

ANNUAL SUMMARY OF YAKUTAT FINFISH  
AND  
SHELLFISH MANAGEMENT OPERATIONS, 1990



By  
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and  
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## INTRODUCTION/OVERVIEW

### *Yakutat Area Set Gillnet - 1990*

A map of the Yakutat area is illustrated in Figure 1. The Yakutat set gillnet fishery produced a cumulative catch of 530,667 salmon (Table 1), which was 29% above the recent 10-year average (Table 2) and the second highest production for the area since 1941. Only three years since 1941 have produced a cumulative catch of over 500,000 salmon. Sockeye made up 65% of the year's harvest, while coho accounted for 28%. Catches of pink and chum salmon were far below average. The chinook harvest was 52% below average, but was affected by various restrictions, particularly the non-sale of chinook in the Situk and Lost rivers. The average setnet income of \$27,911 was 29% above the previous 10-year average (Table 3).

#### **Sockeye Salmon**

The sockeye harvest of 344,461 was 81% above the recent 10-year average (Table 2) and the highest catch since 1938. The East and Situk rivers combined for 73% of the total harvest. The East River catch of 161,378 was 76% above the recent 10-year average, and was the second highest catch on record for the river. The return-per-spawner from the parent year escapement of 44,000 was about 4.6:1. The Situk River catch of 90,735 was the second highest catch in 23 years. As for the past three years, lower escapement goals allowed an increase in overall fishing time. The Situk Weir was washed out by a flood on July 28. A total of 61,375 sockeye had passed through as of that date, and the final escapement was estimated to be 70,000, exceeding the escapement goal. The return-per-spawner was approximately 1.8:1.

The Alsek River catch of 16,852 sockeye was the second highest catch in the past eight years, but was still 3% below the previous 10-year average. The Klukshu Weir escapement of 25,500 was 37% above the recent 10-year average. An updated Alsek abundance model, used for the first time in 1990, accurately predicted the Klukshu escapement. The Yakutat Bay harvest of 41,858 sockeye was 145% above the recent 10-year average, and exceeded the previous high catch (33,677 in 1942) by over 8,000 fish. The combined Manby fisheries catch of 25,666 was second only to the 1989 harvest, and was 113% above average. The Akwe River catch of 3,996 sockeye was not only 67% below the previous 10-year average, but was also the lowest catch since 1978.

#### **Coho Salmon**

The coho harvest of 148,890 was 0.5% above the recent 10-year average (Table 2). The Situk-Ahmklin fishery, with a catch of 45,075, and the Tsiu River fishery, with a catch of 33,785, were the peak producers. The combined catch for the two rivers accounted for 53% of the total harvest. For only the

third time in the past 13 years, the coho catch in the Situk exceeded that of the Tsiu. The Yakataga District, including the Tsiu, Kaliakh, Kiklukh, and Tashalich Rivers, accounted for 33% of the total area catch. Those areas producing above average coho catches in 1990 included the Situk, East, and Kaliakh Rivers, along with Yakutat Bay and the combined Manby fisheries. The Alsek, Akwe, Itatio, Lost, Yahtse, and Tsiu Rivers were all below average in harvest.

Escapement counts ranged from below to above average, depending on the area. All streams from Cape Yakataga to one-half mile west of the Yahtse, except Jetty Creek and Priest River, remained closed to commercial fishing in 1990. Jetty Creek and Priest River, though open, were not fished.

### **Chinook Salmon**

The chinook harvest of 664 was 52% below the recent 10-year average (Table 2). Harvest levels were affected by chinook salmon conservation measures. The non-sale of chinook for the Situk and Lost Rivers was in effect for the entire season. A recruitment curve showed escapement goals would not be met, and during the entire commercial season fishermen were urged to stay on their gear and release live chinook. The final weir count of 671 large chinook was below the present escapement goal of 1,000-1,400.

The Alsek River chinook catch of 78 was 72% below the recent 10-year average catch of 432, and was one of the lowest catches on record. A six inch mesh restriction was again enforced as a conservation measure. The Klukshu Weir count of 1,950 was 14% below the recent 10-year average. Alsek chinook did not appear in the East River in large numbers; the East River catch of 45 chinook was 34% below average. The Akwe River catch of 193 chinook and Yakutat Bay catch of 304 chinook were above average.

### **Pink Salmon**

The pink salmon harvest of 30,839 was 44% below the recent 10-year average (Table 2). Only 1,209 pinks were harvested from Humpback Creek in Yakutat Bay. Escapement goals were met, and fishing time on Humpback Creek was extended for three weeks during the pink salmon season. The Situk River catch of 23,895 pinks was 77% of the total area harvest, and was 48% above the previous 10-year average for that river. The peak escapement count for the Situk was 175,000.

### **Chum Salmon**

Chum salmon returns were poor in 1990. The catch of 5,813 was 65% below the recent 10-year average (Table 2). The East River is the only major chum producer in Yakutat. The East River catch of 4,578 accounted for 79% of the total harvest and was 67% below average. The peak escapement count of 1,700 was also below average.

### *Yakutat Area Troll - 1990*

The 1990 troll season in the Yakutat area was characterized by early summer openings. Trolling for chinook salmon was open June 5-7 and June 21-23. The total harvest for both periods was 50 chinook (Table 4). This was the second consecutive year of June trolling for chinook salmon. The coho season experienced an above average coho troll catch. Most of the coho catch landed in Yakutat (63%) occurred during Statistical Weeks 35-37 (Table 5). Overall effort was above average, with 137 vessels (30 hand troll and 107 power troll) (Table 6).

A chronology of the Yakutat trolling season is as follows: the winter troll season which had opened on October 1, 1990, for chinook only, closed on April 14 at 11:59 pm with very few chinook salmon taken from Yakutat Bay, the only portion of the Yakutat area open for trolling during the winter. Trolling re-opened at 12:01 am on June 5-7 for all species of salmon except coho, and on June 21-23 for all species. On 1 July it opened for all species of salmon; however, the area off the Situk River mouth was closed to the taking of chinook salmon to conserve returning Situk chinook. Catch rates were high the first week but decreased in the following weeks, and trolling for chinook did not close until 11:59 pm on July 22. The quota was not quite reached. One additional day of chinook trolling was allowed on August 23. Excellent coho catches over all of SE-YAK eliminated need for a conservation closure, but a 10-day allocation closure occurred from August 13-August 22. On August 7, specific Yakutat restrictions established by the Board of Fisheries several years ago (Figure 2) went into effect which make weekly troll time in state waters of Yakutat from approximately Grand Plateau Glacier to Sitkagi Bluffs the same as weekly set net fishing time on the Situk River through September 20 (the last day of summer trolling).

The chinook salmon troll catch landed in Yakutat was 8,808 fish (Table 6). This was the largest catch of the past nine years, and was 115% above the recent 8-year average (for years with comparable data). Most of these fish were caught during the July 1-22 summer chinook season. The winter catch was minimal. The peak weekly effort on chinook was 18 hand trollers during the week of July 15 and 24 power trollers during the week of August 19 (Table 4).

Trolling accounted for 93% of the chinook and 38% of the coho landed in Yakutat (Table 7). The approximate exvessel value of troll-caught chinook and coho salmon landed in Yakutat was \$1,200,000 (Table 8). The total effort of 137 vessels landing in Yakutat was 65% above average (Table 6). Troll effort was concentrated in state and federal waters off of the Yakutat forelands, but several trollers fished westward in the Yakataga District, off the Tsu River.

The Yakutat coho salmon troll catch of 89,318 was 20% above the recent 8-year average (Table 6). The peak hand troll effort of 21 boats came during Statistical Week 35, August 26-September 1. The peak

power troll effort of 66 boats came during Statistical Week 36, September 2-8. The lowest effort occurred during Statistical Week 38, with a total of six vessels (hand and power troll combined).

## SALMON - YAKUTAT DISTRICT

### *Alsek River*

The Alsek River sockeye run continued to show modest improvement in 1990. The 1985 parent year escapement of 18,620 sockeye through the Klukshu Weir produced a catch of 16,852 sockeye and an escapement of 25,995 (Tables 9 and 10). The catch of 16,852 was 3% below the recent 10-year average, but was the second highest catch in the last eight years. The Klukshu Weir count of 25,995 was the fourth highest escapement since the its installation in 1976.

Early run sockeye returns were not expected to be good and the Alsek was opened for one 24-hour period on June 18. This was one week later than the 1989 opening, and reflected the concern over the early portion of the run. As in 1988 and 1989, catches and CPUE were carefully monitored inseason to assess run strength for possible extensions of fishing time. Fishing time was not extended during the initial opening due to poor catches. Catch and CPUE improved from this point on and fishing time was extended to 48 hours for the next two weeks, and to 72 hours for the following two weeks. Fishing time remained at 72 hours per week through the end of the sockeye season.

A revised inseason abundance model for the Alsek was used for the first time and proved to be very accurate in predicting run strength and final escapement through the Klukshu Weir. The old model was also used. The Klukshu escapement of 25,995 was within the range predicted by both models. Deduction of the sport and Indian food fishery harvest of 1,388 above the weir left an effective escapement of 24,607 sockeye. Aerial survey counts for the Tanis River were above average, and were also average for Basin Creek (Table 10).

The chinook harvest of 78 was 72% below the recent 10-year average, and was the third lowest catch on record (Table 9). The harvest was affected by the later opening on the Alsek. The catch of Alsek chinook in the East River was also well below average, again due to its later opening (Table 11). Indications are that the chinook run strength was below average. The Klukshu escapement of 1,915 chinook, including jacks, was 21% below average for the years the weir has been in operation. One hundred and seventy-two chinook were harvested in the Indian food fishery, which left an effective escapement of 1,743 chinook. A 6-inch mesh restriction was again enforced in the commercial fishery as a conservation measure.

The coho catch of 1,437 was 76% below the recent 10-year average (Table 9). Catches remained poor throughout the season and fishing times were not extended. The Alsek was closed for the final two weeks of the season as a conservation measure. The preliminary Klukshu Weir count of 313 coho was far below average, though the weir is usually removed prior to the completion of the run. Escapement counts in the Tanis River were below average, and average in Gines Creek (Table 10). The chum catch of 495 was 38% below average.

Range markers delineated the commercial surf fishing area on the east side of the river. No markers were placed on the west side due to surf action there. Markers were also used to close the mouths of Williams, Gines and Emile creeks.

### *East River*

The East River sockeye harvest in 1990 was the second highest on record, with a total of 161,378 fish landed (Table 11). The catch was 76% above the recent 10-year average, and accounted for 47% of all sockeye caught in the Yakutat area. A peak count of 103 permit holders during the last week of July was the highest effort ever recorded for the East River. The return-per-spawner from the parent year escapement of 44,000 was approximately 4.6:1.

The commercial fishery opened on June 25. Fishing time of one 24-hour period was maintained for the first three weeks of the season to minimize interception of Doame River sockeye and Alsek River chinook. Fishing time was increased to two days during the third week of July, to three days for the next three weeks, and to four days during the third week of August. Fishing time was then maintained at three days per week for the remainder of the season. The opening on Monday, July 30, was delayed 24 hours due to a potential escapement backout problem. A test fishery conducted that Monday showed 90% bright fish and fishing was started on Tuesday. Catches in the ensuing 3-day period did not show evidence of a high interception of backout fish.

As in past years, catch and effort were divided between the three user groups by fishing location: inriver, surf, and ocean. The inriver fishermen harvested approximately 50.8% of the sockeye. The surf fishermen took approximately 30.6% of the catch, and ocean fishermen about 18.6% (Table 12). The ocean area was fished only during the peak weeks of the run.

Doame River sockeye escapement counts prior to the initial opening were above average (Table 13). The East River escapement built steadily until an aerial survey on September 3 revealed a final sockeye escapement count of 42,000. Added to the catch of 161,378, this gave a total return of 203,378. Parent year escapement was 44,000, which yielded a return-per-spawner (R/S) of 4.6:1, the fifth best on record

(Table 14). The average R/S since 1975 is 3.9:1. This year's R/S was the best on record from parent year escapements greater than 35,000 sockeye. The 1991 sockeye run will be coming from a parent year escapement, in 1987, of 34,000. An average R/S would yield a total return of approximately 132,000. Allowing for escapement, approximately 100,000 sockeye could be harvested. An above average R/S would yield a correspondingly higher catch.

In recent years, there has been an increase in the use of outhaul, or pulley, systems on the East River. Almost all outhauls are used in the surf area immediately adjacent to the river mouth. Three proposals will be put before the Board of Fisheries in 1991 concerning the use of outhauls. One would ban their use completely, one would restrict their use to areas outside the river mouths, and one would require the outhauls to be marked with buoys for navigational purposes. All three proposals cite safety factors as reasons for making regulation changes. The proposals would apply to all rivers in the Yakutat area.

The coho catch of 7,482 was 7% above the previous 10-year average (Table 11). Normal fishing time of three days per week was maintained for the coho season. Catches dropped off sharply during the last two weeks of September and the river was closed during the last week of the season as a conservation measure. Coho escapement counts were limited by inclement weather, but those that were assessed appeared to be below average.

The chinook catch of 45 was 34% below average. Catches were again affected by the later opening. The chum catch of 4,578 was 67% below the recent 10-year average of 13,733, and was the lowest chum harvest since 1975 (Table 11). Chum escapement counts were also below average. East River chums accounted for 79% of the Yakutat area chum harvest. The East River is not a major pink producer; the catch of 352 pinks was 58% below average.

#### *Akwe River*

This year marked the second year in a row of poor salmon production for the Akwe River. The total salmon harvest of 10,960 was 49% below the recent 10-year average. The chinook catch of 193 was 26% above average and the second highest chinook catch on record. Catches for the other salmon species were all well below average. The sockeye harvest of 3,996 was 67% below, the coho catch of 6,718 was 20% below, the pink catch of 11 was 98% below, and the chum catch of 42 was 90% below the recent 10-year average (Table 15). Aerial surveys, again, were of little value because of limited visibility (Table 16). The main river is glacial and the few small clear tributaries are densely covered with brush.

The Akwe opened on June 25. Catches and catch per unit effort (CPUE) remained below average and fishing periods remained on reduced time for the entire sockeye season. Fishing time remained at 1.5 days

per week for the first three weeks of the season and was further reduced to one day during the third week of July and to half a day during the fourth week of July as a conservation measure. Effort on the Akwe tends to be a function of both fishing time and run strength. A peak count of 15 permit holders fished the river during the second week of the season and effort dropped off from that point on as both run strength and fishing time decreased.

Coho returns were not strong during the early part of the run and fishing time was maintained on a reduced level of two days per week. Time was extended to four days per week for two weeks during the peak of the run as catches and CPUE were good. Normal fishing time of three days was maintained for the last two weeks of the season. Catches dropped off as flood conditions reduced net efficiency during the last half of September.

Markers were placed on the Akwe one-half mile upstream of the mid-tide level to reduce the problem of fishing mixed stocks of Italo and Akwe fish in the common mouth area. The catch of 42 chum salmon in the Akwe was negligible and did not indicate a great interception of Italo chums. Some straying of all species probably does occur, and it is possible that some Italo-bound salmon are intercepted in the Akwe River fishery.

#### *Italo River*

In 1990, fishing on the Italo occurred in two of the three distinct channels, the Old and Middle Italo Rivers. Both were open for the last four weeks of the coho season. Escapement counts for both sockeye and coho remained poor in the New Italo, the main channel of the river, and it was not opened to commercial fishing. Effort was low with fewer than three permit fished; therefore, all catch information is confidential. Table 17 lists catches for the last ten years.

The Old and Middle Italo opened initially on September 10 for a 2-day period. Fishing time was extended to four days the following week and normal three day openings were maintained for the last two weeks of the season. Markers were used in both channels to delineate the upstream closed water areas.

A peak escapement count of 1,300 sockeye was seen in the New Italo on August 6 (Table 18). This was far below historical levels. Nine hundred of these were seen in Italo Lake, the highest count for the lake since 1986. Peak escapement counts of 2,200 coho in the Middle Italo and 2,500 in the Old Italo were above average. The count of 450 coho in the New Italo was below average.

### *Dangerous River*

The Dangerous River opened on June 11, but was not fished until July 16. Fewer than three fishermen fished the Dangerous River and all catch information is confidential. Escapement surveys were not conducted.

### *Situk-Ahrnklin Rivers*

The Situk-Ahrnklin River fishery (referred to in this report as "the Situk River Fishery") recorded very good to excellent catches of sockeye, coho and pink salmon (Table 19). This fishery alone contributes, on the average, 25% of the area's exvessel scinet value (Table 20). For 1990, this was about \$1,200,000. The sockeye harvest of 90,735 was 153% above the recent 10-year average and was the second highest catch since 1966. The coho catch of 45,075 was 29% above average, and the pink catch of 23,895 was 48% above average. Sockeye and pink escapements were good; coho surveys were hampered by flood conditions (Tables 21 and 22). For the third time since 1955, the Situk Weir was placed in the lower river and used for inseason management of the sockeye fishery. Research continued on the Situk to determine the effects of any overflow of Russell Fjord (due to the Hubbard Glacier advance) on salmonids and their habitat. This year's efforts focused on lake and mainstem smolt population estimates. The National Marine Fisheries Service is analyzing the data and preparing a report. Incidental interception of steelhead and chinook in the commercial fishery was monitored during the sockeye season.

### **Chinook Salmon**

The return of chinook salmon to the Situk River in 1990 did not show early signs of strength and indications were that the escapement goal of 1,000-1,400 would not be achieved. A non-sale of chinook regulation was implemented and remained in effect throughout the commercial season. All fishermen were asked to stay with their gear, and to release live chinook. Approximately 48% of the large chinook that passed through the Situk Weir were net-marked, indicating some survival of netted and released fish. Whether or not these fish survived to spawn is unknown. Fishermen were allowed to retain dead chinook for personal use.

The final weir count was 1,262 chinook, of which 631 were large spawners, 496 were 2-ocean jacks, and 135 were 1-ocean jacks (Table 21). Forty large spawners were counted below the weir just before the weir washed out, bringing the count of large spawners to 671. This number was expanded to 700 large spawners by using migratory timing statistics.

## Sockeye Salmon

Based on an analysis of the percentage of 4-year-old sockeye during the 1989 sockeye run, the return of 5-year-old fish was expected to be strong in 1990. The Situk was opened by Emergency Order on June 11, one week earlier than by regulation, in anticipation of this strong return. Concern was expressed by some sport fishermen that the earlier opening would negatively impact emigrant steelhead. Commercial Fish and Sport Fish Divisions cooperated in a project designed to monitor incidental catches of both steelhead and chinook salmon. Commercial fishermen were interviewed about incidental catches at the buying truck located on the river bank. Fishermen who were interviewed during the first three weeks of the fishery recovered 7 dead steelhead. At the time, the price for steelhead was higher than for coho, pink, or chum salmon. Twenty-one steelhead were sold during the same three week period.

Emigrant steelhead were carefully monitored at the weir. A total of 3,619 were counted. A total of 3,351, or 93%, of the out-migrants were through the weir by June 9, two days prior to the initial commercial opening. With the exception of eight steelhead tagged and released below the weir, no steelhead were allowed to pass downstream from the evening of June 9 until the fishery closed on the evening of June 13. Steelhead were allowed to pass freely through the weir from this point on. None of the tagged fish appeared in the net fishery.

Early sockeye catches were good, with indications that few steelhead were being intercepted, thus the initial 1.5 day opening was extended to 2.5 days. Most of the 9,238 sockeye caught during this period came from nets located in the Ahmclin River end of the estuary. These catches indicated strong early returns to that system, later borne out by very good escapement counts (Table 22). Catches remained strong for four of the next five weeks, and fishing time was extended to 4.5 and 5.5 day periods during that time (Table 19). It became apparent that escapement goals would be exceeded, and the Situk remained open to fishing from 6:00 AM, Sunday, July 22, until noon, Thursday, August 16. During this same period, the allowable gear was increased from one to two 20 fathom nets. Time and allowable gear were returned to normal in time for the coho fishery. A peak count of 60 permit holders fished the Situk. This effort level was slightly above average, but well below the levels of the past two years.

The total return of Situk sockeye was calculated by adding inriver catch and escapement to half of the catches for the interception fisheries in Yakutat Bay, Manby Shore, and the Lost River. The 1990 return of 193,500 came from the 1985 escapement of 107,000. Return-per-spawner was 1.8:1. This was above average for recent years, but below the 1989 R/S of 3.5:1. Run strength was not as strong as anticipated early in the season.

The Situk River was again maintained in the lower river. A total of 61,375 sockeye passed through the weir before both ends scoured out on July 29 (Table 21). The final escapement was estimated at 70,000, which exceeded the upper limit of the escapement goal by 15,000.

### **Coho Salmon**

Coho returns were strong to the Situk. The catch of 45,075 was the highest production for any system in Yakutat (Table 19). Escapement counts were below average, but flood conditions prevented effective surveys (Table 22). Catches showed good run strength, and the fishing time was extended to four days during the second and third weeks of September. Catches dropped off after this time, and regular fishing times were maintained through the end of the season.

### **Pink and Chum Salmon**

The pink salmon harvest of 23,895 was above average and escapement counts were good (Tables 19 and 21). Approximately 23,000 pinks were counted through the weir, and the final escapement was estimated at 175,000. The chum catch of 283 was 30% below the previous 10-year average of 404.

### *Lost River*

Along with the Situk River, Yakutat Bay and Manby Shore, the Lost River was opened initially on June 11. The catch of 3,093 sockeye was 29% above the recent 10-year average and was the highest in the last eight years (Table 23). The initial opening was extended from 1.5 to 2.5 days, and the river remained on an extended time of 4.5 days for the next five weeks of the season because of the strength of the Situk River sockeye run. Fishing time was returned to normal for the remainder of the sockeye season to assist the Lost River escapement. Early escapement counts were poor, as it is difficult to see fish in Tawah Creek from the air because of dark water. A peak count of 3,600 sockeye was observed in Ophir Creek on August 22 (Table 24).

The coho catch of 4,922 was 29% below the recent 10-year average (Table 23). Early catches were good and fishing time was extended by one day during the second and third weeks of September. Catches dropped off sharply from that point on as fishing efficiency was affected by flood conditions. Escapement counts for the Lost/Tawah system were excellent. A boat survey on October 1 revealed an escapement count of 9,460 (Table 24).

## *Yakutat Bay*

The Yakutat Bay sockeye catch of 41,858 was 145% above the recent 10-year average, and was the highest catch ever recorded for the Bay (Table 25). The Bay opened on June 11, along with the Situk and Lost Rivers, and the Manby Shore. The initial 1.5 day opening was extended to 2.5 days. The Bay was on extended fishing time of 4.5 days for the next six weeks of the season because of the strength of the Situk sockeye run. In keeping with the Yakutat Area Management Plan, the Bay was not extended beyond 4.5 days in any week, regardless of Situk River fishing time, to protect stocks bound for other river systems.

The Bay recorded consistently high catches each week over the course of the sockeye season. The peak production of almost 8,600 sockeye occurred during the fifth week of the season, but over 8,000 were also caught during the sixth week, and over 7,000 in both the second and third weeks (Table 25). Effort also remained above average; a peak count of 42 permit holders was recorded during the fifth week of the season.

Pink salmon returns to Humpback Creek were not strong, but very little effort was directed toward them and escapement goals were met (Table 26). That portion of Yakutat Bay containing Humpback Creek was extended to 4.25 days of fishing time per week for three weeks to harvest surplus pinks. The remainder of the Bay, including the Monti Bay/Khantaak Island fishery area, remained on a normal fall fishing time of three days during this period. The area of the Bay extended is defined as south of a line stretching west from Eleanor Island and east of a line stretching north from the west point of Sawmill Cove. The pink salmon harvest of 6,178 for Yakutat Bay was 82% below the recent 10-year average, and only 1,209 pinks were taken from Humpy Creek (Table 25). A peak escapement count of 13,800 surpassed the 10,000 fish escapement goal for the Creek.

Yakutat Bay is not a major coho producer. The catch of 5,472 was 76% above the previous 10-year average and the highest catch since 1964. Fishing time was normal except for one day extensions in two of the last four weeks of the season (Table 25). The chinook harvest of 304 was 32% above average and it accounted for 46% of all setnet caught chinook in the Yakutat area.

Large range markers were used to delineate the waters of Yakutat Bay from the waters of the remainder of the district. The markers were 4x8 foot pieces of plywood painted fluorescent orange. They were placed high on the easternmost bluff of Ocean Cape. They proved to be highly visible and defined a line to Pt. Manby. Both the Department of Fish and Game and the Yakutat Advisory Committee have proposals before the Board of Fisheries to establish a line by regulation. The Department's proposal would establish the same line for the setnet fishery that exists to define the Bay for the troll fishery. The

Yakutat Advisory Committee's proposal would start the line 1/2 mile offshore at Ocean Cape Light and then extend it to Pt. Manby.

### *Manby Fisheries*

The 1990 season was the third year in a row of record breaking harvests for the combined Manby fisheries. The catch of 25,666 sockeye was 113% above the recent 10-year average. The coho catch of 16,295 was 50% above the 10-year average. The total catch for all species of 42,049 was the highest on record (Table 27). Sockeye catches were primarily from the Manby Shore outside fishery (20,735). Catches for individual streams were not broken out prior to 1986.

The Manby Shore outside fishery opened on June 11; the inside fisheries on June 25. The outside fishery remained on an extended fishing time of 4.5 days per week for most of the sockeye season because of the strength of the Situk sockeye run. Both the peak catch and effort came during the third week of the season. A storm during the second week of July caused a sharp drop in effort and catch for that week. Sudden Stream was also on extended time for two weeks of the season.

All four of the Manby area streams - Manby Stream, Spoon River, Sudden Stream, and Esker Creek - were fished for coho in 1990. Sudden Stream is not always fished for coho. The total Manby area streams catch of 16,176 coho is well above average. Escapement counts are limited due to the glacial nature of most of the streams in the Manby area. The peak escapement count of 3,000 in Spoon River was excellent. A count of 1,000 coho in Manby Stream was above average, and 250 in Esker Creek was average (Table 28).

### *Yahtse River to Icy Bay*

The Yahtse River coho catch of 7,478 was 20% below the recent 10-year average catch of 9,333 (Table 29). Lack of escapement resulted in reduced fishing time for the first two weeks of the season. Normal fishing time of three days per week was resumed during the first week of September and was maintained throughout the season. The Yahtse was open, but not fished, during the final week of the season. Late season escapement counts for the Yahtse were below average (Table 30). Markers were again used to protect the main clear water spawning tributary that enters the Yahtse about one-half mile upstream from the mouth of the river. Another marker about three miles upstream from the mouth delineated the upstream closed area.

The Yana River was fished for the second year in a row. Fewer than three permits fished the Yana and all catch records are confidential. Peak escapement counts were the same for both years (Table 30). Priest River and Jetty Creek escapement counts were above average (Table 30). Markers were placed approximately 1,300 yards upstream from the mouths of both systems, and both were open, but not fished, for the last three weeks of the season. A flight on September 18 revealed 4,500 coho in Priest River and 2,300 in Jetty Creek.

## SALMON-YAKATAGA DISTRICT

The Yakataga District, including the Kaliakh River, opened initially on June 18. The Tsiu River remained closed until the coho season to protect the relatively small sockeye population in that system, but all other Yakataga systems were open throughout the sockeye season. There was no recorded effort for sockeye in the Yakataga District in 1990. Coho catches for the Tsiu River were below average, while catches for the Kaliakh were above average. The Kiklukh and Tashalich Rivers were fished this season and added small numbers of coho to the Yakataga District's total. The total production for the Yakataga District was 48,802 coho, 33% of the total Yakutat area's catch. The catch of 48,802 coho was 10% below the recent 10-year average for the District. Prices paid on the grounds in the District are always lower than those paid at the dock in Yakutat, and averaged \$0.26/lb. lower in 1990.

### *Kaliakh River*

The Kaliakh was fished initially on August 20, two days prior to the Tsiu River opening. The coho catch of 13,775 was 13% above the previous 10-year average (Table 31). A peak weekly count of 18 permits fished the Kaliakh during the last week of August. Only five permits fished the Kaliakh exclusively, the rest fished the Tsiu, then switched to the Kaliakh during closed periods on the Tsiu. The normal fishing time of three days was extended to four days during the first and second weeks of September.

Catches remained good through the second week in September, but both catches and effort trailed off sharply from that point on. Fewer fish were available as the end of the run was not strong, and the river was in flood condition after the middle of September. Most fishermen departed the area by the end of Statistical Week 39.

Escapement surveys for the Kaliakh are limited due to the remoteness of the spawning tributaries and the fact that fish do not usually appear there until after the fishery closes. A flight on October 3 revealed

2,800 coho in the Kulthieth River, the main spawning tributary of the Kaliakh (Table 32). Another 650 were seen in the main river at the mouths of smaller tributaries. These counts were below average for the Kaliakh.

Enforcement was not the problem that it has been in years past. Despite the peak count of 18 permit holders, there were seldom more than nine fishing the river at any one time, and the fishery was conducted in an orderly fashion. A skiff was maintained on the river for use by ADF&G and F&WP personnel.

### *Tsiu River*

The Tsiu River coho catch of 33,785 was 19% below the recent 10-year average (Table 33). The Tsiu accounted for 69% of the Yakutat District coho harvest. The Tsiu catch was second only to that of the Situk for the Yakutat area. It was only the third year in the past 13 that the Tsiu was not first in coho production for all Yakutat rivers. The river remained closed, as in past years, during the sockeye season to protect the small sockeye population.

The Tsiu opened on Wednesday, August 22, for one 24-hour period. The escapement built slowly, and remained slightly behind schedule for the first three weeks of the season. Normal fishing times of two 24 hour periods per week were maintained throughout the season with the exception of the first week of September. A severe storm effectively halted fishing activity for one 24-hour period, and fishing time was extended one day during that week. Catches fell off sharply during the second and third weeks of September. Storms and resultant flooding affected gear efficiency, but escapement surveys from this point on also showed a reduced run of coho. The later portion of the run remained weak, and the river was open for only one 24-hour period during the fourth week of September before being closed for the season as a conservation measure. A peak count of 29 permit holders fished the Tsiu during the first two weeks of the season, an effort level slightly below average for the Tsiu.

Escapement counts for the Tsiu/Tsivat system were below average (Table 34). A flight on October 3 revealed a final escapement count of 16,800. Of these, 2,700 were seen in the smaller tributaries, 8,000 were observed in the Tsiu Lagoon, and 6,100 in the Tsivat.

There was an increase in the use of outhaul pulley systems this year at the mouth of the river. Six to eight out hauls were used throughout the season. For the first time, out hauls were set up outside the half-mile perimeter of the mouth to allow permit holders to fish the remainder of the district during closed periods on the river. The overflow channel of the Tsivat, which formed during the winter of 1988-89, was successfully fished. During periods of high water it is a waterway, and fish can make the passage into the lake. During low water it is a dead end slough, and during very low water it does not exit to the

ocean. The regulation allowing one-half the waterway to be blocked on the Tsiu was enforced in this channel. The inriver markers on the Tsiu were moved approximately 250 yards upstream from the 1989 marker positions. This action left the new markers almost exactly one-half mile below Duck Island Camp.

As noted in the 1989 Seasonal Summary, there was a potential for conflict between the commercial regulation establishing split fishing periods for the Tsiu, and the regulation establishing a 12-hour subsistence period on Saturday for any area with more than two days of commercial fishing time in a week. The subsistence period for the Tsiu was changed by emergency order to a 12-hour period on Sunday of each week to avoid any conflict between the two regulations.

### *Tashalich and Kiklukh Rivers*

Both the Tashalich and Kiklukh Rivers were fished in 1990. Catches for both were well below average in years for which data is available. The Kiklukh River, locally referred to as 8 Mile Creek, has been fished sporadically for many years, but data for the river were not kept prior to 1987. There is no record of the Tashalich River being fished prior to 1988. Kiklukh River escapement was average (Table 35). A flight on October 3 revealed 450 coho in the Tashalich. It is possible that fish holding in the dark water of the lagoon in this river were missed during surveys.

### **YAKUTAT AREA SUBSISTENCE AND PERSONAL USE - 1990**

Approximately 115 subsistence permits and 11 personal use permits were issued for the Yakutat area in 1990 (Tables 36 and 37). The number of subsistence permits was up 11% from 1989, and the number of personal use permits was down 67%. These changes were likely a result of the state making all residents eligible for subsistence permits on July 1, 1990.

The extrapolated subsistence catch of 444 chinook was the highest on record and about 22% above average (Table 38). Approximately 65% of the chinook harvest came from the Alsek River and Yakutat Bay. The Akwe and Situk Rivers accounted for the remainder of the harvest.

The extrapolated subsistence catch of 4,121 sockeye was the second highest on record and 46% above average (Table 38). Most of the sockeye taken were caught in the Situk-Ahrnklin estuary. Most of the coho harvested were also taken in the Situk-Ahrnklin estuary. The coho catch was up slightly from average (Table 38).

## **YAKUTAT AREA SHELLFISH - 1990**

### **Dungeness Crab**

Dungeness crab is the major shellfish species harvested in the Yakutat Area. The 1990 harvest was slightly under 2,000,000 lbs. A total of 256 landings were made by the 31 vessels (8 local, 23 non-local) participating in the fishery. The average carapace width was 183.92 mm. The average crab weight was 2.36 lbs, and the average price was about \$1.50/lb. Effort was concentrated in the Cape Yakataga/Icy Bay area and from the mouth of the Alsek River to Sitkagi Bluffs, including Yakutat Bay.

### **Tanner Crab**

Five boats (3 local, 2 non-local) fished Tanner crab in 1990. Twenty seven landings totalled 76,816 lbs. The average weight was 2.1 lbs and the average price was about \$1.80/lb.

### **King Crab**

As fewer than three vessels fished for king crab in the 1990/1991 season, all records are confidential.

### **Shrimp**

Preliminary data indicates that a total of 72 landings were made by six boats that fished shrimp during 1990. The harvest of 6,227 lbs consisted of 95.5% spots and 4.5% coonstripes.

### **Scallops**

Increased effort in 1990 resulted in a scallop catch of approximately 545,000 lbs, the second highest catch for the Yakutat area since 1969. Ten permit holders fished the area. Conflicts between scallop dredging and other fisheries resulted in closing the waters of Yakutat Bay south and east of a line from Point Carrew to Point Latouche to scallop dredging. There are two proposals before the Board of Fisheries to restrict scallop dredging in Yakutat Bay. Prices averaged \$3.30/lb.

## 1990 HALIBUT

The 1990 halibut season consisted of three, 24-hour periods (noon to noon): May 1-2, June 5-6, and August 30-31. For the third year in a row, weather was not a factor for the openings. The total catch of 910,369 lbs was 20% above the 1989 harvest of 756,601 lbs. An average price of \$1.58/lb resulted in an exvessel value of \$1,440,000, up 25% from 1989.

## 1990 BLACKCOD (SABLEFISH)

The Eastern Gulf of Alaska regulatory area for blackcod includes the Southeast, East Yakutat, and West Yakutat management areas, and extends roughly from Dixon Entrance to Valdez. Yakutat is located between the East and West Yakutat management areas. All three areas opened on April 1. Weather was not a factor. Blackcod deliveries in Yakutat totalled 2,734,152 lbs, slightly down from last year's delivery of 2,949,940 lbs. Total exvessel value was about \$3,554,398, with an average price for dressed 3-5 lb fish of \$1.30/lb. Three processors bought blackcod in the area in 1990.

Table 1. Yakutat area weekly setnet catch data, 1990.

Week	Ending Date	Chinook	Sockeye	Coho	Pink	Chum	Total
24	6/16	80	15,622	7		8	15,717
25	6/23	93	24,698	63	3	173	25,030
26	6/30	288	31,682	63	6	45	32,084
27	7/07	84	25,902	100	8	33	26,127
28	7/14	45	21,907	712	58	14	22,736
29	7/21	34	46,912	962	1,485	160	49,553
30	7/28	31	42,130	65	2,094	91	44,411
31	8/04	1	64,969	235	8,063	292	73,560
32	8/11	3	25,309	62	5,892	333	32,157
33	8/18	3	29,932	2,738	12,387	1,600	46,660
34	8/25		8,348	10,916	800	750	20,814
35	9/01		5,885	39,140	36	1,364	46,425
36	9/08	1	797	42,536	2	316	43,652
37	9/15		293	29,220	2	387	29,902
38	9/22		73	14,970	3	234	15,280
39	9/29	1	2	4,030		1	4,044
40	10/6			2,513		2	2,515
Totals		664	344,461	148,890	30,839	5,813	530,667

Table 2. Yakutat area 10-year setnet catch comparison.

Year	Effort	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	150	2,800	159,229	119,571	149,998	20,151	451,749	331
1981	152	2,031	132,419	147,537	134,879	10,234	427,100	357
1982	149	1,424	211,895	148,384	9,506	5,837	377,046	313
1983	131	812	155,545	80,974	23,615	11,119	272,035	292
1984	137	944	102,274	182,720	19,387	31,838	337,163	284
1985	149	1,146	236,582	202,166	16,070	12,399	468,363	337.5
1986	153	1,341	151,672	91,284	7,183	16,635	268,115	359
1987	155	1,766	258,884	126,103	12,690	14,744	414,187	442
1988	160	894	162,188	205,866	120,205	29,247	518,400	466
1989	164	810	329,563	176,847	59,319	16,238	582,777	517
Ave.	150	1,396	190,025	148,145	55,285	16,844	411,694	370
1990	161	664	344,461	148,890	30,839	5,813	530,667	516.83
Deviation*								
1990	+7%	-52%	+81%	+5%	-44%	-65%	+29%	+40%

\* Deviation from a 10-year average.

Table 3. Total average earnings from commercial fishing, excluding shellfish, Yakutat area, 1975-1990 (All data are for Yakutat landings only).

Year	Total Finfish Income <sup>1</sup>	Total Salmon Troll Income	Total Salmon Setnet Income	No. of Active Setnet Permits	Aver. Earning per Setnet Permit	Previous 10 Year Aver. Setnet Income	Total Setnet-Troll Salmon Income
1975	\$ 737,270 <sup>2</sup>	\$ 29,185 <sup>3</sup>	\$ 708,085	104	\$ 6,809	-	\$ 737,270
1976	1,252,865 <sup>2</sup>	33,082 <sup>3</sup>	1,219,783	125	9,758	-	1,252,865
1977	2,155,718 <sup>2</sup>	89,108 <sup>3</sup>	2,066,610	130	15,897	-	2,155,718
1978	3,066,121 <sup>2</sup>	396,330	2,669,791	151	17,681	-	3,066,121
1979	3,317,191	70,016	3,168,975	166	17,762	-	3,238,991
1980	2,090,752 <sup>2</sup>	161,000	1,929,752	150	12,059	-	2,090,752
1981	2,428,949 <sup>2</sup>	101,820	2,327,129	152	15,310	-	2,428,949
1982	2,908,629	672,490	2,084,139	149	13,988	-	2,756,629
1983	1,553,472	82,313	1,273,159	131	9,719	-	1,355,472
1984	3,128,096 <sup>4</sup>	560,307	2,375,789	137	17,341	-	2,936,096
1985	4,268,029 <sup>4</sup>	879,932	3,010,579	149	20,205	\$13,632	3,890,511
1986	6,019,829	988,055	1,981,807	153	12,953	14,972	2,969,862
1987	9,767,778	1,180,928	5,077,589	155	32,759	15,292	6,258,517
1988	19,026,072	1,601,344	8,944,228	160	55,901	16,978	10,545,572
1989	11,220,922	1,214,305	4,174,510	164	25,454	20,800	5,388,815
1990	10,691,082	1,203,003	4,493,681	161	27,911	21,569	5,696,684

<sup>1</sup> Through 1985, data includes salmon setnet, salmon hand and power troll, and halibut. Starting in 1986, data also includes blackcod.

<sup>2</sup> Excludes halibut, thus is salmon only (no blackcod harvest before 1984).

<sup>3</sup> Hand troll only; no power troll data, or no power trolling done.

<sup>4</sup> Excludes blackcod landings of 178,000 lb in 1984, 52,000 lb. in 1985, by non-local boats.

Table 4. Yakutat area troll chinook catch, 1990.

Week	Ending Date	Hand Boats	Hand Catch	Power Boats	Power Catch	Total Boats	Total
23	6/09	2	7			2	7
25	6/23	3	43			3	43
27	7/07	10	160	4	514	14	674
28	7/14	10	154	9	1,921	19	2,075
29	7/21	18	100	4	1,419	22	1,519
30	7/28	15	107	15	3,978	30	4,085
34	8/25	16	25	24	380	40	405
Totals		74	596	56	8,212	129	8,808

Table 5. Yakutat area troll coho catch, 1990.

Week	Ending Date	Hand Boats	Hand Catch	Power Boats	Power Catch	Total Boats	Total Catch
27	7/07	10	130 <sup>1</sup>	4	191	14	321
28	7/14	10	207	9	1,275	19	1,482
29	7/21	18	445	4	1,065	22	1,510
30	7/28	15	957	15	5,507	30	6,464
31	8/04	16	1,325	7	2,446	23	3,771
32	8/11	15	2,989	5	2,556	20	5,545
33	8/18	14	1,885	15	8,103	29	9,988
34	8/25	16	1,128	24	2,912	40	4,040
35	9/01	21	2,831	51	24,167	72	26,998
36	9/08	14	420	66	16,015	80	16,435
37	9/15	10	325	32	12,172	42	12,397
38	9/22	4	17	2	250	6	267
Totals		163	12,659	234	76,659	397	89,318

<sup>1</sup> Includes one coho caught week 25.

Table 6. Troll comparison, chinook and coho, 1982-1990.

Year	Chinook	Coho	Total	Hand	Power	Total
1982	1,118	68,300	69,418			
1983	1,430	11,246	12,676			
1984	746	40,600	41,346	26	23	49
1985	3,857	78,021	81,878	34	27	61
1986	5,197	90,428	95,625	32	59	91
1987	7,424	53,368	60,792	21	67	88
1988	5,641	54,383	60,024	33	48	81
1989	7,303	128,373	135,676	29	99	128
Ave.	4,090	74,340	78,429	29	54	83
1990	8,808	89,318	98,126	30	107	137

Table 7. Yakutat area setnet and troll salmon harvest, 1990.

Area	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
Alsek	78	16,852	1,437		495	18,862	38.0
East	45	161,378	7,482	532	4,578	174,015	36.0
Akwe	193	3,996	6,718	11	42	10,960	26.0
Italio			*		*	*	12.0
Dangerous		*	*		*	*	16.5
Situk		90,735	45,075	23,895	283	159,989	74.08
Lost		3,093	4,922	218	5	8,238	58.50
Yakutat Bay	304	41,858	5,472	6,178	359	54,171	62.75
Manby SHORE	44	20,735	119	3	41	20,942	35.0
Manby STREAM		1	4,783			4,784	18.0
Spoon		*	*			*	16.0
Sudden		*	*			*	33.5
Esker			*			*	15.0
Yahise		112	7,478		1	7,591	16.0
Yana			*			*	14.0
Kaliakh		7	13,775		3	13,785	20.0
Tsiu		31	33,785	2		33,818	10.0
Tashalich			*			*	7.0
Kiklukh			*			*	10.0
Total	664	344,461	146,890	30,839	5,813	530,667	516.83
Troll	8,808		89,318			98,126	
Catch	9,472	344,461	238,208	30,839	5,813	628,793	

\* Fewer than 3 permits; all catch figures are confidential

Table 8. 1990 Exvessel dollar value of Yakutat fisheries to fishermen.

Species	Salmon <sup>1</sup>		
	Setnet	Troll <sup>2</sup> Hand	Troll Power
Chinook	\$ 11,785	\$ 25,304	\$ 348,649
Sockeye	3,386,963		
Coho	1,045,793	117,501	711,549
Pink	24,741		
Chum	21,399		
Total	4,493,681	142,805	1,060,198

<sup>1</sup> Figures used to calculate values: halibut, 721,755 lbs @ \$1.50/lb; blackcod, 2,734,152 lbs @ \$1.30/lb; Dungeness crab, 1,978,942 lbs @ \$1.50 lb; scallops, 545,000 lbs @ \$3.30 lb.

<sup>2</sup> Troll income excludes landings to ports other than Yakutat.

Table 8. Page 2 of 2.

Total Halibut <sup>1</sup>		\$ 1,440,000
Total Blackcod <sup>1</sup>		3,554,398
Total Dungeness <sup>1</sup>		2,968,413
Total Scallops <sup>1</sup>		1,798,500
<hr/>		
Total Finfish income <sup>2</sup>	\$10,691,082	\$10,691,082
Total Shellfish income	4,766,913	4,766,913
Total Fishing Income	15,457,995	15,457,995

Average income per setnet permit (161 active permits) was \$27,911, the third highest on record and 29% above the previous 10-year average income of \$21,569.

<sup>1</sup> Figures used to calculate values: halibut, 721,755 lbs @ \$1.50/lb; blackcod, 2,734,152 lbs @ \$1.30/lb; Dungeness crab, 1,978,942 lbs @ \$1.50 lb; scallops, 545,000 lbs @ \$3.30 lb.

<sup>2</sup> Troll income excludes landings to ports other than Yakutat.

Table 9. Alsek River catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
25	6/23	25	43	571				614	1.0
26	6/30	21	26	1,339				1,365	2.0
27	7/07	21	6	3,075				3,081	2.0
28	7/14	24	3	4,663				4,666	3.0
29	7/21	16		2,556	1		2	2,559	3.0
30	7/28	7		2,160				2,160	3.0
31	8/04	8		1,178				1,178	3.0
32	8/11	4		971			2	973	3.0
33	8/18	*							3.0
34	8/25	*							3.0
35	9/01	4		50	115		78	243	3.0
36	9/08	8		33	211		115	359	3.0
37	9/15	6		3	458		129	590	3.0
38	9/22	9		3	644		169	816	3.0
Total		25	78	16,852	1,437		495	18,862	38.0

\* Fewer than 3 permits; all catch figures are confidential.

10-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	40	1,401	25,385	7,602	9	929	35,326	42.0
1981	21	761	24,680	10,614	25	472	36,552	40.0
1982	25	523	28,917	6,304	6	72	35,822	34.0
1983	18	77	19,131	5,661	7	299	25,175	40.0
1984	22	60	14,409	7,854	23	1,354	26,677	33.0
1985	21	212	5,603	5,674	8	423	11,920	33.0
1986	23	476	24,164	1,331	13	537	26,521	34.0
1987	27	345	11,299	2,537	0	1,922	16,102	38.5
1988	30	223	6,286	4,986	7	907	12,409	34.0
1989	28	240	13,513	5,833	3	1,029	20,618	38.0
Ave.	26	432	17,329	5,840	10	794	24,712	36.7
1990	25	78	16,852	1,437	0	495	18,862	38.0
1990 deviation		-72%	-3%	-76%		-38%	-24%	+4%

Table 10. Alsek River escapement, 1990.

Date	Area	Chinook	Sockeye	Coho	Remarks
7/03	Tanis #1 & #2				None seen
7/03	Basin Creek				None seen
7/03	Cabin Creek				None seen
7/03	Gines Creek				None seen
7/18	Tanis #2				None seen
7/23	Tanis #1		30		
7/23	Tanis #2		10		
8/01	Tanis #2		800		
8/14	Tanis #1		2,500		
8/14	Tanis #2		1,000		
8/14	Basin Creek		275		
8/14	Cabin Creek		300		
10/3	Tanis #1			600	
10/3	Tanis #2			200	
10/3	Cabin Creek			300	
10/3	Gines Creek			500	

Klukshu Weir<sup>1</sup>

Chinook	Sockeye	Coho	Total
1,950	25,995	315	28,245

<sup>1</sup> Food fishery harvests of 172 chinook and 1,388 sockeye above the weir counts leaves effective escapement of 1,743 chinook and 24,607 sockeye. Weir removed prior to end of coho run.

Table 11. East River catch, 1990.

Ending									
Wk	Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
26	6/30	31	6	210				216	1.0
27	7/07	31	4	681				685	1.0
28	7/14	31	1	347				348	1.0
29	7/21	46	2	11,526			7	11,535	2.0
30	7/28	73	27	27,969	3	14	48	28,061	3.0
31	8/04	103		57,289	37	33	215	57,574	3.0
32	8/11	87	3	21,061	40	446	300	21,850	3.0
33	8/18	86	1	27,760	224	32	1,500	29,517	4.0
34	8/25	41		7,848	612	5	730	9,195	3.0
35	9/01	33		5,611	3,184	2	1,266	10,063	3.0
36	9/08	19	1	731	888		189	1,809	3.0
37	9/15	18		277	1,682		254	2,213	3.0
38	9/22	7		68	433		58	559	3.0
39	9/29	4			379		11	390	3.0
Totals		103	45	161,378	7,482	532	4,578	174,015	36.0

10-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	52	76	48,530	2,401	193	18,782	69,981	41.0
1981	58	116	47,365	6,520	2,141	8,734	64,876	34.0
1982	40	81	97,785	2,026	428	4,668	104,988	42.0
1983	52	30	82,204	4,891	273	9,566	96,964	29.5
1984	48	22	39,023	10,875	851	22,419	73,190	27.5
1985	66	67	185,851	8,148	801	10,576	206,143	42.0
1986	78	109	76,355	2,769	332	14,285	93,850	28.0
1987	89	98	133,723	5,134	113	10,525	149,593	50.2
1988	81	40	61,483	20,148	2,628	24,453	108,752	39.0
1989	92	43	145,516	7,287	678	13,724	167,248	43.0
Ave.	66	68	91,784	7,020	844	13,773	113,559	37.6
1990	103	45	161,378	7,482	352	4,578	174,015	36.0
1990 deviation		-34%	+76%	+7%	-58%	-67%	+53%	-4%

Table 12. East River sockeye salmon catch comparison, 1990.

Week	Ending Date	Area	Sockeye Catch	% Sockeye Catch
29	7/21	In-river	6,264	54.3
		Surf	4,320	37.5
		Ocean	942	8.2
30	7/28	In-river	11,048	39.5
		Surf	8,105	29.0
		Ocean	8,816	31.5
31	8/04	In-river	28,621	50.0
		Surf	14,598	25.5
		Ocean	14,070	24.5
32	8/11	In-river	9,991	47.5
		Surf	8,750	41.6
		Ocean	2,314	10.9
33	8/18	In-river	15,733	56.7
		Surf	9,646	34.7
		Ocean	2,381	8.6
34	8/25	In-river	6,344	80.8
		Surf	1,505	19.2
		Ocean	Not Fished	
Totals		In-river	78,001	50.8
		Surf	46,924	30.6
		Ocean	28,523	18.6

Table 13. East River escapement, 1990.

Date	Sockeye	Coho	Chum	Remarks
6/15	1,000			Doame River
6/24	2,120			1,270 in Doame River
6/26	20			
7/01	650			Poor visibility/wind
7/03	600			
7/08	1,500			200 below markers
7/16	4,500			1,500 below markers
7/18	420			Doame River/Lake
7/20	12,000			120 below markers
7/23	15,000			
7/25	3,000			
7/30	9,000			Poor visibility
7/31	12,000			
8/01	11,000			
8/06	25,000			15,000 from markers to Steve's Island
8/13	31,000			
8/20	27,000			Poor visibility
8/22	39,000	300	1,700	
9/03	42,000			
9/11	42,000			3,000 mixed chum & coho
10/3		2,800		2,500 in Doame River

Table 14. East River return-per-spawner since 1975.

Year	Total Return	Parent Year Escapement	Return Per Spawner	Rank
1976	79,816	10,000	7.98	1
1982	177,785	25,000	7.11	2
1985	245,851	35,000	7.02	3
1983	147,204	30,000	4.91	4
1990	203,378	44,000	4.62	5
1977	61,309	15,000	4.08	6
1984	68,023	18,000	3.78	7
1975	44,530	12,000	3.71	8
1979	81,262	22,000	3.69	9
1988	99,483	29,000	3.43	10
1989	175,516	60,000	2.93	11
1987	167,723	65,000	2.58	12
1981	82,365	40,000	2.06	13
1978	56,003	35,000	1.60	14
1986	120,355	80,000	1.50	15
1980	66,530	50,000	1.33	16

Average return-per-spawner since 1975: 3.89:1

Table 15. Akwe River catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
26	6/30	11	174	1,544				1,718	1.5
27	7/07	15	11	1,037	1		3	1,052	1.5
28	7/14 <sup>1</sup>	12	7	743				750	1.5
29	7/21	6	1	618	3	3	28	653	1.0
30	7/28	*							0.5
34	8/25	*							2.0
35	9/01	3		10	233	2		245	2.0
36	9/08	9		4	1,478		1	1,483	2.0
37	9/15	7		3	1,748		3	1,754	4.0
38	9/22	8			1,832			1,832	4.0
39	9/29	5			461			461	3.0
40	10/6	4			932			932	3.0
Totals		15	193	3,996	6,718	11	42	10,960	26.0

\* Fewer than 3 permits; all catch figures are confidential.

<sup>1</sup> Includes confiscated sockeye.

10-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	10	110	28,208	8,324	122	131	36,895	30.0
1981	10	108	15,453	6,540	959	35	23,095	22.0
1982	9	120	4,904	9,937	122	63	15,146	23.5
1983	9	93	5,687	5,282	151	73	11,286	30.0
1984	10	143	17,706	8,837	1,027	662	28,375	23.2
1985	9	135	4,938	4,044	19	45	9,181	21.0
1986	15	337	9,497	8,635	41	99	19,609	32.5
1987	12	190	12,133	7,945	32	513	20,813	38.0
1988	13	100	12,476	13,705	1,686	2,288	30,255	39.0
1989	16	192	8,653	10,278	491	314	19,928	27.0
Ave.	11	153	11,966	8,353	465	422	21,458	28.6
1990	15	193	3,996	6,718	11	42	10,960	26.0

Deviation\*

1990	+26%	-67%	-20%	-98%	-90%	-49%	-9%
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\* Deviation from a 10-year average.

Table 16. Akwe River escapement, 1990.

Date	Chinook	Sockeye	Coho	Remarks
8/14		20		Tidal
8/22		110		

The Akwe was flown five times from June 24 to July 16. Due to the turbidity of the river, no fish were seen.

Table 17. Itatio River catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
37	9/15	*							2.0
38	9/22	*							4.0
39	9/29	*							3.0
40	10/6	*							
Totals		*							12.0

10-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	6	1	310	6,808	382	517	8,101	23.5
1981	7	4	1,690	6,047	2,670	808	11,219	40.0
1982	4	6	2,831	6,824	272	599	10,532	33.0
1983	4	0	1,346	4,747	455	574	7,130	29.0
1984	9	1	8,210	9,315	1,364	5,614	24,504	38.0
1985	4	4	1,146	9,496	356	478	11,480	34.0
1986	6	18	3,976	1,873	0	903	6,770	35.5
1987	4	2	778	1,331	3	649	2,763	33.0
1988/89	5	0	5	3,150	6	15	3,176	27.0
Ave.	5	4	2,029	4,959	551	1,016	8,568	29.3
1990	*							12.0
Deviation <sup>1</sup>								
1990								-59%

\* Fewer than 3 permits; all catch figures are confidential.

<sup>1</sup> Deviation from a 10-year average.

Table 18. Italo River escapement, 1990.

Date	Area	Sockeye	Coho	Pink	Remarks
6/24	New Italo				None seen
6/26	New Italo				None seen
7/01	New Italo	250			
7/03	New Italo	250			
7/08	Italo/Akwe	500			Below forks
7/18	New Italo	760			
8/06	New Italo	400			
8/22	Mid/New Italo	850	110	300	Coho seen in Middle
9/03	New Italo		450		+350 in Middle
9/07	Middle Italo		750		
9/17	New Italo		1,300		+1,200 in tidal area in Middle
9/26	Middle Italo		2,200		
10/3	New Italo		270		+3,200 in Middle

Italo Lake Escapement

7/03		100			
7/18		50			
8/06		900			
8/22		200			

Old Italo Escapement

8/22			100		
9/03			300		
9/07			2,500		
9/17			2,000		Poor visibility
9/26			1,800		



Table 20. Situk River economics.

Dollar value of salmon setnet harvest<sup>1</sup>

Year	Chinook (20LB)	Sockeye (6LB)	Coho (9LB)	Pink (3LB)	Chum (9LB)	Total
1975	\$ 7,000	\$ 128,000	\$ 114,560	\$ 7,000	\$ 4	\$ 256,760
1976	24,000	345,300	108,000	8,300	80	485,680
1977	21,000	588,560	255,530	25,230	310	890,630
1978	10,000	333,150	417,270	7,140	126	767,690
1979	29,560	430,350	223,950	31,200	220	715,280
1980	22,540	155,130	218,190	23,100	106	419,070
1981	25,000	237,710	308,270	40,440	625	612,050
1982	5,610	170,940	191,240	3,800	410	372,000
1983	4,830	101,000	96,300	3,300	315	205,750
1984	12,310	50,740	498,530	10,640	2,400	575,120
1985	11,330	122,770	385,000	4,750	710	524,560
1986	3,276	59,771	116,648	688	294	(low) 180,677
1987	23,908	*755,662	454,035	9,682	5,394	1,248,984
1988	10,350	1,018,060	1,522,176	40,223	10,632	(high) 2,601,441
1989	No Sale	899,505	283,090	**58,445	3,748	1,244,788
1990	No Sale	816,615	352,937	18,638	1,070	1,189,260

\*(7 lbs.) average.

\*\*(4 lbs.) average.

Year	Total Yakutat Area Dollar value; Salmon setnet harvest	Percent Value of Situk to Yakutat area setnet
1975	\$ 713,860	36%
1976	1,214,550	40%
1977	2,065,055	(high) 43%
1978	3,066,120	25%
1979	3,219,000	22%
1980	2,090,750	20%
1981	2,133,300	26%
1982	2,084,140	18%
1983	1,355,470	15%
1984	2,375,790	24%
1985	3,010,580	17%

<sup>1</sup> (Average price/lb) x (average lb/fish) x (total fish delivered).

Year	Total Yakutat area dollar Value; Salmon Setnet Harvest	Percent value of Situk to Yakutat area setnet
1986	1,981,807	(low) 9%
1987	5,077,589	25%
1988	8,944,228	29%
1989	4,174,510	30%
1990	4,493,681	26%

1975-1990 Average=25%

Table 21. Situk Weir escapement counts<sup>1</sup>.

Chinook <sup>2</sup>	Sockeye <sup>3</sup>	Coho	Pink	Chum	Total
1,262	61,375		22,636		85,273

<sup>1</sup> Weir washout on July 29; weir removed by August 2.

<sup>2</sup> 631 large spawners, 496 two ocean, 135 one ocean jacks, 40 large spawners estimated below weir at washout, for a total of 671.

<sup>3</sup> Final sockeye escapement estimated to be 70,000.

Table 22. Situk-Ahrnklin escapement surveys.

Situk Float Counts

Date	Chinook	Sockeye	Pink	Coho	Remarks
8/13		3,000	85,000		9 Mile to landing
8/24	2	100	175,000	500	9 Mile to landing
8/30	612	3,500			Lake outlet
9/06	109	6,000		30	Outlet to 9 Mile
9/07				1,630	9 Mile to landing, 1/2 the river was turbid
10/4				657	9 Mile to midway point, log jams stop survey

Mountain Lake and stream

7/03		4,900			3,000 in stream; 1,900 in lake
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Old Situk Float Counts

8/24	1	82	5,000		Also 3 chum
10/2				126	

Ahrnklin River

6/26					Aerial, none seen
6/29	2	8,500			Boat, Ahrnklin/Antlen
7/04		7,900			Boat, Ahrnklin/Antlen

Table 23. Lost River catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
24	6/16	*							2.5
25	6/23	*							4.5
26	6/30	*							4.5
27	7/07	3		409				409	4.5
28	7/14	*							4.5
29	7/21	3		891		50	1	942	4.5
30	7/28	4		585		40	1	626	2.5
31	8/04	*							2.5
32	8/11	*							2.5
33	8/18	*							3.0
34	8/25	*							3.0
35	9/01	3		24	1,124	12		1,160	3.0
36	9/08	3		4	1,330		1	1,335	3.0
37	9/15	4			1,464			1,464	4.0
38	9/22	3			404			404	4.0
39	9/29	*							3.0
40	10/6	*							3.0
Totals		4		3,093	4,922	218	5	8,238	58.5

\* Fewer than 3 permits; all catch figures are confidential.

Table 23. Page 2 of 2.

10-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	5	37	4,040	6,758	2,038	12	12,885	38.5
1981	5	15	2,456	9,548	840	1	12,860	48.5
1982	5	10	5,102	9,955	700	13	15,780	40.0
1983	5	3	2,459	5,340	1,376	3	9,181	37.5
1984	5	22	726	10,688	1,792	71	13,299	34.5
1985	5	6	1,272	9,129	315	13	10,736	40.5
1986	4	6	498	2,495	80	3	3,082	29.0
1987	4	33	1,976	3,646	113	37	5,805	41.0
1988	6	22	2,316	5,905	478	41	8,762	48.0
1989	4	15	3,090	5,737	816	20	9,678	56.5
Ave.	5	17	2,394	6,920	855	21	10,107	41.4
1990	4	0	3,093	4,922	218	5	8,238	58.5
Deviation*								
1990			+29%	-29%	-75%	-76%	-18%	+46%

\* Deviation from a 10-year average.

Table 24. Lost River escapement, 1990.

Date	Area	Sockeye	Coho	Pink	Remarks
6/26	Tawah				None seen
7/08	Tawah				None seen
7/08	Ophir				None seen
7/16	Tawah				None seen
7/23	Tawah				None seen
8/06	Tawah	100			
8/06	Coast Guard Lake	500			
8/06	Ophir				None seen
8/22	Tawah		10	2,000	Aerial
8/22	Ophir	3,600			Aerial
8/22	Tawah		260	2,700	Boat
8/22	Tawah	39	1,284	2,300	Boat
10/1	Tawah		9,460		Boat

Table 25. Yakutat Bay catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye <sup>1</sup>	Coho	Pink <sup>2</sup>	Chum	Total	Days
24	6/16	29	66	4,129	7			4,202	2.5
25	6/23	37	37	7,323	36	1	8	7,405	4.5
26	6/30	39	74	7,119	53	3	149	7,398	4.5
27	7/07	31	57	3,227	94	3	31	3,412	4.5
28	7/14	42	33	8,597	691	37	25	9,383	4.5
29	7/21	38	30	8,239	914	212	6	9,401	4.5
30	7/28	18	3	145	57	964	53	1,222	2.5
31	8/04	11	1	841	117	414	4	1,377	2.5
32	8/11	12		1,308	193	2,299	19	3,819	4.25 <sup>2</sup>
33	8/18	8	2	744	583	1,978	8	3,315	4.25
34	8/25	5		158	410	261	41	870	4.25
35	9/01	5		18	571	1	8	598	3.0
36	9/08	3		3	586	1	3	593	3.0
37	9/15	5		4	917	2	2	925	4.0
38	9/22	*							4.0
39	9/29	*							3.0
40	10/6	*							3.0
Totals		42	304	41,858	5,472	6,178	359	54,171	62.75

\* Fewer than 3 permits; all catch figures are confidential.

<sup>1</sup> Includes Humpy Creek catch of 4 sockeye and 1,209 pink.

<sup>2</sup> Humpy Creek 4.25 days, remainder of Yakutat Bay 3.0 days.

Table 25. Page 2 of 2.

10-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	20	161	9,613	2,345	100,031	74	112,224	47.0
1981	24	132	13,491	1,855	101,833	45	117,356	48.0
1982	26	415	23,922	3,712	3,602	272	31,923	40.0
1983	25	239	17,603	3,634	14,900	363	36,739	40.0
1984	32	125	9,134	2,913	2,159	996	15,327	29.0
1985	32	237	10,992	3,204	5,479	694	20,606	45.5
1986	38	202	21,826	3,056	5,162	687	30,933	36.0
1987	52	319	24,943	2,520	1,671	196	29,649	46.0
1988	34	196	14,239	3,164	99,965	651	118,215	64.5
1989	47	297	24,528	4,712	14,299	309	44,145	69.0
Ave.	33	231	17,052	3,112	34,910	429	55,711	47.0
1990	42	304	41,858	5,472	6,178	359	54,171	62.75
Deviation*								
1990	+27%	+32%	+145%	+76%	-82%	-16%	-3%	+34%

\* Deviation from a 10-year average.

Table 26. Humpback Creek escapement, 1990.

Date	Pink	Remarks
8/03	13,800	Foot
8/06	5,000	Tidal; aerial

Table 27. Manby fisheries catch, 1990.

Manby fisheries combined catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
24	6/16	14	14	2,053				2,067	2.5
25	6/23	14	13	2,411	26	1	22	2,473	4.5
26	6/30	18	8	7,464	8		9	7,489	4.5
27	7/07	14	6	3,580	4		1	3,591	4.5
28	7/14	4	1	441				442	4.5
29	7/21	10	1	7,243	27	2	1	7,274	4.5
30	7/28	6	1	1,984				1,985	2.5
31	8/04	*							3.0
33	8/18	*							3.0
34	8/25	5		11	1,454			1,465	3.0
35	9/01	8			3,086			3,086	3.0
36	9/08	7			4,237			4,237	3.0
37	9/15	6			3,975			3,975	4.0
38	9/22	4			1,888			1,888	3.0
39	9/29	4			1,589			1,589	3.0
Totals		18	44	25,666	16,295	3	41	42,049	52.5

\* Fewer than 3 permits; all catch figures are confidential.

10-year comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	9	43	10,332	8,814	1		19,190	26.5
1981	20	36	13,145	8,575	152		21,908	35.0
1982	22	25	19,211	11,450	60	49	30,795	26.0
1983	20	25	7,689	5,457	139	13	13,323	22.0
1984	18	44	5,116	18,661	2	8	23,831	28.0
1985	14	5	6,662	16,366	33	12	23,078	34.5
1986	6		4,879	3,978		3	8,860	43.5
1987	10	15	8,067	7,552		1	15,635	47.5
1988	15	13	11,923	20,844	106	1	32,887	52.5
1989	25	33	33,078	7,150	47	6	40,304	51.5
Ave.	16	24	12,010	10,885	54	9	22,981	36.7
1990	18	44	25,666	16,295	3	41	42,049	54.5
Deviation*								
1990		+83%	+113%	+50%	-94%	+355%	+83%	+49%

Deviation from a 10-year average.

Table 27. Page 2 of 3.

Manby shore weekly catch-1990

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
24	6/16	14	14	2,053				2,067	2.5
25	6/23	14	13	2,411	26	1	22	2,473	4.5
26	6/30	17	8	7,299	8		9	7,324	4.5
27	7/07	13	6	3,150	4		1	3,161	4.5
28	7/14	*							4.5
29	7/21	9	1	4,835	27	2	1	4,866	4.5
30	7/28	5	1	638				639	2.5
33	8/18	*							3.0
35	9/01	*							3.0
Totals			44	20,735	119	3	41	20,942	33.5

Manby Stream weekly catch-1990

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
34	8/25	*							3.0
35	9/01	3			1,246			1,246	3.0
36	9/08	3			1,663			1,663	3.0
37	9/15	3			597			597	3.0
38	9/22	*							3.0
39	9/29	3			828			828	3.0
Totals		3		1	4,783			4,784	18.0

4-Year comparison

Year	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1986	*	*	*	*	*	*	12.0
1987		9	4,772		1	4,782	10.0
1988	1	632	7,247	17	1	7,898	19.0
1989		719	2,627	25	3	3,374	17.0
Ave.		340	3,661	10	1	4,013	14.5
1990		1	4,783			4,784	18.0

\* Fewer than 3 permits; all catch figures are confidential.

Table 27. Page 3 of 3.

Esker Creek, Spoon River, Sudden Stream combined weekly catch-1990

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
34	8/25	3		6	1,236			1,242	3.0
35	9/01	3			1,787			1,787	3.0
36	9/08	4			2,574			2,574	3.0
37	9/15	3			3,378			3,378	3-4
38	9/22	*			*			*	3.0
39	9/29	*			*			*	3.0
Totals		4		6	11,393			11,399	19.0

\* Fewer than 3 permits; all catch figures are confidential.

4-Year comparison (weeks 34-39)

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1986	5		1	3,366			3,367	18.0
1987	3		1	2,777			2,778	19.0
1988	9		17	11,825	89	1	11,932	22.0
1989	3		13	4,106		1	4,120	17.0
Ave.	5		8	5,518	22	1	5,549	17.25
1990	4		6	11,393			11,399	19.0

Table 28. Manby Streams escapement, 1990.

Manby Stream

Date	Sockeye	Coho	Remarks
8/29		100	
9/05		350	First clear trib to west
9/08		500	
9/18		800	
9/25			None seen
10/3		1,000	

Esker Creek

9/18		250	
10/3		10	

Spoon River

8/29		900	
9/05		30	
9/08		3,000	
9/18	100	1,400	

Table 29. Yahtse River catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
34	8/25	4		106	526			632	2.0
35	9/01	6		3	1,645			1,648	2.0
36	9/08	9		2	3,192		1	3,195	3.0
37	9/15	4		1	1,424			1,425	3.0
38	9/22	*							3.0
39	9/29	*							3.0
Totals		9		112	7,478		1	7,591	16.0

\* Fewer than 3 permits; all catch figures are confidential.

10-year comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980	8			15,771			15,771	18.0
1981	12			11,178			11,178	19.0
1982	5			9,134			9,134	18.0
1983	7			6,799			6,799	18.0
1984	5			1,526			1,526	19.0
1985	5			3,871			3,871	20.0
1986	12			18,278			18,278	16.0
1987	9		4	12,873		2	12,879	19.0
1988	3		1	3,142	2		3,145	24.0
1989	9		8	10,762	4		10,774	22.0
Ave.	8			9,333			9,335	19.0
1990	9		112	7,478		1	7,591	16.0
1990	deviation			-20%			-19%	-16%

Table 30. Yahtse/Yana fisheries escapement, 1990.

Yahtse River escapement			
Date	Coho	Remarks	
8/17		None seen	
8/23		None seen	
8/29	120	West trib	
9/05	1,200	Holding in dark water	
9/08	1,100		
9/18	100	Poor visibility	
9/25	350		
10/3	650		
Yana River escapement			
8/29	350	Lagoons only	
9/05	100		
9/08	500		
9/18	400		
9/25	75		
10/3	75		
Jetty Creek escapement			
9/05	300		
9/08	1,500		
9/18	2,300		
9/25	200		
Priest River escapement			
9/05	500	First clear trib only	
9/08	2,500		
9/18	4,500		
9/25		None seen	
Pt. Riou Creek escapement			
9/08	20		
9/18	50		
10/3		None seen	

Table 31. Kaliakh River catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
34	8/25	5		1	910		2	913	3.0
35	9/01	18		3	5,717		1	5,721	3.0
36	9/08	13		3	4,576			4,579	4.0
37	9/15	10			2,381			2,381	4.0
38/39	9/22 & 29	4			189			189	6.0
Totals		18		7	13,775		3	13,785	20.0

10-Year Comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980				9,601			9,601	14.0
1981				3,986			3,986	13.0
1982				15,586			15,586	13.0
1983				4,433			4,433	10.0
1984				13,082			13,082	21.0
1985	22			22,641			22,641	20.0
1986	27			10,775			10,775	23.0
1987	24			15,709			15,709	16.0
1988	14		2	8,867			8,869	27.0
1989	11			16,858			16,858	25.35
Ave.	20			12,153			12,153	18.23
1990	18		7	13,775		3	13,785	20.0
Deviation*								
1990	-10%			+13%			+13%	+10%

\* Deviation from a 10-year average.

Table 32. Kaliakh River escapement, 1990.

Date	Coho	Remarks
9/20	150	Main river at outlets of tribs
10/3	650	Main river
10/3	2,800	Kuthieth River

Table 33. Tsiu River catch, 1990.

Wk	Ending Date	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
34	8/25	29		10	2,439	2		2,451	1.0
35	9/01	29		15	11,827			11,842	2.0
36	9/08	28		6	13,936			13,942	3.0
37	9/15	20			3,607			3,607	2.0
38	9/22	14			1,976			1,976	2.0
Totals		29		31	33,785	2		33,818	10.0

10-year comparison

Year	Boats	Chinook	Sockeye	Coho	Pink	Chum	Total	Days
1980				29,404			29,404	14.0
1981				29,189			29,189	13.0
1982				46,436			46,436	13.0
1983				19,687			19,687	10.0
1984				50,875			50,875	21.0
1985	34			64,601			64,601	20.0
1986	29			19,251			19,251	17.0
1987	37			35,685			35,685	11.0
1988	38		24	56,116	3	3	56,146	20.0
1989	24		41	62,939	2		62,982	18.75
Ave.	32			41,818			41,818	15.78
1990	29		31	33,785	2		33,818	10.0
Deviation*								
1990	-11%			-19%			-19%	-27%

\* Deviation from a 10-year average.

Table 34. Tsiu/Tsivat River escapement, 1990.

Date	Below Markers	Lake/Tsiu	Tsivat	Remarks
8/17	1,000	300		250 sockeye spawning in Tsivat
8/23	30	1,700		
8/27	2,600	2,900		Poor visibility
8/29	120	3,700		
9/02	2,700	5,500	25	
9/08	1,200	8,250	1,100	
9/16		1,500	400	Poor visibility
9/20		7,850	1,400	Poor visibility
9/25		4,500	2,400	
10/3	25	10,700	6,100	

Table 35. Kiklukh/Tashalich River escapement-1990.

Kiklukh (Eight Mile) River escapement

Date	Coho	Remarks
9/08	650	
10/3	200	

Tashalich River escapement

Date	Coho	Remarks
9/08	75	
10/3	450	

Table 36. 1990 Yakutat subsistence salmon harvest.<sup>1</sup>

Location <sup>2</sup>	Chinook	Sockeye	Coho	Pink	Chum	Other	Total	
Alsek (5)	82	118	12				212	
East (6)		418	20		2	D.Varden 2	440 <sup>1</sup>	
Akwe (4)	41	133	54				228	
Yakutat Bay (17)	150	268	84			Steelhead 6	502 <sup>3</sup>	
Situk (45)	82	2,346	397	34		Steelhead 4	2,859 <sup>3</sup>	
Tsiu (2)			38				38	
Ankau (3)		14	55				69	
Lost (3)			93				93	
Sudden (1)		100	50				150	
Kaliakh (1)			1				1	
Totals	355	3,397	804	34	2	12	4,592 <sup>3</sup>	
Number of permits issued							115	
Number of permits returned							93	81.00%
Number of permits returned, fished							68	
Number of permits returned, not fished							24	

<sup>1</sup> Preliminary data.

<sup>2</sup> Number in parenthesis shows number of permits reporting harvest from that area. Some permits reported catch from more than one area.

<sup>3</sup> Total refers to salmon only; it does not include other fish

Table 37. 1990 Yakutat personal use salmon harvest.<sup>1</sup>

Location <sup>2</sup>	Chinook	Sockeye	Coho	Pink	Chum	Total
Alsək (3)	3	26				29
Situk (3)		6	10			16
Tsiu (1)		25				25
Totals	3	57	10			70
Expanded Total Harvest (Total/.73)	4	78	14			96

Number of permits issued 11

Number of permits returned 9 (82%)

Number of permits returned, fished 7

Number of permits returned, not fished 2

<sup>1</sup> Preliminary data.

<sup>2</sup> Number in parenthesis shows number of permits reporting harvest from that area.

Table 38. Yakutat recent historical subsistence harvest.<sup>1</sup>

Year	Chinook			Sockeye			Coho			Other
	A <sup>2</sup>	B <sup>3</sup>	C <sup>4</sup>	A	B	C	A	B	C	
1980	284	?	?	961	?	?	982	?	?	
1981	167	?	?	952	?	?	1,701	?	?	
1982	198	?	?	1,645	?	?	2,180	?	?	
1983	188	?	?	1,175	?	?	360	?	?	
1984	233	56%	416	890	56%	1,598	572	56%	1,021	
1985	230	52%	442	1,003	52%	1,929	59	7%	843	
1986	301	88%	342	2,357	88%	2,678	586	89%	658	92 Pinks
1987	372	92%	404	3,598	92%	3,911	883	80%	1,104	
1988	196	90%	218	2,119	90%	2,354	1,293	92%	1,405	99 Pinks; 64 Chums
1989	284	79%	359	3,537	79%	4,477	894	79%	1,131	220 Pinks; 49 Chums
Ave. <sup>5</sup>	269		364	2,251		2,824	714		1,027	
1990	355	81%	438	3,397	81%	4,194	804	81%	993	34 Pinks; 2 Chums
Deviation*										
	+32%		+20%	+51%		+49%	+13%		-3%	

<sup>1</sup> Data available only for years starting in 1980

<sup>2</sup> A=Actual recorded harvest.

<sup>3</sup> B=Percent of permits returned.

<sup>4</sup> C=Extrapolated total harvest estimate; (i.e. C=A divided by B).

<sup>5</sup> 6-year average from 1984 through 1989.

\* Deviation from a 10-year average.

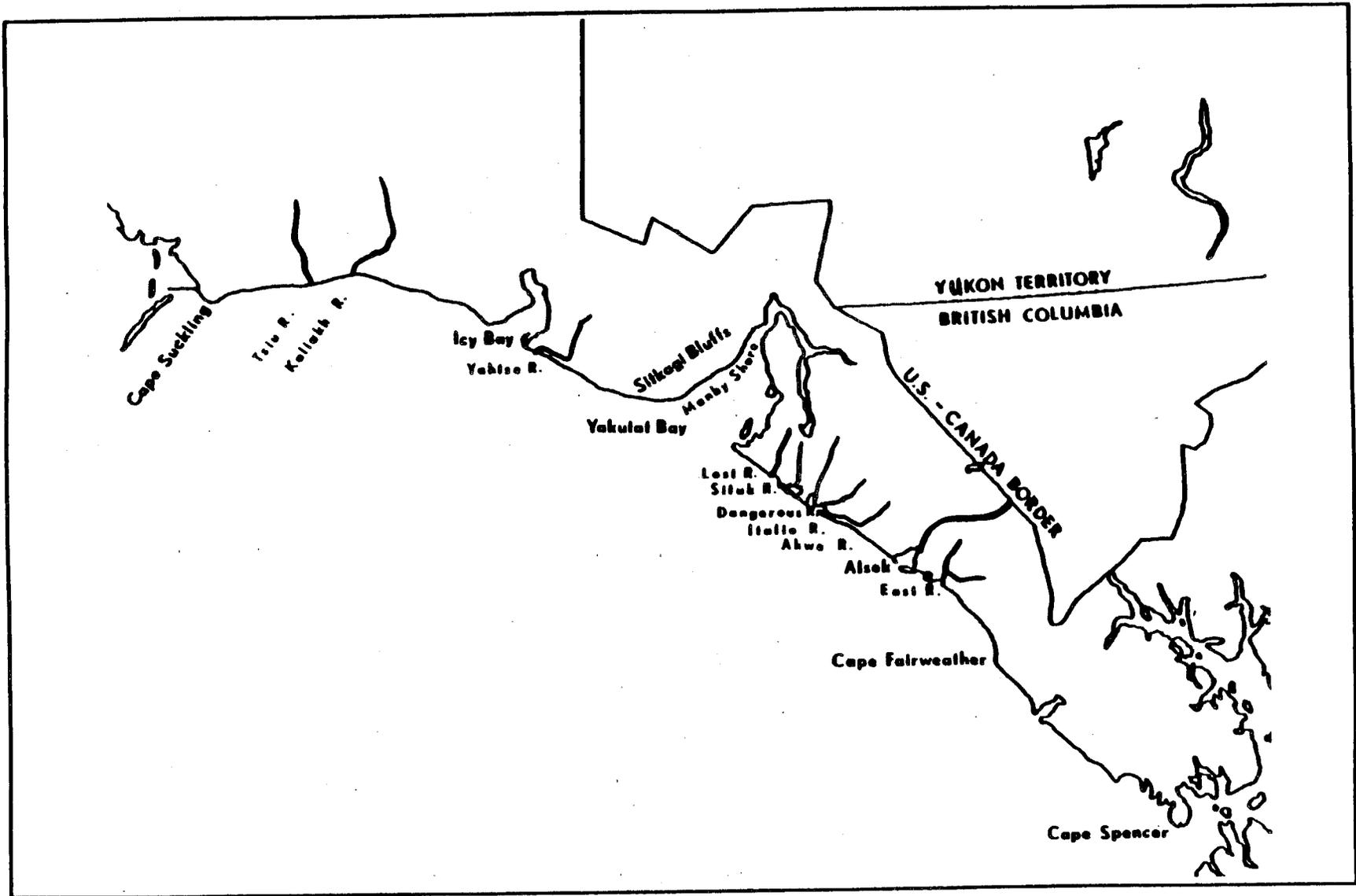


Figure 1. Yakutat Management Area (Cape Suckling to Cape Fairweather).

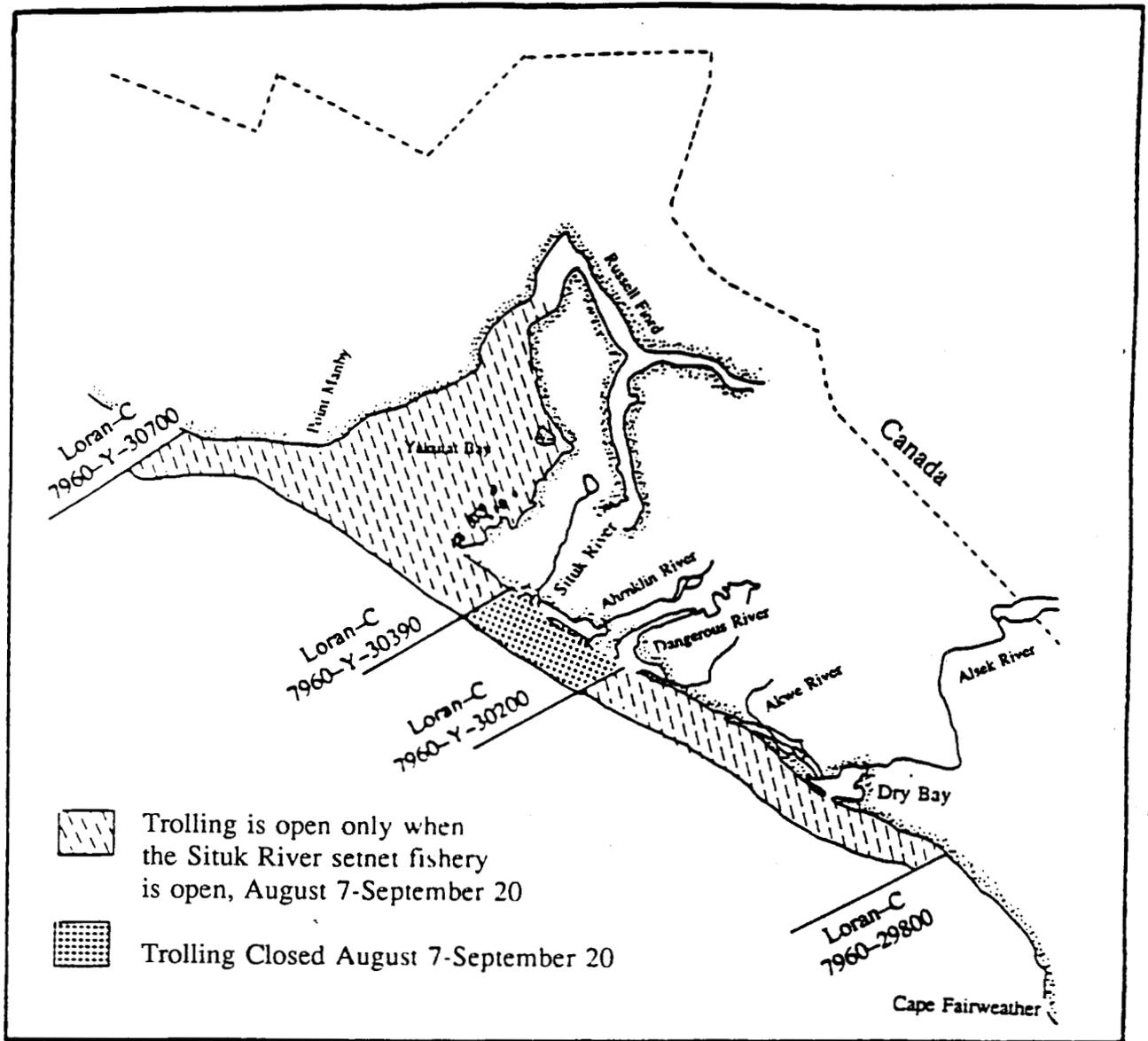


Figure 2. Yakutat area troll closures

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