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**SUBSISTENCE AND PERSONAL USE  
SALMON HARVEST ESTIMATES,  
YUKON AREA, 1995**

by

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and

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## ABSTRACT

The Yukon Area includes all waters of the Yukon River and its tributaries in Alaska and all coastal waters from Canal Point light southward to Naskonat Peninsula. Successful management of Yukon Area fishery resources is dependent upon accurate estimates of subsistence harvests. Estimates of subsistence salmon harvests in the Alaska portion of the Yukon River drainage have been documented by the department since 1961. More recently, subsistence salmon harvests within Yukon Area coastal communities and personal use salmon harvests have also been estimated. Harvest estimation methods have varied throughout the years. The number of salmon harvested in the 1995 Yukon Area subsistence and personal use fisheries were estimated from survey and fishing permit programs. Additionally, the number of fish given to the public for subsistence use from various test fish projects throughout the drainage are also documented in this report.

The majority of villages within the Yukon Area have no regulatory requirements to report their subsistence salmon harvest. To estimate the salmon harvest from these villages the department has implemented a voluntary survey program. The 1995 survey program utilized subsistence catch calendars, postseason household interviews, and postseason household telephone interviews and postcards. Stratified random sampling techniques were used to select Yukon Area households to be interviewed during the 1995 postseason survey. Based on information collected from 1,011 households that were contacted by surveyors in 1995, an estimated total of 41,304 chinook *Oncorhynchus tshawytscha*, 115,025 summer and 53,344 fall chum *O. keta*, and 8,042 coho salmon *O. kisutch* were harvested by subsistence fishermen in the survey portion of the Yukon Area.

A portion of the Yukon Area requires subsistence or personal use fishermen to obtain an annual household permit prior to fishing. In these areas, the fishermen are required to document their harvest on the household permit. Permits are to be returned to the department with household harvest information. A total of 519 subsistence and personal use permits were issued in 1995. A total of 508 subsistence and personal use permits had been returned to the department as of February 29, 1996. A total of 298 permit holders indicated they fished in 1995. The reported permit harvest was 7,830 chinook, 13,474 summer chum, 71,068 fall chum, and 19,245 coho salmon. This does not include Stevens Village household permit harvest information. In Stevens Village the permit information was used to supplement the postseason survey.

From the test fishery projects throughout the drainage, a total of 1,885 chinook, 8,364 summer chum, 7,311 fall chum, and 1,507 coho salmon were given away to households for subsistence use. Residents of the villages of Emmonak, Kotlik, Pilot Station, Mountain Village, Galena, Tanana, Fort Yukon, Manley, and Nenana were the primary recipients of the fish given away from the test fisheries.

Combining survey, permit, and test fishery information, an estimated total of 51,019 chinook, 136,863 summer and 131,723 fall chum, and 28,794 coho salmon were harvested for use in the communities from subsistence, personal use, and test fisheries in 1995. There was an estimated 1,428 subsistence and personal use Yukon Area fishing households in 1995.



## INTRODUCTION

The Yukon Area includes all waters of the Yukon River and its tributaries in Alaska and all coastal waters from Canal Point light southward to Naskonat Peninsula. For management purposes, the Yukon Area is divided into seven districts, a coastal district and six districts within the Yukon River drainage (Figure 1). The Lower Yukon Area (Coastal District and Districts 1, 2, and 3) consists of the coastal waters of the Yukon Area and that portion of the Yukon River drainage from its mouth to Old Paradise Village (Yukon River mile 301). The Upper Yukon Area (Districts 4, 5, and 6) consists of that portion of the Yukon River drainage upstream of Old Paradise Village to the Canadian border.

Effective management of Yukon River salmon runs requires knowledge of the number of salmon harvested in the subsistence and personal use fisheries. Although all five species of Pacific salmon are harvested in Yukon River fisheries, chinook *Oncorhynchus tshawytscha*, chum *O. keta*, and coho *O. kitsutch* salmon compose the majority of subsistence and personal use harvests. The chum salmon return is made up of an early (summer chum) and a later (fall chum) salmon run. Information concerning subsistence salmon fishery harvests within the Alaskan portion of the Yukon River drainage has been collected by the Alaska Department of Fish & Game (department) since 1961 (ADF&G 1995; Holder and Hamner 1995). The documentation of the subsistence harvest prior to 1961 is limited. Early exploration reports attest to the importance of subsistence salmon harvests to the people living in the Yukon River drainage (Zagoskin [1847] 1967; Allen 1887). Historical accounts documented that large salmon harvests were used to support dogs which were used for transportation, packing, and as draft animals for hauling wood (Richardson [1900] 1964; Gilbert and O'Malley 1921). Beginning around 1930, the airplane began replacing the sled dog as the primary mail and supply carrier, which contributed to a gradual reduction in the need for subsistence salmon. Additionally, the introduction of snow machines during the early to mid 1960s accelerated the decline of sled-dog use.

Subsistence salmon catches declined through the 1970s as additional employment opportunities, including commercial fishing activities, became available to rural residents (ADF&G 1985). In the Upper Yukon Area it was legal to sell subsistence caught salmon roe from 1974 through 1977. It is likely that this accounted for the increased subsistence harvest levels observed in those years. Beginning in the early 1980s, there was a renewed interest in the recreational use, as well as the racing, of sled dogs. As the number of dogs increased throughout the drainage, the corresponding subsistence salmon needs also increased. Recent survey information indicates that the practice of keeping sled dogs is much more common in the Upper Yukon Area than in the Lower Yukon Area (Holder and Hamner, in prep). The number of dogs within a household is considered to be a major factor effecting the amount of subsistence salmon that household needs.

In addition, an increasing human population within the Yukon River drainage has also contributed to an increase in subsistence salmon needs. Excluding the greater Fairbanks area, population 74,000 in 1990 (Williams et al. 1991), 40 communities, with a combined population

of approximately 11,000 people of primarily Yupik Eskimo and Athabaskan Indian descent, are located within the Yukon Area.

### *Subsistence and Personal Use Salmon Fishery Description*

The primary fishing gear that Yukon Area fishermen use to harvest subsistence or personal use salmon includes drift gillnets, set gillnets, and fish wheels; however, the degree to which one or the other is more prevalent varies from village to village. Gillnets are used throughout the Yukon Area, fish wheels are only used in the upper Yukon River drainage and beach seines are occasionally used in tributaries of the Yukon and Tanana Rivers.

Subsistence and personal use salmon fishing occurs from late May through early October, although this varies within the drainage. Fishing activities are based either from a fish camp or a home village. Subsistence salmon fishing is often undertaken by extended family groups representing two or more households. These groups, as well as members of individual households, cooperate to harvest, cut, preserve, and store salmon for subsistence use. Some people from communities not located along the mainstem Yukon River, such as Shageluk and Birch Creek, may operate fish camps along the mainstem Yukon River.

A major portion of the human-food-fish are frozen, dried, or smoked for later consumption. Chinook salmon are used primarily for human consumption. The use of chinook salmon for dog food is rare, although it does occur in years of high abundance of small chinook salmon "jacks". Summer chum, fall chum, and coho salmon are also used for human consumption. However, a relatively large percentage of these salmon are also harvested to feed dogs. During the summer season, a relatively small percentage of the subsistence salmon harvest is fed to dogs as whole fresh salmon. Dogs are also fed scraps that become available during the processing of salmon. The majority of the summer chum salmon are dried for winter supplies of dog food. Additionally, fall chum and coho salmon are commonly "cribbed" near "freeze up" for dog food. Cribbing fish is the freezing of salmon by the natural air temperature for later winter use. There is usually little wastage of fish taken for subsistence purposes, although damp weather may cause some drying fish to spoil. Personal use harvested fish can only be harvested for consumption as food or for use as bait by that individual or his immediate family. Personal use salmon cannot be used for dog food.

Many individuals who fish for subsistence or personal use purposes also fish salmon commercially. During the Yukon Area commercial salmon fisheries, some restrictions on subsistence salmon fishing are required to assist in the enforcement of commercial fishing regulations. However, during the salmon fishing season, substantially more time is allowed for subsistence salmon fishing than for commercial fishing. Throughout most of the history of the Yukon Area commercial salmon fishery, commercial and subsistence fishing periods coincided. However, in 1993 regulations were adopted by the Alaska Board of Fisheries which separated subsistence and commercial salmon fishing times in Districts 1, 2, 3, and in the lower portion of

District 4 (Subdistrict 4-A). In these areas, subsistence salmon fishing is allowed from 12 hours after the closure of a commercial period until 18 hours before the start of the next commercial salmon period.

Since the early 1960s, in the upper portions of District 4 (Subdistricts 4-B and 4-C) and in Districts 5 and 6 during the commercial salmon fishing season, an attempt was made to manage the subsistence salmon fishing periods to coincide with commercial salmon fishing periods. Additional subsistence-only salmon fishing periods are occasionally allowed between commercial fishing periods. Twenty-four hours prior to and 24 hours following the commercial fishing season, subsistence salmon fishing is allowed seven days per week in Districts 1, 2, 3, and 4 and in the majority of District 5. Since 1988, in the majority of District 6, the Tanana River drainage, subsistence and personal use fishing is allowed for two 42-hour periods per week throughout the fishing season.

### *History of Survey and Permit Methodologies*

Survey and permit information has been used to provide for Yukon Area subsistence and personal use harvest estimates. Subsistence salmon harvest survey information has been collected through the use of personal or telephone interviews, catch calendars, and mailed questionnaires. Survey methodologies prior to 1988 were varied, although they all had in common the basic premise that surveyors were to census all known *fishing families* in a village. A fishing family was defined as groups of households which fished together. Subsistence Division standardized survey methodology beginning in 1988. The survey methodology identified all households in each community and stratified the households into those that *usually fish* and those that *usually do not fish* (Walker et al. 1989). Subsistence harvest information gathered through these surveys was expanded for non-contacted fishing households to provide an annual community estimate.

The stratification methodologies developed by the Subsistence Division in 1988 were refined by the Commercial Fisheries Management and Development Division in 1990 and 1991 to improve the accuracy and precision of the subsistence harvest estimate (Holder and Hamner 1991, Bromaghin and Hamner 1993). In 1990, households were classified into one of five harvest categories based upon their level of subsistence harvest estimates in 1988 and 1989. A stratified random sample (Cochran 1977) is drawn from the strata formed by combinations of village and harvest levels. The current method assumes that households tend to harvest the same level in the current year as they have historically. The sampling design more intensively samples the households with the historically heaviest harvest.

In areas where subsistence and personal use salmon fishing permits are required, the department depends on the returned permits for harvest information. Fishing permits have been required for three sections of the Upper Yukon Area since the early 1970s: (1) the Yukon River near the Yukon River Bridge between Hess Creek and the Dall River; (2) the upper portion of District 5 between the upstream mouth of Twenty-Two Mile Slough and the U.S./Canada border; and (3)

the Tanana River drainage near Fairbanks. Beginning in 1988, regulations have required salmon fishing permits for District 6, the entire Tanana River drainage.

### *History of the Personal Use Fishery Regulations*

Personal use fishing is very similar to subsistence fishing, but it is a lower priority use of the resource. Due to changes in the state subsistence law in 1986, which limited subsistence hunting and fishing to rural Alaskan residents, the Board of Fisheries created personal use salmon fisheries in the Yukon Area for non-rural state residents. The regulation directed that fishermen residing within non-rural areas be considered personal use fishermen regardless of where they fished. Fishermen residing in rural areas were considered subsistence fishermen regardless of where they fished. The residents of the greater Fairbanks area were considered non-rural fishermen. Initially, only a fall chum salmon personal use fishery was implemented in 1987. Under the statutes and regulations that were in effect from 1988 until July 1, 1990, Alaska residents who lived in non-rural areas were prohibited from participating in all subsistence fisheries, and subsistence fisheries were limited to rural areas. During that time, non-rural residents harvested salmon under personal use fishing regulations which could apply to both rural and non-rural areas.

In 1988, personal use fisheries in the Yukon Area were created for all salmon species. However, in the *McDowell* case, which took effect July 1, 1990, the Alaska Supreme Court struck down the rural residency requirement for subsistence participation, ruling that the Alaska Constitution prevented allocations of fish and game to people based on the location of their residence. The result was that every resident of the State of Alaska became eligible for subsistence fishing and, according to a lower court ruling, subsistence fisheries were not limited to rural areas. In effect, this decision made the personal use category obsolete in the Yukon Area. During the 1991 and the 1992 seasons, all fishermen fished under subsistence fishing regulations and no Yukon Area personal use salmon fishing permits were issued.

During a special session in 1992, the legislature revised the subsistence law to once again allow the Boards of Fisheries and Game to divide the state into subsistence and nonsubsistence areas. Inside the nonsubsistence areas, personal use fishing was authorized and the subsistence regulations for these areas were repealed. The Fairbanks Nonsubsistence Area, which is centered around the Fairbanks North Star Borough, was the only nonsubsistence area created by the Joint Boards of Fisheries and Game in the Yukon River Area. The Fairbanks Nonsubsistence Area included the Tanana River drainage above the confluence of the Wood River upstream to the mouth of the Volkmar River on the north bank of the Tanana River and to the mouth of the Johnson River on the south bank of the Tanana River. During the 1993 season, the personal use fishery regulations were implemented in this area. In October 1993, the state superior court ruled in the *Kenaitze* case that the nonsubsistence area provision of the 1992 subsistence law was unconstitutional because it discriminated between different areas of the state. Although the state was initially granted a stay of the effect of that decision pending appeal to the supreme court, the

stay was vacated on April 11, 1994. With the stay lifted, the state was required to provide for subsistence fishing in nonsubsistence areas during the 1994 season. All Alaskan residents were again qualified as subsistence users during the 1994 fishing season and, although available, no personal use permits were issued.

On May 9, 1995, the Alaska Supreme Court reversed the superior court, upholding the constitutionality of the nonsubsistence areas. Once again, the Joint Boards of Fisheries and Game adopted regulations that affected the Fairbanks nonsubsistence area. Within nonsubsistence areas, no subsistence fishing is allowed, and only personal use fishing regulations are applicable in nonsubsistence areas. The new regulation primarily affected salmon fishermen within Subdistrict 6-C. Subdistrict 6-C falls entirely within the boundaries of the Fairbanks Nonsubsistence Area. When the Subdistrict 6-C salmon fishery is managed under personal use regulations, it has a fishery harvest limit of 750 chinook, 5,000 summer chum, and 5,200 fall chum and coho salmon combined. When the Subdistrict 6-C harvest limits are reached, the personal use fishery will be closed.

### *History of Commercial-Related Harvests*

Distinguishing between subsistence and commercial harvests has been made more difficult with the development of the Upper Yukon Area commercial salmon roe fisheries, which began in 1978. A stripped female refers to the female carcass that is left over after the roe has been removed and sold commercially. Stripped carcasses are a byproduct of the commercial roe fishery, and are believed to replace salmon that would have otherwise been harvested under subsistence fishing regulations to meet subsistence needs.

Beginning in 1990, salmon that were taken commercially but provided both a subsistence and a commercial use were assigned to a special category called the *commercial-related* salmon harvest. Subsistence harvest is defined as those salmon harvested under subsistence fishing regulations. Commercial-related salmon harvests may be summed with the subsistence harvest to provide an estimate of total subsistence utilization. The commercial-related harvests may also be summed with the commercial sale of fish in the round to provide an estimate of total commercial harvest.

The primary commercial product produced from the Subdistrict 4-A fishery is summer chum salmon roe. Since 1981, the number of male and female summer chum salmon carcasses available from the Subdistrict 4-A commercial roe fishery has been more than the Subdistrict 4-A historical subsistence harvest levels. The department estimates the number of male and female summer chum salmon commercially harvested from the pounds of roe sold. The method expands the roe to estimate fish by using the estimated pounds of summer chum salmon roe per female and the sex ratio observed during each commercial period. It is probable that the unmarketable Subdistrict 4-A male and female summer chum salmon carcasses have simply replaced a portion of the subsistence harvest in this area. The estimated number of male summer chum salmon

taken during a Subdistrict 4-A commercial fishing period are included in the commercial-related harvests. The male summer chum salmon harvested in the commercial salmon roe fisheries in Subdistrict 4-A are believed to be either sold in the round or retained for subsistence use.

The number of Subdistrict 4-A commercial-related summer chum salmon available for subsistence use was not estimated by surveys prior to 1983. It is believed that many of the commercial-related salmon harvests were reported as subsistence harvests in these years. In 1984, the Subsistence Division conducted subsistence surveys in the villages of Kaltag and Nulato. The villages of Kaltag and Nulato are within the upper portion of Subdistrict 4-A. These surveys attempted to exclude the commercial summer chum salmon used for subsistence purposes from the subsistence harvest. For this reason, summer chum salmon harvest estimates for Kaltag and Nulato in 1984 were below previous years' harvest estimates. Survey questions were not structured to address the commercial-related harvest during 1985. For 1986 through 1989, Subdistrict 4-A subsistence surveys were conducted to estimate both the number of summer chum salmon taken under subsistence fishing regulations, considered subsistence harvest, and those salmon available for subsistence use as a byproduct of the commercial roe fishery, the commercial-related harvest. Beginning in 1986, the commercial-related summer chum salmon were excluded from the Subdistrict 4-A subsistence harvest estimates in reports.

Beginning in 1990, commercial fishermen in Subdistrict 4-A have been required, by regulation, to report the number of fish harvested to produce the roe sold on fish tickets. Prior to 1992, usage of the commercial-related salmon harvest was not asked in surveys. An additional series of questions were asked of Subdistrict 4-A commercial fishermen during the 1992 survey and continued in 1993 and then again in 1995, to address the usage of the commercial-related harvests. The extra survey questions were initiated to investigate the discrepancies between the number of fish the department estimated being harvested in the Subdistrict 4-A summer chum salmon roe fishery and the number of fish commercial fishermen reported harvesting on fish tickets. In 1994, regulations for the Anvik River Management Area were adopted by the Board of Fisheries which allowed a commercial roe fishery on the Anvik River. The Anvik River is within Subdistrict 4-A and was managed as a terminal harvest commercial fishery since 1994. The Anvik River commercial roe fishery has made additional salmon carcasses available to the area's subsistence users.

## METHODS

Survey and permit information are the two primary sources of information used to estimate the number of salmon harvested in the Yukon Area subsistence and personal use fisheries. Additional salmon are harvested by test fisheries which are made available to subsistence users. Salmon given away by these test fisheries are documented by project, and the information from these three sources is combined to produce Yukon Area harvest estimates. However, it should be noted that many Stevens Village residents fish in both permit and non-permit areas. Stevens Village subsistence salmon harvest estimates are based on the survey information which

incorporates the permit information. Stevens Village permit information must be removed from the permit total to avoid double-counting when combining these two harvest estimates.

### *Subsistence Survey*

The 1995 survey program was designed to provide an accurate estimate of the number of salmon harvested by subsistence fishing households in surveyed villages. The primary components of the survey program were subsistence catch calendars, personal interviews, and telephone or postal surveys.

The household list was updated for the 1995 survey from the survey information collected in 1994. Some households are removed each year as information is obtained that they have moved out of the surveyed communities and as information is obtained about new households having moved into the communities, they are added to the survey's household database. Harvest information from calendars returned by households that were not selected in the 1994 survey are recorded to ensure households were placed in the correct strata for the 1995 survey. Prior to the 1995 survey, the department identified 112 households to be removed and 155 new households to be added to the database.

The department mailed subsistence catch calendars preseason to 1,196 Lower and 1,046 Upper Yukon Area fishing households. The Lower Yukon Area calendars began with mid-May and continued through the first half of September (Appendix C.1). The Upper Yukon Area calendars began with June and extended into the month of October. The calendars were made available to fishermen to record their daily salmon catch by species. Enclosed with the 1995 calendar was a letter of appreciation for the fisherman's participation in the 1994 subsistence survey. The letter included a table that summarized the 1994 subsistence and personal use salmon harvest by village (Appendix C.2). Fishermen were asked to record on the calendar all salmon harvested each day. Harvest information from calendars returned prior to or during the subsistence survey were used to assist in the survey of the household. In an effort to improve calendar returns, posters were sent to each village post office to remind fishermen to complete their catch calendars before surveyors arrived. Radio announcements were also broadcast in the area prior to the surveyor's arrival in the village.

A tagging study conducted in 1986 (Kerkvliet 1986) indicated that residents of the Yukon Area coastal villages of Hooper Bay and Scammon Bay harvest chinook and chum salmon bound for the Yukon River and Norton Sound. Since 1992, the department has included these coastal villages into the Yukon Area subsistence survey.

A list of Yukon Area households located in surveyed communities formed the sampling frame for the stratified random sampling program. Each household on the list was assigned to a subsistence harvest category. These harvest categories consisted of: unknown, do not fish, light, medium, or heavy. Households which had no previous harvest information available for placing

them into a harvest classification were categorized as unknown. Households that had historical harvest information were placed in a harvest category based upon their average total annual salmon harvest from 1988 through 1994. In the Lower Yukon Area, an average harvest of 1 to 200 salmon was considered light, a harvest of 201 to 500 salmon was considered medium, and a harvest greater than 500 salmon was considered heavy. In the Upper Yukon Area, an average harvest of 1 to 100 salmon was considered light, a harvest of 101 to 700 salmon was considered medium, and a harvest greater than 700 salmon was considered heavy.

A stratified random sample (Cochran 1977) of households was drawn from the stratified population, with strata being defined by the combinations of community of residence and harvest category. In general, stratum sample sizes were established based upon the level of harvest: all of the households in the medium and heavy categories were identified to be sampled; 30 percent of the households in the light category were identified to be sampled; 10 percent of the households in the do not fish harvest category were identified to be sampled; and 20 percent of the households in the unknown harvest category were identified to be sampled during the survey. However, to increase the accuracy or to ensure an adequate sample size, sample sizes were increased for some categories within some villages. In Emmonak, Pilot Station, and Tanana, 30 percent of the households in the do not fish harvest strata and 50 percent of the households in the light harvest strata were identified to be sampled. Additionally, in Holy Cross, 50 percent of the households in the light harvest strata were identified to be sampled. All households in survey communities with 35 or fewer households were to be sampled. Further, if the stratum sample size obtained using these guidelines was less than five households, the sample size was increased to a minimum of five, or the stratum size.

Surveyors were provided with project orientation and were required to attend a minimum half-day of instruction prior to conducting the surveys. Appendix C.3 is an example of the 1995 interview form surveyors used. Each interview determined if the household participated in the 1995 subsistence salmon fishery, the number of salmon harvested by species, the number of salmon processed for their own household's use by species, how many other households assisted in the salmon harvest, which other households the harvest was shared with, the number of salmon used that were a byproduct of a commercial fishery, the primary gear type used, and the location of the subsistence salmon harvest.

All households surveyed were asked if the household received any salmon from any other subsistence or commercial fisherman's household, or from test fish projects. The survey concentrated on chinook, chum, and coho salmon, but households were also asked about numbers of pink salmon and other miscellaneous non-salmon species that may have been harvested to meet subsistence needs. The survey questions also included the number of people and dogs in the household and the number of chum and coho salmon fed to dogs. Households indicating they had not met their subsistence salmon needs were asked the reason why they were unable to get enough salmon.

An example of the supplemental Subdistrict 4-A survey form is in Appendix C.4. This survey is used to help document the usage of commercial-related harvests. It asks questions to determine the fisherman's estimate of the number of salmon they harvested commercially, the amount of

time spent fishing commercially, the method and amount of time spent throwing back males, and the end use of the commercially-related byproduct of the roe fishery. The surveyor has the amount of salmon taken to produce the roe sold as reported on fish tickets and the department estimates of the numbers of fish harvested by individual fishermen, based on roe weight samples taken during the fishery, to help evaluate the fishermen's estimate.

Telephone interviews were attempted for households that were to be surveyed but were not contacted personally by the surveyors during the village visits. A survey questionnaire with a postage-paid return envelope was mailed to the households that needed to be surveyed but were not contacted during the personal interviews or by telephone. The collection of personal and telephone interview responses was assumed to constitute a stratified random sample. Estimation was performed using classical, stratified random sampling methods (Cochran 1977). During data analysis, if a strata contained only one household contact the district's variance was used to estimate the stratum's variance. In addition, the district's mean was used to estimate a strata mean if no households were contacted in the strata.

### *Subsistence and Personal Use Permits*

Annual subsistence or personal use fishing household permits are required of resident individuals which desired to fish in permit required areas. Subsistence fishing permits are required in areas primarily located within District 5 and the lower portion of District 6 (Subdistricts 6-A and 6-B) of the Upper Yukon Area. Subsistence harvests within these areas are determined by the harvest reported on permits.

In 1995, personal use salmon permits were required in Subdistrict 6-C in that portion of the Tanana River which falls within the Fairbanks Nonsubsistence Area (Figure 2). Permit applications for the 1995 season were mailed to all 1994 rural community permittees who returned their permit. An informational letter (Appendix C.5) accompanied the permit application. The informational letter explained how to apply by mail for the 1995 permit and included the schedule of the preseason village permit issuing trips. Permits were issued during these preseason permit issuing trips in the villages of Nenana, Manley, Minto, Central, Circle, Delta, Tok, Dot Lake, Tanacross, Tetlin, Northway, and Eagle. Permits were also issued in person or by mail throughout the season from the Fairbanks, Tok, and Delta department offices. Appendix C.6 is an example of the 1995 household application and permit form for subsistence fishing in the Yukon and Kantishna Rivers. Appendix C.7 is an example of the 1995 household application and permit for subsistence salmon fishing in the Tanana River and for subsistence pike fishing in the Tolovana River drainage. Appendix C.8 is an example of the 1995 household application and permit for personal use salmon fishing. Other types of household permits issued in the Tanana River drainage include subsistence and personal use whitefish and suckers.

Permit holders were required to keep a record of their daily fish harvest on the permit. Harvests were tabulated postseason for all permit holders who returned their permit or verbally reported

their harvest information. Most permits issued had an expiration date of October 15, 1995, with the exception of Tolovana River pike permits, Kantishna River salmon permits, and Upper Tanana River permits, all of which expired on December 31, 1995.

Permittees were required to return the permit to the department within 10 days of the expiration of the permit. Reminder letters were used in an attempt to improve the accuracy of the permit information and to improve the percentage of compliance. Fishermen who had not reported their required 1995 harvest information were sent a reminder letter on October 25, 1995 (Appendix C.9). On November 14, 1995, a second reminder letter was sent to all permittees who had still not reported their required harvest information. Fishermen who had complied with the weekly verbal reporting requirement at least once during the fishing season but failed to return their permit were sent first and second reminder letters expressing appreciation for the verbal reporting inseason, and asking them to confirm their season's total harvest (Appendix C. 10). The Tolovana River drainage and Upper Tanana permit holders were sent their first reminder letter on January 5, and a second reminder letter was mailed on January 22, 1996.

### *Test Fishery*

Test fishery programs are annually occurring projects in which salmon are caught in locally used gear types (drift gillnets, set gillnets or fish wheels), and the catch or catch per unit effort (CPUE) is compared within and between years to provide information on run timing, species composition, and relative abundance. Salmon harvested in test fisheries within the Yukon River were frequently given to the public. Salmon harvests given away from test fisheries are included in village subsistence harvest estimates since they are assumed to replace salmon which would have been obtained through more traditional fishing activities.

## **RESULTS**

A total of 51,019 chinook, 136,863 summer chum, 131,723 fall chum, and 28,794 coho salmon were estimated to have been harvested in the Yukon Area by 1,428 subsistence and personal use fishing households. These estimates include salmon given away by the test fish program in 1995. The permit harvest information is based on permits returned as of February 29, 1996. Table 1 summarizes the 1995 Yukon Area surveyed subsistence salmon harvests, the subsistence and personal use permitted salmon harvests, harvests from test fisheries given away, and related information by community of residence.

## *Subsistence Survey*

In 1995, the survey database contained 2,442 households in 34 surveyed Yukon Area village communities. The stratified random sampling design identified 1,113 households to be surveyed in 1995. Surveyors from the Commercial Fisheries Management and Development Division traveled to villages between September 8 and November 10, 1995 (Table 2). Surveyors attempted to interview a member of each household identified in the sample, preferably the primary fisherman. A total of 1,011 households, or 91 percent of the households identified to be sampled, were contacted in 1995. A total of 146 calendars, or 7 percent of the 2,242 distributed calendars, were either picked up by surveyors during the interviews or were mailed back to the department. Table 3 presents a summary of the total number of households, the sample size, and the contact rate for each stratum. The contact number does not include households which declined to participate in the personal interview. Survey questionnaires that were mailed out and returned with incomplete answers to the questions were not suitable for inclusion in the sample.

A total of 1,130 households, or 46 percent of the total 2,442 Yukon Area households, were estimated to have participated in a subsistence salmon fishery (Table 4). Of the 586 households that reported their primary gear type and fished in surveyed villages, 52 percent used set gillnets, 37 percent used drift gillnets, 10 percent used fish wheels, and 1 percent used other gear types (Table 5). In 1995, a total of 9,229 people were estimated to have resided in the 34 surveyed villages (Table 6).

Salmon harvested by the 1,011 households sampled in the surveyed villages was estimated to total 41,304 chinook, 115,025 summer chum, 53,344 fall chum, and 8,042 coho salmon (Table 7; Appendices A.1 through A.4). Tables 8 through 11 identify subsistence salmon harvest estimates by surveyed village and by fishing location. Appendices B.1 through B.4 document the annual subsistence salmon harvest from 1984 to 1995 by species and by village of residence.

The 1995 survey included questions concerning 11 selected miscellaneous fish species harvested by the surveyed villages and are listed in Table 12. Of these, pink salmon, whitefish, pike, and sheefish are expanded to estimate total Yukon Area harvests for the surveyed villages, while the remainder are reported harvests that are unexpanded. Whitefish are the most utilized miscellaneous species. In 1995, whitefish were distinguished between 33,239 large whitefish and 25,421 small whitefish. Other highly utilized species in 1995 include an estimated 17,646 pike and 12,186 sheefish. In 1995, the pink salmon harvest was negligible due to it being a low abundance year in the two-year cycle. Pink salmon harvest estimates totaled 1,061 fish, most of which were harvested by communities within the Coastal District.

The estimated subsistence use of salmon by species are organized by community of residence and catch strata in Table 13. The 1995 Yukon Area estimated numbers of salmon used for subsistence purposes totaled 43,123 chinook, 290,071 summer chum, 82,124 fall chum, and 8,502 coho salmon, and includes salmon harvested, by fishing and non-fishing households, during subsistence activities and those retained from commercial harvests. An estimated total of

687 chinook, 101,805 summer chum, 21,473 fall chum, and 260 coho salmon were retained from commercial catches and used for subsistence purposes by Yukon Area surveyed households (Table 14). Of the estimated number of salmon used for subsistence purposes, 96, 40, 65, and 95 percent of the chinook, summer chum, fall chum, and coho salmon, respectively, were obtained from the subsistence fishery.

In the surveyed communities, a total of 5,284 dogs were estimated to be owned by an estimated 1,484 households (Table 15). The households contacted used an estimated 203,093 summer chum, 60,730 fall chum, and 4,344 coho salmon taken from both subsistence and commercial salmon harvests that were retained for dog food (Table 16).

A total of 207 Yukon Area surveyed households said they did not meet their subsistence salmon needs in 1995. Table 17 categorizes the reasons households gave why their subsistence needs were not met. Appendix A.12 provides specific, individual responses given by the surveyed households. Twenty-one percent of the surveyed households said they did not meet their subsistence salmon needs in 1995, and only 21 percent of the reasons given for not meeting their subsistence needs included the categories: lost opportunity to fish due to high water or inclement weather; no helper to harvest more or process more fish; a poor run of fish; not enough fish caught; and still fishing at the time of the survey. These particular categories of responses are considered actual attempts to get enough subsistence salmon.

The 1995 survey included usage of the commercial-related summer chum salmon byproduct from the Subdistrict 4-A summer chum salmon roe fishery. Surveyors interviewed 56 of 66 Subdistrict 4-A commercial salmon fishermen that participated in the 1995 fishery. Table 18 separates the interview information from Subdistrict 4-A commercial fishermen into results for the Anvik River Management Area and the mainstem Yukon River commercial fishery. Forty-seven of the 56 Subdistrict 4-A mainstem commercial fishermen interviewed said they returned male summer chum salmon back into the river. Twelve out of the 20 Anvik River fishermen interviewed said they released male summer chum salmon caught in seine gear. Seine gear was the primary fishing gear used in the Anvik River commercial fishery. In that portion of Subdistrict 4-A within the mainstem Yukon River, the most common method of returning male summer chum salmon to the water was by a "live chute" manned by the operator or a crewmember on the fish wheel. The majority of Subdistrict 4-A commercial fishermen who returned male summer chum salmon to the water, did so for more than half of the time when they were actively commercial fishing.

The 56 Subdistrict 4-A commercial fishermen interviewed reported harvesting 257,729 male and female summer chum salmon to produce the roe sold. Reported usage of the 1995 commercial summer chum salmon carcasses included 27 percent retained for their own household use, 41 percent reported given away to other households, 11 percent sold or bartered to other households, 16 percent reported as lost to spoilage, and 5 percent unknown (Table 18 and Appendix A.13).

## *Subsistence and Personal Use Permits*

A total of 532 subsistence and personal use household permits were issued during the 1995 fishing season. This total includes 41 households that obtained two permits in order to fish in two different permit areas. Most of these two-permit fishing households occurred in Minto where 27 individuals who were issued a household permit for the taking of salmon on the Yukon or Tanana Rivers also had a subsistence pike fishing permit for the Tolovana River drainage. Permit issuing began in mid-May when department representatives traveled to 12 interior villages and issued 125 permits. The majority of the remainder of the permits were issued either by mail or to individuals who applied for a permit in person at the Fairbanks, Tok, or Delta department offices. In 1995, Tolovana River subsistence pike fishing permits were issued for the calendar year since the majority of the subsistence pike fishing occurs during the winter.

Eighty percent of the permits had an expiration date of October 15, 1995, and 20 percent of the permits had an expiration date of December 31, 1995. Permit holders are required to return their permits within 10 days of permit expiration. Reminder letters were sent out on October 25, 1995, November 14, 1995, January 5, 1996, and January 22, 1996. Of those reminder letter dates, the percentage of permit holders that had returned their harvest information increased as follows; 39 percent, 66 percent, 84 percent, and resulted in an overall return of 98 percent. As of February 29, 1996, a total of 521 permittees had returned their harvest information by either returning the original permit, by communications over the telephone, or by filling out and returning one of the reminder letters.

The total 1995 fish harvests reported by subsistence and personal use permit holders was 9,058 chinook, 13,474 summer chum, 71,128 fall chum, and 19,279 coho salmon. Table 19 contains a summary of the number of fish harvested by permittee and by permit area. Table 20 contains the same information, but organizes it by the permittee's community of residence and by the drainage of the harvest. The 298 households that fished in permit areas were estimated to have operated the following primary gear types: 78 percent used set gillnets, 19 percent used fish wheels, and 3 percent used other gear types.

Historic subsistence permit harvest information is summarized in Appendices B.5 and B.6. During the 1995 fishing season, personal use salmon fishing permits were required in Subdistrict 6-C and in a portion of the upper Tanana River within the Fairbanks Nonsubsistence Area. Historical personal use harvest information is summarized in Appendices B.7 and B.8. Historical subsistence and personal use salmon carcass permit information for the fishery near the confluence of the Delta and Tanana Rivers from 1973 to 1994 is summarized in Appendix B.9. During deliberations on the Arctic-Yukon-Kuskokwim Region (A-Y-K) in 1994, the Board of Fisheries adopted regulations which closed the lower portion of the Delta River for the collection of salmon carcasses.

A total of 390 subsistence permits were issued, of which 255 households reported having 2,261 dogs. Of these households with dogs, 154 households indicated they fed whole fish to their dogs. Personal use permittees were not asked dog-related information because the fish harvested under

the personal use regulation in 1995 could not be fed to dogs. In 1995, subsistence permit fishermen reported harvesting 68,711 whole salmon which were fed to dogs or preserved for dog food. Salmon fed to dogs were not identified by species. Dog-related information obtained from permits, including the reported harvests by fishery and by community of residence, are presented in Table 21.

### *Test Fishery*

Table 22 reports fish given away from test fish projects. A total of 1,885 chinook, 8,364 summer chum, 7,311 fall chum, and 1,507 coho salmon were given away by these projects for subsistence use. Residents in the communities of Emmonak, Kotlik, Pilot Station, Mountain Village, Galena, Tanana, Fort Yukon, Manley, and Nenana were the primary recipients of these fish.

## DISCUSSION

### *Subsistence Surveys*

Subsistence salmon survey harvest estimates presented in this report are not strictly comparable to estimates obtained in some previous years. Commercially harvested fish retained for subsistence purposes were included in the estimates of subsistence harvests prior to 1988. Surveys conducted prior to 1979 were conducted preceding the completion of the fishing season and undoubtedly documented harvest information for only a portion of the later running fall chum and coho salmon. Additionally, the sampling design and questionnaire have changed periodically throughout the history of the program (Brannian and Gnath 1988; Holder and Hamner 1990; Holder and Hamner 1991; Bromaghin and Hamner 1993). In 1995, harvest information from the village of Shageluk was included within District 3. Prior reports include Shageluk village harvests within District 4.

During the personal interviews, surveyors attempted to interview an adult member of the household, preferably the primary fisherman. The quality of the harvest estimate is dependent upon the collection of complete and accurate information. Both the surveyor and the surveyed individual contribute to the quality of the estimate. Surveyors have a responsibility to contact all the households to be surveyed, and to ensure that questions are asked consistently, clearly, and understandably, while fostering a cooperative atmosphere. The household member being interviewed has the responsibility to accurately answer the questions to the best of their ability.

Species identification of the harvest is also a concern. For example, fishermen in portions of the Upper Yukon Area use the term "silver" to refer to any bright silvery salmon. Both fall chum and coho salmon can remain relatively bright late into the season. It had been suggested that pictures of the different salmon species might be helpful in assisting individuals in providing

surveys with more accurate species numbers. In 1992, surveyors tried showing pictures of the different salmon species to assist fishermen in identifying the salmon harvested. Unfortunately, it was difficult for many fishermen to associate the salmon they harvested with the pictures. The most useful technique identified to date is for surveyors to know the local, common names of fish species. Surveyors are provided with the common species names for each village surveyed.

During the 1991 subsistence survey, only subsistence fishing households were asked dog-related information. Beginning in 1992, all surveyed households, whether they fished or not, were asked how many dogs they owned and the number of whole salmon fed to the dogs. The difference in asking all households for dog information accounts for the significant increase in the estimated number of dogs reported on surveys since 1992 (Appendix B.10).

A relationship may exist between water levels and the available opportunity and efficiency of fishermen. During the 1995 fishing season, water levels were below average on the Yukon River until late August in the upper portion and into September for the lower portion of the drainage (Appendix A.14).

The 1995 subsistence harvest of chinook and summer chum salmon was average when compared to the recent five-year 1990 to 1994 averages (Figure 3 and Figure 4). However, the summer chum salmon harvest was well below the five-year average from 1985 to 1990. This is primarily due to the artifact that the surveys prior to 1988 included commercial-related harvests (Figure 4). Summer chum salmon roe sold in Districts 4, 5, and 6 produced female carcasses which were retained from the commercial harvest and were available for subsistence use.

Fall chum salmon subsistence harvests were average in 1995 when compared to the previous five-year average (Figure 5). However, the 1995 harvest was well below the five-year average from 1985 to 1990. The 1990 to 1994 average contains the low harvest in 1992 which resulted from an early freeze up. The average also contains 1993 and 1994 harvests in which regulations restricting the fall season fishery resulted in reduced fishing opportunities. Coho salmon harvests were affected by the same fishing restrictions in 1993, but did not show a similar reduction in 1994 (Figure 6). A large coho salmon return was observed in 1994, and this, along with the lifting of the subsistence restrictions prior to the end of the later run timing of the coho salmon, probably contributed to an average harvest in 1994. The 1995 coho salmon harvest was substantially below the recent five-year average from 1990 to 1994 (Figure 6). The 1995 Yukon River coho salmon return appeared to be weak.

During the fall season, the Upper Yukon Area experienced warmer than normal temperatures in 1995. Warmer temperatures discouraged subsistence harvests early in the fall season run. Fishermen reported that salmon abundance dropped off sharply once cooler weather arrived. Fishermen were waiting for cooler weather prior to harvesting fish for dog food.

The commercial sale of fall chum salmon flesh experienced marketing difficulties in 1995. In 1995, the unusually poor flesh markets for fall chum salmon were reflected in the above average level of commercial sales of fall chum salmon roe in Districts 4 and 5. It appears that the larger than average commercial-related fall chum salmon carcasses available for subsistence users has

replaced a large portion of the subsistence harvest in these areas. Correspondingly, a below-historical-average subsistence fall chum salmon harvest was documented in Districts 4 and 5 during 1995, particularly in the village of Tanana.

The village of Tanana had a 1990 to 1994 five-year average subsistence harvest of approximately 32,000 fall chum salmon. This can be compared to the 1995 village of Tanana subsistence harvest of 14,000 fall chum salmon. Approximately 20,000 female fall chum salmon carcasses were available for the village of Tanana's subsistence use after the roe was extracted and sold. These carcasses are believed to have met some of the subsistence needs in 1995. When the village of Tanana's subsistence harvest is added to the commercial-related harvest, the subsistence use of approximately 34,000 fall chum salmon was within the historical range observed for the village.

The Subdistrict 4-A commercial roe fishery poses a special challenge to the program. With the large number of salmon harvested and the release of male chum salmon, it has been difficult to estimate the commercial-related harvests and the number of summer chum salmon carcasses used for subsistence in Subdistrict 4-A. Although the commercial-related fish carcasses are used for subsistence, these fish are considered a part of the commercial harvest. The Subdistrict 4-A interview questions (Appendix C.4) attempt to document the usage of the commercial-related harvest. Surveyors reported that many Subdistrict 4-A commercial fishermen had only a limited idea of the number of salmon they had taken to produce the roe sold. Subdistrict 4-A fishermen usually agreed with the department's expanded estimate based on the pounds of summer chum salmon roe sold. The illegal selling of dried salmon from unlicensed facilities could have influenced the answers some fishermen gave concerning the number of fish given away or sold to other households. Additionally, many fishermen also keep their dried fish in caches until spring when there is a greater demand for the salmon; therefore fishermen could not accurately say how many they had.

Since 1992, the subsistence survey began addressing the issue of what portion of the salmon harvest was used for the household or whether the household was given any additional salmon. When a household was given salmon, the surveyor asked them to identify the household which gave the salmon to them. The responses to these questions provided the department with an improved understanding of the interrelationship between the amount of salmon harvested and the amount shared between households. This information also assisted the department to ensure each fishing household was in the proper catch stratum since it is based on the amount of salmon caught and not the amount used.

Subsistence salmon total use, as estimated by the subsistence salmon survey, is conservative and is not used to estimate total utilization. The subsistence salmon survey estimates are based on the number of fish harvested by the household for their own use plus any subsistence fish given to them. The estimated use from the survey does not include the department's estimate of byproduct from commercial roe fisheries which are potentially available for subsistence use. Therefore, the survey estimates for use are considered minimum and are not used in estimating total subsistence utilization of each salmon species.

## *Subsistence and Personal Use Permits*

The subsistence fishing permit program is operating smoothly. The spring permit issuing trips and the ability to issue permits through the mail and at the local Tok and Delta department offices works well for most rural residents. However, more effort could be used to improve the weekly telephone permit harvest reporting requirement by personal use fishermen in Subdistrict 6-C and subsistence fishermen in that portion of Subdistrict 6-B three miles upstream of Totchaket Slough. In 1995, some Subdistrict 6-C subsistence salmon fishing permits had been already issued prior to the court ruling reversal which eliminated the Subdistrict 6-C subsistence fishery. The affected fishermen were notified by telephone and their permits were exchanged for personal use salmon fishing permits.

There seems to be confusion about where to report subsistence fish taken from a commercial period. The current regulatory reporting requirements for fish tickets from commercially harvested salmon include reporting commercially caught fish taken but not sold. A problem exists for both commercial fishermen and the department when attempting to clarify, at the time of the subsistence surveys or from returned permits, as to whether these fish were reported during the survey or on a permit, so as not to double count them during the final harvest estimates.

## *Test Fishery*

During the 1995 season, test fisheries were operated by various agencies throughout the drainage (Memorandum dated February 5, 1996, Busher 1996). These test fish are routinely given away and the numbers are documented as being received by the primary recipient villages listed in Table 22. Some test fish are given away to adjacent villages to those listed as the primary village recipient (Appendix A.11). In 1995 the Nenana test fish wheel operator did not document the subsistence fish given away from the test fish wheel.

## **RECOMMENDATIONS**

Although some surveyed individuals may accurately recall the numbers of salmon they harvested during the fishing season, others are only able to provide rough approximations. Minimizing this problem requires fishermen to accurately remember or record their salmon harvests. The department currently uses catch calendars which are mailed, preseason, to all Yukon Area households residing in surveyed communities. Catch calendars are distributed to encourage fishermen to record their harvests daily. Based on the low number of catch calendars returned to the department in 1995, it is recommended that some type of incentive program for returning completed catch calendars needs to be investigated.

Community household lists have formed the basis of the sampling frame since 1988 (Walker et al. 1989). Each year, surveyors have attempted to update the list by having knowledgeable individuals in each community review and update the list. This process alone is not sufficient to maintain a complete and accurate community household list due to the dynamic nature of most communities. The harvest estimates obtained from the sampling program are based on the most complete and accurate household list available. Households identified in the 1995 Permanent Fund list could improve the sampling frame for the 1996 survey. It is recommended that the 1995 Permanent Fund list be obtained for this purpose. Additional efforts need to be expended to minimize the size of the unknown use category by directing surveyors to contact any new households to have their use categorized for the following year's survey. Reducing the size of the unknown use category is an annual effort since this fluctuates with the identification of new households in any given community. In recent years, surveyors have been provided with lists of unknown harvest households to contact during the surveys.

Several village organizations were willing to share their community household lists which they had prepared for their own village census purposes. Where available, other community lists, such as telephone and utility lists, were also reviewed. One of the largest problems with the sampling frame is that, even though it is updated annually, nearly a full year passes from the update to when the next sampling occurs. Methods for updating and maintaining an accurate sampling frame must continually be explored.

To reduce problems with ambiguous or confusing questions, the interview form is continually being reviewed. Its consistent application will only be achieved by additional training time for surveyors and by gaining an understanding of how the person being interviewed might interpret the questions. To minimize these problems, continual feedback of what the surveyors encounter in relationship to the questions must be relayed back to the developers of the interview questions.

In 1995, 91 percent of the surveyed households to be sampled were contacted and 98 percent of the permits were returned. It has been a concern in the past that not enough households were contacted. To increase contact rates, several techniques have been recommended including spending more time in the villages and increasing the effort to make contacts by the telephone and postal system. Experience has shown that spending more time in the villages is the best practical method of increasing our contacts. Telephone contacts are constrained due to the limited availability of telephones in the villages and the reluctance of people to return messages by calling collect. The follow-up interview forms that were sent to households which could not be personally interviewed or contacted by telephone were not useful due to the low response rate. Follow up interview forms that were returned by mail usually did not have all of the questions answered.

If the commercial Yukon Area salmon roe markets continue to expand while the salmon flesh markets continue to decline, the survey may need to find new ways to address the issue of how to better interpret commercial-related harvests more comprehensively as it relates to fulfilling subsistence needs.

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Table 1. Combined subsistence and personal use salmon harvest estimates, test fish harvests given away for subsistence use, and related information, Yukon River, 1995. a

Village	Survey Date	Fishing Households b	Dogs	Estimated Harvest				Primary Gear Used			
				Chinook	Summer Chum	Fall Chum	Coho	Set Nets	Drift Nets	Fish Wheels	
Hooper Bay	9/11-9/12	c	83	298	1,500	13,374	207	48	80	0	0
Scammon Bay	9/11		41	298	585	3,986	147	104	36	5	0
<i>Coastal District Subtotal</i>			124	596	2,085	17,360	354	152	116	5	0
Sheldon Pt.	9/8		23	27	459	2,979	256	419	21	2	0
Alakanuk	9/6-9/7, 9/9		74	137	1,191	10,538	631	658	33	41	0
Emmonak	9/6-9/7, 9/9	d	80	122	1,711	11,696	1,614	485	25	55	0
Kotlik	9/13-9/14	e	55	105	2,599	9,777	2,197	689	42	13	0
<i>District 1 Subtotal</i>			232	391	5,960	34,990	4,698	2,251	121	111	0
Mt. Village	9/15-9/16	f	85	152	1,542	10,554	1,347	921	22	63	0
Pitkas Pt.	9/15		23	74	559	1,665	99	554	9	12	0
St. Marys	9/13-9/14, 9/16		47	79	2,031	5,950	542	154	3	44	0
Pilot Station	9/21-9/22	g	46	141	1,614	4,427	575	241	7	39	0
Marshall	9/19-9/20		46	231	3,291	4,594	754	272	5	41	0
<i>District 2 Subtotal</i>			247	677	9,037	27,190	3,317	2,142	46	199	0
Russian Mission	9/18		33	147	2,450	3,653	865	891	18	15	0
Holy Cross	9/18-9/19		36	89	2,808	948	681	0	10	26	0
Shageluk	9/19		20	106	161	7,542	126	0	18	2	0
<i>District 3 Subtotal</i>			89	342	5,419	12,143	1,672	891	46	43	0
<b>Lower Yukon River Drainage Total</b>			692	2,006	22,501	91,683	10,041	5,436	329	358	0
Anvik	9/22-9/23		17	73	450	9	269	10	9	6	2
Grayling	9/20-9/21		38	214	1,340	3,385	1,155	97	8	26	4
Kaitag	10/3-10/4		33	146	1,890	139	644	426	5	12	16
Nulato	10/4-10/5		49	242	1,533	228	1,137	25	11	33	3
Koyukuk	10/4		4	54	146	315	814	33	1	2	1
Galena	10/2-10/3	h	54	350	1,336	1,954	3,202	275	31	7	16
Ruby	10/11		21	182	1,435	4,445	4,695	607	12	2	7
<i>District 4 Yukon R. Subtotal</i>			216	1,261	8,130	10,475	11,916	1,473	77	88	49
Huslia	10/5-10/6		35	203	932	4,885	1,035	307	35	0	0
Hughes	10/4-10/5		9	68	77	2,448	263	153	9	0	0
Allakaket	10/10-10/11		14	166	321	6,396	260	0	14	0	0
Alatna	10/11		4	2	10	140	0	0	4	0	0
Bettles	10/12		7	103	4	740	583	1	7	0	0
<i>Koyukuk R. Subtotal</i>			69	542	1,344	14,609	2,141	461	69	0	0
<i>District 4 Subtotal</i>			285	1,803	9,474	25,084	14,057	1,934	146	88	49
Tanana	10/9-10/10	j	32	528	2,398	3,660	14,409	2,154	17	1	14
Rampart	10/11		18	71	1,461	1,168	1,403	0	12	0	6
Fairbanks NSB	permits	k	31	191	1,447	722	2,184	18	31	0	0
Stevens Village	10/30, permits	m	20	84	2,674	158	3,194	1	18	0	2
Birch Creek	10/24		2	24	93	0	0	0	2	0	0
Beaver	10/16, 10/30		10	51	1,021	36	1,231	20	9	0	1
Fl. Yukon	10/23-10/24	n	52	418	3,132	998	9,196	4	24	0	28
Circle	permits	o	9	76	1,145	70	5,102	0	5	0	4
Central	permits	p	4	17	171	2	0	0	4	0	0
Eagle	permits	q	32	181	1,886	57	13,115	1	28	0	4
Other	permits	r	9	30	1,004	232	830	7	9	0	0
<i>District 5 Yukon R. Subtotal</i>			219	1,671	16,432	7,103	50,664	2,205	159	1	59

-Continued-

Table 1. (page 2 of 2). a

Village	Survey Date	Fishing Households b	Dogs	Estimated Harvest				Primary Gear Used		
				Chinook	Summer Chum	Fall Chum	Coho	Set Nets	Drift Nets	Fish Wheels
Venetie	10/25-10/26	13	209	434	552	6,085	0	12	0	1
Chalkyitsik	11/9-11/10	6	57	0	0	845	0	6	0	0
<i>Chandalar/Black Rivers Subtotal</i>		19	266	434	552	6,930	0	18	0	1
<i>District 5 Subtotal</i>		238	1,937	16,866	7,655	57,594	2,205	177	1	60
Manley	permits s	19	468	335	1,657	20,272	7,395	11	0	8
Minto	permits t	28	238	535	1,320	4,782	338	22	0	6
Nenana	permits u	38	513	619	5,050	15,720	7,153	15	0	23
Healy	permits v	4	90	6	18	2,142	851	4	0	0
Fairbanks NSB	permits w	106	341	652	4,291	7,027	3,482	89	0	9
Delta Junction	permits x	4	1	0	0	85	0	2	0	0
Other	permits y	14	72	31	105	3	0	13	0	1
<i>District 6 Tanana R. Subtotal</i>		213	1,723	2,178	12,441	50,031	19,219	156	0	47
<b>Upper Yukon River Drainage Total</b>		736	5,463	28,518	45,180	121,682	23,358	479	89	156
Survey Village Subtotals		1,130	5,251	41,304	115,025	53,344	8,042	575	447	101
Permit Area Subtotals		298	2,218	7,830	13,474	71,068	19,245	233	0	55
Test Fish Subtotals z				1,885	8,364	7,311	1,507			
<b>Alaska, Yukon River Drainage Total</b>		1,428	7,469	51,019	136,863	131,723	28,794	808	447	156

a Data collected by Alaska Department of Fish and Game, (ADF&G) Commercial Fisheries Management and Development Division. Survey data is expanded for number of fishing households, number of dogs, and catch data. Permit data is unexpanded, the number of dogs is based on permits issued, while the number of fishing households and their catch is based on returned permits. Gear data represents the principal gear types used by fishing households.

b Estimated number of households that fished in surveyed communities or number of permittees who reported fishing in permit required areas.

c A salmon tagging study at Hooper Bay in 1986 conducted by the Bering Sea Fishermen's Association (BSFA) suggested that harvests in the Nuok Spit area of Hooper Bay intercepted Yukon River and Norton Sound chum salmon stocks.

d Includes 795 chinook, 3,005 summer chum, 1,133 fall chum, and 240 coho salmon from ADF&G test fish catches.

e Includes 920 chinook, 3,377 summer chum, 1,275 fall chum, and 339 coho salmon from ADF&G test fish catches.

f Includes 1 chinook, 523 fall chum, and 559 coho salmon from BSFA test fish catches.

g Includes 166 chinook, 1,875 summer chum, 541 fall chum, and 205 coho salmon from ADF&G test fish catches.

h Includes 2 chinook, 57 summer chum, and 199 fall chum salmon from BSFA test fish catches.

j Includes 1,876 fall chum and 164 coho salmon from BSFA test fish catches.

k Data from Fairbanks North Star Borough fishermen who fished the Yukon River in a permit required area. Of the 46 permits issued, 46 returned their permits and 31 fished. Includes two households that also applied to fish on the Tanana River.

m Permit harvest information from Stevens Village residents was included in the survey data.

n Includes 1,570 fall chum salmon from Council of Athabaskan Tribal Governments (CATG) test fish catches.

o Of the 15 permits issued in Circle, 15 returned their permits and 9 fished.

p Of the 9 permits issued in Central, 9 returned their permits and 4 fished.

q Of the 46 permits issued in Eagle, 46 returned their permits and 32 fished.

r Other includes residents of Manley, Nenana, and the Upper Tanana River drainage villages of Tanacross, Northway, and Tok who fished the Yukon River in a permit area. Of the 17 permits issued, 17 returned their permits and 9 fished.

s Of the 28 permits issued in Manley, 25 returned their permits and 19 fished. Includes 1 chinook, 50 summer chum, and 194 fall chum salmon from the Tanana Tagging Project given away to a resident of Manley.

t Of the 65 permits issued in Minto, 64 returned their permits and 28 fished. Includes 31 Tolovana River Pike permits.

u Of the 49 permits issued in Nenana, 3 were Subdistrict 6-C personal use permits and the remainder were subsistence permits, 49 returned their permits and 38 fished. Includes two households that fished on the Kantishna River.

v Of the 8 permits issued in Healy, 8 returned their permits and 4 fished. Includes one household that also applied to fish on the Kantishna River.

w Fairbanks North Star Borough fishermen who fished the Tanana River. Of the 177 permits issued, 130 were Subdistrict 6-C personal use permits and the remainder were subsistence permits, 174 returned their permits and 106 fished. Includes 24 Tolovana River Pike permits. Includes two households that also applied to fish on the Yukon River and one household that switched from a subsistence to a personal use permit on the Tanana River.

x Of the 7 permits issued in Delta, 6 were personal use permits and the remainder was a subsistence permit, 7 returned their permits and 4 fished.

y Other includes residents of Ketchikan, Juneau, Eagle River, and the Upper Tanana River drainage villages, Tetlin, Tanacross, Northway, Dot Lake, and Tok who fished in the Tanana River. Of the 52 permits issued, 3 were Subdistrict 6-C personal use permits and the remainder were subsistence permits, 48 returned their permits and 14 fished.

z Test fish given away for subsistence purposes.

Table 2. Surveyed communities, the surveyors, and the dates the villages were surveyed, arranged by district, Yukon Area, 1995.

Community	Surveyor(s)	Survey Date(s)
Hooper Bay	Chapell/Edmund	Sept. 11-12
Scammon Bay	Edmund	Sept. 11
<b>Coastal Districts</b>		
Sheldon Point	Edmund/Chapell	Sept. 8
Alakanuk	Edmund	Sept. 6-7, 9
Emmonak	Chapell	Sept. 6-7, 9
Kotlik	Edmund	Sept. 13-14
<b>District 1</b>		
Mountain Village	Edmund/Chapell	Sept. 15-16
Pitka's Point	Borba	Sept. 15
St. Mary's	Chapell/Borba	Sept. 13-14, 16
Pilot Station	Edmund	Sept. 21-22
Marshall	Edmund	Sept. 19-20
<b>District 2</b>		
Russian Mission	Edmund	Sept. 18
Holy Cross	Chapell	Sept. 18-19
Shageluk	Chapell	Sept. 19
<b>District 3</b>		
Anvik	Chapell	Sept. 22-23
Grayling	Chapell	Sept. 20-21
Kaltag	Hopler	Oct. 3-4
Nulato	Hopler	Oct. 4-5
Koyukuk	Chapell	Oct. 4
Galena	Chapell/Hopler	Oct. 2-3
Ruby	Hopler	Oct. 11
Huslia	Borba	Oct. 5-6
Hughes	Borba	Oct. 4-5
Allakaket	Moore	Oct. 10-11
Alatna	Moore	Oct. 11
Bettles	Moore	Oct. 12
<b>District 4</b>		
Tanana	Hopler/Chapell	Oct. 9-10
Rampart	Schultz	Oct. 11
Stevens Village	Hopler	Oct. 30
Birch Creek	Chapell	Oct. 24
Beaver	Hopler	Oct. 16, 30
Fort Yukon	Hopler/Chapell	Oct. 23-24
Chalkyitsik	Chapell	Nov. 9-10
Venetie	Hopler	Oct. 25-26
<b>District 5</b>		

Table 3. Estimated total number of households, the sample size, the number contacted, and the percentage of the sampled households that were contacted in surveyed villages, by catch stratum with community, use category, and district totals, Yukon Area, 1995. a

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Community Totals			
	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C
Hooper Bay	15	5	5	100.0	41	5	4	80.0	64	19	17	89.4	15	15	15	100.0	1	1	1	100.0	138	45	42	93.3
Scammon Bay	3	3	3	100.0	22	5	3	60.0	47	14	11	78.5	5	5	5	100.0	0	0	0	-	77	27	22	81.4
Sheldon's Point	0	0	0	-	10	5	4	80.0	20	6	6	100.0	7	7	7	100.0	0	0	0	-	37	18	17	94.4
Alakanuk	4	4	3	75.0	47	5	4	80.0	70	21	20	95.2	13	13	13	100.0	1	1	1	100.0	135	44	41	93.1
Emmonak	13	5	4	80.0	59	18	18	100.0	65	33	30	90.9	17	17	18	94.1	3	3	2	66.8	157	76	70	92.1
Kotlik	7	5	3	60.0	25	5	4	80.0	54	16	16	100.0	15	15	14	93.3	2	2	2	100.0	103	43	39	90.8
District 1	42	22	18	81.8	204	43	37	86.0	320	109	100	91.7	72	72	70	97.2	7	7	6	85.7	645	253	231	91.3
Mountain Village	2	2	2	100.0	48	5	4	80.0	76	23	23	100.0	16	16	15	93.7	1	1	1	100.0	143	47	45	95.7
Pitkas Point	0	0	0	-	11	11	11	100.0	15	15	14	93.3	6	6	6	100.0	1	1	1	100.0	33	33	32	96.9
St. Mary's	1	1	0	0.0	28	5	5	100.0	40	12	12	100.0	19	19	19	100.0	4	4	4	100.0	92	41	40	97.5
Pilot Station	2	2	2	100.0	38	11	8	72.7	48	24	22	91.6	4	4	4	100.0	1	1	1	100.0	93	42	37	88.0
Marshall	0	0	0	-	11	5	4	80.0	45	14	14	100.0	6	6	6	100.0	1	1	1	100.0	63	26	25	96.1
District 2	5	5	4	80.0	136	37	32	86.4	224	88	85	96.5	51	51	50	98.0	8	8	8	100.0	424	189	179	94.7
Russian Mission	0	0	0	-	19	5	5	100.0	30	9	9	100.0	6	6	6	100.0	1	1	0	0.0	56	21	20	95.2
Holy Cross	0	0	0	-	24	5	5	100.0	38	19	19	100.0	8	8	8	100.0	1	1	1	100.0	71	33	33	100.0
Shageluk	0	0	0	-	18	5	5	100.0	13	5	5	100.0	8	8	7	87.5	3	3	3	100.0	42	21	20	95.2
District 3	0	0	0	-	61	15	15	100.0	81	33	33	100.0	22	22	21	95.4	5	5	4	80.0	169	75	73	97.3
Anvik	0	0	0	-	17	5	4	80.0	15	5	5	100.0	6	6	6	100.0	2	2	2	100.0	40	18	17	94.4
Grayling	0	0	0	-	22	5	5	100.0	15	5	5	100.0	22	22	22	100.0	3	3	3	100.0	62	35	35	100.0
Kaitag	0	0	0	-	13	5	2	40.0	23	7	6	85.7	14	14	12	85.7	1	1	1	100.0	51	27	21	77.7
Nulato	8	5	4	80.0	37	5	5	100.0	30	9	8	88.8	14	14	12	85.7	1	1	1	100.0	90	34	30	88.2
Koyukuk	0	0	0	-	19	5	3	60.0	19	6	5	83.3	3	3	3	100.0	2	2	2	100.0	43	16	13	81.2
Galena	6	5	4	80.0	70	7	7	100.0	51	15	14	93.3	14	14	14	100.0	4	4	4	100.0	145	45	43	95.5
Ruby	2	2	2	100.0	38	5	5	100.0	15	5	5	100.0	10	10	9	90.0	4	4	4	100.0	69	26	25	96.1
Huslia	1	1	0	0.0	31	5	5	100.0	14	5	5	100.0	13	13	13	100.0	5	5	5	100.0	64	29	28	96.5
Hughes	1	1	1	100.0	11	11	6	54.5	8	8	7	87.5	5	5	5	100.0	0	0	0	-	25	25	19	76.0
Allakaket	2	2	1	50.0	18	5	5	100.0	13	5	5	100.0	11	11	9	81.8	2	2	2	100.0	46	25	22	88.0
Alatna	0	0	0	-	4	4	2	50.0	2	2	1	50.0	2	2	1	50.0	0	0	0	-	8	8	4	50.0
Bettles	2	2	0	0.0	18	18	14	77.7	8	8	7	87.5	0	0	0	-	0	0	0	-	28	28	21	75.0
District 4	22	18	12	66.6	298	80	63	78.7	213	80	73	91.2	114	114	106	92.9	24	24	24	100.0	671	316	278	87.9
Tanana	4	4	3	75.0	62	19	16	84.2	16	8	6	75.0	10	10	10	100.0	21	21	20	95.2	113	62	55	88.7
Rampart	1	1	1	100.0	6	6	6	100.0	7	7	7	100.0	11	11	9	81.8	2	2	2	100.0	27	27	25	92.5
Stevens Village	1	1	0	0.0	14	5	4	80.0	9	5	4	80.0	9	9	9	100.0	3	3	2	66.6	36	23	19	82.6
Birch Creek	0	0	0	-	10	10	8	80.0	5	5	5	100.0	0	0	0	-	0	0	0	-	15	15	13	86.6
Beaver	0	0	0	-	14	14	14	100.0	12	12	12	100.0	7	7	7	100.0	0	0	0	-	33	33	33	100.0
Fort Yukon	12	5	4	80.0	132	13	11	84.6	45	14	13	92.8	24	24	23	95.8	5	5	5	100.0	218	61	56	91.8
Venetie	2	2	2	100.0	30	5	4	80.0	12	5	3	60.0	11	11	11	100.0	2	2	2	100.0	57	25	22	88.0
Chalkyitsik	1	1	0	0.0	24	24	19	79.1	4	4	4	100.0	5	5	4	80.0	0	0	0	-	34	34	27	79.4
Chicken	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
District 5	21	14	10	71.4	292	96	82	85.4	110	60	54	90.0	77	77	73	94.8	33	33	31	93.9	533	280	250	89.2
Survey Totals	90	59	44	74.5	991	271	229	84.5	948	370	345	93.2	336	336	320	95.2	77	77	73	94.8	2,442	1,113	1,011	90.8

a Estimated total number of households (N), the sample size (n), the number contacted (C), and the percentage of the sampled households that were contacted (%C) by catch stratum with community, use category, district, and Yukon Area totals, 1995.

Table 4. Estimated number of subsistence fishing households in surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. <sup>a</sup>

Community	N	Unkown			Does Not Harvest Salmon			Light Harvester			Medium Harvester			Heavy Harvester			Combined			CI(95%) (+/-)				
		n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Total					
Hooper Bay	15	5	0.8	0.2	41	4	0.5	0.2	64	17	0.5	0.1	15	15	1.0	0.0	1	1	1.0	0.0	136	42	83	28
Scammon Bay	3	3	0.6	0.0	22	3	0.0	0.0	47	11	0.7	0.1	5	5	1.0	0.0	0	0	-	-	77	22	41	11
Sheldon's Point	0	0	-	-	10	4	0.2	0.1	20	6	0.6	0.1	7	7	1.0	0.0	0	0	-	-	37	17	23	7
Alakanuk	4	3	0.6	0.1	47	4	0.0	0.0	70	20	0.8	0.0	13	13	0.8	0.0	1	1	1.0	0.0	135	41	74	9
Emmonak	13	4	0.5	0.2	59	18	0.3	0.0	65	30	0.6	0.0	17	16	0.6	0.0	3	2	1.0	0.0	157	70	80	15
Kollik	7	3	0.3	0.2	25	4	0.2	0.2	54	16	0.5	0.1	15	14	0.9	0.0	2	2	1.0	0.0	103	39	55	16
District 1	42	18	0.5	0.1	204	37	0.2	0.0	320	100	0.7	0.0	72	70	0.9	0.0	7	6	1.0	0.0	645	231	356	38
Mountain Village	2	2	1.0	0.0	48	4	0.2	0.2	76	23	0.7	0.0	16	15	0.8	0.0	1	1	1.0	0.0	143	45	85	25
Pitkas Point	0	0	-	-	11	11	0.3	0.0	15	14	0.7	0.0	6	6	1.0	0.0	1	1	1.0	0.0	33	32	23	0
St. Mary's	1	0	0.7	0.2	28	5	0.2	0.1	40	12	0.5	0.1	19	19	0.6	0.0	4	4	1.0	0.0	92	40	47	14
Pilot Station	2	2	0.5	0.0	38	8	0.3	0.1	48	22	0.5	0.0	4	4	1.0	0.0	1	1	1.0	0.0	93	37	46	14
Marshall	0	0	-	-	11	4	0.2	0.1	45	14	0.8	0.0	6	6	0.8	0.0	1	1	0.0	0.0	63	25	46	8
District 2	5	4	0.8	0.0	136	32	0.3	0.1	224	85	0.7	0.0	51	50	0.9	0.0	8	8	0.9	0.0	424	179	248	33
Russian Mission	0	0	-	-	19	5	0.2	0.1	30	9	0.7	0.1	6	6	0.8	0.0	1	0	1.0	0.0	56	20	33	9
Holy Cross	0	0	-	-	24	5	0.2	0.1	38	19	0.5	0.0	8	8	1.0	0.0	1	1	1.0	0.0	71	33	36	10
Shageluk	0	0	-	-	18	5	0.2	0.1	13	5	0.6	0.1	8	7	0.7	0.0	3	3	1.0	0.0	42	20	20	7
District 3	0	0	-	-	61	15	0.2	0.1	81	33	0.7	0.0	22	21	0.9	0.0	5	4	1.0	0.0	169	73	89	16
Anvik	0	0	-	-	17	4	0.0	0.0	15	5	0.8	0.1	6	6	0.8	0.0	2	2	0.5	0.0	40	17	17	4
Grayling	0	0	-	-	22	5	0.4	0.2	15	5	0.6	0.2	22	22	0.8	0.0	3	3	0.6	0.0	62	35	38	10
Kallag	0	0	-	-	13	2	0.0	0.0	23	6	0.8	0.1	14	12	0.9	0.0	1	1	1.0	0.0	51	21	33	6
Nulato	8	4	0.7	0.1	37	5	0.0	0.0	30	8	1.0	0.0	14	12	0.8	0.0	1	1	1.0	0.0	90	30	49	3
Koyukuk	0	0	-	-	19	3	0.0	0.0	19	5	0.0	0.0	3	3	0.6	0.0	2	2	1.0	0.0	43	13	4	0
Galena	6	4	0.2	0.1	70	7	0.1	0.1	51	14	0.5	0.1	14	14	0.6	0.0	4	4	1.0	0.0	145	43	54	22
Ruby	2	2	0.0	0.0	38	5	0.0	0.0	15	5	0.6	0.2	10	9	0.7	0.0	4	4	1.0	0.0	69	25	21	5
Huslia	1	0	0.3	0.1	31	5	0.6	0.2	14	5	0.4	0.1	13	13	0.4	0.0	5	5	0.8	0.0	64	28	35	14
Hughes	1	1	0.0	0.0	11	6	0.1	0.1	8	7	0.2	0.0	5	5	1.0	0.0	0	0	-	-	25	19	9	2
Allakaket	2	1	0.0	0.1	18	5	0.0	0.0	13	5	0.2	0.1	11	9	0.8	0.0	2	2	1.0	0.0	46	22	14	4
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	1.0	0.0	2	1	1.0	0.0	0	0	-	-	8	4	4	0
Bettles	2	0	0.3	0.1	18	14	0.0	0.0	8	7	0.5	0.0	0	0	-	-	0	0	-	-	28	21	7	1
District 4	22	12	0.4	0.0	298	63	0.1	0.0	213	73	0.6	0.0	114	106	0.8	0.0	24	24	0.9	0.0	671	276	283	30
Tanana	4	3	0.0	0.0	62	16	0.1	0.0	16	6	0.1	0.1	10	10	0.4	0.0	21	20	0.8	0.0	113	55	32	9
Rampart	1	1	0.0	0.0	6	6	0.3	0.0	7	7	0.8	0.0	11	9	0.7	0.0	2	2	0.5	0.0	27	25	18	1
Stevens Village	1	0	0.1	0.1	14	4	0.5	0.2	9	4	0.2	0.1	9	9	0.8	0.0	3	2	1.0	0.0	36	19	20	7
Birch Creek	0	0	-	-	10	8	0.1	0.0	5	5	0.2	0.0	0	0	-	-	0	0	-	-	15	13	2	1
Beaver	0	0	-	-	14	14	0.1	0.0	12	12	0.2	0.0	7	7	0.7	0.0	0	0	-	-	33	33	10	0
Fort Yukon	12	4	0.0	0.0	132	11	0.0	0.0	45	13	0.3	0.1	24	23	0.7	0.0	5	5	0.8	0.0	218	56	52	24
Venetie	2	2	0.5	0.0	30	4	0.0	0.0	12	3	0.3	0.2	11	11	0.6	0.0	2	2	0.5	0.0	57	22	13	6
Chalkyitsik	1	0	0.1	0.1	24	19	0.1	0.0	4	4	0.2	0.0	5	4	0.5	0.1	0	0	-	-	34	27	6	2
District 5	21	10	0.1	0.0	292	82	0.1	0.0	110	54	0.3	0.0	77	73	0.7	0.0	33	31	0.8	0.0	533	250	154	28
<b>Survey Totals</b>	<b>90</b>	<b>44</b>	<b>0.4</b>	<b>0.0</b>	<b>991</b>	<b>229</b>	<b>0.2</b>	<b>0.0</b>	<b>948</b>	<b>345</b>	<b>0.6</b>	<b>0.0</b>	<b>336</b>	<b>320</b>	<b>0.8</b>	<b>0.0</b>	<b>77</b>	<b>73</b>	<b>0.9</b>	<b>0.0</b>	<b>2,442</b>	<b>1,011</b>	<b>1,130</b>	<b>68</b>

<sup>a</sup> The total number of households (N) and the number of households contacted (n).

Table 5. Reported primary fishing gear used by surveyed subsistence fishing households, Yukon Area, 1995.

Community	Total Households	Households Surveyed	Subsistence Fished	Primary Gear Type Used						
				Set Gillnets	Drift Gillnets	Fish Wheels	Rod & Reel			
Hooper Bay	136	42 (30.8%)	31 (73.8%)	30 (96.7%)	0 (0.0%)	0 (0.0%)	1 (3.2%)			
Scammon Bay	77	22 (28.5%)	15 (68.1%)	13 (86.6%)	2 (13.3%)	0 (0.0%)	0 (0.0%)			
Sheldon's Point	37	17 (49.5%)	12 (70.5%)	11 (91.6%)	1 (8.3%)	0 (0.0%)	0 (0.0%)			
Alakanuk	135	41 (30.3%)	31 (75.6%)	14 (45.1%)	17 (54.8%)	0 (0.0%)	0 (0.0%)			
Emmonak	157	70 (44.5%)	39 (55.7%)	12 (30.7%)	27 (69.2%)	0 (0.0%)	0 (0.0%)			
Kotlik	103	39 (37.8%)	26 (66.6%)	20 (76.9%)	6 (23.0%)	0 (0.0%)	0 (0.0%)			
District 1	645	231 (35.8%)	154 (66.6%)	100 (64.9%)	53 (34.4%)	0 (0.0%)	1 (0.6%)			
Mountain Village	143	45 (31.4%)	34 (75.5%)	9 (26.4%)	25 (73.5%)	0 (0.0%)	0 (0.0%)			
Pitkas Point	33	32 (96.9%)	22 (68.7%)	9 (40.9%)	11 (50.0%)	0 (0.0%)	2 (9.0%)			
St. Mary's	92	40 (43.4%)	28 (70.0%)	2 (7.1%)	26 (92.8%)	0 (0.0%)	0 (0.0%)			
Pilot Station	93	37 (39.7%)	21 (56.7%)	3 (14.2%)	18 (85.7%)	0 (0.0%)	0 (0.0%)			
Marshall	63	25 (39.6%)	18 (72.0%)	2 (11.1%)	16 (88.8%)	0 (0.0%)	0 (0.0%)			
District 2	424	179 (42.2%)	123 (68.7%)	25 (20.3%)	96 (78.0%)	0 (0.0%)	2 (1.6%)			
Russian Mission	56	20 (35.7%)	13 (65.0%)	7 (53.8%)	6 (46.1%)	0 (0.0%)	0 (0.0%)			
Holy Cross	71	33 (46.4%)	21 (63.6%)	6 (28.5%)	15 (71.4%)	0 (0.0%)	0 (0.0%)			
Shageluk	42	20 (47.6%)	12 (60.0%)	11 (91.6%)	1 (8.3%)	0 (0.0%)	0 (0.0%)			
District 3	169	73 (43.1%)	46 (63.0%)	24 (52.1%)	22 (47.8%)	0 (0.0%)	0 (0.0%)			
Anvik	40	17 (42.5%)	9 (52.9%)	5 (55.5%)	3 (33.3%)	1 (11.1%)	0 (0.0%)			
Grayling	62	35 (56.4%)	25 (71.4%)	5 (20.0%)	17 (68.0%)	3 (12.0%)	0 (0.0%)			
Kaltag	51	21 (41.4%)	17 (80.9%)	3 (17.6%)	6 (35.2%)	8 (47.0%)	0 (0.0%)			
Nulato	90	30 (33.3%)	22 (73.3%)	5 (22.7%)	15 (68.1%)	1 (4.5%)	1 (4.5%)			
Koyukuk	43	13 (30.2%)	4 (30.7%)	1 (25.0%)	2 (50.0%)	1 (25.0%)	0 (0.0%)			
Galena	145	43 (29.6%)	23 (53.4%)	13 (56.5%)	3 (13.0%)	7 (30.4%)	0 (0.0%)			
Ruby	69	25 (36.2%)	14 (56.0%)	8 (57.1%)	1 (7.1%)	5 (35.7%)	0 (0.0%)			
Huslia	64	28 (43.7%)	15 (53.5%)	15 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)			
Hughes	25	19 (76.0%)	8 (42.1%)	8 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)			
Allakaket	46	22 (47.8%)	11 (50.0%)	11 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)			
Alatna	8	4 (50.0%)	2 (50.0%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)			
Bettles	28	21 (75.0%)	5 (23.8%)	5 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)			
District 4	671	278 (41.4%)	155 (55.7%)	81 (52.2%)	47 (30.3%)	26 (16.7%)	1 (0.6%)			
Tanana	113	55 (48.6%)	24 (43.6%)	13 (54.1%)	1 (4.1%)	10 (41.6%)	0 (0.0%)			
Rampart	27	25 (92.5%)	16 (64.0%)	11 (68.7%)	0 (0.0%)	5 (31.2%)	0 (0.0%)			
Stevens Village	36	19 (52.7%)	13 (68.4%)	12 (92.3%)	0 (0.0%)	1 (7.6%)	0 (0.0%)			
Birch Creek	15	13 (86.6%)	2 (15.3%)	2 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)			
Beaver	33	33 (100.0%)	10 (30.3%)	9 (90.0%)	0 (0.0%)	1 (10.0%)	0 (0.0%)			
Fort Yukon	218	56 (25.6%)	28 (50.0%)	13 (46.4%)	0 (0.0%)	15 (53.5%)	0 (0.0%)			
Venetie	57	22 (38.5%)	10 (45.4%)	9 (90.0%)	0 (0.0%)	1 (10.0%)	0 (0.0%)			
Chalkyitsik	34	27 (79.4%)	5 (18.5%)	5 (100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)			
District 5	533	250 (46.9%)	108 (43.2%)	74 (68.5%)	1 (0.9%)	33 (30.5%)	0 (0.0%)			
Survey Totals	2,442	1,011 (41.4%)	586 (57.9%)	304 (51.8%)	219 (37.3%)	59 (10.0%)	4 (0.6%)			

Table 6. Estimated number of people in households in surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. <sup>a</sup>

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	Total n	Total	Est CI(95%) (+/-)
Hooper Bay	15	5	4.8	0.6	41	4	4.7	0.7	64	17	4.6	0.5	15	15	5.7	0.0	1	1	4.0	0.0	138	42	654	89
Scammon Bay	3	3	3.3	0.0	22	3	4.3	0.6	47	11	4.8	0.4	5	5	6.2	0.0	0	0	-	-	77	22	363	50
Sheldon's Point	0	0	-	-	10	4	4.5	1.1	20	6	2.6	0.6	7	8	5.5	0.3	0	0	-	-	37	16	137	33
Alakanuk	4	3	3.3	0.6	47	4	3.5	0.8	70	20	6.4	0.3	13	13	4.3	0.0	1	1	4.0	0.0	135	41	690	93
Emmonak	13	4	4.2	1.3	59	17	2.9	0.3	65	30	4.3	0.3	17	16	4.2	0.1	3	2	4.5	2.0	157	69	598	70
Kotlik	7	3	5.6	1.9	25	4	3.5	0.7	54	16	5.6	0.5	15	14	6.3	0.1	2	2	3.5	0.0	103	39	533	74
District 1	42	18	4.5	0.5	204	36	3.7	0.2	320	100	5.1	0.1	72	69	5.3	0.0	7	6	4.1	0.8	645	229	2,976	176
Mountain Villag	2	2	3.5	0.0	48	4	7.0	2.0	76	23	5.5	0.5	16	15	5.1	0.1	1	1	5.0	0.0	143	45	853	208
Pitkas Point	0	0	-	-	11	10	2.7	0.2	15	14	4.1	0.1	6	6	5.0	0.0	1	1	6.0	0.0	33	31	128	5
St. Mary's	1	0	4.2	1.3	28	5	2.6	0.6	40	12	5.4	0.8	19	19	5.0	0.0	4	4	3.2	0.0	82	40	403	73
Pilot Station	2	2	5.0	0.0	38	7	3.7	0.9	48	22	4.4	0.3	4	4	5.7	0.0	1	1	5.0	0.0	93	36	391	82
Marshall	0	0	-	-	11	3	2.6	1.4	45	14	5.0	0.3	6	6	3.8	0.0	1	1	1.0	0.0	63	24	278	46
District 2	5	4	4.3	0.2	136	29	4.5	0.8	224	85	5.1	0.2	51	50	5.0	0.0	8	8	3.8	0.0	424	176	2,053	240
Russian Mission	0	0	-	-	19	5	3.6	0.7	30	9	5.7	0.7	6	6	4.6	0.0	1	0	3.0	0.0	56	20	273	53
Holy Cross	0	0	-	-	24	5	2.8	0.4	38	19	3.7	0.2	8	8	4.3	0.0	1	1	3.0	0.0	71	33	249	28
Shageluk	0	0	-	-	18	5	1.8	0.3	13	5	3.0	0.7	8	7	3.4	0.2	3	3	4.6	0.0	42	20	113	21
District 3	0	0	-	-	61	15	2.8	0.3	81	33	4.4	0.3	22	21	4.1	0.0	5	4	4.0	0.0	169	73	635	64
Anvik	0	0	-	-	17	4	1.7	0.4	15	5	3.2	0.9	6	6	4.0	0.0	2	2	2.5	0.0	40	17	107	32
Grayling	0	0	-	-	22	5	3.2	0.7	15	5	4.6	0.5	22	22	4.0	0.0	3	3	2.0	0.0	62	35	233	34
Kallag	0	0	-	-	13	2	1.0	0.0	23	5	4.8	0.9	14	12	4.5	0.2	1	1	6.0	0.0	51	20	192	43
Nulato	8	4	3.2	0.3	37	5	2.4	0.6	30	8	4.3	0.4	14	12	4.6	0.2	1	1	4.0	0.0	90	30	315	53
Koyukuk	0	0	-	-	19	3	2.6	1.1	19	5	1.6	0.3	3	3	3.0	0.0	2	2	4.0	0.0	43	13	98	43
Galena	6	4	3.7	0.7	70	7	2.4	0.5	51	14	3.1	0.3	14	14	2.6	0.0	4	4	4.2	0.0	145	43	407	85
Ruby	2	2	4.0	0.0	38	5	1.4	0.2	15	5	3.6	0.7	10	9	3.1	0.1	4	4	2.0	0.0	69	25	154	27
Hustla	1	0	3.5	0.4	31	5	4.0	0.6	14	5	3.6	0.4	13	13	4.8	0.0	5	5	4.8	0.0	64	28	266	40
Hughes	1	1	2.0	0.0	11	6	2.6	0.4	8	7	2.2	0.2	5	5	2.6	0.0	0	0	-	-	25	19	63	10
Allakaket	2	1	4.0	0.4	18	5	3.6	1.0	13	5	3.8	0.5	11	9	3.8	0.3	2	2	5.5	0.0	46	22	176	39
Alatna	0	0	-	-	4	2	1.0	0.0	2	1	2.0	0.2	2	1	5.0	0.2	0	0	-	-	8	4	18	1
Bettles	2	0	3.5	0.4	18	14	2.0	0.1	8	6	2.8	0.3	0	0	-	-	0	0	-	-	28	20	66	6
District 4	22	12	3.5	0.2	298	63	2.5	0.2	213	71	3.5	0.1	114	106	3.9	0.0	24	24	3.7	0.0	671	276	2,095	142
Tanana	4	3	1.0	0.0	62	16	2.2	0.3	16	6	2.8	0.5	10	10	2.1	0.0	21	20	3.1	0.0	113	55	276	45
Rampart	1	1	2.0	0.0	6	6	2.3	0.0	7	7	3.1	0.0	11	9	2.8	0.2	2	2	4.5	0.0	27	25	79	6
Stevens Village	1	0	1.5	0.2	14	3	1.0	0.0	9	4	1.7	0.5	9	9	3.3	0.0	3	2	4.0	1.7	36	18	73	14
Birch Creek	0	0	-	-	10	8	2.3	0.2	5	5	2.8	0.0	0	0	-	-	0	0	-	-	15	13	38	5
Beaver	0	0	-	-	14	13	2.6	0.1	12	11	2.6	0.1	7	7	1.8	0.0	0	0	-	-	33	31	81	4
Fort Yukon	12	4	1.2	0.2	132	10	2.4	0.3	45	13	3.7	0.4	24	23	3.5	0.0	5	5	3.8	0.0	218	55	605	100
Venetie	2	2	2.5	0.0	30	3	4.3	0.6	12	3	3.6	1.4	11	11	4.4	0.0	2	2	5.0	0.0	57	21	238	50
Chalkyitsik	1	0	1.5	0.2	24	19	1.8	0.1	4	4	3.5	0.0	5	4	4.2	0.3	0	0	-	-	34	27	81	7
District 5	21	10	1.4	0.1	292	78	2.5	0.1	110	53	3.2	0.2	77	73	3.3	0.0	33	31	3.5	0.1	533	245	1,471	122
<b>Survey Totals</b>	<b>90</b>	<b>44</b>	<b>3.5</b>	<b>0.2</b>	<b>991</b>	<b>221</b>	<b>3.0</b>	<b>0.1</b>	<b>948</b>	<b>342</b>	<b>4.4</b>	<b>0.1</b>	<b>336</b>	<b>319</b>	<b>4.2</b>	<b>0.0</b>	<b>77</b>	<b>73</b>	<b>3.7</b>	<b>0.1</b>	<b>2,442</b>	<b>999</b>	<b>9,229</b>	<b>358</b>

<sup>a</sup> The total number of households (N) and the number of households contacted (n).

Table 7. Subsistence salmon harvest estimates and corresponding confidence intervals for surveyed villages, Yukon Area, 1995.

Community	Catch Strata Combined		Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon	
	Total Households	Households Contacted <sup>a</sup>	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	136	42	1,500	639	13,374	5,903	207	0	48	63
Scammon Bay	77	22	585	333	3,986	1,441	147	183	104	97
Sheldon's Point	37	17	459	174	2,979	731	256	0	419	81
Alakanuk	135	41	1,191	410	10,538	2,894	631	453	658	490
Emmonak	157	70	916	263	8,891	1,451	481	217	245	90
Kotlik	103	39	1,679	364	6,400	2,051	922	244	350	115
District 1	645	231	6,330	959	45,968	7,221	2,644	588	1,824	531
Mountain Village	143	45	1,541	537	10,554	2,399	824	764	362	270
Pitkas Point	33	32	559	26	1,665	143	99	5	554	27
St. Mary's	92	40	2,031	870	5,950	1,470	542	109	154	10
Pilot Station	93	37	1,448	434	2,552	725	34	16	36	47
Marshall	63	25	3,291	1,215	4,594	1,982	754	469	272	190
District 2	424	179	8,870	1,646	25,315	3,509	2,253	903	1,378	334
Russian Mission	56	20	2,450	791	3,653	1,849	865	661	891	827
Holy Cross	71	33	2,808	688	948	248	681	220	0	0
Shageluk	42	20	161	66	7,542	1,753	128	87	0	0
District 3	169	73	5,419	1,545	12,143	3,850	1,672	968	891	827
Anvik	40	17	450	205	9	0	289	75	10	0
Grayingling	62	35	1,340	517	3,385	48	1,155	550	97	75
Kaltag	51	21	1,890	1,210	139	131	644	308	426	315
Nulato	90	30	1,533	348	228	126	1,137	394	25	21
Koyukuk	43	13	146	0	315	0	814	0	33	0
Galena	145	43	1,334	307	1,897	123	3,003	158	275	48
Ruby	69	25	1,435	636	4,445	3,236	4,695	2,128	607	120
Huslia	64	28	932	652	4,885	593	1,035	453	307	35
Hughes	25	19	77	11	2,448	197	263	6	153	3
Allakaket	46	22	321	112	6,396	2,175	260	399	0	0
Alatna	8	4	10	0	140	0	0	0	0	0
Bettles	28	21	4	1	740	335	583	342	1	0
District 4	671	278	9,472	1,685	25,027	4,341	13,858	2,367	1,934	352
Tanana	113	55	2,398	499	3,660	457	12,533	1,298	1,990	558
Rampart	27	25	1,461	158	1,168	3	1,403	349	0	0
Stevens Village	36	19	2,674	712	158	171	3,194	1,851	1	0
Birch Creek	15	13	93	65	0	0	0	0	0	0
Beaver	33	33	1,021	0	36	0	1,231	0	20	0
Fort Yukon	218	56	3,132	876	998	108	7,626	757	4	0
Venetie	57	22	434	0	552	0	6,085	3,055	0	0
Chalkyitsik	34	27	0	0	0	0	845	344	0	0
District 5	533	250	11,213	1,246	6,572	500	32,917	3,907	2,015	558
<b>Survey Totals</b>	<b>2,442</b>	<b>1,011</b>	<b>41,304</b>	<b>3,021</b>	<b>115,025</b>	<b>9,330</b>	<b>53,344</b>	<b>4,745</b>	<b>8,042</b>	<b>1,231</b>

<sup>a</sup> Households contacted indicates the number of households with complete harvest information used in estimating the salmon harvest.

Table 8. Surveyed villages estimated chinook salmon subsistence catch by fishing location, Yukon Area, 1995.

Villages	Coastal District	District			Subdistrict						River Drainages				Total by Community		
		1	2	3 a	4-A b	4-B	4-C	5-A	5-B	5-C	5-D c	Innoko	Koyukuk	Porcupine d		Chandalar	Black River
Hooper Bay	1,500	0	0														1,500
Scammon Bay	8	577	0														585
Sheldon's Point	0	459	0														459
Alakanuk	0	1,191	0														1,191
Emmonak	0	880	36														916
Kotlik	0	1,679	0														1,679
<b>District 1</b>	<b>1,508</b>	<b>4,786</b>	<b>36</b>														<b>6,330</b>
Mountain Village		1,124	417														1,541
Pitkas Point		35	524														559
St. Mary's		298	1,733														2,031
Pilot Station		0	1,448														1,448
Marshall		0	3,291														3,291
<b>District 2</b>		<b>1,457</b>	<b>7,413</b>														<b>8,870</b>
Russian Mission			333	2,117	0											0	2,450
Holy Cross			0	2,808	0											0	2,808
Shageluk			0	3	23											135	161
<b>District 3</b>			<b>333</b>	<b>4,928</b>	<b>23</b>											<b>135</b>	<b>5,419</b>
Anvik					450	0	0									0	450
Grayling					1,340	0	0									0	1,340
Kallag					1,890	0	0									0	1,890
Nulato					1,533	0	0									0	1,533
Koyukuk					46	0	100									0	146
Galena					165	513	658									0	1,334
Ruby					0	117	1,318									0	1,435
Huslia					0	0	0								932	0	932
Hughes					0	0	0								77	0	77
Allakaket					0	0	0								321	0	321
Alatna					0	0	0								10	0	10
Bettles					0	0	0								4	0	4
<b>District 4</b>					<b>5,424</b>	<b>630</b>	<b>2,074</b>								<b>1,344</b>		<b>9,472</b>
Tanana								57	2,341	0	0				0	0	2,398
Rampart								0	1,311	150	0				0	0	1,461
Stevens Village								0	0	928	1,748				0	0	2,674
Birch Creek								0	0	0	93				0	0	93
Beaver								0	0	5	1,016				0	0	1,021
Fort Yukon								0	0	0	2,938			194	0	0	3,132
Venetie								0	0	0	320			0	114	0	434
Chalkyitsik								0	0	0	0			0	0	0	0
<b>District 5</b>								<b>57</b>	<b>3,652</b>	<b>1,081</b>	<b>6,115</b>			<b>194</b>	<b>114</b>		<b>11,213</b>
<b>Survey Totals</b>	<b>1,508</b>	<b>6,243</b>	<b>7,782</b>	<b>4,928</b>	<b>5,447</b>	<b>630</b>	<b>2,074</b>	<b>57</b>	<b>3,652</b>	<b>1,081</b>	<b>6,115</b>	<b>135</b>	<b>1,344</b>	<b>194</b>	<b>114</b>	<b>0</b>	<b>41,304</b>

- a Except for the Innoko River drainage.
- b Except for the Koyukuk River drainage.
- c Except for the Porcupine and Chandalar River drainages.
- d Except for the Black River drainage.

Table 9. Surveyed villages estimated summer chum salmon subsistence catch by fishing location, Yukon Area, 1995.

Villages	Coastal District	District			Subdistrict						River Drainages					Total by Community	
		1	2	3 a	4-A b	4-B	4-C	5-A	5-B	5-C	5-D c	Innoko	Koyukuk	Porcupine d	Chandalar		Black River
Hooper Bay	13,374	0	0														13,374
Scammon Bay	380	3,806	0														3,806
Sheldon's Point	0	2,979	0														2,979
Alakanuk	0	10,538	0														10,538
Emmonak	0	8,626	65														8,691
Kotlik	0	6,400	0														6,400
<b>District 1</b>	<b>13,754</b>	<b>32,149</b>	<b>65</b>														<b>45,968</b>
Mountain Village		7,879	2,875														10,554
Pitkas Point		203	1,462														1,665
St. Mary's		1,147	4,803														5,950
Pilot Station		0	2,552														2,552
Marshall		0	4,594														4,594
<b>District 2</b>		<b>9,229</b>	<b>16,086</b>														<b>25,315</b>
Russian Mission			666	2,987													3,653
Holy Cross			0	948													948
Shageluk			0	0													0
<b>District 3</b>			<b>666</b>	<b>3,935</b>													<b>7,542</b>
Anvik						9	0	0									9
Grayling						3,385	0	0									3,385
Kaltag						139	0	0									139
Nulato						228	0	0									228
Koyukuk						285	0	30									315
Galena						9	1,405	483									1,897
Ruby						150	1,141	3,154									4,445
Huslia						0	0	0									0
Hughes						0	0	0									0
Allakaket						0	0	0									0
Alatna						0	0	0									0
Bettles						0	0	0									0
<b>District 4</b>						<b>4,205</b>	<b>2,546</b>	<b>3,667</b>									<b>14,609</b>
Tanana								735	2,925	0	0						3,660
Rampart								0	1,168	0	0						1,168
Stevens Village								0	0	0	158						158
Birch Creek								0	0	0	0						0
Beaver								0	0	6	30						36
Fort Yukon								0	0	0	982						982
Venetie								0	0	0	0						0
Chalkyitsik								0	0	0	0						0
<b>District 5</b>								<b>735</b>	<b>4,093</b>	<b>6</b>	<b>1,170</b>						<b>6,572</b>
<b>Survey Totals</b>	<b>13,754</b>	<b>41,378</b>	<b>16,817</b>	<b>3,935</b>	<b>4,205</b>	<b>2,546</b>	<b>3,667</b>	<b>735</b>	<b>4,093</b>	<b>6</b>	<b>1,170</b>	<b>7,542</b>	<b>14,609</b>	<b>16</b>	<b>552</b>	<b>0</b>	<b>115,025</b>

a Except for the Innoko River drainage.  
b Except for the Koyukuk River drainage.  
c Except for the Porcupine and Chandalar River drainages.  
d Except for the Black River drainage.

Table 10. Surveyed villages estimated fall chum salmon subsistence catch by fishing location, Yukon Area, 1995.

Villages	Coastal District	District			Subdistrict						River Drainages				Total by Community		
		1	2	3 a	4-A b	4-B	4-C	5-A	5-B	5-C	5-D c	Innoko	Koyukuk	Porcupine d		Chandalar	Black River
Hooper Bay	207	0															207
Scammon Bay	127	20															147
Sheldon's Point	0	258															258
Alakanuk	0	631															631
Emmonak	0	481															481
Kotlik	0	922															922
<b>District 1</b>	<b>334</b>	<b>2,310</b>															<b>2,644</b>
Mountain Village		293	531														824
Pitkas Point		20	79														99
St. Mary's		190	352														542
Pilot Station		0	34														34
Marshall		0	754														754
<b>District 2</b>		<b>503</b>	<b>1,750</b>														<b>2,253</b>
Russian Mission			200	665	0												865
Holy Cross			0	681	0												681
Shageluk			0	45	81												126
<b>District 3</b>			<b>200</b>	<b>1,391</b>	<b>81</b>												<b>1,672</b>
Anvik					269	0	0						0				269
Grayling					1,155	0	0						0				1,155
Kaltag					644	0	0						0				644
Nulato					1,137	0	0						0				1,137
Koyukuk					354	400	60						0				814
Galena					0	992	2,011						0				3,003
Ruby					300	1,210	3,185						0				4,695
Huslia					0	0	0						1,035				1,035
Hughes					0	0	0						263				263
Allakaket					0	0	0						260				260
Alatna					0	0	0						0				0
Bettles					0	0	0						583				583
<b>District 4</b>					<b>3,859</b>	<b>2,602</b>	<b>5,256</b>						<b>2,141</b>				<b>13,858</b>
Tanana								2,117	10,416	0	0		0	0	0	0	12,533
Rampart								0	1,403	0	0		0	0	0	0	1,403
Stevens Village								0	0	250	2,944		0	0	0	0	3,194
Birch Creek								0	0	0	0		0	0	0	0	0
Beaver								0	0	0	1,231		0	0	0	0	1,231
Fort Yukon								0	0	0	6,974		652	0	0	0	7,626
Venetie								0	0	0	0		0	6,085	0	0	6,085
Chalkyitsik								0	0	0	0		0	0	845	0	845
<b>District 5</b>								<b>2,117</b>	<b>11,819</b>	<b>250</b>	<b>11,149</b>		<b>652</b>	<b>6,085</b>	<b>845</b>		<b>32,917</b>
<b>Survey Totals</b>	<b>334</b>	<b>2,813</b>	<b>1,950</b>	<b>1,391</b>	<b>3,940</b>	<b>2,602</b>	<b>5,256</b>	<b>2,117</b>	<b>11,819</b>	<b>250</b>	<b>11,149</b>	<b>0</b>	<b>2,141</b>	<b>652</b>	<b>6,085</b>	<b>845</b>	<b>53,344</b>

a Except for the Innoko River drainage.  
 b Except for the Koyukuk River drainage.  
 c Except for the Porcupine and Chandalar River drainages.  
 d Except for the Black River drainage.

Table 11. Surveyed villages estimated coho salmon subsistence catch by fishing location, Yukon Area, 1995.

Villages	Coastal District	District			Subdistrict							River Drainages				Total by Community	
		1	2	3 a	4-A b	4-B	4-C	5-A	5-B	5-C	5-D c	Innoko	Koyukuk	Porcupine d	Chandalar		Black River
Hooper Bay	48	0	0														48
Scammon Bay	104	0	0														104
Sheldon's Point	0	419	0														419
Alakanuk	0	658	0														658
Emmonak	0	230	15														245
Kotlik	0	350	0														350
District 1	152	1,657	15														1,824
Mountain Village		192	170														362
Pitkas Point		51	503														554
St. Mary's		0	154														154
Pilot Station		0	36														36
Marshall		0	272														272
District 2		243	1,135														1,378
Russian Mission			100	791													891
Holy Cross			0	0													0
Shageluk			0	0													0
District 3			100	791													891
Anvik					10	0	0						0				10
Grayling					97	0	0						0				97
Kaitag					426	0	0						0				426
Nulato					25	0	0						0				25
Koyukuk					28	5	0						0				33
Galena					0	36	239						0				275
Ruby					0	389	218						0				607
Huslia					0	0	0						307				307
Hughes					0	0	0						153				153
Allakaket					0	0	0						0				0
Alatna					0	0	0						0				0
Bettles					0	0	0						1				1
District 4					586	430	457						461				1,934
Tanana								90	1,900	0	0						1,990
Rampart								0	0	0	0						0
Stevens Village								0	0	1	0						1
Birch Creek								0	0	0	0						0
Beaver								0	0	0	20						20
Fort Yukon								0	0	0	4						4
Venetie								0	0	0	0						0
Chalkyitsik								0	0	0	0						0
District 5								90	1,900	1	24						2,015
<b>Survey Totals</b>	152	1,900	1,250	791	586	430	457	90	1,900	1	24	0	461	0	0	0	8,042

a Except for the Innoko River drainage.  
 b Except for the Koyukuk River drainage.  
 c Except for the Porcupine and Chandalar River drainages.  
 d Except for the Black River drainage.

Table 12. Estimated or reported subsistence harvest of selected miscellaneous fish species by surveyed villages, Yukon Area, 1995.

Community	Catch Strata Combined		Estimated Subsistence Harvest with Corresponding Confidence Intervals (Expanded to Estimate Total Yukon Area Harvests)										Reported Numbers of Miscellaneous Fish Species, (Not Expanded)						
	Total Households	Households Contacted <sup>a</sup>	Pink Salmon		Large Whitefish		Small Whitefish		Pike		Sheefish		Burbot	Lamprey	Tomcod	Grayling	Sucker	Arctic Char	Blackfish
			Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)							
Hooper Bay	136	42	326	175	50	22	2,554	943	60	6	0	0	8	0	2,409	0	0	0	21,700
Scammon Bay	77	22	59	596	745	447	1,540	516	895	518	118	146	10	0	1,305	0	0	4	10,850
Sheldon's Point	37	17	1	0	412	382	543	345	17	10	1,017	289	44	0	50	0	0	0	41,300
Alakanuk	135	41	124	132	725	450	2,713	1,727	640	370	1,261	790	137	0	0	0	0	8	26,250
Emmonak	157	70	5	5	1,420	574	1,945	1,227	1,461	711	1,616	869	254	0	930	1	0	0	74,400
Kotlik	103	39	2	1	1,079	920	2,248	1,188	598	290	2,274	1,204	418	0	0	0	0	0	12,600
District 1	645	231	1,015	635	4,430	1,314	11,545	2,679	3,670	998	6,287	1,713	871	0	4,694	1	0	12	187,100
Mountain Village	143	45	35	15	1,601	685	433	287	1,244	342	846	436	452	299	30	86	0	13	6,300
Pitkas Point	33	32	4	0	302	16	10	0	55	0	89	1	12	70	0	17	0	2	0
St. Mary's	92	40	0	0	1,536	1,618	473	54	2,050	1,616	504	325	230	252	0	0	0	15	17,920
Pilot Station	93	37	0	0	2,289	1,350	0	0	987	666	335	170	243	0	0	0	0	1	21,000
Marshall	63	25	6	0	1,546	732	569	119	3,729	1,657	248	109	2,125	1,530	0	0	0	0	0
District 2	424	179	45	15	7,275	2,334	1,485	316	8,064	2,433	2,022	581	3,062	2,151	30	103	0	31	45,220
Russian Mission	56	20	0	0	698	1,090	3	0	564	369	348	240	30	540	0	0	0	0	700
Holy Cross	71	33	0	0	175	149	515	415	423	228	62	47	30	40	0	50	0	12	0
Shageluk	42	20	0	0	407	308	2,864	1,847	694	628	77	40	63	0	0	0	0	0	0
District 3	169	73	0	0	1,280	1,547	3,382	2,262	1,682	1,223	487	327	123	580	0	50	0	12	700
Anvik	40	17	0	0	229	89	130	24	226	233	242	26	3	150	0	62	2	5	0
Grayling	62	35	0	0	672	199	422	118	344	136	274	61	44	2,240	0	184	55	88	50
Kallag	51	21	0	0	1,835	1,113	120	43	168	150	86	44	28	0	0	140	0	5	20
Nulato	90	30	0	0	1,033	587	12	8	9	6	18	9	0	0	0	90	1	60	0
Koyukuk	43	13	0	0	500	0	120	0	216	106	60	6	3	0	0	0	0	1	0
Galena	145	43	0	0	4,941	1,915	1,334	60	203	121	304	164	124	0	0	58	52	20	800
Ruby	69	25	0	0	354	192	111	68	57	34	140	110	10	0	0	30	10	0	0
Huslia	64	28	0	0	1,529	1,226	258	13	1,310	478	470	325	33	0	0	145	10	2	0
Hughes	25	19	0	0	691	63	0	0	67	11	130	5	2	0	0	2	0	0	0
Allakaket	46	22	0	0	1,957	1,061	1,248	1,022	84	20	614	371	0	0	0	80	0	0	0
Alatna	8	4	0	0	60	64	0	61	0	17	44	8	0	0	0	0	0	0	0
Bettles	28	21	0	0	7	2	0	0	77	71	24	15	0	0	0	24	0	24	0
District 4	671	278	0	0	13,809	2,841	3,756	2,118	2,761	865	2,406	540	247	2,390	0	815	130	205	870
Tanana	113	55	0	0	3,899	616	3,768	1,039	155	66	811	197	109	0	0	142	37	5	0
Rampart	27	25	0	0	64	30	230	0	0	0	10	0	1	0	0	57	0	0	0
Stevens Village	36	19	0	0	110	68	410	67	22	17	25	17	12	0	0	0	0	0	0
Birch Creek	15	13	0	0	200	0	178	31	472	0	0	0	0	0	0	0	0	0	0
Beaver	33	33	0	0	174	0	3	0	60	0	38	0	1	0	0	0	0	0	0
Fort Yukon	218	56	0	0	940	226	657	210	491	170	70	60	174	1	0	32	42	0	0
Venetie	57	22	0	0	920	1,357	1	0	90	135	9	13	1	0	0	45	1	0	0
Chalkyitsik	34	27	0	0	139	113	6	5	179	113	22	11	1	0	0	40	0	0	0
District 5	533	250	0	0	6,446	1,514	5,253	1,063	1,469	255	984	208	299	1	0	316	80	5	0
<b>Survey Totals</b>	<b>2,442</b>	<b>1,011</b>	<b>1,061</b>	<b>635</b>	<b>33,239</b>	<b>4,330</b>	<b>25,421</b>	<b>3,615</b>	<b>17,646</b>	<b>2,814</b>	<b>12,186</b>	<b>1,915</b>	<b>4,602</b>	<b>5,122</b>	<b>4,724</b>	<b>1,285</b>	<b>210</b>	<b>265</b>	<b>233,890</b>

<sup>a</sup> Households contacted indicates the number of households with complete harvest information used in estimating the harvests.

Table 13. Estimated number of salmon used for subsistence purposes and corresponding confidence intervals for surveyed villages, Yukon Area, 1995. a

Community	Catch Strata Combined		Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon	
	Total Households	Households Contacted <sup>b</sup>	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	136	42	1,208	456	12,715	5,064	72	0	40	63
Scammon Bay	77	22	524	339	3,683	1,467	127	183	84	87
Sheldon's Point	37	17	440	175	3,096	760	258	0	419	81
Alakanuk	135	41	1,164	379	10,300	2,471	558	425	642	490
Emmonak	157	70	1,097	218	9,959	1,703	816	243	292	95
Kotlik	103	39	2,290	611	10,220	2,942	1,570	837	388	116
District 1	645	231	6,722	958	49,973	6,785	3,397	987	1,865	532
Mountain Village	143	45	1,694	513	11,405	2,139	1,665	1,062	338	249
Pitkas Point	33	32	513	17	1,864	118	108	5	557	27
St. Mary's	92	40	1,953	941	7,093	1,597	363	115	198	86
Pilot Station	93	37	1,668	456	3,116	784	361	472	36	47
Marshall	63	25	3,171	1,140	5,582	2,261	411	142	302	195
District 2	424	179	8,996	1,630	29,060	3,587	2,907	1,176	1,430	333
Russian Mission	56	20	2,651	786	3,926	1,859	765	625	841	827
Holy Cross	71	33	2,242	597	808	194	653	220	0	0
Shageluk	42	20	211	71	7,927	1,826	126	87	0	0
District 3	169	73	5,104	990	12,662	2,613	1,544	669	841	827
Anvik	40	17	417	162	23,483	12,700	409	166	110	0
Grayling	62	35	1,562	493	51,049	38,554	1,272	550	98	75
Kaltag	51	21	1,926	1,201	41,225	25,185	648	307	426	315
Nulato	90	30	1,531	278	22,058	23,821	1,395	540	25	21
Koyukuk	43	13	231	85	2,900	0	545	67	53	38
Galena	145	43	1,304	391	26,942	22,804	2,536	155	261	30
Ruby	69	25	1,733	651	6,811	3,304	6,317	2,219	707	120
Huslia	64	28	822	582	6,653	593	1,012	398	307	35
Hughes	25	19	82	22	2,435	187	263	6	138	3
Allakaket	46	22	377	126	6,996	2,355	465	387	0	0
Alatna	8	4	10	0	140	0	0	0	0	0
Bettles	28	21	16	7	862	373	583	342	1	0
District 4	671	278	10,011	1,653	191,353	58,194	15,444	2,469	2,125	352
Tanana	113	55	2,549	570	4,366	797	37,364	3,073	2,214	557
Rampart	27	25	1,235	133	1,104	3	2,803	365	0	0
Stevens Village	36	19	2,446	553	158	171	2,394	1,851	1	0
Birch Creek	15	13	80	40	0	0	63	43	0	0
Beaver	33	33	842	0	37	0	1,225	0	20	0
Fort Yukon	218	56	4,716	1,899	808	103	8,127	2,343	4	0
Venetie	57	22	400	6	552	0	6,005	2,919	0	0
Chalkyitsik	34	27	22	6	0	0	852	343	0	0
District 5	533	250	12,289	2,063	7,023	821	58,832	5,209	2,239	557
<b>Survey Totals</b>	<b>2,442</b>	<b>1,011</b>	<b>43,123</b>	<b>3,398</b>	<b>290,071</b>	<b>58,762</b>	<b>82,124</b>	<b>6,004</b>	<b>8,502</b>	<b>1,230</b>

a Includes salmon retained from commercial catches for subsistence use as estimated through the survey.

b Households contacted indicates the number of households with complete subsistence use information used in estimating the number of salmon used for subsistence purposes.

Table 14. Estimated number of salmon retained from commercial catches for subsistence use (commercial-related) and corresponding confidence intervals for surveyed villages, Yukon Area, 1995.

Community	Catch Strata Combined		Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon	
	Total Households	Households Contacted <sup>a</sup>	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	136	42	0	0	0	0	0	0	0	0
Scammon Bay	77	22	0	0	0	0	0	0	0	0
Sheldon's Point	37	16	0	0	10	16	0	0	0	0
Alakanuk	135	41	0	0	0	0	0	0	0	0
Emmonak	157	70	8	8	253	125	5	2	21	9
Kotlik	103	39	0	0	185	294	94	168	0	0
District 1	645	230	8	8	449	320	99	168	21	9
Mountain Village	143	45	84	95	373	278	28	9	0	0
Pitkas Point	33	32	5	2	8	2	3	0	0	0
St. Mary's	92	39	0	0	43	33	3	1	0	0
Pilot Station	93	37	0	0	2	0	0	0	0	0
Marshall	63	24	13	20	758	478	0	0	0	0
District 2	424	177	102	97	1,184	554	34	9	0	0
Russian Mission	56	20	0	0	0	0	0	0	0	0
Holy Cross	71	33	0	0	0	0	0	0	0	0
Shageluk	42	19	0	0	0	0	0	0	0	0
District 3	169	72	0	0	0	0	0	0	0	0
Anvik	40	17	6	0	15,860	13,024	0	0	0	0
Grayling	62	34	2	0	5,286	452	0	0	0	0
Kaltag	51	21	31	51	46,776	35,397	0	0	0	0
Nulato	90	30	0	0	19,625	24,683	0	0	0	0
Koyukuk	43	13	0	0	200	0	0	0	0	0
Galena	145	43	212	304	10,759	1,819	600	0	2	0
Ruby	69	25	0	0	1,811	688	500	0	100	0
Huslia	64	28	0	0	0	0	0	0	0	0
Hughes	25	19	0	0	0	0	0	0	0	0
Allakaket	46	22	0	0	0	0	0	0	0	0
Alatna	8	4	0	2	0	0	0	0	0	0
Bettles	28	20	0	0	0	0	0	0	0	0
District 4	671	276	251	308	100,117	45,124	1,100	0	102	0
Tanana	113	55	318	98	56	23	20,120	3,463	137	58
Rampart	27	24	8	5	0	0	120	0	0	0
Stevens Village	36	19	0	0	0	0	0	0	0	0
Birch Creek	15	13	0	0	0	0	0	0	0	0
Beaver	33	32	0	0	0	0	0	0	0	0
Fort Yukon	218	56	0	0	0	0	0	0	0	0
Venetie	57	22	0	0	0	0	0	0	0	0
Chalkyitsik	34	27	0	0	0	0	0	0	0	0
District 5	533	248	326	98	56	23	20,240	3,463	137	58
<b>Survey Totals</b>	<b>2,442</b>	<b>1,003</b>	<b>687</b>	<b>338</b>	<b>101,805</b>	<b>45,128</b>	<b>21,473</b>	<b>3,467</b>	<b>260</b>	<b>59</b>

<sup>a</sup> Households contacted indicates the number of households with complete commercial retention information used in estimating the number of salmon retained from commercial catches.

Table 15. Estimated households with dogs, numbers of dogs, and corresponding confidence intervals for surveyed villages, Yukon Area, 1995.

Community	Catch Strata Combined		Number of Households with Dogs		Number of Dogs	
	Total Households	Households Contacted <sup>a</sup>	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	136	42	95	14	298	256
Scammon Bay	77	22	63	15	298	229
Sheldon's Point	37	16	18	8	27	9
Alakanuk	135	41	69	10	137	51
Emmonak	157	69	74	14	122	21
Kotlik	103	39	62	15	105	23
District 1	645	229	381	33	987	349
Mountain Village	143	45	64	26	152	57
Pitkas Point	33	31	18	1	74	1
St. Mary's	92	39	38	9	79	15
Pilot Station	93	37	44	10	141	57
Marshall	63	24	49	10	231	91
District 2	424	176	213	31	677	123
Russian Mission	56	20	40	9	152	76
Holy Cross	71	33	36	11	89	29
Shageiuk	42	20	35	7	106	21
District 3	169	73	111	16	347	84
Anvik	40	17	23	8	73	14
Grayling	62	35	54	7	241	89
Kaltag	51	20	34	15	146	72
Nulato	90	30	63	17	242	98
Koyukuk	43	13	27	13	54	19
Galena	145	43	76	26	350	227
Ruby	69	25	34	18	182	47
Huslia	64	28	60	4	203	23
Hughes	25	18	9	2	68	19
Allakaket	46	22	21	7	166	40
Alatna	8	4	2	0	2	3
Bettles	28	20	21	2	103	36
District 4	671	275	423	44	1,830	285
Tanana	113	55	73	14	528	41
Rampart	27	25	19	1	71	3
Stevens Village	36	18	24	8	84	13
Birch Creek	15	13	12	1	24	7
Beaver	33	31	17	1	51	2
Fort Yukon	218	54	138	42	418	118
Venetie	57	21	55	0	209	68
Chalkyitsik	34	27	19	2	57	11
District 5	533	244	356	46	1,443	144
<b>Survey Totals</b>	<b>2,442</b>	<b>997</b>	<b>1,484</b>	<b>80</b>	<b>5,284</b>	<b>497</b>

<sup>a</sup> Households contacted indicates the number of households with complete numbers of dogs information.

Table 16. Estimated subsistence and commercial harvests of salmon fed to dogs and corresponding confidence intervals for surveyed villages, Yukon Area, 1995.

Community	Catch Strata Combined		Summer Chum Salmon Fed to Dogs				Fall Chum Salmon Fed to Dogs				Coho Salmon Fed to Dogs			
	Total Households	Households Contacted <sup>a</sup>	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	136	42	2,919	5,248	0	0	0	0	0	0	0	0	0	0
Scammon Bay	77	22	0	0	0	0	214	366	0	0	0	0	0	0
Sheldon's Point	37	16	0	0	0	0	0	0	0	0	0	0	0	0
Alakanuk	135	41	0	0	0	0	0	0	0	0	0	0	0	0
Emmonak	157	69	531	252	0	0	43	62	0	0	7	9	0	0
Kotlik	103	39	0	0	0	0	0	0	0	0	0	0	0	0
District 1	645	229	3,450	5,254	0	0	257	371	0	0	7	9	0	0
Mountain Village	143	45	211	75	33	54	107	52	0	0	0	0	0	0
Pitkas Point	33	31	400	0	0	0	20	0	0	0	400	0	0	0
St. Mary's	92	38	211	4	0	0	20	0	0	0	150	0	0	0
Pilot Station	93	37	218	314	0	0	0	0	0	0	0	0	0	0
Marshall	63	24	514	603	0	0	289	470	0	0	429	282	0	0
District 2	424	175	1,554	684	33	54	436	473	0	0	979	282	0	0
Russian Mission	56	20	0	0	0	0	100	0	0	0	100	0	0	0
Holy Cross	71	33	210	152	3,000	4,157	165	166	0	0	0	0	0	0
Shageluk	42	20	5,069	1,520	171	118	0	0	0	0	0	0	0	0
District 3	169	73	5,279	1,528	3,171	4,159	265	166	0	0	100	0	0	0
Anvik	40	17	0	0	23,410	12,694	0	0	0	0	0	0	0	0
Grayling	62	35	3,483	480	46,780	38,684	70	0	0	0	0	0	0	0
Kaitag	51	20	16	12	39,342	25,244	496	261	0	0	426	315	0	0
Nulato	90	30	58	43	21,875	23,834	0	0	0	0	0	0	0	0
Koyukuk	43	13	235	0	2,600	0	280	0	0	0	10	0	0	0
Galena	145	43	552	60	25,927	22,738	1,293	0	350	0	374	0	0	0
Ruby	69	25	3,154	3,287	2,167	730	4,009	2,304	1,811	688	219	73	100	0
Huslia	64	28	4,161	0	2,200	0	56	88	0	0	22	35	0	0
Hughes	25	18	2,205	160	0	0	0	0	0	0	0	0	0	0
Allakaket	46	22	4,495	1,801	0	0	390	379	0	0	0	0	0	0
Alatna	8	4	0	0	0	0	0	0	0	0	0	0	0	0
Bettles	28	20	726	344	0	0	537	326	0	0	0	0	0	0
District 4	671	275	19,085	3,799	164,300	58,142	7,131	2,374	1,961	688	1,051	325	100	0
Tanana	113	54	4,209	838	56	23	16,251	1,513	19,637	3,419	1,908	559	179	71
Rampart	27	25	400	0	0	0	378	57	0	0	0	0	0	0
Stevens Village	36	18	158	171	0	0	2,344	1,851	0	0	0	0	0	0
Birch Creek	15	13	0	0	0	0	25	21	0	0	0	0	0	0
Beaver	33	31	24	0	0	0	1,225	0	0	0	20	0	0	0
Fort Yukon	218	53	823	148	0	0	4,727	837	1,200	2,251	0	0	0	0
Venetie	57	21	552	0	0	0	4,170	0	0	0	0	0	0	0
Chaikyltsik	34	27	0	0	0	0	723	341	0	0	0	0	0	0
District 5	533	242	6,165	868	56	23	29,843	2,557	20,837	4,094	1,928	559	179	71
<b>Survey Totals</b>	<b>2,442</b>	<b>994 <sup>a</sup></b>	<b>35,533</b>	<b>6,752</b>	<b>167,560</b>	<b>58,291</b>	<b>37,932</b>	<b>3,545</b>	<b>22,798</b>	<b>4,151</b>	<b>4,065</b>	<b>706</b>	<b>279</b>	<b>71</b>

<sup>a</sup> Households contacted indicates the number of households with complete subsistence and commercial-related harvests of salmon fed to dogs information.

Table 17. Summary of responses from surveyed individuals who said their subsistence salmon needs were not met in 1995 and responded to the survey question "Why didn't you meet your salmon needs this year?"

Response Summary Category	Number of Responses	Percent of Total
Due to Mother Nature, i.e., high water/early freeze-up	14	6.8%
Working in another occupation	26	12.6%
No gear - boat, net motor, gas	32	15.5%
No helper to harvest or process fish	14	6.8%
Busy doing other things	28	13.5%
Medical reasons or elderly	25	12.1%
Poor run of fish	1	0.5%
Out of town	12	5.8%
Not enough fish caught	8	3.9%
Miscellaneous reasons not in other categories	24	11.6%
Still fishing	6	2.9%
Didn't fish - normally don't use fish	17	8.2%
<b>TOTALS</b>	<b>207 a</b>	<b>100.0%</b>

a A total of 1,011 households were surveyed in 1995, of which 207 households (21 percent) indicated their subsistence salmon needs were not met.

Table 18. Summary of interview information from Subdistrict 4-A commercial fishermen, summer chum salmon, Yukon Area, 1995.

Number of fishermen that participated in the Subdistrict 4-A commercial fishery:			66 Commercial Fishermen
Number of Subdistrict 4-A commercial fishermen interviewed: a			56 Commercial Fishermen
Number of interviewed fishermen which participated in the mainstem Yukon River commercial fishery:			55 Commercial Fishermen
Number of interviewed fishermen which participated in the Anvik River commercial fishery:			20 Commercial Fishermen
Number of interviewed Subdistrict 4-A fishermen who released live male summer chum salm			55 Commercial Fishermen
Number of mainstem Yukon River interviewed fishermen who released live male summer chum salmon:			47 Commercial Fishermen
Number of Anvik River interviewed fishermen who released live male summer chum salmon:			12 Commercial Fishermen
Method interviewed fishermen used to release live summer chum salmon:			
Mainstem Yukon River:			
Released male summer chum salmon from fish wheel box:	17%		8 Commercial Fishermen
Used "live chute" to return male summer chum salmon:	55%		26 Commercial Fishermen
Used "live box":	5%		2 Commercial Fishermen
Released male summer chum salmon from gillnet:	23%		11 Commercial Fishermen
			47 Commercial Fishermen
Percentage of the time mainstem Yukon River commercial fishermen released live summer chum salmon when commercial fishing:			
All the time:	27%		15 Commercial Fishermen
75 percent of the time:	31%		17 Commercial Fishermen
50 percent of the time:	11%		6 Commercial Fishermen
25 percent of the time:	11%		6 Commercial Fishermen
less than 25 percent of the time	5%		3 Commercial Fishermen
None:	15%		8 Commercial Fishermen
		100%	55 Commercial Fishermen
Usage of summer chum salmon reported harvested during postseason interview of Subdistrict 4-A commercial fishermen:			
Fish retained for household use:	27%	70,079	Summer Chum Salmon
Fish given away to other households:	41%	104,954	Summer Chum Salmon
Fish sold or bartered:	11%	27,799	Summer Chum Salmon
Fish loss to spoilage or animals:	16%	41,440	Summer Chum Salmon
Unknown:	5%	13,457	Summer Chum Salmon
		100%	257,729 Summer Chum Salmon
Summer chum salmon harvested to produce the roe sold by Subdistrict 4-A commercial interviewed fishermen:			
Based on the number of fish reported on fish tickets inseason:		210,019	Summer Chum Salmon
Based on interview with fishermen postseason:		257,729	Summer Chum Salmon
Based on department's estimate: b		370,859	Summer Chum Salmon

a Subdistrict 4-A commercial fishermen may participate in both the mainstem Yukon River and the Anvik River commercial fishery.

b A roe to male and female fish conversion was used. Conversion was based on an inseason sampling method that determined the average pound of roe per female and sex ratio per commercial fishing period.

Table 19. Reported subsistence and personal use fish harvested under the authority of a permit, listed by permit area, Yukon Area, 1995. a

Permit Fishing Area	Permit		Percent Returned	Number of Permits Returned that Fished	Reported Harvest											
	Type	Issued			Returned	Chinook	Summer Chum	Fall Chum	Coho	Whitefish	Sheefish	Burbot	Pike	Suckers	Grayling	
<b>Subsistence Use</b>																
Yukon River near Haul Road Bridge	SY	59	59	100%	39	3,253	954	2,244	59	402	28	11	24	0	0	
Yukon River near Circle and Eagle	SE	87	87	100%	53	3,628	129	19,047	1	183	4	26	58	43	9	
Tanana River Fishing Subdistrict 6A	SA	38	35	92%	26	455	4,894	21,720	9,584	745	0	22	26	1	0	
Tanana River Fishing Subdistrict 6B	SB	98	98	100%	59	1,322	6,712	25,364	7,458	1,090	46	28	55	0	0	
Tanana River Upstream of Subdistrict 6C	SU	50	46	92%	12	0	0	88	0	556	0	54	36	45	1	
Kantishna River Fishing Subdistrict 6A	SK	3	3	100%	3	1	5	1,802	1,760	14	0	4	12	3	0	
Tolovana River Pike	ST	55	52	95%	20	0	0	0	0	96	8	41	1,068	74	0	
<i>Subsistence Permit Subtotals</i>		390	380	97%	212	8,659	12,694	70,265	18,862	3,086	86	186	1,279	166	10	
<b>Personal Use</b>																
Tanana River Fishing Subdistrict 6C	PC	139	138	99%	91	399	780	863	417	18	1	1	1	2	0	
Tanana River Whitefish	PW	3	3	100%	2	0	0	0	0	68	0	0	0	288	0	
<i>Personal Use Permit Subtotals</i>		142	141	99%	93	399	780	863	417	86	1	1	1	290	0	
<b>Permit Totals</b>		532 b	521	98%	305 c	9,058	13,474	71,128	19,279	3,172	87	187	1,280	456	10	

a Does not include permit information returned after February 29, 1996.

b Includes 41 households that were issued permits for two different areas, including 27 Minto households who were issued both Tolovana River pike and salmon permits.

c Includes 2 households that fished in two different permit areas.

Table 20. Reported subsistence and personal use fish harvested under the authority of a permit, listed by community of residence, by drainage, Yukon Area, 1995. a

Community	Harvest by Drainage	Permits		Percent Returned	Number of Permits Returned that Fished	Reported Harvest									
		Issued	Returned			Chinook	Summer Chum	Fall Chum	Coho	Whitefish	Sheefish	Burbot	Pike	Sucker	Grayling
<b>Subsistence Use</b>															
Central	Yukon River	9	9	100%	4	171	2	0	0	0	0	0	0	0	0
Circle	Yukon River	15	15	100%	9	1,145	70	5,102	0	94	0	2	1	0	0
Eagle	Yukon River	46	46	100%	32	1,886	57	13,115	1	50	4	22	36	43	9
Fairbanks North Star Borough b (FNSB)	Yukon River	46	46	100%	31	1,447	722	2,184	18	310	28	13	39	0	0
	Tolovana River	24	22	92%	8	0	0	0	0	3	0	41	165	0	0
	Tanana River	22	22	100%	13	269	3,528	6,384	3,076	103	1	1	7	1	0
	<i>Subtotal</i>	92	90	98%	52	1,716	4,250	8,568	3,094	416	29	55	211	1	0
Healy	Tanana River	7	7	100%	3	6	18	919	0	2	0	0	0	0	0
	Kantishna River	1	1	100%	1	0	0	1,223	851	4	0	0	5	1	0
	<i>Subtotal</i>	8	8	100%	4	6	18	2,142	851	6	0	0	5	1	0
Manley	Yukon River	1	1	100%	1	473	229	0	0	122	0	0	0	0	0
	Tanana River	28	25	89%	19	334	1,607	20,078	7,395	721	0	21	23	0	0
	<i>Subtotal</i>	29	26	90%	20	807	1,836	20,078	7,395	843	0	21	23	0	0
Minto	Yukon River	1	1	100%	0	0	0	0	0	0	0	0	0	0	0
	Tolovana River	31	30	97%	12	0	0	0	0	93	8	0	903	74	0
	Tanana River	35	35	100%	16	535	1,320	4,782	338	449	40	0	51	0	0
	<i>Subtotal</i>	67	66	99%	28	535	1,320	4,782	338	542	48	0	954	74	0
Nenana	Yukon River	1	1	100%	1	241	3	0	7	0	0	0	0	0	0
	Tanana River	44	44	100%	33	612	5,038	14,921	6,233	560	5	28	0	0	0
	Kantishna River	2	2	100%	2	1	5	579	909	10	0	4	7	2	0
	<i>Subtotal</i>	47	47	100%	36	854	5,046	15,500	7,149	570	5	32	7	2	0
Stevens Village	Yukon River	13	13	100%	7	1,228	0	60	34	0	0	0	0	0	0
Upper Tanana Villages c	Yukon River	15	15	100%	8	290	0	915	0	9	0	0	6	0	0
	Tanana River	48	44	92%	11	0	0	3	0	556	0	54	36	45	1
	<i>Subtotal</i>	63	59	94%	19	290	0	918	0	565	0	54	42	45	1
Other d	Tanana River	1	1	100%	1	21	95	0	0	0	0	0	0	0	0
<i>Subsistence Subtotals</i>		390	380	97%	212	8,659	12,694	70,265	18,862	3,086	86	186	1,279	166	10
<b>Personal Use</b>															
Delta Junction	Tanana River	6	6	100%	3	0	0	0	0	68	0	0	0	288	0
FNSB b	Tanana River	130	129	99%	85	383	763	643	406	15	1	1	0	2	0
Nenana	Tanana River	3	3	100%	3	6	7	220	11	3	0	0	0	0	0
Other e	Tanana River	3	3	100%	2	10	10	0	0	0	0	0	1	0	0
<i>Personal Use Subtotals</i>		142	141	99%	93	399	780	863	417	86	1	1	1	290	0
<b>PERMIT TOTALS</b>		532 f	521	98%	305 g	9,058	13,474	71,128	19,279	3,172	87	187	1,280	456	10

a Does not include salmon permit information returned after February 29, 1996.

b Includes residents from the communities of Fairbanks, College, Ester, Ft. Wainwright, North Pole, Salcha, and Two Rivers.

c Includes residents from the communities of Delta Junction, Dot Lake, Northway, Tanacross, Tetlin, and Tok.

d Includes residents from the community of Eagle River.

e Includes residents from the communities of Coldfoot, Juneau, and Ketchikan.

f Includes 41 households that were issued permits for two different areas, including 27 Minto households who were issued both pike and salmon permits.

g Includes 2 households that fished in two different permit areas.

Table 21. Household and dog information reported by subsistence and personal use permits issued and returned, listed by community of residence, Yukon Area, 1995. a

Community	Permit Information b				Household Information					Permit Return Information for Households Feeding Whole Salmon to Dogs	
	Permits		Percent Returned	Numbers of Permits Returned that Fished	Number of People	Number of Fishermen	Number of Households with Dogs	Number of Dogs	Households Indicating Feeding Whole Salmon to Dogs	Number of Households Who Put Whole Salmon up for Dogs	Number of Whole Salmon Fed to Dogs
	Issued	Returned									
<b>Subsistence Use</b>											
Central	9	9	100%	4	21	14	7	17	2	2	52
Circle	15	15	100%	9	43	27	14	76	9	5	4,836
Eagle	46	46	100%	32	126	95	32	181	26	15	10,694
Fairbanks Borough c	92	90	98%	52	286	158	59	532	22	10	13,773
Healy	8	8	100%	4	22	16	5	90	5	3	3,007
Manley	29	26	90%	20	72	43	28	471	24	15	20,750
Minto	67	66	99%	28	141	55	30	240	25	7	3,367
Nenana	47	47	100%	36	163	77	38	515	33	11	11,612
Stevens Village	13	13	100%	7	36	19	11	43	4	0	0
Upper Tanana Villages d	63	59	94%	19	221	123	30	94	4	1	620
Other e	1	1	100%	1	6	2	1	2	0	0	0
<i>Subtotal Subsistence Use</i>	390	380	97%	212	1,137	629	255	2,261	154	69	68,711
<b>Personal Use</b>											
Delta Junction	6	6	100%	3	21	11	0	0	0	0	0
Fairbanks Borough c	130	129	99%	85	394	214	0	0	0	0	0
Nenana	3	3	100%	3	8	5	0	0	0	0	0
Other f	3	3	100%	2	5	4	0	0	0	0	0
<i>Subtotal Personal Use</i>	142	141	99%	93	428	234	0	0	0	0	0
<b>TOTAL</b>	532	521	98%	305	1,565	863	255	2,261	154	69	68,711

a Does not include permit information returned after February 29, 1996.

b Includes 41 households that were issued permits for two different areas.

c Includes residents from the communities of Fairbanks, College, Ester, Ft. Wainwright, North Pole, Salcha, and Two Rivers.

d Includes residents from the communities of Delta Junction, Dot Lake, Northway, Tanacross, Tetlin, and Tok.

e Includes residents from the community of Eagle River.

f Includes residents from the communities of Coldfoot, Juneau, and Ketchikan.

Table 22. Salmon given away for subsistence purposes by test fish programs, Yukon Area, 1995.

Project	Primary Distribution	Chinook	Summer Chum	Fall Chum	Coho
Big Eddy Set Gill Net Sites	Emmonak	795	3,005	1,133	240
Middle Mouth Set Gill Net Sit	Kotlik	920	3,377	1,275	339
Drift Gill Net Sites	Pilot Station	166	1,875	541	205
Drift Gill Net Sites	Mountain Village	1	0	523	559
Test Fish Wheel	Galena	2	57	199	0
North Bank Test Fish Wheel	Tanana	0	0	81	0
South Bank Test Fish Wheel	Tanana	0	0	1,795	164
Test Fish Wheels	Fort Yukon	0	0	1,570	0
Tagging Fish Wheels	Manley	1	50	194	0
Test Fish Wheel	Nenana a	-	-	-	-
<b>Total</b>		<b>1,885</b>	<b>8,364</b>	<b>7,311</b>	<b>1,507</b>

a Records were not kept on amount of salmon given away to other households for subsistence purposes.





5 AAC 99.015 JOINT BOARD NONSUBSISTENCE AREAS. (4) The Fairbanks Nonsubsistence Area is comprised of the following: within Unit 20(A) as defined by 5 AAC 92.450(20)(A) east of the Wood River drainage and south of the Rex Trail but including the upper Wood River drainage south of its confluence with Chicken Creek, within Unit 20(B) as defined by 5 AAC 92.450(20)(B) the North Star Borough and that portion of the Washington Creek drainage east of the Elliot Highway, within Unit 20(D) as defined by 5 AAC 92.450(20)(D) west of the Tanana River between its confluence's with the Johnson and Delta Rivers, west of the west bank of the Johnson River, and north and west of the Volkmar drainage, including the Goodpaster River drainage, and within Unit 25(C) as defined by 5 AAC 92.450(25)(C) the Preacher and Beaver Creek drainages.

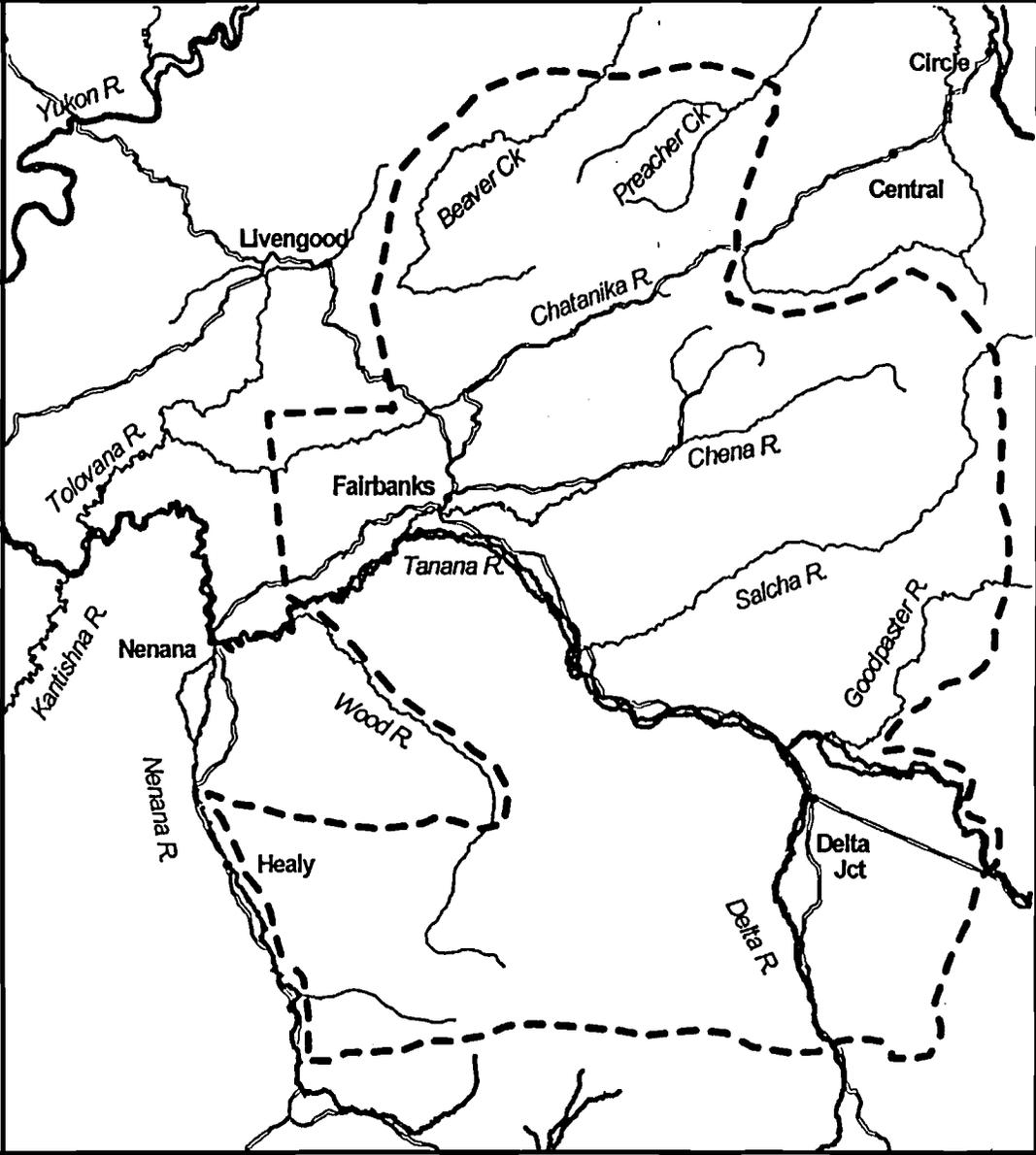
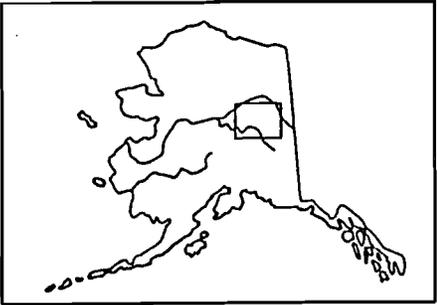
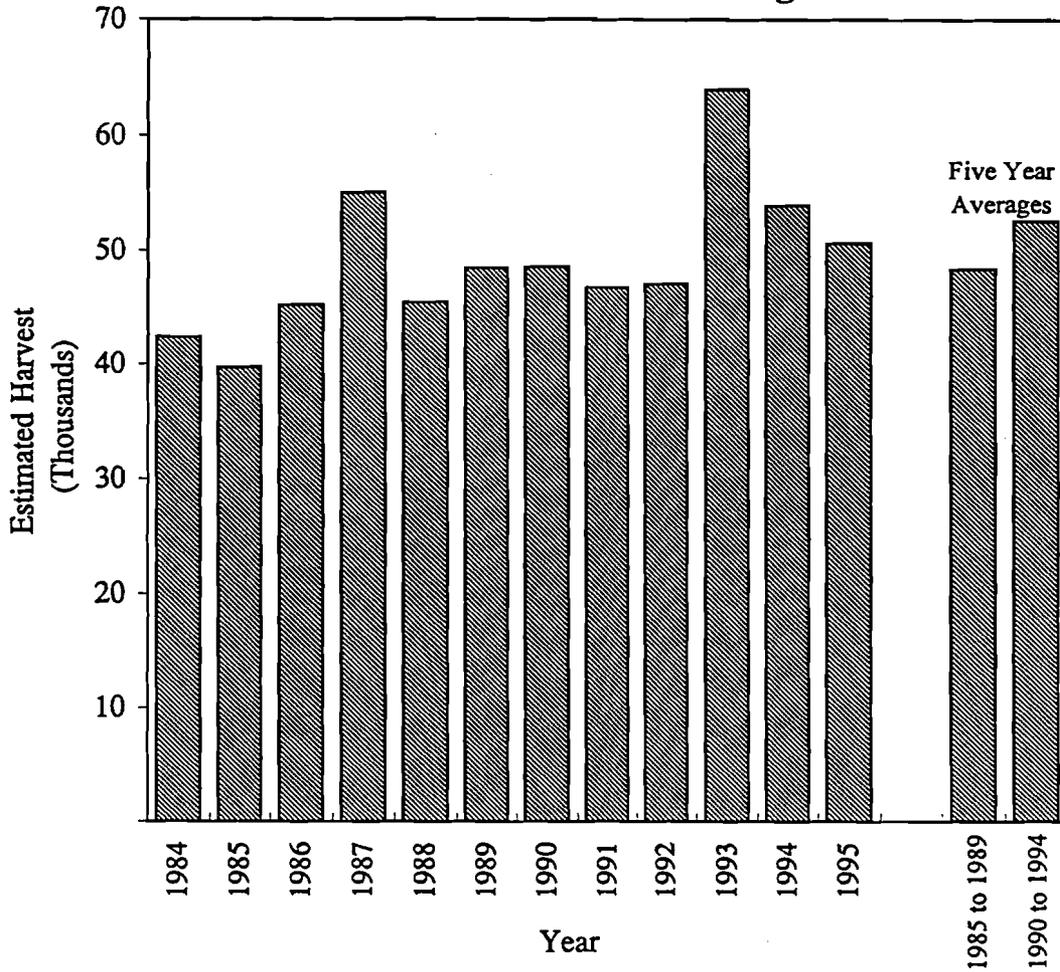


Figure 2. The Fairbanks Nonsubsistence Area, 1995.

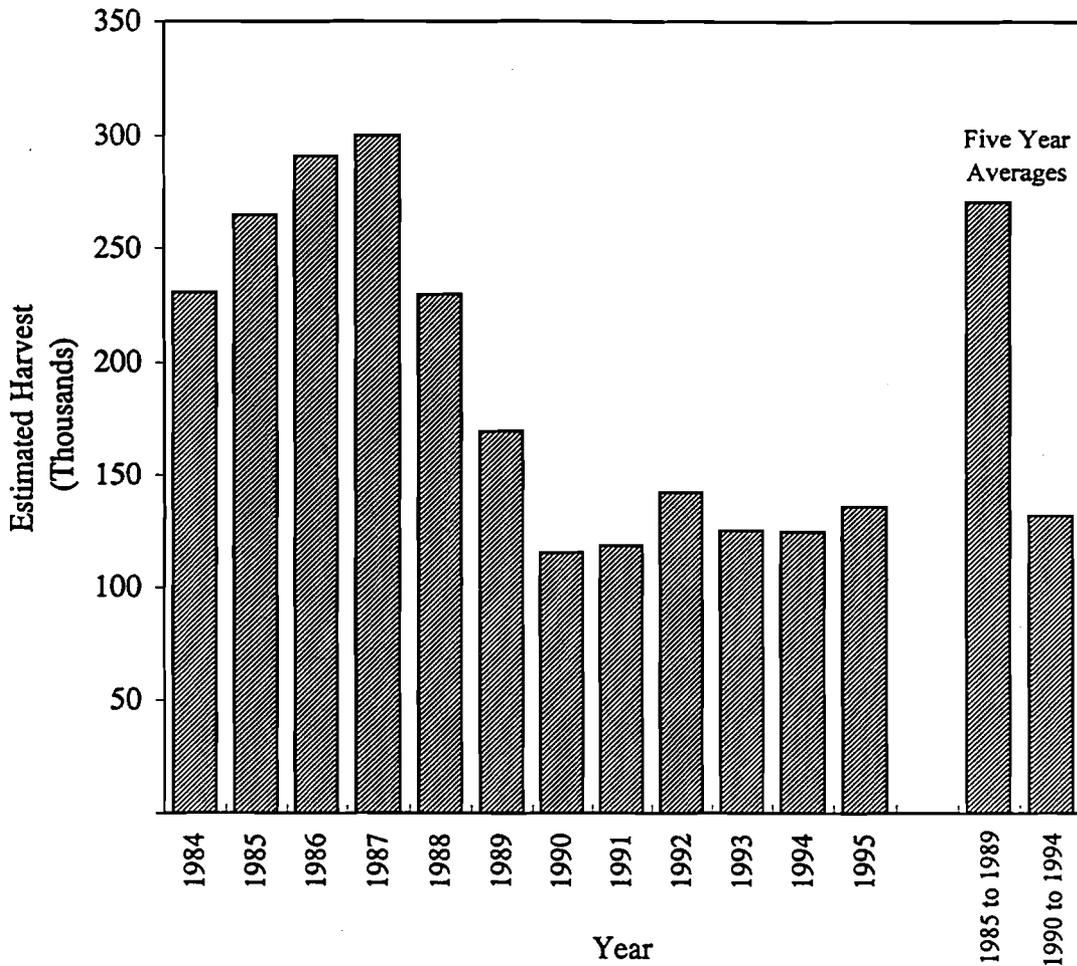
### Estimated Chinook Salmon Subsistence Harvests Yukon River Drainage



Beginning in 1988, subsistence salmon harvest estimates have been generated from a stratified random sample of village households.

Figure 3. The estimated number of chinook salmon harvested in the subsistence salmon fisheries, Yukon Area, 1984 to 1995.

### Estimated Summer Chum Salmon Subsistence Harvests Yukon River Drainage

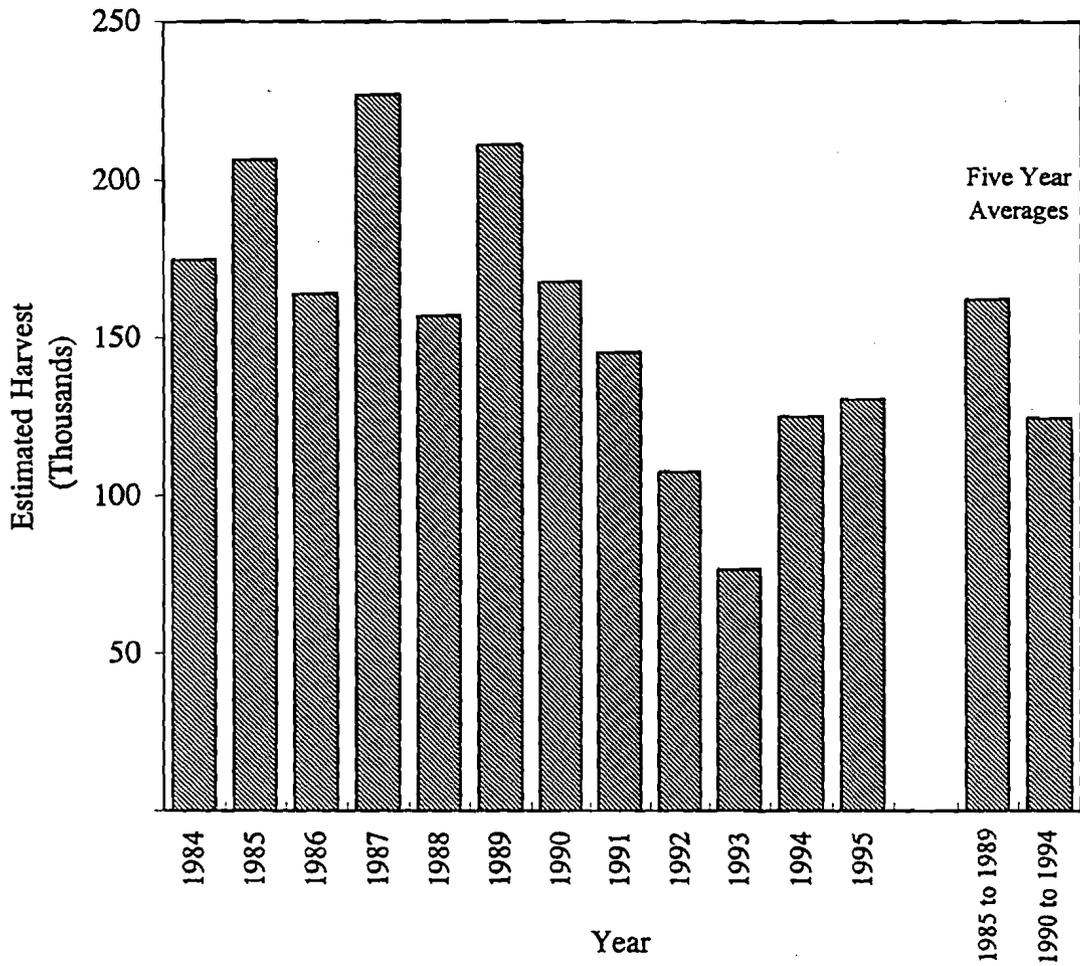


Summer chum salmon harvest estimates prior to 1988 included commercial caught summer chum salmon carcasses retained for subsistence use.

Beginning in 1988, subsistence salmon harvest estimates have been generated from a stratified random sample of village households.

Figure 4. The estimated number of summer chum salmon harvested in the subsistence salmon fisheries, Yukon Area, 1984 to 1995.

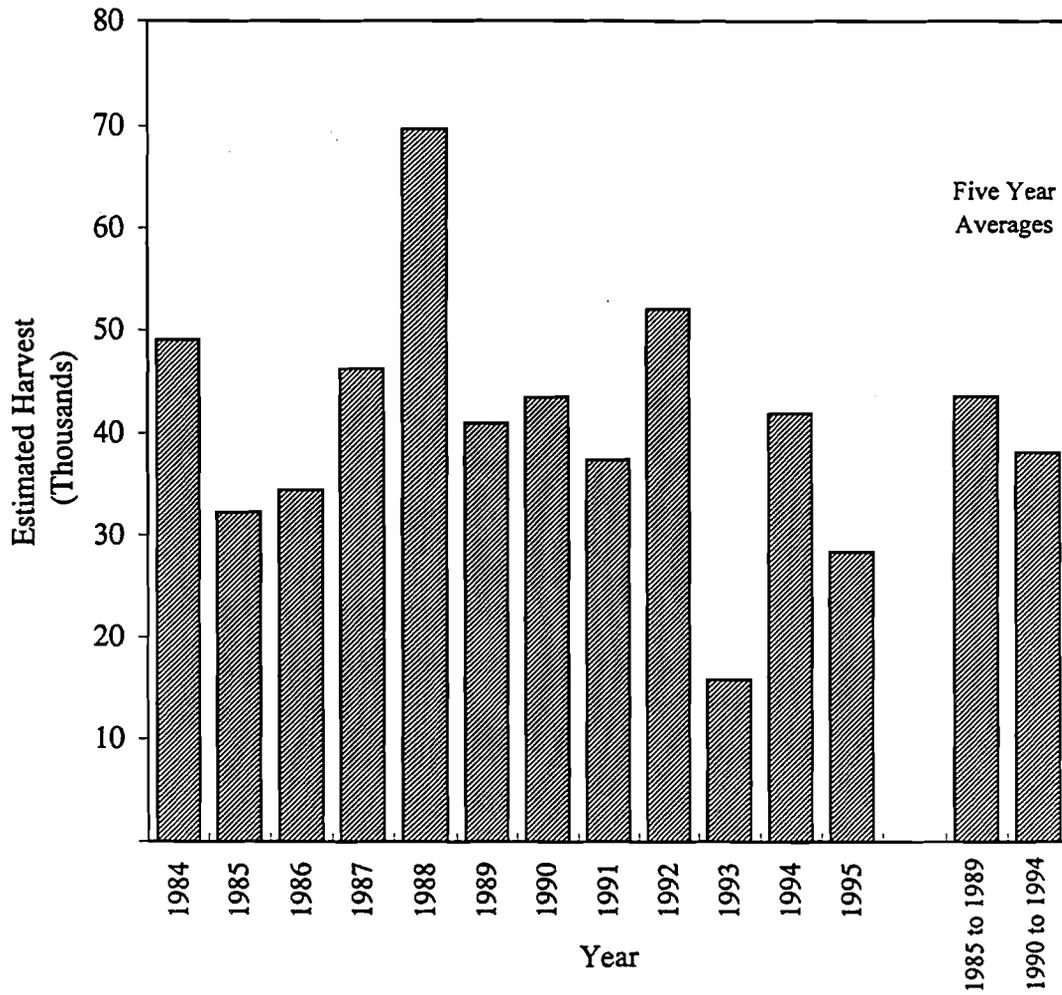
### Estimated Fall Chum Salmon Subsistence Harvests Yukon River Drainage



Beginning in 1988, subsistence salmon harvest estimates have been generated from a stratified random sample of village households.

Figure 5. The estimated number of fall chum salmon harvested in the subsistence salmon fisheries, Yukon Area, 1984 to 1995.

### Estimated Coho Salmon Subsistence Harvests Yukon River Drainage



Beginning in 1988, subsistence salmon harvest estimates have been generated from a stratified random sample of village households.

Figure 6. The estimated number of coho salmon harvested in the subsistence salmon fisheries, Yukon Area, 1984 to 1995.

**APPENDIX A**

**DETAILED YUKON RIVER SALMON HARVEST  
ESTIMATES AND RELATED INFORMATION**



Appendix A.1 Estimated chinook salmon subsistence harvest by residents of surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. a

Community	N	Unknown			Does Not Harvest Salmon				Light Harvester			Medium Harvester			Heavy Harvester			Combined			CI (95%) (+/-)			
		n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Total	Est		Total		
Hooper Bay	15	5	16.6	11.9	41	4	8.0	5.6	64	17	6.8	2.2	15	15	31.4	0.0	1	1	15.0	0.0	136	42	1,500	639
Scammon Bay	3	3	4.6	0.0	22	3	0.0	0.0	47	11	10.4	3.6	5	5	16.0	0.0	0	0	-	-	77	22	585	333
Sheldon's Point	0	0	-	-	10	4	5.0	3.8	20	6	7.3	4.0	7	7	37.4	0.0	0	0	-	-	37	17	459	174
Alakanuk	4	3	0.0	0.0	47	4	0.0	0.0	70	20	14.6	2.9	13	13	13.0	0.0	1	1	0.0	0.0	135	41	1,191	410
Emmonak	13	4	3.5	2.9	59	18	0.1	0.0	65	30	5.4	1.4	17	16	17.5	1.1	3	2	71.5	29.7	157	70	916	263
Kotlik	7	3	2.3	1.7	25	4	0.0	0.0	54	16	10.5	3.3	15	14	52.0	3.3	2	2	155.5	0.0	103	39	1,679	364
District 1	42	18	7.7	4.3	204	37	1.9	1.1	320	100	9.4	1.1	72	70	28.6	0.7	7	6	77.2	12.7	645	231	6,330	959
Mountain Village	2	2	14.0	0.0	48	4	4.2	4.0	76	23	11.5	2.4	16	15	23.0	2.3	1	1	64.0	0.0	143	45	1,541	537
Pitkas Point	0	0	-	-	11	11	6.0	0.0	15	14	6.5	0.8	6	6	59.8	0.0	1	1	35.0	0.0	33	32	559	26
St. Mary's	1	0	-	0.0	28	5	6.6	5.9	40	12	20.2	10.2	19	19	34.4	0.0	4	4	95.2	0.0	92	40	2,031	870
Pilot Station	2	2	25.0	0.0	38	8	7.2	4.2	48	22	19.3	3.1	4	4	43.2	0.0	1	1	20.0	0.0	93	37	1,448	434
Marshall	0	0	-	-	11	4	0.0	0.0	45	14	66.7	13.7	6	6	47.6	0.0	1	1	0.0	0.0	63	25	3,291	1,215
District 2	5	4	15.6	0.0	136	32	5.4	2.2	224	85	25.5	3.4	51	50	36.1	0.7	8	8	62.5	0.0	424	179	8,669	1,646
Russian Mission	0	0	-	-	19	5	1.6	1.3	30	9	59.1	13.4	6	6	107.6	0.0	1	0	-	0.0	56	20	2,450	791
Holy Cross	0	0	-	-	24	5	2.0	1.7	38	19	51.6	9.1	8	8	82.5	0.0	1	1	136.0	0.0	71	33	2,808	688
Shageluk	0	0	-	-	18	5	1.2	1.0	13	5	0.0	0.0	8	7	17.4	3.5	3	3	0.0	0.0	42	20	161	66
District 3	0	0	-	-	61	15	1.6	0.8	81	33	46.1	6.5	22	21	65.7	1.3	5	4	27.2	0.0	169	73	5,419	1,051
Anvik	0	0	-	-	17	4	0.0	0.0	15	5	16.0	7.0	6	6	22.6	0.0	2	2	37.0	0.0	40	17	450	205
Grayling	0	0	-	-	22	5	8.0	7.0	15	5	31.2	14.2	22	22	30.9	0.0	3	3	5.0	0.0	62	35	1,340	517
Kaitag	0	0	-	-	13	2	0.0	0.0	23	6	40.6	26.6	14	12	66.7	5.5	1	1	20.0	0.0	51	21	1,890	1,210
Nulato	8	4	12.5	5.8	37	5	0.0	0.0	30	8	21.8	5.4	14	12	54.2	3.8	1	1	25.0	0.0	90	30	1,533	348
Koyukuk	0	0	-	-	19	3	0.0	0.0	19	5	0.0	0.0	3	3	33.3	0.0	2	2	23.0	0.0	43	13	146	0
Galena	6	4	0.7	0.4	70	7	0.1	0.1	51	14	8.2	3.0	14	14	31.8	0.0	4	4	113.7	0.0	145	43	1,334	307
Ruby	2	2	0.0	0.0	38	5	0.0	0.0	15	5	25.2	20.5	10	9	64.6	10.1	4	4	102.5	0.0	69	25	1,435	636
Huslia	1	0	-	0.0	31	5	18.8	10.7	14	5	0.0	0.0	13	13	13.6	0.0	5	5	34.4	0.0	64	28	932	652
Hughes	1	1	0.0	0.0	11	6	0.0	0.0	8	7	2.2	0.7	5	5	11.8	0.0	0	0	-	-	25	19	77	11
Allakaket	2	1	0.0	0.0	18	5	0.0	0.0	13	5	0.0	0.0	11	9	28.8	5.2	2	2	1.5	0.0	46	22	321	112
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	5.0	0.0	2	1	0.0	0.0	0	0	-	-	8	4	10	0
Bettles	2	0	-	0.0	18	14	0.0	0.0	8	7	0.2	0.0	0	0	-	-	0	0	-	-	28	21	4	1
District 4	22	12	4.8	2.1	298	63	2.6	1.2	213	73	14.6	3.5	114	106	37.3	1.3	24	24	50.8	0.0	671	278	9,472	1,683
Tanana	4	3	0.0	0.0	62	16	0.3	0.1	16	6	16.6	13.1	10	10	13.3	0.0	21	20	94.2	6.7	113	55	2,398	499
Rampart	1	1	0.0	0.0	6	6	30.0	0.0	7	7	65.0	0.0	11	9	57.2	7.2	2	2	98.5	0.0	27	25	1,461	156
Stevens Village	1	0	-	0.0	14	4	36.5	19.4	9	4	4.5	3.3	9	9	175.0	0.0	3	2	182.5	79.3	36	19	2,674	712
Birch Creek	0	0	-	-	10	8	7.5	3.3	5	5	3.6	0.0	0	0	-	-	0	0	-	-	15	13	93	65
Beaver	0	0	-	-	14	14	0.3	0.0	12	12	14.5	0.0	7	7	120.2	0.0	0	0	-	-	33	33	1,021	0
Fort Yukon	12	4	0.0	0.0	132	11	0.9	0.8	45	13	20.7	9.2	24	23	75.5	4.6	5	5	53.0	0.0	218	56	3,132	876
Venetie	2	2	0.0	0.0	30	4	0.0	0.0	12	3	0.0	0.0	11	11	28.5	0.0	2	2	54.5	0.0	57	22	434	0
Chalkyitsik	1	0	-	0.0	24	19	0.0	0.0	4	4	0.0	0.0	5	4	0.0	0.0	0	0	-	-	34	27	0	0
District 5	21	10	0.0	0.0	292	82	3.1	1.0	110	54	17.2	4.2	77	73	69.1	1.7	33	31	93.9	8.4	533	250	11,214	1,246
Survey Totals	90	44	5.6	2.1	991	229	2.9	0.6	848	345	18.4	1.4	336	320	44.4	0.8	77	73	71.4	3.7	2,442	1,011	41,303	3,021

a The total number of households (N), and the number of households contacted (n).

Appendix A.2 Estimated summer chum salmon subsistence harvest by residents of surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. a

Community	N	Unknown		Does Not Harvest Salmon			Light Harvester			Medium Harvester			Heavy Harvester			Combined								
		n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Total	Est	CI (95%)			
Hooper Bay	15	5	48.0	16.0	41	4	106.2	67.4	64	17	79.0	18.2	15	15	189.2	0.0	1	1	400.0	0.0	136	42	13,374	5,903
Scammon Bay	3	3	25.0	0.0	22	3	0.0	0.0	47	11	64.2	15.8	5	5	178.0	0.0	0	0	-	-	77	22	3,986	1,441
Sheldon's Point	0	0	-	-	10	4	30.0	23.2	20	6	53.3	14.5	7	7	230.2	0.0	0	0	-	-	37	17	2,979	731
Alakanuk	4	3	73.3	31.7	47	4	0.0	0.0	70	20	121.0	21.0	13	13	132.7	0.0	1	1	45.0	0.0	135	41	10,538	2,894
Emmonak	13	4	1.0	0.8	59	18	3.8	2.4	65	30	62.3	10.6	17	16	174.4	12.5	3	2	478.0	12.1	157	70	8,691	1,451
Kotlik	7	3	63.3	47.8	25	4	0.0	0.0	54	16	47.0	18.2	15	14	199.1	7.3	2	2	216.0	0.0	103	39	6,400	2,051
District 1	42	18	36.8	10.2	204	37	23.9	13.6	320	100	75.7	7.4	72	70	180.8	3.3	7	6	330.1	5.1	645	231	45,968	7,221
Mountain Village	2	2	100.0	0.0	48	4	8.7	8.3	78	23	90.8	15.1	16	15	160.2	7.6	1	1	480.0	0.0	143	45	10,554	2,399
Pitkas Point	0	0	-	-	11	11	19.2	0.0	15	14	52.2	4.8	6	6	77.8	0.0	1	1	203.0	0.0	33	32	1,865	143
St. Mary's	1	0	-	0.0	28	5	0.0	0.0	40	12	43.5	18.7	19	19	171.6	0.0	4	4	237.2	0.0	92	40	5,950	1,470
Pilot Station	2	2	150.0	0.0	38	8	8.2	5.5	48	22	31.6	6.3	4	4	100.7	0.0	1	1	15.0	0.0	93	37	2,552	725
Marshall	0	0	-	-	11	4	17.5	13.9	45	14	89.3	21.9	6	6	63.3	0.0	1	1	0.0	0.0	63	25	4,594	1,962
District 2	5	4	100.0	0.0	136	32	8.4	3.5	224	85	66.8	7.6	51	50	138.7	2.3	8	8	205.9	0.0	424	179	25,315	3,509
Russian Mission	0	0	-	-	19	5	0.0	0.0	30	9	105.6	31.4	6	6	80.5	0.0	1	0	-	0.0	56	20	3,653	1,849
Holy Cross	0	0	-	-	24	5	0.0	0.0	38	19	13.6	3.3	8	8	43.7	0.0	1	1	78.0	0.0	71	33	948	248
Shageluk	0	0	-	-	18	5	14.8	12.4	13	5	180.0	62.7	8	7	258.1	36.4	3	3	958.0	0.0	42	20	7,542	1,753
District 3	0	0	-	-	61	15	4.3	3.6	81	33	74.4	15.4	22	21	131.7	13.2	5	4	590.4	0.0	169	73	12,143	2,560
Anvik	0	0	-	-	17	4	0.0	0.0	15	5	0.0	0.0	6	6	1.5	0.0	2	2	0.0	0.0	40	17	9	0
Grayling	0	0	-	-	22	5	0.0	0.0	15	5	2.0	1.6	22	22	152.1	0.0	3	3	2.3	0.0	62	35	3,385	48
Kaltag	0	0	-	-	13	2	0.0	0.0	23	6	5.3	2.8	14	12	1.1	0.4	1	1	0.0	0.0	51	21	139	131
Nulato	8	4	0.7	0.5	37	5	0.0	0.0	30	8	3.0	1.6	14	12	9.4	2.8	1	1	0.0	0.0	90	30	228	126
Koyukuk	0	0	-	-	19	3	0.0	0.0	19	5	0.0	0.0	3	3	10.0	0.0	2	2	142.5	0.0	43	13	315	0
Galena	6	4	0.0	0.0	70	7	0.0	0.0	51	14	2.2	1.2	14	14	35.5	0.0	4	4	320.7	0.0	145	43	1,897	123
Ruby	2	2	0.0	0.0	38	5	0.0	0.0	15	5	146.2	109.4	10	9	55.5	17.5	4	4	424.0	0.0	69	25	4,445	3,236
Huslia	1	0	-	0.0	31	5	4.0	3.6	14	5	25.0	20.0	13	13	174.6	0.0	5	5	428.0	0.0	64	28	4,885	593
Hughes	1	1	0.0	0.0	11	6	0.1	0.1	8	7	47.1	12.5	5	5	413.8	0.0	0	0	-	-	25	19	2,448	197
Allakaket	2	1	0.0	0.0	18	5	0.0	0.0	13	5	0.0	0.0	11	9	562.7	100.9	2	2	102.5	0.0	46	22	6,396	2,175
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	20.0	0.0	2	1	50.0	0.0	0	0	-	-	8	4	140	0
Bettles	2	0	-	0.0	18	14	5.0	2.3	8	7	81.2	22.0	0	0	-	-	0	0	-	-	28	21	740	355
District 4	22	12	0.3	0.1	298	63	0.7	0.4	213	73	18.6	7.8	114	106	133.5	9.8	24	24	234.0	0.0	671	278	25,028	3,971
Tanana	4	3	0.0	0.0	62	16	0.0	0.0	16	6	0.0	0.0	10	10	24.0	0.0	21	20	162.8	11.1	113	55	3,660	457
Rampart	1	1	0.0	0.0	6	6	183.3	0.0	7	7	8.5	0.0	11	9	0.4	0.1	2	2	1.5	0.0	27	25	1,168	3
Stevens Village	1	0	-	0.0	14	4	0.0	0.0	9	4	0.0	0.0	9	9	0.6	0.0	3	2	50.5	29.1	36	19	158	171
Birch Creek	0	0	-	-	10	8	0.0	0.0	5	5	0.0	0.0	0	0	-	-	0	0	-	-	15	13	0	0
Beaver	0	0	-	-	14	14	0.4	0.0	12	12	0.1	0.0	7	7	4.0	0.0	0	0	-	-	33	33	36	0
Fort Yukon	12	4	0.0	0.0	132	11	0.0	0.0	45	13	0.0	0.0	24	23	26.5	2.2	5	5	72.0	0.0	218	56	998	108
Venetie	2	2	0.0	0.0	30	4	0.0	0.0	12	3	0.0	0.0	11	11	0.0	0.0	2	2	276.0	0.0	57	22	552	0
Chalkyitsik	1	0	-	0.0	24	19	0.0	0.0	4	4	0.0	0.0	5	4	0.0	0.0	0	0	-	-	34	27	0	0
District 5	21	10	0.0	0.0	292	82	3.8	0.0	110	54	0.6	0.0	77	73	11.9	0.7	33	31	136.0	7.5	533	250	6,571	500
<b>Survey Totals</b>	<b>90</b>	<b>44</b>	<b>22.8</b>	<b>4.7</b>	<b>991</b>	<b>229</b>	<b>7.7</b>	<b>2.8</b>	<b>948</b>	<b>345</b>	<b>51.9</b>	<b>3.7</b>	<b>336</b>	<b>320</b>	<b>116.4</b>	<b>3.5</b>	<b>77</b>	<b>73</b>	<b>220.9</b>	<b>3.2</b>	<b>2,442</b>	<b>1,011</b>	<b>115,023</b>	<b>9,330</b>

a The total number of households (N), and the number of households contacted (n).

Appendix A.3 Estimated fall chum salmon subsistence harvest by residents of surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. a

Community	Unknown				Does Not Harvest Salmon				Light Harvester			Medium Harvester			Heavy Harvester			Combined						
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	Est n	Total	CI (95%) (+/-)
Hooper Bay	15	5	0.0	0.0	41	4	0.0	0.0	64	17	0.0	0.0	15	15	13.8	0.0	1	1	0.0	0.0	136	42	207	0
Scammon Bay	3	3	0.0	0.0	22	3	0.0	0.0	47	11	2.2	1.9	5	5	8.0	0.0	0	0	-	-	77	22	147	183
Sheldon's Point	0	0	-	-	10	4	0.0	0.0	20	6	0.0	0.0	7	7	38.5	0.0	0	0	-	-	37	17	256	0
Alakanuk	4	3	0.0	0.0	47	4	0.0	0.0	70	20	7.3	3.3	13	13	8.3	0.0	1	1	8.0	0.0	135	41	631	453
Emmonak	13	4	0.0	0.0	59	18	0.0	0.0	65	30	2.8	1.4	17	16	17.2	3.2	3	2	0.5	0.2	157	70	481	217
Kotlik	7	3	0.0	0.0	25	4	0.0	0.0	54	16	2.5	1.6	15	14	38.9	5.9	2	2	100.0	0.0	103	39	922	244
District 1	42	18	0.0	0.0	204	37	0.0	0.0	320	100	3.0	0.8	72	70	20.7	1.4	7	6	29.9	0.1	645	231	2,644	588
Mountain Village	2	2	0.0	0.0	48	4	0.0	0.0	76	23	6.4	5.0	16	15	20.9	3.4	1	1	0.0	0.0	143	45	824	764
Pitkas Point	0	0	-	-	11	11	-0.2	0.0	15	14	0.7	0.1	6	6	11.8	0.0	1	1	20.0	0.0	33	32	99	5
St. Mary's	1	0	-	0.0	28	5	0.0	0.0	40	12	1.6	1.3	19	19	19.4	0.0	4	4	26.5	0.0	92	40	542	109
Pilot Station	2	2	0.0	0.0	38	8	0.2	0.2	48	22	0.0	0.0	4	4	6.0	0.0	1	1	0.0	0.0	93	37	34	16
Marshall	0	0	-	-	11	4	0.0	0.0	45	14	10.5	5.3	6	6	46.8	0.0	1	1	0.0	0.0	63	25	754	469
District 2	5	4	0.0	0.0	136	32	0.0	0.0	224	85	4.6	2.0	51	50	21.2	1.0	8	8	15.8	0.0	424	179	2,251	903
Russian Mission	0	0	-	-	19	5	0.0	0.0	30	9	24.0	11.2	6	6	24.1	0.0	1	0	-	0.0	56	20	865	661
Holy Cross	0	0	-	-	24	5	0.0	0.0	38	19	8.9	2.9	8	8	35.6	0.0	1	1	56.0	0.0	71	33	681	220
Shageluk	0	0	-	-	18	5	0.0	0.0	13	5	4.0	3.1	8	7	9.2	2.1	3	3	0.0	0.0	42	20	128	87
District 3	0	0	-	-	61	15	0.0	0.0	81	33	13.7	4.4	22	21	22.9	0.7	5	4	11.2	0.0	169	73	1,672	702
Anvik	0	0	-	-	17	4	0.0	0.0	15	5	5.0	2.5	6	6	17.3	0.0	2	2	45.0	0.0	40	17	269	75
Grayling	0	0	-	-	22	5	13.0	7.3	15	5	28.0	15.3	22	22	19.2	0.0	3	3	8.3	0.0	62	35	1,155	550
Kaitag	0	0	-	-	13	2	0.0	0.0	23	6	6.1	3.6	14	12	35.8	9.5	1	1	0.0	0.0	51	21	644	308
Nulato	8	4	13.7	6.0	37	5	0.0	0.0	30	8	12.7	6.0	14	12	44.5	4.8	1	1	20.0	0.0	90	30	1,137	394
Koyukuk	0	0	-	-	19	3	0.0	0.0	19	5	0.0	0.0	3	3	30.0	0.0	2	2	362.0	0.0	43	13	814	0
Galena	6	4	5.0	2.8	70	7	0.0	0.0	51	14	2.1	1.5	14	14	183.8	0.0	4	4	72.5	0.0	145	43	3,003	156
Ruby	2	2	0.0	0.0	38	5	0.0	0.0	15	5	123.0	71.4	10	9	73.5	17.6	4	4	528.5	0.0	69	25	4,695	2,128
Huslia	1	0	-	0.0	31	5	8.0	7.3	14	5	4.0	3.2	13	13	47.0	0.0	5	5	24.0	0.0	64	28	1,035	453
Hughes	1	1	0.0	0.0	11	6	0.0	0.0	8	7	1.1	0.4	5	5	50.8	0.0	0	0	-	-	25	19	263	6
Allakaket	2	1	0.0	0.0	18	5	0.0	0.0	13	5	20.0	15.6	11	9	0.0	0.0	2	2	0.0	0.0	46	22	260	399
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	0.0	0.0	2	1	0.0	0.0	0	0	-	-	8	4	0	0
Bettles	2	0	-	0.0	18	14	17.1	8.0	8	7	34.2	12.1	0	0	-	-	0	0	-	-	28	21	583	342
District 4	22	12	6.4	2.3	298	63	2.8	1.0	213	73	16.8	5.3	114	106	51.9	2.0	24	24	141.0	0.0	671	278	13,857	2,365
Tanana	4	3	0.0	0.0	62	16	0.0	0.0	16	6	16.6	13.1	10	10	85.0	0.0	21	20	543.6	29.9	113	55	12,533	1,298
Rampart	1	1	0.0	0.0	6	6	25.0	0.0	7	7	47.1	0.0	11	9	74.7	16.2	2	2	50.0	0.0	27	25	1,403	349
Stevens Village	1	0	-	0.0	14	4	0.0	0.0	9	4	0.0	0.0	9	9	173.0	0.0	3	2	545.5	314.9	36	19	3,194	1,851
Birch Creek	0	0	-	-	10	8	0.0	0.0	5	5	0.0	0.0	0	0	-	-	0	0	-	-	15	13	0	0
Beaver	0	0	-	-	14	14	2.8	0.0	12	12	0.0	0.0	7	7	170.1	0.0	0	0	-	-	33	33	1,231	0
Fort Yukon	12	4	0.0	0.0	132	11	0.0	0.0	45	13	2.3	1.9	24	23	225.9	15.6	5	5	420.0	0.0	218	56	7,628	757
Venetie	2	2	50.0	0.0	30	4	0.0	0.0	12	3	150.0	129.9	11	11	128.6	0.0	2	2	1085.0	0.0	57	22	6,085	3,055
Chalkyitsik	1	0	-	0.0	24	19	3.6	1.2	4	4	25.0	0.0	5	4	131.2	34.5	0	0	-	-	34	27	845	344
District 5	21	10	33.3	0.0	292	82	1.0	0.1	110	54	23.6	14.3	77	73	154.7	5.8	33	31	528.0	34.3	533	250	32,916	3,907
Survey Totals	90	44	9.3	0.5	991	229	1.1	0.3	948	345	9.8	2.1	336	320	62.2	1.5	77	73	275.3	14.7	2,442	1,011	53,340	4,745

a The total number of households (N), and the number of households contacted (n).

Appendix A.4 Estimated coho salmon subsistence harvest by residents of surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. a

Community	N	Unknown			Does Not Harvest Salmon				Light Harvester			Medium Harvester				Heavy Harvester			Combined					
		n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	Total n	Total	CI(95%) (+/-)
Hooper Bay	15	5	0.0	0.0	41	4	0.0	0.0	64	17	0.5	0.5	15	15	0.6	0.0	1	1	0.0	0.0	136	42	48	63
Scammon Bay	3	3	0.0	0.0	22	3	0.0	0.0	47	11	1.7	1.0	5	5	4.6	0.0	0	0	-	-	77	22	104	97
Sheldon's Point	0	0	-	-	10	4	0.0	0.0	20	6	2.5	2.0	7	7	52.7	0.0	0	0	-	-	37	17	419	81
Alakanuk	4	3	0.0	0.0	47	4	0.0	0.0	70	20	8.6	3.5	13	13	4.3	0.0	1	1	0.0	0.0	135	41	658	490
Emmonak	13	4	0.0	0.0	59	18	0.0	0.0	65	30	1.3	0.5	17	16	9.2	1.8	3	2	0.5	0.2	157	70	245	90
Kollik	7	3	0.0	0.0	25	4	0.0	0.0	54	16	2.1	1.0	15	14	8.7	1.5	2	2	50.0	0.0	103	39	350	115
District 1	42	18	0.0	0.0	204	37	0.0	0.0	320	100	3.0	0.8	72	70	10.4	0.5	7	6	14.5	0.1	645	231	1,824	531
Mountain Village	2	2	0.0	0.0	48	4	1.0	0.9	76	23	3.6	1.7	16	15	0.4	0.1	1	1	30.0	0.0	143	45	362	270
Pitkas Point	0	0	-	-	11	11	0.4	0.0	15	14	5.9	0.9	6	6	68.1	0.0	1	1	51.0	0.0	33	32	554	27
St. Mary's	1	0	-	0.0	28	5	0.0	0.0	40	12	0.1	0.1	19	19	0.5	0.0	4	4	34.2	0.0	92	40	154	10
Pilot Station	2	2	0.0	0.0	38	8	0.0	0.0	48	22	0.6	0.5	4	4	0.7	0.0	1	1	0.0	0.0	93	37	36	47
Marshall	0	0	-	-	11	4	6.2	4.9	45	14	2.7	1.7	6	6	13.0	0.0	1	1	0.0	0.0	63	25	272	190
District 2	5	4	0.0	0.0	136	32	0.9	0.5	224	85	2.4	0.6	51	50	9.9	0.0	8	8	27.3	0.0	424	179	1,377	334
Russian Mission	0	0	-	-	19	5	0.0	0.0	30	9	24.2	14.0	6	6	27.3	0.0	1	0	-	0.0	56	20	891	827
Holy Cross	0	0	-	-	24	5	0.0	0.0	38	19	0.0	0.0	8	8	0.0	0.0	1	1	0.0	0.0	71	33	0	0
Shageluk	0	0	-	-	18	5	0.0	0.0	13	5	0.0	0.0	8	7	0.0	0.0	3	3	0.0	0.0	42	20	0	0
District 3	0	0	-	-	61	15	0.0	0.0	81	33	9.0	5.2	22	21	7.5	0.0	5	4	0.0	0.0	169	73	891	827
Anvik	0	0	-	-	17	4	0.0	0.0	15	5	0.0	0.0	6	6	0.0	0.0	2	2	5.0	0.0	40	17	10	0
Grayling	0	0	-	-	22	5	0.0	0.0	15	5	5.0	2.5	22	22	0.9	0.0	3	3	0.6	0.0	62	35	97	75
Kaltag	0	0	-	-	13	2	0.0	0.0	23	6	0.0	0.0	14	12	30.4	11.4	1	1	0.0	0.0	51	21	426	315
Nulato	8	4	0.0	0.0	37	5	0.0	0.0	30	8	0.6	0.3	14	12	0.4	0.1	1	1	0.0	0.0	90	30	25	21
Koyukuk	0	0	-	-	19	3	0.0	0.0	19	5	0.0	0.0	3	3	5.0	0.0	2	2	9.0	0.0	43	13	33	0
Galena	6	4	0.0	0.0	70	7	0.0	0.0	51	14	0.6	0.4	14	14	9.2	0.0	4	4	28.2	0.0	145	43	275	48
Ruby	2	2	0.0	0.0	38	5	0.0	0.0	15	5	4.0	3.2	10	9	16.8	3.7	4	4	95.0	0.0	69	25	607	120
Huslia	1	0	-	0.0	31	5	0.0	0.0	14	5	1.6	1.2	13	13	17.3	0.0	5	5	12.0	0.0	64	28	307	35
Hughes	1	1	0.0	0.0	11	6	0.0	0.0	8	7	0.7	0.2	5	5	29.4	0.0	0	0	-	-	25	19	153	3
Allakaket	2	1	0.0	0.0	18	5	0.0	0.0	13	5	0.0	0.0	11	9	0.0	0.0	2	2	0.0	0.0	46	22	0	0
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	0.0	0.0	2	1	0.0	0.0	0	0	-	-	8	4	0	0
Bettles	2	0	-	0.0	18	14	0.0	0.0	8	7	0.1	0.0	0	0	-	-	0	0	-	-	28	21	1	0
District 4	22	12	0.0	0.0	298	63	0.0	0.0	213	73	1.0	0.3	114	106	10.0	1.4	24	24	24.3	0.0	671	278	1,933	352
Tanana	4	3	0.0	0.0	62	16	0.0	0.0	16	6	16.6	13.1	10	10	2.5	0.0	21	20	80.8	9.1	113	55	1,990	558
Rampart	1	1	0.0	0.0	6	6	0.0	0.0	7	7	0.0	0.0	11	9	0.0	0.0	2	2	0.0	0.0	27	25	0	0
Stevens Village	1	0	-	0.0	14	4	0.0	0.0	9	4	0.0	0.0	9	9	0.1	0.0	3	2	0.0	0.0	36	19	1	0
Birch Creek	0	0	-	-	10	8	0.0	0.0	5	5	0.0	0.0	0	0	-	-	0	0	-	-	15	13	0	0
Beaver	0	0	-	-	14	14	0.0	0.0	12	12	0.0	0.0	7	7	2.8	0.0	0	0	-	-	33	33	20	0
Fort Yukon	12	4	0.0	0.0	132	11	0.0	0.0	45	13	0.0	0.0	24	23	0.0	0.0	5	5	0.8	0.0	218	56	4	0
Venetie	2	2	0.0	0.0	30	4	0.0	0.0	12	3	0.0	0.0	11	11	0.0	0.0	2	2	0.0	0.0	57	22	0	0
Chalkyitsik	1	0	-	0.0	24	19	0.0	0.0	4	4	0.0	0.0	5	4	0.0	0.0	0	0	-	-	34	27	0	0
District 5	21	10	0.0	0.0	292	82	0.0	0.0	110	54	2.4	1.9	77	73	0.6	0.0	33	31	51.6	5.8	533	250	2,015	558
Survey Totals	90	44	0.0	0.0	991	229	0.1	0.0	948	345	2.9	0.6	336	320	7.7	0.5	77	73	33.8	2.4	2,442	1,011	8,040	1,231

a The total number of households (N), and the number of households contacted (n).

Appendix A.5 Estimated chinook salmon subsistence use by residents of surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. a

Community	N	Unknown			Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
		n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	Est n	CI(95%) Total (+/-)	
Hooper Bay	15	5	16.6	11.9	41	4	6.5	1.3	64	17	6.6	2.1	15	15	16.8	0.0	1	1	15.0	0.0	136	42	1,208	456
Scammon Bay	3	3	4.6	0.0	22	3	0.3	0.3	47	11	9.7	3.6	5	5	9.0	0.0	0	0	-	-	77	22	524	339
Sheldon's Point	0	0	-	-	10	4	5.0	3.8	20	6	7.1	4.0	7	7	35.2	0.0	0	0	-	-	37	17	440	175
Alakanuk	4	3	0.0	0.0	47	4	0.0	0.0	70	20	14.0	2.7	13	13	13.5	0.0	1	1	8.0	0.0	135	41	1,164	379
Emmonak	13	4	4.7	2.9	59	18	2.0	0.6	65	30	7.4	1.4	17	16	21.7	1.2	3	2	22.0	4.6	157	70	1,097	218
Kotlik	7	3	11.3	7.1	25	4	4.7	1.7	54	16	19.6	5.5	15	14	44.7	3.1	2	2	180.5	0.0	103	39	2,290	611
District 1	42	18	9.6	4.5	204	37	2.7	0.4	320	100	11.1	1.3	72	70	24.5	0.7	7	6	64.3	1.9	645	231	6,722	958
Mountain Village	2	2	14.5	0.0	48	4	5.2	3.8	76	23	13.6	2.3	16	15	21.6	2.3	1	1	32.0	0.0	143	45	1,694	513
Pitkas Point	0	0	-	-	11	11	1.8	0.0	15	14	6.9	0.5	6	6	59.8	0.0	1	1	30.0	0.0	33	32	513	17
St. Mary's	1	0	-	0.0	28	5	11.2	9.0	40	12	20.3	10.2	19	19	24.0	0.0	4	4	92.2	0.0	92	40	1,953	941
Pilot Station	2	2	25.5	0.0	38	8	7.8	4.1	48	22	23.0	3.5	4	4	46.7	0.0	1	1	20.0	0.0	93	37	1,668	456
Marshall	0	0	-	-	11	4	0.7	0.5	45	14	62.7	12.9	6	6	55.8	0.0	1	1	2.0	0.0	63	25	3,171	1,140
District 2	5	4	16.0	0.0	136	32	6.6	2.5	224	85	26.3	3.3	51	50	33.0	0.7	8	8	56.6	0.0	424	179	8,996	1,630
Russian Mission	0	0	-	-	19	5	1.6	1.3	30	9	59.3	13.3	6	6	140.1	0.0	1	0	-	0.0	58	20	2,651	786
Holy Cross	0	0	-	-	24	5	3.4	1.5	38	19	41.9	7.9	8	8	62.2	0.0	1	1	68.0	0.0	71	33	2,242	597
Shageluk	0	0	-	-	18	5	3.8	1.3	13	5	0.6	0.3	8	7	16.8	3.3	3	3	0.0	0.0	42	20	211	71
District 3	0	0	-	-	61	15	3.0	0.8	81	33	41.8	6.1	22	21	67.0	1.2	5	4	13.6	0.0	169	73	5,104	990
Anvik	0	0	-	-	17	4	0.0	0.0	15	5	14.4	5.5	6	6	24.0	0.0	2	2	28.5	0.0	40	17	417	162
Grayling	0	0	-	-	22	5	15.2	6.7	15	5	33.2	13.5	22	22	31.4	0.0	3	3	12.6	0.0	62	35	1,562	493
Kaltag	0	0	-	-	13	2	1.0	0.9	23	6	41.6	26.4	14	12	66.7	5.5	1	1	20.0	0.0	51	21	1,928	1,201
Nulato	8	4	20.0	5.5	37	5	0.4	0.3	30	8	17.8	4.1	14	12	56.7	3.4	1	1	25.0	0.0	90	30	1,531	278
Koyukuk	0	0	-	-	19	3	2.0	1.8	19	5	1.6	1.3	3	3	18.6	0.0	2	2	53.5	0.0	43	13	231	85
Galena	6	4	0.7	0.4	70	7	0.5	0.2	51	14	14.7	3.8	14	14	23.2	0.0	4	4	46.0	0.0	145	43	1,304	391
Ruby	2	2	5.0	0.0	38	5	5.0	2.3	15	5	26.6	20.3	10	9	72.4	9.9	4	4	102.5	0.0	69	25	1,733	651
Huslia	1	0	-	0.0	31	5	15.0	9.5	14	5	1.2	0.3	13	13	15.6	0.0	5	5	27.4	0.0	64	28	822	582
Hughes	1	1	0.0	0.0	11	6	1.5	0.8	8	7	2.7	0.7	5	5	8.8	0.0	0	0	-	-	25	19	82	22
Allakaket	2	1	1.0	0.0	18	5	3.6	1.9	13	5	0.8	0.3	11	9	26.6	4.9	2	2	3.0	0.0	46	22	377	126
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	5.0	0.0	2	1	0.0	0.0	0	0	-	-	8	4	10	0
Bettles	2	0	-	0.0	18	14	0.1	0.0	8	7	1.7	0.4	0	0	-	-	0	0	-	-	28	21	16	7
District 4	22	12	8.0	2.0	298	63	4.0	1.1	213	73	16.2	3.5	114	106	36.9	1.2	24	24	41.0	0.0	671	278	10,011	1,653
Tanana	4	3	0.3	0.1	62	16	4.7	2.6	16	6	22.3	12.2	10	10	8.2	0.0	21	20	86.3	6.5	113	55	2,549	570
Rampart	1	1	0.0	0.0	6	6	28.3	0.0	7	7	57.7	0.0	11	9	46.4	6.1	2	2	75.0	0.0	27	25	1,235	133
Stevens Village	1	0	-	0.0	14	4	22.0	10.3	9	4	14.0	3.4	9	9	163.2	0.0	3	2	181.0	80.2	36	19	2,446	553
Birch Creek	0	0	-	-	10	8	6.6	2.0	5	5	2.8	0.0	0	0	-	-	0	0	-	-	15	13	80	40
Beaver	0	0	-	-	14	14	2.5	0.0	12	12	13.1	0.0	7	7	92.7	0.0	0	0	-	-	33	33	842	0
Fort Yukon	12	4	1.0	0.8	132	11	15.0	6.5	45	13	24.6	9.3	24	23	62.4	4.4	5	5	21.0	0.0	218	56	4,716	1,899
Venetie	2	2	0.0	0.0	30	4	0.0	0.0	12	3	0.3	0.2	11	11	26.0	0.0	2	2	54.5	0.0	57	22	400	6
Chalkyitsik	1	0	-	0.0	24	19	0.5	0.1	4	4	1.0	0.0	5	4	0.7	0.2	0	0	-	-	34	27	22	6
District 5	21	10	0.6	0.4	292	82	9.9	3.0	110	54	19.8	4.2	77	73	58.5	1.6	33	31	82.4	8.4	533	250	12,289	2,063
Survey Totals	90	44	7.5	2.1	991	229	5.7	1.0	948	345	19.5	1.4	336	320	40.6	0.6	77	73	60.7	3.6	2,442	1,001	43,123	3,398

a The total number of households (N), and the number of households contacted (n).

Appendix A.6 Estimated summer chum salmon subsistence use by residents of surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. a

Community	N	Unknown		Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined				
		n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total	Est	CI(95%) (+/-)	
Hooper Bay	15	5	48.0	16.0	41	4	142.5	58.8	64	17	70.3	14.3	15	15	103.3	0.0	1	1	100.0	0.0	136	42	12,715	5,064
Scammon Bay	3	3	18.3	0.0	22	3	6.6	6.1	47	11	63.9	15.8	5	5	95.6	0.0	0	0	-	-	77	22	3,683	1,467
Sheldon's Point	0	0	-	-	10	4	52.5	23.9	20	8	49.6	15.2	7	7	225.4	0.0	0	0	-	-	37	17	3,096	760
Alakanuk	4	3	40.0	15.2	47	4	12.5	11.9	70	20	106.8	16.0	13	13	149.3	0.0	1	1	134.0	0.0	135	41	10,300	2,471
Emmonak	13	4	5.7	3.9	59	18	25.7	7.0	65	30	75.3	10.6	17	16	169.1	10.7	3	2	197.5	88.0	157	70	9,959	1,703
Kotlik	7	3	14.3	9.7	25	4	27.0	11.8	54	16	110.5	27.1	15	14	199.3	7.0	2	2	243.5	0.0	103	39	10,220	2,942
District 1	42	18	26.4	6.2	204	37	45.6	12.4	320	100	83.9	7.2	72	70	158.5	2.9	7	6	187.6	37.7	645	231	49,973	6,785
Mountain Village	2	2	102.5	0.0	48	4	10.5	7.9	76	23	109.1	13.3	16	15	134.9	6.4	1	1	240.0	0.0	143	45	11,405	2,139
Pitkas Point	0	0	-	-	11	11	26.6	0.0	15	14	61.9	4.0	6	6	77.8	0.0	1	1	175.0	0.0	33	32	1,864	118
St. Mary's	1	0	-	0.0	28	5	51.2	15.4	40	12	56.3	17.2	19	19	136.6	0.0	4	4	202.5	0.0	92	40	7,093	1,597
Pilot Station	2	2	167.5	0.0	38	8	11.0	5.9	48	22	40.2	6.8	4	4	101.2	0.0	1	1	27.0	0.0	93	37	3,116	784
Marshall	0	0	-	-	11	4	18.0	13.8	45	14	105.2	25.4	6	6	107.8	0.0	1	1	0.0	0.0	63	25	5,582	2,261
District 2	5	4	108.0	0.0	136	32	20.9	4.6	224	85	81.0	7.6	51	50	123.0	2.0	8	8	156.5	0.0	424	179	29,060	3,587
Russian Mission	0	0	-	-	19	5	10.6	5.0	30	9	105.6	31.4	6	6	92.5	0.0	1	0	-	0.0	56	20	3,926	1,859
Holy Cross	0	0	-	-	24	5	0.6	0.5	38	19	11.8	2.5	8	8	38.1	0.0	1	1	39.0	0.0	71	33	808	194
Shageluk	0	0	-	-	18	5	24.6	13.1	13	5	190.0	66.1	8	7	279.5	34.0	3	3	926.0	0.0	42	20	7,927	1,826
District 3	0	0	-	-	61	15	10.8	4.1	81	33	75.2	15.8	22	21	140.8	12.3	5	4	563.4	0.0	169	73	12,662	2,613
Anvik	0	0	-	-	17	4	28.7	25.1	15	5	735.0	431.0	6	6	1021.0	0.0	2	2	2921.5	0.0	40	17	23,483	12,700
Grayling	0	0	-	-	22	5	190.0	136.4	15	5	1652.0	1296.0	22	22	816.9	0.0	3	3	1372.3	0.0	62	35	51,049	38,554
Kaitag	0	0	-	-	13	2	0.0	0.0	23	6	638.6	543.5	14	12	1538.2	211.9	1	1	5000.0	0.0	51	21	41,225	25,185
Nulato	8	4	0.7	0.5	37	5	0.0	0.0	30	8	564.0	402.7	14	12	259.4	94.2	1	1	1500.0	0.0	90	30	22,058	23,821
Koyukuk	0	0	-	-	19	3	0.0	0.0	19	5	0.0	0.0	3	3	221.6	0.0	2	2	1117.5	0.0	43	13	2,900	0
Galena	6	4	1.2	0.7	70	7	0.4	0.4	51	14	293.0	228.1	14	14	608.2	0.0	4	4	861.2	0.0	145	43	26,942	22,804
Ruby	2	2	0.0	0.0	38	5	0.0	0.0	15	5	146.2	109.4	10	9	222.2	38.2	4	4	549.0	0.0	69	25	6,611	3,304
Huslia	1	0	-	0.0	31	5	6.0	3.6	14	5	25.0	20.0	13	13	305.4	0.0	5	5	429.2	0.0	64	28	6,653	593
Hughes	1	1	0.0	0.0	11	6	0.3	0.2	8	7	47.1	12.5	5	5	410.8	0.0	0	0	-	-	25	19	2,435	197
Allakaket	2	1	0.0	0.0	18	5	40.4	24.6	13	5	4.0	3.1	11	9	546.5	101.4	2	2	102.5	0.0	46	22	6,996	2,355
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	20.0	0.0	2	1	50.0	0.0	0	0	-	-	8	4	140	0
Bettles	2	0	-	0.0	18	14	8.5	4.0	8	7	88.4	22.0	0	0	-	-	0	0	-	-	28	21	862	373
District 4	22	12	0.6	0.2	298	63	19.4	10.2	213	73	404.1	137.6	114	106	638.6	30.3	24	24	1112.0	0.0	871	278	191,353	58,194
Tanana	4	3	0.0	0.0	62	16	6.2	5.3	16	6	0.0	0.0	10	10	24.0	0.0	21	20	178.0	11.0	113	55	4,366	797
Rampart	1	1	0.0	0.0	6	6	183.3	0.0	7	7	0.0	0.0	11	9	0.3	0.1	2	2	0.0	0.0	27	25	1,104	3
Stevens Village	1	0	-	0.0	14	4	0.0	0.0	9	4	0.0	0.0	9	9	0.6	0.0	3	2	50.5	29.1	36	19	158	171
Birch Creek	0	0	-	-	10	8	0.0	0.0	5	5	0.0	0.0	0	0	-	-	0	0	-	-	15	13	0	0
Beaver	0	0	-	-	14	14	0.5	0.0	12	12	0.0	0.0	7	7	4.0	0.0	0	0	-	-	33	33	37	0
Fort Yukon	12	4	0.0	0.0	132	11	0.0	0.0	45	13	0.0	0.0	24	23	21.5	2.2	5	5	58.0	0.0	218	56	808	103
Venetie	2	2	0.0	0.0	30	4	0.0	0.0	12	3	0.0	0.0	11	11	0.0	0.0	2	2	276.0	0.0	57	22	552	0
Chalkyitsik	1	0	-	0.0	24	19	0.0	0.0	4	4	0.0	0.0	5	4	0.0	0.0	0	0	-	-	34	27	0	0
District 5	21	10	0.0	0.0	292	82	5.1	1.1	110	54	0.0	0.0	77	73	10.3	0.6	33	31	143.4	7.5	533	250	7,023	821
<b>Survey Totals</b>	<b>90</b>	<b>44</b>	<b>18.5</b>	<b>2.9</b>	<b>991</b>	<b>229</b>	<b>20.2</b>	<b>4.0</b>	<b>948</b>	<b>345</b>	<b>144.7</b>	<b>31.1</b>	<b>336</b>	<b>320</b>	<b>280.9</b>	<b>10.3</b>	<b>77</b>	<b>73</b>	<b>477.9</b>	<b>4.7</b>	<b>2,442</b>	<b>1,011</b>	<b>290,071</b>	<b>58,762</b>

a The total number of households (N), and the number of households contacted (n).

Appendix A.7 Estimated fall chum salmon subsistence use by residents of surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. a

Community	N	Unknown			Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			Est CI(95%) (+/-)
		n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	n	Total	
Hooper Bay	15	5	0.0	0.0	41	4	0.0	0.0	64	17	0.0	0.0	15	15	4.8	0.0	1	1	0.0	0.0	136	42	72	0
Scammon Bay	3	3	0.0	0.0	22	3	0.0	0.0	47	11	2.2	1.9	5	5	4.0	0.0	0	0	-	-	77	22	127	183
Sheldon's Point	0	0	-	-	10	4	0.0	0.0	20	6	0.0	0.0	7	7	36.5	0.0	0	0	-	-	37	17	256	0
Alakanuk	4	3	0.0	0.0	47	4	1.5	1.4	70	20	5.2	2.9	13	13	8.4	0.0	1	1	8.0	0.0	135	41	556	425
Emmonak	13	4	0.0	0.0	59	18	1.8	0.9	65	30	4.7	1.4	17	16	23.8	3.3	3	2	0.5	0.2	157	70	816	243
Kotlik	7	3	0.0	0.0	25	4	22.7	16.3	54	16	3.7	1.8	15	14	39.9	5.8	2	2	100.0	0.0	103	39	1,570	837
District 1	42	18	0.0	0.0	204	37	3.6	2.0	320	100	3.1	0.8	72	70	20.3	1.4	7	6	29.9	0.1	645	231	3,397	987
Mountain Village	2	2	2.5	0.0	48	4	5.7	5.5	76	23	14.6	6.2	16	15	16.9	2.0	1	1	0.0	0.0	143	45	1,665	1,062
Pitkas Point	0	0	-	-	11	11	0.2	0.0	15	14	0.7	0.1	6	6	11.8	0.0	1	1	20.0	0.0	33	32	106	5
St. Mary's	1	0	-	0.0	28	5	0.0	0.0	40	12	2.8	1.4	19	19	8.3	0.0	4	4	22.7	0.0	92	40	363	115
Pilot Station	2	2	0.0	0.0	38	8	0.2	0.2	48	22	6.8	5.0	4	4	6.0	0.0	1	1	0.0	0.0	93	37	361	472
Marshall	0	0	-	-	11	4	0.0	0.0	45	14	4.0	1.6	6	6	38.0	0.0	1	1	0.0	0.0	63	25	411	142
District 2	5	4	1.0	0.0	136	32	2.1	1.9	224	85	7.8	2.4	51	50	14.8	0.6	8	8	13.9	0.0	424	179	2,907	1,176
Russian Mission	0	0	-	-	19	5	0.0	0.0	30	9	20.6	10.6	6	6	24.1	0.0	1	0	-	0.0	56	20	765	625
Holy Cross	0	0	-	-	24	5	1.0	0.8	38	19	10.1	2.9	8	8	27.1	0.0	1	1	28.0	0.0	71	33	653	220
Shageluk	0	0	-	-	18	5	0.0	0.0	13	5	4.0	3.1	8	7	9.2	2.1	3	3	0.0	0.0	42	20	126	87
District 3	0	0	-	-	61	15	0.4	0.3	81	33	13.0	4.2	22	21	19.8	0.7	5	4	5.6	0.0	169	73	1,544	669
Anvik	0	0	-	-	17	4	5.0	4.3	15	5	12.0	2.7	6	6	19.0	0.0	2	2	15.0	0.0	40	17	409	166
Grayling	0	0	-	-	22	5	13.0	7.3	15	5	28.0	15.3	22	22	23.1	0.0	3	3	19.0	0.0	62	35	1,272	550
Kallag	0	0	-	-	13	2	1.5	1.3	23	6	5.5	3.5	14	12	35.8	9.5	1	1	0.0	0.0	51	21	648	307
Nulato	8	4	17.0	5.3	37	5	1.2	1.1	30	8	19.0	8.6	14	12	44.5	4.8	1	1	20.0	0.0	90	30	1,395	540
Koyukuk	0	0	-	-	19	3	0.6	0.6	19	5	3.0	1.7	3	3	21.6	0.0	2	2	205.0	0.0	43	13	545	67
Galena	6	4	6.2	3.6	70	7	0.7	0.6	51	14	3.5	1.1	14	14	109.2	0.0	4	4	185.0	0.0	145	43	2,536	155
Ruby	2	2	0.0	0.0	38	5	0.2	0.1	15	5	123.0	71.4	10	9	185.0	36.6	4	4	653.5	0.0	69	25	6,317	2,219
Hustla	1	0	-	0.0	31	5	7.0	6.4	14	5	4.6	3.1	13	13	47.0	0.0	5	5	24.0	0.0	64	28	1,012	398
Hughes	1	1	0.0	0.0	11	6	0.0	0.0	8	7	1.1	0.4	5	5	50.8	0.0	0	0	-	-	25	19	263	6
Allakaket	2	1	0.0	0.0	18	5	0.0	0.0	13	5	35.8	15.2	11	9	0.0	0.0	2	2	0.0	0.0	46	22	465	387
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	0.0	0.0	2	1	0.0	0.0	0	0	-	-	8	4	0	0
Bettles	2	0	-	0.0	18	14	17.1	8.0	8	7	34.2	12.1	0	0	-	-	0	0	-	-	28	21	583	342
District 4	22	12	7.9	2.1	298	63	3.5	1.0	213	73	19.7	5.4	114	106	53.1	3.4	24	24	166.3	0.0	671	278	15,444	2,469
Tanana	4	3	0.0	0.0	62	16	0.7	0.4	16	6	16.6	13.1	10	10	86.2	0.0	21	20	1723.3	73.9	113	55	37,364	3,073
Rampart	1	1	0.0	0.0	6	6	150.0	0.0	7	7	125.7	0.0	11	9	83.8	16.9	2	2	50.0	0.0	27	25	2,803	365
Stevens Village	1	0	-	0.0	14	4	0.0	0.0	9	4	0.0	0.0	9	9	84.1	0.0	3	2	545.5	314.9	36	19	2,394	1,851
Birch Creek	0	0	-	-	10	8	6.2	2.2	5	5	0.0	0.0	0	0	-	-	0	0	-	-	15	13	63	43
Beaver	0	0	-	-	14	14	2.8	0.0	12	12	0.0	0.0	7	7	169.2	0.0	0	0	-	-	33	33	1,225	0
Fort Yukon	12	4	6.2	5.1	132	11	9.0	8.7	45	13	1.1	0.9	24	23	201.7	13.3	5	5	391.6	0.0	218	56	8,127	2,343
Venetie	2	2	350.0	0.0	30	4	0.0	0.0	12	3	143.3	124.1	11	11	128.6	0.0	2	2	1085.0	0.0	57	22	6,005	2,919
Chalkyitsik	1	0	-	0.0	24	19	3.8	1.2	4	4	26.0	0.0	5	4	131.2	34.5	0	0	-	-	34	27	852	343
District 5	21	10	36.9	2.9	292	82	8.0	3.9	110	54	27.5	13.6	77	73	138.2	5.3	33	31	1274.4	55.1	533	250	58,832	5,209
<b>Survey Totals</b>	<b>90</b>	<b>44</b>	<b>10.6</b>	<b>0.8</b>	<b>991</b>	<b>229</b>	<b>4.5</b>	<b>1.3</b>	<b>948</b>	<b>345</b>	<b>11.6</b>	<b>2.1</b>	<b>336</b>	<b>320</b>	<b>57.6</b>	<b>1.7</b>	<b>77</b>	<b>73</b>	<b>602.5</b>	<b>23.6</b>	<b>2,442</b>	<b>1,011</b>	<b>82,124</b>	<b>6,004</b>

a The total number of households (N), and the number of households contacted (n).

Appendix A.8 Estimated coho salmon subsistence use by residents of surveyed villages, by catch stratum, with village and district totals, Yukon Area, 1995. a

Community	N	Unknown			Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
		n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total	Est	CI(95%)	
Hooper Bay	15	5	0.0	0.0	41	4	0.0	0.0	64	17	0.5	0.5	15	15	0.1	0.0	1	1	0.0	0.0	136	42	40	63
Scammon Bay	3	3	0.0	0.0	22	3	0.0	0.0	47	11	1.7	1.0	5	5	0.6	0.0	0	0	-	-	77	22	84	97
Sheldon's Point	0	0	-	-	10	4	0.0	0.0	20	6	2.5	2.0	7	7	52.7	0.0	0	0	-	-	37	17	419	81
Alakanuk	4	3	0.0	0.0	47	4	0.0	0.0	70	20	8.4	3.5	13	13	4.1	0.0	1	1	0.0	0.0	135	41	642	490
Emmonak	13	4	0.0	0.0	59	18	1.0	0.5	65	30	0.9	0.2	17	16	10.0	1.8	3	2	0.5	0.2	157	70	292	95
Kotlik	7	3	0.0	0.0	25	4	0.0	0.0	54	16	2.8	1.0	15	14	9.0	1.5	2	2	50.0	0.0	103	39	388	116
District 1	42	18	0.0	0.0	204	37	0.3	0.1	320	100	3.0	0.8	72	70	10.2	0.5	7	6	14.5	0.1	645	231	1,865	532
Mountain Village	2	2	0.0	0.0	48	4	1.0	0.9	76	23	3.3	1.5	16	15	0.5	0.1	1	1	30.0	0.0	143	45	338	249
Pitkas Point	0	0	-	-	11	11	0.6	0.0	15	14	6.0	0.9	6	6	68.1	0.0	1	1	51.0	0.0	33	32	557	27
St. Mary's	1	0	-	0.0	28	5	0.0	0.0	40	12	1.5	1.1	19	19	0.1	0.0	4	4	33.0	0.0	92	40	198	86
Pilot Station	2	2	0.0	0.0	38	8	0.0	0.0	48	22	0.6	0.5	4	4	0.7	0.0	1	1	0.0	0.0	93	37	36	47
Marshall	0	0	-	-	11	4	6.2	4.9	45	14	3.6	1.8	6	6	11.5	0.0	1	1	0.0	0.0	63	25	302	195
District 2	5	4	0.0	0.0	136	32	0.9	0.5	224	85	2.7	0.6	51	50	9.7	0.0	8	8	26.6	0.0	424	179	1,430	333
Russian Mission	0	0	-	-	19	5	0.0	0.0	30	9	22.5	14.0	6	6	27.3	0.0	1	0	-	0.0	56	20	841	827
Holy Cross	0	0	-	-	24	5	0.0	0.0	38	19	0.0	0.0	8	8	0.0	0.0	1	1	0.0	0.0	71	33	0	0
Shageluk	0	0	-	-	18	5	0.0	0.0	13	5	0.0	0.0	8	7	0.0	0.0	3	3	0.0	0.0	42	20	0	0
District 3	0	0	-	-	61	15	0.0	0.0	81	33	8.4	5.2	22	21	7.5	0.0	5	4	0.0	0.0	169	73	841	827
Anvik	0	0	-	-	17	4	0.0	0.0	15	5	0.0	0.0	6	6	16.6	0.0	2	2	5.0	0.0	40	17	110	0
Grayling	0	0	-	-	22	5	0.0	0.0	15	5	5.0	2.5	22	22	1.0	0.0	3	3	0.3	0.0	62	35	98	75
Kaltag	0	0	-	-	13	2	0.0	0.0	23	6	0.0	0.0	14	12	30.4	11.4	1	1	0.0	0.0	51	21	426	315
Nulato	8	4	0.0	0.0	37	5	0.0	0.0	30	8	0.6	0.3	14	12	0.4	0.1	1	1	0.0	0.0	90	30	25	21
Koyukuk	0	0	-	-	19	3	0.0	0.0	19	5	1.2	1.0	3	3	5.3	0.0	2	2	7.0	0.0	43	13	53	38
Galena	6	4	0.0	0.0	70	7	0.0	0.0	51	14	0.4	0.3	14	14	8.8	0.0	4	4	28.7	0.0	145	43	261	30
Ruby	2	2	0.0	0.0	38	5	0.0	0.0	15	5	4.0	3.2	10	9	16.6	3.7	4	4	120.0	0.0	69	25	707	120
Huslia	1	0	-	0.0	31	5	0.0	0.0	14	5	1.6	1.2	13	13	17.3	0.0	5	5	12.0	0.0	64	28	307	35
Hughes	1	1	0.0	0.0	11	6	0.0	0.0	8	7	0.7	0.2	5	5	26.4	0.0	0	0	-	-	25	19	138	3
Allakaket	2	1	0.0	0.0	18	5	0.0	0.0	13	5	0.0	0.0	11	9	0.0	0.0	2	2	0.0	0.0	46	22	0	0
Alatna	0	0	-	-	4	2	0.0	0.0	2	1	0.0	0.0	2	1	0.0	0.0	0	0	-	-	8	4	0	0
Bettles	2	0	-	0.0	18	14	0.0	0.0	8	7	0.1	0.0	0	0	-	-	0	0	-	-	28	21	1	0
District 4	22	12	0.0	0.0	298	63	0.0	0.0	213	73	1.1	0.3	114	106	10.7	1.4	24	24	28.3	0.0	671	278	2,125	352
Tanana	4	3	0.0	0.0	62	16	0.0	0.0	16	6	16.6	13.1	10	10	2.5	0.0	21	20	91.5	9.1	113	55	2,214	557
Rampart	1	1	0.0	0.0	6	6	0.0	0.0	7	7	0.0	0.0	11	9	0.0	0.0	2	2	0.0	0.0	27	25	0	0
Stevens Village	1	0	-	0.0	14	4	0.0	0.0	9	4	0.0	0.0	9	9	0.1	0.0	3	2	0.0	0.0	36	19	1	0
Birch Creek	0	0	-	-	10	8	0.0	0.0	5	5	0.0	0.0	0	0	-	-	0	0	-	-	15	13	0	0
Beaver	0	0	-	-	14	14	0.0	0.0	12	12	0.0	0.0	7	7	2.8	0.0	0	0	-	-	33	33	20	0
Fort Yukon	12	4	0.0	0.0	132	11	0.0	0.0	45	13	0.0	0.0	24	23	0.0	0.0	5	5	0.8	0.0	218	56	4	0
Venetie	2	2	0.0	0.0	30	4	0.0	0.0	12	3	0.0	0.0	11	11	0.0	0.0	2	2	0.0	0.0	57	22	0	0
Chalkyitsik	1	0	-	0.0	24	19	0.0	0.0	4	4	0.0	0.0	5	4	0.0	0.0	0	0	-	-	34	27	0	0
District 5	21	10	0.0	0.0	292	82	0.0	0.0	110	54	2.4	1.9	77	73	0.6	0.0	33	31	58.4	5.7	533	250	2,239	557
Survey Totals	90	44	0.0	0.0	991	229	0.2	0.0	948	345	2.9	0.5	336	320	7.9	0.5	77	73	37.9	2.4	2,442	1,011	8,500	1,230

a The total number of households (N), and the number of households contacted (n).

Appendix A.9 Estimated number of salmon given away by commercial fishermen to subsistence households and corresponding confidence intervals for surveyed villages, Yukon Area, 1995.

Community	Catch Strata Combined		Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon	
	Total Household	Households Contacted <sup>a</sup>	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	136	42	0	0	0	0	0	0	0	0
Scammon Bay	77	22	0	0	0	0	0	0	0	0
Sheldon's Point	37	16	0	0	0	0	0	0	0	0
Alakanuk	135	41	0	0	0	0	0	0	0	0
Emmonak	157	70	0	0	0	0	0	0	0	0
Kotlik	103	39	0	0	0	0	0	0	0	0
District 1	645	230	0	0	0	0	0	0	0	0
Mountain Village	143	45	0	0	0	0	0	0	0	0
Pitkas Point	33	32	0	0	0	0	0	0	0	0
St. Mary's	92	39	0	0	0	0	0	0	0	0
Pilot Station	93	37	0	0	0	0	0	0	0	0
Marshall	63	25	0	0	0	0	0	0	0	0
District 2	424	178	0	0	0	0	0	0	0	0
Russian Mission	56	20	0	0	0	0	0	0	0	0
Holy Cross	71	33	0	0	0	0	0	0	0	0
Shageluk	42	19	0	0	200	196	0	0	0	0
District 3	169	72	0	0	200	196	0	0	0	0
Anvik	40	17	0	0	7,614	1,563	10	0	100	0
Grayling	62	35	0	0	42,280	38,684	0	0	0	0
Kallag	51	21	0	0	852	425	0	0	0	0
Nulato	90	30	0	0	2,625	4,405	0	0	0	0
Koyukuk	43	13	0	0	2,400	0	0	0	0	0
Galena	145	43	30	38	14,741	22,805	0	0	0	0
Ruby	69	25	83	51	556	344	1,111	688	0	0
Huslia	64	28	0	0	1,700	0	0	0	0	0
Hughes	25	19	0	0	0	0	0	0	0	0
Allakaket	46	22	0	0	0	0	0	0	0	0
Alatna	8	4	0	0	0	0	0	0	0	0
Bettles	28	21	0	0	0	0	0	0	0	0
District 4	671	278	113	64	72,767	45,152	1,121	688	100	0
Tanana	113	55	52	78	0	0	451	188	11	4
Rampart	27	24	0	0	0	0	248	253	0	0
Stevens Village	36	19	0	0	0	0	0	0	0	0
Birch Creek	15	13	0	0	0	0	0	0	0	0
Beaver	33	33	0	0	0	0	0	0	0	0
Fort Yukon	218	56	0	0	0	0	0	0	0	0
Venetie	57	22	0	0	0	0	0	0	0	0
Chalkyitsik	34	27	0	0	0	0	0	0	0	0
District 5	533	249	52	78	0	0	699	315	11	4
<b>Survey Totals</b>	<b>2,442</b>	<b>1,007</b>	<b>165</b>	<b>101</b>	<b>72,967</b>	<b>45,152</b>	<b>1,820</b>	<b>757</b>	<b>111</b>	<b>4</b>

<sup>a</sup> Households contacted indicates the number of households with complete information regarding salmon received from commercial fishermen.

Appendix A.10 Estimated number of salmon given away by subsistence fishermen to another subsistence household and corresponding confidence intervals for surveyed villages, Yukon Area, 1995.

Community	Catch Strata Combined		Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon	
	Total Household	Households Contacted <sup>a</sup>	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	136	42	220	190	2,313	2,954	0	0	0	0
Scammon Bay	77	22	7	13	232	304	0	0	0	0
Sheldon's Point	37	16	3	5	365	355	0	0	0	0
Alakanuk	135	41	21	15	789	1,103	73	132	0	0
Emmonak	157	70	107	67	1,060	594	63	87	140	62
Kotlik	103	39	307	218	1,852	1,226	7	11	20	33
District 1	645	230	666	298	6,612	3,467	143	158	160	71
Mountain Village	143	45	207	198	1,802	1,493	522	604	12	16
Pitkas Point	33	30	37	20	444	110	4	0	6	0
St. Mary's	92	38	189	188	1,958	958	51	60	4	6
Pilot Station	93	37	180	181	409	326	0	0	0	0
Marshall	63	25	392	523	683	1,045	0	0	39	62
District 2	424	175	1,004	617	5,296	2,088	577	607	60	65
Russian Mission	56	20	207	10	301	188	0	0	0	0
Holy Cross	71	33	156	87	38	41	68	54	0	0
Shageluk	42	19	56	50	310	360	0	0	0	0
District 3	169	72	418	101	650	408	68	54	0	0
Anvik	40	17	50	9	0	0	190	179	0	0
Grayling	62	34	284	190	307	480	162	33	2	0
Kaltag	51	20	13	23	0	0	20	35	0	0
Nulato	90	30	110	91	0	0	262	328	0	0
Koyukuk	43	13	74	85	0	0	75	67	24	38
Galena	145	43	260	213	70	56	170	125	0	0
Ruby	69	25	243	176	0	0	11	14	0	0
Huslia	64	28	64	13	68	111	8	13	0	0
Hughes	25	18	21	19	2	2	0	0	0	0
Allakaket	46	22	80	69	784	873	205	231	0	0
Alatna	8	4	0	0	0	0	0	0	0	0
Bettles	28	21	13	8	144	71	0	0	0	0
District 4	671	275	1,212	367	1,375	1,007	1,102	463	26	38
Tanana	113	54	357	345	664	668	5,366	1,880	82	49
Rampart	27	24	157	69	0	0	1,363	59	0	0
Stevens Village	36	19	93	73	0	0	0	0	0	0
Birch Creek	15	13	28	19	0	0	13	10	0	0
Beaver	33	31	95	22	2	1	0	0	0	0
Fort Yukon	218	55	2,262	1,743	0	0	1,662	2,257	0	0
Venetie	57	22	9	6	0	0	400	0	0	0
Chalkyitsik	34	27	22	6	0	0	8	2	0	0
District 5	533	245	3,022	1,781	666	668	8,811	2,938	82	49
<b>Survey Totals</b>	<b>2,442</b>	<b>997</b>	<b>6,322</b>	<b>1,946</b>	<b>14,599</b>	<b>4,243</b>	<b>10,700</b>	<b>3,041</b>	<b>328</b>	<b>114</b>

<sup>a</sup> Households contacted indicates the number of households with complete information regarding salmon received from another subsistence fishermen.

Appendix A.11 Estimated number of salmon given away by test fish projects to subsistence households and corresponding confidence intervals for surveyed villages, Yukon Area, 1995.

Community	Catch Strata Combined		Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon	
	Total Household	Households Contacted <sup>a</sup>	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)	Estimated Total	CI(95%) (+/-)
Hooper Bay	136	42	0	0	0	0	0	0	0	0
Scammon Bay	77	22	0	0	0	0	0	0	0	0
Sheldon's Point	37	16	0	0	0	0	0	0	0	0
Alakanuk	135	41	21	17	487	365	0	0	0	0
Emmonak	157	70	283	87	2,181	871	392	186	54	65
Kotlik	103	39	501	354	3,157	1,850	547	640	18	22
District 1	645	230	804	365	5,825	2,077	939	667	71	69
Mountain Village	143	45	0	0	35	24	406	523	10	16
Pitkas Point	33	32	0	0	0	0	0	0	0	0
St. Mary's	92	39	7	10	300	491	0	0	53	87
Pilot Station	93	37	175	117	436	235	327	472	0	0
Marshall	63	24	0	0	0	0	0	0	0	0
District 2	424	177	182	118	771	545	733	705	63	88
Russian Mission	56	20	0	0	0	0	0	0	0	0
Holy Cross	71	33	0	0	0	0	0	0	0	0
Shageluk	42	19	0	0	0	0	0	0	0	0
District 3	169	72	0	0	0	0	0	0	0	0
Anvik	40	17	0	0	0	0	0	0	0	0
Grayling	62	34	0	0	0	0	0	0	0	0
Kallag	51	21	0	0	0	0	0	0	0	0
Nulato	90	30	0	0	0	0	0	0	0	0
Koyukuk	43	13	0	0	0	0	0	0	0	0
Galena	145	43	0	0	0	0	20	0	0	0
Ruby	69	25	0	0	0	0	0	0	0	0
Huslia	64	28	0	0	0	0	0	0	0	0
Hughes	25	19	0	0	0	0	0	0	0	0
Allakaket	46	22	0	0	0	0	0	0	0	0
Alatna	8	4	0	0	0	0	0	0	0	0
Bettles	28	21	0	0	0	0	0	0	0	0
District 4	671	277	0	0	0	0	20	0	0	0
Tanana	113	55	0	0	0	0	0	0	0	0
Rampart	27	24	0	0	0	0	0	0	0	0
Stevens Village	36	19	0	0	0	0	0	0	0	0
Birch Creek	15	13	0	0	0	0	100	87	0	0
Beaver	33	33	0	0	0	0	0	0	0	0
Fort Yukon	218	56	0	0	0	0	0	0	0	0
Venetie	57	22	0	0	0	0	0	0	0	0
Chalkyitsik	34	27	0	0	0	0	0	0	0	0
District 5	533	249	0	0	0	0	100	87	0	0
<b>Survey Totals</b>	<b>2,442</b>	<b>1,005</b>	<b>986</b>	<b>383</b>	<b>6,596</b>	<b>2,148</b>	<b>1,792</b>	<b>974</b>	<b>135</b>	<b>112</b>

<sup>a</sup> Households contacted indicates the number of households with complete information regarding salmon received from test fish projects.

Appendix A.12. Summary of responses of surveyed individuals who said their household subsistence needs were not met, subsistence survey, Yukon Area, 1995.

VILLAGE	CATEGORY a	RESPONSE
Alakanuk	6	John was in hospital throughout summer season.
Alakanuk	4	Didn't have help available, help through the abundance.
Alakanuk	11	"No reason given"
Alakanuk	3	No gear, boat, motor. Also no one to fish for her.
Alakanuk	3	Smokehouse was not ready for the abundance of chums.
Alakanuk	2	Too busy working this summer and lost net in winter.
Alakanuk	14	Didn't fish.
Alakanuk	8	Came back to Alakanuk late during August.
Alatna	5	No time, new house. water high.
Alatna	3	No gear.
Allakaket	11	Fish no good for human use.
Allakaket	5	No time with move.
Allakaket	6	No time, sick.
Allakaket	5	No time, no baby-sitter.
Allakaket	5	No time.
Allakaket	2	Working.
Allakaket	6	Sick.
Allakaket	2	Working.
Allakaket	3	Didn't have a boat.
Allakaket	5	No time to fish.
Allakaket	2	Working.
Allakaket	5	No time, busy.
Allakaket	4	Everybody working, no one to set net.
Allakaket	5	Too busy.
Allakaket	1	Flood last year.
Anvik	11	Attitude of commercial fishers, don't want them out there fishing. Early part of chum run is best for eating fish. Setnetters are wasting lots of males. More subsistence fishing should be allowed during the early part of the summer chum run when the fish are best quality.
Anvik	3	No boat, no motor.
Anvik	8	Never fished, gone all summer having a baby.
Anvik	12	Didn't fish for kings, still fishing for coho/whitefish for dogs.
Beaver	5	Other work took time.
Beaver	3	No boat.
Beaver	11	Too much time downriver (search party).
Beaver	3	Net worn out.
Beaver	3	No boat.
Bettles	3	No boat.
Bettles	5	No time.
Bettles	7	Not enough fish in river.
Birch Creek	11	Sent fish to Arctic Village for a funeral. No man to hunt for her.
Chalkyitsik	6	Too old to fish.
Emmonak	12	Still fishing for coho.
Emmonak	5	Too busy. Started late, motor problems.
Emmonak	3	No motor.
Emmonak	3	No smokehouse.
Emmonak	3	Don't have fish camp.

VILLAGE	CATEGORY a	RESPONSE
Emmonak	4	Mother is too old to cut enough fish.
Emmonak	2	In hospital, busy at work.
Emmonak	12	Season is not over yet.
Emmonak	6	Too old to fish.
Emmonak	8	Away in Anchorage all summer.
Emmonak	6	Hand surgery, unable to cut fish.
Emmonak	11	"No reason given"
Emmonak	5	Too busy commercial fishing and other activities.
Emmonak	6	Too hard work, smokehouse to far, no boat. Elderly.
Emmonak	11	Didn't have a freezer.
Emmonak	3	Motor problems.
Emmonak	5	No time, too busy.
Fort Yukon	5	Not enough time, out hunting.
Fort Yukon	8	Gone half of summer, death in the family.
Fort Yukon	2	Too busy, worked 50 hours a week.
Fort Yukon	1	High water, bad fishing.
Fort Yukon	5	No time to fish.
Fort Yukon	2	Busy working.
Fort Yukon	6	Bad leg slowed him down.
Fort Yukon	1	High water made poor fishing for kings, gave too many away.
Fort Yukon	6	Laid up (stroke).
Fort Yukon	10	Not enough fish this far up.
Galena	14	Didn't put a net out.
Galena	14	Didn't fish.
Galena	11	Nobody gave them any.
Galena	12	Still fishing for whitefish, fall chum and coho.
Galena	3	No boat.
Galena	1	Cold weather is late.
Grayling	1	Bad weather during fall chum season. Couldn't dry fish. Rough water for a small boat.
Grayling	3	No boat, no motor.
Grayling	14	Didn't fish, no one gave her any.
Grayling	8	Has been gone for a year.
Grayling	4	Brother ruptured a disk, other brother gave all fish away.
Holy Cross	2	Worked all summer.
Holy Cross	11	Busy with personal problems.
Hooper Bay	5	Too busy cutting fish for mother.
Hughes	1	High water, not real fisheaters.
Hughes	11	Didn't try very hard.
Hughes	5	Too busy.
Hughes	1	No good place to fish, flood messed up eddy.
Huslia	14	Didn't fish.
Huslia	2	Working at Clear Creek, for Paul Headley.
Huslia	1	Because there is not a good place to fish, though there seemed to be plenty of fish in the river.
Huslia	3	No net.
Huslia	1	Too high water, up and down all year for fall fishing.
Huslia	12	Not fish in same area usually fishes two or three nets all season. -Still fishing.

VILLAGE	CATEGORY a	RESPONSE
Huslia	12	Still fishing. Will buy some from Galena, bales for dog food-heard good deals down there.
Kotlik	8	Out on vacation.
Kotlik	2	Both too busy with commercial fishing/working at city.
Kotlik	2	Too busy working at Bering Sea Fisheries during summer.
Kotlik	3	No motor during season, broke down before subsistence open.
Kotlik	2	School work.
Kotlik	14	Do not fish.
Kotlik	8	Out vacationing.
Kotlik	3	No motor during summer season.
Kotlik	2	Too busy working at store.
Kotlik	2	Too busy working at store.
Kotlik	4	Husband was working at COOP-Emmonak during summer and at CDQ-Nome.
Koyukuk	11	Family crisis.
Koyukuk	14	Didn't fish.
Koyukuk	2	Too busy with work.
Marshall	4	Nobody wanted to fish.
Marshall	2	Too busy with commercial fishing.
Marshall	4	Husband passed away this summer.
Marshall	11	Did not go to fish camp this summer.
Marshall	6	Too old to fish, cut fish, smoke fish.
Marshall	6	Out at hospital after king season.
Marshall	2	Too busy working.
Mountain Village	2	Too busy with commercial fishing and cab driving.
Mountain Village	3	No boat.
Mountain Village	6	Very ill.
Mountain Village	6	Mother is very ill.
Mountain Village	3	No motor.
Mountain Village	6	Husband injured, couldn't fish.
Mountain Village	11	Did not feel like fishing anymore.
Mountain Village	3	No boat.
Mountain Village	6	Sickness in the family.
Mountain Village	3	No motor, no boat.
Mountain Village	4	Wife wasn't in camp and no other help to process salmon.
Mountain Village	2	Too busy traveling the delta.
Mountain Village	5	Too busy working, traveling throughout village due to deaths.
Mountain Village	5	No time, no fish camp.
Nulato	4	Nobody to cut his fish.
Nulato	8	Were out of town.
Nulato	14	Don't fish.
Nulato	10	Couldn't catch kings.
Nulato	8	Out of town.
Pilot Station	2	Too busy commercial fishing.
Pilot Station	4	Nobody to fish for her and she says "too old to cut".
Pilot Station	2	Too busy working during summer.
Pilot Station	3	No boat during summer season.
Pilot Station	6	Too old nobody gives her fish, can't cut anymore.

VILLAGE	CATEGORY a	RESPONSE
Pilot Station	6	Getting too old to fish.
Pilot Station	6	Husband's health deteriorated during June was in hospital all season.
Pilot Station	6	Husband health was not good, passed away during summer.
Pilot Station	6	Do not subsistence fish anymore- too old.
Pilot Station	4	Husband was in Kotzebue for school.
Pilot Station	2	Too busy with commercial fishing.
Pitkas Point	14	Haven't been.
Pitkas Point	14	Fish camp to far away. didn't fish.
Pitkas Point	4	Nobody give her any.
Pitkas Point	10	Split between others, did not get enough/not fish enough.
Pitkas Point	3	No fishrack and smokehouse.
Rampart	2	Didn't get a chance to fish in the fall, busy working.
Rampart	2	Working.
Rampart	11	Too many "people dying-working all the time".
Rampart	8	Usually put away more fish. In Fairbanks most of the summer.
Ruby	1	Not enough current for wheel.
Ruby	1	Poor eddy to use net.
Ruby	6	Family illness.
Ruby	10	Have big family.
Russian Mission	3	No gear.
Russian Mission	14	Didn't go fishing.
Russian Mission	3	No fish camp.
Scammon Bay	5	Too busy commercial fishing. Motor problems.
Scammon Bay	11	Mother didn't feel like cutting fish.
Scammon Bay	4	Victor is in jail.
Scammon Bay	5	New born was too busy.
Scammon Bay	5	Not enough time to do a lot of cutting, with child.
Scammon Bay	2	Only commercial fishes.
Scammon Bay	5	Too busy commercial fishing.
Scammon Bay	5	Partner is in Bristol bay fishing, had no time for subsistence fishing during summer season.
Shageluk	14	Quit fishing, tired of it.
Shageluk	3	Motor broke.
Shageluk	14	Didn't fish.
Shageluk	3	Didn't have motor or net.
Shageluk	11	Too much trouble, personal problems.
Shageluk	14	Didn't fish.
Sheldon's Point	3	Motors not running.
Sheldon's Point	5	No time.
Sheldon's Point	5	Didn't fish enough.
St. Mary's	2	Both working, moved into new house.
St. Mary's	6	In Anchorage this summer, mom sick.
St. Mary's	11	No doesn't have any.
St. Mary's	11	We didn't want to cut fish.
St. Mary's	10	Didn't put away enough.
St. Mary's	6	No motor, no boat, too old to fish.
Stevens Village	1	Not in right spot.
Stevens Village	5	Not enough time (work, search).

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VILLAGE	CATEGORY a	RESPONSE
Stevens Village	4	Not enough help.
Stevens Village	11	Death in family.
Stevens Village	8	Gone a lot.
Stevens Village	11	Switching to 100 foot net instead of 150 foot net.
Tanana	10	Could not fish as much as wanted.
Tanana	10	Couldn't fish enough.
Tanana	3	Didn't fish, no gear.
Tanana	14	Didn't fish.
Tanana	11	Didn't get expected fish.
Tanana	5	Too busy.
Tanana	3	No boat.
Tanana	11	No tail on fall chum, no tail on king run, too many commercial restrictions on king run.
Tanana	6	Too old to fish.
Tanana	14	Doesn't fish.
Tanana	3	No net.
Tanana	11	Too far to haul.
Tanana	8	Not here all of run.
Tanana	14	Didn't fish.
Tanana	6	Knee operation.
Venetie	10	Not fishing enough.
Venetie	1	Not enough salmon, water too high.
Venetie	1	Water too high.
Venetie	5	Too busy.
Venetie	11	Didn't start early enough.

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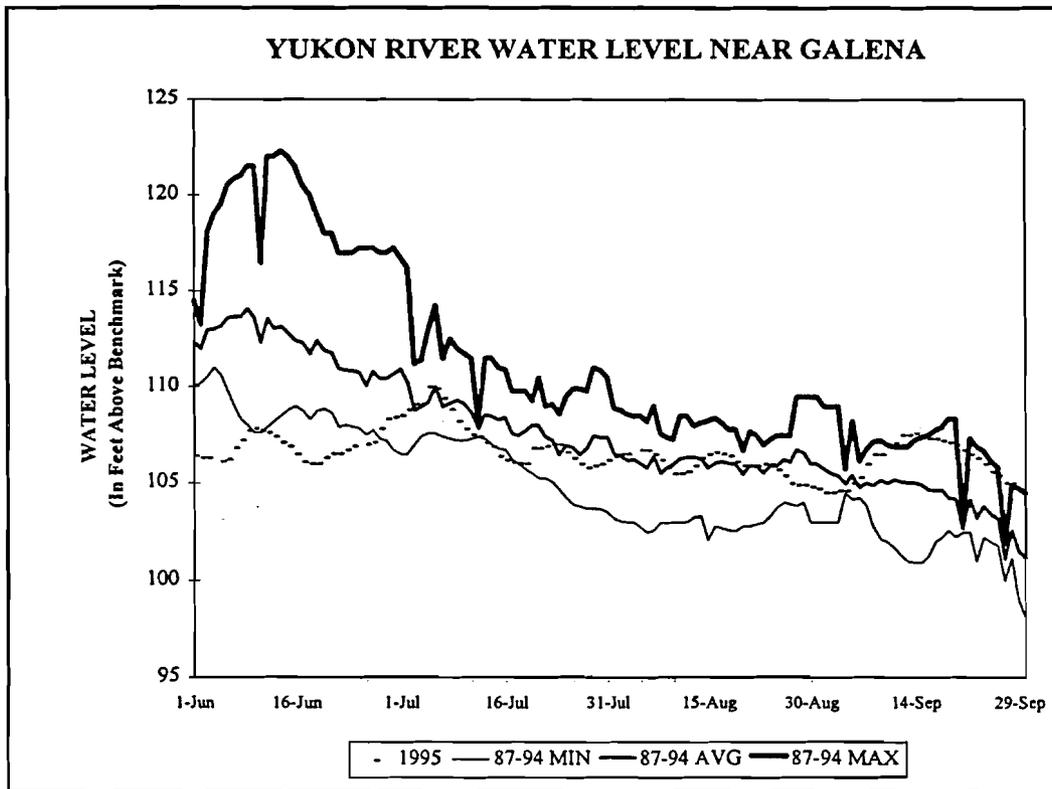
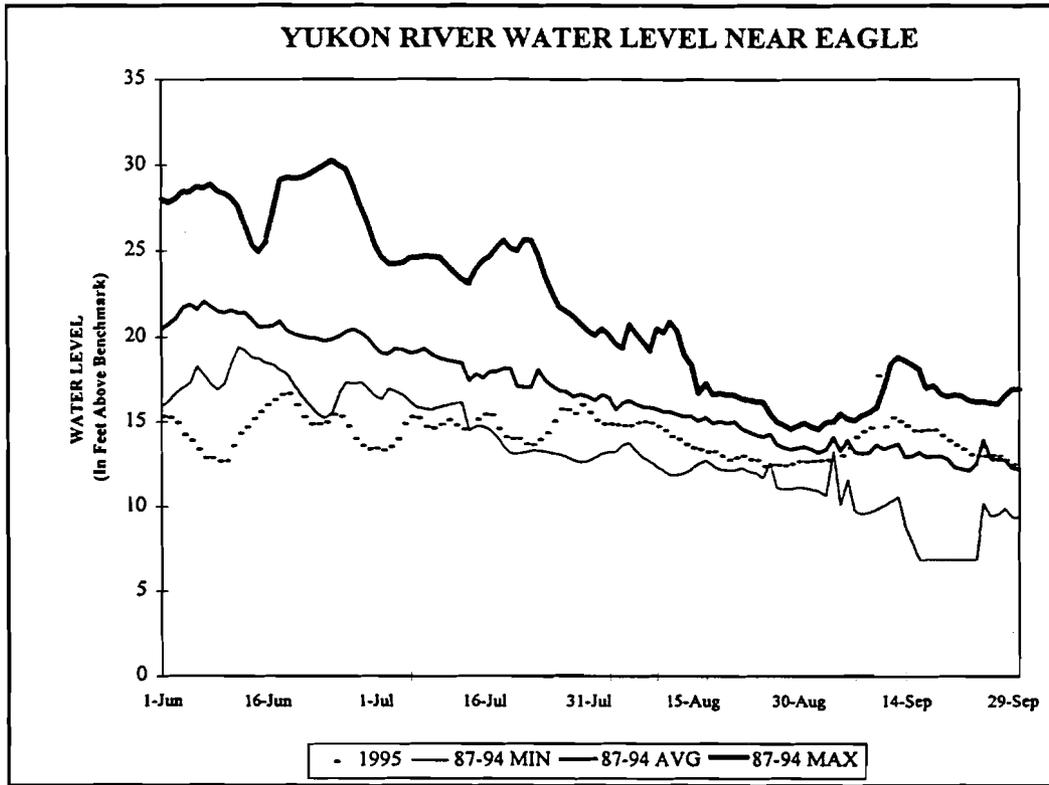
- a Category    Response
- 1    Due to Mother Nature i.e., high water, early freeze-up
  - 2    Working in another occupation
  - 3    No gear - boat, net, motor, gas
  - 4    No helper to harvest or process fish
  - 5    Busy doing other things
  - 6    Medical reasons or elderly
  - 7    Poor run of fish
  - 8    Out of town
  - 9    Will buy or be given more fish
  - 10   Not enough fish caught
  - 11   Miscellaneous reasons not in other categories
  - 12   Still fishing
  - 13   Department Fishing Regulations/Restrictions
  - 14   Didn't fish - normally don't use fish
  - 15   Not enough available to share/barter

Appendix A.13. Summary of survey information from Subdistrict 4-A commercial fishermen concerning summer chum salmon useage, Yukon Area, 1995.

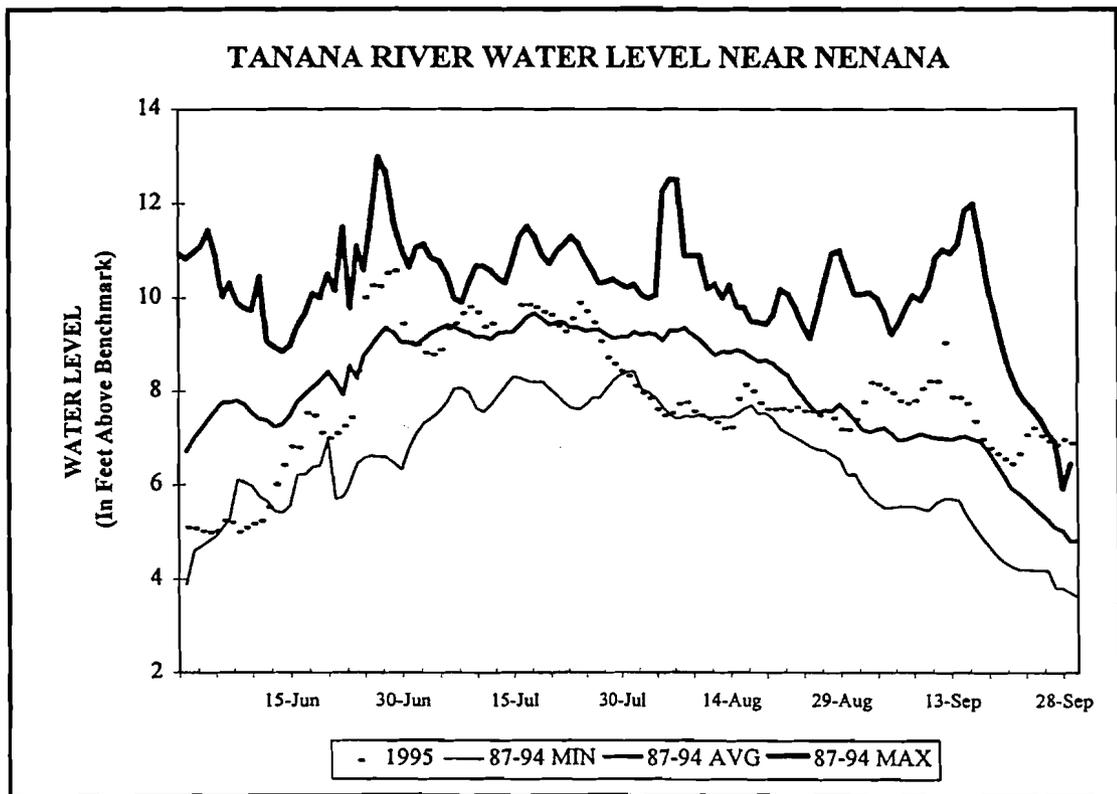
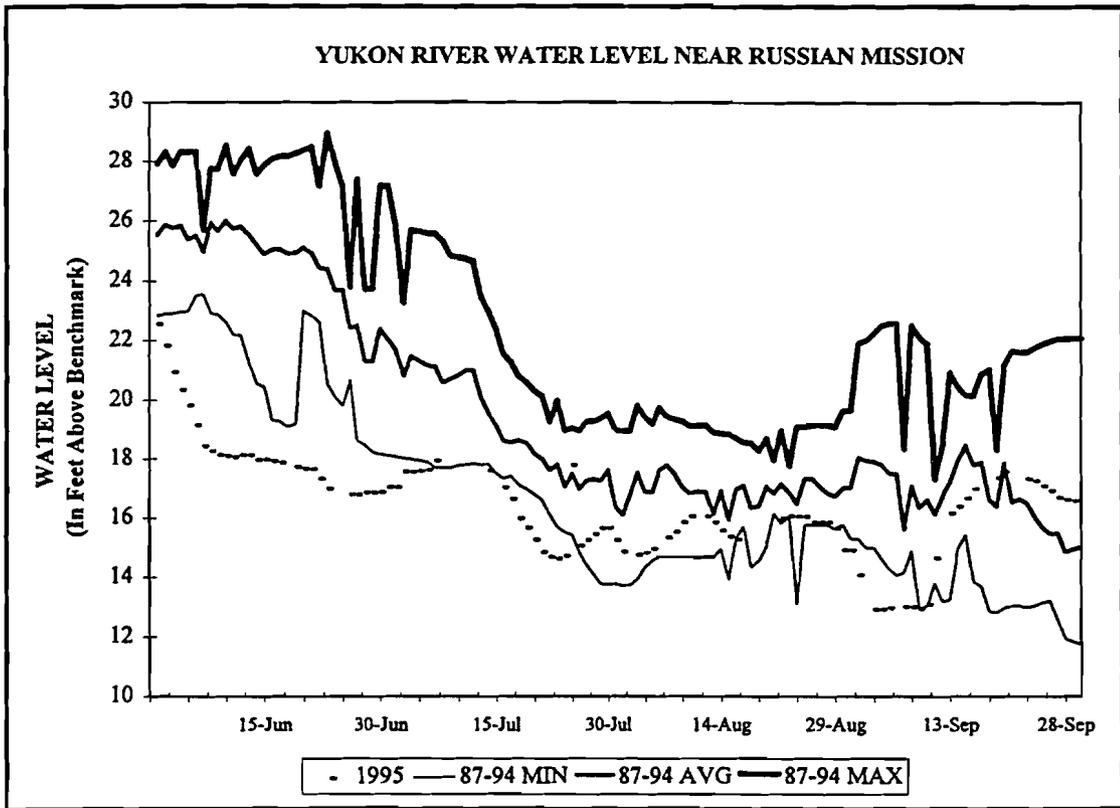
Fisherman	Reported Number of Fish Harvest	Department Estimate of Fish Harvest	Subdistrict 4-A b					Hours Fished <sup>a</sup>		Fisherman's Estimated Commercial Harvest	Estimated Household Use	Number Given Away	Number Sold	Number Lost to Spoilage/or Animals
			Anvik R. Males Kept	Mainstem Yukon River			Anvik	Y-4A						
				Throw Back Males?	Method of Throw Back	Time Released								
1	1,748	2,414	158	yes	4	<4	9	30	2,572	50	2,522	0	0	
2	2,660	4,145							Not contacted					
3	5,133	7,286	DNF	yes	4	3	0	78	5,133	0	5,133	0	0	
4	4,632	7,408	DNF	yes	4	A	0	66	4,632	2,032	0	0	2,600	
5	607	2,133							Declined interview					
6	2,940	5,951	DNF	yes	4	3	0	78	4,000	0	2,000	0	2,000	
7	8,976	13,633	0	yes	4	3	21	66	8,976	0	7,976	c	1,000	
8	3,790	3,864	0	no	-	-	45	42	3,943	600	3,343	0	0	
9	2,678	4,022	10	yes	4	4	9	52	2,700	250	1,850	0	600	
10	3,726	5,263	0	yes	4	A	33	54	3,726	700	2,076	d	950	
11	647	2,247	DNF	yes	4	<4	0	65	6,000	2,800	2,400	0	800	
12	116	573							Declined interview					
13	110	184	DNF	yes	4	2	0	12	110	110	0	0	0	
14	4,813	6,047	0	yes	4	2	33	42	4,800	1,500	2,700	0	600	
15	7,826	7,865	6	yes	4	<4	57	30	8,162	800	6,562	0	800	
16	2,948	8,392	DNF	yes	2	A	0	78	5,000	4,500	0	0	500	
17	141	1,814							Not contacted					
18	5,580	9,825							Not contacted					
19	927	4,933	DNF	yes	2	4	0	56	2,450	1,200	750	0	500	
20	1,744	4,071	DNF	yes	2	4	0	56	2,550	1,300	750	0	500	
21	1,265	5,088	DNF	yes	2	3	0	78	4,000	0	3,925	0	75	
22	2,070	3,476	DNF	yes	2	A	0	56	2,070	0	1,370	0	700	
23	6,719	8,368	53	yes	1	3	57	30	6,772	1,000	4,500	e	1,300	
24	5,316	7,996	0	yes	2	A	45	66	5,700	2,800	0	0	1,900	
25	8,857	15,361	DNF	yes	2	3	0	68	11,000	0	0	8,100	f	2,000
26	1,907	3,333	DNF	yes	2	3	0	54	1,907	357	0	1,400	g	150
27	2,859	11,196							Not contacted					
28	4,530	7,651	DNF	yes	3	A	0	78	4,530	50	0	4,430	50	
29	5,342	9,620	DNF	yes	1	3	0	68	6,720	400	0	0	3,500	
30	2,890	5,075	DNF	yes	2	2	0	52	5,000	2,100	2,400	0	500	
31	3,693	11,006							Declined interview					
32	4,987	9,539	DNF	yes	2	A	0	78	5,000	3,000	0	0	100	
33	969	688	50	no	-	-	57	30	780	0	730	0	50	
34	1,449	3,969	DNF	yes	1	A	0	52	2,000	2,000	0	0	0	
35	1,739	4,608	DNF	no	-	-	0	78	5,000	4,980	0	0	20	
36	2,225	4,910	DNF	yes	2	2	0	78	3,900	3,800	0	0	100	
37	952	5,741	DNF	no	-	-	0	78	5,000	4,980	0	0	20	
38	6,114	12,031	0	yes	1	4	9	78	9,131	3,000	1,000	0	4,500	
39	1,945	2,015	0	yes	2	3	18	54	1,945	0	1,920	0	25	
40	3,230	5,461	DNF	yes	2	3	0	78	3,230	0	3,230	0	0	
41	2,952	11,969	DNF	yes	2	A	0	78	2,900	300	2,100	0	500	
42	7,888	14,827	DNF	yes	2	2	0	60	7,000	0	0	7,000	0	
43	3,633	7,167	DNF	yes	2	A	0	30	4,300	0	2,800	0	1,500	
44	4,079	4,039	200	no	-	-	54	12	4,243	4,243	0	0	0	
45	5,671	6,172	0	yes	1	3	57	30	5,671	0	4,671	0	1,000	
46	3,400	6,413							Not contacted					
47	4,866	6,220	50	yes	2	A	45	48	5,069	600	4,269	0	200	
48	3,364	3,917	0	DNF	-	-	57	0	3,917	1,317	0	0	2,600	
49	5,578	4,977	450	no	-	-	54	12	5,767	0	5,717	0	50	
50	1,858	6,782	DNF	yes	2	A	0	71	2,000	1,500	0	0	500	
51	4,603	10,708	DNF	yes	1	3	0	76	4,500	0	0	0	0	
52	5,589	10,612	DNF	yes	2	3	0	78	6,800	20	6,380	0	400	
53	2,980	5,749	DNF	yes	1	3	0	68	1,280	0	0	0	600	
54	5,393	6,027	0	yes	2	3	45	30	5,393	1,500	1,600	1,200	2,000	
55	8,770	15,358	0	yes	2	A	9	75	8,770	70	5,000	h	2,000	
56	3,307	5,976	DNF	yes	2	3	0	59	8,770	8,770	0	0	0	
57	4,403	10,173	DNF	yes	2	3	0	78	7,000	0	6,000	0	1,000	
58	2,597	5,035	DNF	yes	2	2	0	78	3,500	2,900	500	0	100	
59	3,060	5,167	DNF	no	-	-	0	78	4,000	350	280	3,109	i	0
60	2,214	9,118	DNF	yes	2	4	0	78	6,000	3,000	1,500	0	1,500	
61	2,660	4,422	DNF	yes	3	A	0	78	2,660	50	0	2,560	50	
62	450	814							Not contacted					
63	6,332	6,936	0	yes	1	4	48	18	6,900	0	6,300	j	600	
64	1,312	5,218	DNF	yes	2	A	0	78	1,850	1,050	0	0	800	
65	4,682	8,026							Not contacted					
66	1,766	5,780	DNF	no	-	-	0	78	1,000	100	700	0	200	
234,207			426,804	977					257,729	70,079	104,954	27,799	41,440	

a Total hours possible for Anvik River is 66, while total hours open for commercial fishing in Subdistrict 4-A in the mainstem Yukon River is 78 hours.  
b DNF = Did not fish; method of throwback, 1 = males thrown back after they dropped into a box; 2 = males dropped directly from the wheel into the water by a chute; 3 = males held in a livebox and returned to the river using a dipnet or bucket; 4 = males released alive from a set gillnet; Males released, A = all the time, 3 = 3/4 of the time, 2 = 1/2 the time, 4 = 1/4 of the time, and <4 = less than 1/4 of the time.  
c 6,976 summer chum salmon left at camp for anyone to take, don't know who will take them.  
d 1,000 summer chum salmon still on hand, will give away later.  
e 2,500 summer chum salmon still on hand, will give away later.  
f 2,700 summer chum salmon still on hand, not sold yet.  
g 1,400 summer chum salmon still on hand, will try to sell in the Spring.  
h 2,000 summer chum salmon still on hand, will give away later.  
i 729 summer chum salmon still on hand, will sell to Iditarod mushers in February.  
j 4,325 summer chum salmon still on hand, will give away later.

Appendix A.14. Water levels for the Yukon and Tanana Rivers near the communities indicated.



-Continued-





**APPENDIX B**

**YUKON RIVER DRAINAGE HISTORICAL SUBSISTENCE  
AND PERSONAL USE SALMON HARVESTS**



Appendix B.1 Estimated chinook salmon subsistence harvest, by village, Yukon Area, 1984-1995. a

Village	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-1989 Average	1990-1994 Average
Hooper Bay				2,783	1,099 b	14 b			503	230	157	1,500	-	297 c
Scammon Bay				838	489 b	2 b			948	1,199	668	585	-	938 c
<i>Coastal District Subtotal</i>				3,621	1,588	16			1,451	1,429	825	2,085	-	1,235
Sheldon Pt.	802	143	592	1,173	302	165	756	445	388	561	606	459	475	551
Alakanuk	1,028	517	1,027	1,180	738	820	871	1,044	623	2,562	1,045	1,191	858	1,229
Emmonak	2,099	1,382	1,754	2,518	1,786	1,598	1,873	1,311	2,338	4,372	2,384	1,711	1,808	2,455
Kotlik	695	1,029	1,902	2,407	1,112	1,982	3,119	3,125	1,784	2,913	2,505	2,589	1,686	2,691
<i>Mouth to Anuk River District 1 Subtotal</i>	4,624	3,071	5,275	7,278	3,938	4,565	6,619	5,925	5,141	10,408	6,540	5,960	4,825	6,927
Mt. Village	1,217	672	1,367	2,252	740	2,001	1,792	1,171	1,249	3,217	1,511	1,542	1,406	1,788
Pitkas Pt./St. Marys	2,663	778	1,717	2,457	1,378	2,184	2,476	2,488	2,604	3,043	3,191	2,590	1,703	2,760
Pilot Station	1,116	896	1,452	2,593	674	1,498	3,786	2,661	1,818	2,661	1,977	1,614	1,423	2,585
Marshall	2,176	1,122	1,947	2,564	1,031	1,464	1,492	1,277	1,403	2,592	2,277	3,291	1,626	1,808
<i>Anuk River to Owl Slough District 2 Subtotal</i>	7,172	3,468	6,483	9,866	3,823	7,147	9,546	7,617	7,074	11,513	8,956	9,037	6,157	8,941
Russian Mission	1,938	974	1,747	2,036	1,850	2,367	1,694	1,349	1,282	3,273	1,793	2,450	1,795	1,878
Holy Cross	2,456	2,368	2,505	2,625	2,593	2,379	2,337	1,649	3,491	3,191	4,040	2,808	2,494	2,942
Shageluk			53	47	104	32	62	189	218	128	291	161	59	178
<i>Owl Slough to Bonasila R. District 3 Subtotal</i>	4,394	3,342	4,305	4,708	4,547	4,778	4,093	3,187	4,991	6,592	6,124	5,419	4,348	4,997
<b>Lower Yukon Area Total</b>	<b>16,190</b>	<b>9,881</b>	<b>16,063</b>	<b>25,473</b>	<b>13,896</b>	<b>16,506</b>	<b>20,258</b>	<b>18,729</b>	<b>18,857</b>	<b>29,942</b>	<b>22,446</b>	<b>22,501</b>	<b>15,331</b>	<b>22,100</b>
Anvik	576	405	959	428	211	418	481	619	389	663	424	450	484	515
Grayling	879	903	1,837	1,322	1,571	1,082	144	874	1,074	1,045	1,843	1,340	1,343	996
Kaltag	487	669	1,080	1,117	1,168	1,306	2,244	1,866	1,084	1,260	1,653	1,890	1,068	1,621
Nulato	966	1,063	1,835	1,573	1,986	2,079	2,788	2,500	1,596	1,680	1,735	1,533	1,707	2,056
Koyukuk	1,009	194	569	609	711	1,003	876	885	510	853	589	146	617	743
Galena	1,226	1,329	1,046	1,270	1,982	1,374	3,134	2,574	1,870	1,732	1,834	1,336	1,400	2,229
Ruby/Kokrines	1,107	1,657	1,263	927	1,402	1,016	811	971	498	3,263	1,539	1,435	1,253	1,416
<i>Bonasila R. to Illinois Cr. Subtotal</i>	6,250	6,220	8,589	7,246	9,031	8,278	10,478	10,289	7,021	10,476	9,617	8,130	7,873	9,576
Huslia	169	144	82	182	89	177	198	198	751	232	239	932	135	324
Hughes	856	778	296	177	29	181	90	146	29	88	107 d	77	292	92
Allakaket/Alatina e	375	283	563	309	366	438	356	451	437	139	364 d	331	392	349
Bettles						0	0	18	53	1	0	4	-	14
<i>Koyukuk River Subtotal</i>	1,400	1,205	941	668	484	796	644	811	1,270	460	710	1,344	819	779
<i>District 4 Subtotal</i>	7,650	7,425	9,530	7,914	9,515	9,074	11,122	11,100	8,291	10,936	10,327	9,474	8,692	10,355

-Continued-

Village	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-1989 Average	1990-1994 Average
Tanana	2,682	1,248	1,672	4,021	3,537	3,008	2,284	2,483	2,477	3,362	2,999	2,398	2,697	2,721
Rampart	876	1,302	1,700	2,815	3,145	3,177	1,481	988	2,802	1,956	1,354	1,461	2,428	1,716
Fairbanks (permits) f g	2,499	1,865	1,762	613	0	200	420	982	1,394	1,514	1,920	1,447	888	1,246
Stevens Village	2,177	2,763	2,839	2,076	2,845	3,101	1,295	2,035	1,887	1,754	2,814	2,674	2,725	1,957
Birch Creek					0 b	0		196	44	0	119	93	-	90
Beaver	553	506	708	466	940	1,694	721	713	1,564	1,557	850	1,021	863	1,081
Ft. Yukon	3,608	2,900	3,083	3,950	2,245	4,898	4,051	5,585	4,122	6,361	4,727	3,132	3,415	4,969
Circle/Central (permits) g	545	2,259	2,233	1,614	2,034	1,785	1,951	1,871	1,752	955	1,617	1,316	1,985	1,629
Eagle (permits) g	1,998	2,247	1,915	1,988	2,333	2,385	1,742	1,193	1,040	753	1,234	1,886	2,174	1,192
Other (permits) g h						615	374	571	437	602	1,004	-	-	520
<i>Illinois Cr. to U.S. Can. Border</i>														
<i>Subtotal</i>	14,938	15,090	15,912	17,543	17,079	20,248	14,560	16,420	17,653	18,649	18,236	16,432	17,174	17,122
Venetie	51		32	13	121	88	29	9	35	2,716	524	434	64	663
Chalkyitsik			0	0	0	0	0	0	3	0	0	0	-	1
<i>Chandalar/Black Rivers</i>														
<i>Subtotal</i>	51		32	13	121	88	29	9	38	2,716	524	434	64	663
<i>District 5 Subtotal</i>	14,989	15,090	15,944	17,556	17,200	20,336	14,589	16,429	17,691	21,365	18,760	16,866	17,225	17,767
Manley i	282	744	621	40	572	992	1,169	401	551	238	480	335	594	568
Minto i	440	1,386	350	374	466	366	100	134	142	468	316	535	588	232
Nenana i	2,556	4,919	2,093	3,151	3,846	1,188	1,265	1,599	1,267	693	759	613	3,039	1,117
Fairbanks (permits) g j	321	326	637	531	0	0	84	378	402	273	775	269	299	382
Other i k					0	0	0	3	76	0	40	27	-	24
<i>Tanana River</i>														
<i>District 6 Subtotal</i>	3,599	7,375	3,701	4,096	4,884	2,546	2,618	2,515	2,438	1,672	2,370	1,779	4,520	2,323
<b>Upper Yukon Area Total</b>	<b>26,238</b>	<b>29,890</b>	<b>29,175</b>	<b>29,566</b>	<b>31,599</b>	<b>31,956</b>	<b>28,329</b>	<b>30,044</b>	<b>28,420</b>	<b>33,973</b>	<b>31,457</b>	<b>28,119</b>	<b>30,437</b>	<b>30,445</b>
<b>Alaska Yukon Area Total</b>	<b>42,428</b>	<b>39,771</b>	<b>45,238</b>	<b>55,039</b>	<b>45,495</b>	<b>48,462</b>	<b>48,587</b>	<b>46,773</b>	<b>47,077</b>	<b>63,915</b>	<b>53,902</b>	<b>50,620</b>	<b>46,768</b>	<b>52,645</b>

a More detailed documentation of the estimated subsistence harvests are available in each years respective Yukon Area Annual Management Report (1981 to 1993). The 1994 and 1995 data is preliminary. Beginning in 1988 subsistence salmon harvest estimates have been generated from a stratified random sample of village households. Numbers include test fish catches given away.

Blanks indicate harvest information was not collected.

b The village was not surveyed, harvest estimates were calculated from calendar and post card replies.

c 1992-1994 average harvest.

d Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed. 1994 chinook salmon harvest is estimated using 5 year average 1989-1993.

e Alatna combined with Allakaket.

f Catches by Fairbanks subsistence permit holders that fished in District 5 of the Yukon River.

g Salmon catches expanded for permits not returned and household interviews (1981-1989). Beginning in 1990, reported harvest is from returned permits only.

h Other permit holders that fished in District 5 but did not reside in the villages listed.

i Permits required beginning in 1988 for Subdistricts 6-A and 6-B. In 1988 and 1989, permit and household interview data were expanded. Beginning in 1990, reported harvest is from returned permits only.

j Catches by Fairbanks subsistence permit holders that fished in the Tanana River. Permits required beginning in 1964 for the Tanana River upstream of the Wood River.

k Other permit holders that fished in District 6 but did not reside in the villages listed.

Appendix B.2 Estimated summer chum salmon subsistence harvest, by village, Yukon Area, 1984-1995. a

Village	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-1989 Average	1990-1994 Average
Hooper Bay				23,468	23,059 b	2,293 b			12,900	16,106	10,556	13,374	-	13,187 c
Scammon Bay				6,200	8,171 b	48 b			3,795	4,692	4,347	3,986	-	4,278 c
<i>Coastal District Subtotal</i>				29,668	31,230	2,341			16,695	20,798	14,903	17,360	30,449	17,465
Sheldon Pt.	2,701	1,717	4,755	2,460	2,589	4,314	1,458	2,226	1,415	2,362	1,941	2,979	3,167	1,880
Alakanuk	10,095	7,702	11,280	9,913	6,992	12,108	7,265	8,058	9,951	8,935	5,947	10,538	9,599	8,031
Emmonak	10,053	8,742	12,618	11,177	10,528	22,985	15,215	8,401	12,298	15,568	13,060	11,698	13,210	12,908
Kotlik	5,610	6,188	10,201	7,210	8,825	13,437	13,061	9,105	9,577	7,121	11,197	9,777	9,172	10,012
<i>Mouth to Anuk River District 1 Subtotal</i>	28,459	24,349	38,854	30,760	28,934	52,844	36,999	27,790	33,239	33,986	32,145	34,990	35,148	32,832
Mt. Village	8,665	6,745	11,468	12,456	9,248	15,869	9,950	4,743	7,864	10,505	3,938	10,554	11,157	7,400
Pitkas Pt./St. Marys	11,019	7,556	14,986	12,402	10,501	13,124	9,515	9,284	8,555	7,408	11,231	7,615	11,714	9,198
Pilot Station	3,236	3,133	7,870	4,279	4,242	6,783	6,698	4,634	6,236	5,641	5,450	4,427	5,261	5,732
Marshall	4,076	2,361	7,172	3,997	4,796	3,927	2,290	2,042	2,076	1,745	2,288	4,594	4,451	2,088
<i>Anuk River to Owl Slough District 2 Subtotal</i>	26,996	19,795	41,496	33,134	28,787	39,703	28,453	20,703	24,731	25,297	22,907	27,190	32,583	24,418
Russian Mission	2,227	1,817	3,136	2,283	2,794	2,229	2,146	837	3,331	1,838	801	3,653	2,452	1,791
Holy Cross	5,124	1,870	2,392	1,878	3,036	1,753	857	1,028	1,001	1,517	1,479	948	2,186	1,176
Shageluk			6,710	8,015	8,779	8,842	8,518	3,680	5,267	4,183	6,212	7,542	8,087	5,172
<i>Owl Slough to Bonasila R. District 3 Subtotal</i>	7,351	3,687	12,238	12,176	14,609	12,824	9,521	5,545	9,599	7,538	8,492	12,143	12,724	8,139
<b>Lower Yukon Area Total</b>	<b>62,806</b>	<b>47,831</b>	<b>92,588</b>	<b>105,738</b>	<b>103,560</b>	<b>107,712</b>	<b>74,973</b>	<b>54,038</b>	<b>84,264</b>	<b>87,619</b>	<b>78,447</b>	<b>91,683</b>	<b>110,904</b>	<b>82,864</b>
Anvik	22,433	24,950	41,581	28,887	12,607	410	2,032	876	1,142	1,735	907	9	21,687	1,338
Grayling	28,060	23,937	35,284	21,264	22,634	14,570	1,430	8,094	3,605	1,137	1,418	3,385	23,538	3,137
Kaitag	1,800	26,965	24,667	28,550	3,592	632	6,956	2,287	1,204	1,116	3,683	139	16,881	3,049
Nulato	232	16,315	10,349	16,299	10,201	200	502	159	889	15	975	228	10,673	508
Koyukuk	5,215	9,666	6,250	9,718	284	381	283	2,326	1,130	230	2,039	315	5,260	1,202
Galena	19,480	16,212	8,618	11,776	7,413	6,216	1,760	3,493	3,232	2,477	1,198	1,954	9,647	2,432
Ruby/Kokrines	4,282	13,556	7,883	8,786	4,010	1,844	351	1,352	2,420	1,459	4,586	4,445	7,216	2,034
<i>Bonasila R. to Illinois Cr. Subtotal</i>	81,502	131,601	132,632	125,280	60,741	24,253	13,314	18,587	13,622	8,169	14,806	10,475	94,901	13,700
Huslia	12,550	13,430	10,516	11,042	14,895	10,005	7,368	7,857	13,670	8,343	6,014	4,885	11,978	8,650
Hughes	14,744	12,788	7,280	4,369	2,445	3,687	509	1,257	1,625	827	1,581 d	2,448	6,114	1,160
Allakaket/Alatna e	4,169	7,564	8,934	8,700	8,524	2,915	5,319	7,413	6,858	2,703	5,042 d	6,536	7,327	5,467
Bettles						75	24	155	37	34	45	740	-	59
<i>Koyukuk River Subtotal</i>	31,463	33,782	26,730	24,111	25,864	16,682	13,220	16,682	22,190	11,907	12,682	14,609	25,419	15,336
<i>District 4 Subtotal</i>	112,965	165,383	159,362	149,391	86,605	40,935	26,534	35,269	35,812	20,076	27,488	25,084	120,320	29,036

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Village	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-1989 Average	1990-1994 Average
Tanana	10,620	11,148	11,646	10,876	13,972	7,756	5,905	2,779	4,553	4,245	7,022	3,660	11,080	4,901
Rampart	7,650	5,133	1,450	2,434	3,383	28	58	20	4,494	1,489	559	1,168	2,486	1,324
Fairbanks (permits) f g	4,065	2,027	1,382	1,493	0	0	25	1,068	706	465	360	722	980	525
Stevens Village	5,952	3,046	3,116	1,446	865	2,375	1,671	1,385	460	653	459	158	2,170	926
Beaver	167	263	0	657	214	124	108	2,355	12	134	655	36	252	653
Fl. Yukon	3,032	4,410	3,264	1,187	7,717	1,760	145	11,974	1,700	3,830	2,043	998	3,668	3,938
Circle/Central (permits) g	0	930	459	2,078	871	361	1,267	51	356	85	106	72	940	373
Eagle (permits) g	49	39	516	417	1,273	547	361	607	23	32	38	57	558	212
Other (permits) g h							187	32	291	24	21	232	-	111
<i>Illinois Cr. to U.S. Can. Border</i>														
<b>Subtotal</b>	<b>31,535</b>	<b>26,996</b>	<b>21,833</b>	<b>20,588</b>	<b>28,295</b>	<b>12,951</b>	<b>9,727</b>	<b>20,271</b>	<b>12,595</b>	<b>10,957</b>	<b>11,263</b>	<b>7,103</b>	<b>22,133</b>	<b>12,963</b>
Venetie	0		0	0	701	30	0	3,393	0	129	567	552	183	818
Chalkyitsik			0	0	327	0	90	500	17	0	0	0	-	121
<i>Chandalar/Black Rivers</i>														
<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1,028</b>	<b>30</b>	<b>90</b>	<b>3,893</b>	<b>17</b>	<b>129</b>	<b>567</b>	<b>552</b>	<b>183</b>	<b>939</b>
<b>District 5 Subtotal</b>	<b>31,535</b>	<b>26,996</b>	<b>21,833</b>	<b>20,588</b>	<b>29,323</b>	<b>12,981</b>	<b>9,817</b>	<b>24,164</b>	<b>12,612</b>	<b>11,086</b>	<b>11,830</b>	<b>7,655</b>	<b>22,315</b>	<b>13,902</b>
Manley i	1,260	856	604	267	3,731	2,457	2,250	1,716	850	1,310	1,405	1,657	1,583	1,506
Minto i	5,042	5,291	1,587	1,383	947	1,425	500	748	625	367	509	1,320	2,127	850
Nenana i	13,962	15,825	10,827	21,214	5,654	3,988	1,383	1,499	6,372	5,019	1,352	5,043	11,501	3,125
Fairbanks g j	3,177	2,646	4,024	1,461	0	0	152	1,096	1,342	97	3,693	3,528	1,626	1,276
Other i k					0	0	0	10	315	0	67	113	-	78
<i>Tanana River</i>														
<b>District 6 Subtotal</b>	<b>23,441</b>	<b>24,618</b>	<b>17,042</b>	<b>24,325</b>	<b>10,332</b>	<b>7,868</b>	<b>4,285</b>	<b>5,069</b>	<b>9,504</b>	<b>6,793</b>	<b>7,026</b>	<b>11,661</b>	<b>16,837</b>	<b>6,535</b>
<b>Upper Yukon Area Total</b>	<b>167,941</b>	<b>218,997</b>	<b>198,237</b>	<b>194,304</b>	<b>126,260</b>	<b>61,784</b>	<b>40,636</b>	<b>64,502</b>	<b>57,928</b>	<b>37,955</b>	<b>46,344</b>	<b>44,400</b>	<b>159,473</b>	<b>49,473</b>
<b>Alaska Yukon Area Total</b>	<b>230,747</b>	<b>264,828</b>	<b>290,825</b>	<b>300,042</b>	<b>229,820</b>	<b>169,496</b>	<b>115,609</b>	<b>118,540</b>	<b>142,192</b>	<b>125,574</b>	<b>124,791</b>	<b>136,063</b>	<b>270,377</b>	<b>132,327</b>

a More detailed documentation of the estimated subsistence harvests are available in each years respective Yukon Area Annual Management Report (1981 to 1993). The 1994 and 1995 data is preliminary. Beginning in 1988 subsistence salmon harvest estimates have been generated from a stratified random sample of village households. Numbers include test fish catches given away.

District 4 summer chum salmon subsistence harvest estimates prior to 1988 and District 5 and 6 prior to 1989 included commercially caught summer chum salmon carcasses retained for subsistence use.

Beginning in 1988 and 1989, efforts were made to exclude commercial carcasses from subsistence harvest estimates. Blanks indicate harvest information was not collected.

b The village was not surveyed, harvest estimates were calculated from calendar and post card replies.

c 1992-1994 average harvest.

d Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed. 1994 summer chum salmon harvest is estimated using 5 year average 1989-1993.

e Alatna combined with Allakaket.

f Catches by Fairbanks subsistence use permit holders that fished in District 5 of the Yukon River.

g Salmon catches expanded for permits not returned and household interviews (1981-1989). Beginning in 1990, reported harvest is from returned permits only.

h Other permit holders that fished in District 5 but did not reside in the villages listed.

i Permits required beginning in 1988 for Subdistricts 6-A and 6-B. In 1988 and 1989, permit and household interview data were expanded. Beginning in 1990, reported harvest is from returned permits only.

j Catches by Fairbanks subsistence use permit holders that fished in the Tanana River. Permits required beginning in 1964 for the Tanana River upstream of the Wood River.

k Other permit holders that fished in District 6 but did not reside in the villages listed.

Appendix B.3 Estimated fall chum salmon subsistence harvest, by village, Yukon Area, 1984-1995. a

Village	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-1989 Average	1990-1994 Average
Hooper Bay				105	1,711 b	146 b			127	113	284	207	-	175 c
Scammon Bay				117	551 b	10 b			79	7	63	147	-	50 c
<i>Bering Sea Coast Subtotal</i>				222	2,262	156			206	120	347	354	-	224
Sheldon Pt.	555	713	259	882	289	586	102	84	490	158	25	256	455	172
Alakanuk	1,219	2,603	2,030	3,748	1,194	430	267	193	401	182	73	631	1,668	223
Emmonak	3,329	4,539	2,746	8,160	1,792	840	2,353	2,027	1,628	1,507	3,441	1,614	3,013	2,191
Kollik	3,782	5,420	3,965	5,677	2,200	3,058	2,613	1,631	2,697	5,923	1,348	2,197	3,387	2,842
<i>Mouth to Anuk River District 1 Subtotal</i>	8,885	13,275	9,000	18,467	5,475	4,914	5,335	3,935	5,216	7,770	4,887	4,698	8,522	5,429
Mt. Village	3,497	3,591	2,947	4,897	1,880	4,641	1,566	1,473	1,052	1,113	797	1,347	2,993	1,200
Pitkas Pt./St. Marys	3,927	3,315	5,401	3,966	2,533	1,970	956	2,202	77	708	1,356	641	2,864	1,060
Pilot Station	832	1,957	1,663	583	1,372	1,872	1,941	1,062	3,526	1,017	1,527	575	1,241	1,815
Marshall	3,138	2,681	3,472	4,008	2,815	1,532	1,724	891	2,727	256	471	754	2,418	1,214
<i>Anuk River to Owl Slough District 2 Subtotal</i>	11,394	11,544	13,483	13,454	8,600	10,015	6,187	5,628	7,382	3,094	4,151	3,317	9,516	5,288
Russian Mission	860	1,266	637	1,255	1,151	308	878	425	648	172	11	865	770	427
Holy Cross	1,373	1,024	1,148	1,598	596	711	1,178	190	845	1,068	665	681	846	789
Shageluk		0	370	434	0	4	0	0	865	211	186	128	135	252
<i>Owl Slough to Bonasila R. District 3 Subtotal</i>	2,233	2,290	2,155	3,287	1,747	1,023	2,056	615	2,358	1,449	862	1,672	1,750	1,468
<b>Lower Yukon Total</b>	<b>22512</b>	<b>27109</b>	<b>24638</b>	<b>35430</b>	<b>18084</b>	<b>16108</b>	<b>13678</b>	<b>10178</b>	<b>16162</b>	<b>12433</b>	<b>10247</b>	<b>10041</b>	<b>19788.167</b>	<b>12409.333</b>
Anvik	720	2,125	913	394	136	168	583	452	894	420	155	269	623	501
Graling	1,950	3,106	4,204	4,750	1,760	830	1,405	3,616	2,993	2,083	811	1,155	2,442	2,182
Kaltag	1,330	1,570	2,024	7,474	2,293	1,654	2,327	2,834	2,522	704	630	644	2,503	1,803
Nulato	1,675	4,240	1,762	2,200	1,673	2,436	3,546	1,637	1,910	571	1,109	1,137	2,052	1,755
Koyukuk	1,560	798	2,195	2,492	587	2,460	860	2,761	2,817	2,052	1,049	814	1,422	1,908
Galena	7,270	4,476	4,819	10,509	4,308	6,436	3,202	5,525	2,393	3,255	3,963	3,202	5,091	3,668
Ruby/Kokrines	8,505	6,717	7,101	11,000	5,171	6,599	3,352	2,856	4,499	1,085	5,553	4,695	6,098	3,469
<i>Bonasila R. to Illinois Cr. Subtotal</i>	23,010	23,032	23,018	38,819	15,928	20,583	15,275	19,681	18,028	10,170	13,270	11,916	20,230	15,285
Hustlia	6,306	276	808	585	1,697	1,728	846	411	1,286	258	55	1,035	849	571
Hughes	1,280	1,260	1,422	586	311	260	70	270	325	169	219 d	263	640	211
Allakake/Alatna e	556	707	878	1,477	443	1,989	3,050	513	1,579	235	1,469 d	260	912	1,369
Bettles						0	0	0	14	0	0	583	-	3
<i>Koyukuk River Subtotal</i>	8,142	2,243	3,108	2,648	2,451	3,957	3,966	1,194	3,204	662	1,743	2,141	2,401	2,154
<i>District 4 Subtotal</i>	31,152	25,275	26,126	41,467	18,379	24,540	19,241	20,875	21,232	10,832	15,013	14,057	22,631	17,439

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Village	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-1989 Average	1990-1994 Average
Tanana	42,690	28,113	32,049	41,825	55,998	40,845	41,145	40,868	19,365	23,103	34,681	14,409	33,138	31,832
Rampart	4,395	19,619	3,950	5,092	3,600	2,472	10,818	5,801	5,701	3,272	1,007	1,403	5,789	5,320
Fairbanks (permits) f g	12,920	13,874	11,708	5,264	0	7	82	2,022	2,491	930	2,870	2,184	5,142	1,679
Stevens Village	4,932	11,679	4,150	7,538	1,451	6,633	3,857	2,481	150	862	45	3,194	5,242	1,479
Beaver	0	1,761	3,321	5,750	96	7,242	757	7	361	692	2,069	1,231	3,028	777
Ft. Yukon	7,525	12,719	8,543	15,200	2,766	27,790	11,627	7,467	2,284	2,380	6,827	9,196	11,170	6,117
Circle/Central (permits) g	3,107	4,096	3,650	7,691	4,396	4,478	6,804	6,413	6,379	349	4,581	5,102	4,052	4,905
Eagle (permits) g	18,519	25,264	18,027	19,678	14,800	11,557	8,027	7,985	5,630	2,070	8,263	13,115	14,554	6,395
Other (permits) g h							529	100	0	1,750	0	830	-	476
<i>Illinois Cr. to U.S. Can. Border</i> Subtotal	94,088	117,125	83,398	108,038	83,107	101,024	83,646	73,144	42,361	35,408	60,343	50,664	82,115	58,980
Venetie	4,345		3,193	2,774	34	7,977	5,377	758	3,066	7,881	4,302	6,085	3,495	4,277
Chalkyitsik			1,533	2,686	1,068	3,000	1,490	100	274	475	1,751	845	2,072	818
<i>Chandalar/Black Rivers</i> Subtotal	4,345		4,726	5,460	1,102	10,977	6,867	858	3,340	8,356	6,053	6,930	5,566	5,095
District 5 Subtotal	98,433	117,125	88,124	113,498	84,209	112,001	90,513	74,002	45,701	43,764	68,398	57,594	87,682	64,075
Manley i	2,196	6,560	5,905	4,267	6,899	21,087	25,860	13,243	7,010	3,215	13,722	20,272	7,453	12,610
Minto i	4,025	4,642	545	5,419	2,615	2,005	3,652	5,276	3,017	301	1,419	4,782	3,045	2,733
Nenana i	13,520	22,901	15,902	28,909	26,889	25,340	12,464	17,932	13,253	5,929	11,201	15,500	19,657	12,156
Fairbanks (permits) g j	2,985	2,860	2,803	0	0	0	309	1,671	1,394	58	5,006	6,384	944	1,687
Other i k						10,222	2,283	2,347	1,039	352	2,249	2,230	-	1,654
<i>Tanana River</i> District 6 Subtotal	22,726	36,963	25,155	36,595	36,403	58,654	44,568	40,469	25,713	9,853	33,597	49,168	31,099	30,840
Upper Yukon Total	152,311	179,363	139,405	191,560	138,991	195,195	164,322	135,346	92,646	64,449	116,006	120,819	141,412	112,354
Alaska Total	174,823	208,472	164,043	226,990	157,076	211,303	187,900	145,524	107,808	76,882	126,253	130,860	161,200	124,763

- a More detailed documentation of the estimated subsistence harvests are available in each years respective Yukon Area Annual Management Report (1961 to 1993). The 1994 and 1995 data is preliminary. Beginning in 1988 subsistence salmon harvest estimates have been generated from a stratified random sample of village households. Numbers include test fish catches given away. Includes commercial related harvest to produce roe sold, 1982-1988. Blanks indicate harvest information was not collected.
- b The village was not surveyed, harvest estimates were calculated from calendar and post card replies.
- c 1992 through 1994 average harvest.
- d Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed. 1994 fall chum salmon harvest is estimated using 5 year average 1989-1993.
- e Alatna combined with Allakaket.
- f Catches by Fairbanks subsistence use permit holders that fished in District 5 near the Yukon River bridge crossing.
- g Salmon catches expanded for permits not returned and household interviews (1981-1989). Beginning 1990, reported harvest is from returned permits only.
- h Other permit holders that fished in District 5 but did not reside in the villages listed.
- i Permits required beginning in 1988 for Subdistricts 6-A and 6-B. In 1988 and 1989, permit and household interview data were expanded. Beginning in 1990, reported harvest is from returned permits only.
- j Catches by Fairbanks subsistence use permit holders that fished in the Tanana River. Permits required beginning in 1964 for the Tanana River upstream of the Wood River.
- k Other permits holders that fished in District 6 but did not reside in the villages listed.

Appendix B.4 Estimated coho salmon subsistence harvest, by village, Yukon Area, 1984-1995. a

Village	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-1989 Average	1990-1994 Average
Hooper Bay				69	1,523 b	211 b			28	0	1	48	-	10 c
Scammon Bay				64	326 b	2 b			31	40	80	104	-	50 c
<i>Bering Sea Coast Subtotal</i>				133	1,849	213			59	40	81	152	-	60
Sheldon Pt.	245	49	237	308	169	487	78	35	441	78	52	419	250	137
Alakanuk	776	894	1,518	1,116	634	334	156	391	966	138	94	658	899	349
Emmonak	3,659	1,552	732	3,497	1,578	1,259	1,283	801	668	196	959	485	1,724	781
Kotlik	1,415	751	238	1,475	2,008	2,997	1,784	581	3,353	1,931	2,167	689	1,494	1,963
<i>Mouth to Anuk River District 1 Subtotal</i>	6,095	3,246	2,725	6,396	4,389	5,077	3,301	1,808	5,426	2,343	3,272	2,251	4,367	3,230
Mt. Village	982	1,527	828	2,481	1,314	2,385	1,754	868	1,971	447	968	921	1,707	1,202
Pikias Pt./St. Marys	2,024	1,113	4,832	1,740	3,147	971	515	1,617	2,771	451	978	708	2,381	1,266
Pilot Station	1,114	710	1,514	300	876	379	1,968	553	300	477	811	241	756	822
Marshall	2,946	1,484	1,966	2,373	1,767	1,304	2,107	259	1,545	320	1,124	272	1,779	1,071
<i>Anuk River to Owl Slough District 2 Subtotal</i>	7,066	4,834	9,140	6,894	7,104	5,039	6,344	3,297	6,587	1,695	3,881	2,142	6,602	4,361
Russian Mission	740	276	679	423	604	20	688	396	1,148	152	55	891	400	488
Holy Cross	0	100	102	259	935	517	338	944	105	88	171	0	383	329
Shageluk			173	72	128	0	0	0	296	39	137	0	-	94
<i>Owl Slough to Bonasila R. District 3 Subtotal</i>	740	376	954	754	1,667	537	1,026	1,340	1,549	279	363	891	783	911
<b>Lower Yukon Total</b>	<b>13,901</b>	<b>8,456</b>	<b>12,819</b>	<b>14,177</b>	<b>16,009</b>	<b>10,866</b>	<b>10,871</b>	<b>6,446</b>	<b>13,621</b>	<b>4,357</b>	<b>7,597</b>	<b>5,436</b>	<b>12,266</b>	<b>8,538</b>
Anvik	40	272	296	405	97	40	236	347	202	115	95	10	222	199
Grayling	97	0	860	599	692	969	10	1,363	859	164	36	97	624	486
Kallag	0	0	229	0	0	792	501	1,260	2,105	334	245	426	204	889
Nulato	0	510	69	85	234	276	845	75	435	37	27	25	235	284
Koyukuk	200	120	154	894	10	110	162	307	1,877	70	305	33	258	544
Galena	452	1,072	465	1,349	1,029	415	572	422	1,398	124	803	275	866	664
Ruby/Kokrines	1,631	1,719	339	0	2,169	1,069	974	410	1,299	308	1,957	607	1,059	990
<i>Bonasila R. to Illinois Cr. Subtotal</i>	2,420	3,693	2,412	3,332	4,231	3,671	3,300	4,184	8,175	1,152	3,468	1,473	3,468	4,056
Huslia	12	0	31	124	201	150	235	150	233	9	47	307	101	135
Hughes	400	138	0	0	104	91	43	9	21	3	33 d	153	67	22
Allakake/Alatna e	35	118	15	23	178	118	36	108	0	3	53 d	0	90	40
Bettles						0	0	0	0	0	0	1	-	0
<i>Koyukuk River Subtotal</i>	447	256	46	147	483	359	314	267	254	15	133	461	258	197
<i>District 4 Subtotal</i>	2,867	3,949	2,458	3,479	4,714	4,030	3,614	4,451	8,429	1,167	3,601	1,934	3,726	4,252

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Village	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1985-1989 Average	1990-1994 Average
Tanana	16,898	7,384	4,691	6,680	16,922	5,518	8,580	4,448	11,406	5,576	2,587	2,154	8,239	6,519
Rampart	120	513	110	81	842	87	591	58	75	38	99	0	327	172
Fairbanks (permits) f h	254	13	709	6	0	0	5	8	34	0	25	18	146	14
Stevens Village	145	182	67	0	604	208	479	0	20	0	0	1	212	100
Beaver	0	1	124	0	164	774	172	1	398	135	10	20	213	143
Ft. Yukon	33	3	118	41	370	406	727	380	341	5	963	4	188	483
Circle/Central (permits) g	0	0	37	0	41	1	208	5	54	10	30	0	16	61
Eagle (permits) g	17	2	6	0	11	0	0	0	3	85	0	1	4	18
Other (permits) g h					0	165	450	12	0	0	0	7	-	92
<i>Illinois Cr. to U.S. Can. Border</i>														
<i>Subtotal</i>	17,467	8,098	5,862	6,808	18,954	7,159	11,210	4,912	12,331	5,849	3,714	2,205	9,343	7,603
Venetie	0		0	17	0	2	348	12	45	135	4	0	-	109
Chalkyitsik			8	2	801	26	4	7	0	0	456	0	-	93
<i>Chandalar/Black River</i>														
<i>Subtotal</i>	0		8	19	801	28	352	19	45	135	460	0	-	202
<i>District 5 Subtotal</i>	17,467	8,098	5,870	6,827	19,755	7,187	11,562	4,931	12,376	5,984	4,174	2,205	9,343	7,805
Manley i	1,566	1,926	538	1,467	2,103	5,310	7,574	6,361	4,725	1,535	10,410	7,395	2,269	6,121
Minto i	800	1,144	1,058	671	2,729	1,179	818	526	614	300	2,616	338	1,356	975
Nenana i	10,270	7,614	10,090	19,592	25,369	7,593	7,381	10,171	8,895	1,314	9,387	7,142 e	14,052	7,430
Fairbanks (permits) g j	2,149	1,077	1,635	0	0	0	66	2,501	2,281	0	2,103	3,076 e	542	1,390
Other i k						4,759	1,774	2,002	1,039	1,155	1,973	851	-	1,589
<i>Tanana River</i>														
<i>District 6 Subtotal</i>	14,785	11,761	13,321	21,730	30,201	18,841	17,613	21,561	17,554	4,304	26,489	18,802	18,219	17,504
<b>Upper Yukon Total</b>	<b>35,119</b>	<b>23,808</b>	<b>21,649</b>	<b>32,036</b>	<b>54,670</b>	<b>30,058</b>	<b>32,789</b>	<b>30,943</b>	<b>38,359</b>	<b>11,455</b>	<b>34,284</b>	<b>22,941</b>	<b>31,288</b>	<b>29,582</b>
<b>Alaska Total</b>	<b>49,020</b>	<b>32,264</b>	<b>34,468</b>	<b>46,213</b>	<b>69,679</b>	<b>40,924</b>	<b>43,460</b>	<b>37,388</b>	<b>51,980</b>	<b>15,612</b>	<b>41,861</b>	<b>28,377</b>	<b>43,654</b>	<b>38,100</b>

a More detailed documentation of the estimated subsistence harvests are available in each years respective Yukon Area Annual Management Report (1961 to 1993). The 1994 and 1995 data is preliminary. Beginning in 1988 subsistence salmon harvest estimates have been generated from a stratified random sample of village households. Numbers include test fish catches given away.

Blanks indicate harvest information was not collected.

b The village was not surveyed, harvest estimates were calculated from calendar and post card replies.

c 1992 through 1994 average harvest.

d Due to floods in 1994, Hughes, Allakaket, and Alatna were not surveyed. 1994 fall chum salmon harvest is estimated using 5 year average 1989-1993.

e Alatna combined with Allakaket.

f Catches by Fairbanks subsistence use permit holders that fished in District 5 near the Yukon River bridge crossing.

g Salmon catches expanded for permits not returned and household interviews (1981-1989). Beginning 1990, reported harvest is from returned permits only.

h Other permit holders that fished in District 5 but did not reside in the villages listed.

i Permits required beginning in 1988 for Subdistricts 6-A and 6-B. In 1988 and 1989, permit and household interview data were expanded. Beginning in 1990, reported harvest is from returned permits only.

j Catches by Fairbanks subsistence use permit holders that fished in the Tanana River. Permits required beginning in 1964 for the Tanana River upstream of the Wood River.

k Other permits holders that fished in District 6 but did not reside in the villages listed.

Appendix B.5 Subsistence salmon catches taken under authority of a permit in District 5, Yukon Area, 1974-1995. a

Yukon River "Bridge" Subsistence Salmon Fishery b							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest c	Reported Harvest			Coho
				Chinook	Summer Chum d	Fall Chum d	
1974	29	e	e	591		1,857	1,271
1975	19	e	e	727		778	70
1976	28	e	18	531		974	e
1977	38	e	e	467		2,567	e
1978	57	e	e	1,333		9,735	e
1979	55	e	41	2,194		12,374	e
1980	70	e	67	1,350		6,488	36
1981	57	e	24	1,095		12,034	e
1982	64	e	44	1,935		11,328	20
1983	68	e	46	2,672		15,059	e
1984	67	e	54	4,676		27,869	399
1985	55	e	42	2,618		21,832	33
1986	76	e	58	3,827		18,690	759
1987	16	e	14	1,818	2,091	7,631	6
1988	24	21	18	1,747	2,097	3,183	606
1989	26	20	13	2,483	574	1,157	309
1990	26	25	16	2,033	3,493	1,109	455
1991	52	46	34	2,529	1,295	3,953	20
1992	45	42	33	2,241	975	2,491	34
1993	49	47	36	3,767	492	2,915	16
1994	50	49	36	3,073	384	2,911	25
1995	59	59	39	3,253	954	2,244	59

Upper Yukon River Subsistence Salmon Fishery f							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest c	Reported Harvest			Coho
				Chinook	Summer Chum d	Fall Chum d	
1979	75	e	6	4,063		30,475	114
1980	48	e	39	3,649		18,477	6
1981	71	e	51	4,510		38,333	e
1982	60	e	61	3,833		15,432	e
1983	53	e	52	2,831		23,708	e
1984	58	e	54	2,543		21,675	17
1985	59	e	36	2,419		19,059	2
1986	40	e	52	4,148		20,701	43
1987	51	51	58	3,602	2,495	27,369	0
1988	58	57	50	2,783	2,134	9,078	101
1989	59	56	42	1,186	68	7,515	1
1990	81	75	54	3,746	1,629	14,992	206
1991	70	69	48	3,219	658	14,898	5
1992	85	79	54	2,984	409	12,009	57
1993	79	79	49	1,910	118	2,419	95
1994	79	76	51	3,093	145	12,844	30
1995	87	87	53	3,628	129	19,047	1

a Prior to 1988 salmon harvest expanded for permits not returned. Beginning in 1988, reported harvest from returned permits only.

b That portion of the Yukon River drainage from Hess Creek to Dall River.

c Some fishermen reporting catches did not have permits.

d Summer chum and fall chum salmon undifferentiated from 1974-1986.

e Information not available.

f That portion of the Yukon River drainage from 22 Mile Slough, above the village of Fort Yukon to the United States/Canadian border.

Appendix B.6 Subsistence salmon catches taken under authority of a permit, Tanana River drainage, 1973-1995. a

Subdistrict 6-A Subsistence Salmon Fishery b							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1988	28	24	18	845	1,389	9,165	3,455
1989 c	29	28	24 d	651	1,918	25,266	5,292
1990 c	42	36	26	1,369	2,250	27,957	8,408
1991	45	41	31	420	1,716	17,472	8,486
1992	38	35	26	508	450	5,999	5,028
1993 c	42	41	22	331	784	2,617	1,317
1994	37	37	30	576	3,793	18,076	12,449
1995	38	35	26	455	4,894	21,720	9,584

Subdistrict 6-B Subsistence Salmon Fishery b							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1988	75	66	52	3,721	3,167	18,902	18,906
1989 e	60	51	37 d	455	363	18,506	8,453
1990 e	70	58	38	1,234	1,966	16,332	9,155
1991 e	87	78	51	1,796	2,373	21,629	11,971
1992 e	98	89	57	1,587	7,820	18,782	11,409
1993	99	89	38	1,341	5,976	7,166	2,987
1994	102	94	49	1,337	2,035	13,179	12,840
1995	98	98	59	1,322	6,712	25,364	7,458

Subdistrict 6-C Subsistence Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1973	22	f	4	26	771	886	g
1974	70	f	f	38	1,373	1,580	g
1975	36	f	f	32	751	864	g
1976	110	f	f	31	1,314	1,512	g
1977	89	f	33	81	118	607	g
1978	160	f	126	126	2,729	1,188	g
1979	246	f	199	264	2,384	4,459	g
1980	315	f	254	282	3,729	4,059	g
1981	346	f	228	440	3,239	5,770	g
1982	330	f	209	451	2,708	4,521	g
1983	259	f	147	475	2,276	3,830	g
1984	308	f	212	321	3,177	5,134	g
1985	291	f	155	326	2,646	3,937	g
1986	323	f	211	637	4,031	4,437	g
1987 h	217	f	123	531	2,739	0	0
1988	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0
1990 i	19	18	6	15	69	279	50
1991	149	142	98	299	980	1,080	1,089
1992	149	146	90	343	1,234	896	1,116
1993 j	0	0	0	0	0	0	0
1994 k	145	142	107	457	1,198	1,600	1,545
1995 i	-	-	-	-	-	-	-

-Continued-

## Upper Tanana River Drainage Subsistence Salmon Fishery

Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1988	0	0	0	0	0	0	0
1989	2	2	2	5	0	39	0
1990	1	1	0	0	0	0	0
1991	8	7	6	0	0	288	14
1992	11	11	4	0	0	36	1
1993	10	10	8	0	0	5	0
1994	7	7	3	0	0	202	15
1995	50	46	12	0	0	88	0

- a Prior to 1988, salmon catches expanded for permits not returned. Beginning in 1988, reported harvest from returned permits only.
- b Permit requirement for Subdistricts 6-A and 6-B went into effect in 1988; however, very few Subdistrict 6-A permits were issued in 1988 and 1989 as not all fishermen obtained permits.
- c Includes salmon given away as part of the Departments test fishing projects in Manley.
- d Some fishermen reporting catches did not have permits.
- e Includes salmon given away as part of the Departments test fishing projects in Nenana.
- f Information not available.
- g Fall chum and coho salmon were not reported as separate species prior to 1988.
- h Personal use fishery established for nonrural residents beginning in July of 1987.
- i Some fishermen had both personal use and subsistence permits since the McDowell Decision which became effective July 1990 stated that all Alaskan residents were eligible subsistence participants.
- j Personal use fishery established for those fishing for salmon in the nonsubsistence area
- k No personal use permits were issued in 1994 for this area.
- l In 1995 subsistence regulations were repealed within the Fairbanks Nonsubsistence Area.

Appendix B.7 Personal use salmon catches taken under authority of a permit in the Lower Yukon Area, and in District 5 of the Upper Yukon Area, 1987-1991. a

Lower Yukon Personal Use Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	0	0	0			0	
1988	17	14	10	67	416	5	0
1989	26	23	12	286	381	18	59
1990	19	16	15	450	256	60	8
1991 b	0	0	0	0	0	0	0

Yukon River "Bridge" Area Personal Use Salmon Fishery c							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest d	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	42	e	33	1,674	4,262	15,750	58
1988	45	42	35	1,435	567	1,762	103
1989	45	42	32	1,877	295	3,294	82
1990 f	41	36	26	1,529	641	3,723	18
1991 b	0	0	0	0	0	0	0

Upper Yukon River Personal Use Salmon Fishery g							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest d	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	2	2	2	32	0	0	0
1988	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0
1990	4	4	3	164	0	0	0
1991 b	0	0	0	0	0	0	0

a Personal use fishery during 1987 applied to nonrural residents harvesting only fall chum. Beginning in 1988, nonrural personal use fishing applied to all salmon species and reported harvest is from returned permits only. Effective July 1, 1990 all Alaskan residents became eligible for subsistence fishing permits.

b After 1991 the regulations did not provide for a personal use fishery in these areas.

c That portion of the Yukon River drainage from Hess Creek to Dall River.

d Prior to 1990, some fishermen reporting catches did not have permits.

e Information not available.

f Includes personal use harvest of two chinook salmon taken by one permittee from a non-permit area below Rampart.

g That portion of the Yukon River drainage from 22 Mile Slough, above the village of Fort Yukon, to the United States/Canada border.

Appendix B.8 Personal use salmon catches taken under authority of a permit, Tanana River drainage, 1987-1995. a

Subdistrict 6-A Personal Use Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	0	0	0			0	
1988	1	1	0	0	0	0	0
1989	1	1	1	0	4	0	0
1990	1	1	0	0	0	0	0
1991	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0

Subdistrict 6-B Personal Use Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	0	0	0			0	
1988	1	1	1	306	60	40	22
1989	1	1	1	56	220	0	0
1990	4	4	3	9	12	40	35
1991	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0

Subdistrict 6-C Personal Use Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	132 b	c	60 d			3,316	2,465
1988	208	162	120	317	1,182	2,074	1,125
1989	175	160	112	397	991	1,770	731
1990	152	144	102	442	918	1,353	1,120
1991	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0
1993	133	131	79	426	674	163	0
1994	0	0	0	0	0	0	0
1995	139	138	91	399	780	863	417

-Continued-

Upper Tanana River Personal Use Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
1987	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0
1991 e	0	0	0	0	0	0	0

- a Personal use fishery during 1987 applied to nonrural residents harvesting only fall chum. Beginning in 1988, nonrural personal use fishing applied to all salmon species and reported harvest is from returned permits only. Effective July 1, 1990 all Alaskan residents became eligible for subsistence fishing permits. In 1993 the Board established the Fairbanks Nonsubsistence Area, this designated fishermen residing in the area as personal use. In 1994 a Superior Court decision invalidated the Fairbanks Nonsubsistence Area and subsistence regulations applied. In 1995 the Board amends the Fairbanks Nonsubsistence Area to apply personal use regulations to all fishermen fishing in the area.
- b Represents 60 former subsistence fishermen who were reissued permits to fish fall chum salmon for personal use.
- c Information not available.
- d Some fishing families used both subsistence and personal-use permits.
- e After 1991 the regulations did not provide for a personal use fishery in this area.

Appendix B.9 Subsistence and personal use chum salmon carcasses taken under authority of a permit, Tanana River drainage, 1973-1995.

Upper Tanana River (Big Delta Area)  
Subsistence and Personal Use Chum Salmon Carcass Fishery

Year	Number of Permits Issued b	Number of Permits Returned	Number Reporting Harvest	Fall Chum Salmon Carcasses
1973	16	a	8	1,561
1974	21	a	a	1,974
1975	26	a	a	2,573
1976	36	a	a	3,441
1977	46	a	29	5,816
1978	70	a	43	2,517
1979	32	a	25	4,582
1980	57	a	36	4,915
1981	43	a	27	5,030
1982	37	a	13	1,690
1983	45	a	29	5,357
1984	31	a	14	2,353
1985	30	a	14	2,111
1986	27	a	19	2,276
1987	20	17	13	1,931
1988	22	20	15	2,100
1989	12	12	10	1,785
1990	7	7	3	750
1991	8	4	3	741
1992	10	10	9	1,897
1993 c	0	0	0	0
1994	4	4	4	250
1995 d				

a Information not available.

b Personal use permits in 1987 through 1990 and in 1993, all other years subsistence permits.

c The department elected not to issue any personal use carcass permits to reduce spawning habitat disturbances.

d In 1995 all commercial, sport, personal use, and subsistence fishing was closed by regulations adopted by the Board of Fisheries in that portion of the Delta River from the mouth to a department marker two miles upstream.

Appendix B.10 Households with dogs, number of dogs, and salmon fed to dogs villages, as estimated in surveyed villages or reported in permit areas, Yukon Area, 1990-1995.

Year	Districts Surveyed or Permit	Number of Households with Dogs	Number of Dogs	Summer Chum Salmon Fed to Dogs	Fall Chum Salmon Fed to Dogs	Coho Salmon Fed to Dogs	Total Salmon Fed to Dogs
1990	Survey District 1	-	457	2,859	372	0	3,231
	Survey District 2	-	778	3,279	415	3,667	7,361
	Survey District 3	-	191	3,232	120	166	3,518
	Survey District 4	-	1,469	96,273	6,911	2,512	105,696
	Survey District 5	-	1,288	5,697	72,426	9,120	87,243
	Permits District 5 a	-	-	-	-	-	-
	Permits District 6	-	-	-	-	-	-
	<b>Totals</b>	<b>0</b>	<b>4,183</b>	<b>111,340</b>	<b>80,244</b>	<b>15,465</b>	<b>207,049</b>
1991	Survey District 1	-	352	30	0	16	46
	Survey District 2	-	546	724	652	875	2,251
	Survey District 3	-	104	360	150	0	510
	Survey District 4	-	1,706	171,258	903	591	172,752
	Survey District 5	-	1,522	28,521	54,658	2,755	85,934
	Permits District 5 a	49	299	-	-	-	11,024
	Permits District 6	220	2,081	-	-	-	19,977
	<b>Totals</b>	<b>269</b>	<b>6,610</b>	<b>200,893</b>	<b>56,363</b>	<b>4,237</b>	<b>292,494</b>
1992	Survey District 1	395	1,130	1,171	1,000	153	2,324
	Survey District 2	285	971	694	247	2,237	3,178
	Survey District 3	90	395	657	74	37	768
	Survey District 4	459	2,177	143,749	6,950	3,323	154,022
	Survey District 5	323	1,577	12,897	38,529	14,529	65,955
	Permits District 5 a	52	372	-	-	-	7,026
	Permits District 6	255	2,586	-	-	-	18,115
	<b>Totals</b>	<b>1,859</b>	<b>9,208</b>	<b>159,168</b>	<b>46,800</b>	<b>20,279</b>	<b>251,388</b>
1993	Survey District 1	430	1,081	654	70	22	746
	Survey District 2	232	880	794	260	670	1,724
	Survey District 3	90	342	1,421	234	152	1,807
	Survey District 4	463	1,750	46,043	4,405	589	51,037
	Survey District 5	348	1,840	5,490	38,888	5,147	49,525
	Permits District 5 a	54	293	-	-	-	1,133
	Permits District 6	143	2,595	-	-	-	1,547
	<b>Totals</b>	<b>1,760</b>	<b>8,781</b>	<b>54,402</b>	<b>43,857</b>	<b>6,580</b>	<b>107,519</b>
1994	Survey District 1	449	1,186	1,554	144	384	2,082
	Survey District 2	286	1,074	1,066 b	653	2,470	4,189
	Survey District 3	97	309	309	1,118	0	25
	Survey District 4 c	453	1,753	97,288 d	6,899	5,423	109,610
	Survey District 5	355	1,426	10,903 e	51,674	4,422	66,999
	Permits District 5 a	103	563	-	-	-	9,874
	Permits District 6	212	2,269	-	-	-	34,111
	<b>Totals</b>	<b>1,955</b>	<b>8,580</b>	<b>111,120</b>	<b>60,488</b>	<b>12,699</b>	<b>226,890</b>
1995	Survey District 1	381	987	3,450	257	7	3,714
	Survey District 2	213	677	1,587	436	979	3,002
	Survey District 3	111	347	8,450	265	100	8,815
	Survey District 4	423	1,830	183,385 f	9,092	1,151	193,628
	Survey District 5	356	1,443	7,033	50,680	2,107	59,820
	Permits District 5 a	54	495	-	-	-	17,980
	Permits District 6	103	1,864	-	-	-	50,731
	<b>Totals</b>	<b>1,641</b>	<b>7,643</b>	<b>203,905</b>	<b>60,730</b>	<b>4,344</b>	<b>337,690</b>

a Permit totals do not include the community of Stevens Village.

b Includes 292 summer chum from the commercial fishery retained for subsistence use.

c Does not include the villages of Hughes, Allakaket, Alatna, which were not surveyed due to a major flood event.

d Includes 70,202 summer chum from the commercial fishery retained for subsistence use.

e Includes 400 summer chum from the commercial fishery retained for subsistence use.

f Includes 164,300 summer chum from the commercial fishery retained for subsistence use.

APPENDIX C

YUKON RIVER DRAINAGE SUBSISTENCE SALMON  
SURVEY AND PERMIT HARVEST FORMS



Appendix C.1. Example of the subsistence salmon catch calendar (reduced from original 11x17-inch size) mailed to Lower Yukon Area fishermen, 1995.

PLEASE WRITE THE NUMBER OF ALL SALMON CAUGHT EACH DAY BY PEOPLE LIVING IN YOUR HOUSE. PLEASE INCLUDE SALMON THAT WERE GIVEN TO PEOPLE WHO LIVE IN OTHER HOUSES AND SALMON THAT WERE CAUGHT FOR DOGFOOD. DO NOT INCLUDE SALMON SOLD WHEN COMMERCIAL FISHING.

Commercial Fisheries Management & Development Division  
Alaska Department of Fish and Game  
1300 College Road  
Fairbanks, Alaska 99701

Bulk Rate  
U.S. Postage  
Paid  
Fairbanks, Ak.  
Permit No. 99

NAME

Lower Yukon

WHEN DONE SALMON FISHING FOR THE YEAR, PLEASE HAVE THE CALENDAR AVAILABLE FOR PICK UP BY SURVEYOR OR MAIL IT BACK TO FISH AND GAME.

THANK YOU

Please check this box if you did not fish for salmon in 1995.

This calendar is sent to you by the Alaska Department of Fish and Game in Fairbanks.

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
MAY 1995	15 KING _____ DOG _____	16 KING _____ DOG _____	17 KING _____ DOG _____	18 KING _____ DOG _____	19 KING _____ DOG _____	20 KING _____ DOG _____
	21 KING _____ DOG _____	22 KING _____ DOG _____	23 KING _____ DOG _____	24 KING _____ DOG _____	25 KING _____ DOG _____	26 KING _____ DOG _____
28 KING _____ DOG _____	29 KING _____ DOG _____	30 KING _____ DOG _____	31 KING _____ DOG _____	SUBSISTENCE SALMON CALENDAR		

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
JUNE 1995				1 KING _____ DOG _____ HUMPY _____	2 KING _____ DOG _____ HUMPY _____	3 KING _____ DOG _____ HUMPY _____
				4 KING _____ DOG _____ HUMPY _____	5 KING _____ DOG _____ HUMPY _____	6 KING _____ DOG _____ HUMPY _____
10 KING _____ DOG _____ HUMPY _____	11 KING _____ DOG _____ HUMPY _____	12 KING _____ DOG _____ HUMPY _____	13 KING _____ DOG _____ HUMPY _____	14 KING _____ DOG _____ HUMPY _____	15 KING _____ DOG _____ HUMPY _____	16 KING _____ DOG _____ HUMPY _____
17 KING _____ DOG _____ HUMPY _____	18 KING _____ DOG _____ HUMPY _____	19 KING _____ DOG _____ HUMPY _____	20 KING _____ DOG _____ HUMPY _____	21 KING _____ DOG _____ HUMPY _____	22 KING _____ DOG _____ HUMPY _____	23 KING _____ DOG _____ HUMPY _____
24 KING _____ DOG _____ HUMPY _____	25 KING _____ DOG _____ HUMPY _____	26 KING _____ DOG _____ HUMPY _____	27 KING _____ DOG _____ HUMPY _____	28 KING _____ DOG _____ HUMPY _____	29 KING _____ DOG _____ HUMPY _____	30 KING _____ DOG _____ HUMPY _____
31 KING _____ DOG _____ HUMPY _____	32 KING _____ DOG _____ HUMPY _____	33 KING _____ DOG _____ HUMPY _____	34 KING _____ DOG _____ HUMPY _____	35 KING _____ DOG _____ HUMPY _____	36 KING _____ DOG _____ HUMPY _____	37 KING _____ DOG _____ HUMPY _____

Summer Check  
Paid

THANK YOU AGAIN.

This information is used to try to make sure there will be enough salmon for subsistence for Yukon River drainage families. If you have any questions or comments, please call (907) 459-7274.

PLACE  
STAMP  
HERE

Commercial Fisheries Management  
and Development Division  
Alaska Department of Fish and Game  
1300 College Road  
Fairbanks, Alaska 99701

IF NOT PICKED UP BY OCTOBER 31, PLEASE RETURN TO:

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>JULY 1995</b> <b>SUBSISTENCE SALMON CALENDAR</b>						1 KING _____ DOG _____ HUMPY _____
2 KING _____ DOG _____ HUMPY _____	3 KING _____ DOG _____ HUMPY _____	4 KING _____ DOG _____ HUMPY _____	5 KING _____ DOG _____ HUMPY _____	6 KING _____ DOG _____ HUMPY _____	7 KING _____ DOG _____ HUMPY _____	8 KING _____ DOG _____ HUMPY _____
9 KING _____ DOG _____ HUMPY _____	10 KING _____ DOG _____ HUMPY _____	11 KING _____ DOG _____ HUMPY _____	12 KING _____ DOG _____ HUMPY _____	13 KING _____ DOG _____ HUMPY _____	14 KING _____ DOG _____ HUMPY _____	15 KING _____ DOG _____ HUMPY _____
16 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	17 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	18 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	19 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	20 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	21 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	22 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>
23 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	24 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	25 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	26 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	27 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	28 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	29 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>
30 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	31 KING _____ DOG _____ HUMPY _____ FALL CHUM _____ COHO _____ <small>*Server</small>	<b>LOWER YUKON AREA</b>				

Summer Class =  
Peak =

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>AUGUST 1995</b>		1 FALL CHUM _____ COHO _____	2 FALL CHUM _____ COHO _____	3 FALL CHUM _____ COHO _____	4 FALL CHUM _____ COHO _____	5 FALL CHUM _____ COHO _____
6 FALL CHUM _____ COHO _____	7 FALL CHUM _____ COHO _____	8 FALL CHUM _____ COHO _____	9 FALL CHUM _____ COHO _____	10 FALL CHUM _____ COHO _____	11 FALL CHUM _____ COHO _____	12 FALL CHUM _____ COHO _____
13 FALL CHUM _____ COHO _____	14 FALL CHUM _____ COHO _____	15 FALL CHUM _____ COHO _____	16 FALL CHUM _____ COHO _____	17 FALL CHUM _____ COHO _____	18 FALL CHUM _____ COHO _____	19 FALL CHUM _____ COHO _____
20 FALL CHUM _____ COHO _____	21 FALL CHUM _____ COHO _____	22 FALL CHUM _____ COHO _____	23 FALL CHUM _____ COHO _____	24 FALL CHUM _____ COHO _____	25 FALL CHUM _____ COHO _____	26 FALL CHUM _____ COHO _____
27 FALL CHUM _____ COHO _____	28 FALL CHUM _____ COHO _____	29 FALL CHUM _____ COHO _____	30 FALL CHUM _____ COHO _____	31 FALL CHUM _____ COHO _____		

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<b>SEPTEMBER 1995</b>					1 FALL CHUM _____ COHO _____	2 FALL CHUM _____ COHO _____
3 FALL CHUM _____ COHO _____	4 FALL CHUM _____ COHO _____	5 FALL CHUM _____ COHO _____	6 FALL CHUM _____ COHO _____	7 FALL CHUM _____ COHO _____	8 FALL CHUM _____ COHO _____	9 FALL CHUM _____ COHO _____
10 FALL CHUM _____ COHO _____	11 FALL CHUM _____ COHO _____	12 FALL CHUM _____ COHO _____	13 FALL CHUM _____ COHO _____	14 FALL CHUM _____ COHO _____	15 FALL CHUM _____ COHO _____	16 FALL CHUM _____ COHO _____

Appendix C.2. Example of the preseason letter mailed with the 1995 subsistence catch calendars, Yukon Area, 1995

# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

### DIVISION OF COMMERCIAL FISHERIES MANAGEMENT AND DEVELOPMENT

TONY KNOWLES, GOVERNOR

1300 COLLEGE ROAD  
FAIRBANKS, ALASKA 99701-1599  
PHONE: (907) 459-7274  
FAX: (907) 452-1668

May 10, 1995

Dear Subsistence Salmon Fishermen:

The 1995 salmon fishing season is rapidly approaching. Each year we strive to improve the accuracy of the subsistence salmon harvest estimate for the Yukon River drainage and its communities in Alaska. Estimates of subsistence harvest in the Alaska portion of the Yukon River drainage have been documented by the department since 1961. These estimates are very important because they are used in regulation decisions by the Alaska Board of Fisheries and in the international treaty negotiations with Canada.

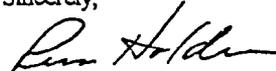
During our community visits and interviews with fishing households last fall, many of you expressed an interest in the results of the survey. We interviewed 933 households of the approximately 2,453 households in the surveyed area of the Yukon River drainage. We also issued 473 fishing permits to households to fish in areas of the Yukon or Tanana Rivers where permits were required. We estimated 1,438 Yukon River households participated in Yukon River subsistence fisheries in 1994.

A total of 55,388 chinook salmon, 147,413 summer chum salmon, 123,565 fall chum salmon, and 44,675 coho salmon were estimated to have been harvested in both surveyed and permit areas of the Yukon River subsistence fisheries during the 1994 fishing season. The total Yukon River drainage subsistence salmon harvest has been estimated by community and fishing district on the attached table. To help us understand the role of the subsistence fishery to households and communities, we also recorded the size of fishing households, fishing gear information, the number of dogs, and the number of fish fed to dogs.

I would like to personally thank you for your participation in the 1994 survey. The project is continuing for the 1995 fishing season, and I have attached a 1995 fishing calendar for you to record your daily harvest of subsistence fish. In addition to our normal subsistence questions for 1995, we will be mapping subsistence fishing locations. If you fish in more than one location, please keep track of the fish you catch by location.

Thank you again for your cooperation!

Sincerely,



Russ Holder  
Fishery Biologist  
CFMD Division  
(907) 459-7274

Appendix C.2. (Page 2 of 2)

1994 ALASKAN YUKON RIVER DRAINAGE SUBSISTENCE SALMON HARVESTS <sup>a/</sup>

Village	Estimation Method <sup>b/</sup>	Total Households or Permits Issued	Households Consented or Permits Renewed	Estimated Fishing Households	Estimated Harvest			Cans
					Chum	Summer Chum	Fall Chum	
Hooper Bay	Survey	139	44	69	137	10,336	284	1
Southern Bay	Survey	83	30	43	668	4,347	43	30
Sheldon Pt.	Survey	28	34	18	826	1,841	23	32
Alakanuk	Survey	122	38	66	1,045	3,847	73	34
Erimonuk <sup>c/</sup>	Survey	182	64	64	2,384	12,080	3,441	939
Kodiak <sup>c/</sup>	Survey	194	41	71	2,305	11,177	1,348	2,187
<b>District 1 Subtotal</b>		<b>649</b>	<b>225</b>	<b>313</b>	<b>7,365</b>	<b>47,048</b>	<b>5,234</b>	<b>3,353</b>
Mt. Village	Survey	157	46	43	1,311	3,328	797	948
Pitka Pt.	Survey	32	30	16	469	1,183	294	344
St. Marys	Survey	105	41	72	2,722	10,128	1,042	614
Pilot Station <sup>d/</sup>	Survey	60	34	34	1,977	3,430	1,527	811
Marshall	Survey	69	24	43	2,277	2,288	471	1,124
<b>District 2 Subtotal</b>		<b>453</b>	<b>179</b>	<b>214</b>	<b>8,956</b>	<b>22,907</b>	<b>4,151</b>	<b>3,881</b>
Russian Mission	Survey	57	30	29	1,793	801	11	33
Holy Cross	Survey	76	31	29	4,040	1,479	645	171
<b>District 3 Subtotal</b>		<b>133</b>	<b>51</b>	<b>78</b>	<b>5,833</b>	<b>2,280</b>	<b>676</b>	<b>226</b>
Anvik	Survey	38	17	15	434	907	153	95
Shageluk	Survey	43	18	12	291	4,212	186	127
Grayling	Survey	60	34	30	1,843	1,418	811	34
Kahlag	Survey	51	24	23	1,423	3,403	630	243
Nalata	Survey	94	21	24	1,723	773	1,109	27
Koyukuk	Survey	44	13	16	389	2,029	1,049	305
Ontona	Survey	149	33	34	1,834	1,198	3,363	802
Rubov	Survey	79	24	23	1,329	4,384	3,323	1,937
<b>District 4 Subtotal</b>		<b>560</b>	<b>192</b>	<b>211</b>	<b>9,908</b>	<b>21,018</b>	<b>13,456</b>	<b>3,605</b>
Huelia	Survey	64	23	14	229	4,814	35	47
Hughes, Alakaket, Alaina <sup>e/</sup>	Not Surveyed							
Battlem	Survey	32	23	3	0	45	0	0
<b>Kenneth River Subtotal</b>		<b>96</b>	<b>46</b>	<b>17</b>	<b>239</b>	<b>6,059</b>	<b>35</b>	<b>47</b>
Tanana	Survey	130	48	43	2,399	7,022	24,481	2,387
Rampart	Survey	23	23	14	1,334	339	1,027	99
Stevens Village	Survey	34	21	20	2,814	430	43	0
Birch Creek	Survey	13	11	3	119	0	0	0
Beaver	Survey	34	24	12	830	633	2,048	18
Pt. Yukon	Survey	221	32	77	4,727	2,043	6,327	140
Fairbanks NSB	Permit	42	42	29	1,320	340	2,370	23
Circle	Permit	22	21	11	1,377	96	4,341	20
Central	Permit	11	11	8	240	8	0	0
Eagle	Permit	37	35	27	1,234	26	3,343	0
Other <sup>f/</sup>	Permit	9	9	7	822	21	0	0
<b>District 5 Subtotal</b>		<b>582</b>	<b>299</b>	<b>253</b>	<b>18,216</b>	<b>11,263</b>	<b>60,343</b>	<b>3,714</b>
Venadie	Survey	64	19	28	324	347	4,302	4
Chulituk	Survey	33	28	7	0	0	1,731	434
<b>Chandalar/Black R. Subtotal</b>		<b>97</b>	<b>47</b>	<b>35</b>	<b>324</b>	<b>347</b>	<b>6,033</b>	<b>460</b>
Manley	Permit	23	23	23	480	1,405	12,722	10,418
Wise	Permit	44	42	23	316	309	1,419	2,416
Nemara	Permit	44	39	24	739	1,332	11,201	9,387
Healy	Permit	3	3	3	0	0	2,022	1,934
Fairbanks NSB	Permit	134	134	118	773	3,475	3,004	2,103
Delta Junction	Permit	3	3	4	18	25	202	13
Other <sup>g/</sup>	Permit	9	9	7	20	42	43	0
<b>Tanana River Subtotal</b>		<b>292</b>	<b>281</b>	<b>214</b>	<b>2,370</b>	<b>7,026</b>	<b>31,577</b>	<b>26,409</b>
Survey Subtotal		2,453	923	1,109	43,688	118,417	74,234	15,231
Retained from Commercial Catch					1,486	22,406	0	2,900
Hughes, Alakaket, Alaina 3 Yr. Av. Est. Summer Season Harvest				33	471	4,029	0	0
Permit Subtotal <sup>h/</sup>		413	399	294	7,743	7,531	49,311	26,344
<b>Alaska Yukon River Drainage Total</b>		<b>2,866</b>	<b>1,322</b>	<b>1,403</b>	<b>55,388</b>	<b>147,413</b>	<b>123,545</b>	<b>44,675</b>

<sup>a/</sup> Source: "Estimates of Subsistence Salmon Harvests in the Yukon River Drainage 1984 (In Prep.) by Pamela Holder and Helen Manner, ADF&G. Harvest are listed by settlement's community of residence.

<sup>b/</sup> Does not include permit information received after March 20, 1995.

<sup>c/</sup> Includes 1,001 chum, 2,982 summer chum, 1,522 fall chum, and 823 coho salmon harvested in ADF&G test fishery and given away for subsistence use.

<sup>d/</sup> Includes 884 chum, 4,068 summer chum, 1,044 fall chum, and 1,210 coho salmon harvested in ADF&G test fishery and given away for subsistence use.

<sup>e/</sup> Includes 324 chum, 2,998 summer chum, 1,348 fall chum, and 786 coho salmon harvested in ADF&G test fishery and given away for subsistence use.

<sup>f/</sup> Villages of Hughes, Alakaket & Alaina were not surveyed due to floods in September 1994.

<sup>g/</sup> Includes information from permits issued to residents of other communities who fished in District 5 of the Yukon River Area.

<sup>h/</sup> Includes information from permits issued to residents of other communities who fished in District 6 of the Tanana River Area.

<sup>i/</sup> Permit totals do not include 48 Tolovana River site permits, 4 Delta River creel permits, and 8 Stevens Village subsistence salmon permits.

Note: Stevens Village permit harvest totals were incorporated into survey harvest total.

Appendix C.3. Example of the subsistence salmon postseason interview form, Yukon Area, 1995

Community \_\_\_\_\_ HHID# \_\_\_\_\_  
 Date of Survey \_\_\_\_\_ Person Interviewed \_\_\_\_\_  
 Interviewer \_\_\_\_\_ Relation to HH \_\_\_\_\_

**YUKON AREA**  
**1995 Post-Season Subsistence Salmon Harvest Survey**  
**CONFIDENTIAL INFORMATION**

1. We would like to make sure we have the correct name and address for this household.

Correct name of Household Head \_\_\_\_\_  
 Occupational or Permanent Note \_\_\_\_\_  
 Significant Other \_\_\_\_\_  
 Occupational or Permanent Note \_\_\_\_\_  
 Mailing Address \_\_\_\_\_ Phone \_\_\_\_\_  
 Adult household member was contacted and declined to be interviewed [ ] \_\_\_\_\_

2. Did anyone in this household catch salmon for subsistence use this year? Yes \_\_\_ No \_\_\_ (If no go to area II.)  
 Fish use includes fish eaten fresh, frozen, dried, smoked, and those used for dog food. Include all salmon kept for subsistence use. Include female carcasses with roe removed and roe sold commercially.

**I. HOUSEHOLD FISHED**

3. May I have your fish catch calendar?  
 Picked up to interviewer \_\_\_ Didn't get one \_\_\_ Not available \_\_\_ Already sent in \_\_\_

How many total salmon did you or your whole fishing group catch this year? (are all fish on calendar?)

CHINOOK \_\_\_ SUMMER CHUM \_\_\_ FALL CHUM \_\_\_ COHO \_\_\_ PINK \_\_\_ Could not estimate \_\_\_

How many households help catch these fish? \_\_\_ (Names) \_\_\_\_\_

4. Portion of catch for this household.

CHINOOK \_\_\_ SUMMER CHUM \_\_\_ FALL CHUM \_\_\_ COHO \_\_\_ PINK \_\_\_ Could not estimate \_\_\_

5. Where do you catch your subsistence salmon? (Circle all that apply and divide harvest by area)

Ocean 1 2 3 4A 4B 4C 5A 5B 5C 5D Porcupine, Koyukuk, Innoko, Chandalar, Black

1st Area \_\_\_ CHINOOK \_\_\_ SUMMER CHUM \_\_\_ FALL CHUM \_\_\_ COHO \_\_\_ PINK \_\_\_ Could not estimate \_\_\_

2nd Area \_\_\_ CHINOOK \_\_\_ SUMMER CHUM \_\_\_ FALL CHUM \_\_\_ COHO \_\_\_ PINK \_\_\_ Could not estimate \_\_\_

6. How many of these salmon did you process ("put up") for your household's use?

CHINOOK \_\_\_ SUMMER CHUM \_\_\_ FALL CHUM \_\_\_ COHO \_\_\_ PINK \_\_\_ Could not estimate \_\_\_

If this household did not process ("put up") all the salmon they caught, ask who they shared with.

7. Did this household share the salmon catch with any other households? (Names, HHIDs, Species and Numbers)

\_\_\_\_\_

\_\_\_\_\_

8. How many of these fish were commercially caught? (i.e. retained by commercial fisherman during a commercial fishing period for subsistence use. Include female carcasses with roe removed and sold separately and all male salmon in Districts 4, 5, and 6.)

CHINOOK \_\_\_ SUMMER CHUM \_\_\_ FALL CHUM \_\_\_ COHO \_\_\_ PINK \_\_\_ Could not estimate \_\_\_

9. What is this households' primary type of subsistence fishing gear? (In order of importance 1= primary)

Set net \_\_\_ Drift net \_\_\_ Fishwheel \_\_\_ Rod & Reel \_\_\_ Other \_\_\_\_\_

Appendix C.3. (Page 2 of 2)

**II. ALL HOUSEHOLDS**

10. Did this household catch any other fish this year? (From Sept/Oct of last year to now.)

WHITEFISH LG \_\_\_\_\_ WHITEFISH SM \_\_\_\_\_ SHEEFISH \_\_\_\_\_ BURBOT \_\_\_\_\_ PIKE \_\_\_\_\_ BLACKFISH \_\_\_\_\_  
 GRAYLING \_\_\_\_\_ SUCKERS \_\_\_\_\_ TROUT (Arctic Char) \_\_\_\_\_ EELS (Lamprey) \_\_\_\_\_ TOMCOD (Saffron) \_\_\_\_\_

11. Was this household given any salmon? Yes \_\_\_\_\_ No \_\_\_\_\_

Subsistence Fishermen (Name) \_\_\_\_\_  
 CHINOOK \_\_\_\_\_ SUMMER CHUM \_\_\_\_\_ FALL CHUM \_\_\_\_\_ COHO \_\_\_\_\_ PINK \_\_\_\_\_ Could not estimate \_\_\_\_\_

Subsistence Fishermen (Name) \_\_\_\_\_  
 CHINOOK \_\_\_\_\_ SUMMER CHUM \_\_\_\_\_ FALL CHUM \_\_\_\_\_ COHO \_\_\_\_\_ PINK \_\_\_\_\_ Could not estimate \_\_\_\_\_

Commercial Fishermen (Name) (list only fish retained for subsistence use while commercial fishing) \_\_\_\_\_  
 CHINOOK \_\_\_\_\_ SUMMER CHUM \_\_\_\_\_ FALL CHUM \_\_\_\_\_ COHO \_\_\_\_\_ PINK \_\_\_\_\_ Could not estimate \_\_\_\_\_

From Fish and Game (Where) \_\_\_\_\_  
 CHINOOK \_\_\_\_\_ SUMMER CHUM \_\_\_\_\_ FALL CHUM \_\_\_\_\_ COHO \_\_\_\_\_ PINK \_\_\_\_\_ Could not estimate \_\_\_\_\_

12. How many people live in this household? \_\_\_\_\_ People

13. How many dogs does this household have? \_\_\_\_\_

Do you feed whole salmon to your dogs? Yes \_\_\_\_\_ No \_\_\_\_\_ Scraps \_\_\_\_\_

How many whole salmon will you feed to your dogs this year? (These can be subsistence and commercial, especially Anvik, Grayling, Kaltag, and Nulato / numbers should represent whole fish, not scraps.  
 Are these salmon from the commercial fishery? Yes \_\_\_\_\_ No \_\_\_\_\_ Some \_\_\_\_\_

(subsistence #'s) SUMMER CHUM (dog) \_\_\_\_\_ FALL CHUM (silver) \_\_\_\_\_ COHO (silver) \_\_\_\_\_  
 (commercial #'s) SUMMER CHUM (dog) \_\_\_\_\_ FALL CHUM (silver) \_\_\_\_\_ COHO (silver) \_\_\_\_\_

14. Did your household get enough subsistence salmon this year? Yes \_\_\_\_\_ No \_\_\_\_\_ (Continue) Could not estimate \_\_\_\_\_  
 If the answer is no ask:  
 Why didn't you meet your salmon needs this year? \_\_\_\_\_  
 \_\_\_\_\_  
 What food are you planning to substitute for the salmon you didn't get? \_\_\_\_\_  
 \_\_\_\_\_

**THIS HOUSEHOLD'S TOTAL SUBSISTENCE SALMON CATCH** (This area filled in by the surveyor after the interview)  
 Subtract numbers of question 8 from question 4 (i.e. 4-8)

CHINOOK \_\_\_\_\_ SUMMER CHUM \_\_\_\_\_ FALL CHUM \_\_\_\_\_ COHO \_\_\_\_\_ PINK \_\_\_\_\_ Could not estimate \_\_\_\_\_

**THIS HOUSEHOLD'S TOTAL SUBSISTENCE SALMON USE** (This area filled in by the surveyor after the interview)  
 (Add numbers from question 6 and question 11 (i.e. 6+11))

CHINOOK \_\_\_\_\_ SUMMER CHUM \_\_\_\_\_ FALL CHUM \_\_\_\_\_ COHO \_\_\_\_\_ PINK \_\_\_\_\_ Could not estimate \_\_\_\_\_

THANK YOU VERY MUCH FOR YOUR HELP. THIS HARVEST INFORMATION WILL BE USED TO MAKE SURE THERE WILL BE ENOUGH SUBSISTENCE SALMON FOR FAMILIES ALONG THE RIVER.  
 Interviewer comments about this interview or anything of value for assisting data analysis.

Appendix C.4. Example of the Subdistrict 4-A commercial fisherman interview form, Yukon Area, 1995.

CONFIDENTIAL INFORMATION

SUBDISTRICT 4-A & ANVIK RIVER MANAGEMENT AREA

1995 Postseason Questionnaire for Commercial Fishermen

---

ANVIK RIVER

Your 1995 fish tickets document your commercial sale of \_\_\_\_\_ pounds of chum salmon roe in Anvik River, and you reported killing \_\_\_\_\_ female chum salmon to produce that roe.

A total of \_\_\_\_\_ fish tickets out of \_\_\_\_\_ fish tickets do not have fish killed information on them. (Fishermen are reminded that they must report the total number of fish killed to the buyer when they sell the roe.)

The department's estimate is \_\_\_\_\_ female chum salmon were killed to produce the roe sold using .87 pounds of roe per female.

1. How many salmon do you estimate were killed to produce the roe which you sold in Anvik River? \_\_\_\_\_
2. During the Anvik River commercial fishery, did you keep any male fish? No \_\_\_ Yes \_\_\_ How many? \_\_\_\_\_
3. This year there were 66 hours of commercial fishing time during 6 commercial periods in the Anvik River.  
How many hours did you fish? \_\_\_\_\_ How many periods were missed? \_\_\_\_\_

SUBDISTRICT 4-A

Your 1995 fish tickets document a commercial sale of \_\_\_\_\_ pounds of chum salmon roe in Subdistrict 4-A, not including the Anvik River, and you reported killing \_\_\_\_\_ chum salmon to produce that roe.

A total of \_\_\_\_\_ fish tickets out of \_\_\_\_\_ fish tickets do not have fish killed information on them. (Fishermen are reminded that they must report the total number of fish killed to the buyer when they sell the roe.)

The department's estimate is \_\_\_\_\_ chum salmon were killed to produce the roe sold using .85 pounds of roe per female and 60 percent female proportion.

4. How many salmon do you estimate were killed to produce the roe which you sold in Subdistrict 4-A? \_\_\_\_\_
5. In Subdistrict 4-A did you or your crewmembers throw back live male summer chum salmon? Yes \_\_\_ No \_\_\_ (If no, go to question 6.)
  - A. In Subdistrict 4-A, how did you throw back the summer chum salmon: (Circle all that apply)
    1. after they dropped into a box?
    2. by a chute directly from the wheel into the water?
    3. by dipnet from a livebox?
    4. other \_\_\_\_\_

OVER

**Survey (Continued)**

B. Of the time you did fish in Subdistrict 4-A, how much of that time were males released?

All the time \_\_\_ Three quarters \_\_\_ Half \_\_\_ One quarter \_\_\_ Less than one quarter \_\_\_

6. This year during 78 hours of commercial fishing during the first 6 commercial periods in Subdistrict 4-A:

How many hours did you fish? \_\_\_\_\_ How many periods were missed? \_\_\_\_\_  
(Note: Period 7 no one fished)

**TOTAL COMMERCIAL HARVEST**

*The 1995 fish tickets document a total commercial sale of \_\_\_\_\_ pounds of chum salmon roe in Subdistrict 4-A, including the Anvik River, and a reported harvest of \_\_\_\_\_ chum salmon killed to produce the roe sold.*

7. Out of your commercial harvest from this survey. (Questions 1 and 4).

\_\_\_\_\_ How many fish were used for your household's subsistence purposes?

\_\_\_\_\_ How many fish were given to other subsistence users? (Names) \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ How many fish were sold or bartered to other users? (Names) \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ How much money did you receive from the fish you sold?

\_\_\_\_\_ How many fish were lost to spoilage, wild animals, and birds?

\_\_\_\_\_ How many/Others! \_\_\_\_\_  
\_\_\_\_\_

**CONFIDENTIAL INFORMATION**

Appendix C.5. Example of the letter sent to selected subsistence fishermen from the listed villages that complied with 1994 reporting requirements, announcing the dates and times for 1995 permit issuance, Yukon Area.

# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

### DIVISION OF COMMERCIAL FISHERIES MANAGEMENT AND DEVELOPMENT

TONY KNOWLES, GOVERNOR

1300 COLLEGE ROAD  
FAIRBANKS, ALASKA 99701-1599  
PHONE: (907) 459-7274  
FAX: (907) 452-1668

May 12, 1995

Dear Subsistence Fishermen:

Current regulations identify three areas in the upper Yukon River drainage for which salmon fishermen are required to obtain a subsistence permit. Subsistence fishing permits are required for fishing in the Eagle and Circle areas, near the Yukon River Bridge (between Hess Creek and the Dall River), and in the Tanana River drainage. Our records indicate that you were issued a 1994 subsistence permit for one of the above areas. If you are planning to fish in 1995 in one of the regulated areas, you will again need to obtain a permit. We are writing to you prior to the 1995 fishing season to give you an opportunity to complete a subsistence permit for the 1995 season at one of the following places and times:

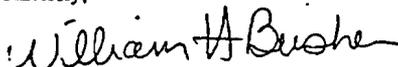
Village	Date/Day	Time	Place
Delta Jct.	5/24/95 (Weds.)	11am to 12 noon	Delta F&G Office
Tanacross	5/24/95 (Weds.)	3pm to 6pm	Community Center
Tok	5/25/95 (Thurs.)	8am to 10pm	Tok F&G Office
Northway	5/25/95 (Thurs.)	12 noon to 3pm	Village Community Center
Tetlin Village	5/26/95 (Fri.)	10am to 1pm	Tetlin Native Office
Nenana	5/26/95 (Fri.)	10am to 2pm	Boat Landing
Minto	5/30/95 (Tues.)	12 noon to 3pm	Lake View Lodge
Manley	5/31/95 (Weds.)	10am to 1pm	Manley Roadhouse
Central	5/30/95 (Tues.)	12 noon to 3pm	Post Office
Circle	5/31/95 (Weds.)	11am to 2pm	Boat Landing
Eagle	5/31/95 (Weds.)	10:30am to 1:30pm	Post Office

If you would like to be personally issued a permit, please complete the top portion of the enclosed "Application and Permit" form and bring this with you to meet us when we come to your area. We will be completing the "Issuing Officer" portion of your application and returning the completed subsistence permit to you.

If you would like to be issued a permit by mail, please complete the top portion of the enclosed "Application and Permit" form, indicate any changes to your address, fill in the requested information, sign it, and return the "Application and Permit" forms to us. We will complete the "Issuing Officer" section, sign it, and mail it back to you. The application form is not a permit until you have completed and signed the top portion, and we have completed the "Issuing Officer" portion and signed it.

If you have any questions or comments, please feel free to contact this office.

Sincerely,



William Busher  
Fishery Biologist  
Commercial Fisheries Management  
and Development Division  
(907)459-7274

Appendix C.6. Example of the Upper Yukon River and Kantishna River subsistence fishing permit application, 1995.

**Household Application and Permit  
for Subsistence Fishing**

Dept. of Fish and Game, Commercial Fisheries Management and Development Division  
1300 College Road, Fairbanks, AK 99701 Phone 459-7274



Name \_\_\_\_\_ Phone \_\_\_\_\_  
(PLEASE PRINT) (Home, Work, Message)

Mailing Address \_\_\_\_\_  
City State Zipcode

Number in your Household \_\_\_\_\_ Household Fishermen \_\_\_\_\_  
(Include yourself) (Names of other household members authorized to fish this household's gear)

Number of Dogs in Household \_\_\_\_\_ Do you feed whole salmon to dogs? (not scraps) yes no  
(Circle one)

Area to be Fished: (Circle one) Kantishna River, Upper Tanana (above Gerstle), Yukon River Bridge, Circle/Eagle

Gear: Fish Wheel \_\_\_\_\_ and/or Set Gillnet \_\_\_\_\_ length \_\_\_\_\_ stretch mesh size \_\_\_\_\_

Conditions of Permit: All regulations pertaining to subsistence fishing in the area to be fished are to be observed. Anyone fishing this household's gear must be named above as a fisherman and carry this permit on their person during any fishing activity. A summary of subsistence fishing regulations is available from the Fairbanks office. It is unlawful to sell or buy fish or their eggs caught for subsistence use. For a 24-hour recording of subsistence and commercial salmon fishing schedules, call 459-7387.

An accurate record of fish taken under authority of this permit must be kept and recorded in the appropriate spaces on the reverse side of this permit. Return this permit with your completed catch information to the Alaska Department of Fish and Game, 1300 College Road, Fairbanks, Alaska, 99701 within 10 days after permit expiration date. FAILURE TO RETURN YOUR PERMIT OR REPORT YOUR CATCH INFORMATION WILL RESULT IN YOUR NOT BEING ISSUED A PERMIT NEXT YEAR.

X \_\_\_\_\_ Date \_\_\_\_\_ Birthdate or Drivers License# \_\_\_\_\_  
Signature of Permittee - I hereby claim the information contained on this permit is a true statement as witnessed by my signature above and I further state that I am a resident of Alaska.

**TO BE COMPLETED BY ISSUING OFFICER:** The above named person(s) is authorized to take fish according to the following stipulations: Permit is valid for one location only and expires October 15, 1995, unless otherwise noted.

- Kantishna River/SK Under authority of this permit 60 chinook salmon and 500 chum salmon may be taken from the date of issue through August 15, 1995 from Subdistrict 6-A. From August 16 through December 31, 1995, 450 chum salmon may be taken from the Kantishna River and fishermen are required to keep daily and cumulative harvest information at the fishing site that is accessible to department personnel. The Kantishna River fishery limit is 2,000 fall chum salmon, once the fishery limit is taken, the subsistence fishery will close by emergency order. Expiration date is December 31, 1995.
- Upper Tanana/SU Under authority of this permit fish may be taken. Permit expires October 31, 1995.
- Yukon Bridge/SY Under authority of this permit fish may be taken from the Yukon River from the mouth of Hess Creek to the mouth of the Dall River.
- Circle, Eagle/SE Under authority of this permit fish may be taken from the Yukon River from the mouth of 22 mile slough upstream to the U.S.-Canada border.

Signature of Issuing Officer \_\_\_\_\_ Date Issued \_\_\_\_\_ Permit Number \_\_\_\_\_



Appendix C.7. Example of the Tanana River salmon and Tolovana River drainage pike subsistence fishing permit application, 1995.

**Household Application and Permit  
for Subsistence Fishing**

Dept. of Fish and Game, Commercial Fisheries Management and Development Division  
1300 College Road, Fairbanks, AK 99701 Phone (907) 459-7274



Name \_\_\_\_\_ Phone \_\_\_\_\_  
(PLEASE PRINT) (Home, Work, Message)

Mailing Address \_\_\_\_\_  
City State Zipcode

Total Household Members \_\_\_\_\_ Household Fishermen \_\_\_\_\_  
(Include yourself) (Members authorized to fish this household's permit)

Number of Dogs in Household \_\_\_\_\_ Do you feed whole salmon to dogs? yes no  
(Circle one)

Area to be Fished: (Circle one) Tanana 6A, Tanana 6B, Tanana 6C, Tolovana River

Gear: Fish Wheel \_\_\_\_\_ and/or Set Gillnet \_\_\_\_\_ length \_\_\_\_\_ stretch mesh size \_\_\_\_\_  
Other \_\_\_\_\_

Conditions of Permit: All regulations pertaining to subsistence fishing in the area to be fished are to be observed. Anyone fishing this household's permit must be named above and carry this permit on their person during any fishing activity. For a 24-hour recording of subsistence or commercial salmon fishing schedules, call (907)459-7387.

An accurate record of fish taken under authority of this permit must be recorded on the reverse side of this permit immediately upon landing. PERMITTEES FISHING IN SUBDISTRICT 6-C AND SUBDISTRICT 6-B (three miles upstream of Totchaket Slough) OR FOR PIKE IN THE CHATANIKA RIVER DRAINAGE ARE REQUIRED TO REPORT THEIR WEEKLY CATCHES BY CALLING THE DEPARTMENT OF FISH AND GAME AT (907) 459-7388 BY 4:30 P.M. EVERY THURSDAY. Return this permit with your completed catch information to the Alaska Department of Fish and Game, 1300 College Road, Fairbanks, Alaska, 99701 within 10 days after permit expiration date. FAILURE TO RETURN YOUR PERMIT OR REPORT YOUR CATCH INFORMATION WILL RESULT IN YOUR NOT BEING ISSUED A PERMIT NEXT YEAR.

X \_\_\_\_\_ Birthdate or Date \_\_\_\_\_ Drivers License No. \_\_\_\_\_

Signature of Permittee - I hereby claim I am a resident of Alaska and that the above information I have provided on this permit is true as witnessed by my signature.

**TO BE COMPLETED BY ISSUING OFFICER:** The above named household member(s) is authorized to take fish according to the following stipulations: Permit is valid for location(s) marked and expires October 15, 1995, unless otherwise noted.

- Tanana 6A/SA Under authority of this permit 60 chinook salmon and 500 chum salmon may be taken from the date of issue through August 15, 1995, and from August 16 through October 15, 1995, 2,000 chum/coho salmon combined may be taken (excluding the Kantishna River).
- Tanana 6B/SB
- Tanana 6C/SC Under authority of this permit 10 chinook and 75 chum salmon may be taken from the date of issue through August 15, 1995, and from August 16, 1995 through October 15, 1995, 75 chum/coho salmon combined may be taken.
- Tolovana River/ST Under authority of this permit pike from the Tolovana River drainage may be taken from the date of issue through December 31, 1995. Expiration date is December 31, 1995.

Signature of Issuing Officer \_\_\_\_\_ Date Issued \_\_\_\_\_ Permit Number \_\_\_\_\_



Appendix C.8. Example of the Yukon Area personal use fishing permit application, 1995.

**Household Application and Permit  
for Personal Use Fishing**

Dept. of Fish and Game, Commercial Fisheries Management and Development Division  
1300 College Road, Fairbanks, AK 99701 Phone (907) 459-7274



Name \_\_\_\_\_ Phone \_\_\_\_\_  
(PLEASE PRINT) (Home, Work, Message)

Mailing Address \_\_\_\_\_  
City State Zipcode

Total Household Members \_\_\_\_\_ Household Fishermen \_\_\_\_\_  
(Include yourself) (Members authorized to fish this household's permit)

\_\_\_\_\_  
(Circle one)

Area to be Fished: Tanana 6C Tanana River between the Salcha and Volkmar Rivers  
(Circle One) (Whitefish and Sucker Harvest Only-- A map with your general fishing location identified, fishing dates, and requested harvest amount must accompany your application.)

Gear: Fish Wheel \_\_\_\_\_ and/or Set Gillnet \_\_\_\_\_ length \_\_\_\_\_ stretch mesh size \_\_\_\_\_  
Other \_\_\_\_\_

**Conditions of Permit:** All regulations pertaining to personal use fishing in the area to be fished are to be observed. Anyone fishing this household's permit must be named above and carry this permit on their person during any fishing activity. For a 24-hour recording of personal use, subsistence or commercial salmon fishing schedules, call (907)459-7387. Personal use caught fish may not be sold, allowed to enter commercial use, or fed to domestic animals.

An accurate record of fish taken under authority of this permit must be recorded on the reverse side of this permit immediately upon landing. PERMITTEES FISHING IN SUBDISTRICT 6-C ARE REQUIRED TO REPORT THEIR WEEKLY CATCHES BY CALLING THE DEPARTMENT OF FISH AND GAME AT (907) 459-7388 BY 4:30 P.M. EVERY THURSDAY. All personal use whitefish and sucker applications go through a review process which usually takes 15 working days. Return this permit with your completed catch information within 10 days after permit expiration date. FAILURE TO RETURN YOUR PERMIT OR REPORT YOUR CATCH INFORMATION WILL RESULT IN YOUR NOT BEING ISSUED A PERMIT NEXT YEAR.

A resident Alaska sport fishing license is required by 5 AAC 77.010.  
Permit is invalid unless permittee has in their possession a valid resident Alaska sport fishing license.

X \_\_\_\_\_ Date \_\_\_\_\_ Sport Fish License # \_\_\_\_\_  
Signature of Permittee - I hereby claim I am a resident of Alaska and that the above information I have provided on this permit is true as witnessed by my signature.

**TO BE COMPLETED BY ISSUING OFFICER:** The above named household member(s) is authorized to take fish according to the following stipulations: Permit is valid for location(s) marked and expires October 15, 1995, unless otherwise noted.

- Tanana 6C/PC Under authority of this permit 10 chinook and 75 chum salmon may be taken from the date of issue through August 15, 1995, and from August 16, 1995 through October 15, 1995, 75 chum/coho salmon combined may be taken.
- Tanana River/PT (Salcha to Volkmar) Under authority of this permit whitefish and suckers may be harvested in the location, during the dates, using the gear, and harvest the amount stipulated in the letter attached to this application and permit. Expiration date is \_\_\_\_\_ 1995.

Signature of Issuing Officer \_\_\_\_\_ Date Issued \_\_\_\_\_ Permit Number \_\_\_\_\_



Appendix C.9. Example of the first fishing permit reminder letter, 1995.

# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

### DIVISION OF COMMERCIAL FISHERIES MANAGEMENT AND DEVELOPMENT

TONY KNOWLES, GOVERNOR

1300 COLLEGE ROAD  
FAIRBANKS, ALASKA 99701-1599  
PHONE: (907) 459-7274  
FAX: (907) 452-1668

November 14, 1995

██████████  
██████████  
██████████████████

Dear ██████████:

The department issued personal use fishing permit PC-██████-95 to you for the 1995 season. We appreciate and use your inseason telephone reporting. My summary of your telephone reports indicates that you harvested the number of fish indicated below:

Chinook    10    Summer Chum    1    Fall Chum    0    Coho    0

Although you may feel that you have completed your reporting requirement, we have not received your expired permit. A condition of the permit you were issued requires that you keep an accurate record of your catch, and that you return your expired permit with the catch information at the end of the season. I need your expired permit to confirm the total number of fish you harvested this past summer. I have enclosed a self-addressed stamped envelope for your use.

Please return your expired permit and catch information immediately. If you are unable to locate the expired permit, please fill in the number of fish you caught last season and return this letter to: Department of Fish and Game, Commercial Fisheries Management and Development Division, 1300 College Road, Fairbanks, Alaska, 99701-1599.

Chinook/Kings \_\_\_\_\_ Summer Chums \_\_\_\_\_ Fall Chums \_\_\_\_\_

Cohos \_\_\_\_\_ Whitefish \_\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

We need your catch information to help us make an accurate assesment of the run and the harvest. This is your second and FINAL notice that we have not received your expired permit or confirmation of your season's harvest. TO GET A PERMIT NEXT YEAR, YOU MUST REPORT YOUR CATCH FOR LAST SEASON.

Sincerely,

*Bonnie Borba*

Bonnie Borba  
Fishery Biologist  
Commercial Fisheries Management  
and Development Division  
(907) 459-7274

Appendix C.10. Example of the second personal use permit reminder letter sent to households which had complied with the inseason reporting requirement by telephone but had not reported postseason, 1995.

# STATE OF ALASKA

TONY KNOWLES, GOVERNOR

## DEPARTMENT OF FISH AND GAME

### DIVISION OF COMMERCIAL FISHERIES MANAGEMENT AND DEVELOPMENT

1300 COLLEGE ROAD  
FAIRBANKS, AK 99701-1599  
PHONE: (907) 459-7274  
FAX: (907) 452-1668

October 25, 1995

██████████  
██████████  
██████████

Dear ██████:

The department issued fishing permit SY-█████-95 to you for the 1995 season. To date, the department has not received your expired permit and catch information for the 1995 season. Regulations require you to keep an accurate record of your catch and to return the expired permit with the catch record at the end of the season. Even if you did not fish, or caught no fish, you must return your permit. **FAILURE TO RETURN YOUR PERMIT AND CATCH INFORMATION WILL RESULT IN YOUR NOT BEING ISSUED A PERMIT NEXT YEAR.**

Please return your expired permit and catch information immediately. If you are unable to locate the expired permit, please fill out the following questions and return this letter to: Department of Fish and Game, Commercial Fisheries Management and Development Division, 1300 College Road, Fairbanks, Alaska, 99701-1599.

I fished in 1995. Yes No (Circle one)

If you fished in 1995, please fill in the number you caught below.

Chinook/Kings \_\_\_\_\_ Summer Chums \_\_\_\_\_ Fall Chums \_\_\_\_\_

Cohos \_\_\_\_\_ Whitefish \_\_\_\_\_ Other \_\_\_\_\_

Whole salmon fed to dogs or put up for dog food \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

Your catch information is needed to accurately document last seasons harvest. Thank you in advance for your cooperation.

Sincerely,

*Bonnie Borba*

Bonnie Borba  
Fishery Biologist  
Commercial Fisheries Management  
and Development Division  
(907) 459-7274

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