignik sockeye catch through July 25. After July 25, Balboa-Stepovak is managed on a local stock basis. The allocation was changed to an even 6 percent beginning in 1988. Seining is still not allowed prior to July 11.

8/Balboa-Stepovak includes Beaver Bay. This fishery is also referred to as the Southeastern District Mainland fishery.

Table 8. ORZINSKI (ORZENOI) SOCKEYE RUNS AND TOTAL SOUTHEASTERN DISTRICT MAINLAND SOCKEYE CATCHES.

Year	Orzinski Escapement*	Orzinski and American Bay Catch	Balance of Suzy Creek Dent Point Catch	Total Suzy Creek Dent Point Catch	Total Orzinski Run	Total Southeast Mainland Catch
1979	20,000	11,800	11,600	23,400	43,400	128,200
1980	12,000	9,600	10,000	20,200	32,200	131,200
1981	18,000	19,400	32,600	52,000	70,000	262,200
1982	9,000	6,100	3,400	9,500	18,500	118,000
1983	21,300	10,800	11,600	22,400	43,700	396,500
1984	18,600	18,600	52,300	70,900	89,500	633,300
1985	14,000	5,100	16,300	21,400	35,400	137,900
1986	10,300	12,500	49,200	61,700	72,000	245,500
1987	11,400	14,500	48,700	63,200	74,600	301,000
1988	19,300	14,500	45,000	59,500	78,800	158,400
1989	16,700	18,500	87,600	106,100	122,800	282,300

*Escapements are indexed total escapements which means that they are likely lower than actual total.

Table 9. PERCENT OF SOCKEYE CAUGHT BY GEAR TYPE-ENTIRE SOUTHEASTERN DISTRICT MAINLAND FISHERY*

Year	Purse Seine	Set Gill Net	Total Sockeye Catch
1976	9	91	62,000
1977	28	72	53,000
1978	13	87	35,000
1979	28	72	128,000
1980	12	88	131,000
1981	13	87	261,000
1982	7	93	118,000
1983	28	72	396,000
1984	7	93	626,000
1985	14	86	138,000
1986	9	91	246,000
1987	3	97	302,000
1988	21	79	158,000
1989	46	54	282,000

*Includes Beaver Bay, Balboa Bay, Southwest Stepovak, Northwest Stepovak, Stepovak Flats, and East Stepovak Sections of the Southeastern District.

Table 10. 1989 SHUMAGIN ISLANDS AND SOUTH UNIMAK JUNE FISHRY SOCKEYE AND CHUM SALMON CATCHES ALL GEAR

		SHUMAGINS		SOUTH UNIMAK	
		Sockeye	Chums	Sockeye	Chums
June	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10	54,362	22,737	147,472	82,999
	11				
	12				
	13				
	14				
	15				
	16	89,165	6,308	361,006	145,922
	17				
	18				
	19	73,782	2,560	132,613	38,308
	20	179,649	15,923	441,173	119,873
	21				
	22				
	23			265,348	20,533
	24				
	25				
	26				
	27				
	28				
	29				
	30				
Total		396,958	47,528	1,347,612	407,635

Table 11. SHUMAGIN ISLAND AND SOUTH UNIMAK JUNE FISHERIES* (Fish in Thousands)

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

*The South Unimak figures include some early July catches.

Table 12. SOUTH UNIMAK JUNE FISHERY DAILY SOCKEYE CATCHES (Figures in Thousands of Fish)

Date	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
June 1									0.1					
2			0.1						0.1					
3			0.2						0.2					
4		0.2		0.3					1.0					
5	0.6		0.1						0.8		0.2			
6	0.4	0.2			0.1			1.1	1.6		1.1			
7	0.2	0.8		7.2				3.2	9.4	0.3	0.1			
8	0.2			9.6			0.2	2.1	12.9	0.3	0.2			
9			5.0	14.3	0.3		0.7	2,3	15.0	0.7	3.9			
10		0.6	3.8	27.8	8.1	1.3	4.6	9.5	22.6	2.4	0.7			1.4
11	3.5	7.5	0.6	30.5		0.9	8.2	18.0	24.5	2.5		5.0		
12	3.5	9.0	2.9			0.9	4.5	25.2	6.2	0.9	11.4	8.3		8.9
13	6.5	9.5			26.6	6.3	7.8	50.7	13.0		15.3	7.7		
14	9.4	5.4		17.8	5.5	0.3	18.1	33.6	21.8	2.7	9.4	15.8		
15	12.3		10.5	35.1	9.7	3.8	21.8	19.1	54.4	23.2	1.3			
16			14.3	46.4	9.1	27.9	28.7	28.6	63.9	16.6	8.2			15.8
17		1.0	23.5	45.9	69.8	29.1	30.5	61.2	38.4	19.0	2.0			
18	26.9	5.6	10.8	50.4		16.5	31.3	65.7	8.1	24.0				38.5
19	29.9	14.1	12.8			1.8	36.2	106.6	231.6	18.1	66.8	27.0		
20	45.9	16.4			104.8	7.8	35.3	56.2	245.6		79.8			10.1
21	26.1	4.1		58.5	65.5	29.4	24.6	55.9	271.2	37.6	39.2			
22	8.9		20.1	51.8	33.5	7.8	12.3	17.5	189.5	53.6	41.8	42.5		
23			17.5	65.1	19.3	5.5	10.5	12.9	38.6	21.5	29.3	56.0		40.1
24		8.7	6.2	60.8	40.5	13.4	9.0	30.5	16.5	39.7	22.8	50.3		42.9
25	28.9	9.3	16.1	19.6		11.6	12.2	34.9	46.5	28.7				33.0
26	31.6	2.7	4.5			6.0	8.0	46.0	78.0	11.3	27.9			
27	13.9	4.8			58.7	1.4	5.6	43.4	47.2		15.0			
28	13.8	3.2		9.0	31.3	0.6	5.3	40.0	43.6	28.2	16.6			
29	5.3		0.3	9.0	27.6	1.9	0.8	9.6	7.8	39.4	18.3	10.0		
30			0.8	7.0	12.1	1.4	1.6	1.8	9.7	47.9	16.0			

Table 12. (continued)

Date	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
June 1					0.3	0.1		0.5						
2						0.3	0.9	3.7						
3	0.1					0.3	0.2	7.1	25.0	2.4				
4						0.6	1.6	9.7	49.2					
5			0.3	0.5		0.0	1.3	39.6		11.8				
6			0.1	1.6		0.6	3.6	80.8						
7	1.0		0.4	0.9			2.4			39.2				
8	1.4	0.3	0.1	1.5	4.1	1.9	3.1					4.4		
9		0.4	0.4	2.5	5.0	6.4	1.6			79.4				
10	1.3	2.3	0.3	1.7	3.2	6.6	7.2					10.0		147.5
11	5.1			3.7		47.6	12.7				8.3	17.8	11.5	
12			5.2	1.6		73.6	13.7	200.7	486.2	200.4				
13		2.7	5.4	18.3		144.1	6.0	290.5	123.2					
14	4.8		16.5	24.2		119.7	3.3	301.1		389.0	55.1	44.2		
15	10.8	4.0	21.3	14.3	53.7	71.8	119.0					47.8	43.1	
16		24.3	6.0	29.0	250.2	21.0	143.4				30.6		79.1	361.0
17	15.6	26.6	4.4	33.1	267.2		156.7					85.4		
18	26.9	29.8	37.0	92.1	313.4		105.5				91.7	66.7	58.9	
19			46.2	71.7	187.8	202.4	131.3	420.3	465.8	181.6				132.6
20		68.0	38.8	118.8	198.7	226.3	22.9					56.5		441.2
21	38.9		38.5	96.1	397.0	218.9	111.5	191.0		258.1	65.6	97.8	82.2	
22	1.3		17.8	20.8	234.9	138.1	120.8					76.5	35.2	
23	44.0		54.3	22.9	107.2		155.5			333.1	20.5		115.5	265.3
24		8.9	29.0	32.6	256.9		170.0				17.3			
25	14.9	28.0		27.3	146.5		9.3				25.2	45.0		
26	51.0		47.3	21.9	114.5	99.7	124.1					100.3		
27			49.5	20.0	79.6	51.9	75.7						49.0	
28	3.5			14.8	82.6	24.4	23.7							
29	4.5				25.1		81.4							
30	6.5				3.4	18.0	61.4							
July 1	4.1			1.1										
2				0.5										
3				9.6										

Table 13. SHUMAGIN ISLANDS JUNE FISHERY DAILY SOCKEYE CATCHES (Figures in Thousands of Fish)

Date	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
June 1	0.1			0.2										
2									0.1					
3			0.2						0.1					
4	0.5	0.2	0.1					0.4	1.2					
5	0.1	0.5	0.3											
6	0.1				0.1									
7	0.5	0.1		10.7				0.2	0.7	0.1				
8				7.2			1.9	0.3	2.2	0.1				
9			4.9	14.3	1.2		2.2	0.6	11.2	0.1	0.6			
10		0.7	3.3	18.0	0.1	0.9	4.7	0.9	3.5	0.2	0.9			
11	0.3	3.8	0.4	5.8		2.4	9.4		2.0	0.4	0.9	0.2		2.8
12	0.5	1.7		18.4		0.1	13.3	5.7	1.1	0.9	0.8	0.7		
13	0.9	1.5		7.4	4.6	2.5	12.3	21.8	3.8		1.0	0.5		2.3
14	2.2	2.3		6.7	1.8	5.8	7.0	2.1	3.8	0.2	1.7	1.8		
15	3.6		1.7	2.5	0.2	6.4	10.3	0.1	6.0	1.9				
16			3.9	3.3	2.2	6.3	9.8	4.7	6.6	0.4	1.2			5.7
17		1.9	9.0	24.6	2.1	0.7	15.3	4.7	11.7	1.3	2.7			
18	4.9	2.1	5.0	17.9		1.3	23.9	2.3		1.0		1.1		23.9
19	3.6	2.3	2.2	5.3		8.8	26.3	5.5	9.2	1.9	8.2	2.9		
20	8.1	3.3		18.8	8.5	5.8	17.7	2.2	16.6	2.4	0.2	0.7		20.2
21	3.2	5.6		12.0	2.0	3.2	10.9	1.0	19.1	2.7	7.3	1.4		
22	1.2		10.0	13.2	2.8	0.1	12.0	1.9	3.8	4.2	5.6			
23			11.1	3.1	2.7	1.3		3.9	2.4	2.1	2.2			
24		1.8	5.6	2.7	2.7	5.2	9.6	3.2	0.5	1.4	12.2			
25	4.3	2.5	13.2	2.7		5.8	18.6	2.9	20.3	2.3	1.8	0.6		
26	6.6	1.0	13.5			4.0	11.7	5.0	9.7	6.0	5.2			
27	5.6	0.5		0.1	8.7	2.5	7.6	3.5	0.3	2.7	6.0			
28	5.0	1.2		0.2	9.2	3.0	4.5	2.7	4.4	2.4	8.1	13.1		
29	2.4		4.4	0.6	4.0	1.8	4.3	3.2	2.4	2.9	4.6			
30			1.9	4.7	1.2	0.9		1.2	2.8	1.7	1.8			
July 1								1.4	1.4	2.9				
2								1.9	3.4	2.9		1.9		
3								1.3	2.9		0.6	2.0		
4								2.7			0.4	2.4		
5											1.0	1.4		

Table 13. (continued)

Date	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
June 1														
2								2.0						
3	0.2							1.6	6.4	7.0				
4	0.1							7.8	16.5					
5								13.0		9.5				
6								7.9						
7	0.3									42.6				
8	0.1	0.1				2.3						0.1		
9		3.4					0.3							
10	0.5	3.7				1.6	1.5					31.6		54.4
11	1.0		0.4			26.7	0.9				6.3		7.9	
12			3.7			22.3		90.8	75.1	59.9				
13		12.1	3.6	6.2		32.7		87.1	39.9					
14	1.1		0.1	12.7		37.0	1.6	78.6		75.5	28.4	23.6		
15	4.5		9.1	12.4	58.1	20.3	14.9						6.1	
16			4.4	4.9	55.4	40.3	25.8				25.0		12.1	89.2
17	5.5		0.2	7.8	31.1		40.7						13.0	
18	12.5		5.0	8.6	34.4		23.4				14.0		67.7	
19			5.7	16.8	10.1	24.3	42.8	127.7	76.3	53.0				73.8
20		26.5	2.6	13.6	20.6	54.2	23.5					55.1		179.6
21	26.7		2.3	21.3	32.7	43.4	63.8			62.2	22.6		38.6	
22			0.1	7.1	17.4	36.4	98.0							
23	19.7		3.3	8.0	13.4		65.9				23.0		51.9	
24			4.8	4.1	6.3						13.3		50.5	
25				17.8	13.0						23.5			
26			10.1	18.5	73.6		47.7		42.5	26.2		30.2		
27			7.1	10.7	47.1								34.5	
28			5.4	8.7	45.2					30.0				
29					10.7									
30					6.0									
July 1					13.5									
2					29.9									
3					15.6									
4					38.0									

Table 14. SOUTH UNIMAK JUNE FISHERY DAILY CHUM CATCHES (Figures in Thousands of Fish)

Date		1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
June	1		NF							0.2		0.8						
	2		NF				1.0			0.5	3.6	5.6						
	3		NF		0.3					0.6	1.0	7.3	12.9	8.9				
	4		NF							1.2	2.7	13.0	32.5					
	5		NF				0.1	0.4			3.0	17.3		34.1				
	6		NF				0.1	2.6		1.2	9.2	31.2						
	7		NF		3.6	0.2	0.4	0.7			10.2			36.0				
	8		NF		8.6	0.4	0.1	1.9	0.3	1.8	13.3					4.9		
	9		NF			0.9	0.2	1.3	0.4	10.9	4.2			53.0				
	10		NF	2.1	13.9	4.2	1.1	1.5	1.6	4.8	10.4					10.9		83.0
	11	11.1	NF		55.4			3.4		24.0	19.8				13.8	22.5	18.5	
	12	14.8	NF	7.0			2.9	0.7		36.0	35.8	88.5	90.7	48.5				
	13	16.9	NF			2.0	1.9	3.9		48.2	13.5	109.0	23.4					
	14	26.8	NF		14.9		4.3	7.1		24.1	7.0	99.3		65.7	54.8	24.1		
	15		NF		32.8	2.2	5.4	1.9	8.3	10.4	98.2					30.2	35.5	
	16		NF	13.4		18.7	2.6	0.7	36.7	7.5	105.0				35.3		70.3	145.9
	17		NF		31.7	12.5	1.6	1.1	41.3		92.0					63.8		
	18		NF	8.9	52.0	12.0	7.2	2.2	58.2		57.9				97.5	54.9	49.9	
	19	25.2	NF				7.7	2.7	34.0	45.6	66.6	169.6	68.4	36.3				38.3
	20		NF	3.3		21.6	3.7	6.8	27.4	39.7	6.4					23.1		119.9
	21		NF		23.4		11.0	7.5	51.9	37.9	52.2	73.3		19.5	32.0	48.0	64.7	
	22	19.2	NF				2.0	3.3	44.0	26.9	43.4					42.7	26.3	
	23	26.0	NF	9.4	30.7		10.6	3.1	24.1		55.8			42.7	6.6		109.4	20.5
	24	31.4	NF	21.2		6.2	9.3	2.7	52.7		50.6				4.7			
	25		NF		14.6	13.4		1.6	24.5		2.3				8.1	24.2		
	26		NF		44.1		12.8	2.4	18.3	47.3	43.7					56.6		
	27		NF				17.4	2.9	18.5	75.1	42.7						90.2	
	28		NF		2.5			0.7	11.4	42.8	7.9							
	29	10.7	NF		3.4				2.1		45.3							
	30		NF		4.5				1.3	34.5	30.6							

Table 15. SHUMAGIN ISLANDS JUNE FISHERY DAILY CHUM CATCHES (Figures in Thousands of Fish)

Date		1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
June	1				0.1													
	2											4.6						
	3				2.3							6.8	2.3	11.3				
	4				0.8							6.4	11.8					
	5											14.0		13.0				
	6											5.4						
	7				0.8									31.0				
	8				0.1	0.2				3.3								
	9			0.2		5.5					1.2							
	10				5.4	3.5				1.5	3.2					8.9		22.7
	11	0.5		5.2	6.3					8.1	1.6				3.9		0.7	
	12	1.4					1.6			5.9		34.1	26.8	15.2				
	13	0.7		1.6		8.4	1.9	1.8		4.3		40.3	13.0					
	14	2.9			1.3			4.7		3.0	6.2	23.3		20.0	23.0	6.8		
	15				7.5		1.8	2.1	5.9	1.4	12.9						0.7	
	16			5.3			1.1	1.4	3.3	3.8	12.7				14.2		1.6	6.3
	17				9.9			2.2	6.0		16.2						1.7	
	18			12.6	12.6		0.8	2.6	2.9		6.8				12.1		16.0	
	19	6.1					0.9	4.1	1.5	4.4	9.0	34.3	16.6	10.1				2.3
	20			10.6		4.4	0.6	2.7	1.2	6.2	9.7					13.1		15.9
	21				15.5		0.7	3.4	2.2	5.6	17.5			15.0	10.9		8.5	
	22	1.4						1.1	1.1	6.8	30.4							
	23	0.5			10.9	1.9	1.1	1.2		17.3					13.1		10.6	
	24					2.3	0.4	0.9							8.5		13.1	
	25						3.5	1.6							13.3			
	26					2.9	3.8	7.2		15.6			38.6	8.9		8.2		
	27					1.1	3.9	4.9									8.9	
	28	9.4				0.8	2.2	5.8						9.1				
	29							2.5										
	30							2.1										

Table 16. SOUTH UNIMAK SALMON CATCHES BY GUIDELINE HARVEST LEVEL PERIODS SOCKEYE VS. CHUMS
(Figures in Thousands of Fish)

Year	June 1 - 11			June 12 - 18			June 19 - 25			** June 26 -		
	*	Sockeye	Chums	*	Sockeye	Chums	*	Sockeye	Chums	*	Sockeye	Chums
1975	(1)	1	2	(3)	63	28	(4)	126	34		-	-
1976	(5)	9	82	(4)	60	137	(3)	99	69	(5)	69	32
1977	(3)	6	6	(5)	85	46	(3)	103	41		-	-
1978	(6)	1	3	(7)	96	32	(6)	225	44	(2)	97	30
1979	(7)	12	12	(7)	213	18	(7)	390	27	(6)	68	7
1980	(4)	12	2	(4)	885	144	(7)	1,529	259	(5)	305	52
1981	(10)	64	45	(5)	430	126	(4)	786	150	(4)	194	200
1982	(10)	36	77	(5)	548	409	(6)	721	277	(5)	366	170
1983	(6)	141	75	(3)	793	298	(2)	613	246		-	-
1984	(2)	75	51	(1)	593	114	(1)	464	68		-	-
1985	(4)	133	132	(2)	589	114	(3)	743	99		-	-
1986	(1)	8	14	(3)	177	186	(4)	129	52		-	-
1987	(3)	32	38	(4)	244	173	(4)	276	138	(1)	100	57
1988	(1)	12	18	(3)	181	156	(3)	233	200	(1)	49	90
1989	(1)	147	83	(1)	361	146	(2)	574	158	(1)	265	21

* Figures in parenthesis are fishing days.

**The fishery was extended into early July during 1976 and 1979, those figures are included.

Table 17. SHUMAGIN ISLANDS SALMON CATCHES BY GUIDELINE HARVEST LEVEL PERIODS SOCKEYE VS. CHUMS
(Figures in Thousands of Fish)

Year	June 1 - 11			June 12 - 18			June 19 - 25			** June 26 -		
	*	Sockeye	Chums	*	Sockeye	Chums	*	Sockeye	Chums	*	Sockeye	Chums
1975	(1)	3	5	(3)	26	20	(1)	20	11		-	-
1976	(6)	2	13	(4)	24	31	(2)	46	26		-	-
1977	(3)	7	9	(1)	12	8	(1)	27	4		-	-
1978		-	-	(5)	26	6	(6)	19	7	(3)	23	5
1979		-	-	(6)	53	15	(7)	89	16	(3)	38	10
1980		-	-	(4)	179	18	(7)	114	10	(9)	280	44
1981	(3)	31	13	(5)	153	26	(4)	158	23		-	-
1982	(3)	3	6	(4)	106	55	(5)	294	84	(1)	48	16
1983	(5)	32	37	(3)	257	98	(1)	128	34		-	-
1984	(2)	23	14	(1)	116	40	(1)	76	17	(1)	43	39
1985	(3)	60	55	(2)	135	33	(2)	115	25	(2)	56	18
1986	(1)	6	4	(3)	67	49	(4)	82	46		-	-
1987	(1)	32	9	(1)	24	7	(1)	55	13	(1)	30	8
1988	(1)	8	1	(4)	99	20	(3)	141	32	(1)	35	9
1989	(1)	54	23	(1)	89	6	(2)	253	18		-	-

* Figures in parenthesis are fishing days.

**The fishery was extended into early July during 1980, those figures are included.

Table 18. SHUMAGIN ISLAND AND SOUTH UNIMAK JUNE FISHERIES (Fish in Thousands)

	SHUMAGINS			UNIMAK			TOTAL		
Year	Sockeye	Chum	Sockeye/ Chum	Sockeye	Chum	Sockeye/ Chum	Sockeye	Chum	Sockeye/ Chum
1960	19	11	1.73	137	84	1.63	156	95	1.64
1961	55	36	1.52	199	157	1.26	254	193	1.32
1962	54	61	.88	272	209	1.30	326	270	1.21
1963	33	36	.91	116	81	1.43	149	117	1.27
1964	85	67	1.27	159	161	0.99	244	228	1.07
1965	207	45	4.60	568	121	4.69	775	166	4.67
1966	54	17	3.18	528	215	2.46	582	232	2.51
1967	69	51	1.35	186	73	2.55	255	124	2.06
1968	233	51	4.57	342	115	2.97	575	166	3.46
1969	76	13	5.85	781	254	3.07	857	267	3.21
1970	153	49	3.12	1,530	403	3.80	1,683	452	3.72
1971	45	115	0.39	565	554	1.02	610	669	0.91
1972	76	108	0.70	443	468	0.95	519	576	0.90
1973	23	23	1.00	239	189	1.26	263	212	1.24
1974	NF	NF	-	NF	NF	-	NF	NF	-
1975	49	36	1.36	190	65	2.92	239	101	2.37
1976	72	74	0.97	235	327	0.72	307	401	0.77
1977	46	22	2.09	193	93	2.08	239	115	2.08
1978	68	18	3.78	419	105	3.99	487	123	3.96
1979	179	41	4.37	683	64	10.67	862	105	8.21
1980	572	71	8.06	2,731	457	5.98	3,303	528	6.26
1981	351	54	6.50	1,474	521	2.83	1,825	575	3.17
1982	451	160	2.82	1,670	934	1.79	2,121	1,094	1.94
1983	416	169	2.46	1,545	615	2.51	1,961	784	2.50
1984	257	109	2.36	1,131	228	4.96	1,388	337	4.12
1985	367	134	2.74	1,495	345	4.33	1,862	479	3.89
1986	156	99	1.58	314	252	1.25	470	351	1.34
1987	141	37	3.81	652	406	1.61	793	443	1.79
1988	282	62	4.55	474	465	1.02	756	527	1.43
1989	397	48	8.27	1,348	408	3.30	1,745	456	3.83

Table 19. SOCKEYE PER CHUM SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE FISHERY

SOUTH UNIMAK

Year	Purse Seine	Drift Gillnet	Set Gillnet	All Gear
1977	3.1	2.0	4.9	2.1
1978	7.2	3.6	27.5	4.0
1979	24.4	4.5	14.7	10.7
1980	5.8	6.7	54.2	6.0
1981	2.3	3.7	21.4	2.8
1982	2.1	1.5	11.1	1.8
1983	2.3	2.9	12.8	2.5
1984	5.2	4.4	36.4	5.0
1985	6.4	2.8	13.2	4.3
1986	1.3	1.2	6.7	1.2
1987	1.5	1.6	5.2	1.6
1988	0.9	1.0	5.2	1.0
1989	3.8	2.7	12.8	3.3
Average	5.1	3.0	17.4	3.6

SHUMAGIN ISLANDS

Year	Purse Seine	Set Gillnet	Total
1977	2.0	10.6	2.1
1978	3.8	1.2	3.8
1979	4.2	7.7	4.4
1980	8.0	9.0	8.1
1981	6.2	25.5	6.5
1982	2.8	6.7	2.8
1983	2.4	16.3	2.5
1984	2.2	19.2	2.4
1985	2.7	4.3	2.7
1986	1.4	4.7	1.6
1987	3.1	13.2	3.8
1988	4.1	5.6	4.6
1989	8.1	11.9	8.4
Average	3.9	10.5	4.1

Table 20. SOCKEYE PER CHUM BY TIME PERIOD (All Gear)

Year	June 1-11	June 12-18	June 19-25	June 26-30	June Total
			SOUTH UNIMAK		
1975	.50	2.25	3.71	-	2.92
1976	.11	.44	1.43	2.16	.72
1977	1.00	1.85	2.51	-	2.08
1978	.33	3.00	5.11	3.23	3.99
1979	1.00	11.83	14.44	9.71	10.67
1980	6.00	6.15	5.90	5.87	5.98
1981	1.42	3.41	5.24	.97	2.83
1982	.47	1.34	2.60	2.15	1.79
1983	1.88	2.67	2.49	-	2.51
1984	1.47	5.20	6.82	-	4.96
1985	1.01	5.16	7.84	-	4.33
1986	.57	.95	2.48	-	1.25
1987	.84	1.41	2.01	1.79	1.61
1988	.67	1.16	1.15	.55	1.02
1989	1.78	2.47	4.70	___	3.31
Average	1.27	3.29	4.56	3.30	3.33
			SHUMAGIN ISLANDS		
1975	.60	1.30	1.82	-	1.36
1976	.15	.77	1.77	-	.97
1977	.78	1.50	6.75	-	2.09
1978	-	4.33	2.71	4.60	3.78
1979	-	3.53	5.56	3.80	4.37
1980	-	9.94	11.40	6.36	8.06
1981	2.38	5.88	6.87	-	6.50
1982	.50	1.93	3.50	3.00	2.82
1983	.86	2.62	3.76	-	2.46
1984	1.64	2.90	4.47	1.10	2.36
1985	1.08	3.84	4.59	3.14	2.74
1986	1.50	1.37	1.78	-	1.58
1987	3.55	3.46	4.20	3.69	3.81
1988	8.00	4.95	4.41	3.89	4.55
1989	2.39	13.97	13.71	___	8.35
Average	1.95	4.15	5.15	3.70	3.72

Table 21. PERCENT COMPOSITION OF SOCKEYE AND CHUM CATCHES BY GEAR TYPE 1977 - 1989

SOUTH UNIMAK JUNE FISHERY

	Sockeye			Chum		
Year	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet
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
Average	49.5	49.2	1.3	44.3	55.4	0.3

SHUMAGIN ISLANDS JUNE FISHERY

	Sockeye		Chum	
Year	Seine	Set Gillnet	Seine	Set Gillnet
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
Average	90.3	9.7	94.8	5.2

Table 22. SOUTH PENINSULA JUNE FISHERY VS. ACTUAL BRISTOL BAY HARVEST, SOCKEYE SALMON

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual S. Peninsula Catch	S. Peninsula % of Actual Bristol Bay Catch	Actual Bristol Bay Catch	S. Peninsula 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*	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**	1,107,000	6.97	470,000	2.96	15,889,000	1,319,000
1987	775,000	4.83	793,000	4.94	16,048,000	1,332,000
1988**	1,542,000	11.01	756,000	5.40	14,011,000	1,163,000

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

**The guideline harvest level if chum salmon restrictions were not placed on the fishery.

Includes only South Unimak and Shumagin June fisheries. Target percentage is 8.3

NOTE: 1986 through 1988 Bristol Bay catch figures are preliminary.

Table 23. SOUTH UNIMAK JUNE ISHERY VS. ACTUAL BRISTOL BAY HARVEST SOCKEYE SALMON

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual S. Unimak Catch	S. 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*	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**	907,000	5.71	314,000	1.98	15,889,000	1,080,000
1987	635,000	3.96	652,000	4.06	16,048,000	1,091,000
1988**	1,263,000	9.01	474,000	3.38	14,011,000	883,000
1989	1,199,000	4.18	1,348,000	4.70	28,710,000	1,952,000

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

**The guideline harvest level if chum salmon restrictions were not placed on the fishery.

Target percentage is 6.8

NOTE: 1986 through 1989 Bristol Bay catch figures are preliminary.

Table 24. SHUMAGIN ISLANDS JUNE FISHERY VS. ACTUAL BRISTOL BAY HARVEST, SOCKEYE SALMON

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual Shumagins Catch	Shumagins % 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*	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**	200,000	1.26	156,000	0.98	15,889,000	238,000
1987	140,000	0.87	141,000	0.88	16,048,000	241,000
1988**	279,000	1.99	282,000	2.01	14,011,000	210,000
1989	264,000	0.92	397,000	1.38	28,710,000	431,000

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

**The guideline harvest level if chum salmon restrictions were not placed on the fishery.

Target percentage is 1.5.

NOTE: 1986 through 1989 Bristol Bay catch figures are preliminary.

Table 25. SOUTH UNIMAK-SHUMAGIN ISLANDS JUNE FISHERY REGULATION HISTORY 1962-1988

Year	South Unimak	Shumagin Islands
1962-66	5 days per week	5 days per week
1967-70	7 days per week	7 days per week
1971-72	6:00 A.M. Monday - 6:00 A.M. Saturday	7 days per week
1973	*Four 13 hour fishing periods per week	*Four 13 hour fishing periods per week.

Both fisheries were closed by emergency order during June 25-28 due to indications of the Bristol Bay run being below escapement requirements.

1974	No fishery	No fishery
1975-83	* 6.8% of predicted Bristol Bay catch	1.5% of predicted Bristol Bay catch

No more than 96 hours per 7 day period and no more than 72 hours of consecutive fishing time in each fishery (windows).

1986	* 6.8% allocation minus June 26-30 segment Windows No fishing before June 11	1.5% allocation minus June 26-30 segment Windows No fishing before June 11

A 400,000 chum salmon ceiling placed on both fisheries combined.

1987	* Same as during 1984-85 for both fisheries.

1988 to Present	*	6.8 of predicted Bristol Bay catch Windows	1.5% of predicted Bristol Bay catch Windows

A 500,000 chum salmon ceiling placed on both fisheries combined.

*Each sockeye allocation is broken down into time period guideline harvest levels.

Dates	South Unimak	Shumagins
June 1 - 11	5%	9%
June 12 - 18	29%	28%
June 19 - 25	51%	41%
June 26 - 30	15%	22%
	100%	100%

Table 26. SALMON GEAR ON SOUTH SIDE OF ALASKA PENINSULA AREA DURING JUNE

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

During the peak of the South Unimak-Shumagin June fishery (June 12-25), approximately 30-40 seiners fish the Shumagins. During the few occasions when South Unimak is open and Shumagins 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 27. UNITS OF GEAR USED IN ALASKA PENINSULA AREA*

	SEINERS FISHING SOUTH UNIMAK & SHUMAGINS DURING JUNE	SEINERS FISHING UNALASKA ONLY	FISHED NORTH PENINSULA ONLY DURING JUNE	TOTAL JUNE SEINERS
1987	84	1	4	89
1988	89	2	0	91
1989	96	2	0	98

	DRIFT GILLNETTERS FISHING SO. UNIMAK & SHUMAGINS DURING JUNE	FISHED NORTH PENINSULA ONLY DURING JUNE (M)	TOTAL AREA M DRIFT GILLNETTERS
1987	140	15	155
1988	147	15	162
1989	144	15	159

	INNER PORT HEIDEN SPRING DRIFT GILLNETTERS (AREA T)	INNER PORT HEIDEN FALL ONLY DRIFT GILLNETTERS (T)	TOTAL INNER PORT HEIDEN DRIFT GILLNETTERS
1987	20	4	24
1988	18	5	23
1989	17	3	20

	AREA T DRIFT GILLNETTERS FISHING IGNIK & OUTER PORT HEIDEN SECTIONS	AREA T DRIFT GILLNETTERS FISHING CINDER RIVER SECTION EXCLUSIVE OF IGNIK & PORT HEIDEN
1987	17	10
1988	19	19
1989	29	14

	TOTAL AREA T DRIFT GILLNETTERS (SEASON)
1987	51
1988	61
1989	63

SET GILLNETTERS (AREA M)

	Sand Point	So. Unimak	No. Unimak (only)	Nelson Lagoon	Port Moller to Port Heiden (only)	Total Area M
1987	55	9	1	25	7	97
1988	52	11	0	28	7	98
1989	51	14	0	28	7	100

SET GILLNETTERS (AREA T)

	Inner Port Heiden	Cinder River	TOTAL AREA T
1987	5	5	10
1988	6	7	13
1989	5	14	19

*During July and August some gillnet (both drift and set) fishermen who have seine permits hand purse seine pink and chum salmon. Four Sand Point set gillnetters listed are seiners during most of the year. These figures were taken while inseason fish ticket editing and will likely differ from Table 28.

Table 28. Number of Limited Entry Permits[a] and Fishing Effort[b] in the Alaska Peninsula Area

	PURSE SEINE		DRIFT GILLNET			SET GILLNET		
YEAR	Area M Permits[a] Available	Area M Permits Fished	Area M Permits Available	Area M Permits[c] Fished	Area T Permits Fished	Area M Permits Available	Area M Permits[c] Fished	Area T Permits Fished
1976	114	(90)	155	(119)	(10)	115	(53)	(6)
1977	113	(87)	156	(114)	(16)	108	(57)	(8)
1978	123	(114)	158	(133)	(27)	113	(61)	(8)
1979	123	(130)	161	(167)	(18)	113	(78)	(13)
1980	126	(125)	163	(157)	(24)	113	(88)	(16)
1981	127	(122)	164	(155)	(18)	115	(88)	(21)
1982	127	(119)	164	(159)	(23)	115	(93)	(18)
1983	127	(121)	166	(159)	(18)	114	(94)	(7)
1984	126	(121)	165	(160)	(44)	113	(104)	(15)
1985	127	(123)	165	(161)	(44)	113	(102)	(18)
1986	125	(121)	165	(164)	(37)	114	(100)	(7)
1987	125	(115)	165	(163)	(48)	114	(108)	(9)
1988	125	(114)	165	(162)	(59)	114	(106)	(14)
1989	125	(119)	165	(163)	(64)	114	(111)	(18)

[a]Includes both permanent permits and interim use permits. In 1987 there were 6 interim use seine permits, 7 drift gillnet permits and 1 set gillnet permit.

[b]Making at least one delivery during the year.

[c]During a portion of the season, in specific sections, Area T set and drift gillnet fishermen are allowed to fish in the Alaska Peninsula Area, Area M. Therefore the number of permits fished may be higher than the number of Area M permits.

Table 29. SOUTH PENINSULA SALMON RUNS* (In Thousands of Fish)

Year		Kings	Sockeyes	Cohos	Pinks	Chums
1962	Catch	3.3	420.0	12.5	1,965.4	824.8
	Escapement	0	18.8	-	1,598.8	399.4
	Total	3.3	438.8	-	3,564.2	1,224.2
1963	Catch	1.9	204.4	16.5	2,367.7	461.3
	Escapement	0	23.0	-	1,317.9	446.7
	Total	1.9	227.4	-	3,685.6	908.0
1964	Catch	2.0	370.8	13.6	2,740.3	751.0
	Escapement	0	15.7	-	1,436.4	454.8
	Total	2.0	386.5	-	4,176.7	1,205.8
1965	Catch	2.1	915.7	34.2	2,884.1	556.4
	Escapement	0	12.1	-	1,035.4	228.0
	Total	2.1	927.8	-	3,919.5	784.4
1966	Catch	1.4	606.2	6.3	305.8	494.4
	Escapement	0	17.0	-	719.4	422.0
	Total	1.4	623.2	-	1,025.2	916.4
1967	Catch	1.6	294.1	2.9	78.3	245.2
	Escapement	0	16.2	-	445.5	182.9
	Total	1.6	310.3	-	523.8	428.1
1968	Catch	1.4	699.8	31.1	1,287.1	325.3
	Escapement	0	12.8	-	823.3	279.1
	Total	1.4	712.6	-	2,110.4	604.4
1969	Catch	1.9	912.8	10.9	1,219.1	389.2
	Escapement	0	29.5	-	2,474.9	134.6
	Total	1.9	942.3	-	3,694.0	523.8
1970	Catch	1.8	1,794.6	32.2	1,723.4	981.7
	Escapement	0	16.5	-	1,298.9	280.5
	Total	1.8	1,811.1	-	3,022.3	1,262.2
1971	Catch	2.2	715.5	16.8	1,450.1	1,366.6
	Escapement	0	19.4	-	702.7	343.2
	Total	2.2	734.9	-	2,152.8	1,709.8
1972	Catch	1.3	557.8	8.0	78.0	727.5
	Escapement	0	11.9	-	111.4	254.5
	Total	1.3	569.7	-	189.4	982.0
1973	Catch	0.4	330.2	6.6	58.3	293.0
	Escapement	0	7.3	-	110.8	505.5
	Total	0.4	337.5	-	169.1	798.5

Table 29. (continued)

Year		Kings	Sockeyes	Cohos	Pinks	Chums
1974	Catch	0.5	204.7	9.4	100.2	71.5
	Escapement	0	95.6	-	284.4	257.3
	Total	0.5	300.3	-	384.6	328.8
1975	Catch	0.1	268.4	0	61.7	132.9
	Escapement	0	51.7	-	552.1	193.3
	Total	0.1	320.1	-	613.8	326.2
1976	Catch	2.1	375.0	0.2	2,367.0	532.5
	Escapement	0	69.7	-	1,456.4	327.2
	Total	2.1	444.7	-	3,823.4	859.7
1977	Catch	0.5	311.7	2.1	1,448.6	243.2
	Escapement	0	64.9	-	2,677.8	774.9
	Total	0.5	376.6	-	4,126.4	1,018.1
1978	Catch	0.8	579.5	60.7	5,490.0	547.0
	Escapement	0	64.8	-	2,858.7	600.5
	Total	0.8	644.3	-	8,348.7	1,147.5
1979	Catch	2.1	1,149.7	356.5	6,570.6	483.0
	Escapement	0	53.3	-	2,629.5	411.1
	Total	2.1	1,203.0	-	9,200.1	894.1
1980	Catch	4.8	3,613.0	274.2	7,861.5	1,351.2
	Escapement	0	45.9	-	2,641.6	362.4
	Total	4.8	3,658.9	-	10,503.1	1,713.6
1981	Catch	12.2	2,255.2	162.2	5,035.9	1,770.3
	Escapement	0	45.7	-	2,307.5	381.3
	Total	12.2	2,300.9	-	7,343.4	2,151.6
1982	Catch	9.8	2,346.0	256.0	6,734.9	2,272.5
	Escapement	0	39.2	-	2,293.0	386.9
	Total	9.8	2,385.2	-	9,027.9	2,659.4
1983	Catch	26.9	2,556.6	127.7	2,827.6	1,707.1
	Escapement	0	59.2	-	851.2	446.5
	Total	26.9	2,615.8	-	3,678.8	2,153.6
1984	Catch	9.2	2,318.0	309.1	11,589.3	1,656.5
	Escapement	0	54.8	-	3,811.6	699.7
	Total	9.2	2,372.8	-	15,400.9	2,356.2

Table 29. (continued)

Year		Kings	Sockeyes	Cohos	Pinks	Chums
1985	Catch	7.9	2,214.6	172.5	4,433.7	1,393.1
	Escapement	0	49.9	-	1,614.1	503.4
	Total	7.9	2,264.5	-	6,047.8	1,896.5
1986	Catch	5.6	1,223.0	235.9	4,031.5	1,749.7
	Escapement	0	48.0	-	1,716.7	544.6
	Total	5.6	1,271.0	-	5,748.2	2,294.3
1987	Catch	9.2	1,449.9	224.7	1,208.6	1,376.3
	Escapement	0	44.6	-	1,540.5	620.7
	Total	9.2	1,494.5	-	2,749.1	1,997.0
1988	Catch	11.1	1,472.9	505.5	7,044.8	1,905.2
	Escapement	0	74.1	(50.0-100.0)	2,839.6	496.4
	Total	11.1	1,547.0	(555.5-605.5)	9,884.4	2,401.6
1989	Catch	7.0	2,660.7	443.8	7,292.7	994.2
	Escapement	0	78.1	25.0-75.0	1,870.9	310.5
	Total	7.0	2,738.8	468.8-518.8	9,163.6	1,304.7

*Escapements are indexed totals. Figures in parenthesis are very rough extrapolated estimates.

Table 30. SOUTH PENINSULA PINK SALMON RUNS (In Thousands of Fish)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1962	Catch	922.1	977.3	1,899.4	42	24	66
	Escapement	826.1	772.7	1,598.8			
	Total	1,748.2	1,750.0	3,498.2			
1963	Catch	1,733.9	590.8	2,324.7	14	29	43
	Escapement	886.5	431.4	1,317.9			
	Total	2,620.4	1,022.2	3,642.6			
1964	Catch	1,514.6	1,190.7	2,705.3	18	17	35
	Escapement	902.4	534.0	1,436.7			
	Total	2,417.0	1,724.7	4,141.7			
1965	Catch	2,331.4	474.7	2,806.1	43	35	78
	Escapement	789.9	245.5	1,035.4			
	Total	3,121.3	720.2	3,841.5			
1966	Catch	220.3	68.5	288.8	15	2	17
	Escapement	627.4	92.0	719.4			
	Total	847.7	160.5	1,008.2			
1967	Catch	53.1	4.2	57.3	11	10	21
	Escapement	327.3	118.2	445.5			
	Total	380.4	122.4	502.8			
1968	Catch	863.3	277.8	1,141.1	34	112	146
	Escapement	528.1	295.2	823.3			
	Total	1,391.4	573.0	1,964.4			
1969	Catch	862.8	265.3	1,128.1	68	23	91
	Escapement	1,906.2	568.7	2,474.9			
	Total	2,769	834.0	3,603.0			
1970	Catch	1,366.1	250.3	1,616.4	83	24	107
	Escapement	1,007.9	291.0	1,298.9			
	Total	2,374.0	541.3	2,915.3			
1971	Catch	1,212.1	214.0	1,426.1	15	9	24
	Escapement	488.0	214.7	702.7			
	Total	1,700.1	428.7	2,128.8			
1972	Catch	51.2	8.8	60.0	12	6	18
	Escapement	81.8	29.6	111.4			
	Total	133.0	38.4	171.4			

Table 30. (continued)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1973	Catch	35.1	1.2	36.3	12	10	22
	Escapement	85.7	25.1	110.8			
	Total	120.8	26.3	147.1			
1974	Catch	95.5	4.7	100.2	0	0	0
	Escapement	238.6	45.8	284.4			
	Total	334.1	50.5	384.6			
1975	Catch	30.4	26.3	56.7	3	2	5
	Escapement	357.8	194.3	552.1			
	Total	388.2	220.6	608.8			
1976	Catch	2,035.9	307.1	2,343.0	18	6	24
	Escapement	1,084.0	372.4	1,456.4			
	Total	3,119.9	679.5	3,799.4			
1977	Catch	1,163.4	280.2	1,443.6	3	2	5
	Escapement	2,168.5	509.3	2,677.8			
	Total	3,331.9	789.5	4,121.4			
1978	Catch	4,067.3	1,332.7	5,400.0	47	43	90
	Escapement	1,966.3	892.4	2,858.7			
	Total	6,033.6	2,225.1	8,258.7			
1979	Catch	4,845.0	1,562.6	6,407.6	57	106	163
	Escapement	2,125.1	504.4	2,629.5			
	Total	6,970.1	2,067.0	9,037.1			
1980	Catch	2,439.6	3,815.6	6,255.2	1,141	466	1,607
	Escapement	1,410.4	1,231.2	2,641.6			
	Total	3,850.0	5,046.8	8,896.8			
1981	Catch	4,196.4	378.5	4,574.9	332	129	461
	Escapement	1,875.0	431.8	2,306.8			
	Total	6,071.4	810.3	6,881.7			
1982	Catch	4,104.9	906.1	5,011.0	1,037	687	1,724
	Escapement	1,533.2	759.8	2,293.0			
	Total	5,638.1	1,665.9	7,304.0			
1983	Catch	2,245.8	526.8	2,772.6	40	15	55
	Escapement	639.2	212.0	851.2			
	Total	2,885.0	738.8	3,623.8			

Table 30. (continued)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1984	Catch	6,533.1	4,136.3	10,669.4	490	449	939
	Escapement	2,526.7	1,824.9	3,811.6			
	Total	9,059.8	5,421.2	14,481.0			
1985	Catch	3,324.8	999.9	4,324.7	72	37	109
	Escapement	1,229.3	384.5	1,613.8			
	Total	4,554.1	1,384.4	5,938.5			
1986	Catch	3,066.9	673.5	3,740.4	150	141	291
	Escapement	1,185.5	531.2	1,716.7			
	Total	4,252.4	1,204.7	5,457.1			
1987	Catch	1,143.4	48.1	1,191.5	11	6	17
	Escapement	1,304.4	236.1	1,540.5			
	Total	2,447.8	284.2	2,732.0			
1988	Catch	4,662.3	2,164.1	6,826.4	87	132	219
	Escapement	1,636.5	1,203.1	2,839.6			
	Total	6,298.8	3,367.2	9,666.0			
1989	Catch	5,582.3	1,511.3	7,093.6	154	45	199
	Escapement	1,179.2	691.6	1,870.8			
	Total	6,761.5	2,202.9	8,964.4			

Table 31. SOUTH PENINSULA CHUM SALMON RUNS (In Thousands of Fish)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1962	Catch	409.5	155.3	564.8	199	61	260
	Escapement	238.6	160.8	399.4			
	Total	648.1	316.1	964.2			
1963	Catch	278.0	80.3	358.3	67	36	103
	Escapement	263.0	183.7	446.7			
	Total	541.0	264.0	805.0			
1964	Catch	378.8	153.3	532.1	153	67	220
	Escapement	160.8	294.0	454.8			
	Total	539.6	447.3	986.9			
1965	Catch	221.7	150.7	372.4	139	45	184
	Escapement	203.3	24.2	228.0			
	Total	425.0	175.4	600.4			
1966	Catch	221.4	36.0	257.4	220	17	237
	Escapement	(354.8)	67.2	422.0			
	Total	576.8	103.2	679.4			
1967	Catch	118.7	4.5	123.2	71	51	122
	Escapement	132.8	50.1	182.9			
	Total	251.5	54.6	306.1			
1968	Catch	121.4	47.6	169.0	105	51	156
	Escapement	191.7	87.4	279.1			
	Total	313.1	135.0	448.1			
1969	Catch	95.1	43.3	138.4	238	13	251
	Escapement	96.9	37.7	134.6			
	Total	192.0	81.0	273.0			
1970	Catch	482.4	87.2	569.6	363	49	412
	Escapement	171.7	108.8	280.5			
	Total	654.1	196.0	850.1			
1971	Catch	637.1	117.5	754.6	497	115	612
	Escapement	199.1	144.1	343.2			
	Total	836.2	261.6	1,097.8			
1972	Catch	150.6	55.9	206.5	413	108	521
	Escapement	145.0	109.5	254.5			
	Total	295.6	165.4	461.0			

Table 31. (continued)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1973	Catch	67.1	12.1	79.2	178	36	214
	Escapement	130.9	81.6	212.5			
	Total	198.0	93.7	291.7			
1974	Catch	56.6	15.3	71.9	0	0	0
	Escapement	169.8	87.5	257.3			
	Total	226.4	102.8	329.2			
1975	Catch	29.9	4.0	33.9	64	35	99
	Escapement	160.2	33.1	193.3			
	Total	190.1	37.1	227.2			
1976	Catch	109.4	25.1	134.5	326	72	398
	Escapement	225.3	101.9	327.2			
	Total	334.7	127.0	461.7			
1977	Catch	109.4	18.8	128.2	93	22	115
	Escapement	500.9	274.0	774.9			
	Total	610.3	292.8	903.1			
1978	Catch	341.6	139.8	481.4	47	18	65
	Escapement	386.2	214.3	600.5			
	Total	727.8	254.1	1,081.9			
1979	Catch	280.4	97.6	378.0	64	41	105
	Escapement	302.7	108.4	411.1			
	Total	583.1	206.0	789.1			
1980	Catch	654.2	169.1	823.3	457	71	528
	Escapement	241.6	120.8	362.4			
	Total	895.8	289.9	1,185.7			
1981	Catch	966.1	229.2	1,195.3	521	54	575
	Escapement	234.5	146.8	381.3			
	Total	1,200.6	376.0	1,576.6			
1982	Catch	922.9	253.8	1,176.7	935	160	1,095
	Escapement	203.0	183.9	386.9			
	Total	1,125.9	437.7	1,536.6			
1983	Catch	600.3	322.6	922.9	615	169	784
	Escapement	328.9	117.6	446.5			
	Total	929.2	440.2	1,369.4			

Table 31. (continued)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1984	Catch	832.9	486.5	1,319.4	228	109	337
	Escapement	446.0	253.7	699.7			
	Total	1,278.9	740.2	2,019.1			
1985	Catch	539.2	375.7	914.9	345	133	478
	Escapement	284.7	218.8	503.5			
	Total	823.9	594.5	1,418.4			
1986	Catch	981.2	417.4	1,398.6	252	99	351
	Escapement	239.6	305.0	544.6			
	Total	1,220.8	722.4	1,943.2			
1987	Catch	753.2	180.0	933.2	406	37	443
	Escapement	329.2	291.5	620.7			
	Total	1,082.4	471.5	1,553.9			
1988	Catch	826.2	552.3	1,378.5	465	62	527
	Escapement	269.1	227.3	496.4			
	Total	1,095.3	779.6	1,874.9			
1989	Catch	420.9	117.3	538.2	408	48	456
	Escapement	189.2	121.3	310.5			
	Total	610.1	238.6	848.7			

Figure 3. South Peninsula Coho Salmon Catches, 1920-89

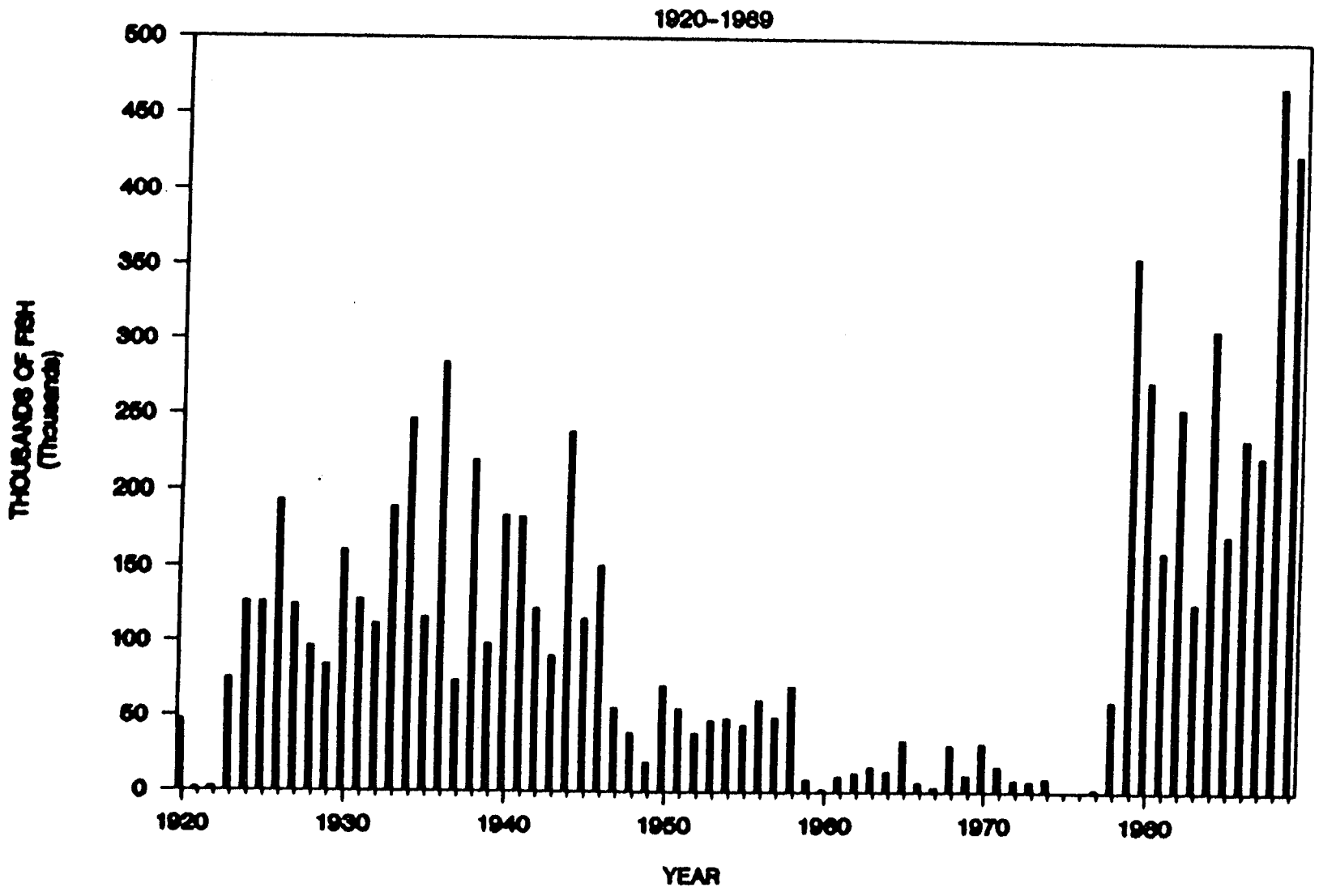

Figure 4. Shumagin Islands July-August Species Composition, 1979-89.

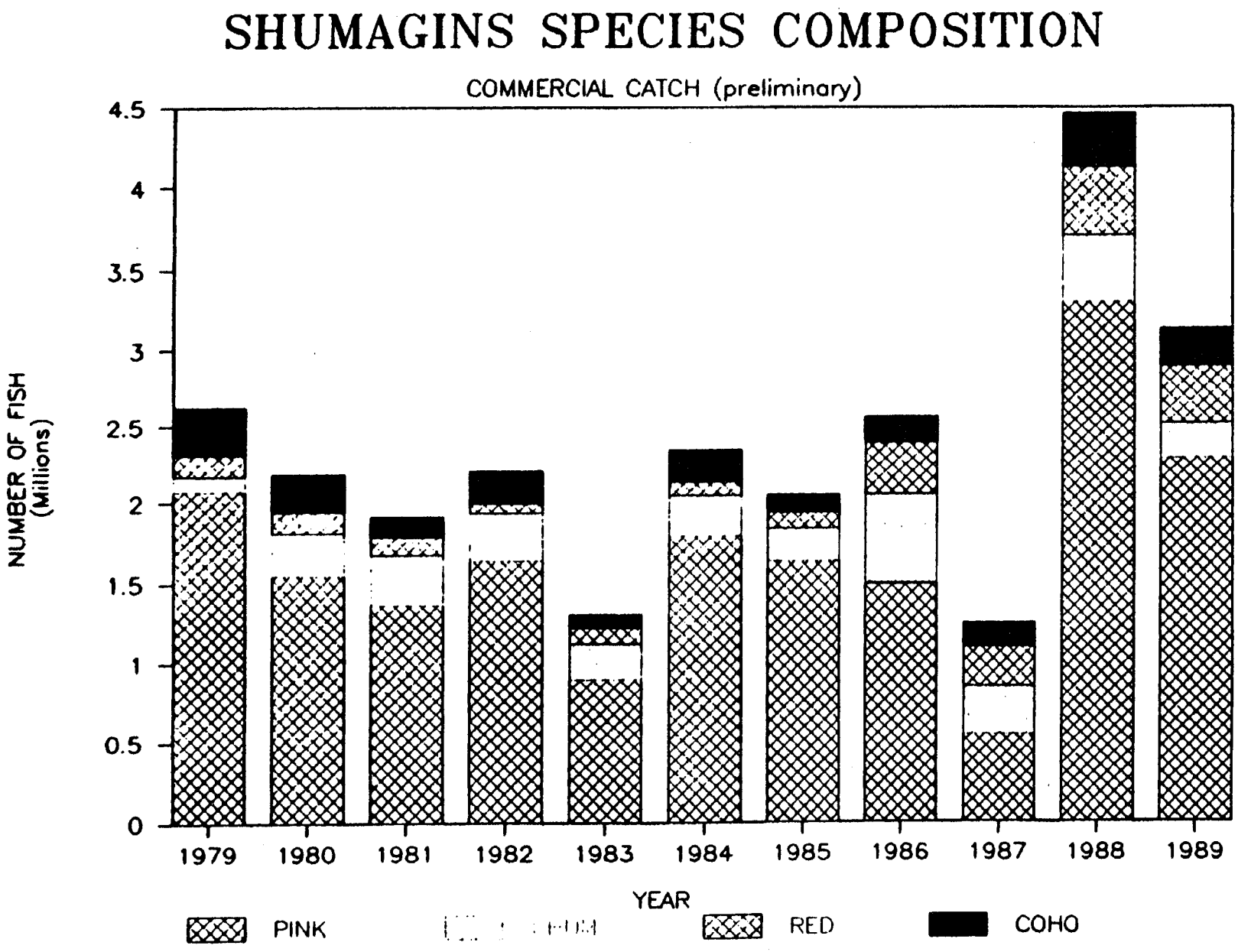

Figure 5. South Unimak July-August Salmon Catch by Species 1960-89.

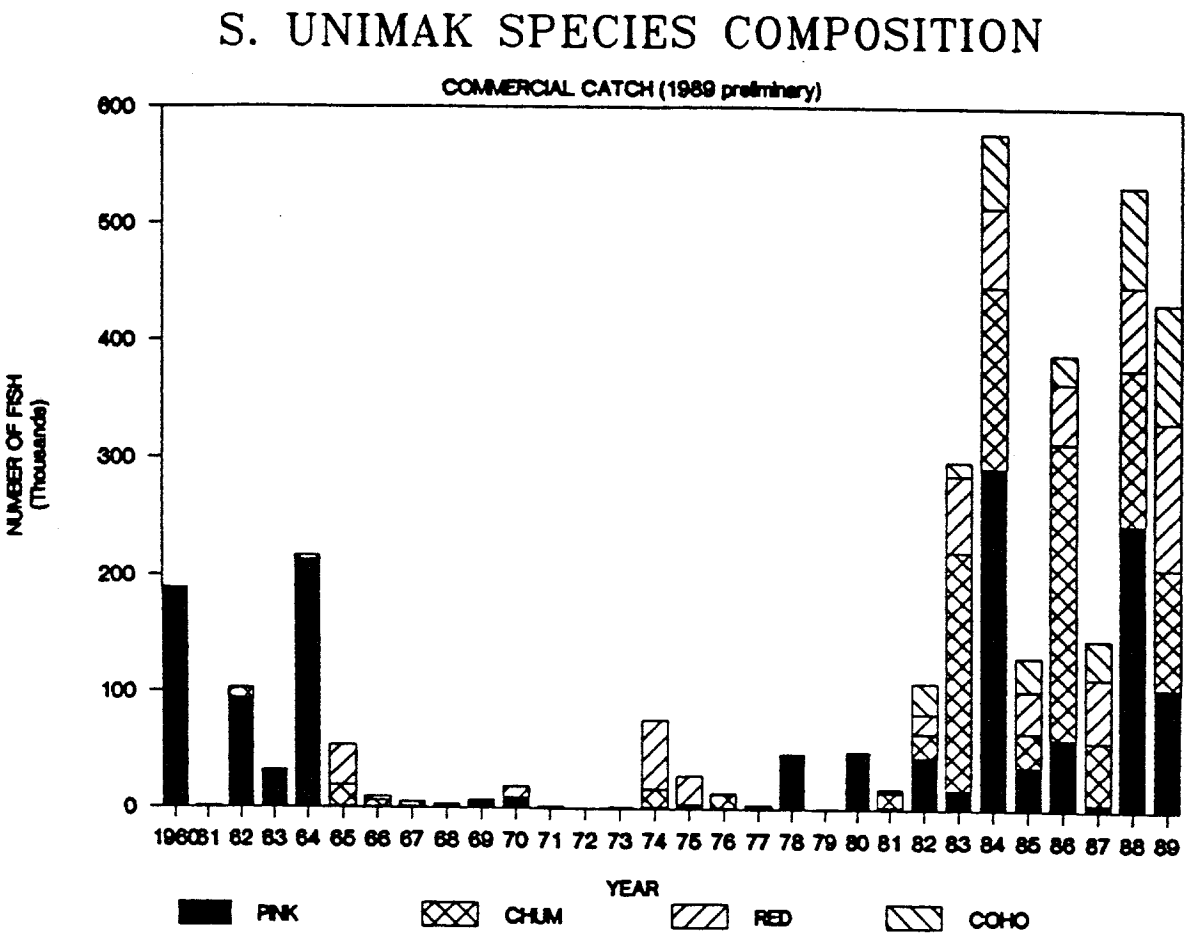

Table 32. NORTH PENINSULA SALMON RUNS (In Thousands of Fish)

Year		Kings	Sockeyes	Cohos	Pinks	Chums
1962	Catch	5.4	249.7	35.2	31.2	34.9
	Escapement	4.4	351.2	-	4.0	150.9
	Total	9.8	600.9	-	35.2	185.8
1963	Catch	3.6	225.2	40.5	6.9	49.9
	Escapement	6.2	351.0	-	4.4	203.2
	Total	9.8	576.2	-	11.3	253.1
1964	Catch	3.6	250.8	36.6	6.8	139.0
	Escapement	25.9	419.9	-	(15.1)	156.1
	Total	29.5	670.7	-	(21.9)	295.1
1965	Catch	6.1	199.5	34.5	2.1	69.7
	Escapement	22.1	238.4	-	0.9	49.3
	Total	28.2	437.9	-	3.0	119.0
1966	Catch	5.6	245.3	37.3	16.0	82.8
	Escapement	8.2	283.3	-	2.0	149.5
	Total	13.8	528.6	-	18.0	232.3
1967	Catch	5.5	224.7	46.8	0.7	41.3
	Escapement	12.2	299.7	-	0.7	122.6
	Total	17.7	524.4	-	1.4	163.9
1968	Catch	4.5	237.1	64.9	0.2	73.5
	Escapement	15.8	251.3	-	26.5	250.8
	Total	20.3	488.4	-	26.7	324.3
1969	Catch	4.8	321.3	49.1	0.1	28.1
	Escapement	19.5	575.0	-	4.4	146.8
	Total	24.3	896.3	-	4.5	174.9
1970	Catch	3.2	213.0	26.4	7.8	50.2
	Escapement	8.3	451.5	-	11.1	169.8
	Total	11.5	664.5	-	18.9	220.0
1971	Catch	2.2	354.2	16.8	0.3	64.2
	Escapement	5.2	435.1	-	8.6	109.4
	Total	7.4	789.3	-	8.9	173.6
1972	Catch	1.8	179.5	8.0	0.0	84.7
	Escapement	5.0	190.2	-	1.3	124.0
	Total	6.8	369.7	-	1.3	208.7
1973	Catch	4.4	171.8	6.6	0.3	155.7
	Escapement	4.3	180.2	-	(0.2)	122.4
	Total	8.7	352.0	-	(0.5)	278.1

Table 32. (continued)

Year		Kings	Sockeye	Cohos	Pinks	Chums
1974	Catch	5.1	247.9	24.0	10.5	35.3
	Escapement	3.0	332.8	-	(23.0)	105.1
	Total	8.1	580.7	-	(33.5)	140.4
1975	Catch	2.1	233.5	28.2	0.3	8.7
	Escapement	4.6	516.8	-	0.6	109.2
	Total	6.7	750.3	-	0.9	117.9
1976	Catch	4.9	641.1	26.0	0.6	73.6
	Escapement	6.0	532.6	-	37.3	293.4
	Total	10.9	1,173.7	-	37.9	367.0
1977	Catch	5.5	471.1	34.1	0.9	129.1
	Escapement	7.1	541.1	-	8.5	681.2
	Total	12.6	1,012.2	-	9.4	810.3
1978	Catch	14.2	896.2	63.3	466.6	163.2
	Escapement	13.7	1,213.5	-	96.8	310.5
	Total	27.9	2,109.7	-	563.4	473.7
1979	Catch	17.1	1,979.5	112.3	5.0	65.7
	Escapement	15.8	1,574.0	-	9.3	305.3
	Total	32.9	3,553.5	-	14.3	371.0
1980	Catch	16.8	1,397.1	127.9	301.7	700.2
	Escapement	11.0	1,387.6	-	103.6	769.5
	Total	27.8	2,784.7	-	405.3	1,469.7
1981	Catch	18.3	1,844.9	155.4	11.2	706.8
	Escapement	12.4	1,347.9	-	6.1	535.2
	Total	30.7	3,192.8	-	17.3	1,242.0
1982	Catch	30.1	1,435.3	238.0	12.3	331.1
	Escapement	20.0	718.4	-	51.7	457.6
	Total	50.1	2,153.7	-	64.0	788.7
1983	Catch	29.5	2,093.4	75.1	3.4	348.7
	Escapement	25.7	580.3	-	4.0	392.6
	Total	55.2	2,673.7	-	7.4	741.3
1984	Catch	23.0	1,734.9	198.5	27.4	796.7
	Escapement	17.7	826.0	-	56.6	870.2
	Total	40.7	2,560.9	-	84.0	1,666.9
1985	Catch	23.5	2,600.5	167.8	3.1	671.1
	Escapement	12.9	898.1	-	1.4	344.2
	Total	36.4	3,498.6	-	4.5	1,015.3

Table 32. (continued)

Year		Kings	Sockeye	Cohos	Pinks	Chums
1986	Catch	11.7	2,463.7	164.1	22.6	271.2
	Escapement	8.7	580.3	-	13.3	243.6
	Total	20.4	3,044.0	-	35.9	514.8
1987	Catch	14.2	1,209.4	171.8	3.5	368.7
	Escapement	10.7	556.0	-	0.1	510.9
	Total	24.9	1,765.4	-	3.6	879.6
1988	Catch	16.8	1,528.1	234.0	65.2	393.5
	Escapement	11.7	614.9	(200-300)	43.5	500.3
	Total	28.5	2,143.0	(434-534)	108.7	893.8
1989	Catch	10.9	1,718.7	227.6	4.1	157.2
	Escapement	5.6	814.4	(150.0-250.0)	1.9	212.3
	Total	16.5	2,533.1	377.6-477.6	6.0	369.5

*Escapements are indexed totals. Figures in parenthesis are very rough extrapolated estimates.

Table 33. NORTHERN DISTRICT KING SALMON RUNS (In Thousands of Fish)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1962	Catch	0	0.4	0	0.5	0.7	3.7	0	5.3
	Escapement	0	(1.1)	0	0.5	0	2.7	(0.1)	4.4
	Total	0	(1.5)	0	1.0	0.7	6.4	(0.1)	9.7
1963	Catch	0	0	0	0.6	0.2	2.5	0	3.3
	Escapement	0	(0.1)	0	0.2	0	4.0	(1.9)	6.2
	Total	0	(0.1)	0	0.8	0.2	6.5	(1.9)	9.5
1964	Catch	0	0	0.1	0.3	0	3.3	0	3.7
	Escapement	5.8	4.2	0.5	3.0	0	8.4	4.0	25.9
	Total	5.8	4.2	0.6	3.3	0	11.7	4.0	29.6
1965	Catch	0	1.9	0.3	0.1	0	4.0	0	6.3
	Escapement	0.7	1.0	0	5.4	0	11.9	3.0	22.0
	Total	0.7	2.9	0.3	5.5	0	15.9	3.0	28.3
1966	Catch	0	0.7	0	0.1	0	2.4	0	3.2
	Escapement	0	(1.3)	0	(0.3)	0	4.7	1.9	8.2
	Total	0	(2.0)	0	(0.4)	0	7.1	1.9	11.4
1967	Catch	0	1.4	0	0.1	0.4	3.6	0	5.5
	Escapement	(0.8)	0.5	0.3	3.0	0	5.1	1.3	11.0
	Total	(0.8)	1.9	0.3	3.1	0.4	8.7	1.3	16.5
1968	Catch	0	1.0	0.1	0.3	1.3	2.8	0	5.5
	Escapement	0.3	(1.1)	0	2.6	0	7.3	2.7	14.0
	Total	0.3	(2.1)	0.1	2.9	1.3	10.1	2.7	19.5
1969	Catch	0	1.4	0	0.5	0.5	2.5	0	4.9
	Escapement	(0.8)	(1.1)	0	1.0	0	8.1	1.6	12.6
	Total	(0.8)	(2.5)	0	1.5	0.5	10.6	1.6	17.5
1970	Catch	0	0	0	0.2	0.4	2.6	0	3.2
	Escapement	0.2	0.3	0.3	1.0	0	2.9	2.0	6.7
	Total	0.2	0.3	0.3	1.2	0.4	5.5	2.0	9.9
1971	Catch	0	0	0.1	0.3	0.4	1.4	0	2.2
	Escapement	0.1	0.1	0.2	0.8	0	2.3	(1.5)	5.0
	Total	0.1	0.1	0.3	1.1	0.4	3.7	(1.5)	7.2
1972	Catch	0	0	0.1	0.2	0.2	1.3	0	1.8
	Escapement	0.7	1.6	0	0.1	0	1.4	1.0	4.8
	Total	0.7	1.6	0.1	0.3	0.2	2.7	1.0	6.6

Table 33. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1973	Catch	0	1.6	0	0.7	0.3	1.5	0	4.1
	Escapement	0.6	0.6	0	0.1	0	1.5	0.8	3.6
	Total	**0.6**	**2.2**	**0**	**0.8**	**0.3**	**3.0**	**0.8**	**7.7**
1974	Catch	0	2.5	0	0.2	0.2	2.1	0	5.0
	Escapement	0.5	0.7	0	0.3	0	1.1	0.4	3.0
	Total	**0.5**	**3.2**	**0**	**0.5**	**0.2**	**3.2**	**0.4**	**8.0**
1975	Catch	0	0.4	0	0.3	0.2	1.2	0	2.1
	Escapement	0.1	0.9	0	0.7	0	2.5	0.4	4.6
	Total	**0.1**	**1.3**	**0**	**1.0**	**0.2**	**3.7**	**0.4**	**6.7**
1976	Catch	0	1.5	0.1	0.5	0.6	2.2	0	4.9
	Escapement	1.6	0.2	0	0.5	0	3.3	0.4	6.0
	Total	**1.6**	**1.7**	**0.1**	**1.0**	**0.6**	**5.5**	**0.4**	**10.9**
1977	Catch	0	2.5	0.1	0.7	0.5	1.7	0	5.5
	Escapement	0.1	0.7	0	0	0	5.6	0.7	7.1
	Total	**0.1**	**3.2**	**0.1**	**0.7**	**0.5**	**7.3**	**0.7**	**12.6**
1978	Catch	0	9.5	0	0.6	0.7	3.4	0	14.2
	Escapement	1.1	4.2	0	(0.2)	0	4.2	4.0	13.7
	Total	**1.1**	**13.7**	**0**	**(0.8)**	**0.7**	**7.6**	**4.0**	**27.9**
1979	Catch	0	9.7	0	1.4	0.5	5.4	0	17.0
	Escapement	0.3	(3.2)	0	0	0	11.0	1.5	15.8
	Total	**0.3**	**(12.9)**	**0**	**1.4**	**0.5**	**16.4**	**1.5**	**32.8**
1980	Catch	0	5.4	0.1	1.7	0.9	8.7	0	16.8
	Escapement	(3.0)	(1.6)	0	0.1	0	5.5	0.8	(11.0)
	Total	**(3.0)**	**(7.0)**	**0.1**	**1.8**	**0.9**	**14.2**	**0.8**	(27.8)
1981	Catch	0	6.1	0	1.1	0.1	11.0	0	18.3
	Escapement	(3.0)	(1.0)	0	2.3	0	5.2	0.9	(12.4)
	Total	**(3.0)**	**(7.1)**	**0**	**3.4**	**0.1**	**16.2**	**0.9**	**(30.7)**
1982	Catch	0	11.0	0.9	2.9	0.6	13.5	1.2	30.1
	Escapement	(2.5)	(7.5)	0	0.9	0	7.0	2.1	20.0
	Total	**(2.5)**	**(18.5)**	**0.9**	**3.8**	**0.6**	**20.5**	**3.3**	**50.1**
1983	Catch	0	6.8	0.9	8.6	0.7	12.1	0.4	29.5
	Escapement	7.2	0.9	0	(1.5)	0	12.5	3.6	25.7
	Total	**7.2**	**7.7**	**0.9**	**(10.1)**	**0.7**	**24.6**	**4.0**	**55.2**

Table 33. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1984	Catch	0	6.4	1.3	6.0	0.6	7.8	0.8	22.9
	Escapement	0.4	7.4	0	0.6	0	6.3	3.0	17.7
	Total	0.4	13.8	1.3	6.6	0.6	14.1	3.8	40.6
1985	Catch	0	4.4	1.7	4.8	1.8	10.9	0	23.6
	Escapement	0.7	4.7	0	1.2	0	3.2	3.2	13.0
	Total	0.7	9.1	1.7	6.0	1.8	14.1	3.2	36.6
1986	Catch	0	1.8	1.5	2.9	0.4	4.8	0.2	11.6
	Escapement	1.7	2.4	0	0.8	0	1.8	2.1	8.8
	Total	1.7	4.2	1.5	3.7	0.4	6.6	2.3	20.4
1987	Catch	0	3.2	0.9	3.8	0.3	5.8	0.1	14.1
	Escapement	0.9	1.4	0	0.7	0	4.1	3.6	10.7
	Total	0.9	4.6	0.9	4.5	0.3	9.9	3.7	24.8
1988	Catch	0	5.8	0.8	3.5	0.2	6.5	0	16.8
	Escapement	0.4	2.2	0.2	1.2	0	3.3	3.3	10.6
	Total	0.4	8.0	1.0	4.7	0.2	9.8	3.3	27.4
1989	Catch	0.1	2.9	0.5	2.2	0.3	3.8	1.0	10.8
	Escapement	0.2	0.8	0	0.9	0	3.1	0.6	5.6
	Total	0.3	3.7	0.5	3.1	0.3	6.9	1.6	16.4

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 34. Northwestern District Sockeye Salmon Runs (In Thousands of Fish)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1962	Catch	4.7	4.1	8.8
	Escapement	27.0	(24.0)	(51.0)
	Total	31.7	28.1	(59.8)
1963	Catch	1.7	5.2	6.9
	Escapement	40.0	14.0	54.0
	Total	41.7	19.2	60.9
1964	Catch	4.7	10.3	15.0
	Escapement	50.0	(20.0)	70.0
	Total	54.7	30.3	85.0
1965	Catch	0.4	14.1	14.5
	Escapement	7.0	6.9	13.9
	Total	7.4	21.0	28.4
1966	Catch	0.0	16.3	16.3
	Escapement	7.5	12.4	19.9
	Total	7.5	28.7	36.2
1967	Catch	8.1	5.3	13.4
	Escapement	9.0	5.8	14.8
	Total	17.1	11.1	28.2
1968	Catch	11.1	4.6	15.7
	Escapement	10.0	7.8	17.8
	Total	21.1	12.4	33.5
1969	Catch	6.1	3.5	9.6
	Escapement	14.0	39.5	53.5
	Total	20.1	43.0	63.1
1970	Catch	3.1	0.7	3.8
	Escapement	7.0	(35.0)	(42.0)
	Total	10.1	(35.7)	(45.8)
1971	Catch	6.9	2.4	9.3
	Escapement	4.0	30.0	34.0
	Total	10.9	32.4	43.3
1972	Catch	0.8	6.2	7.0
	Escapement	5.0	4.8	9.8
	Total	5.8	11.0	16.8

Table 34. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1973	Catch	1.2	2.6	3.8
	Escapement	2.0	5.0	7.0
	Total	3.2	7.6	10.8
1974	Catch	4.7	3.6	8.3
	Escapement	4.0	3.3	7.3
	Total	8.7	6.9	15.6
1975	Catch	1.5	1.5	3.0
	Escapement	7.0	12.3	19.3
	Total	8.5	13.8	22.3
1976	Catch	19.0	1.7	20.7
	Escapement	14.0	21.5	35.5
	Total	33.0	23.2	56.2
1977	Catch	3.1	31.5	34.6
	Escapement	26.5	28.6	55.1
	Total	29.6	60.1	89.7
1978	Catch	15.6	24.5	40.1
	Escapement	17.0	28.0	45.0
	Total	32.6	52.5	85.1
1979	Catch	10.8	63.1	73.9
	Escapement	9.0	33.7	42.7
	Total	19.8	96.8	116.6
1980	Catch	34.2	15.2	49.4
	Escapement	11.5	90.1	101.6
	Total	45.7	105.3	151.0
1981	Catch	30.9	20.1	51.0
	Escapement	12.0	60.7	72.7
	Total	42.9	80.8	123.7
1982	Catch	24.5	9.3	33.8
	Escapement	21.5	29.3	50.8
	Total	46.0	38.6	84.6
1983	Catch	15.2	14.3	29.5
	Escapement	18.5	14.2	32.7
	Total	33.7	28.5	62.2

Table 34. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1984	Catch	4.7	197.0	201.7
	Escapement	19.1	70.3	89.4
	Total	23.8	267.3	291.1
1985	Catch	6.2	77.4	83.6
	Escapement	17.2	29.5	46.7
	Total	23.4	106.9	130.3
1986	Catch	19.1	139.2	158.3
	Escapement	15.7	45.7	61.4
	Total	34.8	184.9	219.7
1987	Catch	6.5	137.9	144.4
	Escapement	13.6	36.3	49.9
	Total	20.1	174.2	194.3
1988	Catch	11.5	67.0	78.5
	Escapement	17.3	35.6	52.9
	Total	28.8	102.6	131.4
1989	Catch	8.6	44.0	52.6
	Escapement	22.5	58.1	80.6
	Total	31.1	102.1	133.2

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 35. NORTHERN DISTRICT SOCKEYE SALMON RUNS (In Thousands of Fish)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1962	Catch	0.9	17.8	9.7	142.9	0	69.6	0	240.9
	Escapement	5.0	(19.0)	5.9	215.0	0.1	54.2	1.0	300.2
	Total	5.9	(36.8)	15.6	357.9	0.1	123.8	1.0	541.1
1963	Catch	0	0	26.6	120.0	0	71.5	0	218.1
	Escapement	1.4	(14.2)	10.4	238.6	0.1	31.0	(1.3)	297.0
	Total	1.4	(14.2)	37.0	358.6	0.1	102.5	(1.3)	515.1
1964	Catch	0	6.3	33.3	107.5	0	88.7	0	235.8
	Escapement	1.5	10.0	(6.5)	250.2	0.2	80.0	1.5	349.9
	Total	1.5	16.3	(39.8)	357.7	0.2	168.7	1.5	585.7
1965	Catch	0	9.7	58.4	62.4	0.1	53.8	0	184.4
	Escapement	7.5	30.0	(12.5)	137.0	0	37.0	0.5	224.5
	Total	7.5	39.7	(70.9)	199.4	0.1	90.8	0.5	408.9
1966	Catch	0	8.0	11.0	152.6	0	60.0	0	231.6
	Escapement	3.0	(11.7)	24.3	185.0	0.6	36.5	2.3	263.4
	Total	3.0	(19.7)	35.3	337.6	0.6	96.5	2.3	495.0
1967	Catch	0	3.1	0	156.1	12.5	40.2	0	211.9
	Escapement	(3.8)	(12.0)	26.4	200.0	0.2	42.0	(0.5)	284.9
	Total	(3.8)	(15.1)	26.4	356.1	12.7	82.2	(0.5)	496.8
1968	Catch	0	0	78.6	90.5	3.4	51.1	0	223.6
	Escapement	4.1	(15.0)	(15.0)	166.0	0.4	31.0	(2.0)	233.5
	Total	4.1	(15.0)	(93.6)	256.5	3.8	82.1	(2.0)	457.1
1969	Catch	0	5.2	24.0	205.5	4.4	72.8	0	311.9
	Escapement	(3.8)	(15.0)	(15.6)	406.0	0.1	78.5	(2.5)	521.5
	Total	(3.8)	(20.2)	(39.6)	611.5	4.5	151.3	(2.5)	833.4
1970	Catch	0	0	44.8	110.0	1.7	52.7	0	209.2
	Escapement	1.5	14.1	16.1	294.0	0	82.4	1.4	409.5
	Total	1.5	14.1	60.9	404.0	1.7	135.1	1.4	618.7
1971	Catch	0	0	57.1	238.6	1.7	47.5	0	344.9
	Escapement	2.0	30.8	26.5	281.0	0.2	60.1	0.5	401.1
	Total	2.0	30.8	83.6	519.6	1.9	107.6	0.5	746.0
1972	Catch	0	0	12.0	136.2	1.1	23.2	0	172.5
	Escapement	0.4	3.5	13.1	135.4	0	28.0	0	180.4
	Total	0.4	3.5	25.1	271.6	1.1	51.2	0	352.9

Table 35. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1973	Catch	0	1.5	21.5	117.3	4.2	23.9	0	168.4
	Escapement	1.2	7.2	16.0	130.1	0	18.7	0	173.2
	Total	1.2	8.7	37.5	247.4	4.2	42.6	0	341.6
1974	Catch	0	2.5	47.0	140.9	7.7	25.2	0	223.3
	Escapement	1.3	1.4	14.6	266.5	0	39.9	1.8	325.5
	Total	1.3	3.9	61.6	407.4	7.7	65.1	1.8	548.8
1975	Catch	0	0.6	8.7	166.0	3.7	51.5	0	230.5
	Escapement	0.9	5.1	40.8	310.0	0.1	138.6	2.0	497.5
	Total	0.9	5.7	49.5	476.0	3.8	190.1	2.0	728.0
1976	Catch	0	5.0	219.7	310.9	9.9	74.9	0	620.4
	Escapement	6.3	30.3	15.7	328.0	0.5	108.9	7.4	497.1
	Total	6.3	35.3	235.4	638.9	10.4	183.8	7.4	1,117.5
1977	Catch	0	3.4	97.0	268.7	11.0	56.4	0	436.5
	Escapement	3.9	23.6	20.7	265.2	13.5	155.0	4.1	486.5
	Total	3.9	27.0	117.7	533.9	24.5	211.4	4.1	922.5
1978	Catch	0	0.8	32.2	556.4	53.7	213.4	0	856.5
	Escapement	3.8	18.8	21.2	814.0	4.9	304.3	1.5	1,168.5
	Total	3.8	19.6	53.4	1,370.4	58.6	517.7	1.5	2,025.0
1979	Catch	0.1	36.9	194.4	1,320.9	32.1	320.9	0	1,905.3
	Escapement	6.0	(46.7)	97.5	1,013.0	5.0	360.1	3.0	1,531.3
	Total	6.1	(83.6)	291.9	2,333.9	37.1	681.0	3.0	3,436.6
1980	Catch	0	24.6	252.2	741.9	10.5	318.5	0	1,347.7
	Escapement	30.0	(47.0)	(100.0)	751.0	1.5	352.6	3.9	1,286.0
	Total	30.0	(71.6)	(352.2)	1,492.9	12.0	671.1	3.9	2,633.7
1981	Catch	0	3.8	68.9	1,327.8	18.6	374.7	0	1,793.8
	Escapement	100.0	(26.6)	(151.0)	741.5	0.6	251.0	(4.0)	1,274.7
	Total	100.0	(30.4)	(219.0)	2,069.3	19.2	625.7	(4.0)	3,068.5
1982	Catch	0	8.8	142.5	1,009.3	11.3	229.2	0.4	1,401.5
	Escapement	(13.0)	(62.0)	(43.0)	361.3	0.5	179.6	6.0	665.4
	Total	(13.0)	(70.8)	(185.5)	1,370.6	11.8	408.8	6.4	2,066.9
1983	Catch	0.1	0.1	729.6	1,126.2	15.0	192.9	0	2,063.9
	Escapement	9.0	8.6	40.1	358.0	0.5	128.8	2.6	547.6
	Total	9.1	8.7	769.7	1,484.2	15.5	321.7	2.6	2,611.5

Table 35. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1984	Catch	0	1.7	743.7	637.4	31.4	118.8	0	1,533.0
	Escapement	16.0	31.1	22.3	414.0	0.7	251.0	0.6	735.7
	Catch	16.0	32.8	766.0	1,051.4	32.1	369.8	0.6	2,268.7
1985	Catch	0.3	5.1	978.2	822.5	4.5	706.3	0	2,516.9
	Escapement	12.6	45.5	22.7	451.5	0.7	314.8	3.7	851.5
	Total	12.9	50.6	1,000.9	1,274.0	5.2	1,021.1	3.7	3,368.4
1986	Catch	0.7	38.0	1,148.8	938.2	1.3	178.4	0	2,305.4
	Escapement	25.7	26.4	66.9	279.4	0.3	117.9	2.3	518.9
	Total	26.4	64.4	1,215.7	1,217.6	1.6	296.3	2.3	2,824.3
1987	Catch	0.2	2.3	719.3	214.0	0.7	128.5	0.1	1,065.1
	Escapement	15.3	28.3	30.7	266.7	0.7	155.7	8.7	506.1
	Total	15.5	30.6	750.0	480.7	1.4	284.2	8.8	1,571.2
1988	Catch	0	10.6	753.6	495.0	3.9	186.6	0	1,449.7
	Escapement	2.0	35.9	26.9	347.5	0.4	142.5	6.9	562.1
	Total	2.0	46.5	780.5	842.5	4.3	329.1	6.9	2,011.8
1989	Catch	0.8	13.6	749.0	557.8	5.7	325.0	14.3	1,666.2
	Escapement	4.0	11.2	16.7	487.0	0.5	206.8	7.6	733.8
	Total	4.8	24.8	765.7	1,044.8	6.2	531.8	21.9	2,400.0

Figures in parenthesis are extrapolated estimates. Except for Bear and Nelson Rivers where weir and tower counts are used, escapements are indexed totals.

Table 36. 1979-1989 NORTH PENINSULA COHO SALMON CATCHES BY DISTRICT AND SECTION (Numbers of Fish in Thousands)

SECTION	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Dublin Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urilia Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	7.6	4.8	0.0
Swanson Lagoon	6.5	0.0	0.5	0.0	0.7	12.7	26.2	22.0	8.3	12.3	7.0
Bechevin Bay	0.0	0.1	0.0	0.1	0.7	0.4	1.4	0.0	0.8	0.1	1.5
Izembek-Moffet Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	3.0	0.1
Northwestern District Total	6.5	0.1	0.5	0.1	1.4	13.1	27.6	25.3	19.6	20.2	8.6
Black Hills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Caribou Flats	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nelson Lagoon	80.0	80.3	133.5	170.7	64.0	113.3	88.2	99.3	83.7	95.4	119.3
Herendeen-Moller B.	0.1	0.1	0.1	0.4	0.4	0.7	0.5	0.0	0.0	0.0	0.0
Bear River	1.9	4.9	4.6	11.6	4.2	10.6	15.0	11.3	5.0	15.7	14.5
Three Hills	0.1	0.0	0.0	0.2	0.0	3.0	1.4	1.9	2.1	3.3	1.4
Ilnik	0.0	0.4	0.0	13.1	2.7	6.2	6.2	5.4	21.3	35.0	26.0
Inner Port Heiden	16.2	13.3	3.8	18.7	1.7	21.6	15.4	19.4	27.5	27.3	25.9
Outer Port Heiden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	8.6	14.3
Cinder River	8.0	28.6	12.9	23.4	0.7	30.0	13.5	0.3	12.6	28.5	17.5
Northern District Total	106.3	127.6	154.9	238.1	73.7	185.4	140.2	138.8	152.2	213.8	218.9
NORTH PENINSULA TOTAL	**112.8**	**127.7**	**155.4**	**238.2**	**75.1**	**198.5**	**167.8**	**164.1**	**171.8**	**234.0**	**227.5**

Table 37. NORTHWESTERN DISTRICT PINK SALMON RUNS (In Thousands of Fish)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1962	Catch	0	30.8	30.8
	Escapement	0	4.0	4.0
	Total	0	34.8	34.8
1963	Catch	0	6.0	6.0
	Escapement	0	4.4	4.4
	Total	0	10.4	10.4
1964	Catch	0.1	6.7	6.8
	Escapement	0	(15.0)	(15.0)
	Total	0.1	21.7	21.8
1965	Catch	0	2.0	2.0
	Escapement	0	0.9	0.9
	Total	0	2.9	2.9
1966	Catch	0	16.0	16.0
	Escapement	0.4	1.3	1.7
	Total	0.4	17.3	17.7
1967	Catch	0	0.3	0.3
	Escapement	0.2	0.5	0.7
	Total	0.2	0.8	1.0
1968	Catch	0	0	0
	Escapement	1.5	25.0	26.5
	Total	1.5	25.0	26.5
1969	Catch	0	0	0
	Escapement	2.3	2.1	4.4
	Total	2.3	2.1	4.4
1970	Catch	0	7.8	7.8
	Escapement	0	11.1	11.1
	Total	0	18.9	18.9
1971	Catch	0	0.3	0.3
	Escapement	0.1	8.4	8.5
	Total	0.1	8.7	8.8
1972	Catch	0	0	0
	Escapement	0	1.2	1.2
	Total	0	1.2	1.2

Table 37. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1973	Catch	0	0	0
	Escapement	0	(0.2)	(0.2)
	Total	0	(0.2)	(0.2)
1974	Catch	0	10.3	10.3
	Escapement	0	(23.0)	(23.0)
	Total	0	(33.3)	(33.3)
1975	Catch	0.0	0.0	0.0
	Escapement	0.1	0.5	0.6
	Total	0.1	0.5	0.6
1976	Catch	0	0	0
	Escapement	0.1	37.2	37.3
	Total	0.1	37.2	37.3
1977	Catch	0	0	0
	Escapement	0.2	6.2	6.4
	Total	0.2	6.2	6.4
1978	Catch	2.2	465.6	467.8
	Escapement	0	90.4	90.4
	Total	2.2	556.0	558.2
1979	Catch	0	1.6	1.6
	Escapement	0	9.3	9.3
	Total	0	10.9	10.9
1980	Catch	0	297.9	297.9
	Escapement	0	94.0	94.0
	Total	0	391.9	391.9
1981	Catch	0	9.1	9.1
	Escapement	0	5.7	5.7
	Total	0	14.8	14.8
1982	Catch	0	5.1	5.1
	Escapement	0.2	51.5	51.7
	Total	0.2	56.6	56.8
1983	Catch	0	*1.3	1.3
	Escapement	0	3.9	3.9
	Total	0	5.2	5.2

Table 37. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1984	Catch	0.1	9.7	9.8
	Escapement	0.0	33.0	33.0
	Total	0.1	42.7	42.8
1985	Catch	0	2.0	2.0
	Escapement	0	1.4	1.4
	Total	0	3.4	3.4
1986	Catch	0	9.9	9.9
	Escapement	0	12.9	12.9
	Total	0	22.8	22.8
1987	Catch	0	0.8	0.8
	Escapement	0	1.1	1.1
	Total	0	1.9	1.9
1988	Catch	1.2	29.0	30.2
	Escapement	1.8	26.7	28.5
	Total	3.0	55.7	58.7
1989	Catch	0	3.2	3.2
	Escapement	0	1.9	1.9
	Total	0	5.1	5.1

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 38. NORTHWESTERN DISTRICT CHUM SALMON RUNS (In Thousands of Fish)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1962	Catch	6.2	8.5	14.7
	Escapement	68.0	48.0	116.5
	Total	74.2	57.0	131.2
1963	Catch	3.2	41.3	44.5
	Escapement	133.5	22.3	155.8
	Total	136.7	63.6	200.3
1964	Catch	60.2	25.7	85.9
	Escapement	95.5	(16.0)	111.5
	Total	155.7	41.7	197.4
1965	Catch	4.7	44.6	49.3
	Escapement	24.0	(1.8)	25.8
	Total	28.7	46.4	75.1
1966	Catch	8.9	47.2	56.1
	Escapement	54.0	10.0	64.0
	Total	62.9	57.2	120.1
1967	Catch	9.9	8.9	18.8
	Escapement	32.8	15.4	48.2
	Total	42.7	24.3	67.0
1968	Catch	48.8	0.2	49.0
	Escapement	142.7	19.8	162.5
	Total	191.5	20.0	211.5
1969	Catch	4.5	1.4	5.9
	Escapement	95.3	8.0	103.3
	Total	99.8	9.4	109.2
1970	Catch	10.0	2.5	12.5
	Escapement	58.1	(5.6)	63.7
	Total	68.1	8.1	76.2
1971	Catch	36.3	7.5	43.8
	Escapement	54.1	5.9	60.0
	Total	90.4	13.4	103.8
1972	Catch	57.9	1.5	59.4
	Escapement	65.8	11.2	77.0
	Total	123.7	12.7	136.4

Table 38. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1973	Catch	96.6	6.5	103.1
	Escapement	68.1	(7.5)	75.6
	Total	164.7	(14.0)	178.7
1974	Catch	11.2	3.0	14.2
	Escapement	76.0	(6.1)	82.1
	Total	87.2	9.1	96.3
1975	Catch	3.4	0.5	3.9
	Escapement	74.3	17.3	91.6
	Total	77.7	17.8	95.5
1976	Catch	38.1	7.9	46.0
	Escapement	127.7	38.3	166.0
	Total	165.8	46.2	212.0
1977	Catch	20.3	22.6	42.9
	Escapement	381.4	54.3	435.7
	Total	401.7	76.9	478.6
1978	Catch	82.3	48.4	130.7
	Escapement	134.1	29.5	163.6
	Total	216.4	77.9	294.3
1979	Catch	17.8	12.5	30.3
	Escapement	178.0	12.4	190.4
	Total	195.8	24.9	220.7
1980	Catch	282.5	85.0	367.5
	Escapement	364.2	41.1	405.3
	Total	646.7	126.1	772.8
1981	Catch	296.4	59.1	355.5
	Escapement	235.0	29.6	264.6
	Total	531.4	88.7	620.1
1982	Catch	57.5	37.7	95.2
	Escapement	166.4	23.8	190.2
	Total	223.9	61.5	285.4

Table 38. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1983	Catch	154.8	14.9	169.7
	Escapement	173.3	20.2	193.5
	Total	328.1	35.1	363.2
1984	Catch	102.7	79.8	182.5
	Escapement	427.5	33.4	460.9
	Total	530.2	113.2	643.4
1985	Catch	126.6	116.5	243.1
	Escapement	194.7	25.7	220.4
	Total	321.3	142.2	463.5
1986	Catch	69.1	44.5	113.6
	Escapement	142.4	23.3	165.7
	Total	211.5	67.8	279.3
1987	Catch	148.6	64.6	213.2
	Escapement	286.0	55.5	341.2
	Total	434.6	120.1	554.7
1988	Catch	112.2	66.1	178.3
	Escapement	304.4	51.8	356.2
	Total	416.6	117.9	534.5
1989	Catch	14.5	11.3	25.8
	Escapement	90.6	19.4	110.0
	Total	105.1	30.7	135.8

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 39. NORTHERN DISTRICT CHUM SALMON RUNS (In Thousands of Fish)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1962	Catch	0.2	8.6	0.6	7.0	0	3.7	0	20.1
	Escapement	0.5	(1.9)	(1.5)	1.5	18.3	9.7	(1.0)	34.4
	Total	0.7	(10.5)	(2.1)	8.5	18.3	13.4	(1.0)	54.5
1963	Catch	0	0	0.7	0.6	0	4.1	0	5.4
	Escapement	1.2	(7.4)	(1.5)	(3.0)	26.0	7.0	(1.3)	47.4
	Total	1.2	(7.4)	(2.2)	(3.6)	26.0	11.1	(1.3)	52.8
1964	Catch	0	0	2.3	6.5	39.8	3.4	0	52.0
	Escapement	0.2	1.0	(1.5)	3.0	35.9	2.0	(1.0)	44.6
	Total	0.2	1.0	(3.8)	9.5	75.7	5.4	(1.0)	96.6
1965	Catch	0	0.8	2.3	1.5	13.6	2.2	0	20.4
	Escapement	0	8.5	(1.5)	1.0	8.0	4.0	(0.5)	23.5
	Total	0	9.3	(3.8)	2.5	21.6	6.2	(0.5)	43.9
1966	Catch	0	0	0.3	3.7	17.9	4.8	0	26.7
	Escapement	4.4	(3.4)	(1.5)	1.0	56.2	17.0	2.0	85.5
	Total	4.4	(3.4)	(1.8)	4.7	74.1	21.8	2.0	112.2
1967	Catch	0	0	0	13.6	2.4	5.1	0	21.1
	Escapement	2.5	3.0	9.6	2.5	25.0	29.8	(2.0)	74.4
	Total	2.5	3.0	9.6	16.1	27.4	34.9	(2.0)	95.5
1968	Catch	0	0	3.1	7.5	10.5	3.5	0	24.6
	Escapement	0	(11.0)	0	9.5	47.7	18.1	2.0	88.3
	Total	0	(11.0)	3.1	17.0	58.2	21.6	2.0	112.9
1969	Catch	0	1.2	1.3	10.3	7.8	3.5	0	24.1
	Escapement	2.5	(11.0)	(1.5)	1.0	14.0	13.0	0.5	43.5
	Total	2.5	(12.2)	(2.8)	11.3	21.8	16.5	0.5	67.6
1970	Catch	0	0	3.2	14.6	12.2	1.5	0	31.5
	Escapement	1.3	22.0	0.5	2.0	42.8	36.0	(1.5)	106.1
	Total	1.3	22.0	3.7	16.6	55.0	37.5	(1.5)	137.6
1971	Catch	0	0	2.5	12.9	1.2	3.8	0	20.4
	Escapement	2.5	12.1	0.8	0	14.5	19.0	(0.5)	49.4
	Total	2.5	12.1	3.3	12.9	15.7	22.8	(0.5)	69.8
1972	Catch	0	0	0.8	14.0	7.3	3.2	0	25.3
	Escapement	5.3	12.2	0.5	3.7	8.0	16.8	(0.5)	47.0
	Total	5.3	12.2	1.3	17.7	15.3	20.0	(0.5)	72.3

Table 39. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1973	Catch	0	2.5	0.9	34.2	13.2	1.8	0	52.6
	Escapement	0.6	22.8	0.8	0.8	3.7	12.7	0	46.8
	Total	0.6	25.3	1.7	35.0	16.9	14.5	0	99.4
1974	Catch	0	1.0	1.3	11.4	3.2	0.5	0	17.4
	Escapement	4.6	4.5	0	1.5	3.7	8.3	0.4	23.0
	Total	4.6	5.5	1.3	12.9	6.9	8.8	0.4	40.4
1975	Catch	0	0	0.1	3.8	0.2	0.7	0	4.8
	Escapement	0.3	1.5	2.0	2.0	7.3	4.5	0	17.6
	Total	0.3	1.5	2.1	5.8	7.5	5.2	0	22.4
1976	Catch	0	1.1	2.9	12.3	5.5	5.8	0	27.6
	Escapement	1.9	30.7	5.7	18.0	28.5	42.5	0.1	127.4
	Total	1.9	31.8	8.6	30.3	34.0	48.3	0.1	155.0
1977	Catch	0	0	7.1	32.3	34.8	10.7	0	84.9
	Escapement	(1.7)	32.0	(1.5)	17.0	108.5	83.3	1.5	245.5
	Total	(1.7)	32.0	(8.6)	49.3	143.3	94.0	1.5	330.4
1978	Catch	0	0	1.2	14.6	6.6	10.3	0	32.7
	Escapement	7.4	22.0	(1.5)	(15.5)	89.3	10.2	(1.0)	146.9
	Total	7.4	22.0	(2.7)	(30.1)	95.9	20.5	(1.0)	179.6
1979	Catch	0	0.8	0.7	17.4	10.9	5.7	0	35.5
	Escapement	(3.6)	(32.7)	0	7.0	30.6	37.0	4.0	114.9
	Total	(3.6)	(33.5)	0.7	24.4	41.5	42.7	4.0	150.4
1980	Catch	0	2.6	29.7	161.7	59.6	80.1	0	333.7
	Escapement	(10.0)	(33.7)	(10.0)	20.0	116.1	164.0	10.4	364.2
	Total	(10.0)	(36.3)	(39.7)	181.7	175.7	244.1	10.4	697.9
1981	Catch	0	0.2	7.1	155.0	126.2	62.8	0	351.3
	Escapement	(11.8)	(73.4)	(11.0)	27.2	85.0	57.0	(11.0)	276.4
	Total	(11.8)	(73.6)	(18.1)	182.2	211.2	119.8	(11.0)	627.7
1982	Catch	0	0.7	21.2	142.4	50.2	21.4	0.1	236.0
	Escapement	(5.5)	(35.5)	1.0	42.4	152.0	29.1	(2.0)	267.5
	Total	(5.5)	(36.2)	22.2	184.8	202.2	50.5	(2.1)	503.5
1983	Catch	0	0	26.1	87.7	51.3	14.0	0	179.1
	Escapement	17.2	14.5	11.2	(15.0)	126.0	14.0	1.2	199.1
	Total	17.2	14.5	37.3	(102.7)	177.3	28.0	1.2	378.2

Table 39. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1984	Catch	0	0.2	174.2	242.3	119.2	78.4	0	614.3
	Escapement	13.0	85.0	4.0	7.0	241.3	49.0	10.0	409.3
	Total	13.0	85.2	178.2	249.3	360.5	127.4	10.0	1,023.6
1985	Catch	0	0	86.6	68.3	266.4	6.6	0	427.9
	Escapement	3.2	26.5	0.2	5.2	71.7	13.0	4.1	123.9
	Total	3.2	26.5	86.8	73.5	338.1	19.6	4.1	551.8
1986	Catch	0.1	0.8	38.7	86.7	27.8	3.6	0	157.7
	Escapement	2.2	12.0	0.0	6.4	55.8	0.8	0.7	77.9
	Total	2.3	12.8	38.7	93.1	83.6	4.4	0.7	235.6
1987	Catch	0	1.0	48.0	85.5	14.2	6.7	0	155.4
	Escapement	12.4	55.4	0.1	5.0	88.6	5.2	4.7	171.4
	Total	12.4	56.4	48.1	90.5	102.8	11.9	4.7	326.8
1988	Catch	0	4.8	48.2	73.7	75.8	12.6	0	215.1
	Escapement	5.3	41.6	0.1	3.0	76.5	11.0	6.6	144.1
	Total	5.3	46.4	48.3	76.7	152.3	23.6	6.6	359.2
1989	Catch	0	1.2	16.9	40.3	66.0	5.0	1.9	131.3
	Escapement	5.0	8.9	0	3.5	83.4	0.8	0.7	102.3
	Total	5.0	10.1	16.9	43.8	149.4	5.8	2.6	233.6

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 40. NELSON LAGOON SALMON RUNS (Fish in Thousands)

	KINGS			SOCKEYES			CHUMS			COHO
Year	Escapement	Catch	Total	Escapement	Catch	Total	Escapement	Catch	Total	Catches
1960	–	5.4	–	48.0	93.5	141.5	15.0	16.3	31.3	31.4
1961	0.3	3.7	4.0	138.2	76.8	215.0	10.1	1.9	12.0	20.3
1962	2.7	3.7	6.4	54.2	69.6	123.8	9.7	3.7	13.4	30.0
1963	4.0	2.5	6.5	31.0	71.5	102.5	7.0	4.1	11.1	33.4
1964	8.4	3.3	11.7	80.0	88.7	168.7	2.0	3.4	5.4	30.2
1965	11.9	4.0	15.9	37.0	53.8	90.8	4.0	2.2	6.2	28.4
1966	4.7	2.4	7.1	36.5	60.0	96.5	17.0	4.8	21.8	27.6
1967	5.1	3.6	8.7	42.0	40.2	82.2	29.8	5.1	34.9	34.8
1968	7.3	2.8	10.1	31.0	51.1	82.1	18.1	3.5	21.6	55.9
1969	8.1	2.5	10.6	78.5	72.8	151.3	13.0	1.5	14.5	34.3
1970	2.9	2.6	5.5	82.4	52.7	135.1	36.0	7.7	43.7	24.7
1971	2.3	1.4	3.7	60.1	47.5	107.6	19.0	3.8	22.8	6.9
1972	1.4	1.3	2.7	28.0	23.2	51.2	16.8	3.2	20.0	7.3
1973	1.5	1.5	3.0	18.7	23.9	42.6	12.7	1.8	14.5	16.6
1974	1.1	2.1	3.2	39.9	25.2	65.1	8.3	0.5	8.8	15.8
1975	2.5	1.2	3.7	138.6	51.5	190.1	4.5	0.7	5.2	21.3
1976	3.3	2.2	5.5	108.9	74.9	183.8	42.5	5.8	48.3	19.3
1977	5.6	1.7	7.3	155.0	56.4	211.4	83.3	10.7	94.0	22.3
1978	4.2	3.4	7.6	304.3	213.4	517.7	10.2	10.3	20.5	30.9
1979	11.0	5.4	16.4	360.1	320.9	681.0	37.0	5.7	42.7	80.0
1980	5.5	8.7	14.2	352.6	318.5	671.1	164.0	80.1	244.1	80.3
1981	5.2	11.0	16.2	251.0	374.7	625.7	57.0	62.8	119.8	133.5
1982	7.0	13.5	20.5	179.6	229.2	408.8	29.1	21.4	50.5	170.7
1983	12.5	12.1	24.6	128.8	192.9	321.7	14.0	14.0	28.0	64.0
1984	6.3	7.8	14.1	251.0	118.8	369.8	49.0	78.4	127.4	113.3
1985	3.2	10.9	14.1	318.5	706.3	1024.8	13.0	6.6	19.6	88.2
1986	1.8	4.8	6.6	117.9	178.4	296.3	1.8	3.6	5.4	99.3
1987	4.1	5.8	9.9	155.7	128.5	284.2	5.2	6.7	11.9	83.7
1988	3.3	6.5	9.8	142.5	186.6	329.1	11.0	12.6	23.6	95.4
1989	3.1	3.8	6.9	206.8	325.0	531.8	0.8	5.0	5.8	119.3

Table 41. DAILY NELSON LAGOON SECTION KING SALMON CATCHES 1979-89 (ALL GEAR)

Date	1979 Boats	1979 Catch	1980 Boats	1980 Catch	1981 Boats	1981 Catch	1982 Boats	1982 Catch	1983 Boats	1983 Catch
May 30										
31							5	151		
June 1							5	97		
2							10	159	1	25
3							1	2		
4										
5										
6									9	297
7							17	793	11	309
8							10	400	12	305
9							8	345	11	255
10							9	296		
11					17	1,513				
12					20	1,597				
13	13	1,078							14	1,164
14	13	668					5	96	14	616
15	15	319			20	788	18	778	11	397
16			19	1,813	12	549	23	965	13	579
17			17	786	19	858	22	776		
18	18	236	18	696	20	1,031	22	904		
19	17	358	16	378	18	765				
20	18	393	13	413					15	672
21	22	344					18	885	15	187
22	23	175			23	584	13	604	17	727
23	22	169	21	282	22	461	22	909	18	911
24	21	179	25	658	20	331	21	575	17	866
25	15	157	23	486	19	241	21	457		
26	22	357	25	439	23	308				
27	17	227	19	225	17	254			24	701
28	18	143	23	353	20	219	21	360	25	833
29	11	50	25	448	9	33	25	427	24	489
30	19	71	25	270	24	309	29	557	22	369
July 1	22	66	27	143	18	162	26	410		
2	15	12	17	85	11	12	25	475		
3	25	24	23	174	24	135				
4	17	13	12	57	20	148			23	227
5	19	65	23	114	20	47	28	253	24	369
6	16	38	23	115	14	89	30	257	23	269
7	19	8	23	120	27	119	26	258	24	191
8	20	95	22	108	26	138	25	100	22	176
9	13	18	24	156	26	86				
10	21	27	6	47	12	23				
11	15	6	8	37	22	58			18	78
12	16	9	9	22	15	36	24	50	21	90
13	17	23	15	129	15	19	26	99	22	53
14	11	19	15	34	18	28	23	60	20	37
15	18	6	13	45	10	5	23	50	17	13
SEASON TOTAL		5,399		8,706		10,981		13,488		12,055

Table 41. (continued)

	1984		1985		1986		1987		1988	
Date	Boats	Catch	Boats	Catch	Boats	Catch	Boats	Catch	Boats	Catch
May 30									1	7
31										
June 1							17	136		
2							10	94		
3			6	43	6	20	6	61		
4	8	95	4	29	6	10	4	31		
5	11	68	4	12	18	270		204		
6	3	20	6	88					18	296
7	6	23							14	160
8							1	32	14	70
9					12	158	3	41		
10			17	694	10	137	22	502		
11	15	208	3	52	19	191	19	285		
12	15	223	7	100	18	106				
13	10	82	9	119					5	72
14	18	212							4	80
15							24	1,086	11	280
16					2	78			10	340
17			22	821	22	486	23	363		
18	13	396	19	692	26	279	22	358		
19	15	431	18	447	24	333				
20			20	390	27	334			28	721
21			22	499	24	250			25	595
22			19	427	22	157	24	672	24	455
23			17	461	25	330	22	599	27	654
24			29	520	25	277	21	189		
25	12	44	24	321	25	291	26	249		
26	7	8	21	427	26	144				
27	5	3	19	303					29	856
28			20	317					29	599
29							28	251	22	345
30					25	121	30	239	32	295
July 1			31	905	32	264	27	128	22	193
2	10	149	6	230	31	183	31	138		
3	10	83	28	585	27	130				
4			22	324					33	116
5			16	269					26	102
6			24	276			38	172	27	60
7			20	150	33	123			27	61
8			26	359	30	63				
9	28	1,575	18	58			34	89		
10	25	872	29	182						
11	29	685	25	103			41	261	31	41
12	20	134	26	272					39	20
13	27	585	12	47	31	47	27	22	27	10
14	28	605	27	99			23	18	27	7
15	22	304	28	105			25	15	26	7
SEASON TOTAL		7,801		10,850		4,849		5,823		6,474

Table 41. (continued)

	1989		1990		1991		1992		1993	
Date	Boats	Catch	Boats	Catch	Boats	Catch	Boats	Catch	Boats	Catch
May 30										
31										
June 1										
2										
3										
4										
5	18	204								
6	15	178								
7	6	74								
8										
9										
10										
11										
12	24	416								
13	24	516								
14	22	423								
15										
16										
17										
18	21	157								
19	11	30								
20	6	6								
21										
22										
23										
24										
25										
26	26	75								
27	26	120								
28	27	197								
29	23	207								
30	30	287								
July 1										
2										
3	36	221								
4	34	81								
5	27	71								
6	32	53								
7	29	60								
8	31	66								
9	31	32								
10	32	26								
11	28	205								
12	29	20								
13	30	21								
14	30	22								
15	25	5								
SEASON TOTAL		3,822								

Table 42. DAILY PORT HEIDEN SECTION KING SALMON CATCHES 1979-89 (ALL GEAR)

Date	1979 Boats	1979 Catch	1980 Boats	1980 Catch	1981 Boats	1981 Catch	1982 Boats	1982 Catch	1983 Boats	1983 Catch
May 25					6	94				
26					11	218				
27					10	93				
28	2	14	4	39	7	85				
29	10	524	5	96						
30	10	288								
31	15	577					5	66	11	369
June 1	13	218			12	514	10	139	14	437
2			4	69	14	344	14	221	17	484
3			3	43	13	289	12	220		
4	19	736	12	270	13	117				
5	19	777	17	370						
6	19	561							21	1,069
7	17	724					20	1,194	21	415
8	19	634			16	902	19	721	13	271
9			13	631	17	639	20	603	19	370
10			22	488	17	411	17	447		
11	18	854	21	458	19	519				
12	6	185	20	662						
13	16	1,070							18	1,740
14	17	653					20	2,013	18	720
15	10	372			18	1,050	20	1,589	9	204
16			15	465	17	478	18	1,035	5	217
17			22	679			19	821		
18	14	515	22	559						
19	15	328	22	248						
20	14	265							12	368
21	13	224					17	1,298		
22	2	43			7	141	12	324		
23			11	75	5	181	4	163	1	113
24			9	66			2	79		
25	1	2	8	21						
26	2	63	9	46						
27	5	41	8	61						
28	6	74								
29					2	1				
30			9	3	4	1				
SEASON TOTAL		9,742		5,349		6,077		10,933		6,777

The driftnet fleet moves to the Bristol Bay area during late June. Remaining effort usually consists of several setnets in front of Meshik village.

Table 42. (continued)

Date	1984 Boats	1984 Catch	1985 Boats	1985 Catch	1986 Boats	1986 Catch	1987 Boats	1987 Catch	1988 Boats	1988 Catch
May 25										
26										
27										
28										
29										
30										
31										
June 1							7	181	1	42
2							8	124		
3					1	5	13	188		
4	13	250			6	61	5	106		
5	14	459			2	40				
6	19	325							17	496
7	20	366							17	556
8							24	568	14	326
9					19	356	29	643		
10			14	544	16	181	33	325		
11	23	1,390	13	457	8	53	6	61		
12	23	785	14	510	3	18				
13	22	601	14	338					17	1,041
14	20	472							12	582
15							24	605	19	271
16					22	431	20	380		
17			21	1,280	9	216				
18	23	893	9	193	13	201				
19	15	412	11	207	6	76				
20	5	174	1	44					19	733
21	1	53							19	1,035
22									17	516
23					1	47				
24			1	323	1	20				
25	1	85	1	153	1	11				
26	1	63	1	132	1	10				
27	1	65	1	149	1	4			16	78
28	1	65			1	12			7	28
29							10	15		
30					1	4	4	5	2	17
SEASON TOTAL		6,458		4,330		1,821		3,217		5,816

The driftnet fleet moves to the Bristol Bay area during late June. Remaining effort usually consists of several setnets in front of Meshik village.

Table 42. (continued)

Date	1989 Boats	1989 Catch	1990 Boats	1990 Catch	1991 Boats	1991 Catch	1992 Boats	1992 Catch	1993 Boats	1993 Catch
May 25										
26										
27										
28										
29										
30										
31										
June 1										
2										
3										
4										
5	15	354								
6	13	238								
7	4	113								
8										
9										
10										
11										
12	18	660								
13	16	525								
14	15	318								
15										
16										
17										
18										
19	11	483								
20	8	176								
21	2	41								
22										
23										
24										
25										
26	1	3								
27										
28	1	1								
29										
30	1	0								
SEASON TOTAL		2,927								

Table 43. 1989 NELSON LAGOON DAILY SOCKEYE SALMON CATCHES (Numbers of Fish, All Gear)

Date		Permits	Catch
June	5	28	577
	6	15	451
	7	6	160
	12	24	2,209
	13	24	1,988
	14	22	2,668
	19	21	630
	20	11	16
	21	6	4
	26	26	9,174
	27	26	15,614
	28	27	16,442
	29	23	18,454
	30	30	16,583
July	3	36	37,715
	4	34	19,837
	5	27	14,535
	6	32	19,726
	7	29	13,202
	8	31	11,682
	9	31	9,349
	10	32	8,042
	11	28	13,141
	12	29	9,755
	13	30	10,302
	14	30	6,579
	15	25	4,773
	16	24	4,410
	17	19	5,010
	18	23	4,656
	19	24	3,556
	20	24	2,802
	21	22	2,342
	22	22	1,971
	23	22	2,983
	24	22	2,426
	25	22	2,088
	26	17	998
	27	15	1,398
	31	24	2,715
August	1	23	2,756
	2	23	2,757
	3	19	1,913
August	7	18	2,252
	8	16	1,863
	9	22	1,785
	10	24	1,956
	14	28	1,637
	15	24	1,161
	16	26	907
	21	32	1,113
	22	33	816
	23	32	679
	28	33	148
	29	33	106
	30	33	266
	31	31	354
Sept.	4	31	30
	5	31	667
	6	31	20
	11	27	244
	12	19	1
	13	15	5
	SEASON TOTAL		324,979

Table 44. 1989 NELSON LAGOON DAILY COHO SALMON CATCHES
(Numbers of Fish, All Gear)

Date		Permits	Catch
July	18	23	1
	19	24	2
	20	24	2
	21	22	4
	22	22	3
	23	22	8
	24	22	9
	25	25	3
	26	17	13
	27	15	6
	31	24	61
August	1	23	134
	2	23	90
	3	19	76
	7	18	266
	8	16	542
	9	22	548
	10	24	853
	14	28	2,141
	15	24	1,835
	16	26	1,815
	21	32	6,477
	22	33	6,522
	23	32	9,103
	28	33	16,493
	29	33	8,873
	30	33	8,456
	31	31	8,864
Sept.	4	31	9,917
	5	31	15,401
	6	31	11,987
	11	27	4,592
	12	19	2,523
	13	15	1,715
		SEASON TOTAL	119,335

Table 45. 1989 INNER PORT HEIDEN DAILY COHO SALMON CATCHES
(Numbers of Fish, All Gear)

Date		Permits	Catch
August	8	1	1
	9	1	4
	14	12	1,475
	15	13	2,621
	16	8	435
	21	14	2,757
	22	15	4,105
	23	15	3,296
	24	11	2,025
	28	17	3,682
	29	19	3,662
	30	15	1,488
Sept.	1		138
	2		210
		SEASON TOTAL	**25,899**

Table 46. APPROXIMATE ILNIK AND OUTER PORT HEIDEN AUGUST-SEPTEMBER SALMON CATCHES BY AREA T FISHERMEN NOT PARTICIPATING IN PORT HEIDEN JUNE FISHERY

Year	Boats	Sockeyes	Cohos	Total
1986	18	9,000	2,000	11,000
1987	17	5,000	9,000	14,000
1988	19	27,000	27,000	54,000
1989	29	12,000	19,000	31,000

Table 47.A. Sockeye salmon daily and cumulative escapement counts through the Bear River weir, 1989.

Date	Daily			Cumulative			Daily Percent		Cumulative Percent		
	Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
May 28	1	0	1	1	0	1	0.0	0.0	0.0	0.0	0.0
29	0	0	0	1	0	1	0.0	0.0	0.0	0.0	0.0
30	0	0	0	1	0	1	0.0	0.0	0.0	0.0	0.0
31	1	0	1	2	0	2	0.0	0.0	0.0	0.0	0.0
June 1	2	0	2	4	0	4	0.0	0.0	0.0	0.0	0.0
2	0	2	2	4	2	6	0.0	0.0	0.0	0.0	0.0
3	0	0	0	4	2	6	0.0	0.0	0.0	0.0	0.0
4	0	0	0	4	2	6	0.0	0.0	0.0	0.0	0.0
5	39	0	39	43	2	45	0.0	0.0	0.0	0.0	0.0
6	13	0	13	56	2	58	0.0	0.0	0.0	0.0	0.0
7	72	0	72	128	2	130	0.0	0.0	0.0	0.0	0.0
8	10	0	10	138	2	140	0.0	0.0	0.0	0.0	0.0
9	9	0	9	147	2	149	0.0	0.0	0.0	0.0	0.0
10	49	0	49	196	2	198	0.0	0.0	0.0	0.0	0.0
11	14	2	16	210	4	214	0.0	0.0	0.0	0.0	0.0
12	44	2	46	254	6	260	0.0	0.0	0.1	0.0	0.1
13	101	2	103	355	8	363	0.0	0.0	0.1	0.0	0.1
14	18	0	18	373	8	381	0.0	0.0	0.1	0.0	0.1
15	222	0	222	595	8	603	0.0	0.0	0.1	0.0	0.1
16	98	0	98	693	8	701	0.0	0.0	0.2	0.0	0.2
17	262	6	268	955	14	969	0.1	0.0	0.2	0.0	0.2
18	195	3	198	1,150	17	1,167	0.0	0.0	0.3	0.0	0.3
19	408	9	417	1,558	26	1,584	0.1	0.0	0.3	0.0	0.4
20	72	1	73	1,630	27	1,657	0.0	0.0	0.4	0.0	0.4
21	45	1	46	1,675	28	1,703	0.0	0.0	0.4	0.0	0.4
22	136	10	146	1,811	38	1,849	0.0	0.0	0.4	0.0	0.4
23	506	27	533	2,317	65	2,382	0.1	0.0	0.5	0.0	0.5
24	176	17	193	2,493	82	2,575	0.0	0.0	0.6	0.0	0.6
25	373	39	412	2,866	121	2,987	0.1	0.0	0.6	0.0	0.7
26	300	35	335	3,166	156	3,322	0.1	0.0	0.7	0.0	0.7
27	56	13	69	3,222	169	3,391	0.0	0.0	0.7	0.0	0.8
28	163	16	179	3,385	185	3,570	0.0	0.0	0.8	0.0	0.8
29	4	1	5	3,389	186	3,575	0.0	0.0	0.8	0.0	0.8
30	43	11	54	3,432	197	3,629	0.0	0.0	0.8	0.0	0.8
July 1	57	6	63	3,489	203	3,692	0.0	0.0	0.8	0.0	0.8
2	333	43	376	3,822	246	4,068	0.1	0.0	0.8	0.1	0.9
3	13,409	1,027	14,436	17,231	1,273	18,504	3.0	0.2	3.8	0.3	4.1
4	25,753	1,334	27,087	42,984	2,607	45,591	5.7	0.3	9.5	0.6	10.1
5	11,242	580	11,822	54,226	3,187	57,413	2.5	0.1	12.0	0.7	12.7
6	2,194	157	2,351	56,420	3,344	59,764	0.5	0.0	12.5	0.7	13.3
7	3,031	120	3,151	59,451	3,464	62,915	0.7	0.0	13.2	0.8	14.0
8	5,974	376	6,350	65,425	3,840	69,265	1.3	0.1	14.5	0.9	15.4

-Continued-

Table 47.A. (page 2 of 3)

Date	Daily			Cumulative			Daily Percent		Cumulative Percent		
	Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
9	18,250	913	19,163	83,675	4,753	88,428	4.0	0.2	18.6	1.1	19.6
10	12,206	564	12,770	95,881	5,317	101,198	2.7	0.1	21.3	1.2	22.4
11	15,122	890	16,012	111,003	6,207	117,210	3.4	0.2	24.6	1.4	26.0
12	6,677	427	7,104	117,680	6,634	124,314	1.5	0.1	26.1	1.5	27.6
13	9,281	572	9,853	126,961	7,206	134,167	2.1	0.1	28.2	1.6	29.7
14	7,406	757	8,163	134,367	7,963	142,330	1.6	0.2	29.8	1.8	31.6
15	4,416	581	4,997	138,783	8,544	147,327	1.0	0.1	30.8	1.9	32.7
16	7,444	1,308	8,752	146,227	9,852	156,079	1.7	0.3	32.4	2.2	34.6
17	7,152	1,413	8,565	153,379	11,265	164,644	1.6	0.3	34.0	2.5	36.5
18	10,137	1,262	11,399	163,516	12,527	176,043	2.2	0.3	36.3	2.8	39.0
19	6,554	820	7,374	170,070	13,347	183,417	1.5	0.2	37.7	3.0	40.7
20	3,651	497	4,148	173,721	13,844	187,565	0.8	0.1	38.5	3.1	41.6
21	5,252	658	5,910	178,973	14,502	193,475	1.2	0.1	39.7	3.2	42.9
22	9,214	1,307	10,521	188,187	15,809	203,996	2.0	0.3	41.7	3.5	45.2
23	6,183	837	7,020	194,370	16,646	211,016	1.4	0.2	43.1	3.7	46.8
24	6,431	671	7,102	200,801	17,317	218,118	1.4	0.1	44.5	3.8	48.4
25	5,895	568	6,463	206,696	17,885	224,581	1.3	0.1	45.8	4.0	49.8
26	2,374	205	2,579	209,070	18,090	227,160	0.5	0.0	46.4	4.0	50.4
27	7,904	797	8,701	216,974	18,887	235,861	1.8	0.2	48.1	4.2	52.3
28	3,641	532	4,173	220,615	19,419	240,034	0.8	0.1	48.9	4.3	53.2
29	3,169	348	3,517	223,784	19,767	243,551	0.7	0.1	49.6	4.4	54.0
30	944	135	1,079	224,728	19,902	244,630	0.2	0.0	49.8	4.4	54.2
31	1,382	184	1,566	226,110	20,086	246,196	0.3	0.0	50.1	4.5	54.6
Aug 1	1,548	110	1,658	227,658	20,196	247,854	0.3	0.0	50.5	4.5	55.0
2	3,817	328	4,145	231,475	20,524	251,999	0.8	0.1	51.3	4.6	55.9
3	4,659	284	4,943	236,134	20,808	256,942	1.0	0.1	52.4	4.6	57.0
4	7,842	454	8,296	243,976	21,262	265,238	1.7	0.1	54.1	4.7	58.8
5	7,610	544	8,154	251,586	21,806	273,392	1.7	0.1	55.8	4.8	60.6
6	7,267	628	7,895	258,853	22,434	281,287	1.6	0.1	57.4	5.0	62.4
7	8,212	771	8,983	267,065	23,205	290,270	1.8	0.2	59.2	5.1	64.4
8	4,214	332	4,546	271,279	23,537	294,816	0.9	0.1	60.2	5.2	65.4
9	4,563	395	4,958	275,842	23,932	299,774	1.0	0.1	61.2	5.3	66.5
10	4,940	557	5,497	280,782	24,489	305,271	1.1	0.1	62.3	5.4	67.7
11	3,695	445	4,140	284,477	24,934	309,411	0.8	0.1	63.1	5.5	68.6
12	1,246	152	1,398	285,723	25,086	310,809	0.3	0.0	63.4	5.6	68.9
13	3,857	362	4,219	289,580	25,448	315,028	0.9	0.1	64.2	5.6	69.9
14	13,791	1,353	15,144	303,371	26,801	330,172	3.1	0.3	67.3	5.9	73.2
15	8,633	1,450	10,083	312,004	28,251	340,255	1.9	0.3	69.2	6.3	75.4
16	6,674	906	7,580	318,678	29,157	347,835	1.5	0.2	70.7	6.5	77.1
17	5,179	541	5,720	323,857	29,698	353,555	1.1	0.1	71.8	6.6	78.4
18	2,740	588	3,328	326,597	30,286	356,883	0.6	0.1	72.4	6.7	79.1
19	2,636	419	3,055	329,233	30,705	359,938	0.6	0.1	73.0	6.8	79.8

-Continued-

Table 47.A. (page 3 of 3)

Date	Daily			Cumulative			Daily Percent		Cumulative Percent		
	Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
20	4,131	680	4,811	333,364	31,385	364,749	0.9	0.2	73.9	7.0	80.9
21	13,386	687	14,073	346,750	32,072	378,822	3.0	0.2	76.9	7.1	84.0
22	7,116	533	7,649	353,866	32,605	386,471	1.6	0.1	78.5	7.2	85.7
23	3,832	425	4,257	357,698	33,030	390,728	0.8	0.1	79.3	7.3	86.6
24	1,996	212	2,208	359,694	33,242	392,936	0.4	0.0	79.8	7.4	87.1
25	1,993	218	2,211	361,687	33,460	395,147	0.4	0.0	80.2	7.4	87.6
26	4,675	506	5,181	366,362	33,966	400,328	1.0	0.1	81.2	7.5	88.8
27	5,106	465	5,571	371,468	34,431	405,899	1.1	0.1	82.4	7.6	90.0
28	3,825	529	4,354	375,293	34,960	410,253	0.8	0.1	83.2	7.8	91.0
Post-28	37,275	3,472	40,747	412,568	38,432	451,000	8.3	0.8	91.5	8.5	100.0
Total	412,568	38,432	451,000	412,568	38,432	451,000	91.5	8.5	91.5	8.5	100.0

Post-28 August escapement determined by the escapement through August 28 and Bear River Section sockeye catch decline through 10 September.

Table 47.B. Chinook, pink, chum, and coho salmon daily and cumulative escapement counts through the Bear River weir, 1989.

Date	Daily				Cumulative			
	Chinook	Pink	Chum	Coho	Chinook	Pink	Chum	Coho
June 11	1	0	0	0	1	0	0	0
12	0	0	0	0	1	0	0	0
13	0	0	0	0	1	0	0	0
14	0	0	0	0	1	0	0	0
15	0	0	0	0	1	0	0	0
16	0	0	0	0	1	0	0	0
17	0	0	0	0	1	0	0	0
18	0	0	0	0	1	0	0	0
19	0	0	0	0	1	0	0	0
20	0	0	0	0	1	0	0	0
21	0	0	0	0	1	0	0	0
22	0	0	0	0	1	0	0	0
23	0	0	5	0	1	0	5	0
24	0	0	0	0	1	0	5	0
25	0	0	0	0	1	0	5	0
26	0	0	0	0	1	0	5	0
27	0	0	0	0	1	0	5	0
28	0	0	1	0	1	0	6	0
29	0	0	0	0	1	0	6	0
30	0	0	0	0	1	0	6	0
July 1	0	1	0	0	1	1	6	0
2	0	0	0	0	1	1	6	0
3	0	0	0	0	1	1	6	0
4	0	0	0	0	1	1	6	0
5	1	0	0	0	2	1	6	0
6	0	0	0	0	2	1	6	0
7	0	1	0	0	2	2	6	0
8	0	2	0	0	2	4	6	0
9	1	2	0	0	3	6	6	0
10	0	0	0	0	3	6	6	0
11	1	0	0	0	4	6	6	0
12	0	1	0	0	4	7	6	0
13	1	0	0	0	5	7	6	0
14	0	2	0	0	5	9	6	0
15	0	0	0	0	5	9	6	0
16	0	2	0	0	5	11	6	0
17	1	2	0	0	6	13	6	0
18	1	2	0	0	7	15	6	0
19	0	4	0	0	7	19	6	0
20	0	0	0	0	7	19	6	0
21	1	8	0	0	8	27	6	0

-Continued-

Table 47.B. (page 2 of 2)

Date	Daily				Cumulative			
	Chinook	Pink	Chum	Coho	Chinook	Pink	Chum	Coho
22	1	33	0	0	9	60	6	0
23	0	31	0	0	9	91	6	0
24	2	8	0	0	11	99	6	0
25	1	30	0	0	12	129	6	0
26	0	13	0	0	12	142	6	0
27	6	19	0	0	18	161	6	0
28	0	49	0	0	18	210	6	0
29	1	22	0	0	19	232	6	0
30	0	7	0	0	19	239	6	0
31	0	27	0	0	19	266	6	0
Aug 1	0	10	1	0	19	276	7	0
2	2	9	0	0	21	285	7	0
3	0	15	7	0	21	300	14	0
4	5	23	6	0	26	323	20	0
5	2	10	1	0	28	333	21	0
6	1	53	1	0	29	386	22	0
7	3	65	2	0	32	451	24	0
8	0	45	3	0	32	496	27	0
9	3	117	7	0	35	613	34	0
10	3	50	5	0	38	663	39	0
11	3	45	5	0	41	708	44	0
12	0	86	2	0	41	794	46	0
13	3	53	12	0	44	847	58	0
14	4	66	7	0	48	913	65	0
15	1	49	9	0	49	962	74	0
16	2	21	0	0	51	983	74	0
17	2	53	6	0	53	1,036	80	0
18	1	15	19	0	54	1,051	99	0
19	0	8	2	0	54	1,059	101	0
20	1	11	7	0	55	1,070	108	0
21	0	17	0	0	55	1,087	108	0
22	0	16	18	0	55	1,103	126	0
23	0	12	24	0	55	1,115	150	0
24	0	11	27	0	55	1,126	177	0
25	2	10	14	7	57	1,136	191	7
26	1	20	17	8	58	1,156	208	15
27	0	14	13	14	58	1,170	221	29
28	0	12	7	4	58	1,182	228	33
Total	58	1,182	228	33	58	1,182	228	33

Post-8 August escapement listed under aerial surveys (see aerial survey counts).

Table 48.A. Sockeye salmon daily and cumulative escapement counts through the Nelson River weir, 1989.

Date	Daily			Cumulative			Daily Percent		Cumulative Percent		
	Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
June 19	966	15	981	966	15	981	0.5	0.0	0.5	0.0	0.5
20	2,980	72	3,052	3,946	87	4,033	1.5	0.0	2.0	0.0	2.1
21	828	28	856	4,774	115	4,889	0.4	0.0	2.5	0.1	2.5
22	187	6	193	4,961	121	5,082	0.1	0.0	2.6	0.1	2.6
23	849	46	895	5,810	167	5,977	0.4	0.0	3.0	0.1	3.1
24	446	16	462	6,256	183	6,439	0.2	0.0	3.2	0.1	3.3
25	48	2	50	6,304	185	6,489	0.0	0.0	3.3	0.1	3.4
26	723	16	739	7,027	201	7,228	0.4	0.0	3.6	0.1	3.7
27	6,136	78	6,214	13,163	279	13,442	3.2	0.0	6.8	0.1	7.0
28	5,496	129	5,625	18,659	408	19,067	2.8	0.1	9.7	0.2	9.9
29	5,251	244	5,495	23,910	652	24,562	2.7	0.1	12.4	0.3	12.7
30	10,576	395	10,971	34,486	1,047	35,533	5.5	0.2	17.9	0.5	18.4
July 1	6,527	371	6,898	41,013	1,418	42,431	3.4	0.2	21.3	0.7	22.0
2	8,164	280	8,444	49,177	1,698	50,875	4.2	0.1	25.5	0.9	26.4
3	20,582	460	21,042	69,759	2,158	71,917	10.7	0.2	36.1	1.1	37.3
4	18,229	519	18,748	87,988	2,677	90,665	9.4	0.3	45.6	1.4	47.0
5	11,830	490	12,320	99,818	3,167	102,985	6.1	0.3	51.7	1.6	53.4
6	10,637	1,103	11,740	110,455	4,270	114,725	5.5	0.6	57.2	2.2	59.4
7	8,203	491	8,694	118,658	4,761	123,419	4.3	0.3	61.5	2.5	63.9
8	5,921	765	6,686	124,579	5,526	130,105	3.1	0.4	64.5	2.9	67.4
9	6,281	915	7,196	130,860	6,441	137,301	3.3	0.5	67.8	3.3	71.1
10	2,258	161	2,419	133,118	6,602	139,720	1.2	0.1	69.0	3.4	72.4
11	7,506	640	8,146	140,624	7,242	147,866	3.9	0.3	72.9	3.8	76.6
12	6,582	860	7,442	147,206	8,102	155,308	3.4	0.4	76.3	4.2	80.5
13	5,213	1,059	6,272	152,419	9,161	161,580	2.7	0.5	79.0	4.7	83.7
14	4,517	501	5,018	156,936	9,662	166,598	2.3	0.3	81.3	5.0	86.3
15	3,127	364	3,491	160,063	10,026	170,089	1.6	0.2	82.9	5.2	88.1
16	2,167	310	2,477	162,230	10,336	172,566	1.1	0.2	84.1	5.4	89.4
17	1,961	223	2,184	164,191	10,559	174,750	1.0	0.1	85.1	5.5	90.5
18	3,217	256	3,473	167,408	10,815	178,223	1.7	0.1	86.7	5.6	92.3
19	1,025	158	1,183	168,433	10,973	179,406	0.5	0.1	87.3	5.7	93.0
20	2,330	165	2,495	170,763	11,138	181,901	1.2	0.1	88.5	5.8	94.2
21	1,287	119	1,406	172,050	11,257	183,307	0.7	0.1	89.1	5.8	95.0
22	1,104	140	1,244	173,154	11,397	184,551	0.6	0.1	89.7	5.9	95.6
23	1,518	184	1,702	174,672	11,581	186,253	0.8	0.1	90.5	6.0	96.5
Post-23	6,328	419	6,747	180,999	12,001	193,000	3.3	0.2	93.8	6.2	100.0
Total	181,000	12,000	193,000	181,000	12,000	193,000	93.8	6.2	93.8	6.2	100.0

Post-23 July escapement determined by the rate of the sockeye escapement decline over the last two weeks the weir was manned.

Table 48.B. Chinook, pink, and chum salmon daily and cululative escapement counts through the Nelson River weir, 1989.

Date	Daily			Cumulative		
	Chinook	Pink	Chum	Chinook	Pink	Chum
June 19	23	0	0	23	0	0
20	24	0	0	47	0	0
21	37	0	0	84	0	0
22	1	0	0	85	0	0
23	26	0	0	111	0	0
24	6	0	0	117	0	0
25	1	0	0	118	0	0
26	0	0	0	118	0	0
27	6	0	0	124	0	0
28	6	0	0	130	0	0
29	0	0	0	130	0	0
30	22	0	0	152	0	0
July 1	16	0	0	168	0	0
2	4	0	0	172	0	0
3	11	0	0	183	0	0
4	1	0	0	184	0	0
5	7	0	0	191	0	0
6	3	0	0	194	0	0
7	4	0	0	198	0	0
8	4	0	0	202	0	0
9	1	0	0	203	0	0
10	0	0	0	203	0	0
11	5	0	2	208	0	2
12	4	0	6	212	0	8
13	5	0	6	217	0	14
14	3	0	10	220	0	24
15	4	0	3	224	0	27
16	2	0	3	226	0	30
17	5	0	2	231	0	32
18	4	3	20	235	3	52
19	0	1	4	235	4	56
20	4	1	33	239	5	89
21	4	3	27	243	8	116
22	4	1	32	247	9	148
23	25	4	49	272	13	197
Post-23						
Total	272	13	197	272	13	197

Post-23 July escapement listed under aerial surveys (see aerial survey counts).

Table 49. Salmon escapement survey counts in the South Peninsula, 1989.

Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
SOUTHEASTERN DISTRICT										
281-35.07	Bluff Point	Not Surveyed								
281-35.06	Boulder Bay	29-Aug	241	Good	0	500	0	0	Schwarz	1,000 pinks at stream mouth, additional 75 carcasses
281-35.05	Fox Bay	05-Aug	217	Good	0	0	0	0	Schwarz	
		29-Aug	241	Good	0	600	0	0	Schwarz	500 pinks at stream mouth
281-35.04	Fox Bay	05-Aug	217	Good	0	0	0	0	Schwarz	
		29-Aug	241	Good	0	350	0	0	Schwarz	
281-35.02	Fox Bay	13-Aug	225	Good	0	200	0	0	Shaul	Several schools along the beach
		29-Aug	241	Good	0	5,650	0	0	Schwarz	1,000 pinks at stream mouth, good escapement
281-34.08	Island Bay	29-Aug	241	Good	0	200	0	0	Schwarz	
281-34.07	Island Bay	29-Aug	241	Good	0	150	0	0	Schwarz	100 pinks at stream mouth
281-34.06	Island Bay	05-Aug	217	Good	0	0	0	0	Schwarz	
		13-Aug	225	Good	0	0	0	0	Shaul	2,000 salmon on flats, 500 salmon along the beach
		29-Aug	241	Good	0	100	0	0	Schwarz	Poor escapement, see 34.05
281-34.05	Island Bay	29-Aug	241	Good	0	900	0	0	Schwarz	2,500 pinks at stream mouth
281-34.04	Unnamed	29-Aug	241	Good	0	225	0	0	Schwarz	
281-34.03	Stonehouse	05-Aug	217	Good	0	0	0	0	Schwarz	3,500 salmon at stream mouth
		13-Aug	225	Good	0	100	0	0	Shaul	400 at stream mouth, cove cleaned out, skiff tracks
		29-Aug	241	Good	0	1,400	0	0	Schwarz	4,500 pinks at stream mouth
		13-Sep	256	Good	0	3,300	0	0	Shaul	

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey-- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
281-34.02	Osterback	05-Aug	217	Good	0	0	0	0	Schwarz	1,700 salmon at stream mouth
		13-Aug	225	Good	0	1,100	0	0	Shaul	2,000 salmon at stream mouth
		29-Aug	241	Good	0	2,300	0	0	Schwarz	500 pinks at stream mouth
		13-Sep	256	Good	0	2,200	0	0	Shaul	
281-34.01	Granville-Portage Inlet	29-Aug	241	Good	0	900	2,000	0	Schwarz	2,000 pinks at stream mouth
		13-Sep	256	Good	0	900	1,100	200	Shaul	Pinks and chums spawning, cohos still schooled
281-33.05	Stepovak River	13-Aug	225	Good	0	0	0	0	Shaul	At least 30,000 chums? on the flats
		29-Aug	241	Good	0	21,000	28,000	0	Schwarz	Good escapement in all observed tributaries
		13-Sep	256	Poor	0	5,500	9,000	0	Shaul	Muddy water in some usually clear tributaries
281-33.04	Big River	29-Aug	241	Poor	0	0	1,200	0	Schwarz	Muddy water in most tributaries
		13-Sep	256	Poor	0	2,000	0	0	Shaul	Muddy water in some usually clear tributaries
281-33.03	Louie's Corner	29-Aug	241	Good	0	4,900	4,000	0	Schwarz	
		13-Sep	256	Good	0	7,000	3,000	0	Shaul	
281-33.02	Ramsey Bay	29-Aug	241	Poor	0	0	2,700	0	Schwarz	Muddy water in most tributaries
281-33.01	Ramsey Bay	29-Aug	241	Poor	0	0	2,090	0	Schwarz	Muddy water in most tributaries
		13-Sep	256	Poor	0	3,000	200	0	Shaul	Muddy water in most tributaries
281-32.07	Grub Gulch	05-Aug	217	Poor	0	0	0	0	Schwarz	Muddy water but should have seen fish if present
		13-Aug	225	Good	0	2,600	1,100	0	Shaul	1,000 chums at stream mouth
		29-Aug	241	Fair	0	27,500	3,000	0	Schwarz	Muddy water, species composition approximate
		13-Sep	256	Good	0	12,200	1,500	500	Shaul	
281-32.05	Clark Bay	05-Aug	217	Good	0	100	0	0	Schwarz	
		29-Aug	241	Good	0	1,400	0	0	Schwarz	Muddy water, species composition approximate

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey-- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
281-32.04	Little Norway	06-Aug	218	Good	0	500	0	0	Schwarz	1,850 salmon at stream mouth, 150 chums? in lake
		13-Aug	225	Good	0	2,000	0	0	Shaul	2,000 salmon at stream mouth
		29-Aug	241	Good	0	8,800	0	0	Schwarz	
281-31.03	Orzinski (Orzenoi) Lake	03-Jul	184	Excellent	2,300	0	0	0	Shaul	200 at stream mouth, plus 5-600 sockeye along beach
		14-Jul	195	Poor	0	0	0	0	Shaul	200 at stream mouth, too turbulent for lake survey, 1-2,000 above outlet in lake, too poor for estimate
		18-Jul	199	Good	9,200	0	0	0	Shaul	300 at stream mouth, 300+ in outlet stream
		05-Aug	217	Good	9,675	175	0	0	Schwarz	8,000 pinks at stream mouth, 7,675 sockeye spawning, 2,000 sockeye still schooled
		13-Aug	225	Good	12,000	8,000	0	0	Shaul	3,000 pinks at stream mouth, 500 pinks along beach
		29-Aug	241	Good	9,000	12,000	0	0	Schwarz	2,000 sockeye still schooled, could use another 12,000 pink escapement
281-20.04	Windbound Bay	05-Aug	217	Good	0	0	0	0	Schwarz	300 pinks at stream mouth
		29-Aug	241	Good	0	1,050	0	0	Schwarz	
281-20.03	Chichagof Stream	29-Aug	241	Good	0	85	0	0	Schwarz	
281-20.02	Chichagof	05-Aug	217	Good	0	400	0	0	Schwarz	7,000 salmon at stream mouth, 3,450 in lake, 1,500 in outlet to ocean
		29-Aug	241	Good	0	7,400	0	0	Schwarz	Good escapement, 100 in lagoon, 750 at lagoon mouth
281-20.01	Chichagof Bay	05-Aug	217	Good	0	25	0	0	Schwarz	2,200 salmon at stream mouth
		29-Aug	241	Good	0	1,500	0	0	Schwarz	
281-10.04	West Cove	05-Aug	217	Good	0	0	0	0	Schwarz	250 salmon at stream mouth

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
281-10.03	Suzy Creek	25-Jul	206	Good	0	2,200	0	0	Shaul	3,000 pinks at stream mouth, Goose survey
		28-Jul	209	Good	0	3,625	0	0	Schwarz	4,000 pinks at stream mouth
		05-Aug	217	Good	0	4,625	0	0	Schwarz	1,800 pinks at stream mouth
		09-Aug	221	Good	0	9,500	0	0	Shaul	2,000 pinks at stream mouth
		13-Aug	225	Good	0	16,300	0	0	Shaul	10,000 pinks at stream mouth
		29-Aug	241	Good	0	3,900	0	0	Schwarz	40,000 carcasses in stream
281-10.02	Dorenoi Minor	05-Aug	217	Good	0	0	0	0	Schwarz	
		29-Aug	241	Good	0	3,350	0	0	Schwarz	
281-10.01	Dorenoi Major	05-Aug	217	Good	0	5,025	0	0	Schwarz	
		29-Aug	241	Good	0	5,300	0	0	Schwarz	
283-90.04	San Diego Bay	29-Aug	241	Good	0	0	225	0	Schwarz	600 chums in lagoon
283-90.03	San Diego	03-Aug	215	Good	0	0	125	0	Schwarz	See note on 90.04
283-90.04	San Diego Lagoon	05-Aug	217	Good					Schwarz	5,500 chums? in stream outlet
283-90.02	Rough Beach	04-Aug	216	Good	0	6,200	0	0	Shaul	Goose survey
		05-Aug	217	Good	0	21,500	0	0	Schwarz	
		13-Aug	225	Good	0	23,000	0	0	Shaul	1,000 salmon at stream mouth
		29-Aug	241	Good	0	11,200	0	0	Schwarz	Additional 22,500 carcasses
283-90.01	Swedania Point	04-Aug	216	Good	0	300	0	0	Shaul	
		05-Aug	217	Good	0	500	0	0	Schwarz	750 salmon at stream mouth
		09-Aug	221	Good	0	1,300	0	0	Shaul	
		13-Aug	225	Good	0	5,100	0	0	Shaul	
		29-Aug	241	Good	0	5,900	0	0	Schwarz	Not as many carcasses as in Rough Beach Creek

-Continued-

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
282-13.01	Unga Spit	Not Surveyed								
282-13.02	Dry Lagoon	29-Aug	241	Good	0	600	0	0	Schwarz	
282-13.03	Bay Point	28-Jul	209	Good	0	5,375	0	0	Schwarz	Mostly pinks
		05-Aug	217	Good	0	7,650	0	0	Schwarz	Additional 1,450 salmon in lagoon
		13-Aug	225	Good	0	14,000	2,000	0	Shaul	200 salmon at stream mouth
		29-Aug	241	Good	0	4,000	0	0	Schwarz	
282-13.04	Pinnacle Point	13-Aug	225	Good	0	100	0	0	Shaul	Very poor escapement
		29-Aug	241	Good	0	250	0	0	Schwarz	
282-13.05	Unnamed	29-Aug	241	Good	0	0	0	0	Schwarz	
282-10.02	Apollo Minor	05-Aug	217	Good	0	25	0	0	Schwarz	
		13-Aug	225	Good	0	1,300	0	0	Shaul	
		29-Aug	241	Poor	0	250	0	0	Schwarz	
282-10.03	Apollo Creek	05-Aug	217	Good	0	600	0	0	Schwarz	400 pinks at stream mouth
		13-Aug	225	Good	0	1,700	0	0	Shaul	
		29-Aug	241	Poor	0	2,500	0	0	Schwarz	
282-10.04	Acheredin Lake	26-Jul	207	Good	7,100	0	0	0	Schwarz	Good escapement
		13-Aug	225	Good	6,000	0	0	0	Shaul	Salmon still schooled
282-10.10	Unnamed	Not Surveyed								
282-10.11	Apollo Gold Mine	05-Aug	217	Good	0	1,785	0	0	Schwarz	
		13-Aug	225	Good	0	2,700	0	0	Shaul	300 salmon at stream mouth
		29-Aug	241	Good	0	2,150	0	0	Schwarz	1,000 pinks at stream mouth
282-10.12	Unga Cape	Not Surveyed								

-Continued-

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
282-10.13	Baralof Bay	29-Aug	241	Good	160	0	0	0	Schwarz	
282-10.14	Squaw Harbor Minor	05-Aug	217	Good	0	0	0	0	Schwarz	1,100 salmon at stream mouth
		13-Aug	225	Good	0	100	0	0	Shaul	
		29-Aug	241	Good	0	950	0	0	Schwarz	
282-10.15	Squaw Harbor Major	05-Aug	217	Good	0	2,915	0	0	Schwarz	
		13-Aug	225	Good	0	8,400	0	0	Shaul	1,000 salmon at stream mouth, 3,000 salmon along beach
		29-Aug	241	Good	0	22,300	0	0	Schwarz	Good escapement
282-10.16	Ben Green Bight	15-Jul	196	Good	0	0	0	0	Schwarz	3,000 salmon at stream mouth
		05-Aug	217	Good	0	4,500	0	0	Schwarz	650 salmon at stream mouth
		13-Aug	225	Good	0	2,700	0	0	Shaul	400 salmon at stream mouth
		29-Aug	241	Good	0	6,500	0	0	Schwarz	
282-12.10	No Name	Not Surveyed								
282-12.09	South Quartz Point	05-Aug	217	Good	0	10	0	0	Schwarz	
		29-Aug	241	Good	0	55	0	0	Schwarz	At least 165 carcasses
282-12.08	South Quartz Point	05-Aug	217	Good	0	0	0	0	Schwarz	
		29-Aug	241	Good	0	25	0	0	Schwarz	At least 75 carcasses
282-12.07	Zachary Bay	29-Aug	241	Good	0	750	0	0	Schwarz	At least 2,250 carcasses
282-12.06	Zachary Bay	05-Aug	217	Good	0	10	0	0	Schwarz	
		29-Aug	241	Good	0	1,550	0	0	Schwarz	At least 4,650 carcasses
282-12.05	Zachary Bay	05-Aug	217	Good	0	1,475	0	0	Schwarz	29,000 pinks at the head of Zackery Bay
		29-Aug	241	Good	0				Schwarz	Counts included in stream 282-12.04
282-12.04	Zachary Bay	29-Aug	241	Good	0	550	0	0	Schwarz	At least 1,650 carcasses

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Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Condition	Species: Sockeye	Species: Pink	Species: Chum	Species: Coho	Observer	Remarks
282-12.03	Zachary Bay	05-Aug	217	Good	0	35	0	0	Schwarz	
		29-Aug	241	Good	0	50	0	0	Schwarz	At least 150 carcasses
282-12.02	Zachary Bay	05-Aug	217	Good	0	0	0	0	Schwarz	
		29-Aug	241	Good	0	55	0	0	Schwarz	At least 165 carcasses
282-12.01	Coal Harbor	29-Aug	241	Good	0	125	0	0	Schwarz	At least 375 carcasses
282-10.18	Humbolt Creek	29-Aug	241	Poor	0	450	0	0	Schwarz	
282-11.01	Salmon Ranch	25-Aug	237	Good	0	1,000	0	0	Shaul	2,000 pinks at stream mouth
282-11.03	Fox Hole	05-Aug	217	Good	0	400	0	0	Schwarz	3,500 salmon at stream mouth
		25-Aug	237	Good	0	1,100	0	0	Shaul	6,000 pinks at stream mouth
282-11.06	Korovin Island	Not Surveyed								
282-20.00	Sanborn Harbor	Not Surveyed								
282-20.03	Sanborn Harbor	Not Surveyed								
282-20.04	Sanborn Harbor	Not Surveyed								
282-20.05	Falmouth Harbor	Not Surveyed								
283-80.16	Ballast	29-Aug	241	Good	0	0	0	0	Schwarz	
283-80.15	Coleman	13-Aug	225	Good	0	400	0	0	Shaul	
		29-Aug	241	Good	0	0	2,200	0	Schwarz	100 salmon at stream mouth

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Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-80.14	Johnson	13-Aug	225	Good	0	3,200	0	0	Shaul	3,000 chums on the flats
		29-Aug	241	Good	0	5,900	350	0	Schwarz	500 chums at stream mouth, plus 6,000 carcasses
283-80.12	Foster's Camp	01-Sep	244	Good	0	600	0	0	Schwarz	
283-80.11	Foster's Camp	01-Sep	244	Good	0	625	0	0	Schwarz	500 additional carcasses
283-80.09	Foster's	06-Aug	218	Good	0	14,100	0	0	Schwarz	200 salmon at stream mouth
	Creek	13-Aug	225	Good	0	15,000	300	0	Shaul	6,000 salmon at stream mouth, 10,000 along beach
		29-Aug	241	Good	0	6,700	0	0	Schwarz	More than 7,000 additional carcasses
283-80.08	Lefthand	05-Aug	217	Good	0	12,175	0	0	Schwarz	20,000 pinks along beach: Fosters-Lefthand
	Bay	13-Aug	225	Good	0		500	0	Shaul	Partial survey of lower 1/2 mile
		29-Aug	241	Good	0	3,100	0	0	Schwarz	Many additional carcasses
		28-Sep	271	Good	0	0	0	200	Shaul	
283-80.06	Cape Aliaksin	06-Aug	218	Good	0	2,010	0	0	Schwarz	2,000 salmon at stream mouth
	East	25-Aug	237	Good	0	10,000	0	0	Shaul	50 pinks at stream mouth, good escapement
283-80.05	Cape Aliaksin	06-Aug	218	Good	0	150	0	0	Schwarz	1,500 salmon at stream mouth
	Center	25-Aug	237	Good	0	2,200	0	0	Shaul	50 pinks at stream mouth
283-80.04	Cape Aliaksin	06-Aug	218	Good	0	0	0	0	Schwarz	1,500 salmon at stream mouth
	West	25-Aug	237	Good	0	10,000	0	0	Shaul	100 pinks at stream mouth, good escapement
SOUTHWESTERN DISTRICT										
283-70.05	Beaver	09-Aug	221	Fair	0	25,000	13,000	0	Shaul	6-800 chums in clear tributary, species ID difficult
	River	28-Sep	271	Fair	0	0	0	3,300	Shaul	3,000 in slough near beach, rest in clear tributaries
283-70.04	Smiley's	13-Aug	225	Good	0	12,100	0	0	Shaul	Good escapement
		25-Aug	237	Good	0	12,000	0	0	Shaul	

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Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey-- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-70.03	McGinty Point	13-Aug	225	Good	0	18,600	0	0	Shaul	
		25-Aug	237	Good	0	24,000	0	0	Shaul	
283-70.02	East of Mino	04-Aug	216	Good	0	9,000	0	0	Shaul	Partial survey below forks, Goose survey
		13-Aug	225	Good	0	78,000	0	0	Shaul	Good escapement
		25-Aug	237	Good	0	42,000	0	0	Shaul	
283-70.01	Mino Creek	18-Jul	199	Good	0	14,500	0	0	Shaul	Partial survey below fork E
		25-Jul	206	Excellent	0	49,000	0	0	Shaul	5,000 pinks at mouth, partial Goose survey
		28-Jul	209	Good	0	59,000	0	0	Schwarz	Complete survey
		04-Aug	216	Good	0	81,000	0	0	Shaul	Partial survey below F fork
		06-Aug	218	Good	0	104,700	0	0	Schwarz	
		13-Aug	225	Good	0	185,000	0	0	Shaul	Good escapement, complete survey
		25-Aug	237	Good	550	118,000	0	0	Shaul	250 sockeye in D lake, 300 sockeye in F lake, 64,000 pinks in E fork, many additional carcasses
283-62.05	Coal Bay Major	25-Jul	206	Good	0	800	0	0	Shaul	
		28-Jul	209	Good	0	5,500	0	0	Schwarz	
		04-Aug	216	Good	0	12,000	0	0	Shaul	Partial survey up to canyon
		06-Aug	218	Good	0	39,300	0	0	Schwarz	Good escapement
		25-Aug	237	Good	0	31,000	0	0	Shaul	
283-62.04	Coal Bay Minor	25-Jul	206	Good	0	100	0	0	Shaul	100 pinks at stream mouth
		28-Jul	209	Good	0	0	0	0	Schwarz	
		04-Aug	216	Good	0	6,000	0	0	Shaul	
		06-Aug	218	Good	0	4,900	0	0	Schwarz	Partial survey, maybe additional 500 salmon
		25-Aug	237	Good	0	13,000	0	0	Shaul	300 pinks at stream mouth
283-62.03	Coal Bay Middle	25-Aug	237	Good	0	400	0	0	Shaul	
283-62.02	Coal Bay	25-Aug	237	Good	0	2,000	0	0	Shaul	

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Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Condition	Species: Sockeye	Species: Pink	Species: Chum	Species: Coho	Observer	Remarks
283-62.01	Cape Tolstoi	25-Aug	237	Good	0	1,200	0	0	Shaul	
283-63.16	Settlement Point	14-Jul	195	Good	0	1,400	0	0	Shaul	Partial survey below forks
		25-Jul	206	Good	0	11,500	0	0	Shaul	Partial survey: mainstem only
		28-Jul	209	Good	0	20,100	0	0	Schwarz	250 pinks at stream mouth
		31-Jul	212	Good	0	53,000	0	0	Shaul	Partial survey: mainstem only, 9,000 above forks
		04-Aug	216	Good	0	49,000	0	0	Shaul	Partial survey: mainstem only, 32,000 above forks
		06-Aug	218	Good	0	62,800	0	0	Schwarz	1,000 pinks at stream mouth
		09-Aug	221	Good	0	111,000	0	0	Shaul	2,000 at stream mouth, 7,000 in fork, 60,000 below
		25-Aug	237	Good	0	69,200	200	0	Shaul	200 chums at stream mouth, 10,200 in fork, 34,000 pinks below
283-63.15	Middle Creek	14-Jul	195	Good	0	500	0	0	Shaul	
		28-Jul	209	Good	0	6,000	0	0	Schwarz	650 pinks at stream mouth
		31-Jul	212	Good	0	24,000	0	0	Shaul	
		06-Aug	218	Good	0	18,200	0	0	Schwarz	
		09-Aug	221	Good	0	27,000	0	0	Shaul	
		25-Aug	237	Good	0	24,000	0	0	Shaul	
283-64.10	Ness Creek	25-Aug	237	Good	0	400	0	0	Shaul	100 pinks at stream mouth
283-64.09	Inner Canoe Bay	25-Aug	237	Good	0	0	2,100	0	Shaul	1,500 chums at stream mouth
283-64.08	Entrance Creek	03-Aug	215	Good	0	800	0	0	Schwarz	
		09-Aug	221	Good	0	500	500	0	Shaul	5,000 chums at stream mouth
		25-Aug	237	Good	0	1,600	1,500	0	Shaul	1,300 chums at stream mouth, poor escapement
283-64.	Wolverine Gulch	25-Aug	237	Good	0	400	0	0	Shaul	Poor escapement

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Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-64.06	Canoe Bay River	14-Jul	195	Poor	0	0	4,500	0	Shaul	Inner bay too choppy to survey
		18-Jul	199	Poor	0	0	6,400	0	Shaul	Inner bay too choppy to survey
		28-Jul	209	Good	0	0	22,800	0	Schwarz	1,000 chums at mouth, additional 1,500 chums in bay
		06-Aug	218	Good	550	150	37,200	0	Schwarz	Additional 10,000 chums in inner bay
		25-Aug	237	Good	500	1,100	21,100	0	Shaul	400 chums at stream mouth, 700 pinks & 2,800 chums in Four Bears Creek
		28-Aug	240	Good	0	0	0	1,300	Shaul	
283-64.05	Bluff Point	28-Jul	209	Good	0	0	15	0	Schwarz	
		06-Aug	218	Good	0	0	330	0	Schwarz	
		09-Aug	221	Good	0	0	200	0	Shaul	Partial survey lower 1/4 mile, 4,000 chums at mouth
		25-Aug	237	Good	0	1,200	900	0	Shaul	500 chums at mouth, 4,500 pinks along beach, poor escapement
283-63.14	Dry Lagoon	Not Surveyed								
283-63.13	Ruby's Lagoon	25-Aug	237	Good	100	0	4,800	0	Shaul	3,000 chums in lagoon, sockeye in lake at right fork
		28-Sep	271	Good	0	0	0	100	Shaul	Partial survey of lagoon only
283-63.11	Chinaman Lagoon North	25-Aug	237	Good	0	0	0	0	Shaul	1,000 chums at stream mouth
		28-Sep	271	Good	0	0	0	0	Shaul	Partial survey of lagoon only
283-63.10	Chinaman Lagoon Main	25-Aug	237	Good	0	0	0	0	Shaul	2,000 chums at stream mouth
		28-Sep	271	Good	0	0	0	0	Shaul	Partial survey of lagoon only
283-63.09	Chinaman Lagoon	Not Surveyed								
283-63.06	Chinaman Lagoon South	25-Aug	237	Good	0	0	400	0	Shaul	See notes on 63.05 & 63.06
		28-Sep	271	Good	0	0	0	0	Shaul	Partial survey of lagoon only

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Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-63.05	Lower Chinaman Lagoon	25-Aug	237	Good	0	0	100	0	Shaul	See notes on 63.06
283-63.04	Chinaman Stream South	25-Aug	237	Good	0	0	700	0	Shaul	
283-61.05	Long John Lagoon	28-Sep	271	Good	0	0	0	600	Shaul	
283-61.04	Spring Fed Lakes	08-Aug	220	Good	600	0	0	0	Shaul	200 chums in pothole, 1-2,000 in lagoon
		28-Aug	240	Good	100	500	0	0	Shaul	
283-61.03	Long John Lagoon	28-Aug	240	Good	0	0	0	0	Shaul	
283-61.02	Southwest Stream	28-Aug	240	Good	0	1,300	2,200	0	Shaul	4,000 chums at stream mouth
		28-Sep	271	Good	0	0	0	900	Shaul	
SOUTHWESTERN DISTRICT										
283-52.10	Dushkin Lagoon	Not Surveyed								
283-52.08	Volcano River	08-Aug	220	Good	0	300	100	0	Shaul	2,000 chums at stream mouth
		18-Aug	230	Good	0	1,100	1,100	0	Shaul	3,500 chums at stream mouth
		28-Aug	240	Fair	0	1,200	5,500	0	Shaul	2,000 chums at stream mouth, flats choppy
		28-Sep	271	Good	0	0	0	500	Shaul	
283-52.07	Volcano Center Slough	08-Aug	220	Good	0	0	0	0	Shaul	2,000 chums at stream mouth
		28-Aug	240	Good	0	2,100	1,000	0	Shaul	4,000 chums at stream mouth
		28-Sep	271	Good	0	0	0	200	Shaul	Still a few chums spawning

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Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey-- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-52.06	West Springholes	08-Aug	220	Good	0	0	100	0	Shaul	
		28-Aug	240	Good	0	5,000	0	0	Shaul	2,000 pinks at stream mouth
283-52.05	Streamguard Creek	28-Aug	240	Good	0	5,000	0	0	Shaul	
283-52.04	Stub Creek	18-Aug	230	Good	0	0	0	0	Shaul	1,000 pinks at stream mouth
		28-Aug	240	Good	0	1,700	0	0	Shaul	400 pinks at stream mouth
283-52.03	Little Bear Bay	18-Aug	230	Good	0	0	0	0	Shaul	300 chums at stream mouth
		28-Aug	240	Good	0	700	800	0	Shaul	300 pinks & 2,000 chums in bay
283-52.01	Nikolaski Spit	13-Aug	225	Good	0	2,800	0	0	Shaul	
		28-Aug	240	Good	0	7,000	0	0	Shaul	
283-51.06	Dolgoi Harbor Southwest	13-Aug	225	Good	0	5,500	0	0	Shaul	1,000 pinks at mouth, illegal fishing occurring
		28-Aug	240	Good	0	7,500	0	0	Shaul	Additional many carcasses
283-51.05	Dolgoi Harbor South	28-Aug	240	Good	0	300	0	0	Shaul	
283-51.03	Dolgoi Harbor	28-Aug	240	Good	0	200	0	0	Shaul	
283-41.01	Belkofski Village	04-Aug	216	Good	0	1,800	0	0	Shaul	Partial survey lower 1/4 mile, 400 pinks at mouth
		08-Aug	220	Good	0	1,900	600	0	Shaul	
		13-Aug	225	Good	0	1,900	0	0	Shaul	
		28-Aug	240	Poor	0	11,000	0	0	Shaul	4,000 upper portion, 7,000 lower, 3,000 schooled

-Continued-

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-42.12	Rocky River	02-Aug	214	Good	0	3,000	0	0	Shaul	12,000 pinks at stream mouth
		08-Aug	220	Good	0	8,000	0	0	Shaul	
		12-Aug	224	Good	0	6,500	0	0	Shaul	Partial survey of lower 1/2 stream
		18-Aug	230	Good	0	9,000	0	0	Shaul	
		28-Aug	240	Poor	0	19,000	0	0	Shaul	Turbulent
283-42.10	Kitchen Anchorage	08-Aug	220	Good	0	100	0	0	Shaul	1,000 pinks at stream mouth
		18-Aug	230	Good	0	300	0	0	Shaul	1,500 pinks at mouth & 9,000 along beach
		28-Aug	240	Good	0	4,500	0	0	Shaul	4,000 pinks at mouth & 9,000 along beach
283-42.09	Captain's Harbor	08-Aug	220	Good	0	0	0	0	Shaul	300 pinks at stream mouth
		28-Aug	240	Good	0	1,200	0	0	Shaul	1,000 pinks in the harbor
283-42.07	Belkofski Bay River	08-Aug	220	Poor	0	100	200	0	Shaul	Partial survey above 1st tributary, probably 5-10,000 chums in Captain's Harbor
		18-Aug	230	Good	0	200	700	0	Shaul	Partial survey up to 4-way junction, 10,000 chums at mouth and in Captain's Harbor
		28-Aug	240	Poor	0	100	12,500	0	Shaul	Partial survey to 4-way junction, probably 1,000 pinks & chums above junction & 5,000 chums in harbor
		05-Sep	248	Good	0	700	19,000	0	Shaul	
		28-Sep	271	Good	0	0	0	2,800	Shaul	Still 3-4,000 chums still spawning
283-42.06	Belkofski Bay Beach	18-Aug	230	Good	0	400	0	0	Shaul	
		05-Sep	248	Good	0	800	0	0	Shaul	Could use another 2,000 escapement
283-42.05	Belkofski Bay	04-Aug	216	Good	0	200	0	0	Shaul	200 pinks at stream mouth
		08-Aug	220	Good	0	400	0	0	Shaul	
		12-Aug	224	Good	0	600	0	0	Shaul	
		18-Aug	230	Good	0	3,000	0	0	Shaul	200 pinks at stream mouth, 5,000 along beach
		28-Aug	240	Good	0	3,900	0	0	Shaul	

-Continued-

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-42.03	Indian Head	12-Aug	224	Good	0	300	0	0	Shaul	Beach water murky
		18-Aug	230	Good	0	900	0	0	Shaul	600 pinks at mouth, 3,000 along beach by 42.02
		28-Aug	240	Good	0	4,000	0	0	Shaul	100 pinks at mouth, 500 along beach by 42.02
		05-Sep	248	Good	0	3,000	0	0	Shaul	
283-33.05	Ram's Creek	08-Aug	220	Good	0	500	500	0	Shaul	100 pinks above culvert
		18-Aug	230	Good	0	2,700	0	0	Shaul	100 pinks at mouth, 10-20,000 between creek & cannery
		21-Aug	233	Good	0	5,800	0	0	Berceli	8,000 pinks at stream mouth
		28-Aug	240	Good	0	8,800	300	0	Shaul	2,800 above culvert, bay choppy
		05-Sep	248	Good	0	12,000	500	0	Shaul	Additional many carcasses
283-33.04	King Cove Lagoon	05-Sep	248	Good	0	0	500	0	Shaul	1,000 chums at mouth, 2,000 chums east side of lagoon
283-33.03	King Cove Lagoon	28-Aug	240	Good	0	0	0	0	Shaul	Jumpers on east side of lagoon, red tide
		05-Sep	248	Good	0	0	100	0	Shaul	Extensive red tide in lagoon
283-31.01	Fox Island Anchorage East	29-Jul	210	Good	0	1,600	0	0	Shaul	
		02-Aug	214	Good	0	8,000	0	0	Shaul	2,000 pinks at stream mouth
		08-Aug	220	Good	0	16,000	0	0	Shaul	
		13-Aug	225	Good	0	12,000	0	0	Shaul	1,000 pinks at mouth, pinks at mouth look fresh
		25-Aug	237	Good	0	9,000	0	0	Shaul	500 pinks at mouth, could use larger escapement
283-31.02	Fox Island Anchorage Center	29-Jul	210	Good					Shaul	Partial survey: mouth only, 1,000 pinks at mouth
		08-Aug	220	Good	0	4,400	0	0	Shaul	good escapement
		25-Aug	237	Good	0	3,000	0	0	Shaul	
283-31.03	Fox Island Anchorage West	29-Jul	210	Good	0	2,300	0	0	Shaul	Partial survey: lower 1/2 mile, 2,000 pinks at mouth
		02-Aug	214	Good	0	9,200	0	0	Shaul	3,000 pinks at stream mouth
		08-Aug	220	Good	0	33,000	0	0	Shaul	2,000 pinks at stream mouth, good escapement
		13-Aug	225	Good	0	35,000	0	0	Shaul	
		25-Aug	237	Good	0	19,000	0	0	Shaul	

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey-- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-31.05	Paw Cape Creek	13-Aug	225	Good	0	8,300	0	0	Shaul	300 pinks at mouth, good escapement
		25-Aug	237	Good	0	12,200	0	0	Shaul	
283-31.06	Southern Creek	24-Jul	205	Good	0	77,000	0	0	Shaul	Most salmon in upper portion
		29-Jul	210	Good	0	169,000	0	0	Shaul	Good escapement
		13-Aug	225	Good	0	53,000	0	0	Shaul	Partial survey: lower 1/2 of stream
		25-Aug	237	Good	0	89,000	0	0	Shaul	Additional piles of carcasses
283-31.10	Eastern Creek	24-Jul	205	Good	0	4,500	0	0	Shaul	5,000 pinks at mouth, 6 boats waiting for opening
		02-Aug	214	Good	0	21,000	0	0	Shaul	3,000 pinks at stream mouth, good escapement
		13-Aug	225	Good	0	49,500	0	0	Shaul	1,000 pinks at stream mouth
		25-Aug	237	Good	0	7,000	0	0	Shaul	
283-34.11	Lenard Harbor South	28-Aug	240	Good	0	1,400	0	0	Shaul	100 pinks at stream mouth
283-34.10	Lenard Harbor	08-Aug	220	Poor	0	100	0	0	Shaul	500 chums at stream mouth
		18-Aug	230	Poor	0	200	400	0	Shaul	
		28-Aug	240	Fair	0	1,300	1,200	0	Shaul	
		05-Sep	248	Good	0	0	2,400	0	Shaul	400 chums at stream mouth
		28-Sep	271	Good	0	0	0	200	Shaul	Still a few chums spawning
283-34.09	Barney's Creek	08-Aug	220	Good	0	300	0	0	Shaul	500 pinks at mouth, 2,000 along beach
		18-Aug	230	Good	0	7,000	0	0	Shaul	Partial survey: lower 1/2 mile, probably 3,000 above
		28-Aug	240	Good	0	6,000	900	0	Shaul	Good escapement
283-34.07	Kinzarof Lagoon	26-Aug	238	Good	700	0	0	0	Shaul	
283-34.06	Kinzarof Lagoon	26-Aug	238	Good	100	0	0	0	Shaul	

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Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-34.05	Kinzarof Lagoon	26-Aug	238	Good	700	0	0	0	Shaul	
283-34.03	Trout Creek	26-Aug	238	Good	20	100	300	0	Shaul	
283-34.02	Russel Creek	24-Jul	205	Good	0	0	1,900	0	Shaul	Partial survey: below hatchery, all in lower mile
		09-Aug	221	Good	0	0	17,000	0	Shaul	5,000 chums at mouth, many jumpers in bay
		18-Aug	230	Good	0	1,100	30,300	0	Shaul	100 pinks and 300 chums above hatchery
		26-Aug	238	Good	0	3,000	42,500	0	Shaul	1 sockeye carcass, 200 pinks & 500 chums above weir, not enough salmon being released past weir
		05-Sep	248	Good	0		400	0	Shaul	Partial survey: counted schooled fish, fish above weir
		12-Sep	255	Good	40	20,000	2,500	0	Shaul	Partial survey: counted mostly pinks
283-34.01	Mortensen Lagoon	26-Aug	238	Good	400	0	0	0	Shaul	600 sockeye at stream mouth
		05-Sep	248	Good	1,500	0	0	0	Shaul	400 sockeye at stream mouth
		12-Sep	255	Good	2,400	0	0	0	Shaul	
283-32.01	Old Man's Lagoon	31-Jul	212	Good	0	0	300	0	Shaul	
		26-Aug	238	Good	0	0	1,300	0	Shaul	
283-20.06	Thinpoint Lagoon & Entrance Channel	19-Jul	200	Fair	500	0	0	0	Shaul	Partial survey: lagoon only, water murky
		24-Jul	205	Excellent	2,800	0	0	0	Shaul	Partial survey: lagoon only, Cherokee survey
		08-Aug	220	Good	13,500	0	0	0	Shaul	Partial survey: lagoon only, good escapement
		14-Aug	226	Fair	2,000	0	0	0	Shaul	Partial survey: lagoon only, older fish in lagoon moved into the lake
		22-Aug	234	Good	7,000	0	0	0	Shaul	Partial survey: lagoon only, all probably additional to 8/08 survey, fish in upper portion are colored
		26-Aug	238	Good	3,300	0	0	0	Shaul	Partial survey: lagoon only,
		05-Sep	248	Fair	1,000	0	0	3,000	Shaul	Species composition rough estimate, Cherokee survey
		12-Sep	255	Good	0	0	0	4,800	Shaul	
283-20.08	Thinpoint West	Not Surveyed								

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey-- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-20.09	Thinpoint Lake Stream	26-Aug	238	Good	100	0	0	0	Shaul	1,000 sockeye at stream mouth
		05-Sep	248	Fair	1,200	0	0	0	Shaul	Water at mouth murky, Cherokee survey
		12-Sep	255	Good	1,700	0	0	0	Shaul	
283-20.10	Thinpoint Lake	26-Aug	238	Good	3,500	0	0	0	Shaul	Sockeye are spawning
		05-Sep	248	Fair	2,000	0	0	0	Shaul	Sockeye are spawning
		12-Sep	255	Good	1,500	0	0	0	Shaul	
283-20.04	Southwest Bight	01-Aug	213	Good	0	400	0	0	Shaul	
		05-Aug	217	Good	0	700	0	0	Shaul	
		14-Aug	226	Good	0	2,800	0	0	Shaul	Several schools along beach, jumpers in deep water
		27-Aug	239	Good	0	3,700	0	0	Shaul	
283-20.03	Verskin's Bight	01-Aug	213	Good	0	1,500	0	0	Shaul	
		14-Aug	226	Good	0	11,000	0	0	Shaul	5,000 pinks at mouth, good escapement
		27-Aug	239	Good	0	14,000	0	0	Shaul	100 pinks at stream mouth
283-20.01	Sandy Cove Stream	01-Aug	213	Good	0	100	0	0	Shaul	
		14-Aug	226	Good	0	5,000	300	0	Shaul	1,000 chums at stream mouth
		27-Aug	239	Good	0	3,200	6,000	0	Shaul	Pinks spawning, chums still schooled
		05-Sep	248	Good	0	0	7,000	0	Shaul	4,000 still schooled
283-11.01	Egg Island Stream	14-Aug	226	Good	0	4,600	0	0	Shaul	
		27-Aug	239	Good	0	2,600	400	0	Shaul	
		05-Sep	248	Good	0	0	0	0	Shaul	Cherokee survey
283-12.13	Little John Lagoon	09-Aug	221	Good	0	100	100	0	Shaul	1,000 chums on flats, 100 chums along spit
		22-Aug	234	Good					Shaul	3,000 pinks & chums, Cherokee survey
		27-Aug	239	Good	0	900	2,600	0	Shaul	Poor escapement
283-12.12	Little John Sand Spit	27-Aug	239	Good	0	0	50	0	Shaul	300 chums at mouth, additional 20 pink carcasses

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Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey-- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-12.11	Cannery	27-Aug	239	Good	0	20	30	0	Shaul	
283-12.05	Middle Lagoon	19-Jul	200	Good	300	0	0	0	Shaul	Sockeye in 2 schools
		05-Aug	217	Good	8,000	0	0	0	Shaul	Best escapement in 17 years with a streamguard in plac
		14-Aug	226	Good	800	0	0	0	Shaul	Partial survey, fish moved upstream
		22-Aug	234	Good	0	0	0	22	Shaul	Partial survey
		27-Aug	239	Good	2,400	0	0	0	Shaul	1,800 spawning in lake, rest schooled lake outlet
		05-Sep	248	Good	5,500	0	0	0	Shaul	1,000 schooled in lake, 200 spawning in outlet
		12-Sep	255	Good	.800	0	0	0	Shaul	100 spawning in outlet, 500 south & 200 north shore
283-12.01	Hansen's	14-Aug	226	Good	300	700	0	0	Shaul	1,500 pinks at mouth, sockeye spawning
		27-Aug	239	Good	20	1,200	0	0	Shaul	100 pinks at stream mouth
284-60.08	Deadman's Cove	05-Aug	217	Good	0	1,500	0	0	Shaul	Partial survey: lower 1/2 mile
		14-Aug	226	Good	300	2,800	0	0	Shaul	200 sockeye in lake, rest schooled above canyon
		27-Aug	239	Good	0	1,700	0	100	Shaul	300 pinks still schooled
284-60.07	Whalebone	05-Aug	217	Good	2,500	0	0	0	Shaul	
		27-Aug	239	Good	0	500	0	0	Shaul	100 pinks in upper stream
284-60.06	Sankin Bay	27-Aug	239	Good	0	200	0	0	Shaul	
284-60.05	Whirl Point	05-Aug	217	Good	0	200	0	0	Shaul	
		27-Aug	239	Good	0	800	0	0	Shaul	
284-60.04	Ikatan River	27-Aug	239	Poor	0	0	0	0	Shaul	Partial survey: clear tributary only
284-60.03	Swede's Lake	05-Aug	217	Good	150	0	0	0	Shaul	Sockeye spawning
		27-Aug	239	Good	20	0	0	0	Shaul	
284-60.01	Ikatan Point	27-Aug	239	Good	0	250	0	0	Shaul	

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	-Survey-- Condition	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
UNIMAK DISTRICT										
284-50.00	Dora Harbor Left	27-Aug	239	Good	0	100	0	0	Shaul	
284-40.09	Otter Cove North	14-Aug	226	Good	0	300	200	0	Shaul	
		27-Aug	239	Good	0	100	100	0	Shaul	
284-40.08	Otter Cove South	27-Aug	239	Good	0	100	50	0	Shaul	
284-40.05	Lazaref River	Not Surveyed								
283-10.??	Sanak Village	Not Surveyed								
283-10.??	Sanak Is. W.	Not Surveyed								
283-10.??	Dodd's Bay W.	Not Surveyed								
283-10.??	Dodd's Bay E.	Not Surveyed								
283-10.??	Sandy Bay	Not Surveyed								
283-10.??	Salmon Bay	Not Surveyed								

Zero indicates no fish present, blank indicates fish were not counted.

Table 50. Salmon escapement survey counts in the Aleutian Islands Management Area, 1989.

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Condition	Species: Sockeye	Pink	Chum	Observer	Remarks
302-	Akutan Harbor	Not Surveyed							
302-80.52	Kulliiak Bay Lakes	Not Surveyed							
302-50.60	Kisselen	Not Surveyed							
302-50.50	Erskine Bay	Not Surveyed							
302-40.11	Summer Bay	Not Surveyed							
302-40.10	Humpy Cove	22-Aug	235	Good	0	401	0	Johnson	Foot survey
		05-Sep	249	Good	0	88	0	Skordelis	Foot survey
302-40.09	Summer Bay	Not Surveyed							
302-40.08	Unalaska Village	03-Aug	216	Good	0	700	0	Griffin	Foot survey
		23-Aug	236	Good	0	2926	0	Johnson	Foot survey, 138 pinks in upper creek
		07-Sep	251	Good	0	1433	0	Skordelis	Foot survey, 1,300 pinks in upper creek
302-40.07	Pyramid Creek	Not Surveyed							
302-40.06	Captain's Bay	03-Aug	216	Good	0	0	0	Quimby	50 pinks at stream mouth
		22-Aug	235	Good	0	189	0	Johnson	Foot survey, no spawnouts
		06-Sep	250	Good	0	133	0	Skordelis	Foot survey
302-40.05	Nateekin River	03-Aug	216	Good	0	4500	0	Quimby	Surveyed lower 2 miles of stream
302-40.03	Makushin Valley	Not Surveyed							
302-30.01	Kalekta Bay	Not Surveyed							

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Table 50. (page 2 of 3)

Stream Number	Stream Name/Location	--Calendar--Survey Date	Day	Condition	Species---- Sockeye	Pink	Chum	Observer	Remarks
302-15.07	McLee's Lake	Not Surveyed							
302-15.05	Driftwood Bay	Not Surveyed							
302-13.10	Volcano Bay	Not Surveyed							
302-14.20	Makushin Village	Not Surveyed							
302-14.18	Glacier Valley	Not Surveyed							
302-14.17	Humpback Bay #2	Not Surveyed							
302-14.16	Humpback Bay #1	03-Aug	216	Good	0	300	0	Quimby	
302-14.15	Portage #1	Not Surveyed							
302-14.14	Portage #2	Not Surveyed							
302-14.13	Portage #3	Not Surveyed							
302-14.12	Portage #4	Not Surveyed							
302-14.11	Cannery Bay	Not Surveyed							
302-13.05	Skan Bay	Not Surveyed							
302-13.04	Skan Bay	Not Surveyed							
302-13.03	Skan Bay	Not Surveyed							

-Continued-

Table 50. (page 3 of 3)

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species Sockeye	Pink	Chum	Observer	Remarks
302-12.15	Pumicestone Bay	Not Surveyed							
302-12.11	Pumicestone Bay	Not Surveyed							
302-12.09	McIver Bight	Not Surveyed							
302-12.07	Kashega West A Lake	Not Surveyed							
302-12.07	Kashega Bay B	Not Surveyed							
302-12.05	Kismaliuk Bay	Not Surveyed							
302-12.04	Kismaliuk Bay	Not Surveyed							
302-12.03	Kismaliuk Bay	Not Surveyed							
302-12.01	Aspid Bay	Not Surveyed							
302-11.08	Chernofski Harbor	Not Surveyed							
302-11.06	Station Bay	Not Surveyed							
302-11.05	Station Bay	Not Surveyed							
302-11.04	Station Bay West Arm	Not Surveyed							
302-11.03	No Name	Not Surveyed							

Table 51. Salmon escapement survey counts in the North Peninsula, 1989.

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
NORTHWESTERN DISTRICT											
311-30.06	Unnamed	Not Surveyed									
311-30.05	Unnamed	Not Surveyed									
311-30.07	Whaleback Mountain Creek	16-Jun	167	Good	0	3,500	0	0	0	Shaul	Salmon in outlet channel, 3,000 in lower 500 yards, new channel mouth 11/2 miles east of old mouth
		22-Jun	173	Poor	0	12,000	0	0	0	Shaul	Good sign of salmon at mouth of outlet channel
		02-Jul	183	Poor						Shaul	A few salmon observed at channel mouth
		19-Jul	200	Fair	0	26,000	0	0	0	Shaul	22,500 sockeye below creek entrance
		14-Aug	226	Good	0	43,000	0	2,000	0	Shaul	Chums and 2,000 sockeye in channel, additional 5% carcasses, 40 bears observed, good escapement
311-30.08	Christianson Lagoon	19-Jul	200	Good	0	1,700	0	0	0	Shaul	500 sockeye spawning
		14-Aug	226	Good	0	1,200	0	0	0	Shaul	
311-30.09	Mudhole	08-Jul	189	Good	0	0	0	600	0	Shaul	900 chums in lagoon and outlet
		19-Jul	200	Fair	0	0	0	1,100	0	Shaul	No sign of large number of fish, lagoon choppy
		14-Aug	226	Good	0	2,000	0	2,000	0	Shaul	Additional 1,000 sockeye and 1,000 chums near mouth
311-30.10	Clear Lagoon	08-Jul	189	Good	0	0	0	0	0	Shaul	
		19-Jul	200	Poor				200		Shaul	
		14-Aug	226	Good	0	2,000	0	500	0	Shaul	Additional 1,800 sockeye spawning near stream mouth
311-40.01	Emil's River	19-Jul	200	Good	0	0	0	0	0	Shaul	
311-40.04	North Creek	19-Jul	200	Good	0	0	0	200	0	Shaul	Chums at lower end of stream
311-50.01	Big River	27-Aug	239	Good	0	0	0	800	0	Shaul	Partial survey: spawning tributaries only

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Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
311-50.02	Swanson Lagoon	19-Jul	200	Good	0	0	0	1,200	0	Shaul	Partial survey: creek, nothing on spawning grounds
		29-Jul	210	Good	0	1,150	0	350	0	Shaul	Partial survey: creek, additional 200 fish in outlet channel
		07-Aug	219	Good	0	1,200	0	400	0	Shaul	Partial survey: creek, Additional 1,000 fish in outlet channel, 2-3,000 fish in lagoon, 500 sockeye and 100 chum spawning
		27-Aug	239	Good	0	2,700	0	300	1,300	Shaul	Sockeye: 1,200 in creek, 1,200 in lagoon, 300 in outlet channel, chums in creek, coho in outlet
		25-Sep	268	Good	0	1,300	0	0	11,000	Shaul	4,000 coho in outlet, sockeye spawning in lagoon
311-60.01	Mike's Valley	02-Jul	183	Good	0	0	0	0	0	Shaul	Partial survey: lower 1/2 mile; 50 chums at creek mouth, nothing above mouth
		19-Jul	200	Good	0	0	0	1,000	0	Shaul	Partial survey: did not fly upper mile due to turbulence; 500 chums at mouth
		29-Jul	210	Good	0	0	0	900	0	Shaul	Partial survey: 1/2 mile, 400 chums at mouth
		07-Aug	219	Good	0	0	100	2,500	0	Shaul	300 chums at mouth, additional 2-3000 chums on flats
		12-Aug	224	Good	0	0	0	2,600	0	Shaul	Partial survey: lower 1/2 mile, nothing at mouth
		27-Aug	239	Good	0	0	700	2,600	0	Shaul	1,900 chums and 500 pinks in lower 1/2 mile
		25-Sep	268	Good	0	0	0	0	200	Shaul	Partial survey: lower 1/2 mile
311-60.06	Anderson's	27-Aug	239	Good	0	0	250	100	0	Shaul	
311-60.07	Traders Cove	05-Aug	217	Good	0	0	0	0	0	Shaul	Partial survey: lagoon only
	& .08	27-Aug	239	Good	0	0	0	300	0	Shaul	Additional 300 chums in channel
		05-Sep	248	Good	0	0	0	1,500	0	Shaul	1,000 chums at stream mouth, poor escapement
311-60.12	Warmsprings	27-Aug	239	Good	0	0	0	50	0	Shaul	No sign of fish on flats
	Bay	05-Sep	248	Good	0	0	0	400	0	Shaul	1,000 chums at stream mouth, additional 1,000 carcasses on flats, probably stranded by tide
311-60.13	Hungry's Creek	27-Aug	239	Good	0	100	800	0	0	Shaul	Turbulent
312-20.01	Norma Bay	27-Aug	239	Good	0	500	0	50	0	Shaul	

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Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
312-20.02	Mike's Duck Camp	19-Jul	200	Good	0	0	0	300	0	Shaul	
		07-Aug	219	Good	0	0	0	1,000	0	Shaul	
		27-Aug	239	Good	0	0	0	2,300	0	Shaul	
312-20.03	Norma Bay South	07-Aug	219	Good	0	0	0	1,300	0	Shaul	2-3,000 fish in alligator hole
		14-Aug	226	Good	0	0	0	1,300	0	Shaul	5,000 chums at mouth, some will go into stream 312-20.4
		22-Aug	234	Good	0	0	0	5,000	0	Shaul	6,000 chums at stream mouth
		27-Aug	239	Good	0	0	0	2,900	0	Shaul	3,000 chums at mouth, additional 400 chums in springs west of creek
312-20.04	Norma Bay South	27-Aug	239	Good	0	0	0	900	0	Shaul	500 chums at mouth, additional 500 chums on flats
312-20.52	2nd stream W of Frosty Cr.	27-Aug	239	Good	0	0	0	1,900	0	Shaul	300 chums at stream mouth
312-20.51	Springs South of Frosty	27-Aug	239	Good	0	0	0	3,000	0	Shaul	
312-20.05	Frosty Creek	19-Jul	200	Poor				1,000	0	Shaul	Glacial runoff, murky water
		29-Jul	210	Fair	0	0	0	1,400	0	Shaul	Glacial runoff, poor escapement
		07-Aug	219	Fair	0	0	0	2,100	0	Shaul	Murky water
		14-Aug	226	Good	0	0	0	4,800	0	Shaul	2,000 chums at stream mouth, poor escapement
		27-Aug	239	Good	0	100	0	8,000	0	Shaul	
312-20.06	Blue Bill Lake	26-Aug	238	Good	0	2,600	0	0	0	Shaul	
312-20.13	Outer Marker Lake	26-Aug	238	Good	0	100	0	100	0	Shaul	
		13-Sep	256	Good	0	1,100	0	0	0	Shaul	500 sockeye in lower lake, 600 sockeye spawning in upper lake

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Stream Number	Stream Name/Location	Calendar Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
312-40.00	Spring fed 2m SW of Joshua Green River	Not surveyed									
312-40.01	Joshua Green River	19-Jul	200	Poor	0	0	0	4,500	0	Shaul	Partial survey: below lake, count probably low
		29-Jul	210	Poor	0	10,000	0	25,000	0	Shaul	Chum count is rough, no signs of large concentrations, poor escapement in clear tributaries
		07-Aug	219	Good	0	0	0	0	0	Shaul	Partial survey: right hand and below
		14-Aug	226	Fair	0	0	0	0	0	Shaul	Muddy, very little sign in lefthand, 3,700 sockeye and 400 chums in right hand clear tributaries
		26-Aug	238	Good	0	6,000	0	15,000	0	Shaul	8,500 chums in left hand, remainder in right hand, no sign in lower end, 500 sockeye spawning in lake, poor chum escapement
		28-Sep	271	Good	0	0	0	0	4,000	Shaul	1,000 coho in right hand, 3,000 coho in left hand, all up near spawning grounds
312-40.02	Moffet Springs Creek	19-Jul	200	Good	0	0	0	300	0	Shaul	
		29-Jul	210	Good	0	0	0	1,500	0	Shaul	
		07-Aug	219	Good	0	0	0	3,000	0	Shaul	
		14-Aug	226	Excellent	0	100	0	5,000	0	Shaul	
		26-Aug	238	Good	0	0	0	7,700	0	Shaul	
312-40.03	Moffet Creek	19-Jul	200	Poor	0	0	0	0	0	Shaul	
		29-Jul	210	Poor	0	800	0	200	0	Shaul	Partial survey: could not see below spawning grounds
		07-Aug	219	Good	0	1,500	0	2,600	0	Shaul	
		14-Aug	226	Good	0	1,100	0	7,000	0	Shaul	2,000 chums below forks
		25-Aug	237	Good	0	600	0	7,800	0	Shaul	Sockeye all in central tributaries, additional to previous surveys, chums: 6,800 in main fork and 1,000 below

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
NORTHERN DISTRICT											
313-10.02	North Creek	18-Jul	199	Fair	75	0	0	0	0	Shaul	Murky water, rough estimate
		25-Aug	237	Good	0	7,000	0	700	0	Shaul	2,200 sockeye in C1 lake, balance in C2 lakes, chums in B, poor escapement
313-10.05	Cathedral River	25-Aug	237	Good	0	600	0	0	0	Shaul	Partial survey: lake only, consistant with last year
313-10.06	Trader Mt.	25-Aug	237	Good	0	0	0	30	0	Shaul	Partial survey: east clear tributary only
313-10.11	Black Hills	14-Jul	195	Good	400	0	0	0	0	Shaul	Channel cut through directly into Bering Sea
		27-Sep	270	Good	0	0	0	0	200	Shaul	
313-10.14	Steelhead	14-Jul	195	Good	125	0	0	0	0	Shaul	Channel cut through directly into Bering Sea
		27-Sep	270	Good	0	0	0	0	300	Shaul	
313-30.01	David's River	18-Jul	199	Good	300	1,000	0	0	0	Shaul	Partial survey: spawning grounds
		25-Aug	237	Good	0	0	0	0	0	Shaul	Partial survey: spawning grounds, nothing
		25-Sep	268	Good	0	2,040	0	0	0	Shaul	1,400 sockeye in Big Fish Lake, unable to get good coho survey due to poor airplane
313-30.02	Caribou River	31-Jul	212	Good	0	1,900	0	0	0	Shaul	Partial survey: Trader Mountain spawning area, 100 in Divide Lake, 1,800 in lower clear spawning area

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
313-30.03	Nelson River a/ Hoodoo Lake	22-Jul	203	Good	2,500	0	0	0	0	Shaul	Partial survey: Alex Orloff's cabin to weir, weir weir count: chinook = 247 accumulative
		21-Aug	233	Good	0	0	0	620	0	Berceli	Partial survey: Tower- Lake; additional 80 carcasses
		25-Aug	237	Good	0	0	0	0	7,000	Shaul	Partial survey: Forks- Tower, fairly high water
		30-Aug	242	Good	0	0	0	0	7,800	Shaul	Partial survey: Forks- Left Creek, 4,300 coho above tower, high water, possibly another 2-3,000 coho
		05-Sep	248	Good	0	0	0	0	13,600	Shaul	Partial survey: Forks- Left Creek, 11,200 coho above weir
		12-Sep	255	Poor	0	0	0	0	18,000	Shaul	Partial survey: Petterson Creek-Left Creek, Cherokee
		25-Sep	268	Good	0	0	0	0	32,000	Shaul	Partial survey: Petterson Creek-Lake, 25,000 coho between weir and Left Creek, conservative count
313-30.03	Petterson	Not Surveyed									
313-30.??	Coastal Lake	25-Sep	268	Good	0	3,300	0	0	0	Shaul	3,000 sockeye in Coastal Lake, 300 in Drillhole Lake, low count due to high water, plankton bloom
314-20.02	Doe Valley	09-Aug	221	Good	0	0	0	500	0	Shaul	300 chums at stream mouth, additional 100 carcasses
314-20.03	Buck Valley	22-Jul	203	Good	0	0	0	0	0	Shaul	200 chums at stream mouth
		09-Aug	221	Good	0	0	0	800	0	Shaul	500 chums at stream mouth
314-20.04	Deer Valley	22-Jul	203	Good	0	0	0	1,800	0	Shaul	500 chums at stream mouth
		09-Aug	221	Good	0	10	0	5,400	0	Shaul	3,000 chums at stream mouth (rough estimate)
314-20.05	Portage Valley	09-Aug	221	Good	0	0	0	0	0	Shaul	2,000 chums at stream mouth
314-20.06	Grass Valley	22-Jul	203	Good	0	300	0	400	0	Shaul	
		09-Aug	221	Good	0	500	0	7,700	0	Shaul	5,000 chums at stream mouth, sockeye all spawning
314-20.07	Lawrence Valley	22-Jul	203	Good	0	0	0	1,400	0	Shaul	Additional 1,000 chums on flats
		09-Aug	221	Good	0	0	0	11,000	0	Shaul	7,000 chums at stream mouth, estimated 30,000 chums schooled in deep water at head of Herendeen Bay

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
314-20.08	Mine Harbor	Not surveyed									
314-20.09	Coal Creek	22-Jul	203	Good	0	0	0	400	0	Shaul	3,000 chums at stream mouth
		09-Aug	221	Good	0	0	0	3,300	0	Shaul	Very poor escapement
314-30.04	Mud Bay	09-Aug	221	Good	0	0	0	2,500	0	Shaul	
314-30.05	Mud Bay	09-Aug	221	Good	0	0	0	1,300	0	Shaul	
314-30.07	Right Head Creek	09-Aug	221	Good	0	0	0	200	0	Shaul	
314-30.09	Right Head Creek	09-Aug	221	Good	0	0	0	1,000	0	Shaul	500 chums at stream mouth
314-30.10	Left Head Creek	09-Aug	221	Good	0	0	0	1,000	0	Shaul	
315-10.01	Frank's Lagoon	01-Jul	182	Good	0	0	0	900	0	Shaul	Partial survey: creek outlet, 400 chum spawning in tributary, the remainder in outlet
		22-Jul	203	Good	0	0	0	1,300	0	Shaul	Partial survey: creek only, lagoon and outlet murky
		21-Aug	233	Good	0	0	0	0	0	Berceli	
315-10.02	King Salmon	01-Jul	182	Good	50	0	0	0	0	Shaul	Fish in one school
		22-Jul	203	Good	300	0	0	0	0	Shaul	Partial survey: lower 1 mile
		31-Jul	212	Fair	75	0	0	0	0	Thomson	25 chinook in lagoon
315-11.02	Bear River b/ C & E	01-Jul	182	Good	0	800	0	0	0	Shaul	Partial survey: below weir, all sokeye within 1/2 of weir, very poor escapement
		03-Jul	184	Good	0	19,500	0	0	0	Shaul	Sockeye in thin line from lower forks to weir

-Continued-

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
315-12.00	Sandy River & Lake	01-Jul	182	Good	0	12,500	0	0	0	Shaul	Partial survey: below lake, 6,000 sockeye in lagoon, 3,500 sockeye from tower-lagoon
		18-Jul	199	Good	0	36,000	0	0	0	Shaul	Partial survey: lake and spawning grounds, all sockeye at upper end of lake
316-10.01	Lime Creek	Not surveyed									
316-10.02	Unnamed	Not Surveyed									
316-10.04	Three Hills	05-Sep	248	Good	0	100	0	0	0	Shaul	
316-10.05	Ocean River	03-Jul	184	Good	10	100	0	0	0	Shaul	All sockeye in creeks between lakes, additional 10 chinook in Ilnik Lake
		18-Jul	199	Good	20	100	0	0	0	Shaul	All fish in Finger Lake and immediately below, river flowing into Ilnik Lagoon
316-10.06	Willie Creek	03-Jul	184	Good	0	2,200	0	0	0	Shaul	200 sockeye near mouth of outlet, 1,000 sockeye colored up and close to spawning
		18-Jul	199	Good	10	3,300	0	0	0	Shaul	Fish colored, chinook and 400 sockeye spawning
316-20.01	Ilnik Estuary & River	03-Jul	184	Good	0	3,000	0	0	0	Shaul	Partial survey: fog, fish colored up
		07-Jul	188	Good	0	3,850	0	0	0	Fox	Sockeye in front of village, fish colored up
		08-Jul	189	Poor	0	300	0	0	0	McCullough	No fish in front of village, 75 sockeye in lake, the rest below lake
		18-Jul	199	Good	0	12,000	0	0	0	Shaul	10,300 sockeye in front of village, no more coming in, 1,300 sockeye on spawning grounds
		30-Aug	242	Good	0	0	0	0	9,000	Shaul	Partial survey: lagoon only
		05-Sep	248	Good	0	0	0	0	17,500	Shaul	Partial survey: lagoon, most schooled above village
		13-Sep	256	Good	0	0	0	0	25,300	Shaul	Partial survey: lagoon, 25,000 coho in lake above village, 300 coho in lagoon below first wide spot

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Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
316-20.04	Unangashak River	30-Aug	242	Good	0	0	0	0	1,400	Shaul	Partial survey: lower 3 miles
		05-Sep	248	Poor	0	130	0	0	300	Shaul	Partial survey: lower 3 miles, sockeye spawning in southern most of two large lakes to the southwest
		13-Sep	256	Good	0	0	0	0	300	Shaul	Partial survey: lower 3 miles
317-2	Charles	30-Jul	211	Good	0	220	0	0	0	Fox	
317-4 A&B	Bluff Creek	30-Jul	211	Good	0	4,580	0	60	0	Fox	Sockeye: 400 in Yellow Bluff, 1,000 below forks, balance in Red Bluff, some probably chinook
317-6 A	Highland Creek	30-Jul	211	Good	0	680	0	0	0	Fox	
317-7 A	Meshik River	08-Jul	189	Good	0	0	0	0	0	McCullough	7,200 sockeye and chum mixed in stream
		30-Jul	211	Good	380	0	0	980	0	Fox	
		26-Aug	238	Poor	0	0	0	0	1,100	Fox	Muddy, likely many more fish
		30-Aug	242	Good	0	0	0	0	27,000	Shaul	Partial survey: to Plenty Bear, good escapement
317-7 B	Braided Creek	30-Jul	211	Good	200	0	0	560	0	Fox	
317-7 C	Landlocked Creek	30-Jul	211	Good	0	900	0	0	0	Fox	
317-7 E	Blue Violet Creek	30-Jul	211	Good	3	1,740	0	1,070	0	Fox	
317-7 F	Wolf Creek	30-Jul	211	Good	0	150	0	580	0	Fox	
317-7 H	Shoe Creek	30-Jul	211	Good	0	170	0	900	0	Fox	200 sockeye and 800 chums at stream mouth
317-7 K	Unnamed	30-Jul	211	Good	0	950	0	200	0	Fox	

-Continued-

Table 51. (page 10 of 11)

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
317-7 L	Unnamed	30-Jul	211	Good	0	220	0	280	0	Fox	
317-7 M	Unnamed	30-Jul	211	Good	0	400	0	480	0	Fox	
317-7 N	Unnamed	30-Jul	211	Good	0	970	0	0	0	Fox	
317-7 O	Plenty Bear Creek	30-Jul	211	Good	0	0	0	0	0	Fox	
317-7 O-A	Plenty Bear Creek	30-Jul	211	Good	0	0	0	0	0	Fox	
317-7 P	Waterfall Creek	30-Jul	211	Good	0	0	0	90	0	Fox	
317-7 R	Rainbow Creek	30-Jul	211	Good	15	0	0	450	0	Fox	
317-7 T	Cub Creek	30-Jul	211	Good	0	0	0	120	0	Fox	
317-20.09	Barabaro Creek	Not Surveyed									
317-20.08	Birthday Creek	30-Jul	211	Good	0	0	0	350	0	Fox	
318-20.04	Mud Creek	13-Sep	256	Good	0	0	0	0	6,200	Shaul	6000 coho above forks, 200 coho below forks
318-20.06	Cinder River	14-Aug	226	Good	60	700	0	500	0	Pillifant	
		26-Aug	238	Poor						Fox	Too muddy
		13-Sep	256	Poor						Shaul	Too muddy, impressive water level
318-20.06	Lava Creek	14-Aug	226	Good	0	3,000	0	0	0	Pillifant	3,000 carcasses (probably chums)
318-20.06	High Creek	Not surveyed									

-Continued-

Table 51. (page 11 of 11)

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Condition	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
318-20.06	Meloy Creek	14-Aug	226	Good	50	250	0	400	0	Pillifant	
318-20.06	Wiggly Creek	14-Aug	226	Good	100	0	0	600	0	Pillifant	Additional 200 chum carcasses
318-20.06	Ray Creek	14-Aug	226	Good	10	0	0	300	0	Pillifant	
318-20.06	L Creek	14-Aug	226	Good	5	0	0	0	0	Pillifant	

a/ See Nelson River tower counts, and total escapement

b/ See Bear River tower counts, and total escapement

Table 52. SOUTH PENINSULA SOCKEYE INDEXED TOTAL ESCAPEMENTS BY SECTION, 1962-1989

	SOCKEYE SALMON				
Year	Northwest and Southwest Stepovak	Shumagin Islands	Mino Creek - Little Coal Bay	Pavlof Bay	Canoe Bay
1962	5,000	4,000	100	(500)	200
1963	7,600	2,700	100	(500)	0
1964	5,800	700	0	900	0
1965	6,000	2,100	0	1,500	0
1966	10,000	900	100	200	0
1967	6,200	4,000	0	400	0
1968	3,600	2,400	0	400	0
1969	19,200	1,600	200	500	0
1970	4,600	4,400	500	1,400	300
1971	11,100	2,800	500	1,300	0
1972	6,500	2,000	0	400	0
1973	1,200	1,000	0	500	0
1974	61,500	7,900	0	200	200
1975	22,300	11,600	500	1,600	1,600
1976	29,700	7,500	1,000	2,800	300
1977	17,000	9,200	2,000	4,500	500
1978	22,200	9,000	2,700	2,100	1,500
1979	20,000	13,000	200	1,100	1,500
1980	12,000	6,300	1,100	1,000	5,500
1981	18,000	4,000	500	5,500	2,000
1982	9,100	10,000	800	1,000	1,000
1983	21,500	10,000	1,600	1,100	5,000
1984	18,600	10,600	100	700	9,000
1985	14,000	7,800	500	900	1,000
1986	10,500	6,800	100	1,500	2,700
1987	11,400	2,000	500	1,200	1,300
1988	19,300	3,100	600	1,900	1,500
1989	16,700	7,300	600	800	1,100

Figures in parenthesis are extrapolated estimates.

Table 52. (continued)

SOCKEYE SALMON

Year	Cold Bay	Thin Point	Morzhovoi Bay	Ikatan Bay
1968	2,300	2,200	1,500	400
1969	5,200	2,100	500	200
1970	1,000	1,100	(2,500)	700
1971	900	1,300	200	1,300
1972	1,100	1,300	200	400
1973	1,500	700	400	1,000
1974	3,500	16,000	5,300	1,000
1975	5,000	6,100	2,200	800
1976	4,900	20,500	1,700	1,300
1977	7,600	17,700	3,800	2,600
1978	14,700	7,400	2,600	(2,600)
1979	7,800	6,900	700	2,100
1980	4,800	12,000	1,300	1,000
1981	5,600	7,500	1,200	1,400
1982	2,600	8,800	4,200	1,700
1983	8,000	6,500	3,700	1,800
1984	6,600	7,000	500	1,800
1985	5,000	4,600	2,100	3,900
1986	1,800	12,400	5,500	1,800
1987	7,800	8,700	7,000	2,100
1988	9,500	23,500	7,300	2,300
1989	5,900	21,500	14,300	3,000

Figures in parenthesis are estrapolated estimates.

Table 53. SOUTH PENINSULA INDEXED TOTAL ESCAPEMENTS BY SECTION

PINK SALMON

Year	Stepovak Flats & East Stepovak	Northwest and Southwest Stepovak	Balboa Bay	Shumagin Islands	Beaver Bay	Mino Creek - Little Coal Bay
1962	48,000	122,300	(24,500)	112,900	(17,500)	278,700
1963	87,000	197,000	53,800	52,000	21,700	290,100
1964	35,000	155,300	25,200	125,400	30,500	316,000
1965	100,000	160,700	32,000	50,900	8,400	255,100
1966	107,000	191,500	(70,000)	(83,000)	(10,000)	108,600
1967	53,200	67,000	25,100	32,000	1,800	73,000
1968	25,000	(75,000)	63,600	51,200	(8,000)	96,200
1969	180,000	369,300	187,200	112,900	29,400	484,900
1970	59,000	273,900	38,700	166,500	(15,000)	173,400
1971	15,700	101,200	13,600	32,000	(12,000)	190,100
1972	1,300	20,900	1,100	9,900	0	13,200
1973	9,500	17,500	(6,000)	12,000	(500)	21,500
1974	4,100	41,400	7,500	(40,000)	(6,000)	28,000
1975	20,000	110,000	8,000	52,200	2,500	90,400
1976	30,000	204,600	42,500	331,000	(14,000)	116,900
1977	101,400	360,000	92,700	299,600	82,500	662,000
1978	77,000	449,200	108,200	199,600	60,500	498,100
1979	40,000	302,400	133,600	(131,400)	65,700	648,100
1980	56,800	344,100	77,700	133,600	32,400	297,500
1981	78,800	460,000	82,000	89,600	53,600	700,000
1982	25,000	313,400	50,000	140,000	50,000	419,200
1983	42,700	115,300	27,300	51,700	4,000	160,400
1984	101,000	418,100	135,100	165,800	49,200	876,800
1985	34,200	216,300	34,500	125,600	23,300	380,200
1986	50,700	222,000	41,200	176,000	9,400	239,700
1987	89,100	290,500	58,100	174,700	48,800	321,700
1988	79,300	450,400	82,200	257,200	47,800	248,900
1989	85,900	189,200	74,400	115,000	68,000	453,400

Figures in parenthesis are extrapolated estimates.

Table 53. (continued)

PINK SALMON

Year	Pavlof Bay	Canoe Bay	Volcano Bay	Belkofski Bay	Deer Island	Cold Bay
1962	213,200	9,000	5,000	95,300	229,100	(7,000)
1963	158,900	26,000	7,200	150,200	225,300	9,700
1964	205,000	(10,000)	5,100	(85,000)	201,000	24,500
1965	158,600	24,200	21,000	53,000	135,900	7,000
1966	55,200	2,100	0	30,000	32,600	13,300
1967	62,600	12,600	21,000	72,000	15,600	300
1968	132,600	76,500	(7,200)	54,000	67,000	97,600
1969	438,500	104,000	115,000	244,000	185,100	4,000
1970	186,500	94,900	10,500	65,800	120,500	29,200
1971	76,200	47,200	13,500	58,100	136,700	200
1972	29,400	6,000	7,000	8,000	7,000	1,100
1973	10,000	8,700	7,300	6,300	7,100	200
1974	106,800	4,800	3,000	10,100	16,100	8,200
1975	68,900	5,800	70,000	58,600	56,100	1,100
1976	267,000	78,000	117,600	109,600	47,800	50,100
1977	442,300	129,000	137,500	239,200	101,200	8,300
1978	395,700	178,000	193,800	221,200	184,000	76,900
1979	543,100	260,800	60,000	139,200	256,100	5,900
1980	425,200	43,100	56,200	230,200	350,200	49,600
1981	325,000	86,000	107,000	163,600	107,500	7,900
1982	462,300	73,300	41,900	106,300	157,700	95,100
1983	172,500	65,300	26,200	50,900	89,400	11,100
1984	708,800	72,000	143,600	207,000	446,000	143,200
1985	378,500	36,700	24,200	82,100	206,300	7,100
1986	403,800	42,600	78,800	111,600	181,500	29,900
1987	282,300	39,200	19,800	50,400	137,400	7,000
1988	390,000	80,700	127,500	250,100	482,000	33,900
1989	183,200	10,300	37,200	104,500	401,100	86,100

Figures in parenthesis are extrapolated estimates.

Table 53. (continued)

PINK SALMON

Year	Thin Point	Morzhovoi Bay	Ikatan Bay	Unimak District	Bechevin* Bay
1962	31,300	63,000	170,000	172,000	4,000
1963	(4,000)	15,000	(10,000)	(10,000)	4,400
1964	39,400	(41,000)	(110,000)	27,500	(15,000)
1965	13,700	6,100	5,000	3,800	900
1966	5,900	2,000	3,900	4,300	1,300
1967	5,100	2,500	700	(1,000)	500
1968	9,400	14,000	29,000	17,000	25,000
1969	14,700	1,000	3,500	1,400	2,100
1970	7,900	9,300	25,000	22,800	11,100
1971	3,600	800	1,500	300	8,400
1972	1,100	3,700	1,500	200	1,200
1973	4,000	(200)	0	(0)	(200)
1974	1,600	300	2,500	(4,000)	(23,000)
1975	5,200	2,100	1,000	200	500
1976	6,000	13,400	10,900	(17,000)	37,200
1977	5,100	8,100	9,500	400	6,200
1978	15,700	90,000	75,000	35,800	90,400
1979	6,000	9,000	24,400	3,800	9,300
1980	53,000	76,500	320,500	95,000	94,000
1981	18,200	9,500	17,300	800	5,700
1982	34,900	48,000	187,900	88,000	51,500
1983	15,700	4,400	13,500	800	3,900
1984	77,000	16,500	199,000	52,900	33,300
1985	30,300	8,500	10,500	15,900**	1,400
1986	39,700	14,800	58,500	16,400**	12,600
1987	7,500	2,900	5,800	5,300	1,100
1988	55,600	21,600	103,900	18,500	26,700
1989	36,400	10,200	6,800	(9,400)	0

Figures in parenthesis are extrapolated estimates

* Bechevin Bay is considered part of the North Peninsula.

**Includes Sanak Island, which accounted for 15,500 and 5,400 during 1985 and 1986 respectively.

Table 54. SOUTH PENINSULA INDEXED TOTAL ESCAPEMENTS BY SECTION

CHUM SALMON

Year	Stepovak Flats & East Stepovak	Northwest and Southwest Stepovak	Balboa Bay	Shumagin Islands	Beaver Bay	Mino Creek - Little Coal Bay
1962	12,000	14,000	(43,700)	10,000	(6,000)	16,900
1963	29,400	71,900	43,900	1,200	0	300
1964	18,000	17,500	24,200	100	4,500	1,500
1965	60,000	23,500	29,900	1,100	200	100
1966	110,000	33,300	(100,000)	(0)	0	2,000
1967	15,700	5,500	27,100	1,100	3,300	0
1968	23,000	(11,100)	31,600	3,700	(6,500)	800
1969	6,000	9,400	16,400	2,400	9,800	0
1970	25,000	24,700	29,900	0	(15,000)	100
1971	56,100	49,900	26,500	300	(20,000)	200
1972	19,000	20,300	15,100	6,600	5,500	0
1973	27,000	4,500	8,700	4,400	(7,500)	800
1974	25,000	11,000	8,200	(1,500)	9,600	400
1975	24,000	43,100	(9,000)	8,300	4,900	1,500
1976	20,000	19,300	43,100	10,100	(10,400)	0
1977	126,200	47,300	55,300	14,000	15,000	0
1978	74,000	76,900	53,300	26,000	7,000	500
1979	(50,000)	50,400	28,500	(5,000)	200	0
1980	26,100	44,300	28,300	1,100	19,000	0
1981	34,000	23,900	42,000	5,500	13,000	0
1982	20,000	26,900	14,000	3,000	10,000	0
1983	40,200	51,100	46,600	11,800	10,700	0
1984	54,200	42,400	35,700	56,300	62,400	0
1985	34,800	16,900	17,500	24,300	18,800	0
1986	44,300	38,700	33,300	1,500	9,900	0
1987	91,000	28,100	35,600	12,600	5,600	4,100
1988	21,000	20,700	23,300	7,600	12,000	2,000
1989	55,400	11,700	4,000	26,000	26,000	0

Figures in parenthesis are extrapolated estimates.

Table 54. (continued)

Year	Pavlof Bay	Canoe Bay	Volcano Bay	Belkofski Bay	Deer Island	Cold Bay
			CHUM SALMON			
1962	(26,500)	109,500	54,900	29,000	0	(13,000)
1963	(10,000)	106,300	17,900	104,600	0	46,400
1964	(25,000)	70,000	70,400	51,700	0	114,300
1965	(15,000)	73,500	6,300	7,000	0	10,400
1966	(20,000)	89,500	29,900	11,000	0	14,300
1967	(12,000)	68,100	19,100	21,000	0	5,500
1968	23,300	91,700	(8,700)	29,500	0	31,400
1969	(5,000)	47,900	2,000	10,000	0	20,100
1970	13,000	64,000	25,200	36,500	0	34,100
1971	(15,000)	31,100	24,100	65,500	0	25,600
1972	8,100	70,400	16,000	37,300	0	25,700
1973	19,500	58,500	16,000	34,400	0	11,600
1974	(22,000)	92,100	27,400	29,100	0	16,400
1975	8,200	61,200	11,500	4,800	0	8,200
1976	17,500	104,900	29,500	30,000	0	24,300
1977	60,100	183,000	76,000	60,300	0	85,000
1978	43,100	105,400	54,600	32,500	0	103,600
1979	(17,000)	151,600	41,500	17,800	0	17,300
1980	15,600	107,200	11,900	31,500	0	50,600
1981	13,600	102,500	30,400	34,900	0	50,400
1982	9,900	119,200	56,000	24,100	0	74,600
1983	12,000	156,500	37,700	16,900	0	33,500
1984	29,500	165,500	79,800	50,500	0	78,000
1985	22,300	150,100	49,300	31,100	0	75,200
1986	23,100	88,800	82,000	64,700	0	111,800
1987	43,000	109,200	69,900	57,400	0	89,100
1988	44,600	136,800	28,400	63,100	0	101,900
1989	18,200	71,300	15,600	27,900	0	61,000

Figures in parenthesis are extrapolated estimates.

Table 54. (continued)

CHUM SALMON

Year	Thin Point	Morzhovoi Bay	Ikatan Bay	Unimak District	Bechevin* Bay
1962	14,200	7,700	42,000	0	48,500
1963	(9,000)	4,800	(1,000)	(0)	22,300
1964	19,500	37,100	(1,000)	0	(16,000)
1965	500	500	0	0	(1,800)
1966	3,000	7,700	700	600	10,000
1967	600	3,700	200	(0)	15,400
1968	3,100	12,700	2,000	0	19,800
1969	200	5,200	0	200	8,000
1970	6,300	6,400	300	0	(5,600)
1971	8,600	20,000	300	0	5,900
1972	17,000	12,900	400	200	11,200
1973	10,900	8,000	200	(500)	(7,500)
1974	5,200	7,900	1,000	(500)	(6,100)
1975	800	7,800	0	0	17,300
1976	7,400	9,900	200	(600)	38,300
1977	26,300	25,300	0	1,100	54,300
1978	10,400	13,000	200	0	29,500
1979	17,500	12,000	1,800	500	12,400
1980	11,800	14,000	0	1,000	41,000
1981	19,500	11,500	0	100	29,600
1982	15,000	14,000	200	0	20,100
1983	21,300	7,700	500	0	15,500
1984	23,000	22,400	0	0	30,400
1985	44,000	19,200	0	0	21,900
1986	39,600	6,500	0	100	15,500
1987	51,300	23,400	0	400	34,700
1988	17,500	10,100	5,200	1,100	25,000
1989	10,000	3,900	2,500	500	9,100

Figures in parenthesis are extrapolated estimates

* Bechevin Bay is considered part of the North Peninsula.

Table 55. INDEXED TOTAL ESCAPEMENTS OF SOCKEYE SALMON IN SOME NORTH PENINSULA PRODUCTION AREAS (FISH IN THOUSANDS).

Year	Ilnik River	Willie Creek	Ocean River	Sandy River	Bear River	Nelson Lagoon	Whaleback Mtn. Creek	Cristianson Lgn. Crks.
1960	7.0	45.0	14.6 I	27.5	185.0	48.0	14.5	1.3
1961	4.5	12.6	0.6 I	57.3	200.0	138.2	-	-
1962	3.3	2.0	0.1 I	25.0	190.0	54.2	-	-
1963	4.6	2.8	2.5 I	38.6	200.0	31.0	12.5	0.7
1964	-	2.4	0.6 I	40.2	210.0	80.0	16.7	1.5
1965	7.0	2.7	2.3 ?	22.0	115.0	37.0	5.0	0.4
1966	14.0	12.6	4.2 ?	5.0	180.0	36.5	8.7	0.6
1967	14.0	3.8	5.0 ?	30.0	170.0	42.0	-	0.6
1968	11.2	-	0.6 ?	16.0	150.0	31.0	5.0	-
1969	-	-	0.5 I	45.0	361.0	78.5	30.0	3.0
1970	7.6	7.0	0.7 I	25.0	269.0	82.4	-	-
1971	9.0	16.1	1.0 I	30.0	251.0	60.1	27.5	2.0
1972	5.4	6.0	1.7 B	8.4	127.0	28.0	2.5	1.4
1973	13.1	1.7	1.2 B	5.1	125.0	18.7	4.0	0.1
1974	10.3	1.5	2.7 B	16.5	250.0	39.9	2.9	0.2
1975	18.0	5.3	17.2 B	40.0	270.0	138.6	10.0	0.4
1976	10.2	4.1	0.8 I	43.0	285.0	108.9	18.0	1.4
1977	9.2	8.2	3.2 I	50.2	215.0	155.0	12.5	1.2
1978	12.9	5.0	2.8 I	64.0	730.0	304.3	10.0	0.2
1979	79.2	6.0	12.0 I	61.0	952.0	360.1	24.4	1.0
1980	49.6	20.0	28.0 I	76.0	670.8	352.6	75.6	0.3
1981	-	-	- I	51.5	689.9	251.0	57.0	2.1
1982	12.0	13.6	16.9 I	61.3	300.0	179.6	25.0	0.5
1983	11.8	3.6	13.2 I	28.0	329.9	128.8	12.0	1.5
1984	12.4	3.7	- I	19.0	394.6	251.0	61.0	2.0
1985	13.1	3.6	4.3 I	11.5	440.0	318.5	24.4	1.4
1986	44.5	15.1	7.2 B	6.9	273.4	117.9	36.3	0.5
1987	15.2	8.5	7.0 B	8.7	252.4	155.7	23.8	0.4
1988	14.0	5.2	7.7 I	34.5	310.1	142.5	28.6	1.1
1989	12.0	4.3	0.2 I	36.0	451.0	206.8	45.0	1.7

I = Years Ocean River emptied into Ilnik Lagoon.
B = Years Ocean River emptied directly into Bering Sea.

Table 56. INDEXED TOTAL ESCAPEMENTS OF CHUM SALMON IN SOME MAJOR NORTH PENINSULA PRODUCTION AREAS (Fish in Thousands)

Year	Frank's Lagoon	Moller Bay	Herendeen Bay	Nelson Lagoon	Moffett Bay	Izembek Bay	St. Catherine Cove
1960	3.0	27.1	52.5	-	76.4	18.0	5.2
1961	3.5	14.4	24.0	9.1	-	11.0	-
1962	1.5	2.0	16.4	9.7	-	48.0	21.6
1963	0.5	6.4	13.5	7.0	91.5	44.0	6.6
1964	2.2	11.0	25.5	2.0	55.5	42.0	-
1965	1.2	-	5.6	4.0	-	9.5	0.6
1966	0.7	10.7	45.5	17.0	-	19.5	5.0
1967	-	-	19.3	29.8	17.8	15.0	3.6
1968	6.0	(3.6)	45.5	18.1	89.3	52.8	4.4
1969	-	-	10.0	13.0	72.3	23.0	6.3
1970	0.5	11.6	31.2	36.0	(32.3)	25.1	3.1
1971	0	4.4	10.2	19.0	28.0	26.1	3.8
1972	4.3	-	6.0	16.8	29.1	36.7	5.9
1973	0.6	(1.4)	2.8	12.7	41.1	27.0	8.4
1974	1.3	-	2.8	8.3	34.1	41.9	3.5
1975	2.6	(1.2)	6.3	4.5	35.8	38.3	12.7
1976	6.4	9.1	19.4	42.5	90.8	36.5	5.4
1977	10.0	32.2	77.5	83.3	254.9	126.5	14.6
1978	-	(9.8)	64.3	10.2	85.7	48.4	12.0
1979	5.6	13.0	18.0	37.0	130.0	48.0	5.2
1980	17.8	37.2	79.0	164.0	289.3	74.8	13.1
1981	22.1	34.2	50.1	57.0	187.0	48.0	10.0
1982	41.8	8.8	(152.3)	29.1	130.4	38.6	10.8
1983	15.0	16.4	108.0	14.0	115.5	57.2	8.3
1984	6.8	18.6	222.7	49.0	354.2	73.3	7.7
1985	5.2	6.9	64.8	13.0	138.8	59.9	7.5
1986	5.7	11.3	44.5	0.8	121.1	21.3	6.3
1987	4.9	19.6	69.0	5.2	217.6	68.4	17.9
1988	2.0	17.2	59.4	11.0	237.3	67.1	10.7
1989	2.2	6.5	76.9	0.8	57.2	33.4	5.1

- Insufficient data for estimate

() Estimate based on incomplete data.

Table 57. Sandy River Sockeye Escapement Age Composition. (Fish in thousands)

Age Class	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
0.1	-	-	-	-	-	-	*	-	*	-
0.2	-	-	-	-	-	-	*	-	*	-
0.3	-	-	-	-	-	-	*	-	*	-
0.4	-	-	-	-	-	-	*	-	*	-
1.1	-	-	-	2.3	0.1	-	*	-	*	0.3
1.2	31.8	13.8	8.4	36.4	18.5	10.9	*	2.1	*	21.4
1.3	16.0	53.6	37.5	16.7	7.4	7.7	*	4.4	*	11.8
1.4	-	0.4	-	-	-	-	*	-	*	-
2.1	-	-	-	0.3	-	-	*	-	*	-
2.2	5.8	3.3	2.8	0.8	2.0	0.2	*	0.1	*	0.6
2.3	7.4	4.5	2.8	4.8	-	0.2	*	0.3	*	0.1
2.4	-	-	-	-	-	-	*	-	*	-
3.1	-	-	-	-	-	-	*	-	*	-
3.2	-	0.4	-	-	-	-	*	-	*	-
3.3	-	-	-	-	-	-	*	-	*	-
3.4	-	-	-	-	-	-	*	-	*	-
TOTAL	61.0	76.0	51.5	61.3	28.0	19.0	11.5	6.9	8.7	34.5

*No samples were collected in 1985 and 1987 due to high water on spawning grounds.

The 1988 and 1989 information was obtained from scale samples, otoliths were used during previous years. Escapements are indexed totals.

Table 57. (continued)

Age Class	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
0.1	-									
0.2	0.1									
0.3	0.1									
0.4	-									
1.1	0.1									
1.2	7.7									
1.3	25.7									
1.4	-									
2.1	0.3									
2.2	0.4									
2.3	1.6									
2.4	-									
3.1	-									
3.2	-									
3.3	-									
3.4	-									
TOTAL	36.0									

*No samples were collected in 1985 and 1987 due to high water on spawning grounds.

The 1988 and 1989 information was obtained from scale samples, otoliths were used during previous years. Escapements are indexed totals.

Table 58. Bear River Sockeye Escapement Age Composition. (Fish in thousands)

Age Class	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
0.1	-	-	-	-	-	-	-	-	-	-
0.2	-	-	-	-	-	-	-	-	-	-
0.3	-	-	-	-	-	-	-	0.3	-	-
0.4	-	-	-	-	-	-	-	-	-	-
1.1	6.7	7.6	-	2.5	0.1	8.5	0.8	-	-	0.1
1.2	40.3	34.9	128.9	4.5	6.6	12.1	16.1	9.5	6.5	1.1
1.3	3.1	9.4	37.8	15.4	2.1	4.9	30.2	12.6	33.9	14.9
1.4	-	-	-	-	0.3	0.4	-	-	0.2	0.1
2.1	95.1	44.3	14.6	55.9	40.3	141.7	36.8	3.2	0.5	28.7
2.2	660.7	480.4	397.1	95.9	154.4	167.7	299.7	159.1	132.8	126.0
2.3	144.6	93.3	111.5	125.7	119.6	59.3	52.9	88.3	77.5	138.9
2.4	-	-	-	-	1.4	-	1.5	0.4	1.0	0.2
3.1	-	-	-	-	-	-	-	-	-	-
3.2	-	0.9	-	0.1	4.7	-	2.0	-	-	0.1
3.3	1.5	-	-	-	0.4	-	-	-	-	-
3.4	-	-	-	-	-	-	-	-	-	-
TOTAL	952.0	670.8	689.9	300.0	329.9	394.6	440.0	273.4	252.4	310.1

Table 58. (continued)

Age Class	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
0.1	-									
0.2	-									
0.3	-									
0.4	-									
1.1	1.0									
1.2	14.0									
1.3	1.3									
1.4	2.7									
2.1	37.5									
2.2	265.8									
2.3	123.2									
2.4	4.8									
3.1	-									
3.2	0.5									
3.3	0.2									
3.4	-									
TOTAL	451.0									

Table 59. Nelson (Sapsuk) Sockeye Escapement Age Composition. (Fish in thousands)

Age Class	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
0.1	-	-	-	-	-	-	-	-	-	-
0.2	-	-	-	-	-	-	-	-	-	-
0.3	-	-	-	-	-	-	-	0.7	-	0.8
0.4	-	-	-	-	-	-	-	-	-	-
1.1	2.3	6.7	-	16.2	0.4	1.0	-	-	-	1.7
1.2	52.2	13.8	28.6	0.6	4.1	14.0	13.2	1.8	26.9	25.3
1.3	-	66.0	16.3	11.4	7.9	34.1	14.5	9.2	14.2	19.7
1.4	-	-	-	-	0.4	-	-	-	-	-
2.1	49.7	13.8	9.0	13.9	5.2	41.8	42.8	2.8	0.8	17.7
2.2	146.7	191.2	152.9	14.7	41.0	94.4	210.9	18.4	96.4	36.6
2.3	55.9	43.9	36.9	114.8	40.2	58.8	32.9	83.9	3.9	32.6
2.4	43.3	-	-	-	-	-	-	0.2	-	-
3.1	-	-	-	-	-	-	-	-	-	-
3.2	-	-	0.5	-	0.4	-	-	-	-	0.6
3.3	-	-	-	-	0.4	-	-	-	-	-
3.4	-	-	-	-	-	-	-	-	-	-
TOTAL	352.1	335.4	244.2	171.6	124.0	244.1	314.3	117.0	142.2	135.0

Table 59. (continued)

Age Class	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
0.1	-									
0.2	-									
0.3	-									
0.4	-									
1.1	0.3									
1.2	27.7									
1.3	15.1									
1.4	-									
2.1	6.8									
2.2	131.4									
2.3	11.0									
2.4	0.5									
3.1	0.1									
3.2	0.1									
3.3	-									
3.4	-									
TOTAL	193.0									

Table 60. URILIA BAY AND ILNIK LAGOON SOCKEYE PERCENT AGE COMPOSITION, 1986-1988

URILIA BAY

Year	0.2	0.3	0.4	1.1	1.2	1.3	1.4	2.2	2.3	2.4
*1986	1.1	45.1	0.1	0	3.6	48.1	0.5	0.1	1.4	0
*1987	0.2	50.7	0	0	6.5	39.5	1.4	0	0.5	0
*1988	8.2	21.9	2.2	0	9.6	55.5	0	0.7	1.9	0
*1989	2.7	44.5	0.6	0	9.6	40.6	0.6	0.6	0.8	0

*Samples are from commercial catch, dominantly seine caught

ILNIK LAGOON

Year	0.2	0.3	0.4	1.1	1.2	1.3	1.4	2.2	2.3	2.4
1986	0.9	53.9	0	0	1.3	37.3	0.1	0.9	5.5	0
1987	2.3	40.7	7.0	0	1.2	44.2	1.2	1.2	2.3	0
1988	1.7	40.6	1.5	0.2	5.8	43.0	2.0	0.9	3.9	0.4
1989	0.6	3.2	4.8	0.3	3.8	73.3	3.8	2.5	7.6	0

MESHIK RIVER

Year	0.2	0.3	0.4	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4
1988	4.0	28.4	41.1	0	0.9	9.3	12.0	0	0.6	1.5	2.2
1989	2.5	20.7	1.0	0	7.8	47.9	1.2	0.6	1.9	16.3	0.2

Table 61. 1989 Percent Age Composition of Chum Salmon Escapements[a].

SOUTH PENINSULA

Age Class	Canoe Bay	Belkofski Bay
0.2	0.7	4.5
0.3	73.7	74.6
0.4	20.2	17.2
0.5	5.3	3.6
0.6	0.1	0

NORTH PENINSULA

Age Class	Izembek-Moffet Bay	Herendeen Bay
0.2	2.2	0.2
0.3	40.5	65.4
0.4	39.8	30.9
0.5	17.5	3.5
0.6	0	0

[a]Samples were collected from seine dominated commercial fisheries in terminal locations.

Table 62. 1989 ALASKA PENINSULA AREA ESTIMATED SUBSISTENCE SALMON CATCHES

Community	Permits Issued	Permits Returned	Percent Returned	Projected Catch (Fish) King	Sockeye	Coho	Pink	Chum	Total
Sand Point	86	63	73.3	53	6,347	1,050	731	1,149	9,330
King Cove	39	25	64.1	3	1,982	1,973	294	690	4,942
Cold Bay	18	13	72.2	0	231	55	4	22	312
False Pass	7	4	57.1	4	336	100	175	47	662
Nelson Lagoon/ Port Moller	9	9	100.0	21	250	227	0	11	509
Port Heiden	4	4	100.0	7	222	28	1	4	262
Sub-Total	163	118	72.4	88	9,368	3,433	1,205	1,923	16,017
Non Local Alaska Residents	25	21	84.0	0	1,036	72	8	181	1,297
Total Alaska Peninsula Area	**188**	**139**	**73.9**	**88**	**10,404**	**3,505**	**1,213**	**2,104**	**17,314**
Unalaska									
Local Residents	70	41	58.6	2	1,064	470	1,292	36	2,864
Non Local Residents	4	1	25.0	0	48	0	0	0	48
Total Unalaska	**74**	**42**	**56.8**	**2**	**1,112**	**470**	**1,292**	**36**	**2,912**

AVERAGE SUBSISTENCE SALMON CATCH PER SUCCESSFUL PERMIT

Community	Kings	Sockeye	Coho	Pink	Chum	Total
Sand Point	0.7	83.4	13.8	9.6	15.1	122.6
King Cove	0.1	60.8	61.0	12.0	21.2	155.1
Cold Bay	0	18.6	4.4	0.3	1.8	25.1
False Pass	0.7	64.0	19.0	33.3	9.0	126.0
Nelson Lagoon/Port Moller	2.3	27.8	25.2	0	1.2	56.5
Port Heiden	2.3	74.0	9.3	0.3	1.3	87.2
Unalaska	0	21.5	9.5	26.1	0.7	57.8
Non Local Alaska Residents	0	55.3	3.8	0.4	9.7	69.2

Table 63. 1989 Thin Point Cove Sockeye and Coho Harvests

Subsistence Fishery		
Estimated Permit Holders[a]	Sockeye	Coho
17	1,479	1,239
Commercial Fishery		
Permit Holders[b]		
8	2,614	3,872
Total Harvest	4,093	5,111

[a]The number of subsistence permit holders fishing Thin Point Cove and the number of fish caught are extrapolated from permit returns. All subsistence fishermen fishing Thin Point Cove during 1988 are estimated to be King Cove residents.

[b]The commercial information came from fish tickets.

The indexed total sockeye escapement was 21,500. This figure is probably close to but slightly under the actual figure. The peak coho escapement count was 4,800, however the total escapement was probably somewhat higher.

Table 64. 1989 Mortensen's Lagoon Subsistence and Commercial Sockeye-Coho Harvests.

	Estimated Permits	Sockeye	Coho
Cold Bay Residents	12	231	28
King Cove Residents	0	0	0
Out of Area Residents	7	189	0
Total	19	420	28

The number of permit holders fishing Mortensen's Lagoon and number of fish caught are extrapolated from returned permits.

	Boats	Sockeye	Coho
Commercial Catch	5	270	0

The commercial catch includes all of statistical area 283-32, some of the fish may be going to systems other than Mortensen's Lagoon.

	Sockeye	Coho
Estimated Escapements	4,300	-

Table 65. 1989 Reese Bay (Unalaska Island) Subsistence Sockeye Catch.

Estimated Permits[a]	Sockeyes
12	436

[a]The number of permit holders and number of fish caught are extrapolated from returned permits.

Table 66. ESTIMATED MORTENSEN LAGOON, THIN POINT COVE, AND REESE BAY SUBSISTENCE SALMON HARVESTS, 1982 - 1989.

Year	Mortensen's Lagoon (Estimated) Permits	Sockeye	Cohos	Thin Point Cove (Estimated) Permits	Sockeye	Cohos	Reese (Wislow) Bay (Estimated) Permits	Sockeye	Coho
1982	30	590	1,145	-	-	-	-	-	
1983	41	300	1,600	-	-	-	-	-	
1984	27	745	500	-	-	-	-	-	
1985	22	590	831	-	-	-	23	669	0
1986	12	362	178	15	1,568	656	54	2,824	0
1987	22	604	254	15	1,226	966	20	806	0
1988	21	737	66	17	488	2,196	21	792	0
1989	19	420	28	17	1,479	1,239	12	436	16
Average	24	544	575	16	1,190	1,264	26	1,105	3

Table 67. 1989 Estimated Adak-Kagalaska Islands Personal Use Salmon Catches.

Permit Holders	64
Number of Returned Permits	47 (73.3%)
Number of Returned Permits Reporting Catch[a]	19 (40.4% of returned permits)
Estimated Number of Permit Holders That Caught Salmon	26

Average Catch Per Permit Holder

Kings	Sockeye	Coho	Pinks	Chums	Total
0	14.7	0	4.5	0	19.2

Estimated Total Catch

Kings	Sockeye	Coho	Pinks	Chums	Total
0	382	0	117	0	499

[a]At least 255 of the sockeye harvest was taken at Quail Bay on Kagalaska Island.

ALASKA PENINSULA - ALEUTIAN ISLANDS MANAGEMENT AREA

SAC-ROE HERRING REPORT

TO THE

ALASKA BOARD OF FISHERIES

By: Len Schwarz

Regional Information Report[1] No. 4K89-31

Alaska Department of Fish and Game
Division of Commercial Fisheries
211 Mission Road
Kodiak, Alaska 99615

November 1989

[1]The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished divisional reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries

AREA DESCRIPTION

The Peninsula/Aleutian Management Area is described as statistical Area "M", which includes South Peninsula and Aleutian waters west of Kupreanof Point to the International Date Line and North Peninsula waters extending from the International Date Line east to Cape Menshikof (Figure 1).

1989 SEASON SUMMARY

By regulation, the commercial herring sac-roe season in Area "M" extends from April 15 through July 15. However, the opening of the Port Moller District was delayed by emergency order until May 29. During the 1989 season commercial deliveries on the Alaska Peninsula occurred from May 13 through June 23. The total Peninsula harvest of 1,055 short tons (s.t.) was above the recent 5 year average of 875 tons; no sac-roe harvest occurred in the Aleutian Islands (Table 1). Seventeen purse seine vessels made deliveries to the five companies that bought fish. The average roe recovery was 9%. The average price per ton was $447 for 10% roe recovery making the fishery worth approximately $424,000 to the fishermen.

NORTH PENINSULA

Historical Perspective:

The observed presence of commercial quantities of sac-roe herring on the North Peninsula has been centered around Port Moller and Herendeen Bay. No commercial herring landings occurred in the area until 1982 when 506 tons were harvested (Table 1).

Prior to 1982, there had been reports that in some years herring were present during the spring near the Peter Pan dock in Port Moller, however abundance was unknown. Numerous schools of herring were documented in the Herendeen Bay Area during 1976 through department aerial surveys. The first year that aerial surveys were able to locate herring schools in Port Moller Bay was 1984. In past years, fishing vessels destined for the Togiak fishery frequently stopped in the Port Moller Area to prospect for herring. Since 1982, a commercial sac-roe fishery has developed in both Moller and Herendeen Bays and along the Bering Sea coast eastward from Port Moller (Table 2). The run timing of these stocks appear to be later than the Togiak stocks.

1989 NORTH PENINSULA SUMMARY

The entire North Peninsula opened to commercial herring fishing by regulation on April 15, however the opening of the Port Moller District was delayed until May 29. On May 28 a 249 ton harvest occurred just north of the Port Moller District boundary. After May 28 all the harvest occurred in the Port Moller District. From May 28 to June 23, 8 seiners harvested 744.7 tons (Table 3). For the first time since 1985, Port Moller was not inundated by seine vessels immediately after the Togiak season closed. During the 1986 through 1988 seasons, there was an average of 52 vessels present although only a small percentage actually made landings. The average roe recovery was 9.6% with an average price of $425, with $42 for every percentage point above or below 10%. The North Peninsula fishery was worth approximately $304,500 to the fishermen.

Preseason:

Prior to the 1989 sac-roe herring season, a harvest guideline of 225 tons was established in the Port Moller District. In 1986 a trend began of increasing fishing effort effectively harvesting the early returning fish stocks. In order to shift fishing pressure from the earlier arriving smaller stocks, to a later arriving more abundant stock, the Port Moller District opening was to be delayed until May 30. A stipulation was added that the fishery would be opened if, due to run timing, a large biomass was spotted before May 30.

Fishery:

On May 28 a harvest of 248 tons occurred in the Port Heiden District. N o herring were observed after this and it's probable that the biomass moved into the Port Moller District (Figure 2).

On May 29 a department survey documented a biomass of 1,300 tons in the Port Moller District near Bear River. As stated in the Preseason Management Plan, the Port Moller District would open prior to May 30 if a significant biomass was present. On May 29 a 6 hour opening occurred where 313 tons where harvested near the Port Moller processing facility.

On May 30, the biomass was estimated at 2,500 tons (Table 4) (May 30 biomass estimate plus harvest on May 28 and 29). The harvest of 561 tons represented an exploitation of over 20% and the fishery was closed until additional biomass could be documented in the area.

From June 9 through June 12 industry pilots reported small groups of herring (200-300 tons) moving into Moller and Herendeen Bays, spawning, and then leaving. Departmental surveys conducted on June 13 and 16 documented over 300 tons on each flight. This information established the biomass estimate at 3,195 tons, bringing the exploitation rate below 20% The Port Moller herring district was reopened on June 16 and an additional

harvest of 184 tons was made between June 16 and June 23. The season closed by regulation on July 15, resulting in a harvest of 735 tons.

Biomass:

From May 19 through June 16, thirteen aerial surveys were flown in the Port Moller District (Table 4). In past years, biomass estimates have been difficult to obtain due to poor weather, muddy water, and the rapid arrival and departure of fish. (See 1988 AMR). The 1989 season was exceptional in that fish were visible in significant numbers on 6 different surveys.

A large biomass was spotted on May 28 and 29 in the Bear River Section. On May 30, 1,102 tons were spotted in Herendeen Bay, 15 tons around Deer Island and 822 tons in Moller Bay. These estimates added with the catch of 561 taken prior to May 30 put the estimated biomass at 2,500 tons. Fish spotted in Herendeen and Moller Bay on June 13 and Moller Bay on June 16 were added to the May 30 estimate to bring the total estimated season biomass to 3,195 tons.

There were industry reports of small amounts of herring spawning and leaving the area from June 9 through 12. Also larva studies conducted for NOAA indicated that some spawning occurred on May 15, before aerial survey observations began. Both of these events indicate that the 3,195 ton estimate is a minimum figure. The harvest of 744.7 tons represent a 23% exploitation of the 3,195 ton minimum biomass estimate.

Age Class

The age class structure of the fish that arrived in late May and were primarily harvested along the Bering Sea coast between the Port Moller cannery and Three Hills, was dominated by older fish. Age 6, 8, and 11+ were evenly represented and accounted for over

70% of the sample taken (Table 5, Figure 3). These fish provided 75% of the harvest.

During the latter half of June, samples were taken from the head of Moller and Herendeen Bays. Both of these samples were dominated by age 5 fish (Figure 4).

SOUTH PENINSULA

Historical Perspective

The South Peninsula herring sac-roe fishery started to develop in 1979. Significant landings occurred in 1980 (453 tons), and peaked in 1981 (716 tons) (Table 1). A Board of Fisheries regulation closed the South Peninsula sac-roe fishery in 1983 in favor of a food and bait fishery. The food and bait fishery did not develop and the sac-roe season was reopened during the 1984 season. During the years in which a commercial harvest occurred, landings were reported from 18 separate geographical locations, of these only Canoe Bay produced an annual harvest (Table 7). Beginning in 1984, the Board of Fisheries directed through regulation that this fishery would be managed to allow for a sac-roe as well as food and bait harvest. The sac-roe harvest was allocated 75% of the allowable harvest with the remaining 25% allocated to the food and bait fishery. To date, the food and bait fishery has not developed.

From 1981 through 1989 ADF&G has deployed field crews along the South Peninsula for the purpose of developing biological data and to monitor the commercial fishery. Crews have been stationed in Canoe Bay each season (1981-1989) and intermittently in the other harvest locations or in locations of suspected commercial fishery potential. The crews have been successful in collecting samples and documenting spawning. Aerial fixed wing surveys have been utilized with limited success, primarily due to the large area involved and the sporadic and unpredictable appearance of the fish.

1989 South Peninsula Summary

Harvest guidelines were established preseason based on past fishing performanc, age class data and general information on stock size gathered from Department and industry aerial surveys. Areas where little information on stock size was known were left open for exploration.

The commercial sac-roe fishery on the South Peninsula occurred in 7 locations: Canoe Bay, Pavlof Bay, Lenard Harbor, Stepovak, Shumagin Islands, Balboa Bay, and Dolgoi Island (Table 7, Figure 2). The majority of harvest (48%) came from Canoe Bay. From May 13 to June 17, 310 tons were harvested by 12 seine vessels. The average roe recovery was 7.7% with an average price of $500/ton for 10% roe recovery making the value of the fishery approximately $113,000 to the fishermen.

Intensive aerial surveys to document spawning biomass on the South Peninsula are not possible because of the large area involved, the sporadic and unpredictable appearance of fish, and because the fishery takes place during the middle of the June sockeye salmon fishery, when the availability of personnel is limited. Table 9 lists the surveys that were flown. Surface area of schools sighted is recorded in the form of R.A.I. (relative abundance index) units. R.A.I. units are an expression of total surface area of sighted herring schools in terms of small schools (surface area equal to 538^2 ft.). No attempt is made to convert these units into tonnages due to the lack of conversion factors for deep waters. Many of the schools sighted could have been capelin.

Age Class Composition

As expected, the Canoe Bay fishery was dominated by the younger age classes. Age 4 made up over half of the samples taken. Samples were also taken in the Shumagin Islands and Stepovak Bay. Although the 4 year old age class was strong in both of these areas, age 5 was the dominant age class (Table 10, Figure 5).

Table 1. ALASKA PENINSULA-ALEUTIAN ISLAND AREA HERRING SAC-ROE HARVESTS (Short Tons)

Year	South Peninsula	Aleutian Islands	North Peninsula	Total
1979	10	-	-	10
1980	454	-	-	454
1981	716	-	-	716
1982	138	-	506	644
1983	-	-	627	627
1984	211	-	431	642
1985	345	-	716	1,061
1986	281	-	889	1,170
1987	319	-	512	831
1988	377	-	294	671
1989	310	-	745	1,055

Table 2. ANNUAL HARVEST OF PORT MOLLER HERRING BY GEOGRAPHICAL AREA

Location	1983	1984	1985	1986	1987	1988	1989
Deer Island	-	-	73	41.5		-	-
Herendeen Bay	510	181	100	112.5	160.8[a/]	8.2	67.0
Moller Bay	36	250	256	261.4	344.3	285.5	116.3
Bear River/E. Bering Sea Coast	81	-	287	473.5	7.3	-	561.4
TOTAL	627	431	716	888.9	512.4	293.7	744.7

[a/]At least 11 tons were taken around Deer Island.

Table 3. 1989 NORTH PENINSULA COMMERCIAL SAC-ROE HERRING HARVEST
(Short Tons)

Date	Area of Catch	Harvest	Roe %
May 28	Three Hills	248.5	9.8
May 29	Entrance Point	312.9	9.8
June 16	Herendeen Bay	31.0	9.4
June 17	Herendeen Bay	36.0	8.1
June 17	Moller Bay	88.5	8.6
June 23	Moller Bay	27.8	10.0
North Pacific Totals		744.7	9.6

Table 4. 1988 ALASKA DEPARTMENT OF FISH AND GAME NORTH PENINSULA HERRING AERIAL SURVEYS BIOMASS ESTIMATES (Short tons)

Date	Deer Island			Herendeen Bay			Moller Bay			Bear River		
	RAI[a]	Tons[b]	Rating[c]	RAI	Tons	Rating	RAI	Tons	Rating	RAI	Tons	Rating
5/19	0	0	4	0	0	4			4			
5/22	0	0	4	0	0	3	0	0	4	0	0	3
5/23	0	0	3	0	0	2	0	0	3		N/A	
5/25	0	0	3	0	0	2	0	0	2	0	0	3
5/29							0	0	0	433	1,300	2
5/29							0	0	2	266	799	2
5/30 A.M.	10	15[d]	2	725	1,102[d]	2	105	172	2	0	0	2
5/30 P.M.	0	0	2	10	15	2	318	822[d]	2	0	0	2
5/31	0	0	3	0	0	3	5	7	3	0	0	2
6/2	0	0	3	0	0	2	5	7	2	0	0	2
6/13	0	0	3	30	46[d]	2	110	284[d]	2			
6/15							112	170	2			
6/16				19	49	2	270	365[d]	2			

R.A.I. units express the entire surface area of sighted herring schools in terms of small schools (surface area equal to 538^2 ft.). For example 10 R.A.I. units is equivalent to 10 small herring schools each with a surface area of 538^2 ft.

[a] Relative Abundance Index: small school (less than 538^2 ft) = 1 R.A.I. unit
medium school (532^2 ft to $4{,}841^2$ ft) = 5 R.A.I. units
large school (square ft./538^2 ft)

[b] Tons: RAI units are multiplied by 1.52 (schools in water less than 16 ft.)
2.58 (schools in water 16 ft - 26 ft)

[c] Rating (of survey conditions): 1) Excellent; 2) Good; 3) Fair; 4) Poor; 5) Unsatisfactory

[d] Used in calculating peak biomass estimate.

Table 5. NORTH PENINSULA SAC-ROE HERRING AGE CLASS COMPOSITION FROM COMMERCIAL SEINE SAMPLES, 1989

Date	Sample Size		Age Class 3	4	5	6	7	8	9	10	11+
OUTER MOLLER/BEAR RIVER[a]											
May 28	606		-	-	19	86	30	148	48	79	196
May 29	1,097		-	1	76	361	70	257	77	90	165
TOTAL	1,703	%	-	-	6	26	6	24	7	10	21
HERENDEEN BAY											
June 16	108	%	-	2	62	22	5	1	1	-	7
MOLLER BAY											
June 17	67		-	1	38	16	1	1	2	2	6
June 23	113		1	-	82	18	5	1	2	2	2
Total	180	%	1	1	67	19	3	1	2	2	4

[a] Samples taken on May 28 were taken near Three Hills. Samples taken on May 29 were taken near Bear River and the Port Moller cannery.

Table 6. PERCENT AGE CLASS COMPOSITION OF NORTH PENINSULA COMMERCIAL HERRING SAMPLES BY GEOGRAPHIC AREA BY YEAR

Year	AGE CLASS								
	3	4	5	6	7	8	9	10	11
HERENDEEN BAY									
1985	5	49	21	15	6	4	-	-	-
1986	-	3	25	13	20	21	17	1	-
1987	2	4	22	24	17	13	10	6	2
1988	3	23	30	22	9	4	3	3	2
1989	-	2	62	22	5	1	1	-	7
INNER MOLLER BAY									
1985	1	12	8	15	33	27	2	-	1
1986	1	7	21	12	18	19	20	1	1
1987	2	11	13	22	12	11	17	11	-
1988	1	30	29	12	6	5	5	8	5
1989	1	1	67	19	3	1	2	2	4
OUTER MOLLER/ BEAR RIVER									
1985	1	26	16	20	17	17	1	1	-
1986	-	2	22	13	21	23	18	1	-
1987	2	48	9	14	5	11	8	3	-
1988	-NO FISH HARVESTED IN THIS SECTION-								
1989	-	-	6	26	6	24	7	10	21

Table 7. SUMMARY OF SOUTH PENINSULA HERRING SAC-ROE LANDINGS BY AREA

Location	1982	1983[a]	1984	1985	1986[b]	1987	1988	1989
Granville								39.2
Island Bay[c]								
Ramsey Bay[c]			30	11			.3[d]	
Clarks Bay[c]								
Orzenoi Bay[c]								
American Bay[c]								
Balboa Bay	5		25				11	17.4
Beaver Bay								
Little Coal Bay								
Pavlof								
Canoe Bay	133		156	95	61	91.7	69.3	52.7
Volcano/Dolgoi Island				239	140.5	117.7	236.5	148.4
Iliasik Is.					13		17	
Belkofski Bay								
King Cove					8	37.8	12	
Lenard Harbor								
Dolgoi Harbor					59	59.5	30.7	8.6
Shumagin Islands						12.3		5.2
								38.5
TOTAL	138		211	345	281.5	319.0	376.8	310.0

CLOSED TO SAC ROE FISHING

[a] The entire South Peninsula was closed to sac-roe herring fishing in 1983 in favor of a bait fishery that never developed.

[b] Stepovak Bay (Kupreanof Point to Swedania Point) was closed in 1986 and 1987 due to declining biomass trends.

[c] These bays are located inside Stepovak Bay.

[d] Seven tons of green herring dumped on May 7, two tons dumped on May 11.

Table 8. 1989 SOUTH PENINSULA COMMERCIAL SAC-ROE HERRING CATCHES (Short Tons)

Area	Date	Tons	Roe %
Canoe Bay	May 28	4.3	6.5
	31	5.5	8.7
	June 3	12.3	7.9
	4	1.3	7.9
	5	12.5	8.2
	8	46.5	8.1
	9	35.5	7.1
	10	10.5	7.4
	12	20.0	8.2
	TOTAL	148.4	7.8
Pavlof Bay	June 12	18.7	8.2
	18	5.5	8.0
	19	28.5	6.2
	TOTAL	52.7	7.1
Stepovk	May 19	39.2	9.0
Shumagin Isl.	May 13	38.5	7.4
Lenard Harbor	June 17	8.6	8.9
Balboa	May 18	1.5	10.0
	19	5.0	9.0
	21	10.9	9.0
	TOTAL	17.4	9.1
Dolgoi Isl.	May 26	2.1	7.2
	June 1	3.1	7.8
	TOTAL	5.2	7.6
	TOTAL	310.0	7.7

Table 9. ALASKA DEPARTMENT OF FISH AND GAME SOUTH PENINSULA AERIAL SURVEYS[a] 1989

Area	Date	RAI[b]	Conditions
Canoe Bay	May 24	15	2
	June 13	15	1
	June 15	12	2
	June 16	37	2
Balboa Bay	May 22	0	2
	May 24	0	2
Fox Bay	May 22	0	2
San Diego	May 22	0	2
Stepovak	May 22	0	2

[a]Species identification is difficult, many of schools spotted probably were capelin.

[b]RAI = (Relative Abundance Index) units express the entire surface area of sighted herring schools in terms of small schools (surface area equal to 538^2 ft.). For example 10 RAI units is equivalent to 10 small herring schools each with a surface area of 538^2 ft.

Relative Abundance Index: small school (less than 538^2 ft) = 1 R.A.I. unit
medium school (532^2 to $4{,}841^2$ ft) = 5 R.A.I. units
large school (square ft/538^2 ft)

Tons: R.A.I. units are multiplied by 1.52 (schools in water less than 16 ft)
2.58 (schools in water 16 ft - 26 ft)

No conversion was made from R.A.I. to tons on the South Peninsula because water depths were greater than 26 feet.

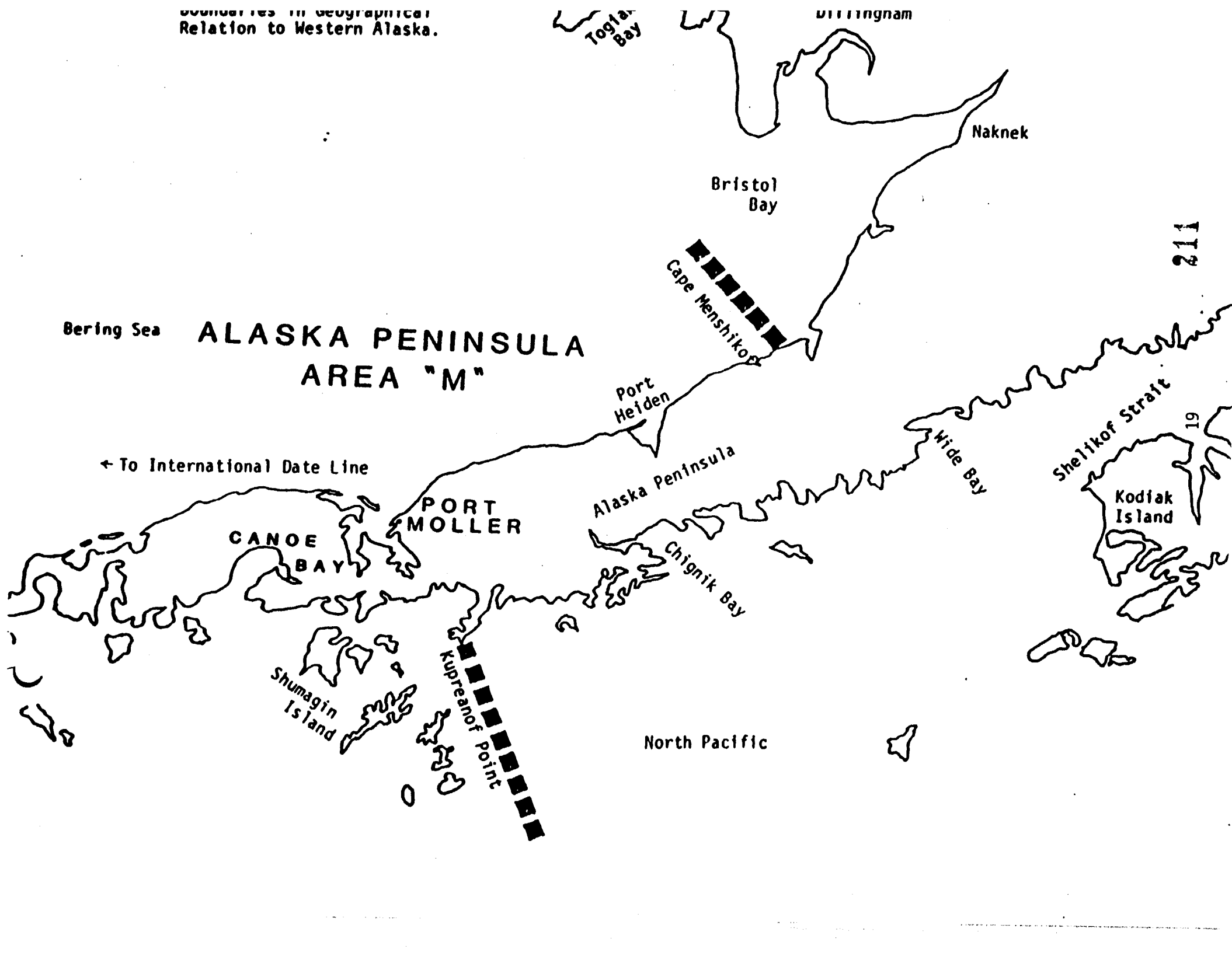
Rating (of survey conditions): 1) Excellent; 2) Good; 3) Fair; 4) Poor; 5) Unsatisfactory

Table 10. SOUTH PENINSULA SAC-ROE HERRING AGE CLASS COMPOSITION FROM COMMERCIAL SEINE SAMPLES, 1989

Date	Area	Sample Size		Age Class								
				3	4	5	6	7	8	9	10	11
				Number of Samples								
May 28	Canoe Bay	71		5	32	16	12	1	-	4	1	-
June 2		22		1	9	8	2	-	-	2	-	-
3		47		3	34	5	1	-	-	3	1	-
8		81		5	41	22	7	-	1	3	1	1
9		57		3	40	9	3	-	-	1	-	1
				Percent								
	Total	278	%	6	56	22	9	-	-	5	1	1
May 20	Stepovak	60		3	31	50	13	-	-	-	2	-
June 13	Shumagins	115		1	15	79	1	-	-	3	-	2

Table 11. PERCENT AGE CLASS COMPOSITION OF SOUTH PENINSULA COMMERCIAL HERRING SAMPLES BY YEAR IN CANOE BAY

	AGE CLASS								
Year	3	4	5	6	7	8	9	10	11
1985	1	3	81	7	6	1	1	0	1
1986	6	-	3	82	6	2	-	1	-
1987	25	28	1	5	34	3	3	-	-
1988	24	31	20	-	1	16	4	2	1
1989	6	56	22	9	-	-	5	1	1


Boundaries in Geographical Relation to Western Alaska.
Togiak Bay
Dillingham
Naknek
Bristol Bay
Cape Menshikof
211
Bering Sea
ALASKA PENINSULA
AREA "M"
Port Heiden
Wide Bay
Sheltikof Strait
19
← To International Date Line
Alaska Peninsula
PORT MOLLER
CANOE BAY
Chignik Bay
Kodiak Island
Shumagin Island
Kupreanof Point
North Pacific

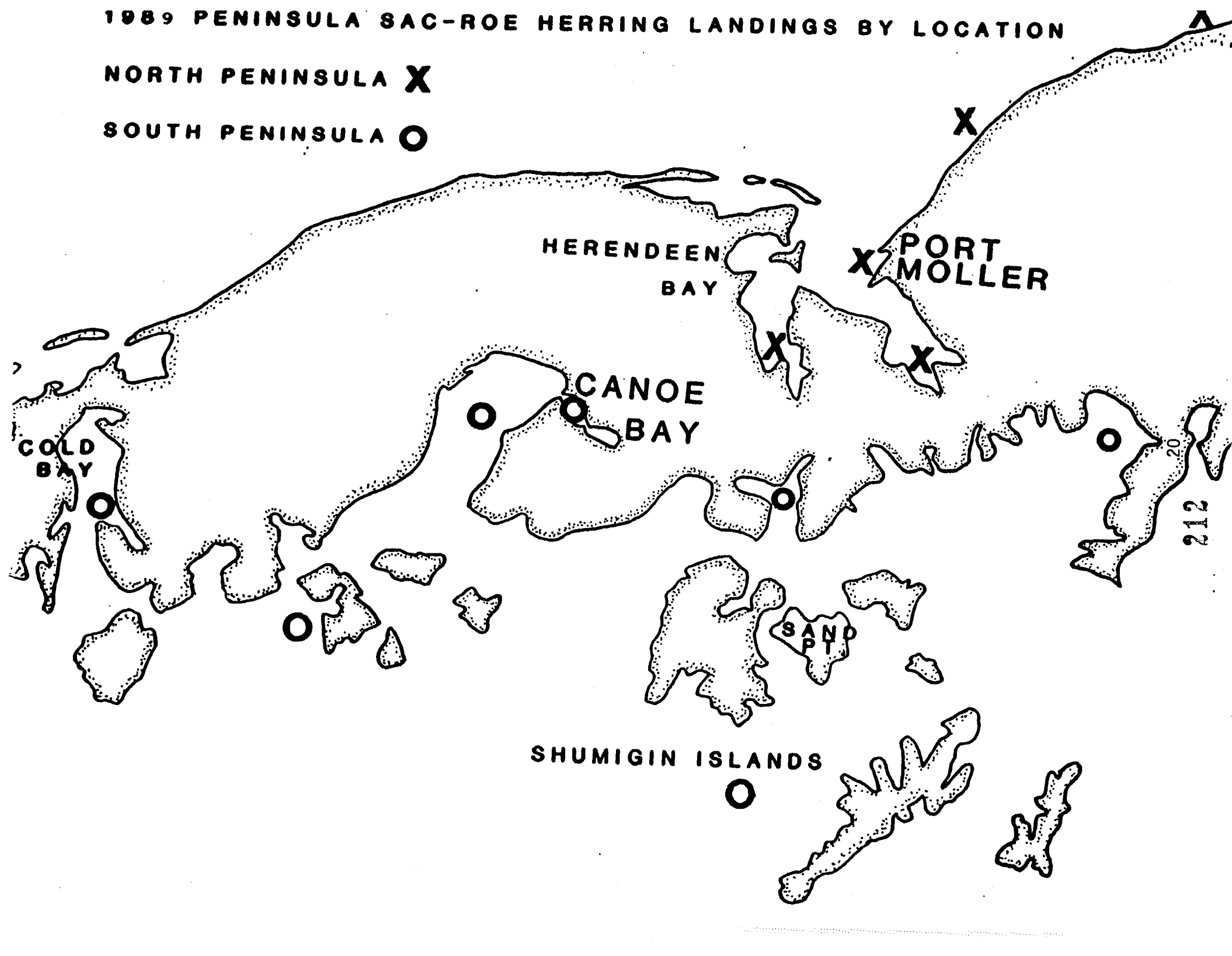

1989 PENINSULA SAC-ROE HERRING LANDINGS BY LOCATION
NORTH PENINSULA X
SOUTH PENINSULA O
HERENDEEN BAY
PORT MOLLER
CANOE BAY
COLD BAY
SAND PT
SHUMIGIN ISLANDS
212

Figure 3. COMMERCIAL SAC-ROE HERRING AGE FREQUENCY BEAR RIVER SECTION BY YEAR

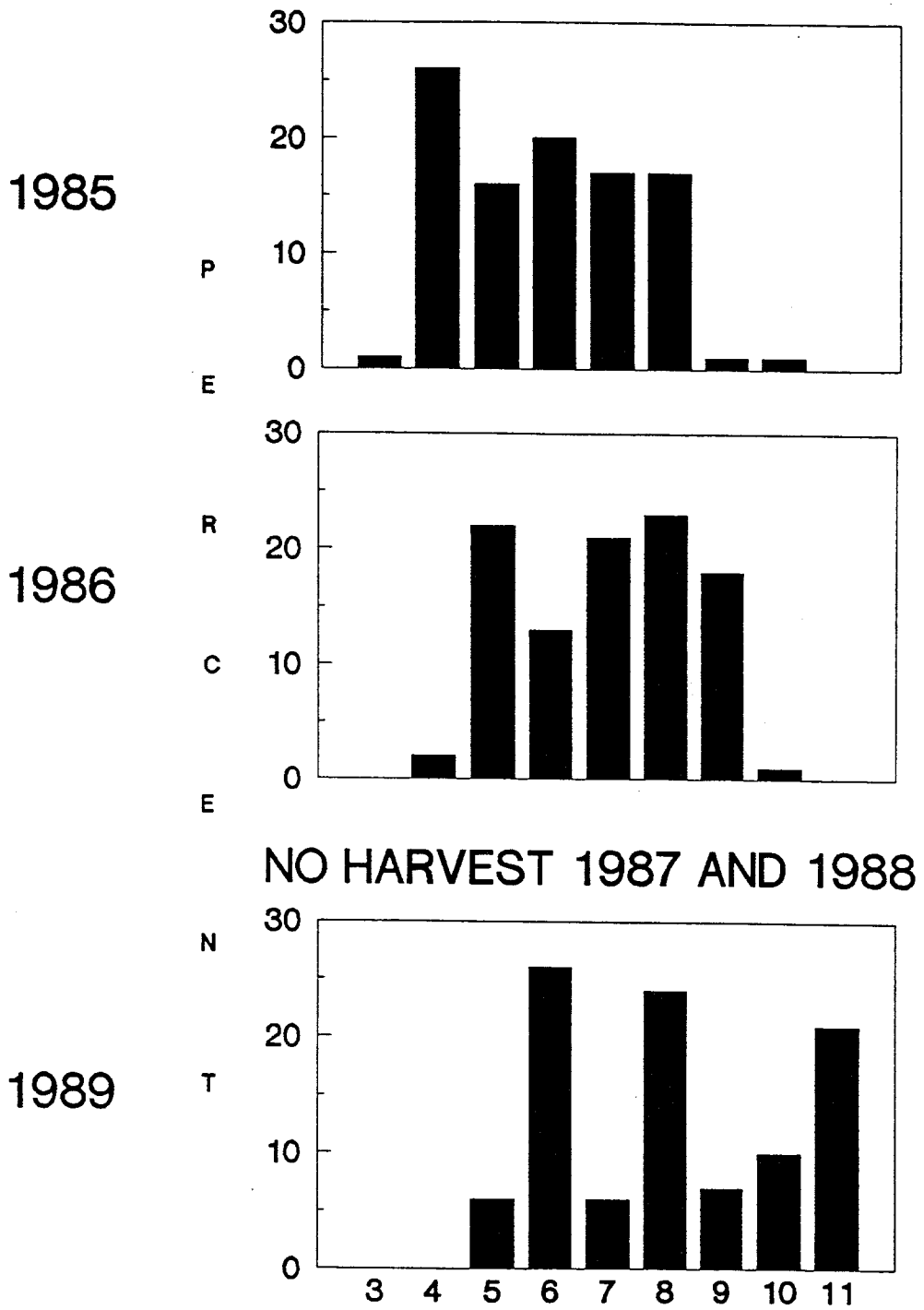


Figure 4.

NORTH PENINSULA COMMERCIAL SAC-ROE HERRING AGE FREQUENCY COMPARISONS BY AREA BY YEAR

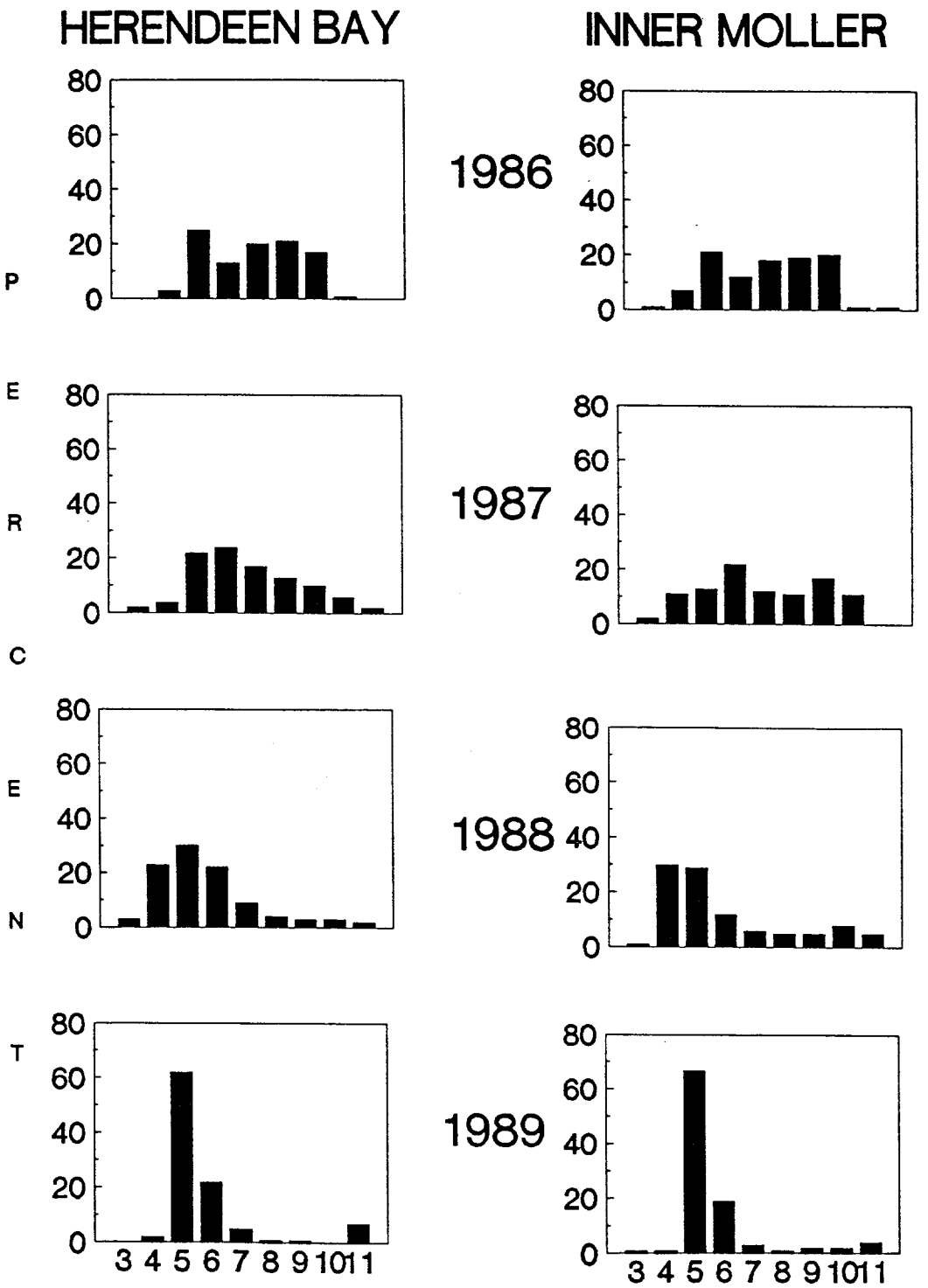
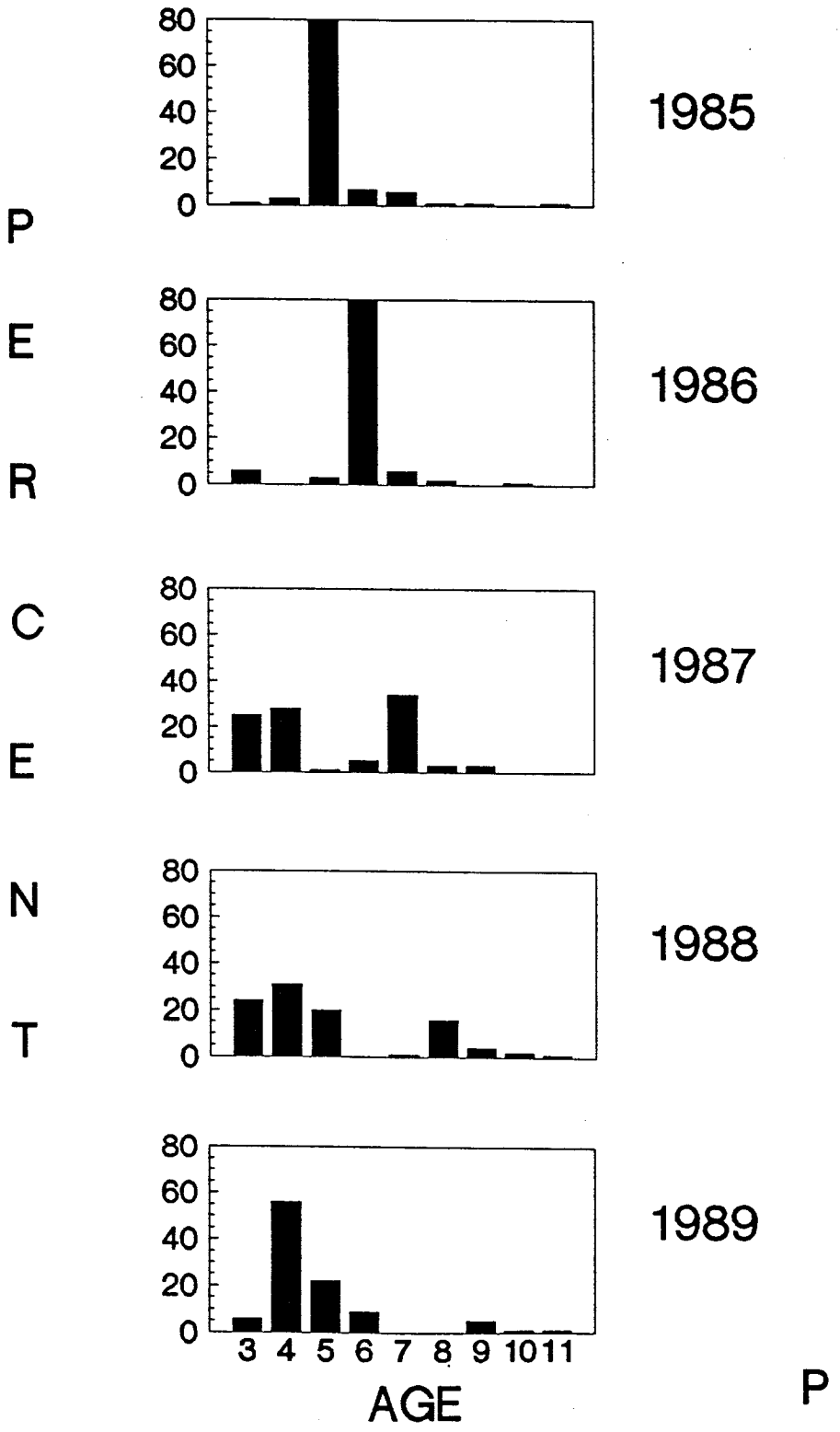


Figure 5. CANOE BAY COMMERCIAL SAC-ROE HERRING AGE FREQUENCY



EASTERN ALEUTIAN ISLANDS "DUTCH HARBOR" FOOD/BAIT HERRING FISHERY

REPORT TO THE BOARD OF FISHERIES

NOVEMBER 1989

SUBMITTED BY:

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[1]The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished divisional reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

TABLE OF CONTENTS
EASTERN ALEUTIAN ISLANDS "DUTCH HARBOR"
FOOD/BAIT HERRING FISHERY

LIST OF FIGURES

LIST OF TABLES

Summary

The 1989 Dutch Harbor food and bait herring harvest quota was 3,100 short tons. The fishery started July 16, 1989 at 12:01 A.M. with a total of seven seiners, two gillnetters, and six tenders participating. The season ended 21 days later at 12:00 midnight August 5, 1989 with a final catch of 3,081 short tons. Of that total number of tons harvested, approximately 1,024 tons were processed as food herring. The daily harvest averaged 150 tons which was delivered to five different processing companies.

HISTORICAL PERSPECTIVE AND BACKGROUND

The Eastern Aleutian Islands herring food and bait fishery occurs near Unalaska and Akutan Islands primarily in the vicinity of Unalaska and Akutan Bays (Figure 1). By regulation the fishery management plan applies to the Unimak, Akutan, and Unalaska Districts and the Umnak District east of Samalga Pass. This management plan has been in effect since 1981. Historically the fishery occurred from 1929 to 1938 (Table 1).

Historically, the industry was a mixture of gillnet and seine gear, holding pounds, and numerous small shore-based hand packing operations. A large portion of the catch was brined for either food or bait purposes; some product was frozen. Seine gear provided the bulk of the herring harvest.

Currently, fishing effort consists of purse seine vessels, which use large seines up to 250 fathoms long and 25 to 35 fathoms deep. The entire 1981-1986 harvests were taken by purse seine. One gill net vessel participated in the 1987 and 1988 season, and two gill net vessels participated in the 1989 season. Purse seine vessels average approximately 50 feet in keel length and also participate in the Area M salmon fishery. The fish finding electronics (sonar) onboard these vessels are critical to the fishing operation, much as the airplane is critical to the sac-roe fishery. Generally there is a fairly free exchange of

information between all the vessels involved. Fleet efficiency is also enhanced by its ability to spread out and conduct "sonar searches" over a fairly large area when herring concentrations leave traditional fishing areas.

When herring concentrations leave the usual harvest locations, the industry follows the herring with floating processors and tenders. Processing efficiency and product quality may decline when this occurs. Harvest locations have extended over approximately 90 miles, from Tigalda Island to Makushin Bay (Figure 1). The majority of the harvest, however, has occurred within a five mile radius of shore-based processing facilities in Unalaska and Akutan Bays.

Two similarities between the current and historical fisheries are the quality problems associated with feeding herring and the availability of herring when industry desires to harvest them. The feed problem was overcome in the historical fishery by the use of holding pounds, where seine caught herring were held until their stomachs became empty. Gill net caught herring required special handling to prevent spoilage. In the current fishery the use of shaved ice and super-chilled seawater in conjunction with rapid processing alleviates most of the feed related problems. When feeding conditions are severe the processors have suspended buying. Historically, the availability of herring was categorized into an early summer run (late June to late July) and a late summer run (late August to early September). This pattern does not seem to hold in the current fishery as herring have been steadily harvested from July 16 through September 15.

Shore-based processors purchase the majority of the herring harvested in this fishery. Floating processors have been used each year, however they are limited by daily handling capacities which are considerably less than that of the shore-based plants. All of the processors associated with the herring fishery have

floating processors and are diversified into bottomfish, salmon, halibut, black cod, scallops, and the Bering Sea and Peninsula crab fisheries. In 1988 some herring were tendered to the King Cove shore plant, and in 1989 to the Sand Point shore plant.

The values shown in Table 1 represent estimates of total ex-vessel value. Generally, the ex-vessel value for bait herring has exceeded that for food herring. Industry information indicates that foreign food markets currently have multiple sources of herring from European and Canadian stocks which have been cycling high in recent years. While Eastern Aleutian food herring are a suitable and desirable product, an ample and more reliable supply of food herring from other countries currently dominate the market. The bait product from this fishery has a more solid market in that it is used locally and in other fishing ports of Alaska as bait for the longline and crab fisheries. Bait demands have been increasing in recent years and a premium is placed on quality bait, i.e., freshness and high oil content. Overall, the ex-vessel value of bait herring has remained more stable than that for food.

HARVEST STRATEGY

The harvest strategy of the Dutch Harbor food and bait herring fishery has been evolving since it was re-established in 1981 (Table 2). During the 1981 and 1982 seasons there were no harvest restrictions. From 1983 to 1985 the Board of Fisheries implemented a harvest ceiling of 3,527 tons per year due to biological concern over multiple exploitation on Eastern Bering Sea spawning stocks, specifically the Bristol Bay, Nelson Island and Port Moller stocks. Scale pattern analysis studies identified these stocks as comprising the Eastern Aleutian herring biomass. The extensive sac-roe fisheries occurring on these stocks coupled with the food and bait fishery on different proportions of these same spawning stocks creates an element of biological concern and possible exploitation above the board's

20% guideline policy. In 1986 a modification of the harvest ceiling was implemented by ADF&G in response to the Board of Fisheries concern for the diminishing nature of the contributing stocks (primarily Togiak, to which the bulk of the Eastern Aleutian catch is estimated to be comprised). Concern was triggered by a lack of recruitment in the spawning stocks. The 1986 harvest ceiling in the Eastern Aleutians was reduced by 30% (to 2,453 tons). This reduction was commensurate with the percentage reduction of the observed available Togiak spawning biomass between the springs of 1985 and 1986. The 1987 harvest ceiling was set at 2,332 tons in line with the 1985 to 1987 reduction on observed Togiak spawning biomass.

In 1988 the Alaska Board of Fisheries implemented a Bering Sea Herring Fisheries Management Plan which established a criteria for calculating the Dutch Harbor food and bait quota.

To ensure the conservation of herring stocks, the board adopted a requirement that the overall exploitation of a herring stock should not exceed 20% of the spawning biomass. In the case of the Togiak spawning stock an allocation between the sac-roe fishery, spawn on kelp fisher, and the Dutch Harbor food and bait fishery was established so that the catch did not exceed 20% of the spawning biomass. The number of fishermen involved and the value of the fishery were factors considered by the board when making the allocations between the fisheries. The Bering Sea Management Plan defines under what conditions and to what extent there will be a Dutch Harbor food and bait fishery. The elements governing the food and bait fishery are listed below:

1. The Dutch Harbor food and bait fishery quota is determined through the following calculations:

A. The desired exploitation rate (maximum of 20%) is applied to the estimated Togiak spawning biomass. This figure represents the total combined allowable harvest to be extracted by the Togiak sac-roe fishery, spawn on kelp fishery, and the Dutch Harbor food and bait fishery.

B. The spawn on kelp fishery is allocated 1,500 tons of herring.

C. The Dutch Harbor fishery is allocated 7% of the remaining allowable harvest (after the 1,500 ton spawn on kelp allocation has been subtracted from the total allowable harvest).

D. The Togiak herring sac-roe harvest allocation is the remainder of the total allowable harvest after the spawn on kelp and Dutch Harbor allocation have been subtracted.

2. If the herring sac-roe harvest in the Togiak District exceeds its allocation by more than 20%, the department shall deduct the amount of herring that exceeds the Togiak District herring sac-roe allocation from the Dutch Harbor fishery allocation for that season.

3. If the Togiak District herring sac-roe fisheries do not harvest their allocation the unharvested amount of herring will be added to the Dutch Harbor fishery allocation. When an increase of the Dutch Harbor fishery allocation is made under this section, the total allocated harvest may not exceed 3,100 short tons.

4. When the Togiak District is below its threshold (35,000 tons), the Dutch Harbor fishery will be closed for that season.

1989 FISHERY

Using the newly adopted Bering Sea Herring Management Plan and the revised Togiak spawning biomass, a preseason harvest quota of 3,100 tons was calculated for the Dutch Harbor herring fishery:

100,000 Tons Estimated 1989 Togiak Spawning Biomass
x 20% desired exploitation
20,000 Tons Total Allowable Harvest
- 1,500 Spawn on Kelp Allocation
18,500 Tons Remaining Allowable Harvest
x .07
1,295 Dutch Harbor Food and Bait Allocation

17,205 Tons Allowable Sac-Roe Harvest
-12,039 Tons Actual Sac-Roe Harvest
5,166 Tons Unharvested Sac-Roe Allocation

1,295 Tons Dutch Harbor Allocation had the allowable Togiak sac-roe harvest been taken
+ 5,166 Tons Unharvested Togiak Sac-Roe Harvest
3,100* Tons Adjusted Dutch Harbor Food and Bait Allocation

*As mandated by the management plan, if the Togiak sac-roe allowable harvest is not taken, then the amount not taken will be added to the Dutch Harbor food and bait allocation. The Dutch Harbor quota however, may not exceed 3,100 tons.

The fishery was opened by regulation to continuous fishing at 12:01 A.M. July 16 with seven seine vessels and two gillnetters participating. Five companies with five tenders and two floating processors were registered to buy herring.

Herring were accessible for harvest on July 16, and the fleet found them immediately at Eider Point in Unalaska Bay. The catch

averaged about 200 tons per day for the first ten days (Table 3). The fishery was temporarily closed during July 25 through 27 in order to account for all fish tickets and assess the harvest accurately. By August 1, all but two vessels had left for the pink salmon fishery on the South Peninsula and take advantage of the higher price being paid for pink salmon. The remaining two vessels worked in close association with the department to obtain the remainder of the quota. The season ended at 12:00 midnight, August 5, 1989 (Table 4) with an estimated catch of 3,100 short tons harvested. Daily radio contact with vessels and landline contact with shorebased processing plants updated the daily catch estimates. As photocopies of fish tickets or original fish tickets came in, the accumulative poundage was adjusted accordingly. After all fish tickets were received, the final catch of 3,081 short tons were tabulated. Of that total number of tons harvested, approximately 1,024 tons were processed as food herring. The bait herring was purchased at $.15 per pound while the food herring was purchased at $.125 per pound. The ex-vessel value of the fishery is estimated at $873,100.00.

Bait - 2,057 tons @ .15/lb =	617,100.00
Food - 1,024 tons @ .125/lb =	256,000.00
Total =	$873,100.00

The herring were in fine shape and of desirable size. The herring averaged about one pound apiece and averaged 12-14 inches in length.

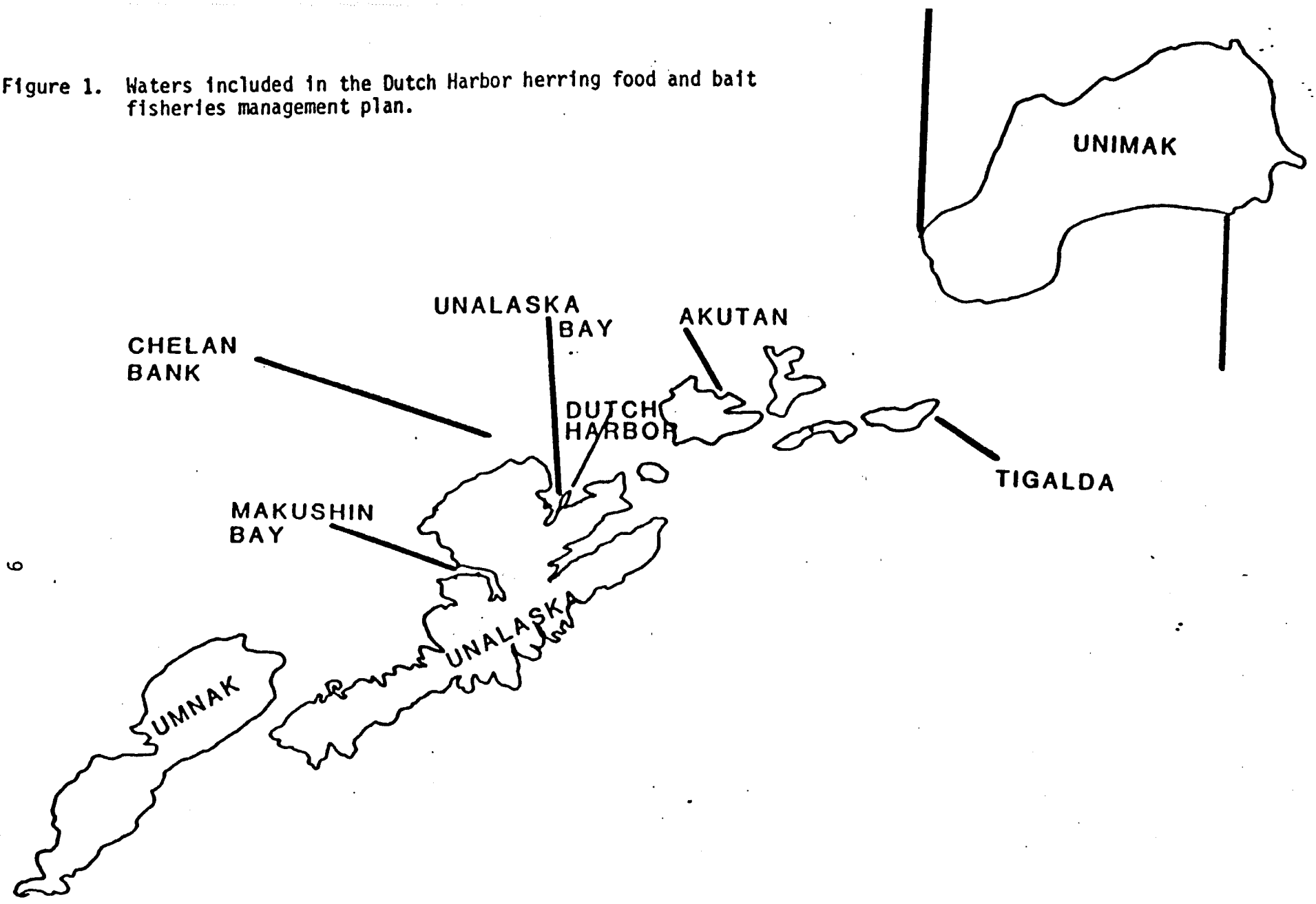
MANAGEMENT PLAN REVIEW AND 1990 HARVEST PROJECTIONS

The current management plan, adopted in 1988, generated food and bait allocations of 1,700 tons in 1988 and 1,300 tons in 1989. In both years the allocation was increased to 3,100 because the allowable Togiak sac-roe harvest was not taken.

Based on the projected Togiak spawning biomass of 56,020 tons in

1990, the Dutch Harbor food and bait quota would be 679 tons. However, this figure could change if the biomass projection is inaccurate or if the desired sac-roe harvest is not achieved in 1990.

Figure 1. Waters included in the Dutch Harbor herring food and bait fisheries management plan.



SAMALGA PASS

Table 1. PENINSULA/ALEUTIANS MANAGEMENT AREA EASTERN ALEUTIAN ISLANDS HERRING FOOD/BAIT FISHERY HISTORICAL INDUSTRY SUMMARY BY YEAR

YEAR	HARVEST IN SHORT TONS	NO. PROCESSORS	NO. BOATS	NO. LANDINGS	X TONS PER BOAT	X TONS PER LANDING	X $ PER TON	$ VALUE (MILLIONS)	X $ PER VESSEL
1929	1259	*	*	*	*	*	*	*	*
1930	1916	*	*	*	*	*	*	*	*
1931	1056	12	26	*	*	*	*	*	*
1932	2510	12	30	*	*	*	*	*	*
1933	1585	12	38	*	*	*	*	*	*
1934	1533	9	*	*	*	*	*	*	*
1935	2412	10	*	*	*	*	*	*	*
1936	1379	8	*	*	*	*	*	*	*
1937	579	*	*	*	*	*	*	*	*
1938	513	*	*	*	*	*	*	*	*
1939-44	NO FISHERY								
1945	75	*	*	*	*	*	*	*	*
1946-80	NO FISHERY								
1981	704	2	2	16	352	44	300	0.211	0.11
1982	3565	6	7	95	509.3	37.5	300	1.02	0.15
1983	3567	5	8	96	445.9	37.2	232	0.828	0.10
1984	3578	5	9	61	397.6	58.7	210	0.751	0.68
1985	3480	3	6	78	560	44.6	162	0.564	0.09
1986	2394	4	7	53	342	45.2	254	0.600	0.09
1987	2503	4	8	45	373	55.6	300	0.751	0.09
1988	2004	6	8[a/]	59	251	34.0	252	.505	0.06
1989	3081	5	9[b/]	69	342	45.0	283	.873	0.09

[a/] Seven seiners and one gill netter participated.

[b/] Seven seiners and two gill netters participated.

Table 2. DUTCH HARBOR FOOD AND BAIT HERRING FISHERY (SHORT TONS)

YEAR	PRESEASON TOGIAK SPAWNING BIOMASS	HARVEST QUOTA	FOOD AND BAIT HARVEST	% SPAWNING BIOMASS HARVESTED
1981	159,000	NONE	704	.4%
1982	98,000	NONE	3,565	2.5%
1983	142,000	3,525[a]	3,567	2.5%
1984	115,000	3,525	3,578	3.1%
1985	132,000	3,525	3,480	2.7%
1986	96,000	2,453[a]	2,394	2.5%
1987	88,000	2,332[b]	2,503	2.8%
1988	132,000	3,100[c]	2,204	2.3%
1989	100,108	3,100[c]	3,081	3.0%

[a] Harvest ceiling of 3,525 established by Board of Fisheries.

[b] Harvest quota set by ADF&G. Reduced proportionate with the drop from the 1985 Togiak spawning biomass level.

[c] Harvest quota set under provisions of the Bering Sea Herring Fisheries Management Plan.

Table 3. 1989 DAILY HERRING CATCHES FOR THE DUTCH HARBOR FOOD AND BAIT HERRING FISHERY

DATE		DAILY	CUMULATIVE
July	16	340.86	340.86
	17	204.08	544.94
	18	224.55	769.49
	19	13.26	782.75
	20	42.04	824.79
	21	308.27	1,133.06
	22	312.39	1,445.45
	23	310.94	1,756.39
	24	265.46	2,021.85
	25	CLOSED BY E.O.	2,021.85
	26	CLOSED BY E.O.	2,021.85
	27	CLOSED BY E.O.	2,021.85
	28	388.07	2.409.92
	29	53.44	2,453.36
	30	48.28	2,511.64
	31	387.34	2,898.98
Aug.	1	55.01	2,953.99
	2	-0-	2,953.99
	3	37.66	2,991.65
	4	41.65	3,033.30
	5	47.35	3,080.64

Table 4. PENINSULA/ALEUTIANS MANAGEMENT AREA EASTERN ALEUTIANS HERRING FOOD/BAIT FISHERY HARVEST DURATION BY YEAR

YEAR	LANDING DATE FIRST	LANDING DATE LAST	DAYS FISHED	SEINE VESSELS	TOTAL HARVEST
1981	8/03	8/23	21	2	704
1982	8/05	9/12	39	6	3,565
1983	7/23	9/06	46	5	3,567
1984	7/17	7/27	11	5	3,578
1985	7/17	8/11	26	3	3,480
1986	7/16	7/28	13	4	2,394
1987	7/16	7/23	4[a]	9[b]	2,503
1988	7/16	9/18	21	8[b]	2,004
1989	7/16	8/05	19[c]	9[d]	3,081

[a] Closed 7/19, reopened for 14 hours on 7/23.

[b] Includes one gill netter.

[c] Closed 7/26, reopened 7/27 until August 5.

[d] Includes two gill netters.

ARTICLE 10. STATISTICAL AREA M; ALASKA PENINSULA—ALEUTIAN ISLAND AREA.

5 AAC 27.600. DESCRIPTION OF AREA. Statistical Area M includes all waters bound on the east by a line extending southeast (135°) from the southernmost tip of Kupreanof Point, on the west by the International Date Line, and on the north by a line extending west from the westernmost tip of Cape Menshikof.

5AAC 27.605. DESCRIPTION OF DISTRICTS AND SECTIONS. (a) Sand Point District: all waters on the south (Pacific) side of the Alaska Peninsula between the western boundary of the Chignik Area and 161° W. long.

(1) Stepovak Bay Section: all waters of the Sand Point District located north of 55°32′ N. lat. and east of 160°30′ W. long.

(2) Swedania Point-Balboa Bay Section: all waters of the Sand Point District located between 160°31′ W. long. and 160°47′ W. long., and north of 55°26′ N. lat.

(3) Point Aliaksin-Beaver Bay Section: all waters of the Sand Point District located between 160°47′ W. long. and 161° W. long., and north of 55°26′ N. lat.

(4) General Section: all other waters of the Sand Point District.

(b) Pavlof District: all waters on the south (Pacific) side of the Alaska Peninsula between 161° W. long. and a line extending 150° from 55°05′54″ N. lat., 161°59′ W. long. through Inner and Outer Iliasik Islands, including Bear and Volcano Bays.

(1) Canoe Bay Section: all waters of Canoe Bay east of 161°21′45″ W. long.

(2) Pavlof Bay Section: all waters of Pavlof Bay north of 55°21′42″ N. lat. (latitude of Cape Tolstoi), excluding the Canoe Bay and Seal Cape—Wosnesenski Sections.

(3) Seal Cape-Wosnesenski Section: all waters of the Pavlof District located between 161° W. long. and 161°30′ W. long. (longitude of Cape Tolstoi).

(4) General Section: all other waters of the Pavlof District.

(c) King Cove District: all waters of the south (Pacific) side of the Alaska Peninsula between a line extending 150° from 55°05′54″ N. lat., 161°59′ W. long. through Inner and Outer Iliasik Islands and 163°30′ W. long., including waters of Isanotski Strait south of a line from Nichols Point to the False Pass dock.

(1) Belkofski Section: all waters of the King Cove District east of 162°15′ W. long. (longitude of Bold Cape).

(2) Deer Passage Section: all waters of the King Cove District between 162°15′ W. long. (longitude of Bold Cape) and 162°25′ W. long (longitude of Vodapoini Point), and north of 54°55′ N. lat., excluding all waters of Lenard Harbor.

(3) Cold Bay Section: all waters of the King Cove District bounded by a line from Thin Point to Vodapoini Point.

(4) General Section: all other waters of the King Cove District.

(d) Unimak District: all waters on the southside of Unimak Island between 163°30′ W. long. and the longitude of Scotch Cap Light.

(e) Akutan District: all waters extending west of Unimak Island to and including Akutan Pass.

(f) Unalaska District: all waters west of Akutan Pass to and including Umnak Pass.

(1) Unalaska Bay Section: all waters of the Unalaska Bay District enclosed by a line from Priest Rock at 54°00′24″ N. lat., 166°22′42″ W. long. to Cape Cheerful at 54°00′33″ N. lat., 166°37′45″ W. long.

(2) General Section: all waters of the Unalaska District not included in the Unalaska Bay Section.

(g) Umnak District: all waters west of Umnak Pass to and including Atka Pass.

(h) Adak District: all waters west of Atka Pass to the terminus of the Aleutian Islands.

(i) Amak District: all Bering Sea waters south and west of Cape Lieskof (55°47′ N. lat., 162°04′ W. long.) to the longitude of Cape Sarichef Light, including all waters of Bechevin Bay and Isanotski Strait north of a line from the False Pass Cannery dock to the tip of Nichols Point.

(j) Port Moller District: all Bering Sea waters between the latitude of Cape Lieskof and the latitude of Cape Seniavin (56°24′ N. lat.).

(1) Western Section: all waters of the Port Moller District west of the longitude of Wolf Point on Walrus Island, excluding the waters of Herendeen Bay and Deer Island—Mud Bay Sections.

(2) Deer Island—Mud Bay Section: all waters of the Port Moller District bounded by a line from the northernmost tip of Point Edward to the southernmost tip of Wolf Point on Walrus Island to Point Divide (55°53′10″ N. lat., 160°47′ W. long.) to the northernmost tip of Black Point.

(3) Herendeen Bay Section: all waters of Herendeen Bay south of a line from the northernmost tip of Black Point to Point Divide (55°53′10″ N. lat., 160°47′ W. long.).

(4) Inner Port Moller Bay Section: all waters of Port Moller Bay enclosed by a line from Point Divide (55°53′10″ N. lat., 160°47′ W. long.), to Harbor Point (55°55′ N. lat., 160°34′30″ W. long.).

(5) Outer Port Moller Bay Section: all waters of the Port Moller District south and east of a line from Point Divide (55°53'10" N. lat., 160°47' W. long.) to the southernmost tip of Wolf Point on Walrus Island to the southernmost tip of Entrance Point (55°59'30" N. lat., 160°34' W. long.).

(6) Bear River Section: all Bering Sea waters between the longitude of Wolf Point on Walrus Island and Cape Seniavin Light, excluding the waters of the Herendeen Bay, Deer Island-Mud Bay, Outer Port Moller Bay, and Inner Port Moller Bay Sections.

(k) Port Heiden District: all waters between the latitude of Cape Seniavin (56°24' N. lat.) and the latitude of Cape Menshikof (57°31'20" N. lat.).

5 AAC 27.610. FISHING SEASONS AND PERIODS. (a) In the Sand Point, Pavlof, King Cove, Unimak, Akutan, Unalaska, Umnak, and Adak Districts, herring may be taken from April 15 through July 15 (sac-roe season) and from July 16 through February 28 (food and bait season).

(c) In the Amak, Port Moller, and Port Heiden Districts, herring may be taken from April 15 through July 15 (sac roe season) and from August 15 through February 28 (food and bait season).

(d) Herring may be taken only during periods established by emergency order.

5 AAC 27.630. GEAR. Herring may be taken only by purse seines and gill nets, except as follows:

(1) in the Amak District, herring may be taken with trawls only from August 15 through February 28.

(2) in waters of the Bering Sea north of 55°47' N.lat., herring may be taken by trawls only during seasons established by emergency order.

5 AAC 27.631. GILL NET SPECIFICATIONS AND OPERATIONS. (a) During the herring sac roe season, the aggregate length of herring gill nets in use by a herring CFEC permit holder may not exceed 150 fathoms.

(b) The interim-use or entry permit holder must be physically present while the gill net is being fished.

(c) Each drift gill net in operation must have a buoy at one end and the opposite end must be attached to the fishing vessel. Each set gill net in operation must be anchored and buoyed at both ends. Each buoy must be plainly and legibly marked with the permanent vessel license plate number (ADF&G number) of the vessel operating the gear. The buoy may bear only a single number and this number must be that of the vessel used in operating the gear. The numbers must be painted on the top one-third of the buoy in numerals at least four inches in height, one-half inch in width and in a color contrasting to that of the buoy. The buoy markings must be visible on the buoy above the water surface.

5 AAC 27.632. SEINE SPECIFICATIONS AND OPERATIONS. During the herring sac roe season, no purse seine may be more than 1,000 meshes in depth and more than 100 fathoms in length. During the herring food and bait season, no purse seine may be more than 250 fathoms in length.

5 AAC 27.650. WATERS CLOSED TO HERRING FISHING. (a) Herring may not be taken from June 25 through September 30 in any waters closed to salmon fishing.

5 AAC 27.660. HARVEST STRATEGY. (b) The department shall manage the Sand Point, Pavlof, and King Cove Districts so that 75 percent of the estimated guideline harvest level of 1,200 s. tons is taken during the sac-roe season and 25 percent is taken during the food and bait season. If the 75 percent is not taken during the sac-roe season, then the amount of herring not taken may be allowed to be taken during the food and bait season. The department shall adjust the guideline harvest level based on herring biomass assessments conducted during the sac-roe season.

5 AAC 27.662. BUYER AND TENDER REPORTING REQUIREMENTS. In addition to the requirements of 5 AAC 39.130(f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of the department upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall:

(1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of the department located in the statistical area before transporting or processing of herring;

(2) make daily reports of all herring purchased from fishermen, and other processing records as specified by a local representative of the department; and

(3) submit fish tickets before departure from the area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.

(b) No net or other obstruction may be placed across the entrance to any lagoon or bay that may prevent the free passage of herring.

(c) The mesh size of a herring gill net may not be less than 2-1/8 inches or more than 2-1/2 inches, except as follows:

(1) in Statistical Area M, mesh sizes from 2-1/2 to three inches may be used only under the authority of a permit issued by the department;

(2) in Statistical Areas E, T, W, and Q the mesh size may not exceed three inches.

(d) Gill nets may be fished with the float line and floats below the surface of the water.

(e) No person may use a gill net to take herring at the same time that he is using a purse seine, hand purse seine, or beach seine to take herring.

(f) A purse seine and a hand purse seine have stopped fishing when both ends of the seine are attached to the fishing vessel. A beach seine has stopped fishing when all of the lead line is on the beach above the water.

5 AAC 27.055. PERMITS FOR HERRING SPAWN. The taking of herring spawn for commercial purposes may be conducted under the terms of a permit issued by the commissioner or his authorized representative, unless otherwise provided in 5 AAC 27.100—5 AAC 27.990.

5 AAC 27.060. BERING SEA HERRING FISHERY MANAGEMENT PLAN. (a) The department shall follow the directives of the Bering Sea Herring Management Plan, as well as the regulations that govern the individual herring fisheries, when managing the commercial herring fisheries that take place in the Bering Sea.

(b) Unless otherwise specified in this chapter, the department shall manage the fisheries so that the exploitation rate on eastern Bering Sea herring stocks does not exceed 20 percent of the biomass of those stocks.

(c) The following thresholds are minimum biomass levels for each herring fishing district. When the department estimates, in season, that the biomass in a district is below its threshold, the department may not allow a commercial harvest of herring in that district.

District	Thresholds (s.t.)
Port Moller	1,000
Togiak	35,000
Security Cove	1,200
Goodnews Bay	1,200
Cape Avinof	500
Nelson Island	2,500
Nunivak Island	1,500
Cape Romanzof	1,500
Norton Sound	7,000

(d) The department shall manage the herring food and bait fishery that takes place in the Unimak, Akutan, and Unalaska Districts and that portion of the Umnak District east of Samalga Pass (Dutch Harbor fishery) so that it is allocated seven percent of the allowable Togiak District herring sac-roe harvest determined under the provisions of the Bristol Bay Herring Management Plan (5 AAC 27.865).

(e) If the herring sac-roe harvest in the Togiak District exceeds its allocation by more than 20 percent, the department shall deduct the amount of herring that exceeds the Togiak District herring sac-roe allocation from the Dutch Harbor fishery allocation for that season as determined in (d) of this section.

(f) If the Togiak District herring sac-roe fisheries do not take their available harvest, the unharvested amount of herring will be added to the Dutch Harbor fishery allocation as determined in (d) of this section. When making this re-allocation, the department shall consider the conditions that lead to the under harvest, the amount of herring to be re-allocated, and the status of the herring stock. When an increase of the Dutch Harbor fishery allocation is made under this section, the total allocated harvest may not exceed 3,100 s. tons.

(g) When the Togiak District is below its threshold, the Dutch Harbor fishery will be closed for that season.

ARTICLE 3. PROHIBITIONS.

5 AAC 27.090. UNLAWFUL POSSESSION OF HERRING OR HERRING GEAR. (a) It is unlawful for any person to possess unprocessed herring aboard a vessel licensed as a commercial fishing vessel within any statistical area unless the season is open or unless the person is acting under the authorization of 5 AAC 27.030(b). This prohibition does not apply to herring possessed for subsistence or personal bait purposes under applicable regulations.

(b) It is unlawful for any person to possess aboard a vessel licensed as a commercial fishing vessel within any statistical area any herring or any gear used in the taking of herring, if the herring or herring gear are prohibited by other regulations in 5 AAC 27 governing the area, unless the vessel is acting under the authorization of 5 AAC 27.030(b).

(c) It is unlawful for any person to possess, purchase, sell, barter or transport herring within the state or within waters subject to the jurisdiction of the state if that person knows or has reason to know that herring was taken or possessed in contravention of the regulations of this chapter.

5 AAC 27.092. UNLAWFUL ACTS WITHIN AN ADJACENT SEAWARD BIOLOGICAL INFLUENCE ZONE. It is unlawful for any person to take, attempt to take, cause to be taken, or possess herring, or to operate, attempt to operate or cause to be operated any vessel or gear or to possess any gear or to take, attempt to take, cause to be taken, or fail to take any action, in violation of 5 AAC 27.010(b).

5 AAC 27.093. DISPOSAL OF HERRING. In Statistical Areas T, W, and Q and the Bering Sea waters of Statistical Area M, herring carcasses may be disposed of only as follows:

Emergency Order No. 4-F-M-01-89

Effective Date: April 15, 1989

EXPLANATION: This emergency order establishes weekly commercial herring sac-roe season fishing periods as follows for the Alaska Peninsula-Aleutian Islands Area:

(1) Port Moller District.

(A) April 15 - July 15. No open fishing periods, unless established by subsequent emergency order.

(2) Unimak, Akutan and Unalaska Districts, and that portion of the Umnak District located east of Samalga Pass.

(A) April 15 - June 15 herring may be taken during Sunday through Saturday.

(B) June 16 - July 15. No open fishing periods.

(3) In the balance of the area, not listed in 1 or 2, herring may be taken during Sunday through Saturday.

JUSTIFICATION: Fishing time is needed to allow herring sac-roe harvests in the Alaska Peninsula-Aleutian Islands Area during most of the sac-roe season. Effort is anticipated to be light. Therefore, until conditions indicate more conservative measures are needed, seven fishing days per week can be allowed in most of the area without jeopardizing the resource. The reason that portions of the area will remain closed during part of the season is as follows:

(A) Umnak District east of Samalga Pass, Unimak District, Akutan District, and Unalaska District during June 16 through July 15;

This area is managed on a food/bait fishery allocation during the food/bait season beginning July 16, which is managed on the basis of Togiak (Bristol Bay Area) spawning stocks. During some years food/bait (non local spawning) stocks are present well before July 16. The closure from June 16 through July 15 will prevent food/bait herring being harvested prior to the food/bait season.

If sac-roe stocks are discovered during June 16 - July 15 appropriate locations can be opened to herring fishing by subsequent emergency order.

(B) It appears that there are two Port Moller District herring stocks. The early stock has been subjected to intense pressure during recent years while the later and much larger stock has been subjected to very little exploitation. Until such a time that a large early biomass is observed or until such a time that the large late biomass is anticipated to arrive (probably after

May 29). The time and duration of fishing periods will depend on such factors as observed biomass, the amount of anticipated effort, weather, and tides.

Emergency Order No. 4-F-M-02-89

Effective Date: 12:00 Noon May 21, 1989

EXPLANATION: This emergency order closes the head of Stepovak Bay enclosed by a line running from the southern tip of Dent Point to the southern tip of Pad Island to a point on the Kupreanof Peninsula located east of Pad Island's northern tip, effective 12:00 Noon May 21 through July 15.

JUSTIFICATION: Approximately 40 tons of herring have been taken from the head of Stepovak Bay. Stock assessment work done in 1988 indicated that the herring biomass at the head of Stepovak Bay was conservatively estimated to be 125 tons. The present harvest is above the 20 percent guideline harvest level established by the Alaska Board of Fisheries. Therefore the head of Stepovak Bay should be closed to herring fishing.

Emergency Order No. 4-F-M-03-89

Effective Date: 12:00 Midnight May 24, 2989

EXPLANATION: This emergency order closes the Swedania Point-Balboa Bay Section to commercial herring fishing during May 25 through July 15.

JUSTIFICATION: The 1989 Peninsula-Aleutians Herring Sac Roe Management Plan states that the herring sac-roe season guideline harvest level is 15 tons of herring in the Swedania Point-Balboa Bay Section. The harvest is presently estimated to be 18 tons, therefore the Swedania Point-Balboa Bay section should be closed for the balance of the season.

Emergency Order No. 4-F-M-04-89

Effective Date: 2:00 P.M. May 29, 1989

EXPLANATION: This emergency order opens the Port Moller District to commercial herring fishing for 6 hours, beginning 2:00 P.M. May 29.

JUSTIFICATION: A survey just completed discovered an estimated biomass of 1,200 tons in the Port Moller District. Based on the behavior of this stock in the past, they will be present for only a few hours and will disappear after spawning. Based on the

catching and tender capacity available, a six hour fishing period should result in a harvest of close to 20% of the observed biomass which is the target exploitation adopted by the Board of Fisheries.

Emergency Order No. 4-F-M-08=89

Effective Date: 12:15 P.M. June 12, 1989

EXPLANATION: This emergency order closes the Canoe Bay Section to commercial herring fishing during 12:15 P.M. June 12 through July 15 (the balance of the herring sac-roe season).

JUSTIFICATION: The 1989 Peninsula-Aleutians Herring Sac-Roe Management Plan states that the herring sac-roe season guideline harvest level is 131 tons of herring in the Canoe Bay Section. The harvest is presently estimated to be 135 tons, therefore the Canoe Bay Section should be closed for the balance of the season. Notice can be given individually to all fishermen on the grounds by an Alaska Department of Fish and Game employee on the grounds.

Emergency Order No. 4-F-M-12-89

Effective Date: 6:00 P.M. June 16, 1989

EXPLANATION: This emergency order reopens the commercial herring sac-roe fishery in the Port Moller District effective 6:00 P.M. June 16 until the sac-roe season ends or 200 short tons of herring are harvested.

JUSTIFICATION: Recent surveys have resulted in a total herring biomass estimate to date of 2,643 tons in the Port Moller District. This has reduced the exploitation rate down to 11.5%. Another 200 tons of herring can be harvested while still keeping the exploitation rate under 20%. Effort has been reduced to only three boats with a limited tender capacity, therefore liberal fishing time can be allowed.

Emergency Order No. 4-F-M-32-89

Effective Date: July 16, 1989

EXPLANATION: This emergency order establishes the fishing periods as 24 hours per day 7 days per week for the Alaska Peninsula-Aleutian Islands Area herring food and bait fishery.

JUSTIFICATION: Fishing time is needed to harvest herring during the open season. Effort is anticipated to be light. If conditions warrant, changes can be made by subsequent emergency order.

Emergency Order No. 4-F-M-40-89

Effective Date: July 25, 1989

EXPLANATION: This emergency order closes the Eastern Aleutians food and bait herring season until there is an accurate tally of the catch.

JUSTIFICATION: The Eastern Aleutians food and bait herring season guideline harvest level is 3,100 short tons. Based on preliminary report, the catch is 2,300 tons. There is sometimes a large difference between grounds estimates and fish ticket information. At this time, it is desirable to obtain all the fish ticket information to find out what the actual catch is as the fleet has a large harvesting ability.

Emergency Order No. 4-F-M-42-89

Effective Date: 12:01 A.M. July 28, 1989

EXPLANATION: This emergency order reopens the Eastern Aleutians food and bait herring fishing season on July 28, after closing on July 25. This emergency order supersedes emergency order 4-F-M-40-89.

JUSTIFICATION: The Eastern Aleutians food and bait herring catch has been accurately placed 2,411 short tons, leaving 689 tons of the quota to be taken. The season needs to be reopened to allow the fishermen to harvest their allocation.

Emergency Order No. 4-F-M-48-89

Effective Date: August 6, 1989

EXPLANATION: This emergency order closes the Eastern Aleutians food and bait herring fishery and the food and bait herring season in the Amak, Port Moller, and Port Heiden Districts.

JUSTIFICATION: The 1989 Eastern Aleutians food and bait herring allocation of 3,100 short tons should be reached by August 5. Herring from the same stocks as those of the Eastern Aleutians food and bait fishery may be found in the North Peninsula Districts (Amak, Port Moller, and Port Heiden). Bering Sea stocks including those of the North Peninsula have been exploited during the sac-roe season. To prevent over exploitation of the stocks, the North Peninsula Districts should be closed to herring fishing along with the Eastern Aleutians fishery.

ALASKA PENINSULA AREA

CHAPTER 09.—ALASKA PENINSULA AREA

ARTICLE 1. DESCRIPTION OF AREA.

5 AAC 09.001. APPLICATION OF THIS CHAPTER. Requirements set forth in this chapter apply to commercial fishing only, unless otherwise specified. Subsistence fishing regulations affecting commercial fishing vessels or affecting any other commercial fishing activity are set forth in the subsistence fishing regulations in chs. 1 and 2 of this title.

5 AAC 09.100. DESCRIPTION OF AREA. The Alaska Peninsula Area includes all waters of Alaska from Cape Menshikof to Cape Sarichef Light and from a line extending from Scotch Cap through the easternmost tip of Ugamak Island to a line extending 135° southeast from Kupreanof Point.

ARTICLE 2. FISHING DISTRICTS AND SECTIONS.

5 AAC 09.200. FISHING DISTRICTS AND SECTIONS. (a) The Northern District includes all waters on the north (Bering Sea) side of the Alaska Peninsula between the westernmost tip of Cape Menshikof and the southernmost tip of Moffet Point:

(1) Cinder River Section: All waters of the Northern District east of 158°20′ W. long.;

(2) Port Heiden Sections:

(A) Outer Port Heiden Section: all waters of the Northern District located between 158°20′ W. long. and the longitude of Strogonof Point (158°51′ W. long), exclusive of the Inner Port Heiden Section;

(B) Inner Port Heiden Section: all waters of Port Heiden Bay south and east of a line from Strogonof Point at 56°53′16″ N. lat., 158°50′36″ W. long. to the mainland shore of the northeast entrance to the bay at 56°56′31″ N. lat., 158°40′44″ W. long.;

(3) Ilnik Section: all waters between the longitude of Strogonof Point (158°51′ W.long.) and the longitude of Three Hills (159°50′ W.long.);

(4) Three Hills Section: all waters between the longitude of Three Hills (159°50′ W.long.) and the longitude of Cape Seniavin Light (160°06′ W.long.);

(5) Bear River Section: all waters between the longitude of Cape Seniavin Light (160°06′ W.long. and the longitude of Wolf Point (160°48′30″ W.long.), excluding the waters of the Herendeen-Moller Bay Section;

(6) Herendeen-Moller Bay Section: all waters south of a line extending from Entrance Point to Wolf Point to Point Edward on Cape Rozhnof;

(7) Nelson Lagoon Section: all waters of Nelson Lagoon inside the bars and inside a line extending from Lagoon Point to Wolf Point to Point Edward on Cape Rozhnof;

(8) Caribou Flats Section: all waters between Wolf Point and a point at 55°53′40″ N.lat., 161°49′ W.long., approximately 22 nautical miles west of Nelson Lagoon Village and exclusive of the waters comprising the Nelson Lagoon section;

(9) Black Hills Section: all waters between 55°53′40″ N.lat., 161°49′ W.long., and Moffet Point.

(b) The Northwestern District: all waters on the north (Bering Sea) side of the Alaska Peninsula between Moffet Point and Cape Sarichef Light on Unimak Island, including Bechevin Bay and the waters of Isanotski Strait north of a line from the False Pass cannery dock to Nichols Point.

(1) Izembek-Moffet Bay Section: all waters between Moffet Point and Cape Galazenap;

(2) Bechevin Bay Section: all waters between Cape Galazenap and Chunak Point, including Bechevin Bay and the waters of Isanotski Strait nofth of a line from the False Pass cannery dock to Nichols Point;

(3) Swanson Lagoon Section: all waters on the north side of Unimak Island between the easternmost edge of Chunak Point (55°02′ N. lat., 163°27′ W. long.) and east of the longitude of Otter Point (163°16′30″ W. long.), excluding the waters of the Bechevin Bay Section;

(4) Urilia Bay Section: all waters on the north side of Unimak Island west of the longitude of Otter Point (163°16′30″ W. long.) and east of the northernmost tip of Cape Mordvinof (54°56′ N. lat., 164°25′45″ W. long.), including Peterson and Christianson Lagoons;

(5) Dublin Bay Section: all waters on the northwest side of Unimak Island east of the northernmost tip of Cape Mordvinof and west of Cape Sarichef Light (54° 35′50″ N. lat., 164° 55′ 30″ W. long.).

(c) The Unimak District includes all waters on the south side of Unimak Island between a line extending from Scotch Cap (54°24′ N. lat., 164°47′36″ W. long.) through the easternmost tip of Ugamak Island (54°12′42″ N. lat., 164°45′48″ W. long.), and a line extending 115° from Cape Pankof Light (54°39′36″ N. lat., 163°03′36″ W. long), including the Sanak Islands;

(1) Cape Lutke Section: all waters of the Unimak District east of a line extending from Scotch Cap (54°24′ N. lat., 164°47′36″ W. long) through the easternmost tip of Ugamak Island (54°12′42″ N. lat., 164°45′48″ W. long.), and west of the longitude of Rock Island (163°37′18″ W. long.);

(2) Otter Cove Section: all waters of the Unimak District east of the longitude of Rock Island (163°37′18″ W. long.) and north of 54°30′ N. lat.;

(3) Sanak Island Section: all waters of the Unimak District east of the longitude of Rock Island (163°37′18″ W. long.) and south of 54°30′ N. lat..

(d) Southwestern District: all waters on the south side of the Alaska Peninsula north and east of a line extending 115° from Pankof Light (54°39'36" N. lat., 163°03'36" W. long.) and west of a line extending 106° from Arch Point Light (55°12'20" N. lat., 161°54'15" W. long.) to the western boundary of the Southeastern District (longitude of McGinty Point: 160°59' W. long.), including Inner Iliasik, Outer Iliasik, Goloi, Dolgoi, Poperechoi, and Deer Islands, all waters of Ikatan Bay, and all waters of Isanotski Strait south of a line from the False Pass cannery dock (54°51'30" N. lat., 163°24'30" W. long.) to Nichols Point (54°51'30" N. lat., 163°23'10" W. long.);

(1) Ikatan Bay Section: all waters of the Southwestern District located south and west of a line from Kenmore Head (54°57' N. lat., 163°01'40" W. long.) to Hague Rock (54°33'10" N. lat., 162°24' W. long.), and west of a line extending true south from Hague Rock;

(2) Morzhovoi Bay Section: all waters of Morzhovoi Bay north of a line from Kenmore Head to Cape Tachilni (54°56' N. lat., 162°52'30" W. long.);

(3) Thin Point Section: all waters of the Southwestern District east of Kenmore Head (54°57"' N. lat., 163°01'40" W. long.) and west of Thin Point (54°57'30" N. lat., 162°33'30" W. long.), excluding waters of the Ikatan, Morzhovoi, and Cold Bay Sections;

(4) Cold Bay Section: all waters north of a line from Thin Point to Vodapoini Point;

(5) Deer Island Section: all waters within one nautical mile of Deer Island;

(6) Belkofski Bay Section: all waters between Vodapoini Point and Moss Cape, including Inner and Outer Iliasik Islands but excluding the waters of the Deer Island section;

(7) Volcano Bay Section: all waters between Moss Cape and Arch Point including Goloi, Dolgoi and Poperechnoi Islands;

(8) General Section: all other waters of the Southwestern district.

(e) South Central District: all waters on the south side of the Alaska Peninsula north and east of a line extending 106° from Arch Point Light (55°12'20" N. lat., 161°54'15" W. long.), and west of a line extending south from McGinty Point (55°27'30" N. lat., 160°59' W. long.), including Ukolnoi and Wosnesenski Islands;

(1) Pavlof Bay Section: all waters of Pavlof Bay, excluding the Canoe Bay section, and all other waters of the district west of the longitude of Cape Tolstoi (161°30' W.long.);

(2) Canoe Bay Section: all waters of Canoe Bay enclosed by a line from a point at 55°35'37" N.lat., 161°21'33" W.long. to a point at 55°35'41" N.lat., 161°21'40" W.long.;

(3) Mino Creek-Little Coal Bay Section: all waters of the district, excluding those of the Pavlof Bay and Canoe Bay sections, between the longitude of McGinty Point (160°59' W.long.) and the longitude of Cape Tolstoi (161°30' W.long.);

(f) Southeastern District: all waters on the south side of the Alaska Peninsula east of a line extending south from McGinty Point (55°27'30" N. lat., 160°59' W. long.), and west of a line extending 135° from Kupreanof Point (55°34' N. lat., 159°36' W. long.), including all of the Shumagin Islands;

(1) Beaver Bay Section: all waters of the Southeastern District east of the longitude of McGinty Point (160°59' W. long.), west of 160°49' W. long., and north of 55°26' N. lat.;

(2) Balboa Bay Section: all waters of the Southeastern District east of 160°49' W. long., north of 55°26' N. lat., and west of the longitude of Swedania Point (160°31'30" W. long.);

(3) Shumagin Islands Section: all waters of the Southeastern District east of the longitude of McGinty Point (160°59'W. long.), west of a line extending 135° from Kupreanof Point (55°34' N. lat., 159°36' W. long.), south of a line from 55°26' N. lat., 160°31'30" W. long., to 55°32'12" N. lat., 160°02'36" W. long. (approximately 1 nautical mile north of Karpa Island), and east to the Alaska Peninsula Area boundary (a line extending 135° from Kupreanof Point), excluding the Beaver Bay, Balboa Bay, and Southwest Stepovak Sections:

(4) Southwest Stepovak Section: all waters of the Southeastern District south of the latitude of 55°37'20" N. lat., west of 159°52' W. long., north of Shumagin Islands Section, and east of the Balboa Bay Section;

(5) Northwest Stepovak Section: all waters of the Southeastern District north of 55°37'20" N. lat. and west of the longitude of Dent Point (159°52' W. long.);

(6) Stepovak Flats Section: all waters of the Southeastern District north of 55°48'18" N. lat. and east of the longitude of Dent Point (159°52' W. long.);

(7) East Stepovak Section: all waters of the Southeastern District south of 55°48'18" N. lat., east of the longitude of Dent Point (159°52' W. long.), north of 55°32'12" N. lat., and west of a line extending 135° from Kupreanof Point (55°34' N. lat., 159°36' W. long.).

ARTICLE 3.—SALMON FISHERY

5 AAC 09.301. SEAWARD BOUNDARY OF DISTRICTS. For the purpose of managing the historical salmon net fishery in the vicinity of False Pass and Unimak Bight, the outer boundary of the Southwestern and Unimak Districts is a line three miles seaward from a line commencing at 54°26'45" N.lat., 162°53' W.long., near the western end of Sanak Island to Cape Lutke on Unimak Island. The seaward boundary of all other districts is a line three miles seaward of the baseline described in 5 AAC 39.975(13).

5 AAC 09.310. FISHING SEASONS. (a) In the Northern District, salmon may be taken as follows:

(1) Cinder River Section

(A) from May 1 through September 30 within the lagoon into which Cinder River drains (locally known as False Ugashik or Shagong);

(B) from August 1 through September 30 throughout this section;

(2) Port Heiden Sections:

(A) Inner Point Heiden Section: from May 1 through September 30;

(B) Outer Port Heiden Section: from August 1 through September 30;

(3) Ilnik Section

(A) from May 1 through September 30 within Ilnik Lagoon and all waters inside the Seal Islands;

(B) from July 5 through September 30 throughout this section;

(4) Three Hills Section: from June 25 through September 30;

(5) Bear River Section: from May 1 through September 30;

(6) Herendeen-Moller Bay Section: from May 1 through July 20 with the exception that within the bight enclosed by a line from Entrance Point to Harbor Point salmon may be taken from May 1 through September 30;

(7) Nelson Lagoon Section: from May 1 through September 30;

(8) Caribou Flats Section: from May 1 through June 20;

(9) Black Hills Section: from May 1 through September 30.

(b) In the Northwestern District, salmon may be taken only from June 1 through August 10, except that

(1) in the Dublin Bay Section, salmon may be taken only from July 10 through August 10;

(2) in the Bechevin Bay Section, salmon may be taken only from June 1 through September 30;

(3) after September 1, the salmon fishery season will be opened by emergency order.

(c) In the Unimak District, salmon may be taken only from June 1 through September 30.

(d) In the Southwestern District, salmon may be taken only from June 1 through September 30.

(e) In the South Central District, salmon may be taken only from June 1 through September 30.

(f) In the Southeastern District, salmon may be taken only from June 1 through September 30.

5 AAC 09.320. FISHING PERIODS. (a) In the Northern District, salmon may be taken from 6:00 a.m. Monday until 6:00 p.m. Thursday, except as follows:

(1) in the Black Hills and Caribou Flats Sections, salmon may be taken from 6:00 a.m. Monday until 6:00 p.m. Friday;

(2) in the Nelson Lagoon Section, salmon may be taken

(A) during the period of May 1 through June 15, from 6:00 a.m. Monday until 12:00 midnight Wednesday;

(B) during the period June 16 through August 15, from 6:00 a.m. Monday until 12:00 midnight Thursday;

(C) after August 15, from 6:00 a.m. Monday until 12:00 midnight Wednesday;

(3) in the Cinder River, Outer Port Heiden, Inner Port Heiden, and Ilnik Sections salmon may be taken from 6:00 a.m. Monday until 6:00 p.m. Wednesday.

(b) Salmon may be taken only during the open season in the Northwestern District in the

(1) Izembek-Moffet Bay Section: from 6:00 a.m. Monday until 6:00 p.m. Thursday;

(2) Bechevin Bay Section: only during fishing periods established by emergency order;

(3) Urilia Bay Section: from 6:00 a.m. Monday until 6:00 p.m. Thursday.

(4) Dublin Bay Section, from 6:00 a.m. Monday until 6:00 p.m. Thursday.

(c) Salmon may be taken during the open season in the Unimak District during fishing periods established by emergency order.

(d) Salmon may be taken only during the open season in the Southwestern District only during fishing periods established by emergency order.

(e) Salmon may be taken only during the open season in the South Central District only during fishing periods established by emergency order.

(f) Salmon may be taken only during the open season in the Southeastern District only during fishing periods established by emergency order.

5 AAC 09.330. GEAR. (a) In the Northern District salmon may be taken:

(1) in the Cinder River Section: with drift gill nets or set gill nets only;

(2) in the Inner and Outer Port Heiden Sections: with drift gill nets or set gill nets only;

(3) in the Ilnik Section: with drift gill nets or set gill nets only;

(4) in the Three Hills Section: with drift gill nets only;

(5) in the Bear River Section: with drift gill nets, purse seines and hand purse seines;

(6) in the Herendeen-Moller Bay Section: with drift gill nets, set gill nets, purse seines and hand purse seines;

(7) in the Nelson Lagoon Section: with drift gill nets or set gill nets;

(8) in the Caribou Flats Section: with drift gill nets or set gill nets;

(9) in the Black Hills Section; with drift gill nets or set gill nets only;

(b) in the Northwestern District, salmon may be taken with drift gill nets, set gill nets, purse seines and hand purse seines.

(c) In the Unimak District, salmon may be taken with drift gill nets, set gill nets, purse seines and hand purse seines.

(d) In the Southwestern District, salmon may be taken with purse seines, hand purse seines and set gill nets except that

(1) salmon may also be taken with drift gill nets west of a line from Kenmore Head to Hague Rocks to the easternmost tip of the Sanak Islands;

(e) In the South Central District, salmon may be taken with set gill nets, purse seines and hand purse seines, except that

(2) within Canoe Bay, salmon may be taken only with purse seines and hand purse seines;

(f) In the Southeastern District, salmon may be taken only with set gill nets, purse seines and hand purse seines except that

(1) salmon may be taken only with purse seines and hand purse seines in the area between Popof Head and Dark Cliffs (Popof Island) from June 1 through August 31;

(3) salmon may be taken only with set gill nets from June 1 through July 10 in the Beaver Bay, Balboa Bay, Southwest Stepovak, Northwest Stepovak, Stepovak Flats, and East Stepovak Sections;

(4) salmon may be taken by set gill net during periods when the seine fishery is closed by emergency order due to presence of immature salmon.

5 AAC 09.331. GILL NET SPECIFICATIONS AND OPERATION. (a) The size and operation of drift gill nets is as follows:

(1) the aggregate length of drift gill nets on a salmon fishing boat or in use by such boat shall be no more than 200 fathoms in length;

(2) the mesh size of drift gill nets shall not be less than five and one-quarter inches, except that in the Caribou Flats Section the mesh size of drift gill nets shall not be less than eight and one-half inches;

(3) no drift gill net used in the Nelson Lagoon Section may exceed 29 meshes in depth, except that after August 15 no drift gill net may exceed 38 meshes in depth.

(b) The size and operation of set gill nets is as follows:

(1) a set gill net may be no more than 100 fathoms in length; the aggregate length of set gill nets operated by a CFEC permit holder may be no more than 200 fathoms; no more than two gill net sites may be operated by a CFEC permit holder except that in the

(A) Inner Port Heiden Section a set gill net may be no more than 50 fathoms in length; the aggregate length of set gill nets operated by a CFEC permit holder may be no more than 100 fathoms; and no more than two gill net sites may be operated by a CFEC permit holder;

(B) Ilnik Lagoon (portion of the Ilnik Section) a set gill net may be no more than 50 fathoms in length; the aggregate length of set gill nets operated by a CFEC permit holder may be no more than 150 fathoms; and no more than three gill net sites may be operated by a CFEC permit holder;

(2) set gill nets shall be operated in substantially a straight line; no more than 30 fathoms of each set gill net may be used as a single hook;

(3) the mesh size of set gill nets shall not be less than five and one-quarter inches, except that in the Caribou Flats Section the mesh size of set gill nets shall not be less than eight and one-half inches;

(4) the maximum depth of set gill nets used in the Nelson Lagoon Section shall not be over 29 meshes;

(5) in the Unimak, Southwestern, South Central, and Southeastern Districts, 10 fathoms of seine webbing may be used on the shoreward end of a set gill net; the shoreward end of the seine webbing must be attached to the beach above low tide.

(6) During hours of darkness, each set gill net must be marked with at least one red light on the seaward end of the net, and at least one red light on both ends of the net if that net is more than 300 feet from shore.

5 AAC 09.332. SEINE SPECIFICATIONS AND OPERATION. (a) Purse seines and hand purse seines may not be less than 100 fathoms nor more than 250 fathoms in length.

(b) Leads may not be less than 50 fathoms nor more than 150 fathoms in length, except that leads of any length may be used in the Unimak District and the Bear River Section. Only one lead may be used with a seine. A lead may be attached to only one end of a seine, and the lead may not be attached to the boat end of the seine. Leads of any length may be carried onboard vessels in the Ikatan Bay Section.

5 AAC 09.334. IDENTIFICATION OF GEAR. (a) Each drift gill net in operation must have at each end a bright red keg, buoy or cluster of floats plainly and legibly marked with the permanent vessel license plate (ADF&G) number of the vessel operating the gear as well as the initials of the operator.

(b) Each set gill net in operation must be identified as required by 5 AAC 39.280.

5 AAC 09.335. MINIMUM DISTANCE BETWEEN UNITS OF GEAR. No part of a set gill net may be set or operated within 900 feet of any part of another set gill net, except that in the

(1) Inner Port Heiden Section no part of a set gill net may be set or operated within 600 feet of any part of another set gill net;

(2) Nelson Lagoon Section no part of a set gill net may be set or operated within 1,800 feet of any part of another operating set gill net.

5 AAC 09.350. CLOSED WATERS. Salmon may not be taken in the following locations:

(1) Meshik River: all waters upstream of a line crossing the river from a point at 56°47'04" N.lat., 158°41'06" W.long., to 56°47'58" N.lat., 158°38'45" W.long.; this is approximately one-half nautical mile upstream from the mean high tide mouth and approximately at the lower line of permanent grass growth;

(2) Sandy River

(A) May 1 through July 26; within 2,000 yards of the terminus of the river;

(B) July 27 through September 30: within 500 yards of the terminus of the river;

(3) Bear River

(A) May 1 through August 8: within 1,000 yards of the terminus of the river;

(B) August 9 through September 30: within 500 yards of the terminus of the river;

(4) Frank's Lagoon: all waters of the lagoon and within 500 yards outside the entrance;

(5) Bechevin Bay

(A) Saint Catherine Cove (Mike's Creek): all waters within 1,000 yards of the stream located at 55°00'48" N.lat., 163°31'33" W.long.;

(B) Trader's Cove: all waters north and east of a line from Morzhovoi Village (54°54"45" N.lat., 162°18'15" W.long.) to the base of Trader Mountain (55°00'05" N.lat., 162°18'22" W.long.);

(C) Warmsprings Bay: all waters southeast of a line from a point on the south shore of the bay at 54°56'28 N.lat., 163°15'45" W.long., to a point on the north shore of the bay at 54°57'16" N.lat., 163°15'33" W.long.;

(6) Christianson's Lagoon: all waters of the lagoon and its exit channel from the lagoon to a point 1,500 yards downstream from the lagoon;

(7) Ikatan Bay: all waters within 1,000 yards of the stream at 54°45'15" N.lat., 163°15'15" W.long. on the north shore of the Ikatan Peninsula which exits from Swede's Lake;

(8) Morzhovoi Bay: all waters including Littlejohn Lagoon north and west of a line from the easternmost tip of Kenmore Head to Reynolds Head (55°9' N.lat., 162°57'51" W.long.) before July 7; beginning July 7:

(A) Middle Lagoon: all waters of the lagoon and within 1,000 yards of its entrance;

(B) Littlejohn Lagoon: all waters of the lagoon and within 500 yards of its entrance at the narrows;

(9) Thin Point Cove and Lagoon: all waters north and west of a line from the tip of Thin Point westward to a point on the shore at 54°57'30" N.lat., 162°43'15" W.long.;

(10) Cold Bay

(A) Old Man Lagoon, Mortensen Lagoon and Nurse Lagoon: all waters of the lagoons and within 500 yards outside their entrances;

(B) Lenard Harbor: all water east of a line from a point on the south shore at 55°06' N.lat., 162°23' W.long., to a point on the north shore at 55°07' N.lat., 162°23' W.long., and within 1,000 yards of any salmon stream;

(C) Kinzarof Lagoon area: all waters north of a line from 55°13'25" N.lat., 162°43'25" W.long., to 55°16'10" N.lat., 162°34'25" W.long.;

(11) Deer Island

(A) all waters within 200 yards of the stream located at 54°55'41" N.lat., 162°14'12" W.long. and locally known as Eastern Creek.

(B) all waters within 200 yards of the stream located at 54°51'44" N.lat., 162°22'07" W.long. and locally known as Southern Creek;

(12) Belkofski Bay: all waters north and east of a line from 55°09'22" N.lat., 162°08'12" W.long., to 55°08'08" N.lat., 162°07'03" W.long., then to 55°07'20" N.lat., 162°07'39" W.long.;

(13) Volcano and Bear Bay

(A) all waters north of a line from 55°13'24" N.lat., 162°01'24" W.long., to 55°13'51" N.lat., 161°58' W.long.;

(B) all waters of Bear Bay west of 162° W.long. and locally known as Little Bear Bay;

(14) Longjohn Lagoon: all waters of the lagoon and within 500 yards outside its entrance;

(15) Pavlof Bay

(A) Chinaman Lagoon and Jackson Lagoon: all waters of the lagoons and within 1,000 yards outside their entrances;

(B) Dry Lagoon: all waters of the lagoon and within 500 yards of its entrance;

(C) Canoe Bay: all waters east of 161°14'12" W. long.;

(16) Balboa Bay

(A) all waters north of a line extending west from Reef Point;

(B) all waters of Lefthand Bay west of a line from 55°31'36" N.lat., 160°42'54" W.long., to 55°33'12" N.lat., 160°42'06" W.long.;

(17) Zachary Bay: all waters of the inner bay south and west of a line extending from the inner edge of the grass line of the sand spit to the west of the tip of the prominent point of land approximately 1½ nautical miles inside Quartz Point;

(18) San Diego Bay: all waters of a lagoon at the head of the bay and within 500 yards outside the lagoon's entrance except that from July 19 through August 31 the closure includes all waters west of a line from the reef at 55°33'08" N.lat., 160°26'30" W.long., to the headland at 55°34'02" N.lat., 160°25'48" W.long.;

(19) Dorenoi Bay

(A) through July 25, all waters north and west of a line from the tip of Renshaw Point to the opposite shore at 55°38'30" N. lat., 160°19' W. long.;

(B) after July 25, all waters within 500 yards of the terminus of any salmon stream;

(20) Chichagof Bay: all waters of the lagoon and within 500 yards of the lagoon entrance;

(21) Orzinski Bay (Orzenoi): within 1,000 yards of any salmon stream;

(22) Grub Gulch: all waters north and east of a line from 55°48'18" N.lat., 159°56'06" W.long. to 55°49'00" N.lat., 159°58'12" W.long.;

(23) Stepovak Bay: from June 1 through July 28, all waters within 500 yards of any salmon stream or lagoon unless otherwise specified; from July 29 through September 30, all waters north of a line extending east from the tip of Dent Point to a point on the Kupreanof Peninsula at 55°47' N.lat., 159°38'30" W.long.;

(24) Bay Point: all waters of the lagoon and within 500 yards of the lagoon entrance;

(25) Amak Island and adjacent Sea Lion Rocks: all waters within three nautical miles of these islands and elevations;

(27) Applegate Cove-Norma Bay: all waters south of a line from 55°14'08" N.lat., 162°53' W.long., to the southwest extremity of Norma Bay at 55°10'50" N.lat., 163°05'07" W.long.; this boundary aligns with the Cold Bay VORTAL cone and the headland located approximately two nautical miles south of the radar domes near Grant Point.

(28) Ilnik Lagoon: all waters of Ilnik Lagoon and Lake west of 159°30'12" W.long.;

(29) Herendeen Bay

(A) from May 1 through July 20, all waters within 500 yards of any salmon stream unless otherwise specified;

(B) after July 20, all waters south of the latitude of Bold Bluff Point (55°45'15" N.lat.) and within 500 yards of all salmon streams north of 55°45'15" N.lat.

(30) Nelson Lagoon: all waters of the lagoon and river (called Caribou, Nelson, and Lagoon River) flowing into the upper (west) end of Nelson Lagoon, upstream of a line from 55°57'20" N.lat., 161°22'15" W.long. to 55°57'45" N.lat., 161°22'40" W.long.

(31) Caribou Flats: all waters of the Caribou Flats Section;

(32) Cape Menshikof: all waters of the Cinder River Section located north of Loran C line 9990-Y-32920;

(33) King Salmon River:

(A) from May 1 through July 15, all waters within 1000 yards of the stream terminus;

(B) after July 15, all waters within 500 yards of the stream terminus.

5 AAC 09.355. SALMON PROCESSOR AND BUYER REPORTING REQUIREMENTS. The operator of a floating salmon processing vessel or tender, or a shorebased processing operation, and a company employing aircraft used for transporting salmon, shall report in person, or by radio or telephone, to a local representative of the department located in the management area of intended operation before the start of processing or buying operations. The report must include the location and the date of intended operation, and identify and describe each vessel or other method of transport employed in hauling or processing salmon.

5 AAC 09.360. SOUTHEASTERN DISTRICT SALMON MANAGEMENT PLAN. (a) This plan pertains to the management of the interception of Chignik River sockeye salmon caught in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters inside of a line from Renshaw Point to the mouth of Osterback Creek.

(b) In years when a harvestable surplus for the first (Black Lake) and second (Chignik Lake) runs of Chignik River system sockeye salmon is expected to be less than 600,000, there will be no commercial salmon fishery allowed in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, as described in 5 AAC 09.200(f), until a harvest of 300,000 sockeye salmon in the Chignik Area, as described in 5 AAC 15.100, is achieved. After July 8, after at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections will approach as near as possible 6 percent of the total Chignik sockeye salmon catch.

(c) In years when a harvestable surplus beyond escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000, but the first run fails to develop as predicted and it is determined that a total sockeye salmon harvest in the Chignik Area of 600,000 or more may not be achieved, the commercial salmon fishery in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections will be curtailed in order to allow at least a minimum harvest in the Chignik Area of 300,000 sockeye salmon by July 9 if that number of fish are determined to be surplus to the escapement goals of the Chignik River system. After July 8 and after at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections will approach as near as possible 6 percent of the total Chignik sockeye salmon catch.

(d) In years when a harvestable surplus beyond the escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000 and the department determines the runs are as strong as expected, the department shall manage the fishery so that the number of sockeye salmon taken in the East Stepovak, West Stepovak, Balboa Bay, and Beaver Bay Sections will approach as near as possible 6 percent of the total Chignik sockeye salmon catch.

(e) The estimate of sockeye salmon destined for the Chignik River has been determined to be 80 percent of the sockeye salmon harvested along the mainland from the easternmost tip of McGinty Point to Suzy Creek and from the Stepovak Flats and the East Stepovak Sections. The remaining sockeye salmon taken in the mainland fishery have been determined to be destined for Orzinski Bay.

(f) The total Chignik sockeye salmon catch constitutes those sockeye salmon caught within the Chignik Area, plus 80 percent of the sockeye salmon caught in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, as described in 5 AAC 09.200(f), plus 80 percent of the sockeye salmon caught in the Cape Igvak Section of the Kodiak Area. The percentage of Chignik sockeye salmon may be permitted to fluctuate above or below 6 percent at any time before July 25.

(g) This allocation method will be in effect through July 25. The first fishing period of the commercial salmon fishing season in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections will not occur before the first fishing period of the commercial salmon fishing season in the Chignik Area. After July 25, commercial salmon fishing in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections may be allowed on local stocks.

(h) During the period from approximately June 26 to July 9, the strength of the second run of the Chignik River system sockeye salmon cannot be evaluated. In order to prevent overharvest of the second run, the department may disallow or severely restrict commercial salmon fishing in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections during this period.

(i) The department shall announce commercial salmon fishing periods by emergency order. The department shall give at least one day's notice before the opening of a commercial salmon fishing period, unless it is an extension of a fishing period in progress.

5 AAC 09.365. SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE SALMON MANAGEMENT PLAN. (a) Mixed stocks of salmon bound for distant systems have historically been intercepted in significant numbers along the Alaska Peninsula. To ensure that none of these runs are overharvested, it is necessary to restrain their interception.

(b) The Alaska Board of Fisheries has established sockeye guideline harvest levels on the South Unimak and Shumagin Islands interception fisheries during June, which are based on percentages of the latest projected Bristol Bay inshore sockeye harvest as published by the Department of Fish and Game. The South Unimak fishery takes place in the Unimak District and the Ikatan Bay and Bechevin Bay Sections, as described in Sec. 200(c), (d)(1) and (b)(2) of this chapter. The Shumagin Islands fishery takes place in the Shumagin Islands Section, as described in Sec. 200(f)(3) of this chapter. Consistent with the board's Policy Statement on Management of Mixed Stock Salmon Fisheries and traditional harvest patterns, the maximum percentage allowed for the South Unimak fishery is 6.8 percent and for the Shumagin Islands fishery, 1.5 percent. The forecasts for Bristol Bay are sometimes updated as more information becomes available, just prior to the South Unimak and Shumagin Islands season, and exact numbers of fish cannot be given before the opening of each fishery.

(c) Guideline harvest levels are established with the understanding that catches will be distributed proportionally over the June runs to avoid excessive impacts on any segment of the runs. In order to accomplish this, the following guidelines will be adhered to as much as practicable:

Weekly Guideline Harvest Levels of Sockeye Salmon
(expressed as a percentage of the total allowable harvest)

Weekly Period	South Unimak	Shumagin Islands
June 1-4 & 5-11	5%	9%
June 12-18	29%	28%
June 19-25	51%	41%
June 26-30	15%	22%
	100%	100%

There may be no more than 96 hours of fishing allowed during any seven day week and no more than 72 consecutive hours of fishing at any time. The fishery must be closed for at least 24 hours following any opening of 72 consecutive hours. It is the preference of the board that the timing of the open and closed fishing periods be set to reduce excessive impacts on any segment of the runs. It is also the preference of the board that no more than 48 consecutive hours of fishing be allowed unless circumstances such as weather or attainment of the weekly guideline harvest levels require up to 72 consecutive hours of fishing.

(d) Weekly fishing periods will be announced by field emergency order, and they will be adjusted to keep the harvest within the weekly guidelines. If catches fall below the guidelines for a given weekly period, those unharvested sockeye will not be added into a subsequent weekly period. If weekly guideline harvest levels are inadvertently exceeded during any given fishing period, the excess will be a portion of the total guideline harvest level. If, during the last weekly fishing period, the staff determines that no significant fishing occurred due to weather conditions, the staff may, it its discretion, permit fishing to continue after June 30.

(e) The South Unimak and Shumagin Island June salmon fishery targets on the more abundant and valuable sockeye salmon. The board recognizes that the harvest of other

salmon species is incidental to the sockeye harvest. The board has determined that this incidental harvest is unavoidable and cannot be regulated with the present level of knowledge regarding this fishery. The board will not support any significant increase in the interception rate of chum salmon taken in the South Unimak and Shumagin Islands June salmon fishery. These stocks are probably fully utilized in existing terminal fisheries of long standing. This determination is consistent with the philosophy contained in the board's Policy Statement on Management of Mixed Stock Salmon Fisheries. The board recognizes that the conservation and allocation of non-targeted salmon stocks may be a concern during some years, but does not have the data to ensure specific corrective action at this time (Dec. 1982).

(f) The department shall close the June fishery if 500,000 chum salmon are taken before the sockeye salmon guideline harvest level is taken.

ARTICLE 4.—BOTTOMFISH FISHERY

5 AAC 09.410. FISHING SEASON. There is no closed season on bottomfish.

ARTICLE 5.—SMELT FISHERY

5 AAC 09.510. FISHING SEASON. There is no closed season on smelt.

ALEUTIAN ISLANDS AREA

CHAPTER 12.—ALEUTIAN ISLANDS AREA

ARTICLE 1.—DESCRIPTION OF AREA

5 AAC 12.001. APPLICATION OF THIS CHAPTER. Requirements set forth in this chapter apply to commercial fishing only, unless otherwise specified. Subsistence fishing regulations affecting commercial fishing vessels or affecting any other commercial fishing activity are set forth in the subsistence fishing regulations in chs. 1 and 2 of this title.

5 AAC 12.100. DESCRIPTION OF AREA. The Aleutian Islands Area includes all waters of Alaska in the Aleutian Islands west of Cape Sarichef Light and west of a line extending from Scotch Cap through the easternmost tip of Ugamak Island.

ARTICLE 2.—FISHING DISTRICTS AND SECTIONS

5 AAC 12.200. DESCRIPTION OF DISTRICTS AND SECTIONS. (a) Akutan District: all waters between Scotch Cap and Cape Sarichef Light and extending west to and including Akutan Pass. South of Scotch Cap Light, the eastern boundary of the district is a line extending from Scotch Cap through the easternmost tip of Ugamak Island.

(b) Unalaska District: all waters west of Akutan Pass to and including Umnak Pass;

(1) Beaver Inlet Section: all waters between Cape Sedanka and Cape Kalekta and including Unalga Island;

(2) Unalaska Bay Section: all waters between Cape Kalekta and Cape Kovrizhka;

(3) Makushin Bay Section: all waters between Cape Kovrizhka and Spray Cape;

(4) Kashega Bay Section: all waters between Spray Cape and Konets Head;

(5) Southern Section: all waters between Konets Head and Cape Sedanka.

(c) Umnak District: all waters west of Umnak Pass to and including Atka Pass.

(d) Adak District: all waters west of Atka Pass to the terminus of the Aleutian Islands.

ARTICLE 3.—SALMON FISHERY

5 AAC 12.310. FISHING SEASONS. Salmon may be taken only from July 10 through September 30, except that in the Kashega Bay Section, salmon may be taken only from June 1 through September 30.

5 AAC 12.320. WEEKLY FISHING PERIODS. Salmon may be taken only as follows:

(1) June 1 through July 18, from 6:00 a.m. Monday until 6:00 p.m. Friday;

(2) from July 19 through September 30, salmon may be taken during open season only during fishing periods established by emergency order;

5 AAC 12.330. GEAR. Salmon may be taken by purse seines, hand purse seines and beach seines.

5 AAC 12.332. SEINE SPECIFICATIONS AND OPERATION. (a) Purse seines and hand purse seines may not be less than 100 fathoms nor more than 250 fathoms in length.

(b) Beach seines may not be less than 100 fathoms in length and 3 fathoms in depth, nor more than 250 fathoms in length and 12 fathoms in depth.

(c) No lead may be less than 25 fathoms nor more than 150 fathoms in length.

5 AAC 12.350. CLOSED WATERS. The waters of Inner Iliulik Harbor and Margrets Bay between the Unalaska-Dutch Harbor bridge and 166°32′ W. long. are closed to the taking of salmon.

5 AAC 12.355. SALMON PROCESSOR AND BUYER REPORTING REQUIREMENTS. The operator of a floating salmon processing vessel or tender, or a shorebased processing operation, and a company employing aircraft used for transporting salmon, shall report in person, or by radio or telephone, to a local representative of the department located in the management area of intended operation before the start of processing or buying operations. The report must include the location and the date of intended operation, and identify and describe each vessel or other method of transport employed in hauling or processing salmon.

ARTICLE 4.—BOTTOMFISH FISHERY.

5 AAC 12.410. FISHING SEASON. There is no closed season on bottomfish.

5 AAC 12.430. GEAR. Bottomfish may be taken by sunken gill nets under the authority of a permit issued by the commissioner or a local representative of the department. The permit may specify open areas, fishing periods, gear specifications and operating specifications, and may require completion by the vessel operator of a log book provided by the department.

Emergency Order No. 4-F-M-05-89

Effective Date: 6:00 A.M. June 10, 1989

EXPLANATION: This emergency order allows commercial salmon fishing from 6:00 A.M. until 10:00 P.M. during June 10 in the South Unimak and Shumagin Island fisheries.

JUSTIFICATION: The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game's forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 1-11 allocations are 24,000 and 60,000 to the Shumagin Islands and South Unimak fisheries respectively.

June 1-11 sockeye harvests are much stronger toward the end of the period than earlier. The percentage of the chums is generally high early in the June 1-11 period.

The Alaska Board of Fisheries has placed a 500,000 (fish) chum salmon catch ceiling on both fisheries combined. The fleet should be able to harvest the sockeye allocation during one day near the end of the period, therefore minimizing the June 1-11 chum salmon interception. Only light winds are forecasted for June 10 but are likely to be strong during June 11, according to the National Weather Service.

Emergency Order No. 4-F-M-06-89

Effective Date: 6:00 A.M. June 12, 1989

EXPLANATION: This emergency order increases the waters closed to commercial salmon fishing at Christianson's Lagoon outlet channel at Urilia Bay to include all waters upstream from a point located 200 yards upstream from the outlet channel terminus at the ocean shoreline, effective 6:00 A.M. June 12 through December 31, 1989.

JUSTIFICATION: Salmon in the upper portion of the outlet channel are milling and some are vulnerable to overfishing. A recent survey indicates that the number of sockeye in waters presently closed to commercial is less than 5,000, the season goal is 25,000 to 50,000. There is plenty of area in the lower 200 yards of the channel and outside the channel to harvest the resource.

Emergency Order No. 4-F-M-07-89

Effective Date: 6:00 A.M. June 16, 1989

EXPLANATION: This emergency order allows commercial salmon fishing from 6:00 A.M. until 10:00 P.M. during June 16 in the South Unimak and Shumagin Islands fisheries.

JUSTIFICATION: The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game's forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 12-18 allocations are 74,000 and 348,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Alaska Board of Fisheries has placed a 500,000 (fish) chum salmon catch ceiling on both fisheries combined. A June 10 fishing period resulted in a chum harvest of 100,000 fish. During some years the chum salmon percentage decreased during the latter portion of the June 12-18 period. A June 16 fishing period will enable the fleet to harvest part of it's sockeye allocation while hopefully minimizing the chum salmon catch.

Emergency Order No. 4-F-M-09-89

Effective Date: 12:00 P.M. June 13, 1989

EXPLANATION: This emergency order closes the commercial salmon fishery in the Urilia Bay Section after June 13 until further notice.

JUSTIFICATION: The sockeye escapement into Urilia Bay is estimated to be less than 5,000. The season escapement goal is 25,000 to 50,000. Fishing effort is unusually high consisting of 6 seiners, 12 drift gillnetters 1 set gillnetter. The catch during June 12 was less than 7,000 fish indicating that the run is only moderately strong. The fishery should be closed at this time until a large portion of the escapement goal is achieved.

Emergency Order 4-F-M-10-89

Effective Date: 6:00 P:.M. June 14, 1989

EXPLANATION: This emergency order extends the commercial salmon fishing period an additional 6 hours until midnight Wednesday during the week of June 11-17 in the Ilnik Lagoon.

JUSTIFICATION: Fishermen are only able to fish in Ilnik Lagoon during approximately 4-5 hours during the incoming tide. The tides are such that during June 14 no fishing can occur unless the weekly fishing period is extended past 6:00 P.M., the Ilnik sockeye run is just beginning and effort only consists of 3 set gillnetters. A brief extension of the fishing period can be allowed at this time without jeopardizing the resource.

Emergency Order No. 4-F-M-11-89

Effective Date: 6:00 A.M. June 16, 1989

EXPLANATION: This emergency order allows a 6:00 A.M. until 10:00 P.M. fishing period during June 16 in the Southeastern District Mainland Fishery.

JUSTIFICATION: Except for the Northwest Stepovak Section, which is managed on the basis of Orzinski Lake sockeye, the Southeastern District Mainland fishery is managed on the basis of Chignik sockeye prior to July 26 as described under 5 AAC 09.360.

This year's early Chignik sockeye run is predicted to product a harvest of 750,000 fish. A June 12-13 fishing period in the Chignik Area resulted in a harvest of approximately 59,000 sockeye. A 16 hour fishing period on June 16 will give the Southeastern District Mainland fishermen the opportunity to catch their allocation (6% of the total Chignik destined harvest prior to July 26) and a chance to test the strength of the Orzinski sockeye run.

Emergency Order No. 4-F-M-13-89

Effective Date: 6:00 A.M. June 19, 1989

EXPLANATION: This emergency order allows commercial salmon fishing from 6:00 A.M. until 10:00 P.M. during June 19 in the South Unimak and Shumagin Islands fisheries.

JUSTIFICATION: The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game's forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 19-25 allocations are 108,000 and 611,000 to the Shumagin Islands and South Unimak fisheries respectively.

A 16 hour fishing period during June 19 will enable the fleet to harvest part of it's June 19-25 sockeye allocation.

Emergency Order No. 4-F-M-14-89

Effective Date: 10:00 P.M. June 19, 1989

EXPLANATION: This emergency order extends commercial fishing time 24 hours until 10:00 P.M. June 20 in the South Unimak and Shumagin Islands fisheries.

JUSTIFICATION: The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game's forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 19-25 allocations are 108,000 and 611,000 to the Shumagin Islands and South Unimak fisheries respectively.

A 16 hour fishing period was allowed during June 19, however very little fishing occurred due to high winds which are expected to decrease during June 20. a 24 hour extension of fishing time is needed to enable the fleet to harvest the resource. Winds are predicted to moderate June 20 according to the National Weather Service.

Emergency Order No. 4-F-M-15-89

Effective Date: 6:00 P.M. June 21, 1989

EXPLANATION: This emergency order extends the fishing period 48 hours until 6:00 P.M. June 23 in the Inner Port Heiden and Ilnik Sections.

JUSTIFICATION: Weather has greatly reduced fishing during Monday through Wednesday in the Inner port Heiden and Ilnik Sections. Effort level is only three set gillnet fishermen in Ilnik Lagoon and most of the Port Heiden fishermen have moved to Bristol Bay, leaving only two set gillnet fishermen in the Inner Port Heiden Section. The fishing period can be extended 48 hours to make up for fishing time lost to weather without endangering the resource.

Emergency Order No. 4-F-M-16-89

Effective Date: 6:30 A.M. June 23, 1989

EXPLANATION: This emergency order establishes a 6:00 A.M. until 6:00 P.M. commercial salmon fishing period in the South Unimak fishery during June 23.

JUSTIFICATION: There are 136,000 sockeye left to be taken in the South Unimak quota with 63,000 remaining to be taken from the June 19-25 portion. There is a 500,000 chum salmon catch ceiling placed on the South Unimak and Shumagin Islands fisheries combined (the combined chum catch is now 415,000).

The sockeye to chum ratio has been steadily improving and should reach its highest point during June 22-25. Chum salmon catches sometimes greatly increase during the June 26-30 period. A 12-hour fishing period on June 23 will enable the fleet to harvest their sockeye allocation while minimizing the chum salmon catch.

Emergency Order No. 4-F-M-17-89

Effective Date: June 26, 1989

EXPLANATION: This emergency order:

1. Closes the commercial salmon fishing season in that portion of the Bear River Section located southwest of Sandy River's northeast closed waters boundary.

2. Allows a 6:00 A.M. June 26 until 6:00 P.M. June 28 commercial salmon fishing period in the Urilia Bay Section.

3. Reduces the closed waters in the lower end of Christianson's Lagoon exit channel by 300 yards to include only waters upstream from a point 500 yards above the exit channel terminus. This emergency order supersedes emergency order No. 4-F-M-06-89.

JUSTIFICATION:

The Bear river sockeye escapement is less than 3,000 which is poor for this date. The Sandy River sockeye escapement is difficult to monitor and the run is of very short duration making it vulnerable to overfishing. Most of the Alaska Peninsula drift gillnet fleet is anticipated to fish in the vicinity of Port Moller on June 26. A greatly expanded closed waters area is needed to obtain desired escapements.

The sockeye escapement into Urilia Bay is estimated to be nearing the lower end of it's escapement goal range of 25,0900 to 50,000. The run will continue for another three weeks. A harvest can be allowed at this time without jeopardizing the resource.

The 200 yard closure previously implemented by emergency order No. 4-F-M-06-89 displaced part of a set gillnet operation. Due to the fact no salmon milling areas are between 200 and 500 yards above the Christianson Lagoon exist channel terminus, more room can be made available for fishing without jeopardizing the escapement.

Emergency Order No. 4-F-M-18-89

Effective Date: 6:00 P.M. June 28, 1989

EXPLANATION: This emergency order extends the commercial salmon fishing periods as follows during the week of June 25 - July 1:

1. Ilnik Lagoon 6 hours until 12:00 P.M. Wednesday.

2. Nelson Lagoon 24 hours until 12:00 P.M. Friday.

3. Inner Port Heiden Section 54 hours until 12:00 P.M. Friday.

JUSTIFICATION:

Effort in the Inner Port Heiden Section consists of only one set gillnet fisherman and catch information indicates that the sockeye run is strong. More fishing time can be allowed without jeopardizing the resource.

Effort consists of only three set gillnet fishermen in Ilnik Lagoon and tides are such that they will only be able to fish one day during the week unless the period is extended several hours. The Ilnik sockeye run is anticipated to be strong but has not yet proven to be so. A short extension of the fishing period will give the fishermen a better chance to test the run strength.

The Nelson Lagoon sockeye escapement of 13,400 is on target for this date and catch rates indicate that the run is very strong. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-19-89

Effective Date: 12:00 P.M. June 30, 1989

EXPLANATION: This emergency order extends commercial salmon fishing through the weekend until 6:00 P.M. Wednesday July 5 in the Inner Port Heiden Section. Emergency Order 4-F-M-18-89 extended Inner Port Heiden fishing time through Friday June 30.

JUSTIFICATION: Effort in the Inner Port Heiden Section continues to consist of only one set gillnetter. Catch information indicates the sockeye run may be of record size. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-20-89

Effective Date: July 3, 1989

EXPLANATION: This emergency order establishes 6:00 A.M. Monday until 6:00 P.M. Thursday commercial salmon fishing periods in the Bechevin Bay and Swanson Lagoon Sections.

JUSTIFICATION: The fishing periods have been inadvertently deleted from the regulation book that area comprising the Swanson Lagoon Section. Chum salmon should be entering the Bechevin Bay section, fishing time is needed to give the fishermen the opportunity to harvest the resource. The 6:00 A.M. Monday until 6:00 P.M. Thursday fishing periods are the same as those in the adjacent Izembek-Moffet Bay Section.

Emergency Order No. 4-F-M-21-89

Effective Date: July 3, 1989

EXPLANATION: This emergency order closed the fishing period in the Bear River, Three Hills, and the Herendeen-Moller Bay Sections until re-established by emergency order.

JUSTIFICATION: The Bear River sockeye escapement through the weir is less than 4,000 and there are very few fish in the river below the weir. Test fishing indicates that there are very few salmon near the river mouth. A closure of the fishery is necessary until a large portion of the 125,000 escapement goal through July 15 is in protected waters. The entire Herendeen-Moller Bay Section should be closed until other areas can be reopened to spread the gear out, an over-concentration of gear in the Herendeen-Moller Bay section could deplete the chum stocks while also catching Bear River sockeye.

Emergency Order No. 4-F-M-22-89

Effective Date: 4:00 A.M. July 6, 1989

EXPLANATION: This emergency order expands the closed waters at the head of Cold Bay to include all waters north of 55°10' north latitude.

A 4:00 A.M. July 6 until 10:00 P.M. July 7 commercial salmon fishing period is established for the following locations:

1. Northwest Stepovak Section
2. Shumagin Islands Section
3. South Central District
4. Southwestern District
5. Sanak Island Section
6. Otter Cove Section

JUSTIFICATION: Local chum salmon runs should be underway at this time and fishing time is needed to test the run strength and allow a harvest.

The Orzinski Lake sockeye escapement on July 3 was estimated at 2,500, which is unusually high for this date. There is also good sign of sockeye in the upper end of Orzinski Bay. The Northwest Stepovak Section should be open for the harvest of Orzinski sockeye.

The upper portion of Cold Bay needs to be closed to enable FRED to take as many pink and chum salmon eggs as possible for the Russel Creek Hatchery. Healthy natural spawning populations need to be maintained in addition to hatchery fish.

Emergency Order No. 4-F-M-23-89

Effective Date: 12:01 A.M. July 5, 1989

EXPLANATION: This emergency order allows a 12:01 A.M. until 10:00 P.M. commercial salmon fishing period during July 5 in the Herendeen-Moller Bay Section.

JUSTIFICATION: Fishing time is needed to harvest Herendeen-Moller Bay chums. Due to a fishing period in the Ilnik Section during July 5 fishing effort in the Herendeen-Moller Bay Section is anticipated to be light and an orderly harvest can take place without threatening the resource.

Emergency Order No. 4-F-M-24-89

Effective Date: 6:00 P.M. July 5, 1989

EXPLANATION: This emergency order extends the commercial salmon fishing period through 12:00 midnight Friday July 7 in the Inner Port Heiden Section. The Nelson Lagoon Section remains open to continuous salmon fishing through the weekend until 12:00 P.M. Thursday July 13.

JUSTIFICATION: The minimum end of Nelson Lagoon;s 100,000 to 150,000 sockeye escapement goal will be reached by the end of July 5, with approximately three weeks left in the run. Fishing effort continues to consist of only one fisherman and catch information indicates the run is unusually strong in the Inner Port Heiden Section. Weather is also presenting fishing during July 5 at Inner Port Heiden.

Emergency Order No. 4-F-M-25-89

Effective Date: 12:00 P.M. July 7, 1989

EXPLANATION: This emergency order extends commercial salmon fishing time through 6:00 P.M. July 12 in the Inner Port Heiden Section.

JUSTIFICATION: The Inner Port Heiden fishery which presently consists of only three gillnet fishermen has not been able to operate due to weather during the past two days. Previous catches indicate a very strong sockeye run and salmon research biologists report seeing very large numbers of sockeye in the river. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-26-89

Effective Date: 4:00 A.M. July 12, 1989

EXPLANATION: This emergency order establishes a 4:00 A.M. July 12 until 10:00 P.M. July 13 commercial salmon fishing period for the following locations:

1. Stepovak Flats Section

2. Northwest Stepovak Section

3. Shumagin Islands Section

4. South Central District

5. Southwestern District

6. Sanak Island Section

7. That portion of the Otter Cove Section located east of the longitude of Cape Aksit.

JUSTIFICATION: Fishing time is needed to harvest South Peninsula chum salmon and test run strength. The Orzinski sockeye escapement of over 2,500 fish is very good for this date, therefore the Northwest Stepovak Section should be open to harvest Orzinski sockeye.

Emergency Order No. 4-F-M-27-89

Effective Date: 12:00 Midnight July 9, 1989

EXPLANATION: This emergency order closes the commercial salmon fishing season in the Ilnik Section after July 9.

JUSTIFICATION: The Ilnik sockeye escapement goal is 25,000 to 50,000 fish. To date, the escapement is estimated to be less than 10,000 and the run should be past it's peak. Bear River sockeye are intercepted in the Ilnik Section and the Bear River sockeye escapement through the weir is less than 75,000, as compared to a July 15 goal of 110,000 to 125,000. This is despite a lengthy closure of the Bear River and Three Hills Section. The Ilnik Section needs to be closed to commercial salmon fishing in order to conserve both Ilnik and Bear River sockeye stocks.

Emergency Order No. 4-F-M-28-89

Effective Date: 6:00 A.M. July 12, 1989

EXPLANATION: This emergency order reopens the commercial salmon fishing season in that portion of the Bear River Section located

south and west of Frank's Lagoon south regulatory marker. A 6:00 A.M. July 12 until 6:00 P.M. July 13 commercial salmon fishing period is established for the Three Hills, Bear River, and Herendeen-Moller Bay Sections. This emergency order supersedes emergency order 4-F-M-17-89.

JUSTIFICATION: The Bear River sockeye escapement (excluding jacks) has passed 101,000 and is expected to pass the minimum end of the July 15, 110,000 to 125,000 escapement goal during July 12. More fishing area can be allowed on the west end of the Bear River Section. A terminal sanctuary extending from the south marker of Frank's Lagoon to the north regulatory marker of Sandy River will ensure that escapement needs are met.

Emergency Order No. 4-F-M-29-89

Effective Date: 10:00 P.M. July 12, 1989

EXPLANATION: This emergency order closes the Shumagin Islands salmon seine fishery at 10:00 P.M. July 12, 24 hours earlier than originally scheduled.

JUSTIFICATION: The Alaska Department of Fish and Game has observed large numbers of immature sockeye salmon being gilled in seine gear in the Shumagin Islands. The observations indicated that about 200 immature sockeye per set were being killed and wasted as these fish are not wanted by the processors. The Shumagin Islands seine fishery should be closed to prevent wastage of a valuable resource. Set gillnet gear does not catch immature salmon and this gear can continue to fish as provided under 5 AAC 09.330. (f)(4).

Emergency Order No. 4-F-M-30-89

Effective Date: 6:00 P.M. July 13,1989

EXPLANATION: This emergency order:

1. Extends commercial salmon fishing time 48 hours until 6:00 P.M. July 15, in the Three Hills and Herendeen Bay Sections and that portion of the Bear River Section located north of Sandy River's north regulatory marker and that portion of the Bear River Section south of Frank's Lagoon south regulatory marker. The season has been closed by previous emergency order for the area between Frank's Lagoon and Sandy River.

2. Allows continuous commercial salmon fishing until 12:00 P.M. July 27 in the Nelson Lagoon Section.

3. Extends commercial salmon fishing time 24 hours until 6:00 P.M. July 14 in the Izembek-Moffet Bay Section.

4. Extends commercial salmon fishing time for the Shumagin Islands set gillnet fishery 24 hours until 10:00 P.M. July 14.

JUSTIFICATION: The minimum end of the 110,000 to 125,000 Bear River July 15 sockeye escapement goal has been reached. The upper end of the Nelson Lagoon season sockeye escapement goal of 100,000 to 150,000 has been reached. More fishing time is needed to harvest the resource.

Weather has prevented commercial salmon fishing in the Izembek-Moffet Bay Section during much of the week of July 9-15 and effort consists of only 4 seiners. A 24 hour extension will give the fishermen an opportunity to harvest the resource.

Large numbers of immature sockeye salmon being gilled in seines caused closure of the Shumagin Island seine fishery 24 hours before it was scheduled to close. Shumagin chum salmon catches during July 12 totaled 28,000 which indicates a strong run. A 24 hour extension of the Shumagin Islands set gillnet fishery as provided for under 5 AAC 09.330 will enable set gillnetters to harvest the chum salmon resource. Set gillnet gear does not catch immature salmon.

Emergency Order No. 4-F-M-31-89

Effective Date: 12:00 P.M. July 13, 1989

EXPLANATION: This emergency order reopens the commercial salmon fishing season effective July 14 in those portions of the Bear River Section located between the Bear River church and Sandy River and between Frank's Lagoon and King Salmon River. This emergency order supersedes 4-F-M-28-89.

JUSTIFICATION: The Bear River sockeye escapement is nearing the upper end of the 110,000 to 125,000 goal through July 15. More fishing area is needed to harvest the resource. It is desirable to leave some of the area closed near Bear River to enable the July 15-August 5 escapement to get off to a healthy start. Continuous fishing is allowed until 6:00 P.M. July 15 and catches indicate that the run is very light at this time.

Emergency Order No. 4-F-M-33-89

Effective Date: July 17, 1989

EXPLANATION: This emergency order reestablishes 6:00 P.M. Thursday commercial salmon fishing periods in the Three Hills, Bear River, Herendeen-Moller Bay, and Urilia Bay Sections.

JUSTIFICATION: The Bear River sockeye escapement foal of 110,000 to 125,000 fish through July 15 has been surpassed and a new escapement goal period is beginning. Fishing time is needed to harvest sockeye during the July 16-August 5 portion of the Bear River run in which the goal is 40,000 to 50,000. The Urilia Bay sockeye run should be over and fishing time is needed to harvest chums. The 6:00 A.M. Monday until 6:00 P.M. Thursday fishing periods are the same as published in the regulation book.

Emergency Order No. 4-F-M-34-89

Effective Date: 4:00 A.M. July 20, 1989

EXPLANATION: This emergency order allows a 4:00 A.M. July 20, until 10:00 P.M. July 31, commercial salmon fishing period for set gillnet gear in the Shumagin Islands Section and for all legal gear in the Northwest Stepovak Section and that portion of the Alaska Peninsula Area's south (Pacific) side located between the longitude of McGinty Point and the longitude of Cape Aksit.

JUSTIFICATION: Pink salmon are entering South Peninsula waters at this time and fishing time is needed to harvest the resource and test run strength. Test fishing has indicated that immature salmon are still present in large numbers in the Shumagin Islands where they are subject to being gilled by seiners and wasted. Regulation 5 AAC 09.330 specifies that set gillnetting may be allowed in the Southeastern District when seining is closed due to the presence of immature salmon.

Emergency Order No. 4-F-M-35-89

Effective Date: 6:00 P.M. July 20, 1989

EXPLANATION: This emergency order extends commercial salmon fishing time 24 hours until 6:00 P.M. Friday July 21 in the following locations:

(1) Three Hills Section

(2) Bear River Section

(3) that portion of the Herendeen-Moller Bay Section enclosed by a line from Entrance Point to Harbor Point.

JUSTIFICATION: The Bear River sockeye escapement during the July 16-August 5 period is 30,000 as of 8:00 P.M. July 19. With most of the period's escapement goal of 40,000 to 50,000 achieved by July 20, more fishing time can be allowed at this time to harvest the resource.

Emergency Order No. 4-F-M-36-89

Effective Date: 4:00 A.M. July 24, 1989

EXPLANATION: This emergency order establishes a 4:00 A.M. July 24 until 10:00 P.M. July 25 commercial salmon fishing period in the Kashega Bay Section.

JUSTIFICATION: Kashega had an excellent pink salmon escapement during the parent year. This was not the case in other parts of the Aleutian Islands Area. Fishing time is needed to test run strength at Kashega.

Emergency Order No. 4-F-M-37-89

Effective Date: July 24, 1989

EXPLANATION: This emergency order closes the commercial salmon fishing season in the Northwestern District after July 23.

JUSTIFICATION: Chum salmon escapements are presently weak throughout the Northwestern District. The catch totaled less than 7,000 chums during the present week which is a weak daily catch during most years. The Northwestern District should be closed at this time to conserve the stocks.

Emergency Order No. 4-F-M-38-89

Effective Date: 6:00 A.M. July 24, 1989

EXPLANATION: This emergency order:

1. Reopens the commercial salmon fishing season in the Ilnik Section, superseding emergency order 4-F-M-27-89.

2. Reopens the commercial salmon fishing season in that portion of the Bear River Section located between the Bear River church and King Salmon River, superseding emergency order 4-F-M-31-89.

3. Allows continuous commercial salmon fishing during the open season from 6:00 A.M. July 24 until 6:00 P.M. August 2 in the Ilnik, Three Hills, Bear River, and Herendeen-Moller Bay Sections.

4. Reduces the closed waters at Bear River to the stream terminus during July 24 through August 5.

JUSTIFICATION: The July 16-August 5 Bear River sockeye escapement has reached the upper end of the 40,000-50,000 sockeye escapement goal for this period. More fishing effort and area is needed to harvest the resource. The Ilnik sockeye run is over and Bear River sockeye pass through the Ilnik Section. The fishing period runs only through August 2 to protect late run sockeye which will be entering the area at this time.

Emergency Order No,. 4-F-M-39-89

Effective Date: 5:00 A.M. July 25, 1989

EXPLANATION: This emergency order establishes a 5:00 A.M. July 25 until 10:00 P.M. July 27 commercial salmon fishing period in the following locations:

1. Northwest Stepovak Section
2. Shumagin Islands Section
3. South Central District
4. Southwestern District
5. Sanak Islands
6. Otter Cove Section

A 12:01 A.M. July 25 until 10:00 P.M. July 27 commercial salmon fishing period is established for the following locations:

1. Beaver Bay Section
2. Balboa Bay Section
3. Southwest Stepovak Section
4. East Stepovak Section

JUSTIFICATION: The previous fishing period and early pink salmon escapement surveys indicate that the South Peninsula pink salmon run is strong. Fishing time is needed to harvest the resource. The Beaver Bay, Balboa Bay, Southwest Stepovak, and East Stepovak Sections cannot be managed on a local stock basis until June 26.

Emergency Order No. 4-F-M-41-89

Effective Date: 5:00 A.M. July 30, 1989

EXPLANATION: This emergency order establishes a 5:00 A.M. July 30 until 10:00 P.M. August 1 commercial salmon fishing period in the Southeastern District, South Central District, Southwestern District, Otter Cove Section, and Sanak Islands Section.

JUSTIFICATION: During the present fishing period, fishermen are catching over 350,000 pink salmon per day which indicates a strong run. Pink salmon escapements are good for this date in the early systems. Fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-43-89

Effective Date: 5:00 A.M. July 31, 1989

EXPLANATION: This emergency order establishes a 5:00 A.M. July 31 until 10:00 P.M. August 1 commercial salmon fishing period in the Kashega Bay Section.

JUSTIFICATION: Kashega had an excellent pink salmon escapement during the parent year. This was not the case in other parts of the Aleutian Islands Area. Fishing time is needed to test run strength at Kashega.

Emergency Order No. 4-F-M-44-89

Effective Date: 5:00 A.M. July 30, 1989

EXPLANATION: This emergency order reduces the closed waters of Southern creek on Deer Island to include only those waters above the stream terminus.

JUSTIFICATION: A recent survey indicated that Southern Creek has a pink salmon escapement of 169,000 which is above the optimum number necessary for this stream. More fishing area is needed to harvest the resource.

Emergency Order No,. 4-F-M-45-89

Effective Date: 6:00 P.M. August 2, 1989

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours until 6:00 P.M. Friday August 4 in the Bear River, Three Hills, and Ilnik Sections and in Port Moller Bight (enclosed by a line from Harbor Point to Entrance Point).

JUSTIFICATION: The Bear River sockeye escapement during the July 16-August 5 period is presently 80,000 compared to a goal of 40,000 to 50,000 for this period. More fishing time is needed to harvest the resource. A new escapement goal period begins after August 5 and a closure during August 5 should allow the escapement to get off the a healthy start during the late period. Fishing periods after August 4 are the same as listed in the regulation book.

Emergency Order No. 4-F-M-46-89

Effective Date: August 4, 1989

EXPLANATION: This emergency order establishes a 5:00 A.M. August 4 until 10:00 P.M. August 6 commercial salmon fishing period in the Southeastern District, South Central District, Southwestern District, Otter Cove Section, and Sanak Islands Section.

JUSTIFICATION: South Peninsula pink salmon catches are averaging 700,000 fish per day during the July 30-August 1 period, which indicates a very strong run. Escapements into early systems are good for this date. More fishing time is needed to harvest the resource.

Emergency Order Mp. 4-F-M-47-89

Effective Date: 5:00 A.M. August 4, 1989

EXPLANATION: This emergency order reduces the closed waters at Eastern Creek on Deer Island to include only those waters upstream from the stream terminus. The closed waters boundary at

the head of Stepovak Bay has been clarified with a longitude and latitude on the western boundary.

JUSTIFICATION: The Eastern Creek pink salmon escapement is estimated at 21,000 fish which is considered the optimum level for this system. More fishing area is needed to harvest the resource.

The tip of Dent Point is not defined in the regulation book and this has led to confusion. Large numbers of pink salmon are being caught in the contested area, indicating strong runs entering the head of Stepovak Bay. A liberal interpretation of the boundary with a longitude and latitude will accurately define the closure line and give fishermen a place to harvest pink salmon while adequately protecting chums at the head of the bay

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Emergency Order No. 4-F-M-49-89

Effective Date: 10:00 P.M. August 6, 1989

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours until 10:00 P.M. August 8 in the Deer Island Section and that portion of the Belkofski Bay Section located south of a line from Indian Head to Belkofski Point and west of the longitude of Belkofski Point.

The closed waters reduction to the stream terminus at Bear River remains in effect for the balance of the season or until further notice.

JUSTIFICATION: Deer Island pink salmon escapements are very good and catches are averaging over 100,000 per day. Fishermen are holding hook for Deer Island fish in part of the Belkofski Bay Section. More fishing time is needed to harvest Deer Island pinks.

The Bear River sockeye escapements are averaging over 5,000 fish per day despite the closed waters being reduced to the terminus. Escapement needs for the remainder of August is less than 2,000 fish per day. There is presently no need to increase the closed waters out to 500 yards as printed in the regulation book. A previous emergency order opened Bear River to the terminus only through August 5.

Emergency Order No. 4-F-M-50-89

Effective Date: 5:00 A.M. August 10, 1989

EXPLANATION: This emergency order establishes a 6:00 A.M. August 10 until 10:00 P.M. August 11 commercial salmon fishing period in the Southeastern District, all of the Southwestern District except the Volcano Bay Section, Unimak District, Bechevin Bay Section, Mino Creek-Little Coal Bay Section, and that portion of the Pavlof Bay Section located east of 161°34' W. long.

JUSTIFICATION: Pink salmon runs are strong over most of the south side of the Alaska Peninsula Area. Morzhovoi Bay and Thin Point Cove sockeye escapements are good. The late Bechevin Bay chum runs should be beginning. Fishing time is needed to harvest the resource.

Optimum pink salmon escapement levels have been reached at Coal Bay and Deer Island streams. The Thin Point Lagoon sockeye escapement is estimated at 13,500 which is above the minimum goal of 10,000. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-51-89

Effective Date: 6:00 P.M. August 10, 1989

EXPLANATION: This emergency order expands the weekly fishing periods 24 hours until 6:00 P.M. Friday each week during the open season in the Bear River, Three Hills, and Herendeen-Moller Bay Sections.

JUSTIFICATION: The post August 5 Bear River sockeye escapement is 20,000 fish. The season goal is 50,000 to 75,000. Daily escapements are averaging over 5,000. At this rate the escapement goal can easily be met while allowing more fishing time.

Emergency Order No. 4-F-M-52-89

Effective Date: 10:00 P.M. August 11, 1989

EXPLANATION: This emergency order extends commercial salmon fishing 24 hours until 10:00 P.M. August 12 in the following locations:

(1) That portion of the south side of the Alaska Peninsula Area located west of Thin Point (excluding the Cold Bay Section).

(2) The Belkofski Bay and Deer Island Sections.

(3) That portion of the Pavlof Bay Section located east of 161°34' W. long.

(4) That portion of the south peninsula located between Cape Tolstoi and Swedania Point.

(5) The Shumagin Islands and East Stepovak Sections.

JUSTIFICATION: Pink salmon runs are strong over most of the south peninsula. Thin Point and Morzhovoi Bay sockeye escapements are good. High southeast winds are preventing fishermen from fishing in much of the area during August 11. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-53-89

Effective Date: 10:00 A.M. August 12, 1989

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours until 10:00 P.M. August 14 in the following locations:

(1) Deer Island Section

(2) That portion of the Pavlof Section located east of 161°34'W. long.

(3) That portion of the South Peninsula located between Cape Tolstoi and Swedania Point.

(4) The Shumagin Islands Section

(5) East Stepovak Section

JUSTIFICATION: Pink salmon runs continue to be strong on Deer Island and over much of the South Peninsula located east of Pavlof Bay. More fishing time can be allowed in selected areas at this time without jeopardizing escapements.

Emergency Order No. 4-F-M-54-89

Effective Date: August 18, 1989

EXPLANATION: This emergency order allows continuous commercial salmon fishing during the open season in the Bear River, Three Hills, and Herendeen-Moller Bay Sections.

JUSTIFICATION: The post August 5 Bear River sockeye escapement is 60,000 with approximately one month left in the run. The post-August 5 goal is 50,000 to 75,000. Even with continuous fishing, the upper end of the escapement goal should be easily surpassed. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-55-89

Effective Date: 6:00 P.M. August 23, 1989

EXPLANATION: This emergency order extends the commercial salmon fishing period 24 hours until 6:00 P.M. Thursday during the week of August 20-26 in the Inner Port Heiden and Outer Port Heiden Sections.

JUSTIFICATION: The August 22 Port Heiden coho catch was 4,400 fish which is above the previous average of 3,800 for this date with comparable gear levels. Coho normally escape through the Port Heiden fishery at a high rate when the run is strong. A 24 hour extension of the present fishing period should enable the

fishermen to better harvest the resource while still maintaining an adequate escapement.

Emergency Order No 4-F-M-56-89

Effective Date: 6:00 A.M. September 1, 1989

EXPLANATION: This emergency order reopens the commercial salmon fishing season from September 4 until September 30 in the Northwestern District.

A 6:00 A.M. September 1 until 9:00 P.M. September 5 commercial salmon fishing period is established for the Southeastern District.

A 6:00 A.M. September 4 until 9:00 P.M. September 8 commercial salmon fishing period is established for the Swanson Lagoon Section.

A 6:00 A.M. September 4 until 9:00 P.M. September 10 commercial salmon fishing period is established for the following locations:

1. Dublin Bay Section
2. Urilia Bay Section
3. Izembek-Moffet Bay Section
4. Unimak District
5. Ikatan Bay Section
6. Morzhovoi Bay Section
7. Thin Point Section
8. Cold Bay Section

After September 10 no commercial salmon fishing periods will be allowed in the Northwestern District unless established by subsequent emergency order.

JUSTIFICATION: Fishing time is needed to harvest coho salmon which should be entering local bays at this time. Much of the area, where historical coho catches have been minor and where late chums need to be protected will remain closed. Chum runs are weak and are generally earlier in the Southeastern District (and therefore in closed waters earlier than in the western coho producing locations). Coho salmon fishing is more efficient in Swanson Lagoon than in other portions of the Northwestern District, therefore less fishing time can be allowed in Swanson Lagoon without jeopardizing the resource.

Emergency Order 4-F-M-57-89

Effective Date: 6:00 P.M. August 30, 1989

EXPLANATION: This emergency order extends commercial salmon fishing time until 12:00 P.M. midnight Thursday during the week of August 27 - September 2 in the Nelson Lagoon, Ilnik, Inner Port Heiden, and Outer Port Heiden Sections.

JUSTIFICATION: Port Heiden, Ilnik, and Nelson Lagoon daily coho salmon catches during the same dates during near record years. The Nelson Lagoon coho escapement is the best on record for this date, although weather and water conditions have prevented surveys of Port Heiden and Ilnik systems. It is likely that tender service will be discontinued to some locations during the following week which may terminate fisheries in those locations. Effort is declining in the Ilnik and Outer Port Heiden Sections. A brief extension of fishing time during this week will enable the fleet to better harvest the resource and should not jeopardize escapements.

Emergency Order No. 4-F-M-58-89

Effective Date: 12:00 P.M. August 31, 1989

EXPLANATION: This emergency order allows continuous commercial salmon fishing time during the balance of the 1989 season (ends September 30) in the Inner and Outer Port Heiden Sections.

JUSTIFICATION: The Meshik River coho escapement is estimated at 27,000 which is at the desired level for this system, and there is at least one week left in the run. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-59-89

Effective Date: 6:00 P.M. September 6, 1989

EXPLANATION: This emergency order extends weekly salmon fishing periods 54 hours until 12:00 P.M. Friday each week in the Ilnik Section but increases the waters closed to salmon fishing at Unangashak River to include all waters within 2-1/2 nautical miles of the stream terminus.

JUSTIFICATION: The coho salmon escapement into the Ilnik Lagoon system is estimated at 17,500 which is very good for this date. To date, most coho fishing effort in that portion of the Ilnik Lagoon Section enclosed by the Seal Islands has been targeted on Unangashak River fish. A recent survey indicated that the Unangashak escapement may be low (although survey conditions are never ideal in this system). The Unangashak stocks should be protected from further exploitation at this time and a larger harvest of Ilnik Lagoon coho should be encouraged.

Emergency Order No. 4-F-M-60-89

Effective Date: 6:00 A.M. September 9, 1989

EXPLANATION: This emergency order allows a 6:00 A.M. September 9 until 9:00 P.M. September 11 commercial salmon fishing period in the Southeastern District.

JUSTIFICATION: Fishing time is needed for fishermen to harvest salmon in the Southeastern District and to test coho run strength. Due to the lateness in the season and average September weather conditions, fishing effort is anticipated to decline.

Emergency Order No. 4-F-M-61-89

Effective Date: 9:00 P.M. September 10, 1989

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours until 9:00 P.M. September 12 in the Thin Point and Cold Bay Sections.

JUSTIFICATION: Thin Point and Cold Bay coho runs are strong. Weather has prevented fishing every day except for one since the fishing period began on September 4. A two day extension will give the fishermen a better opportunity to harvest the resource.

Emergency Order No. 4-F-M-62-89

Effective Date: 9:00 P.M. September 11, 1989

EXPLANATION: This emergency order extends commercial salmon fishing time 48 hours until 9:00 P.M. September 13 in the Southeastern District.

JUSTIFICATION: Weather is preventing fishermen from fishing over much of the Southeastern District. Effort level is anticipated to continue to decline due to weather and the lateness of the season. More fishing time can be allowed at this time to make up for that lost to weather.

Emergency Order No. 4-F-M-63-89

Effective Date: 9:00 P.M. September 12, 1989

EXPLANATION: This emergency order extends salmon fishing time 48 hours until 9:00 P.M. September 13 in the Thin Point and Cold Bay Sections.

JUSTIFICATION: The Thin Point Lagoon coho escapement is estimated to be 4,800 which is good for this date. Effort consists of only 3 set gillnetters and catches continue to be good. A 24 hour extension can be granted at this time without jeopardizing the resource.

Emergency Order No. 4-F-M-64-89

Effective Date: 6:00 A.M. September 17, 1989

EXPLANATION: This emergency order establishes a 6:00 A.M. September 17 until 9:00 P.M. September 21 commercial salmon fishing period in the Southeastern District.

JUSTIFICATION: Fishing time is needed for the fleet to harvest salmon in the Southeastern district. Effort is anticipated to be very light due to the lateness in the season and normal high winds during this time of year.

Emergency Order No. 4-F-M-65-89

Effective Date: 9:00 P.M. September 21, 1989

EXPLANATION: This emergency order allows continuous commercial salmon fishing through October 31 in the Southeastern District.

JUSTIFICATION: Commercial fishing effort in the Southeastern District has dwindled to only 5 or 6 gillnetters and is anticipated to decline further. Weather is preventing fishing activity during most of the present week and is anticipated to be windy for most of the Fall which is normal for this area. Continuous fishing will enable fishermen to take advantage of what fishable days weather will allow. Only one or two fishermen are expected to operate in October and their catch results will enable the Department to learn more about late salmon going into and passing through the Southeastern District.

ALASKA PENINSULA AREA

REGULATION CHANGES MADE BY THE ALASKA BOARD OF FISHERIES AT JANUARY 1990 MEETING.

GEAR

1. The maximum depth of seines is 375 meshes. Seine mesh size may not exceed 3-1/2 inches except the first 25 meshes above the leadline may not be more than 7 inches.

2. Leads may not be less than 50 fathoms nor more than 150 fathoms in length throughout the entire Alaska Peninsula Area.

3. In the Unimak and Southwestern Districts, drift gillnets may not exceed 90 meshes in depth.

4. In the Northwestern and Northern Districts, drift gillnets may not exceed 70 meshes in depth, except in the Nelson Lagoon Section where drift gillnets may not exceed 29 meshes through August 15 or more than 38 meshes in depth after August 15. In the Northwestern and Northern Districts leadline weights on drift gillnets fishing in this area will be restricted so that no more than 60 fathoms of a single leadline will be allowed per 50 fathoms of cork line. No portion of this leadline may exceed 1.5 pounds per fathom.

5. In the Unimak, Southwestern, South Central and Southeastern Districts, the maximum depth of set gillnets shall not be over 90 meshes.

6. The east side of Popof Island between Popof Head and Dark Cliffs will be open to set gillnetting during fishing periods when seining is not allowed due to the presence of immature salmon.

7. Gillnetting will be allowed during fishing periods throughout the Southeastern, South Central, Southwestern, and Unimak Districts where seining can't be allowed due to the presence of immature salmon.

SOUTH UNIMAK-SHUMAGIN ISLANDS JUNE SALMON MANAGEMENT PLAN

8. The sockeye allocation is divided into three periods instead of four with time period allocations as follows for each fishery:

June 13 - 18	35%
June 19 - 25	45%
June 26 - 30	25%
	100%

If catches in either fishery fall below the guidelines in the first weekly period, those unharvested sockeye up to a maximum of 5 percent of the total guideline harvest level for that fishery will be added to the weekly guideline for the second period.

9. The chum salmon catch ceiling has been raised from 500,000 to 600,000 for both fisheries combined.

10. The "window" regulations (no more than 96 hours of fishing time in a 7 day period or no more than 72 consecutive hours of fishing) have been removed.

11. The fishing area at South Unimak has been extended to include the following portions of the Southwestern District in addition to the Ikatan Bay Section (but does not include closed waters as described under 5 AAC 09.350):

    (1) Those waters north and west of a line from Cape Pankof Light to Thin Point (54°57'26" N. lat., 162°33'12" W. long.).

    (2) Those waters enclosed by a line from Thin Point to Stag Point (54°10' N. lat, 161°53'45" W. long.) to Dolgoi Cape (55°03'45" N. lat., 161°44' W. long.) and from Bluff Point (55°10' N. lat., 161°53'45" W. long.) to Arch Point (55°12'20" N. lat, 161°54'15" W. long.).

12. The documented number of Russel Creek hatchery chums caught in the South Unimak and Shumagin Islands June fishery will be added to the chum salmon catch ceiling beginning in 1993.

URILIA BAY

13. The closed waters at Christianson's Lagoon has been expanded to include all waters located over 500 yards upstream from the lagoon outlet at the ocean shoreline.

NORTHERN DISTRICT

14. The fishing periods during June in the Bear River and Three Hills Section are reduced 24 hours to 6:00 A.M. Monday until 6:00 P.M. Wednesday.

15. The season in that portion of the Ilnik Section located between Loran C line 990-Y-33265 and Strogonof Point will not open until July 15.

16. There is no open season in the Outer Port Heiden Section.

17. Area T permits are no longer valid in the Outer Port Heiden Section and that portion of the Ilnik Section not enclosed by the Seal Islands.

GAME OBSERVATIONS

The willow ptarmigan population continued to be very high in the vicinity of Port Moller and Nelson Lagoon. At Cold Bay, they were spotty.

Brown bears and wolves continue to be abundant along the lower Alaska Peninsula and on Unimak Island.

The upper Alaska Peninsula caribou herd seems to be healthy and stable. The lower Peninsula herd seems to be declining. A study indicated that calves are not surviving in the lower Peninsula herd and nutrition is believed to be a factor. Not one caribou was observed on Unimak Island during salmon stream survey flights.

A census of the Popof Island bison herd was made during August 5. A total of 105 adult bison and 14 calves were observed. This compares with 91 adults and 8 calves observed in 1988. Both surveys were done by Commercial Fisheries Division personnel and aircraft for the Division of Wildlife Conservation (formerly Game Division).

MISCELLANEOUS ACTIVITY OR OBSERVATIONS

After a series of meetings, dealing with the Russel Creek Hatchery Management Plan, FRED Division collected 10 million pink salmon eggs and 16 million chum eggs. The pinks were the result of a 10 million egg transplant from Kitoi Hatchery on Afognak Island during the Fall of 1987.

The Alaska groundfish fisheries are fully Americanized. The dispute now is between onshore processors and fishermen versus a greatly expanding fleet of factory trawlers. Pacific cod fishing continues to be an important winter time occupation for local fishermen at King Cove and Sand Point who use trawls, converted crab pots and longlines.

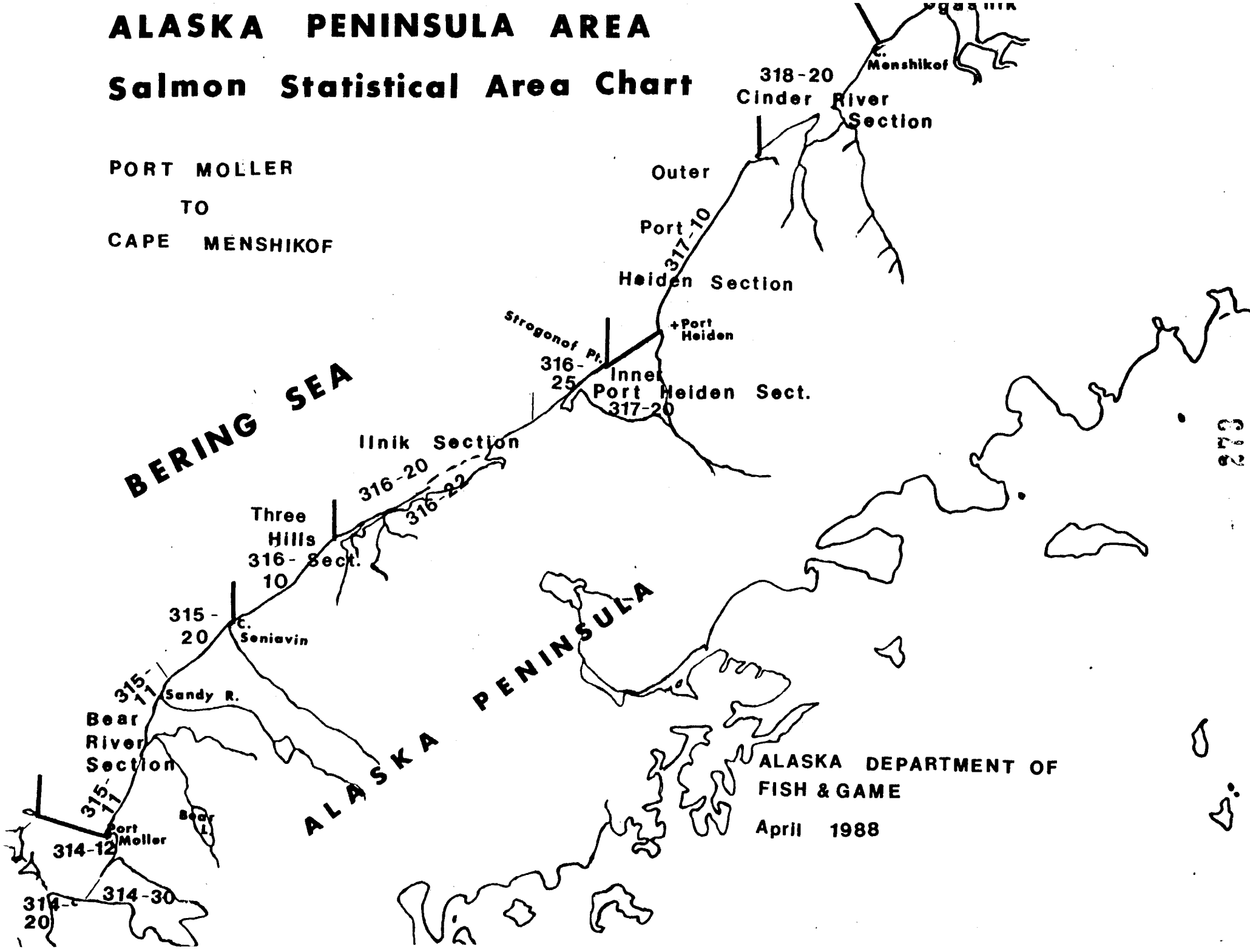
Sport fishing for salmon along the Alaska Peninsula seems to be on a continued increase. A considerable number of sport fishermen fly to Cold Bay to fish Russel and Trout Creek cohos. There are also commercial sport fish operations at Bear Lake, Sandy River, Ocean River, Ilnik and Meshik River. Sport fishing is also a popular activity at Unalaska and Adak.

There was an unusually heavy crop of crowberries, strawberries, and blueberries in the vicinity of Cold Bay. Salmon berries were also abundant in specific locations.

ALASKA PENINSULA AREA

Salmon Statistical Area Chart

PORT MOLLER
TO
CAPE MENSHIKOF



ALASKA DEPARTMENT OF
FISH & GAME

April 1988

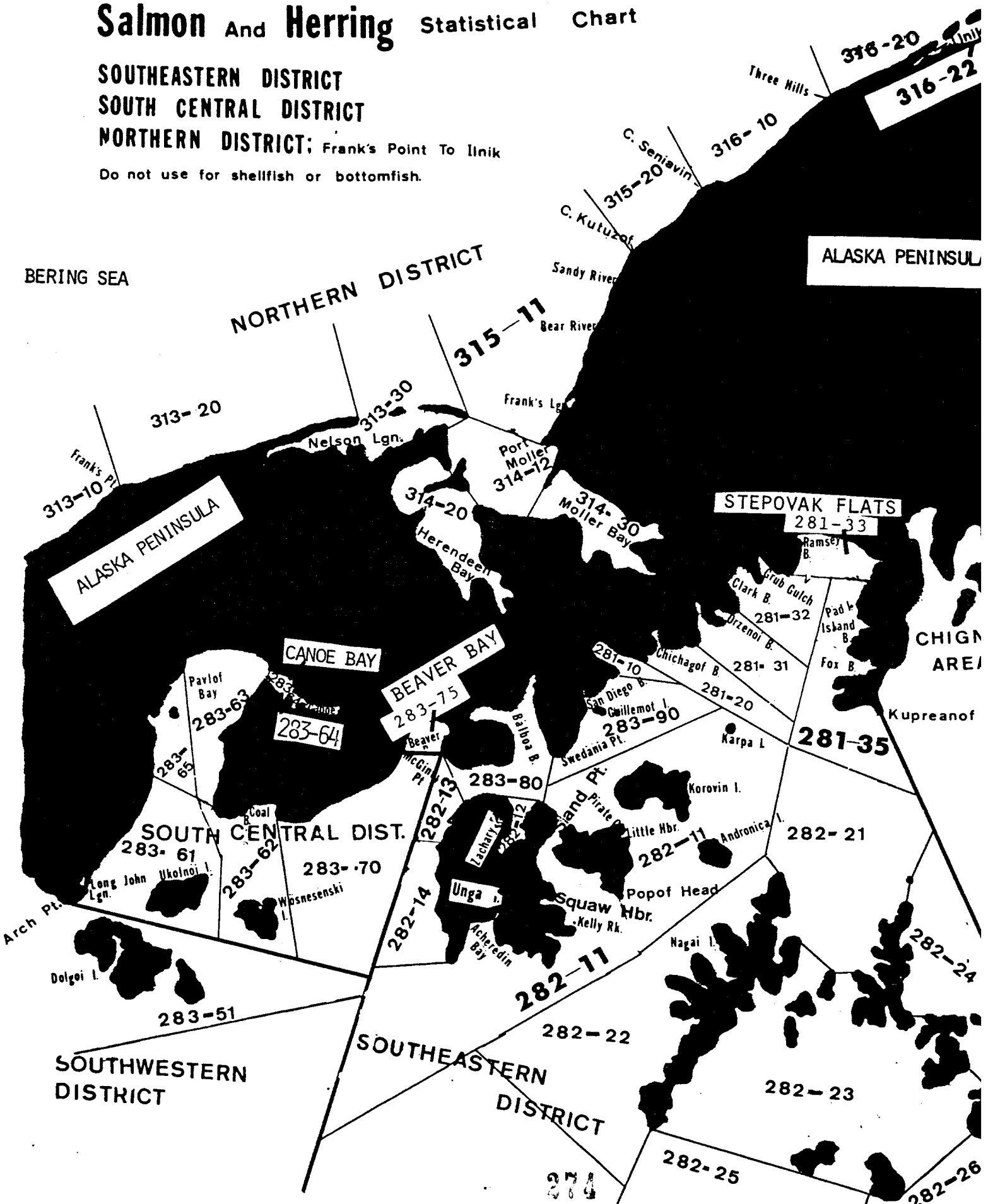
ALASKA PENINSULA AREA

Salmon And Herring Statistical Chart

ALASKA DEPARTMENT OF FISH AND GAME
APRIL 1986

SOUTHEASTERN DISTRICT
SOUTH CENTRAL DISTRICT
NORTHERN DISTRICT: Frank's Point To Ilnik

Do not use for shellfish or bottomfish.



ALASKA PENINSULA AREA

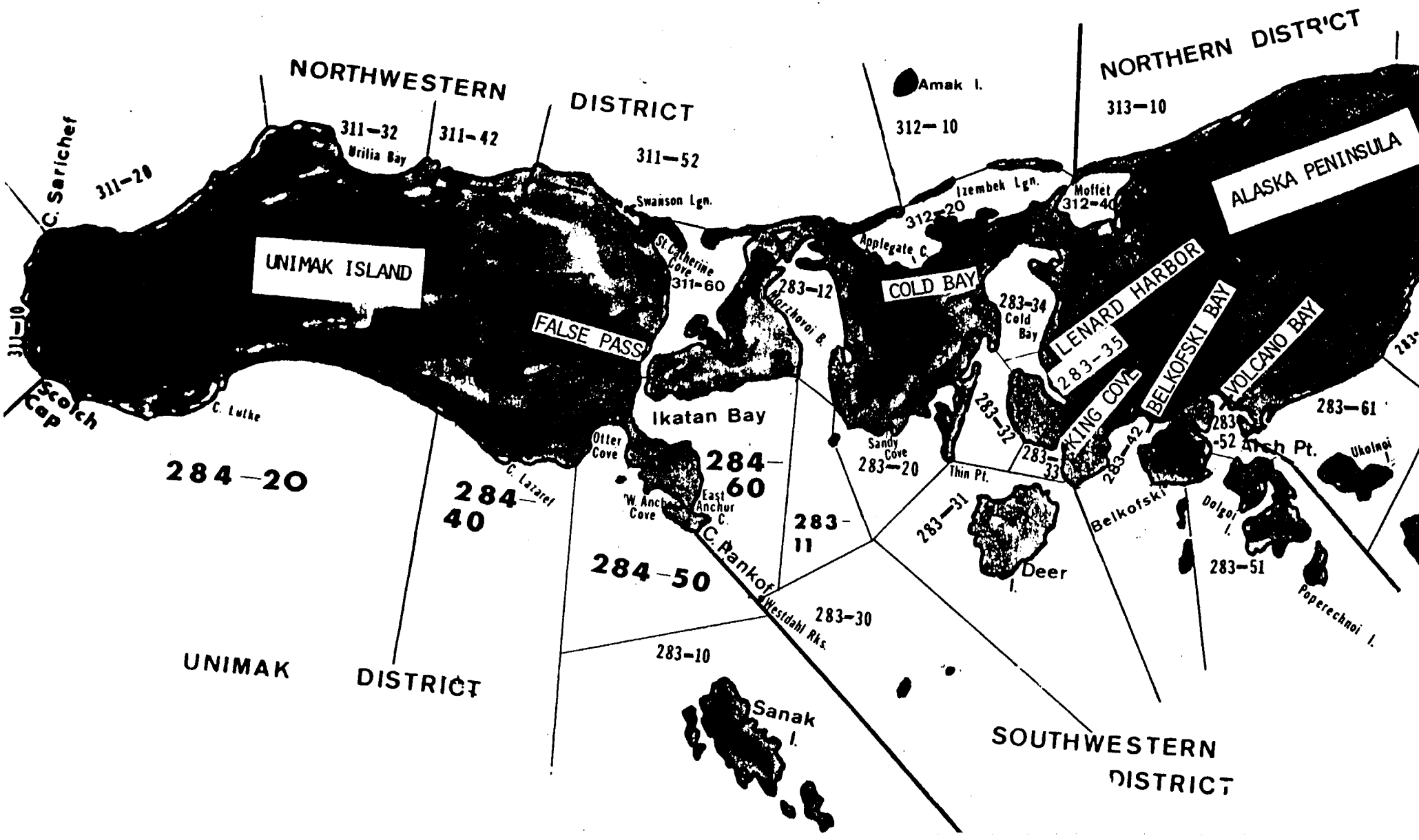
Salmon And Herring Statistical Chart

ALASKA DEPARTMENT OF FISH AND GAME
APRIL 1986

NORTWESTERN, UNIMAK, And SOUTHWESTERN DISTRICTS

BERING SEA

Do not use for shellfish or bottomfish.

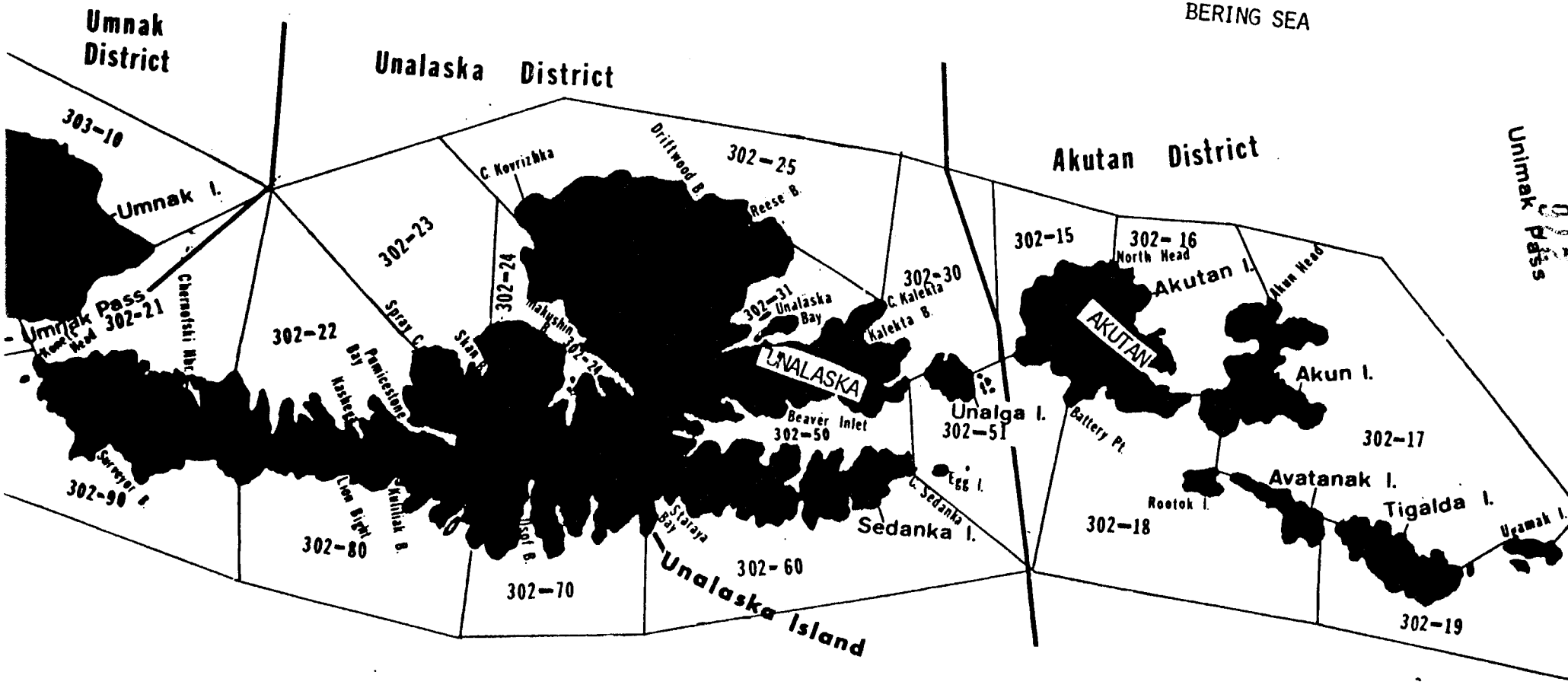


ALEUTIAN ISLANDS AREA

UNALASKA AND AKUTAN DISTRICTS

Statistical Chart For SALMON And HERRING

Do not use for shellfish or bottomfish.



ALASKA DEPARTMENT OF FISH AND GAME
APRIL 1979

KODIAK DISTRICT CORRECTION TABLE (1)

	TIME HIGH	TIME LOW	FEET HIGH	FEET LOW
KODIAK AND AFOGNAK ISLANDS				
Andreson B., Shuyak Is.	+0:39	+0:48	+2.8	+0.4
Perenosa Bay	+0:32	+0:42	+2.8	+0.4
Seal Bay	+0:33	+0:39	+2.7	+0.4
Tonki Bay	+0:16	+0:24	+2.6	+0.3
Marmot Is., Marmot St.	+0:22	+0:10	+1.2	+0.1
Izhut Bay	+0:16	+0:24	+0.4	+0.1
Kazakof B., Marmot B.	+0:08	+0:08	+0.9	+0.3
Fox Bay, Whale Is.	+0:27	+0:40	+1.5	+0.3
Kizhuyak Bay	+0:10	+0:14	+1.1	+0.1
Kizhuyak Point	+0:09	+0:12	+0.9	+0.2
Ouzinkie, Spruce Is.	-0:01	-0:01	+0.5	+0.1
Spruce Is. (no. side)	+0:06	+0:11	+0.7	+0.2
Kodiak Harbor			Kodiak Schedule	
St. Paul Harbor	-0:07	-0:03	+0.2	+0.1
Womens Bay	+0:04	+0:01	+0.3	+0.1
Uganik B. (Saltery Cove)	-0:25	-0:17	0.0	0.0
Port Hobron, Sitkalidak Island	-0:14	-0:03	0.0	+0.2
Three Saints Bay	-0:18	-0:10	+0.1	+0.2
Jap Bay	-0:13	-0:06	0.0	+0.2
Sitkinak Lagoon	-0:16	+0:10	-0.7	+0.3
Lazy Bay, Alitak Bay	+0:02	+0:18	*1.41	*1.41
Moser B. (Trap Pt.)	+0:13	+0:32	*1.39	*1.39
Olga Bay (Cannery)	+3:48	+4:16	*0.14	*0.14
ALASKA PENINSULA				
Kanatak Lagoon, Pt. B.	+0:25	+0:54	+3.3	+0.4
Lees Cabins, Wide B.	+0:25	+0:35	+3.5	+0.3
Anchorage Bay	+0:23	+0:43	+0.5	+0.4
Three Star Point	+0:32	+0:40	*0.93	*0.93
Chiachi Is. (east side)	+0:26	+0:40	*0.92	*0.92
Kupreanof Harbor, Paul Island	+0:23	+0:38	*0.92	*0.92
Fox B., Kupreanof P.	+0:22	+0:36	*0.89	*0.89
Dent Pt., Stepovak Bay	+0:21	+0:36	*0.89	*0.89
SHUMAGIN ISLANDS				
Korovin Is. (east side)	+0:26	+0:52	*0.92	*0.92
Sanborn H., Nagai Is.	+0:37	-0:37	*0.86	*0.86
Mist H., Nagai Is.	+0:35	+0:38	*0.83	*0.83
Pirate Cove, Popof Is.	+0:42	+0:43	*0.88	*0.88
Sand Point, Popof Is.	+0:30	+0:42	*0.87	*0.87
Zachary Bay, Unga Is.	+0:34	+0:49	*0.88	*0.88
Albatross A., Balboa B.	+0:32	+0:43	*0.91	*0.91
Beaver Bay	+0:37	+0:42	*0.87	*0.87
Seal Cape, Coal Bay	+0:34	+0:45	*0.84	*0.84
Ukolnoi Island	+0:41	+0:40	*0.83	*0.83
Dorgoi H., Dolgoi Is.	+0:44	+0:40	*0.79	*0.79
Settlement Pt., Pav B.	+0:43	+0:48	*0.84	*0.84
Canoe Bay, Pavlof B.	+1:36	+1:30	*0.76	*0.76
King Cove	+0:40	+0:42	*0.80	*0.80
Lenard Harbor, Cold B.	+0:46	+0:57	*0.85	*0.85
Cold Bay	+0:49	+1:03	*0.84	*0.84
Morzhovoi Bay	+0:50	+0:43	*0.80	*0.80

*Multiply by this ratio

KODIAK DISTRICT CORRECTION TABLE (2)

	TIME HIGH	TIME LOW	FEET HIGH	FEET LOW
ALASKA PENINSULA, Continued				
SANAK ISLANDS				
Peterson Bay	+0:29	+0:32	*0.73	*0.73
Sanak Harbor	+0:48	+0:43	*0.78	*0.78
ALEUTIAN ISLANDS				
UNIMAK ISLAND				
Dora Harbor	+0:49	+0:55	*0.77	*0.77
Hoston Bay	+0:43	+0:45	*0.78	*0.78
BERING SEA				
ST. LAWRENCE ISLAND				
Mogtowaya River Ent.	+8:16	+9:21	*0.20	*0.20
Provodnik Point	+5:55	+6:05	*0.28	*0.28
Makak Lagoon Ent.	+1:31	+1:50	*0.22	*0.20
Tachelagai B., Nunivak	-5:00	-4:33	*0.51	*0.51
Kolechok Bay	+0:01	+0:28	*0.77	*0.77
Cape Romanzof	-0:24	+0:03	*0.80	*0.80
Black, Black River	+1:35	+1:53	*0.59	*0.59
ARCTIC OCEAN				
Kenakuak Pass, Y.R.	+3:47	+5:34	*0.20	*0.10
Kawanak Pass Ent., Y.R.	+4:26	+5:23	*0.22	*0.20
ARCTIC OCEAN				
Kwalok, Kotzebue Sd.	+6:20	+6:10	*0.32	*0.30
Point Barrow	-0:33	-0:23	*0.05	*0.05
Flaxman Island	-0:53	-0:25	*0.08	*0.08
Herschel Is., Mac'zie	+1:32	-1:39	....	....
Tuktoyaktuk, Mac'zie	-1:26	-0:51	....	....

*Multiply by this ratio.
‡Along the Arctic coast of Alaska east of Cape Lisburne the mean range is about ½ foot.

MEMORANDA

The following height ratios should be used primarily to calculate only the higher high and lower low waters. These listings were done for convenience purposes only and do not constitute any endorsement of the use of such figures by the NOS or Elliott Sales.

	TIME HIGH	TIME LOW	FEET HIGH	FEET LOW
False Pass	+2:48	+2:23	*0.48	*0.48
Akutan Harbor	+4:18	+4:41	*0.46	*0.46
Dutch Harbor	+4:35	+4:41	*0.44	*0.44
Cape Sagak	+1:32	+1:32	*0.58	*0.58
Finch Cove	0:00	+5:11	*0.38	*0.38
Atka Pass E. End	-0:07	+2:54	*0.54	*0.54
Sweeper Cove	+1:00	+5:04	*0.44	*0.44

*Multiply Kodiak hides by this ratio

HIGH Tides KODIAK District

JULY 1990

DATE Jul	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1	Sat			0:21	9.7	2:06	6.3
2	SUN			1:16	9.9	2:54	6.7
3				2:06	10.0	3:38	7.0
4				2:51	9.9	4:20	7.2
5				3:36	9.6	4:57	7.3
6				4:18	9.0	5:34	7.4
7	Fri			4:57	8.3	6:11	7.4
8	Sat			5:42	7.5	6:48	7.4
9	SUN			6:25	6.7	7:23	7.4
10				7:17	5.8	8:02	7.4
11				8:23	5.1	8:46	7.5
12				9:47	4.7	9:37	7.8
13	Thur			11:20	4.6	10:31	7.8
14	Fri			12:36‡	4.9	11:30	8.1
15	Sat			....	....	1:28	5.4
16	SUN			0:20	8.6	2:10	5.8
17				1:05	9.0	2:46	6.3
18				1:50	9.5	3:21	6.8
19				2:35	9.7	3:56	7.2
20	Thur			3:18	9.7	4:28	7.7
21	Fri			3:59	9.5	5:04	8.1
22	Sat			4:47	8.9	5:42	8.4
23	SUN			5:34	8.1	6:21	8.6
24				6:29	7.1	7:04	8.7
25				7:36	6.1	7:54	8.6
26				9:00	5.3	8:54	8.7
27	Thur			10:40	5.0	10:03	8.7
28	Fri			12:09‡	5.3	11:14	8.9
29	Sat			....	....	1:13	5.8
30	SUN			0:16	9.2	2:02	6.3
31	Mon			1:11	9.4	2:42	6.8

• BIGGER THE DOT – BETTER THE FISHING

68

LOW Tides KODIAK District

JULY 1990

DATE Jul	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1	Sat			7:33	-1.6	8:06	2.8
2	SUN			8:22	-2.0	7:53	2.6
3				9:07	-2.1	8:42	2.4
4				9:49	-2.0	9:30	2.3
5				10:26	-1.7	10:15	2.3
6				11:03	-1.2	11:00	2.3
7	Fri			11:37	-0.6	11:48	2.3
8	Sat			....	....	12:00	0.1
9	SUN			0:38	2.3	12:43	0.9
10				1:31	2.3	1:15	1.6
11				2:36	2.2	1:54	2.3
12				3:49	1.9	2:38	2.8
13	Thur			4:58	1.4	3:42	3.4
14	Fri			5:59	0.8	4:51	3.8
15	Sat			6:51	0.1	5:54	3.8
16	SUN			7:35	-0.6	6:50	3.2
17				8:14	-1.2	7:41	2.9
18				8:51	-1.6	8:27	2.4
19				9:28	-1.9	9:11	2.0
20	Thur			10:02	-1.9	9:56	1.6
21	Fri			10:39	-1.6	10:44	1.3
22	Sat			11:15	-1.1	11:37	1.0
23	SUN			11:53	-0.3	....	....
24				0:33	0.9	12:31	0.6
25				1:39	0.8	1:13	1.5
26				2:51	0.6	2:06	2.4
27	Thur			4:14	0.3	3:15	3.0
28	Fri			5:30	-0.1	4:37	3.3
29	Sat			6:36	-0.7	5:54	3.2
30	SUN			7:29	-1.2	6:58	2.9
31	Mon			8:13	-1.5	7:50	2.4

ALASKA DAYLIGHT TIME

69

HIGH Tides KODIAK District

MAY 1990

DATE May	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1				11:09	7.1	11:48	8.2
2				....	....	12:16	7.4
3				0:31	9.1	1:16	7.7
4				1:13	9.9	2:12	7.8
5				1:52	10.4	3:02	7.8
6				2:35	10.6	3:51	7.8
7	SUN			3:20	10.5	4:42	7.3
8				4:03	10.1	5:24	6.9
9				4:49	9.4	6:09	6.5
10				5:41	8.6	7:09	6.3
11				6:37	7.7	8:12	6.2
12				7:43	6.9	9:34	6.4
13				9:02	6.3	10:29	6.7
14	SUN			10:21	6.0	11:12	7.2
15				11:28	6.0	11:46	7.6
16				....	....	12:27	8.1
17				0:20	8.1	1:13	8.3
18				0:52	8.5	1:56	8.4
19				1:24	8.8	2:38	8.5
20				1:56	9.0	3:17	8.6
21	SUN			2:28	9.1	3:55	8.6
22				3:03	9.2	4:34	8.5
23				3:38	9.1	5:16	8.4
24				4:17	8.9	6:01	8.3
25				4:59	8.6	6:46	8.3
26				5:48	8.1	7:38	8.5
27				6:50	7.5	8:31	8.9
28	SUN			8:03	6.8	9:23	7.5
29				9:27	6.4	10:14	8.2
30				10:51	6.3	11:06	8.9
31				12:05‡	6.4	11:52	9.5

• BIGGER THE DOT – BETTER THE FISHING

66

LOW Tides KODIAK District

MAY 1990

DATE May	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1				5:07	1.8	5:30	0.7
2				6:06	0.5	6:11	0.5
3				7:00	-0.7	6:55	0.9
4				7:50	-1.8	7:40	1.1
5				8:38	-2.4	8:24	1.4
6				9:25	-2.7	9:08	1.7
7	SUN			10:14	-2.5	9:52	2.1
8				11:02	-2.0	10:41	2.5
9				11:50	-1.3	11:28	3.0
10				....	....	12:03	4.6
11				0:33	3.3	1:58	3.2
12				1:47	3.5	2:38	3.8
13				3:12	3.4	3:30	1.3
14	SUN			4:32	2.8	4:30	1.6
15				5:31	2.1	5:12	1.9
16				6:20	1.3	5:54	2.1
17				7:00	0.5	6:36	2.2
18				7:37	-0.1	7:09	2.4
19				8:12	-0.6	7:45	2.5
20				8:47	-1.0	8:20	2.6
21	SUN			9:23	-1.2	8:54	2.7
22				10:01	-1.3	9:33	2.9
23				10:39	-1.2	10:12	3.0
24				11:21	-1.0	10:57	3.2
25				12:04‡	-0.8	11:50	3.2
26				....	....	12:53	-0.4
27				0:57	3.2	1:43	0.1
28	SUN			2:13	2.8	2:36	0.6
29				3:36	2.1	3:32	1.1
30				4:45	1.0	4:30	1.5
31				5:51	-0.1	5:28	1.8

ALASKA DAYLIGHT TIME

67

HIGH Tides KODIAK District

AUGUST 1990

DATE Aug	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1				2:00	9.5	2:18	7.2
2				2:42	9.5	2:58	7.5
3				3:24	9.2	4:01	7.7
4				4:00	8.8	4:50	7.9
5				4:36	8.1	5:19	7.9
6	SUN			5:13	7.4	5:48	7.9
7				5:52	6.6	6:18	7.8
8				6:35	5.8	6:53	7.6
9				7:31	5.0	7:34	7.4
10	Thur			8:57	4.5	8:29	7.3
11	Fri			10:51	4.4	9:46	7.4
12	Sat			12:15‡	4.8	10:56	7.8
13	SUN			1:08‡	5.4	11:57	8.3
14				....	....	1:41	8.0
15				0:49	8.9	2:17	8.7
16				1:35	9.5	2:45	7.4
17				2:20	9.7	3:17	8.1
18				3:05	9.7	3:51	8.7
19				3:51	9.4	4:28	9.1
20	SUN			4:36	8.7	5:02	9.4
21				5:26	7.8	5:41	9.4
22				6:22	6.8	6:27	9.2
23				7:29	5.8	7:29	8.8
24	Thur			8:57	5.1	8:27	8.3
25	Fri			10:45	5.0	9:50	8.1
26	Sat			12:07‡	5.5	11:11	8.2
27	SUN			....	....	1:03	6.1
28				0:15	8.5	1:41	8.7
29				1:06	8.8	2:13	7.2
30				1:51	8.9	2:45	7.7
31	Thur			2:30	8.9	3:13	8.0

• BIGGER THE DOT – BETTER THE FISHING

70

LOW Tides KODIAK District

AUGUST 1990

DATE Aug	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1				8:51	-1.6	8:36	2.9
2				9:27	-1.5	9:17	1.7
3				9:57	-1.2	9:58	1.5
4				10:27	-0.8	10:36	1.4
5				10:56	-0.2	11:15	1.4
6	SUN			11:23	0.5	11:56	1.5
7				11:48	1.2	....	....
8				0:41	1.6	12:19	2.0
9				1:37	1.7	12:48	2.5
10	Thur			2:48	1.8	1:33	3.2
11	Fri			4:09	1.6	2:38	3.7
12	Sat			5:28	1.0	4:13	3.8
13	SUN			6:23	0.3	5:31	3.6
14				7:08	-0.4	6:34	3.0
15				7:45	-1.0	7:25	2.3
16				8:22	-1.5	8:12	1.5
17	Thur			8:58	-1.7	8:57	0.8
18	Fri			9:31	-1.6	9:41	0.1
19	Sat			10:07	-1.2	10:30	-0.3
20	SUN			10:42	-0.5	11:19	-0.4
21				11:20	0.4	....	....
22				0:14	-0.3	11:57‡	1.3
23				1:17	0.0	12:41	2.2
24	Thur			2:34	0.3	1:39	3.1
25	Fri			3:59	0.4	3:08	3.6
26	Sat			5:22	0.1	4:43	3.6
27	SUN			6:26	-0.3	6:02	3.1
28				7:13	-0.6	7:00	2.5
29				7:52	-0.8	7:45	1.8
30				8:24	-0.8	8:25	1.3
31	Thur			8:53	-0.7	9:02	0.9

ALASKA DAYLIGHT TIME

71

HIGH Tides KODIAK District

JUNE 1990

DATE Jun	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1	Thur			....	....	1:00	6.6
2	Fri			0:42	10.0	2:06	6.9
3	Sat			1:28	10.3	2:56	7.0
4	SUN			2:17	10.4	3:49	7.1
5				3:03	10.3	4:34	7.1
6				3:48	9.8	5:23	7.0
7				4:34	9.2	6:08	6.9
8				5:19	8.5	6:57	6.8
9				6:09	7.6	7:42	6.8
10	Sat			7:02	6.7	8:31	6.9
11	SUN			8:09	6.0	9:17	7.1
12				9:22	5.4	10:01	7.4
13				10:42	5.2	10:43	7.7
14				11:51	5.2	11:25	8.0
15				....	....	12:52	8.4
16	Thur			0:07	8.4	1:43	8.7
17	Fri			0:48	8.7	2:25	8.9
18	SUN			1:27	9.1	3:05	8.3
19				2:06	9.3	3:43	8.5
20				2:47	9.5	4:22	8.7
21				3:26	9.5	5:00	8.9
22				4:08	9.3	5:39	7.1
23				4:54	8.8	6:21	7.3
24	Sat			5:42	8.2	7:02	7.6
25	SUN			6:41	7.3	7:48	8.0
26				7:47	6.5	8:36	8.3
27				9:10	5.8	9:29	8.7
28				10:40	5.5	10:29	9.1
29				12:02‡	5.6	11:25	9.4
30	Fri			....	....	1:13	5.9

• BIGGER THE DOT – BETTER THE FISHING

64

LOW Tides KODIAK District

JUNE 1990

DATE Jun	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1	Thur			6:48	-1.1	6:21	2.1
2	Fri			7:40	-1.9	7:13	2.2
3	Sat			8:30	-2.4	8:03	2.3
4	SUN			9:16	-2.5	8:51	2.4
5				10:01	-2.4	9:41	2.5
6				10:47	-2.0	10:30	2.6
7				11:32	-1.4	11:19	2.8
8				....	....	12:14	-0.7
9	Sat			0:14	3.0	12:54	0.0
10	SUN			1:18	3.0	1:36	0.8
11				2:27	2.9	2:23	1.5
12				3:36	2.5	3:08	2.1
13				4:45	1.9	3:58	2.5
14				5:43	1.3	4:46	2.8
15				6:29	0.6	5:41	3.0
16	Thur			7:14	-0.1	6:29	3.1
17	Fri			7:53	-0.7	7:14	3.1
18	SUN			8:31	-1.1	7:57	3.0
19				9:11	-1.5	8:39	2.9
20				9:49	-1.7	9:21	2.8
21				10:25	-1.7	10:06	2.7
22	Thur			11:04	-1.6	10:56	2.5
23	Fri			11:43	-1.2	11:48	2.4
24	Sat			....	....	12:22	-0.6
25	SUN			0:51	2.1	1:07	0.1
26				1:58	1.8	1:53	0.9
27				3:14	1.2	2:45	1.7
28				4:29	0.5	3:47	2.3
29	Thur			5:38	-0.3	4:53	2.7
30	Fri			6:41	-1.0	5:58	2.9

ALASKA DAYLIGHT TIME

65

HIGH Tides KODIAK District

SEPTEMBER 1990

DATE Sep	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1	Fri			3:06	8.7	3:38	8.3
2	Sat			3:41	8.3	4:03	8.4
3	SUN			4:15	7.8	4:29	8.4
4				4:49	7.2	4:54	8.3
5				5:26	6.5	5:22	8.0
6				6:08	5.7	5:54	7.8
7				6:59	5.0	6:33	7.5
8	Sat			8:24	4.5	7:33	7.2
9	Sat			10:24	4.5	8:59	7.1
10	SUN			11:47	5.0	10:24	7.4
11				12:28‡	5.7	11:33	8.0
12				....	....	12:59	8.5
13				0:30	8.6	1:31	7.4
14				1:19	9.1	2:05	8.1
15	Fri			2:06	9.4	2:37	9.1
16	Sat			2:53	9.3	3:10	9.7
17	SUN			3:40	9.0	3:48	10.1
18				4:28	8.3	4:28	10.1
19				5:19	7.5	5:08	9.8
20				6:17	6.5	5:56	8.2
21	Fri			7:26	5.7	6:51	8.5
22	Sat			9:00	5.3	8:08	7.8
23	Sat			10:36	5.5	9:40	7.5
24	SUN			11:45	6.0	11:01	7.5
25				....	....	12:31	6.6
26				0:05	7.8	1:06	7.2
27				0:54	8.0	1:37	7.7
28				1:37	8.1	2:06	8.2
29	Fri			2:15	8.1	2:28	8.5
30	Sat			2:50	7.9	2:55	8.7

• BIGGER THE DOT – BETTER THE FISHING

72

LOW Tides KODIAK District

SEPTEMBER 1990

DATE Sep	DAY	SUNRISE	SUNSET	AM TIME	AM FT	PM TIME	PM FT
1	Fri			9:21	-0.4	9:36	0.6
2	Sat			9:49	0.0	10:10	0.4
3	SUN			10:15	0.6	10:44	0.4
4				10:38	1.2	11:19	0.5
5				11:05	1.8	....	....
6				0:01	0.9	11:31‡	2.4
7				0:51	1.2	12:00	3.0
8				1:57	1.5	12:45	3.5
9				3:19	1.5	2:03	4.0
10	SUN			4:46	1.1	3:38	3.9
11				5:44	0.5	4:38	3.5
12				6:31	-0.1	5:28	2.4
13				7:10	-0.6	7:08	1.2
14				7:48	-0.9	7:58	0.2
15				8:23	-1.0	8:42	-0.7
16	Sat			8:59	-0.7	9:26	-1.4
17	SUN			9:34	-0.2	10:14	-1.7
18				10:11	0.4	11:03	-1.6
19				10:51	1.2	11:58	-1.1
20				11:33	2.1	....	....
21				0:57	-0.5	12:22	2.9
22				2:13	0.2	1:34	3.5
23				3:38	0.5	3:15	3.8
24	SUN			4:59	0.4	4:56	3.4
25				5:59	0.3	6:02	2.7
26				6:42	0.1	6:52	1.9
27				7:17	0.1	7:32	1.2
28				7:48	0.2	8:08	0.5
29	Fri			8:18	0.4	8:40	0.1
30	Sat			8:43	0.7	9:12	-0.3

ALASKA DAYLIGHT TIME

73

INTRODUCTION

This book contains schedules of predicted tide changes with better fishing days indicated with DOTS of increasing size. Also contained are many pages of interesting and valuable information for ship captains, fishermen, sportsmen and visitors to the Pacific Coast. **BE SURE** to refer to CORRECTION TABLE to adjust time and height to your location.

Tide schedules are furnished by the National Ocean Survey, National Oceanic & Atmospheric Administration from calculations established by the known and predictable forces at established reference stations and are corrected periodically from studies of actual observations. The publisher of Dot's Fishing Guide is constantly in touch with this and other government agencies in its efforts to maintain up to date, accurate information.

"HIGH" Tide predictions are on the LEFT hand pages.

"LOW" Tide predictions are on the RIGHT hand pages.

"A.M." Times are mornings from 0:00 (Midnight) to NOON and are printed in light face type.

"P.M." Times are afternoons and evenings from NOON to 0:00 (Midnight) and are printed in BOLD TYPE.

"FT" represents the height of the tide water in feet and tenths of a foot above, or — below, a fixed reference point of 0.0 Zero.

TABLE OF CONTENTS

NOTICE

The tide tables and the corrections in this book have been figured based on the premise of average weather. Be aware that conditions not considered average for the area will effect the published predictions.

During times of storm or extreme conditions, the mariner is well advised to keep informed of local weather forecasts as they relate to the effects on these tide tables.

NUSHAGAK BAY DISTRICT
CORRECTION TABLE

To correct the TIME and HEIGHT for HIGH or LOW tides for the points given below, add or subtract TIME and FEET from the NUSHAGAK District Tide Table.

	TIME High	TIME Low	FEET High	FEET Low
BRISTOL BAY				
Port Moller (Entrance Point)	—4:23	—4:59	*.56	*.36
Port Heiden	—3:03	—3:35	*0.62	*1.34
EGEGIK RIVER				
Entrance	—1:30	—1:13	*.92	*.92
Egegik	—1:04	+0:36	*.65	*.32
Middle Bluff				
Kvichak Bay	—0:50	—0:50	0.6	0.6
NAKNEK RIVER				
Entrance#	—0:19	+0:26	+2.0	—0.3
Morakas Point	—0:11	+1:37	*.90	*.36
Omakstalia Point	—0:12	+1:35	*.37	*.12
Naknek Air Base	+0:57	+1:46	*.13	*.08
KVICHAK RIVER				
Nakeen	+0:04	+2:01	*.90	*.28
Kvichak	+0:35	+2:49	*.83	*.34
Levelock	+1:27	+1:34	*.69	*.20
NUSHAGAK BAY				
Protection Point	—0:12	—0:22	—1.6	0.6
Snag Point	+0:48	+1:07	+0.2	—0.4
Black Rock				
Walrus Islands	+0:07	—0:07	—10.1	*.70
ST. LAWRENCE ISLAND				
Northeast Cape	—1:57	—2:22	*.12	*.08
Fossil River Ent.	—2:06	—2:34	*.08	*.08
Nyrakpak Lagoon Entrance	—2:33	—2:57	*.06	*.06

#No Low water falls below —2 feet.
* Multiply height of District Tide by proper ratio to correct height of High or Low Tides.

HIGH Tides NUSHAGAK District — MAY 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Mon	●	11:54	19.8	.....	.....
2 Tue	•	0:28	17.0	12:46	19.3
3 Wed	•	1:34	18.5	1:28	18.7
4 Thu	•	2:39	20.1	2:18	18.6
5 Fri	•	3:42	21.5	3:13	17.3
6 Sat	•	4:41	22.6	4:09	16.7
7 SUN	●	5:40	23.3	5:08	16.2
8 Mon	●	6:38	23.6	6:07	15.8
9 Tue	●	7:34	23.4	7:07	15.4
10 Wed	●	8:27	22.9	8:08	15.1
11 Thu	●	9:18	22.2	9:10	14.9
12 Fri	●	10:06	21.3	10:13	14.9
13 Sat	●	10:55	20.2	11:15	15.0
14 SUN	●	11:37	19.0	.....	.....
15 Mon	●	0:15	15.3	12:20	17.8
16 Tue	●	1:15	15.9	12:57	16.7
17 Wed	●	2:11	16.6	1:35	15.5
18 Thu	●	3:02	17.4	2:14	14.5
19 Fri	•	3:48	18.1	2:50	13.7
20 Sat	•	4:34	18.7	3:31	13.1
21 SUN	•	5:16	19.3	4:07	12.6
22 Mon	•	5:55	19.8	4:48	12.3
23 Tue	•	6:36	20.2	5:31	12.3
24 Wed	•	7:15	20.5	6:16	12.4
25 Thu	•	7:54	20.7	7:10	12.7
26 Fri	•	8:33	20.8	8:07	13.3
27 Sat	•	9:12	20.8	9:10	14.1
28 SUN	•	9:53	20.6	10:17	15.2
29 Mon	•	10:36	20.2	11:22	16.6
30 Tue	•	11:20	19.6	.....	.....
31 Wed	•	0:28	18.2	12:07	18.9

LOW Tides NUSHAGAK District — MAY 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Mon	•	5:39	2.1	6:33	2.1
2 Tue	•	6:39	3.0	7:18	0.8
3 Wed	•	7:43	3.8	8:07	-1.3
4 Thu	•	8:46	4.5	8:58	-2.6
5 Fri	•	9:49	5.0	9:52	-3.6
6 Sat	•	10:53	5.2	10:46	-4.0
7 SUN	•	11:55	5.2	11:40	-3.9
8 Mon	•	.....	...	12:52	5.0
9 Tue	•	0:36	-3.4	1:00	4.6
10 Wed	•	1:31	-2.5	2:05	4.4
11 Thu	•	2:27	-1.3	3:11	4.1
12 Fri	•	3:22	0.0	4:20	3.6
13 Sat	•	4:15	1.5	5:19	3.2
14 SUN	•	5:10	3.0	6:06	2.7
15 Mon	•	6:06	4.5	6:51	2.2
16 Tue	•	7:01	5.7	7:32	1.8
17 Wed	•	7:57	6.7	8:13	1.4
18 Thu	•	8:54	7.3	8:51	1.1
19 Fri	•	9:48	7.8	9:31	0.9
20 Sat	•	10:40	8.0	10:09	0.8
21 SUN	•	11:30	8.0	10:48	0.6
22 Mon	•	12:17	8.0	11:28	0.5
23 Tue	•	.....	...	1:05	7.8
24 Wed	•	0:11	0.4	1:47	7.4
25 Thu	•	0:53	0.5	2:27	6.8
26 Fri	•	1:39	0.7	3:09	5.8
27 Sat	•	2:30	1.1	3:51	4.5
28 SUN	•	3:22	1.9	4:36	2.9
29 Mon	•	4:21	2.9	5:18	1.1
30 Tue	•	5:23	3.9	6:05	-0.6
31 Wed	•	6:26	5.0	6:54	-2.2

HIGH Tides NUSHAGAK District — JUNE 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Thu	•	1:32	19.8	12:57	18.1
2 Fri	•	2:34	21.2	1:50	17.3
3 Sat	•	3:33	22.3	2:47	16.6
4 SUN	•	4:32	23.0	3:43	15.9
5 Mon	•	5:28	23.3	4:43	15.4
6 Tue	•	6:22	23.2	5:45	14.9
7 Wed	•	7:13	22.8	6:48	14.6
8 Thu	•	8:03	22.2	7:48	14.3
9 Fri	•	8:48	21.4	8:50	14.3
10 Sat	•	9:31	20.4	9:53	14.4
11 SUN	•	10:12	19.3	10:55	14.9
12 Mon	•	10:50	18.2	11:53	15.5
13 Tue	•	11:29	17.1	.....	.....
14 Wed	•	0:46	16.3	12:04	16.6
15 Thu	•	1:41	17.2	12:38	15.1
16 Fri	•	2:31	18.0	1:18	14.3
17 Sat	•	3:16	18.7	2:00	13.7
18 SUN	•	4:02	19.3	2:38	13.2
19 Mon	•	4:44	19.8	3:21	13.0
20 Tue	•	5:26	20.3	4:07	12.9
21 Wed	•	6:06	20.7	5:00	12.8
22 Thu	•	6:44	20.9	5:57	13.1
23 Fri	•	7:24	21.1	7:00	13.6
24 Sat	•	8:02	21.0	8:00	14.3
25 SUN	•	8:42	20.8	9:07	15.4
26 Mon	•	9:24	20.3	10:13	16.8
27 Tue	•	10:08	19.8	11:20	18.2
28 Wed	•	10:53	19.1	.....	.....
29 Thu	•	0:24	19.6	11:42	18.3
30 Fri	•	1:26	20.8	12:37	17.5

* BIGGER THE DOT — BETTER THE FISHING

LOW Tides NUSHAGAK District — JUNE 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Thu	•	7:32	5.7	7:44	-3.4
2 Fri	•	8:36	6.2	8:37	-4.2
3 Sat	•	9:39	6.4	9:30	-4.6
4 SUN	•	10:40	6.3	10:26	-4.2
5 Mon	•	11:40	6.0	11:19	-3.6
6 Tue	•	.....	...	12:36	5.6
7 Wed	•	0:13	-2.6	1:31	5.1
8 Thu	•	1:06	-1.3	2:28	4.5
9 Fri	•	1:58	0.1	3:15	3.9
10 Sat	•	2:53	1.7	4:01	3.2
11 SUN	•	3:46	3.3	4:46	2.6
12 Mon	•	4:41	4.8	5:37	1.9
13 Tue	•	5:34	6.1	6:38	1.3
14 Wed	•	6:30	7.1	7:48	0.7
15 Thu	•	7:27	7.9	7:28	0.4
16 Fri	•	8:23	8.3	8:10	0.1
17 Sat	•	9:16	8.6	9:40	-0.1
18 SUN	•	10:07	8.7	9:32	-0.3
19 Mon	•	10:56	8.6	10:14	-0.4
20 Tue	•	11:44	8.3	10:56	-0.4
21 Wed	•	12:30	7.7	11:42	-0.3
22 Thu	•	.....	...	1:12	6.9
23 Fri	•	0:28	0.1	1:54	5.7
24 Sat	•	1:19	0.8	2:38	4.2
25 SUN	•	2:14	1.8	3:22	2.4
26 Mon	•	3:10	3.0	4:07	0.6
27 Tue	•	4:12	4.2	4:55	-1.2
28 Wed	•	5:15	5.3	5:44	-2.6
29 Thu	•	6:17	6.2	6:34	-3.7
30 Fri	•	7:20	6.7	7:27	-4.3

DAYLIGHT TIME

HIGH Tides NUSHAGAK District — JULY 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Sat	●	2:25	21.7	1:30	18.8
2 SUN	●	3:24	22.2	2:29	18.1
3 Mon	●	4:17	22.4	3:23	17.6
4 Tue	●	5:11	22.3	4:18	17.0
5 Wed	●	6:03	22.0	5:09	16.5
6 Thu	●	6:49	21.5	5:59	16.2
7 Fri	●	7:34	20.8	7:39	16.1
8 Sat	●	8:15	19.9	8:29	16.3
9 SUN	●	8:52	19.0	9:29	16.7
10 Mon	●	9:29	18.0	10:25	15.3
11 Tue	●	10:04	17.0	11:18	16.0
12 Wed	●	10:39	16.2	.....	.....
13 Thu	•	0:11	16.8	11:15	15.5
14 Fri	•	0:59	17.5	11:53	14.9
15 Sat	•	1:48	18.2	12:32	14.5
16 SUN	•	2:34	18.8	1:14	14.1
17 Mon	•	3:19	19.3	1:57	13.9
18 Tue	•	4:04	19.8	2:48	13.8
19 Wed	•	4:45	20.2	3:44	13.9
20 Thu	•	5:27	20.5	4:44	14.2
21 Fri	•	6:08	20.7	5:48	14.7
22 Sat	•	6:47	20.6	6:53	15.5
23 SUN	•	7:29	20.4	7:59	16.5
24 Mon	•	8:11	20.0	9:02	17.7
25 Tue	•	8:57	19.5	10:07	18.9
26 Wed	•	9:45	18.9	11:10	20.0
27 Thu	•	10:34	18.3	.....	.....
28 Fri	•	0:12	20.8	11:27	17.7
29 Sat	•	1:11	21.2	12:25	17.1
30 SUN	•	2:10	21.5	1:21	16.5
31 Mon	•	3:07	21.4	2:20	15.9

* BIGGER THE DOT — BETTER THE FISHING

LOW Tides NUSHAGAK District — JULY 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Sat	•	8:23	7.0	8:19	-4.4
2 SUN	•	9:25	7.0	9:13	-4.0
3 Mon	•	10:25	6.7	10:07	-3.3
4 Tue	•	11:21	6.3	11:00	-2.5
5 Wed	•	12:17	5.8	11:51	-1.7
6 Thu	•	.....	...	1:00	5.2
7 Fri	•	0:43	0.3	1:57	4.6
8 Sat	•	1:33	1.9	2:43	3.8
9 SUN	•	2:24	3.4	3:25	3.0
10 Mon	•	3:17	4.7	4:06	2.3
11 Tue	•	4:10	6.0	4:46	1.6
12 Wed	•	5:04	7.0	5:25	0.9
13 Thu	•	5:57	7.7	6:05	0.5
14 Fri	•	6:49	8.3	6:46	0.1
15 Sat	•	7:43	8.6	7:29	-0.3
16 SUN	•	8:36	8.8	8:14	-0.6
17 Mon	•	9:24	8.7	8:56	-0.8
18 Tue	•	10:13	8.4	9:41	-0.9
19 Wed	•	11:02	7.8	10:30	-0.7
20 Thu	•	11:48	6.8	11:19	-0.2
21 Fri	•	.....	...	12:33	5.5
22 Sat	•	0:11	0.5	1:18	3.8
23 SUN	•	1:04	1.6	2:04	2.0
24 Mon	•	2:03	2.7	2:51	0.2
25 Tue	•	3:05	3.9	3:41	-1.4
26 Wed	•	4:04	4.9	4:30	-2.7
27 Thu	•	5:06	5.8	5:23	-3.5
28 Fri	•	6:09	6.3	6:16	-3.9
29 Sat	•	7:09	6.7	7:11	-3.8
30 SUN	•	8:09	6.7	8:04	-3.4
31 Mon	•	9:08	6.6	8:59	-2.6

DAYLIGHT TIME

HIGH Tides NUSHAGAK District — AUGUST 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Tue	●	4:00	21.2	3:19	18.3
2 Wed	●	4:51	20.8	4:19	14.9
3 Thu	●	5:36	20.3	5:18	14.6
4 Fri	●	6:21	19.6	6:18	14.8
5 Sat	●	7:00	18.7	7:12	14.7
6 SUN	●	7:36	17.9	8:08	15.1
7 Mon	●	8:11	17.0	8:58	15.6
8 Tue	●	8:46	16.3	9:50	16.2
9 Wed	●	9:18	15.7	10:38	16.8
10 Thu	●	9:54	15.2	11:25	17.4
11 Fri	•	10:32	14.9	.....	.....
12 Sat	•	0:13	17.9	11:14	18.1
13 SUN	•	1:02	18.4	11:56	18.5
14 Mon	•	1:47	18.8	12:42	14.6
15 Tue	•	2:33	19.2	1:33	14.7
16 Wed	•	3:18	19.5	2:30	15.0
17 Thu	•	4:01	19.7	3:30	15.4
18 Fri	•	4:43	19.8	4:34	16.1
19 Sat	•	5:26	19.7	5:40	17.1
20 SUN	•	6:11	19.5	6:46	18.2
21 Mon	•	6:57	19.2	7:50	19.3
22 Tue	•	7:45	18.8	8:53	20.3
23 Wed	•	8:34	18.4	9:55	21.0
24 Thu	•	9:27	18.0	10:54	21.3
25 Fri	•	10:22	17.6	11:53	21.4
26 Sat	•	11:19	17.1	.....	.....
27 SUN	•	0:52	21.2	12:20	16.7
28 Mon	•	1:48	20.8	1:19	16.2
29 Tue	•	2:43	20.4	2:20	15.8
30 Wed	•	3:33	19.7	3:16	15.5
31 Thu	•	4:19	19.0	4:16	15.3

* BIGGER THE DOT — BETTER THE FISHING

LOW Tides NUSHAGAK District — AUGUST 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Tue	•	10:03	6.4	9:52	-1.5
2 Wed	•	10:58	5.9	10:44	-0.3
3 Thu	•	11:50	5.4	11:36	1.5
4 Fri	•	.....	...	12:36	4.8
5 Sat	•	0:25	2.4	1:21	4.2
6 SUN	•	1:13	3.6	2:03	3.6
7 Mon	•	2:04	4.8	2:43	2.9
8 Tue	•	2:54	5.8	3:21	2.3
9 Wed	•	3:43	6.6	4:00	1.6
10 Thu	•	4:36	7.3	4:40	1.2
11 Fri	•	5:26	7.8	5:22	0.7
12 Sat	•	6:15	8.1	6:05	0.2
13 SUN	•	7:04	8.3	6:51	-0.2
14 Mon	•	7:53	8.3	7:38	-0.4
15 Tue	•	8:42	7.9	8:24	-0.5
16 Wed	•	9:31	7.2	9:13	-0.4
17 Thu	•	10:16	6.2	10:06	0.1
18 Fri	•	11:05	4.7	11:01	0.8
19 Sat	•	11:52	3.0	11:58	1.7
20 SUN	•	.....	...	12:39	1.3
21 Mon	•	0:58	2.6	1:28	-0.4
22 Tue	•	1:57	3.6	2:20	-1.8
23 Wed	•	2:57	4.4	3:13	-2.8
24 Thu	•	3:56	5.0	4:07	-3.3
25 Fri	•	4:56	5.4	5:03	-3.4
26 Sat	•	5:55	5.7	5:57	-3.1
27 SUN	•	6:54	5.8	6:54	-2.4
28 Mon	•	7:50	5.7	7:48	-1.5
29 Tue	•	8:48	5.6	8:44	-0.4
30 Wed	•	9:41	5.3	9:39	0.9
31 Thu	•	10:30	4.9	10:29	2.1

DAYLIGHT TIME

HIGH Tides NUSHAGAK District — SEPTEMBER 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Fri	●	5:04	18.2	4:11	15.4
2 Sat	●	5:43	17.3	5:05	15.6
3 SUN	●	6:21	16.4	6:05	16.0
4 Mon	●	6:53	15.6	7:44	16.5
5 Tue	•	7:29	15.0	8:29	17.0
6 Wed	•	8:01	14.5	9:15	17.4
7 Thu	•	8:37	14.3	9:57	17.8
8 Fri	•	9:14	14.2	10:42	18.1
9 Sat	•	9:53	14.2	11:28	18.4
10 SUN	•	10:39	14.4	.....	.....
11 Mon	•	0:13	18.7	11:27	14.6
12 Tue	•	1:00	18.9	12:20	15.0
13 Wed	•	1:43	19.1	1:19	15.6
14 Thu	•	2:27	19.1	2:19	16.4
15 Fri	•	3:13	19.0	3:20	17.4
16 Sat	•	3:58	18.8	4:30	18.6
17 SUN	•	4:43	18.5	5:33	19.9
18 Mon	•	5:33	18.2	6:36	21.0
19 Tue	•	6:24	17.8	7:38	21.9
20 Wed	•	7:17	17.5	8:37	22.3
21 Thu	•	8:15	17.3	9:36	22.4
22 Fri	•	9:14	17.0	10:34	22.1
23 Sat	•	10:13	16.8	11:30	21.6
24 SUN	•	11:13	16.5	.....	.....
25 Mon	•	0:26	20.9	12:13	16.3
26 Tue	•	1:19	20.1	1:17	16.1
27 Wed	•	2:09	19.2	2:17	16.0
28 Thu	•	2:55	18.2	3:16	16.1
29 Fri	•	3:40	17.1	4:13	16.3
30 Sat	•	4:18	16.1	5:05	16.7

* BIGGER THE DOT — BETTER THE FISHING

LOW Tides NUSHAGAK District — SEPTEMBER 1989

DAY	DOTS	AM TIME	AM FT	PM TIME	PM FT
1 Fri	•	11:15	4.5	11:20	3.3
2 Sat	•	11:57	4.0	.....	.....
3 SUN	•	0:11	4.4	12:38	3.6
4 Mon	•	0:58	5.2	1:15	3.2
5 Tue	•	1:47	6.0	1:58	2.8
6 Wed	•	2:36	6.5	2:34	2.3
7 Thu	•	3:22	6.9	3:13	1.9
8 Fri	•	4:08	7.2	3:55	1.4
9 Sat	•	4:54	7.5	4:40	1.0
10 SUN	•	5:40	7.5	5:28	0.7
11 Mon	•	6:29	7.4	6:13	0.4
12 Tue	•	7:14	6.9	7:03	0.4
13 Wed	•	7:59	6.1	7:54	0.5
14 Thu	•	8:48	4.9	8:51	1.1
15 Fri	•	9:36	3.4	9:48	1.7
16 Sat	•	10:22	1.7	10:48	2.5
17 SUN	•	11:14	0.1	11:50	3.1
18 Mon	•	.....	...	12:04	-1.4
19 Tue	•	0:49	3.7	12:57	-2.5
20 Wed	•	1:49	4.2	1:52	-3.1
21 Thu	•	2:49	4.5	2:46	-3.3
22 Fri	•	3:45	4.6	3:44	-3.1
23 Sat	•	4:44	4.7	4:41	-2.4
24 SUN	•	5:40	4.6	5:38	-1.5
25 Mon	•	6:35	4.5	6:36	-0.3
26 Tue	•	7:28	4.2	7:31	1.0
27 Wed	•	8:20	4.0	8:28	2.3
28 Thu	•	9:09	3.7	9:22	3.5
29 Fri	•	9:54	3.4	10:16	4.5
30 Sat	•	10:37	3.1	11:08	5.4

DAYLIGHT TIME

CALENDAR WEEKS TO BE USED FOR CATCH STATISTICS

STAT WEEK	YEAR/DATE 1987	YEAR/DATE 1988	YEAR/DATE 1989	YEAR/DATE 1990	YEAR/DATE 1991	YEAR/DATE 1992	YEAR/DATE 1993	YEAR/DATE 1994	YEAR/DATE 1995
1	0101 - 0103	0101 - 0102	0101 - 0107	0101 - 0106	0101 - 0105	0101 - 0104	0101 - 0102	0101 - 0101	0101 - 0107
2	0104 - 0110	0103 - 0109	0108 - 0114	0107 - 0113	0106 - 0112	0105 - 0111	0103 - 0109	0102 - 0108	0108 - 0114
3	0111 - 0117	0110 - 0116	0115 - 0121	0114 - 0120	0113 - 0119	0112 - 0118	0110 - 0116	0109 - 0115	0115 - 0121
4	0118 - 0124	0117 - 0123	0122 - 0128	0121 - 0127	0120 - 0126	0119 - 0125	0117 - 0123	0116 - 0122	0122 - 0128
5	0125 - 0131	0124 - 0130	0129 - 0204	0128 - 0203	0127 - 0202	0126 - 0201	0124 - 0130	0123 - 0129	0129 - 0204
6	0201 - 0207	0131 - 0206	0205 - 0211	0204 - 0210	0203 - 0209	0202 - 0208	0131 - 0206	0130 - 0205	0205 - 0211
7	0208 - 0214	0207 - 0213	0212 - 0218	0211 - 0217	0210 - 0216	0209 - 0215	0207 - 0213	0206 - 0212	0212 - 0218
8	0215 - 0221	0214 - 0220	0219 - 0225	0218 - 0224	0217 - 0223	0216 - 0222	0214 - 0220	0213 - 0219	0219 - 0225
9	0222 - 0228	0221 - 0227	0226 - 0304	0225 - 0303	0224 - 0302	0223 - 0229	0221 - 0227	0220 - 0226	0226 - 0304
10	0301 - 0307	0228 - 0305	0305 - 0311	0304 - 0310	0303 - 0309	0301 - 0307	0228 - 0306	0227 - 0305	0305 - 0311
11	0308 - 0314	0306 - 0312	0312 - 0318	0311 - 0317	0310 - 0316	0308 - 0314	0307 - 0313	0306 - 0312	0312 - 0318
12	0315 - 0321	0313 - 0319	0319 - 0325	0318 - 0324	0317 - 0323	0315 - 0321	0314 - 0320	0313 - 0319	0319 - 0325
13	0322 - 0328	0320 - 0326	0326 - 0401	0325 - 0331	0324 - 0330	0322 - 0328	0321 - 0327	0320 - 0326	0326 - 0401
14	0329 - 0404	0327 - 0402	0402 - 0408	0401 - 0407	0331 - 0406	0329 - 0404	0328 - 0403	0327 - 0402	0402 - 0408
15	0405 - 0411	0403 - 0409	0409 - 0415	0408 - 0414	0407 - 0413	0405 - 0411	0404 - 0410	0403 - 0409	0409 - 0415
16	0412 - 0418	0410 - 0416	0416 - 0422	0415 - 0421	0414 - 0420	0412 - 0418	0411 - 0417	0410 - 0416	0416 - 0422
17	0419 - 0425	0417 - 0423	0423 - 0429	0422 - 0428	0421 - 0427	0419 - 0425	0418 - 0424	0417 - 0423	0423 - 0429
18	0426 - 0502	0424 - 0430	0430 - 0506	0429 - 0505	0428 - 0504	0426 - 0502	0425 - 0501	0424 - 0430	0430 - 0506
19	0503 - 0509	0501 - 0507	0507 - 0513	0506 - 0512	0505 - 0511	0503 - 0509	0502 - 0508	0501 - 0507	0507 - 0513
20	0510 - 0516	0508 - 0514	0514 - 0520	0513 - 0519	0512 - 0518	0510 - 0516	0509 - 0515	0508 - 0514	0514 - 0520
21	0517 - 0523	0515 - 0521	0521 - 0527	0520 - 0526	0519 - 0525	0517 - 0523	0516 - 0522	0515 - 0521	0521 - 0527
22	0524 - 0530	0522 - 0528	0528 - 0603	0527 - 0602	0526 - 0601	0524 - 0530	0523 - 0529	0522 - 0528	0528 - 0603
23	0531 - 0606	0529 - 0604	0604 - 0610	0603 - 0609	0602 - 0608	0531 - 0606	0530 - 0605	0529 - 0604	0604 - 0610
24	0607 - 0613	0605 - 0611	0611 - 0617	0610 - 0616	0609 - 0615	0607 - 0613	0606 - 0612	0605 - 0611	0611 - 0617
25	0614 - 0620	0612 - 0618	0618 - 0624	0617 - 0623	0616 - 0622	0614 - 0620	0613 - 0619	0612 - 0618	0618 - 0624
26	0621 - 0627	0619 - 0625	0625 - 0701	0624 - 0630	0623 - 0629	0621 - 0627	0620 - 0626	0619 - 0625	0625 - 0701
27	0628 - 0704	0626 - 0702	0702 - 0708	0701 - 0707	0630 - 0706	0628 - 0704	0627 - 0703	0626 - 0702	0702 - 0708
28	0705 - 0711	0703 - 0709	0709 - 0715	0708 - 0714	0707 - 0713	0705 - 0711	0704 - 0710	0703 - 0709	0709 - 0715
29	0712 - 0718	0710 - 0716	0716 - 0722	0715 - 0721	0714 - 0720	0712 - 0718	0711 - 0717	0710 - 0716	0716 - 0722
30	0719 - 0725	0717 - 0723	0723 - 0729	0722 - 0728	0721 - 0727	0719 - 0725	0718 - 0724	0717 - 0723	0723 - 0729
31	0726 - 0801	0724 - 0730	0730 - 0805	0729 - 0804	0728 - 0803	0726 - 0801	0725 - 0731	0724 - 0730	0730 - 0805
32	0802 - 0808	0731 - 0806	0806 - 0812	0805 - 0811	0804 - 0810	0802 - 0808	0801 - 0807	0731 - 0806	0806 - 0812
33	0809 - 0815	0807 - 0813	0813 - 0819	0812 - 0818	0811 - 0817	0809 - 0815	0808 - 0814	0807 - 0813	0813 - 0819
34	0816 - 0822	0814 - 0820	0820 - 0826	0819 - 0825	0818 - 0824	0816 - 0822	0815 - 0821	0814 - 0820	0820 - 0826
35	0823 - 0829	0821 - 0827	0827 - 0902	0826 - 0901	0825 - 0831	0823 - 0829	0822 - 0828	0821 - 0827	0827 - 0902
36	0830 - 0905	0828 - 0903	0903 - 0909	0902 - 0908	0901 - 0907	0830 - 0905	0829 - 0904	0828 - 0903	0903 - 0909
37	0906 - 0912	0904 - 0910	0910 - 0916	0909 - 0915	0908 - 0914	0906 - 0912	0905 - 0911	0904 - 0910	0910 - 0916
38	0913 - 0919	0911 - 0917	0917 - 0923	0916 - 0922	0915 - 0921	0913 - 0919	0912 - 0918	0911 - 0917	0917 - 0923
39	0920 - 0926	0918 - 0924	0924 - 0930	0923 - 0929	0922 - 0928	0920 - 0926	0919 - 0925	0918 - 0924	0924 - 0930
40	0927 - 1003	0925 - 1001	1001 - 1007	0930 - 1006	0929 - 1005	0927 - 1003	0926 - 1002	0925 - 1001	1001 - 1007
41	1004 - 1010	1002 - 1008	1008 - 1014	1007 - 1013	1006 - 1012	1004 - 1010	1003 - 1009	1002 - 1008	1008 - 1014
42	1011 - 1017	1009 - 1015	1015 - 1021	1014 - 1020	1013 - 1019	1011 - 1017	1010 - 1016	1009 - 1015	1015 - 1021
43	1018 - 1024	1016 - 1022	1022 - 1028	1021 - 1027	1020 - 1026	1018 - 1024	1017 - 1023	1016 - 1022	1022 - 1028
44	1025 - 1031	1023 - 1029	1029 - 1104	1028 - 1103	1027 - 1102	1025 - 1031	1024 - 1030	1023 - 1029	1029 - 1104
45	1101 - 1107	1030 - 1105	1105 - 1111	1104 - 1110	1103 - 1109	1101 - 1107	1031 - 1106	1030 - 1105	1105 - 1111
46	1108 - 1114	1106 - 1112	1112 - 1118	1111 - 1117	1110 - 1116	1108 - 1114	1107 - 1113	1106 - 1112	1112 - 1118
47	1115 - 1121	1113 - 1119	1119 - 1125	1118 - 1124	1117 - 1123	1115 - 1121	1114 - 1120	1113 - 1119	1119 - 1125
48	1122 - 1128	1120 - 1126	1126 - 1202	1125 - 1201	1124 - 1130	1122 - 1128	1121 - 1127	1120 - 1126	1126 - 1202
49	1129 - 1205	1127 - 1203	1203 - 1209	1202 - 1208	1201 - 1207	1129 - 1205	1128 - 1204	1127 - 1203	1203 - 1209
50	1206 - 1212	1204 - 1210	1210 - 1216	1209 - 1215	1208 - 1214	1206 - 1212	1205 - 1211	1204 - 1210	1210 - 1216
51	1213 - 1219	1211 - 1217	1217 - 1223	1216 - 1222	1215 - 1221	1213 - 1219	1212 - 1218	1211 - 1217	1217 - 1223
52	1220 - 1226	1218 - 1224	1224 - 1230	1223 - 1229	1222 - 1228	1220 - 1226	1219 - 1225	1218 - 1224	1224 - 1230
53	1227 - 1231	1225 - 1231	1231 - 1231	1230 - 1231	1229 - 1231	1227 - 1231	1226 - 1231	1225 - 1231	1231 - 1231

COMPANIES PURCHASING SALMON AND HERRING
IN ALASKA PENINSULA AND ALEUTIAN ISLANDS AREAS
DURING 1989

(S) Salmon (H) Herring

	Company Name and Home Office	Processing Plants
(S)	All Alaskan Seafoods, Inc. 130 Nickerson St., Suite 307 Seattle,WA 98109 (206) 285-8200	NORTHERN ALASKAN WSL 5879 (Contacted through Dillingham 842-5279 FAX 842-5395)
(S)(H)	Alyeska Seafoods P.O. Box C-5030 Seattle, WA 98105 (206) 323-3200	Unalaska Shoreplant 581-1211 or 1212
(S)	ANPAC, Inc. P.O. Box 92520 Anchorage, AK 99509 (907) 561-1399	Anchorage Shoreplant NUSHAGAK
(S)	Crusader Fisheries, Inc. P.O. Box 692 Kodiak, AK 99615 (907) 486-3147	CRUSADER SEA LEGEND WYH 5118
(S)	FAVCO, Inc. P.O. Box 190968 Anchorage, AK 99519 (907) 278-1525	Anchorage Shoreplant
(S)	Icicle Seafoods, Inc. P.O. Box 79003 Seattle, WA 98119 (206) 282-0988 FAX (206) 282-7222	DISCOVERY STAR EVENING STAR
(S)	Layfayette Incorporated 3837 13th W., Suite 104 Seattle, WA 98119 (206) 281-7022	LAYFAYETTE WN 2253
(S)	New West Fisheries, Inc. 1100 11th Street Bellingham, WA 98225 (206) 734-9050	NEW WEST
(S)	North Coast Seafood Processors P.O. Box 17538 Seattle, WA 98107 (206) 789-5108	POLAR BEAR WE 6476

COMPANIES PURCHASING SALMON AND HERRING
IN ALASKA PENINSULA AND ALEUTIAN ISLANDS AREAS
DURING 1989

-continued-

(S) Salmon (H) Herring

Company Name and Home Office	Processing Plants
(S)(H) Ocean Pacific	OCEAN PACIFIC (Sank near Ketchikan late in season.)
(S)(H) Peter Pan Seafoods, Inc. 1000 Denny Building Seattle, WA 98121 (206) 728-6000	Port Moller Shoreplant King Cove Shoreplant BLUE WAVE WTQ 5140
(H) Queen Fisheries, Inc East Point Seafoods Bldg. C-3 Fishermen's Terminal Seattle, WA 98119 (206) 284-7571	Dutch Harbor Shoreplant
(S)(H) SnoPac Products, Inc Box 3001 Bothell, WA 98041 (206) 231-2296	SNOW PAC
(S)(H) Trident Seafoods 5303 Shilshole Ave. N.W. Seattle, WA 98107 (206) 783-3813 or 3818	Sand Point Shoreplant Akutan Shoreplant SEA ALASKA WYX 2858 BILLIKIN WYX 2752 BOUNTIFUL WSX 6805 NEPTUNE WRC 8312
(H) Unisea, Inc Dutch Harbor Seafoods, LTD P.O. Box 97019 Redmond, WA 98073 (206) 881-8181	UNISEA (In Dutch Harbor) (Alaska Peninsula Salmon were processed by Peter Pan Seafoods)

1989 FIELD PERSONNEL

Employee	Title and/or Location/Duty
Arnie Shaul, H, M	Alaska Peninsula Area Management Biologist
Alan Quimby, H, M	Aleutian Islands Area Management Biologist
Len Schwarz, H, M	Alaska Peninsula Area Assistant Management Biologist
Bob Berceli, H, M	FB I, Management Program Assistant
Hal Terry, H, M	Airplane Pilot I
Steve Krueger, H, M, R	FT III-Port Moller, Nelson River
Joe Krueger, H, M	FT III-Canoe Bay, Sand Point
Tim Ward, M	FB I-Resolution, Thin Point Cove
Chris Sundby, M	FB I-Cold Bay, Middle Lagoon
Tim Johnson, M	FT III-Port Moller, Dutch Harbor
Dean Beers, M	FT III-Bear Lake
Todd Harper, M	FT II-Bear Lake, Nelson River
John Goodwin, M	FT II-Nelson River, Bear Lake
Jim McCullough, R	Area Salmon Research Biologist
Mark Weinberger, R	FB I-Nelson River, King Cove
Tracy McKinion, R	FT III-Port Moller
Shelli Clay, R	FT I-King Cove
Lief Brockman, R	FT I-Port Moller
Malcolm Bennett, R	FT I-Port Moller
Tara Degnan, R	FT I-King Cove

H = Herring
M = Salmon Management
R = Salmon Research