**Fishery Data Series No. 12-72**

# Subsistence and Personal Use Salmon Harvests in the Alaska Portion of the Yukon River Drainage, 2011

**by**

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

## Symbols and Abbreviations

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**Weights and measures (metric)**

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

**Weights and measures (English)**

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

**Time and temperature**

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

**Physics and chemistry**

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

**General**

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

**Mathematics, statistics**

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

*FISHERY DATA SERIES NO. 12-72*

# SUBSISTENCE AND PERSONAL USE SALMON HARVESTS IN THE ALASKA PORTION OF THE YUKON RIVER DRAINAGE, 2011

by

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# ABSTRACT

This annual report contains estimates of subsistence and personal use salmon harvests within the Alaska portion of the Yukon River drainage. Most Yukon Area communities have no regulatory requirements to report their subsistence salmon harvest. For these remote communities, the Alaska Department of Fish and Game used a voluntary survey program. Harvest information was collected through postseason household interviews, follow-up telephone interviews, postal questionnaires, and harvest calendars. Stratified random sampling techniques were used to select Yukon Area households to be interviewed. In 2011, a total of 1,097 households (76% of selected) were surveyed in 33 communities. Data from surveyed households were expanded to estimate the harvest of unsurveyed households. In more accessible portions of the Yukon Area, fishermen are required to document their harvest on a subsistence or personal use permit. In 2011, 492 subsistence and personal use permits were issued, with 97% returned. Of these returned permits, 267 reported fishing. This report also documents subsistence salmon given to households from various test fishery projects. The total subsistence and personal use harvest throughout the Yukon Area was estimated to be 41,069 Chinook *Oncorhynchus tshawytscha*, 96,459 summer chum *O. keta*, 80,549 fall chum *O. keta*, and 12,576 coho *O. kisutch* salmon. The primary fishing gear types used were set gillnets (45%), drift gillnets (48%), fish wheels (6%) and other (<1%). Approximately 1,727 households owned 5,353 dogs and 248 households fed an estimated 84,247 salmon to dogs.



Key words: Tanana River, Yukon River, Chinook *Oncorhynchus tshawytscha*, chum *O. keta*, and coho salmon *O. kisutch*, northern pike *Esox lucius*, inconnu *Stenodus leucichthys*, whitefish *Coregonus* spp., harvest, personal use, subsistence.


# INTRODUCTION

Since 1961, the Alaska Department of Fish and Game (ADF&G) has collected information on subsistence salmon harvests in the Yukon Area (ADF&G 2002). Subsistence harvest estimates provide a record of historical harvest and trends. Annual documentation of the subsistence salmon harvest is used in conjunction with commercial, sport, and personal use harvests and escapement estimates to calculate total run size. Harvest and escapement information combined with age composition is used to construct brood tables and estimate the number of returning offspring per spawner for some stocks. Subsistence harvests provide information that ADF&G uses to forecast future salmon returns and provide an outlook on subsistence fishing in the coming year.

The Yukon River drainage supports five species of Pacific salmon: Chinook *Oncorhynchus tshawytscha*, chum *O. keta*, coho *O. kisutch*, pink *O. gorbuscha*, and sockeye *O. nerka* salmon. The majority of subsistence and personal use harvests are made up of Chinook, chum, and coho salmon. The chum salmon return consists of two temporally and genetically distinct stocks: early or summer chum and late or fall chum salmon. Subsistence salmon fishing activities in the Yukon Area typically begin in late May and continue through early October. Salmon fishing in May and October is highly dependent upon river ice conditions.

Yukon Area communities have a long tradition of harvesting salmon for subsistence use. Fishing activities are usually based from a fish camp or a home community. Extended family groups, representing two or more households, often work together to harvest, cut, and preserve salmon for subsistence use. Some households from Yukon River tributary communities, such as Shageluk and Venetie, may operate or share in the operation of fish camps along the mainstem Yukon River (Figure 1). Subsistence salmon harvested for human consumption are commonly dried, smoked, canned, or frozen.

Residents of the Yukon River drainage are primarily of Yup'ik Eskimo and Athabascan Indian descent. Excluding the greater Fairbanks area (approximately 97,580 people), the most recent census indicates the population of rural Yukon Area residents within the Denali Borough, Southeast Fairbanks, Yukon-Koyukuk, and Wade Hampton Census Areas was approximately 22,230 people

in 2011. The recent five-year (2006–2010) average rural population in the Yukon Area has remained relatively stable at approximately 22,120 people (Hunsinger 2012).

Subsistence and personal use fishermen in the Yukon Area primarily use drift gillnets, set gillnets, and fish wheels to harvest salmon. Set gillnets are used throughout the Yukon Area, whereas under state regulations, drift gillnets are only allowed from the mouth of the Yukon River to approximately 18 miles below the community of Galena (River Mile 530) to harvest salmon (Alaska Administrative Code (AAC) 5 AAC 01.220 and 5 AAC 77.717 Lawful Gear). Since 2005, drift gillnets were allowed under federal permits in Subdistricts 4-B and 4-C (near the communities of Galena and Ruby) (Appendix C). These drift areas are only open for a portion of the summer during regulatory openings. Although fish wheels are a legal gear type for subsistence fishing throughout the drainage, they are essentially used only in the Upper Yukon Area. Water conditions and fishing locations are more suitable for the operation of fish wheels in the Upper Yukon Area, which also contains a better supply of logs and young spruce trees used for fish wheel construction.

Yukon Area fishermen may participate in both commercial and subsistence salmon fisheries. In some areas, subsistence fishing periods are separated from commercial fishing by closures before, during, and after commercial periods, while in other areas subsistence and commercial fishing may occur concurrently. Separation of fishing times allows for better enforcement of commercial regulations and management of the fisheries. Salmon or their eggs harvested during subsistence openings cannot be legally bought or sold under the State of Alaska regulations, but commercially harvested salmon may be retained for subsistence use. Commercial fisheries in the Yukon Area are only opened in areas near fish buyer and processor operations where fishermen will have a market for their catch.

Subsistence fishermen are not required to have a fishing permit in most of the Yukon River drainage; however, permits are required for subsistence or personal use fishing in the Tanana River and parts of the Koyukuk River and Yukon River that are accessible by road (Figure 1). In the communities along the Yukon River and tributaries covered by the survey, the selected households' harvests are used to estimate subsistence harvests for the entire community including unsurveyed households. In contrast, fishermen in permit areas are required as a condition of their permit to submit harvest records, and their reports are not expanded to estimate harvest from households that do not return permits.

A personal use fishery was implemented in 1986 and currently takes place in the Fairbanks Nonsubsistence Area (Figure 2). The nonsubsistence area was established in 1992 (Appendix C) due to the potential heavy demand urban fishermen could place on the resource. In the nonsubsistence area, fishermen must possess a personal use household permit and a resident sport fish license in order to participate in the fishery. State regulations dictate that personal use fishing has a lower priority than subsistence fishing. The priority for personal use is similar to that of commercial and sport fisheries. The personal use fishery has a limit of 750 Chinook and 5,000 chum salmon taken through August 15 and 5,200 chum and coho salmon combined taken after August 16. Fishermen who harvested salmon within a portion of Subdistrict 6-B, or all of Subdistrict 6-C, were required to call in their catch on a weekly basis for inseason fishery management purposes.

There is usually little wastage of fish taken for subsistence purposes, although poor weather conditions may cause some fish to spoil during processing and some fish are lost to disease (e.g., *Ichthyophonus*) or scavengers. Households may harvest additional salmon to make up for lost fish

or be unable to meet subsistence needs if salmon were lost after the fishing season. Generally, the number of salmon lost each year is less than 2% of the total salmon harvest (Table 1; Appendix A6).

In addition to human consumption, salmon are fed to sled dogs and other dogs. Sled dogs are used for recreation, transportation, and as haul animals. Summer chum, fall chum, and coho salmon are primarily harvested to feed dogs in the Upper Yukon Area (Andersen and Scott 2010). Salmon retained for dog food is an important component of subsistence harvest and was found to constitute between 25% and 92% of all fish species fed to sled dogs among six Yukon River communities (Andersen and Scott 2010). Because Chinook salmon are so prized a regulation was added in 2001 stating that only Chinook salmon that are small or unfit for human consumption may be fed to dogs (5 AAC 01.240(d), Appendix C1). Most of the subsistence salmon used for dog food are dried summer chum salmon or "cribbed" (frozen in the open air) fall chum and coho salmon. During the active fishing season households in all areas feed scraps from salmon processing to dogs. The practice of keeping sled dogs is less common in the Lower Yukon Area; therefore harvesting salmon for sled dogs is more common in the Upper Yukon Area. Relatively few whole salmon are fed to dogs in the Lower Yukon Area.

A gradual reduction in the need for salmon as dog food began around 1930, when airplanes began replacing sled dogs as the primary mail and supply carrier. This decline accelerated in the 1960s with the introduction of snow machines to Interior Alaska. Beginning in the early 1980s, there was a renewed interest in recreational use and racing of sled dogs, and the number of subsistence salmon harvested for dog food increased; however, from 1991 to present day there has been a decline in the number of households with dog teams (Andersen and Scott 2010). The decline is due in part to poor chum salmon runs from 1998 to 2002 combined with the steep rise in cost of equipment (boat, motor, nets, fuel) needed to harvest fish for dog food.

Concerns about subsistence harvests in the Yukon River drainage have existed since at least the 1920s. Commercial fishing operations were first recorded in Canada from the Yukon Territory in 1903 and in the Lower Yukon Area in 1918 (Walker et al. 1989; Whitmore et al. 1990). Large commercial harvests from 1918 to 1922 prompted a complete closure of commercial fishing in the Lower Yukon Area from 1925 to 1931 to protect upriver subsistence fisheries. Starting in 1958, information on subsistence salmon harvests in the Yukon River was collected by the State of Alaska; however, survey methods from 1958 to 1960 were not documented. Methods from 1961 to 1987 varied from year to year, and included a 1961 survey by two Fish and Game aides who traveled by boat from the mouth of the Yukon to Dawson City enumerating fish on drying racks and in smoke houses (Pennoyer et al. 1962). In 1989, survey methodology was implemented utilizing comprehensive household lists and harvest groups for households which were classified by whether or not they usually fished for salmon (Holder and Hamner 1990). In 1990, the current harvest groups were implemented, further categorizing fishing households as "Light," "Medium," or "Heavy" harvesters and are based on each household's harvest history (Holder and Hamner 1991) From 1990 to 2002, different harvest levels were used for the Upper and Lower Yukon Areas to define harvest groups (Holder and Hamner 1990; Brase and Hamner 2003). Beginning in 2003, the same levels of harvest were used for the entire Yukon Area (Busher and Hamazaki 2004).

The 2011 subsistence salmon harvest survey and permit programs collected quantitative information on salmon harvest by species, gear types used to harvest salmon, harvest distribution, miscellaneous species harvest, number of dogs and salmon fed to dogs. Qualitative

information was also collected from households about salmon health and quality, subsistence fishing success, and fishery concerns. The primary method of estimating Yukon Area subsistence harvest is the annual postseason salmon harvest survey. Using a combination of survey and permit information, this report documents the estimated subsistence and personal use harvests within the Alaska portion of the Yukon River drainage. State regulations dictate that subsistence is the highest priority use of salmon and subsistence is a primary consideration in fishery management actions.

### STUDY AREA

The Yukon Area includes all waters of Alaska within the Yukon River drainage and all coastal waters of Alaska from Point Romanof southward to the Naskonat Peninsula (Figure 1). For management purposes, the Yukon Area is divided into seven districts and 10 subdistricts. The Lower Yukon Area consists of coastal waters and the Yukon River drainage from its mouth to Old Paradise Village (river mile 301) and is composed of Districts 1, 2, and 3. The Upper Yukon Area consists of the Yukon River drainage upstream of Old Paradise Village to the Canada border (river mile 1,224) and is divided into Districts 4, 5, and 6. Upper Yukon Area includes three large (>400 miles) silt laden tributaries where harvests occur: Koyukuk, Tanana, and Porcupine rivers. The Coastal District includes the remainder of coastal Yukon Area waters not included in District 1. The harvest from Coastal District communities contains fish not necessarily Yukon River bound (Kerkvliet 1986). Two communities within the Yukon Area, Chevak and Arctic Village, are not included in this harvest survey based on their distance from the Yukon River proper and harvest of very few salmon. In this report, the difference between the designations "Yukon River" and "Yukon Area" is that the Yukon Area includes the Coastal District. Yukon River totals apply to data considered for the U.S./Canada border passage objectives and Yukon Area refers to the management area for which this report applies.

## OBJECTIVES

The objectives of the study included the following:

1. Estimate the number of salmon and nonsalmon fish species harvested for subsistence in the Yukon Area, by community, using household surveys, harvest documented on subsistence and personal use permits, commercial fisheries reports of salmon caught but not sold, and records of salmon given to communities from test fishery projects.
2. Update community household lists to provide the basis for stratified random sampling of fishing and nonfishing households sufficient to support community harvest estimates, and estimate the number of people in each surveyed community.
3. Estimate the number of salmon harvested from each fishing district and subdistrict in the Yukon Area.
4. Document gear types used by Yukon Area subsistence and personal use fishermen and the percentage of Chinook salmon harvested by gear types in 2011.
5. Document the number of dogs within Yukon Area communities and salmon fed to dogs.
6. Document household responses relating to meeting of subsistence salmon needs in surveyed communities.

In addition, the investigators documented comments and concerns conveyed by subsistence users during household surveys.

# METHODS

## HARVEST SURVEY INSTRUMENTS

Total subsistence and personal use harvest in the Alaska portion of the Yukon River drainage includes fish harvested for direct personal or family use (Appendix C), fish caught in the various test fishery projects and distributed to households, and commercial related fish caught but not sold and retained for subsistence and personal use. Total number of salmon harvested for subsistence and personal use fisheries was estimated using information collected from household surveys, subsistence and personal use permits, harvest calendars, and postcards. In surveyed communities, information collected from surveyed households is expanded to estimate the harvest of the entire community. In permit communities, harvest totals reported on returned permits were not expanded to estimate information from unreturned permits. Permit areas are located near communities that are road accessible (Figure 1).

### Household Subsistence Surveys

Fishermen harvesting salmon in the Yukon Area outside of permit areas have no permit or harvest reporting requirements. The primary objective of the subsistence household survey is to estimate the total number of salmon harvested for subsistence from each community in the non-permit areas. Participation in the survey is voluntary, and household harvest information is kept confidential. Surveyed communities were contacted starting in the Lower Yukon Area in September. Communities were surveyed roughly in order from downriver to upriver after most households have finished harvesting salmon for subsistence. Household surveys were primarily conducted by two ADF&G technicians.

#### *Survey Design*

The household harvest survey methodology was based on stratified random sample design (Cochran 1977). In this design, a household within the community was the primary sampling unit. A household generally consists of one or more people living together in a dwelling and sharing the same phone and mailing address. Multiple generations living in one dwelling would be considered one household. Individuals living in detached but physically related structures were considered part of a household if they participated as a unit in harvesting, processing, and distributing resources and shared contact information.

Households were stratified into five groups based on the level of harvest, which was determined by the total number of salmon harvested by each household in the most recent two of the previous five years. Total salmon harvest included Chinook, summer chum, fall chum, and coho salmon and did not include pink or sockeye salmon. When two recent years of harvest data were unavailable, such as from new households or households that have not participated in the survey, the household's harvest group designation remained the same or the household was classified as unknown. The percentages of each household group to be surveyed were as follows:

1. Unknown: Unknown harvest level. Survey coverage 100%.
2. Do Not Fish: Households that do not harvest salmon. Survey coverage 30%.
3. Light Harvester: 1-100 total salmon harvest. Survey coverage 30%.
4. Medium Harvester: 101-500 total salmon harvest. Survey coverage 100%.
5. Heavy Harvester: >500 total salmon harvest. Survey coverage 100%.

To improve the precision of harvest estimates in the larger communities of Emmonak, Holy Cross, Pilot Station, and Tanana, 50% of the Light Harvester and Do Not Fish groups were sampled. When any stratum contained 5 or fewer households, the sample size was made equal to the stratum size (i.e., 100% coverage). In communities with less than 40 households, all households were selected to be surveyed (100% coverage). The list of households initially selected to be surveyed in 2011 included approximately 200 more households than in 2010. The larger number of selected households was primarily due to a greater number of new or unknown harvest group households identified in recent years.

Harvesting households included households that participated in subsistence salmon fishing activities. Frequently, two or more households fished together at a fish camp or as a group where one household operated fishing gear, and the other household processed fish (cutting and drying). Each of these households was considered to be a "fishing" household (Figure 3). The number of fish harvested by each household consisted of the number of fish taken home from the group catch. In cases where fishing households caught and brought home fish and then gave fish to nonfishing households that did not participate in the group, receiving households were not considered to be fishing households.

### *Household Updates*

The database of Yukon Area households was updated using information from the previous years' surveys. Community census lists, telephone directories, news items, and other sources of information were also used in maintaining the database. Households that lived outside of the survey areas but traveled to the Yukon River to fish in or near a surveyed community were included on the household list in the community nearest their fishing location.

Subsistence Assistants (residents with local knowledge) were employed by the Yukon River Drainage Fisheries Association (YRDFA) to assist with annually reviewing and updating the household list and community maps, and guiding surveyors within the communities. In a few cases, Subsistence Assistants served as translators, but they did not conduct interviews. When assistants were unavailable, surveyors worked with other sources of local information such as tribal administrators or school principals to aid in community navigation. In some communities, an additional assistant was hired to work with each surveyor, and serve as an alternate if the first assistant was unavailable for the entire visit.

### *Household Survey Questionnaire*

To keep data comparable between years, the subsistence survey questions (Figure 4) have generally remained consistent from year to year. Questions included total number of salmon harvested by the household (questions 5 and 7), whether the household commercial fished and if any of their subsistence harvest was retained from commercial fishing (question 9), number of salmon kept by the household (question 12), fishing gear types used to harvest salmon (question 8), gear types used to harvest Chinook salmon (question 8A), and area fished (question 7).

To determine distribution of salmon within a community, the survey addresses the number of households that fished together (question 6), total number of the group's catch (question 5), the number of salmon given to other families outside the group (question 11), the number of salmon received from other households, from commercial harvest, or from a test fishery project (question 13), and the number of salmon harvested for dog food (questions 18, 19, 20).

Households were asked to assess at what level their subsistence salmon needs were met for each species (Figure 4, question 14). Needs met was calculated by comparing the number of salmon harvested or received to the number that the household said they usually harvested or received. Households may receive fish from test fishery projects or throughout the year from friends and relatives. At the time of the survey, some households were unable to assess whether their needs were met because they had not yet received their fish for the year. Comments were also recorded by surveyors to identify factors such as lack of fishing equipment or bad weather that affected a household's ability to meet its needs. Comments also indicated whether a household normally harvested or used a species, as opposed to those who did not harvest a particular species. Comments from households reporting they "usually get zero," included species not traditionally fished in a particular area due to its distribution, personal preference, or individuals in a household allergic to the species. If a household lost part of its subsistence catch (question 10), the surveyor asked about the reason for loss and verified that the lost fish were included in the harvest estimates.

Households were also asked about their harvest of miscellaneous fish species (question 15) including pink and sockeye salmon. Miscellaneous species include large whitefish over four pounds and small whitefish species less than four pounds *(Coregonus* spp. and *Prosopium cylindraceum),* sheefish *(Stenodus leucichthys),* burbot *(Lota lota),* northern pike *(Esox lucius),* Alaska blackfish *(Dallia pectoralis),* Arctic grayling *(Thymallus arcticus),* longnose sucker *(Catostomus catostomus),* Arctic char *(Salvelinus alpinus),* Arctic lamprey *(Lampetra camtschatica),* and saffron cod *(*tomcod, *Eleginus gracilis).* For species that are commonly harvested in the winter and spring, households were asked about their harvest of that species throughout the previous winter, from the date of the previous year's survey to the current year's survey.

### *Household Survey*

Before conducting the survey, surveyors were trained in interviewing techniques, which included learning the local names of salmon species and various ways to obtain the number of fish harvested. The surveyors were also briefed on current fishery issues and management actions related to the subsistence and commercial salmon fishing season. Surveyors were trained to ask questions consistently and foster a cooperative atmosphere so that interviewed household members were able to recall as accurately as possible their household harvest and use and share any fishery related knowledge and concerns pertinent to the survey outcome.

Household surveys were conducted in September and October when the majority of salmon fishing activities had ended and fishermen could more easily recall their harvest numbers. In 2011, a total of 1,439 households were selected to be surveyed in 33 communities. A total of 24 Subsistence Assistants were hired in 22 communities. Surveyors attempted to contact all selected households and noted households that were unavailable during the community visit for follow-up later by phone or letter. After the interview was completed, survey participants were given a small token of appreciation (keychain flashlight) for participating in the survey.

After the household surveys were conducted, survey forms were edited for clarity and completion. Households were called back when further clarification was needed or to reconcile conflicting information among households that harvested or shared salmon with each other. When fishermen reported amounts in alternative terms, such as the number of five gallon buckets, quart sized bags, gunny sacks, or pounds, a conversion sheet based on local approximate

measures was used to estimate number of fish harvested. Calculations were made when the surveys were edited prior to database entry.

## Permit Program

In communities along the entire Tanana River drainage (District 6) and where the Yukon River is accessible by the Alaska Highway road system (portions of District 5), households must obtain subsistence or personal use fishing permits issued at the ADF&G offices in Fairbanks, Delta Junction, and Tok. In addition, permit applications for the current season were mailed to all fishermen who returned their permits from the previous season. For residents of communities outside the Fairbanks area, subsistence permit applications were mailed with a postage paid return envelope. Included were the dates a department representative would visit their community. In 2011, permit issuing trips were conducted in the communities of Central, Circle, Delta Junction, Dot Lake, Manley Hot Springs, Minto, Nenana, Northway, Rampart, Tanacross, and Tok (Figure 1). Permits were also issued by ADF&G staff stationed at the Eagle sonar project.

Permit holders were required to record their daily fish harvest on the permit and return it to ADF&G within 10 days of the expiration date (October 15 for salmon and December 31 for nonsalmon permits and Kantishna River salmon permits). Households that did not report their harvest by the expiration date were mailed up to two reminder letters. Further, households that did not respond to the reminder letters were contacted by telephone.

Harvests from permit communities were estimated by summing harvests of all permit holders who returned their permit, returned a completed reminder letter, or verbally reported their harvest information. Commercially harvested salmon reported as caught but not sold on fish tickets from permit areas were added to the community where the harvest occurred (Table 1).

Fishermen in the community of Eagle were asked to note on their permit how many salmon were harvested above and below the Eagle sonar project located near the community in the permit area of Subdistrict 5-D (Figure 1). Follow-up phone calls were made to fishermen postseason to verify gear types and locations of harvest by species.

The community of Stevens Village was surveyed as part of the annual household harvest survey, however some households fished downriver in a permit area (Figure 1). To avoid double counting fish estimated by the harvest survey, information from permits issued to households in Stevens Village was not added to the survey estimates. Permit information was used to supplement data collected as part of the household harvest survey.

## Subsistence Harvest Calendars and Postcards

Prior to the salmon fishing season, subsistence harvest calendars were distributed to households in surveyed communities in the Yukon Area. Calendars were also sent to previously identified households that do not live in surveyed communities and fish outside of permit areas. Calendars, in which fishermen record their daily salmon harvest by species, were primarily used to help fishermen remember their harvest numbers and provide information on timing of subsistence harvests by species.

In May 2011, 1,645 calendars (1,015 to Lower Yukon Area and 630 to Upper Yukon Area) were mailed to all households except those in the Do Not Fish category. Calendars were also mailed to households with a history of subsistence fishing in the community of Rampart, and extra calendars

were available upon request. Prior to surveyor visits to each community, fliers were sent to post offices, stores, schools, or city offices to remind fishermen to have their harvest calendars available during the household surveys. Each household that returned a properly completed 2011 harvest calendar before January 1, 2012, became eligible to win one of six $100 lottery prizes.

To collect additional information on the harvest of Arctic lamprey *Lampetra camtschatica*, postcards were mailed to several communities. In November 2010, 657 postcards were mailed to every household in the communities of Anvik, Grayling, Holy Cross, Marshall, Mountain Village, Pilot Station, Pitkas Point, Russian Mission, and St. Mary's. Households were asked to record their subsistence and commercial Arctic lamprey harvests from October to December 2010 (Figure 3).

## DATA ANALYSIS AND ESTIMATION METHODS

Classical stratified random sampling methods (Cochran 1977) were used to estimate the average and total number of fish caught by each of the five harvest groups in each surveyed Yukon Area community.

The methods described below were used to make estimations of the following: 1) the number of people in a community (Figure 4, question 2), 2) the number of subsistence salmon harvested (question 7), 3) the number of salmon given away (question 13), 4) the number of salmon used for subsistence (question 12), 5) the number of dogs (question 17) in a community, 6) the number of salmon retained for dog food (question 20), 7) the number of salmon usually harvested (question 14), and 8) the number of large and small whitefish, sheefish, and northern pike harvested (question 15).

Denote that:

$N_{kj}$ = the number of households in the $j$th ($j$ = 1 … 5) harvest group of the $k$th community

$n_{kj}$ = the number of sampled households in the $j$th harvest group

$y_{kji}$ = response (e.g., the number of fish harvested) of $i$th sampled household ($i$ = 1 … $n_{kj}$)

Mean response of the $j$th harvest group ( $\bar{y}_{kj}$ ) was calculated as:

$$\bar{y}_{kj} = \frac{\sum_i y_{kji}}{n_{kj}} \quad ; \tag{1}$$

and its standard error ($SE_{kj}$) was calculated as:

$$SE_{kj} = \sqrt{\frac{s_{kj}^2}{n_{kj}}\left(\frac{N_{kj}-n_{kj}}{N_{kj}}\right)} \text{ where } s_{kj}^2 = \hat{V}(y_{kj}) = \frac{\sum_j \left(y_{kji}-\bar{y}_{kj}\right)^2}{n_{kj}-1} \quad . \tag{2}$$

The estimate of total responses of the *k*th community ($\hat{T}_k$) was calculated as:

$$\hat{T}_k = \sum_{j=1}^{5} N_{kj}\bar{y}_{kj} \quad ; \tag{3}$$

and its 95% confidence interval (95%CI$_k$) was calculated as:

$$95\%\mathrm{CI}_k = t_{(0.025,df=n_k-1)} \cdot \sqrt{\hat{V}(T_k)} \text{ where } \hat{V}(T_k) = \sum_{j=1}^{5} N_{kj}^2 \left(\frac{N_{kj}-n_{kj}}{N_{kj}}\right)\left(\frac{s_{kj}^2}{n_{kj}}\right). \tag{4}$$

Because estimates of the responses in each community were independent and mutually exclusive, the estimate of survey wide total ($\hat{T}$) was calculated as:

$$\hat{T} = \sum_{k=1} \hat{T}_k \tag{5}$$

and its 95% confidence interval (95%CI) was calculated as:

$$95\%\mathrm{CI} = t_{(0.025,df=n-1)} \cdot \sqrt{\hat{V}(\hat{T})} \text{ where } \hat{V}(\hat{T}) = \sum_{k=1} \hat{V}(\hat{T}_k). \tag{6}$$

The number of fish harvested at each fishing area within a community (question 7) was estimated as follows.

Denote that:

$y_{kjih}$ = number of fish harvested at the *h*th fishing location by *i*th household in the *j*th harvest group of the *k*th community.

Proportion of salmon harvested at *h*th fishing area by *j*th group was estimated as:

$$\hat{p}_{kjh} = \frac{\sum_i y_{kjih}}{\sum_i \sum_h y_{kjih}} . \tag{7}$$

The number of salmon harvested at the *h*th fishing area at the *k*th community was calculated as:

$$\hat{T}_{kh} = \sum_j N_{kj}\bar{y}_{kj}\hat{p}_{kjh} \quad , \tag{8}$$

where $\bar{y}_{kj}$ is mean harvest of the *j*th use group and $N_{kj}$ is the number of *j*th group households.

Total number of salmon harvested at the *h*th fishing area was estimated as:

$$\hat{T}_h = \sum_k \hat{T}_{kh} \quad . \tag{9}$$

For estimation of the number of; subsistence fishing households (question 3), households that own dogs, and households that feed salmon to dogs (questions 17 and18), the following expansion method was used:

Proportion of households who subsistence fish or own dogs or feed salmon to dogs in the *j*th harvest group of the *k*th community ( $\hat{p}_{kj}$ ) was calculated as:

$$\hat{p}_{kj(s)} = \frac{n_{kj(s)}}{n_{kj}}, \tag{10}$$

where $n_{kj(s)}$ = the number of sample households that subsistence fish or own dogs or feed salmon to dogs.

Estimated number of households that subsistence fish or own dogs or feed salmon to dogs in the *k*th community ( $\hat{N}_{k(s)}$ ) was calculated as:

$$\hat{N}_{k(s)} = \sum_{j=1}^{5} N_{kj}\hat{p}_{kj(s)}; \tag{11}$$

and its 95% confidence interval (95%CI$_k$) was calculated as:

$$95\%\mathrm{CI}_k = t_{(0.025,df=n-1)} \cdot \sqrt{\hat{V}(\hat{N}_{k(s)})} \text{ where } \hat{V}(\hat{N}_{k(s)}) = \sum_{j=1}^{5} N_{kj}^2 \left(\frac{N_{kj}-n_{kj}}{N_{kj}}\right)\left(\frac{\hat{p}_{kj(s)}(1-\hat{p}_{kj(s)})}{n_{kj}-1}\right). \tag{12}$$

Estimated number of households that subsistence fish or own dogs or feed salmon to dogs in the survey wide total ( $\hat{T}_{(s)}$ ) was calculated as:

$$\hat{N}_{(s)} = \sum_{k} \hat{N}_k; \tag{13}$$

and its 95% confidence interval (95%CI) was calculated as:

$$95\%\mathrm{CI} = t_{(0.025,df=n-1)} \cdot \sqrt{\hat{V}(\hat{N}_{(s)})} \text{ where } \hat{V}(\hat{N}_{(s)}) = \sum_{k=1} \hat{V}(\hat{N}_{k(s)}). \tag{14}$$

The number of subsistence fishing households using a particular gear type was estimated as follows:

Proportion of subsistence fishing households using *h*th gear was calculated as:

$$\hat{q}_{kjh} = \frac{n_{kjh}}{n_{kj(s)}}, \tag{15}$$

where $n_{kjh}$ = the number of sample households that used the *h*th fishing gear.

The number of fishing households using the *h*th fishing gear in the *k*th community ($\hat{N}_{kh}$) was calculated as:

$$\hat{N}_{kh} = \sum_{j} N_{kj} \hat{p}_{kj} \hat{q}_{kjh}, \quad (16)$$

where $\hat{p}_{kj(s)}$ = the proportion of fishing household in the *j*th harvest group of the *k*th community.

For the number of Chinook salmon harvested by gear types (question 8A), the proportion of Chinook salmon harvested by gear type *h* by each household was estimated as follows.

Proportion of Chinook salmon harvested by the *h*th fishing gear by *j*th group was estimated as:

$$\hat{p}_{kjh} = \frac{\sum_{i} y_{kjih}}{\sum_{i}\sum_{h} y_{kjih}}, \quad (17)$$

and its variance was calculated as

$$V(\hat{p}_{kjh}) = \frac{\hat{p}_{kjh} \cdot (1 - \hat{p}_{kjh})}{\sum_{i}\sum_{h} y_{kjih} - 1}. \quad (18)$$

The number of Chinook salmon harvested by the *h*th fishing gear by *j*th group at the *k*th community was calculated as:

$$\hat{\bar{y}}_{kjh} = \bar{y}_{kj} \hat{p}_{kjh}, \quad (19)$$

where $\bar{y}_{kj}$ is mean harvest of the *j*th use group, and its variance was calculated as:

$$V(\hat{\bar{y}}_{kjh}) = (\bar{y}_{kj})^2 V(\hat{p}_{kjh}) + (\hat{p}_{kjh})^2 V(y_{kj}) - V(\hat{p}_{kjh}) V(y_{kj}). \quad (20)$$

Total number of Chinook salmon harvested by each gear type was calculated the using the equations (2) to (6).

Reported harvests of other miscellaneous fish species were not expanded because of limited harvest information. Harvest groups stratified for salmon are not adequate to estimate species captured with different harvest methods and at different times of year. Those fish species include Arctic grayling, Arctic char, Alaska blackfish, burbot, Arctic lamprey, longnose sucker, and saffron cod (Appendix B10). Additionally, the number of sockeye salmon harvested annually is collected but was too low to support stratified estimates and was not expanded.

# RESULTS

## OVERALL ESTIMATION OF HARVEST

An estimated 41,069 Chinook, 96,459 summer chum, 80,549 fall chum, and 12,576 coho salmon were harvested for subsistence and personal use by 1,543 households in the Yukon Area (Table 1). The total number of salmon harvested included estimated postseason survey estimates, reported harvest from returned permits (subsistence and personal use), salmon reported as distributed to communities from test fishery projects, and salmon reported on fish tickets in District 6 as retained from commercial fisheries. Reported harvests from Stevens Village permits are not included in the total harvest. Salmon retained from commercial fishing in surveyed communities were included in subsistence survey harvest estimates for each community.

The total number of salmon caught in subsistence fisheries was 229,546 salmon, consisting of 40,980 Chinook, 96,020 summer chum, 80,202 fall chum, and 12,344 coho salmon (Figure 5; Appendices B1–B4). This does not include harvests from personal use salmon permits which were issued in the Fairbanks Nonsubsistence Area (Figure 2). The 2011 total subsistence salmon harvests comprised 18% Chinook, 42% summer chum, 35% fall chum, and 5% coho salmon (Table 1 and Figure 5). Pink and sockeye salmon were not included in the overall number of salmon harvested. Total number of salmon harvested included salmon provided by test fishery projects to households for subsistence use consisting of 2,777 Chinook, 7,615 summer chum, 2,777 fall chum, and 824 coho salmon (Table 1; Appendix A5).

The estimated number of households in the Yukon Area does not include households issued permits for the harvest of northern pike in the Tolovana River. The primary gear types used by households for subsistence and personal use salmon fishing throughout the Yukon Area were set gillnets (45%), drift gillnets (48%), and fish wheels (6%). The other 1% included households that used spears and fyke nets in the Tanana River (Table 1).

Surveyed communities and households that obtained subsistence and personal use permits owned an estimated number of 5,353 dogs (Table 1). An estimated 248 households reported feeding subsistence caught salmon to their dogs (Tables 2 and 3). Surveyed and permit households throughout the Yukon Area retained an estimated 84,247 salmon for dog food from subsistence harvests (Tables 3 and 4; Appendix B9) excluding permit harvests from Stevens Village. The total number of salmon fed to dogs included seven summer chum salmon retained from commercial harvests (Table 4).

## SUBSISTENCE SURVEYS

Surveyors traveled to 31 Yukon Area communities between September 6 and October 29, 2011, and contacted 956 households in person. Surveys for 98 households were collected by telephone, and information from 43 households was collected from surveys or calendars returned by mail. Due to their small size and difficulties in scheduling travel, the communities of Bettles and Birch Creek were surveyed by phone and letter in 2011. Twelve unselected households from eight communities were surveyed, either as new households, unselected households that requested to be surveyed, or that were misidentified as selected. The number of additional surveys from unselected households was small and not statistically significant in regards to the stratified household selection; therefore their responses were entered along with responses from selected households. Overall, a total of 1,097 households were surveyed (Table 5), which represented 76% of households initially selected for the survey. Of the 2,568 total households identified in the survey area, an estimated 1,305

households (51%) participated in the 2011 subsistence fishery (Table 6). The estimated total population in surveyed communities was 9,749 people (Table 7).

Access to areas between Stevens Village and Rampart on the Yukon River includes boating from the Dalton Highway (Haul Road) bridge. Stevens Village is uniquely situated just outside the boundary of a permit area on the Yukon River. Some residents acquire a permit to fish between the Haul Road Bridge and the permit area boundary downstream of the community; however, most residents fish outside of the permit area. Consequently, information from the household survey was primarily used to estimate subsistence harvest. Information from returned permits was used to supplement incomplete survey data. Permit harvest information from Stevens Village permits is reported in permit tables but was not added to the subsistence harvest survey estimates.

An estimated 32,586 Chinook, 85,991 summer chum, 43,052 fall chum, and 4,675 coho salmon were harvested by households in the surveyed communities. Fishermen from some communities fish in multiple districts, subdistricts, or tributaries to take advantage of harvest opportunities for different salmon stocks. The greatest number of each salmon species harvested by fishermen by district were: District 4 with a harvest of 9,893 Chinook salmon; District 1 with 23,241 summer chum salmon; District 5 with 31,887 fall chum salmon; and District 4 with a harvest of 2,072 coho salmon. No salmon were reported as harvested from the Black River, and 405 fall chum salmon were reported as harvested from the Porcupine River (Tables 8–11).

At least 8 surveyed communities received a total of 13,790 salmon from test fishery projects. Included in the number of test fish are 10 Chinook and 30 summer chum salmon given to Kwik'pak fisheries from test fishery projects near Emmonak for distribution to subsistence households in communities. Harvest from surveyed communities included an estimated 2,726 Chinook, 626 summer chum, 217 fall chum, and 82 coho salmon reported by households as retained from commercial periods for subsistence (Appendix A5).

The estimated subsistence harvest of other fish in Yukon Area surveyed communities was 2,291 pink salmon, 26,911 large whitefish, 17,979 small whitefish, 14,270 northern pike, and 10,139 sheefish. Coastal District communities of Scammon Bay and Hooper Bay harvested approximately 92% of the estimated total number of pink salmon (Table 12).

The reported harvest of other miscellaneous fish species (not expanded) in surveyed communities was 2,477 burbot, 6,037 Arctic lamprey, 6,797 tomcod (saffron cod), 1,273 Arctic grayling, 286 longnose suckers, 205 Arctic char, and 87,064 Alaska blackfish (Table 13). Alaska blackfish were primarily taken in the Lower Yukon Area and were frequently reported by households in terms of pounds, sacks, or buckets estimated at 14 fish per pound. The reported harvest of sockeye salmon was 279 fish (Table 13). Household surveys were conducted in communities that harvest Arctic lamprey in September (Table 1), before conclusion of the Arctic lamprey fishery for that year. Arctic lampreys harvested during the winter of 2010 were reported by households during the 2011 survey (Table 13).

An estimated 1,510 households in surveyed communities in the Yukon Area owned 3,957 dogs. Of the households with dogs, 143 households (9%) fed whole fish to dogs (Table 2). Surveyed households indicated dogs were fed an estimated 17,265 summer chum (includes seven fish retained from commercial fishing), 33,662 fall chum and 2,421 coho salmon from subsistence harvests (Table 4).

A total of 1,117 salmon (about 0.7% of the total salmon harvest) was reported as lost in the surveyed communities. Lost salmon consisted of 30 Chinook, 837 summer chum, 47 fall chum, and 11 coho salmon. An additional 192 salmon were unsuitable for human consumption but were fed to dogs, consisting of 41 Chinook and 151 summer chum salmon (Appendix A6). Lost salmon are included in household harvest estimates but are not included in a household's use (Figure 4, question 12), unless they were fed to dogs. Reasons for loss included spoilage due to rain and bad weather, pathogens, and scavengers. The majority of fish lost in 2011 (61% of 1,117 fish) were due to rain and bad weather conditions during processing and included 23 Chinook, 605 summer chum, 46 fall chum, and 7 coho salmon (Appendix A6).

Of the households contacted during the survey, 718 households replied to the 'needs met/usually get' question for Chinook salmon. Of these households, 54% met less than 50% of their Chinook salmon needs and 38% met between 75% and 100% of their Chinook salmon needs based on what they usually harvest or receive. Of the 436 households providing information on summer chum salmon, 36% of households met less than 50% of their needs and 58% were able to meet 75% or more of their summer chum salmon needs based on what they usually harvest or receive. Only 253 and 112 households answered the "needs met/usually get" question for fall chum and coho salmon respectively. The percentage of households meeting 50% or less of their subsistence needs was 55% for fall chum salmon and 49% for coho salmon and 42% and 50% of households reported meeting 75% or more of their needs for fall species (Table 14).

Under one half (46%) of surveyed households reported they got at least half of the Chinook salmon they usually get. In individual communities, responses ranged from 0% (Allakaket and Alatna) to 75% (Nulato) of households meeting at least half of their subsistence needs for Chinook salmon. Several communities did not have any households that responded to the needs met question for any species (Bettles), while some communities did not have any responses for summer chum (Nulato, Beaver, Venetie), or coho salmon (Holy Cross, Hughes, Alatna, Stevens Village, Beaver, Venetie, Chalkyitsik). Six communities reported meeting 100% of their needs for summer chum salmon, two communities met 100% of their needs for fall chum salmon, and four communities reported meeting 100% of their needs for coho salmon (Table 14).

Of the 2,568 households in the surveyed communities, households with unknown harvest levels (419 households, 16%) and households that do not harvest salmon (864 households, 34%) comprised 50% of households in surveyed communities. Some of these households did harvest salmon in 2011. Just over 50% (1,305 households) of all households in surveyed communities were categorized as fishing households (Table 6). The largest group of known fishing households was light harvesters (957 households, 75% of fishing households). Medium harvesters (298 households, 23%) and heavy harvester (30 households, 2%) comprised the other 25% of fishing households. The group with the largest proportion of the Chinook salmon harvest was the light harvesters who took an estimated 46% of the total. Light harvesters also took the largest proportions of summer chum and coho salmon with approximately 39% and 47% respectively of each species (Appendices A2 and A4). Heavy harvesters took the largest proportion of fall chum salmon (61%) for subsistence harvest (Appendix A3).

Household primary gear types in surveyed communities consisted of 39% drift gillnets, 57% set gillnets, and 4% fish wheels used to harvest salmon species (Table 1). Of the 523 surveyed households that reported harvesting Chinook salmon, 501 (96%) reported the gear type or types they used to harvest Chinook salmon and how many Chinook salmon were harvested by each gear type. These responses were expanded to obtain estimates of total Chinook salmon harvested

by gear type. An estimated 20,343 Chinook salmon (62% of the total) were harvested by drift gillnets, 8,512 (26%) by set gillnets, and 3,731 (11%) by fish wheels. No Chinook salmon were reported as harvested by other gear types such as dip net or hook and line. Four communities (Pitkas Point, St. Mary's, Pilot Station, and Kaltag) were estimated to harvest 100% of their Chinook salmon by drift gillnets. Eight communities (Hooper Bay, Huslia, Hughes, Allakaket, Alatna, Stevens Village, Birch Creek, and Venetie) were estimated to harvest 100% of their Chinook salmon by set gillnets. Fish wheels were only used to harvest Chinook salmon in 4 upper river communities: Ruby (68% of Chinook salmon harvested in that community), Tanana (51% of Chinook salmon harvested), Beaver (20% of Chinook salmon harvested), and Ft. Yukon (74% of Chinook salmon harvested).

## SUBSISTENCE PERMITS

In areas that require subsistence fishing permits in District 5 (Yukon River) and District 6 (Tanana River), 407 (97%) of the total subsistence permits issued were returned and 229 households reported participating in salmon and nonsalmon subsistence fisheries (Tables 3, 15 and 16). The timing and distribution of fishing effort by district and by day based on harvest recorded on permits (Figure 6, bottom panel) shows a decrease in fishing effort between summer and fall salmon runs in mid-August. The majority of the late season fishing effort is targeting fall chum salmon in the Upper Yukon Area districts.

The 2011 subsistence permit harvest information was based on permits returned by February 15, 2012 (Tables 3, 15 and 16). Total subsistence harvests of 5,291 Chinook, 2,444 summer chum, 33,173 fall chum, and 6,127 coho salmon were reported. The total harvest of other fish species included: 4,795 whitefish, 102 sheefish, 139 burbot, 319 northern pike, 278 longnose suckers, and 475 Arctic grayling (Tables 15 and 16).

Five Chinook and one fall chum salmon were distributed to the community of Eagle from the Eagle sonar drift gillnet test fishery project (Table 1, Appendix A5). Based on subsistence salmon permits (not including Tolovana pike permits which do not require the reporting of dog information), 105 households indicated that they fed salmon to dogs. These households reported retaining 31,349 whole salmon for dog food (Table 3). Primary gear types reported by the 200 households that fished for subsistence salmon included 158 (79%) with set gillnets, 38 (19%) with fish wheels (Table 1) and 4 (2%) households that fished used other gear types (fyke net or spear). This does not include two permits issued to households in Stevens Village, or 27 permits issued for the pike fishery in the Tolovana River that primarily used ice fishing (jigging) gear.

Records from fish tickets under "Not Sold/Personal Use" indicate that 352 Chinook, 1,650 fall chum, and 718 coho salmon were retained from commercial fishing in District 6. These salmon were added to the community harvests from Fairbanks and Nenana (Table 1).

## PERSONAL USE

In 2011, 71 (96%) of the personal use permits issued were returned (Table 15). Of these, 38 permits reported fishing, including 33 that were issued for salmon and 5 that were issued for nonsalmon species. Personal use permit holders reported harvesting 89 Chinook, 439 summer chum, 347 fall chum, 232 coho salmon; and 56 whitefish, 1 sheefish, 1 burbot and 136 longnose suckers (Tables 15 and 16). Of the 38 households that reported fishing for personal use, primary gear types included 34 households (90%) using set gillnets, 2 households (5%) using fish wheels (5%), and 2 households (5%) using other gear (fyke net; Table 1).

## CALENDARS AND POSTCARDS

In 2011, households returned a total of 239 subsistence harvest calendars (approximately 14% of total issued). A total of 202 calendars (85% of those returned) documented salmon harvest information. The remaining households that returned harvest calendars in 2011 either indicated they "did not fish" this season (13%) or the calendars were returned blank (2%). The timing and distribution of fishing effort by district and by day is shown based on returned calendars (Figure 6 top panel). Households were more likely to record fishing effort during the summer season and were less diligent about recording harvest during the fall season.

Arctic lamprey postcards were mailed to 657 households in November 2010 (Figure 3). The winter of 2010–2011 was the fourth year that postcards were sent to households for the purpose of documenting Arctic lamprey. Of the nine communities that received postcards, seven reported subsistence or commercial fishing for Arctic lamprey. Post cards were returned by 122 households; 38 households indicated they fished for Arctic lamprey with a reported harvest of 4,623 lamprey taken for subsistence use and 18,390 lamprey sold commercially in 2010 (Table 17). Several fishermen reported that they were unable to harvest eels (Arctic lamprey) due to changes in the river channel or missed their run timing (Mountain Village), or that there were two runs and they fished on the first run (Grayling).

# DISCUSSION

While the outlook for summer chum, fall chum, and coho salmon was for strong runs with sufficient strength to support escapement and subsistence and commercial harvests, the 2011 Chinook salmon run was expected to be poor or below average, necessitating conservation measures to meet escapement goals and share the available subsistence harvest throughout the drainage (Hayes and Wiese 2011). Preseason management strategies were developed with input from U.S. Fish and Wildlife Service, fishermen, tribal council representatives, and other stakeholders to prepare for a potentially low run. These strategies included closures on the first pulse of the Chinook salmon run, prohibited sale of incidental Chinook salmon harvested during summer chum salmon directed commercial openings, reduction of sport fishery limits in Yukon River tributaries, and no retention of Chinook salmon in the mainstem Yukon River sport fishery (Hayes et al. 2011). This was also the first year for new restrictions limiting gillnet gear to mesh sizes of 7.5 inch or less in all districts, including the Coastal District (Appendix C1).

In 2011, the Yukon River breakup in Alakanuk was on May 22, matching the 1983–2010 average and one day later than the recent 10-year average[1] (2001–2010). The regulatory subsistence fishing schedule began on June 6 in District 1 and was implemented chronologically upriver based on migratory timing as the salmon runs traveled upstream (Appendix A7, A8, Appendix C1; ADF&G 2001). The schedule reduces the impact on any particular component of the run and spreads subsistence harvest opportunities among subsistence users throughout the drainage.

[1] Alaska Pacific River Forecast Center: Breakup database search results for Yukon River location Alakanuk. [Internet]. 1956– .Anchorage: NOAA Alaska Region Headquarters. [updated: 29 Dec 2005; cited 30 March, 2012]. Available from: http://aprfc.arh.noaa.gov/php/brkup/getbrkup.php?riverbasin=Yukon&river=Yukon+River

The first reported subsistence harvest of Chinook salmon was on June 2 in Emmonak (Andy Padilla, Commercial Fishery Biologist, ADF&G, Fairbanks, personal communication, June 2, 2011), and the first pulse of Chinook salmon was observed in the Lower Yukon test fishery on June 14–18. The preliminary cumulative passage estimate from the Pilot Station sonar project was 107,027 Chinook salmon, which was below the 1995–2011 average estimate and index of 159,000 fish (JTC 2012). In 2011, modifications were made to the regulatory subsistence fishing schedule by emergency orders to protect Chinook salmon (Appendices A7 and A8). Several commercial fishing periods in Districts 1 and 2 were held concurrently with subsistence fishing penings to allow subsistence fishermen more fishing opportunity to harvest summer chum salmon and reduce the overall amount of time that subsistence and commercial fishermen would have to impact Chinook salmon. Subdistrict 5-D, which is usually open continuously by regulation, was closed during the first and second pulses of the Chinook salmon run. An additional closure was implemented in the middle and upper portions of Subdistrict 5-D to provide further protection for Canadian origin Chinook salmon (Appendices A7 and A8). Passage of Chinook salmon across the U.S./Canada border was estimated to be approximately 50,900 Chinook salmon, which was within the interim management escapement goal range (JTC 2012).

Openings in Districts 1 and 2 were also restricted (from 7.5 inch maximum mesh) to 6 inch or smaller mesh during some subsistence and commercial periods to reduce harvest of Chinook salmon but allow harvest of summer chum salmon. Summer chum salmon passage at the Pilot Station sonar project was estimated to be approximately 1.8 million (JTC 2012), slightly above the median (Hayes et al. 2011).

The total run size estimate for fall chum salmon was 1.2 million fish which was above average, while the Pilot Station sonar project passage estimate of 118,453 coho salmon was below average (JTC 2012; Estensen and Borba 2011). No additional restrictions were placed on subsistence fishing during the fall season and subsistence fishing periods were open continuously or according to regulatory schedules; in Districts 1 and 2 subsistence fishing was closed before, during and after fall season commercial openings. Subsistence and commercial fishing took place concurrently in Subdistricts 5-B and 5-C and District 6 during the fall season (Appendices A7 and A8).

## COMMERCIAL AND SUBSISTENCE FISHING

In addition to salmon harvested during subsistence openings, commercial fishing households have the opportunity to retain salmon caught during commercial openings for subsistence purposes. Income from commercial fishing is often used by households to help pay for the costs associated with subsistence harvesting activities, including fuel and fishing equipment. Abundance of salmon and harvest opportunities do not guarantee that salmon will be harvested and distributed in a manner that fulfills subsistence needs throughout a community.

Commercial harvests of summer chum, fall chum, and coho salmon were each above their respective recent five year (2006–2010) and 10 year (2001–2010) averages. The commercial fishery for summer chum salmon was delayed until the bulk of the Canadian-origin Chinook salmon had moved through the Lower Yukon Area (65% of overall run on June 24), however the commercial summer chum harvest was still 164% above the recent 10 year average (JTC 2012). During the summer chum commercial season, mesh size was restricted to gillnets 6 inch or less and Chinook salmon caught incidentally were not allowed to be sold but could be retained for

subsistence uses (Hayes et al. 2011). Commercial fishing periods for summer chum salmon occurred in Districts 1, 2, and 6 with most of the commercial harvest (97%) from the Lower Yukon Area. During the fall season after August 1 the restriction on the sale of Chinook salmon was lifted and 82 Chinook salmon were sold in the Lower Yukon (JTC 2012).

Although the commercial harvest of summer chum salmon in Districts 1 and 2 was nearly double the recent five year average (2006–2010; Estensen et al. 2012) the subsistence harvests were only 4% above the recent five year average (Appendix B2). While large numbers of summer chum salmon were available for harvest in Districts 1 and 2, only 57% of households reported meeting over 50% of their needs for summer chum salmon (Table 14). Analysis of the needs met question was limited by the small number of households that chose to answer the question, and does not incorporate harvest group or fishing information (Table 14). Households that did not fish were included with all other households that answered the needs met question.

The 2011 fall chum salmon commercial harvest for the entire Alaska portion of the Yukon Area was 238,979 fish, the largest since 1995; commercial fishermen in the Lower Yukon Area harvested 96% fall chum salmon and fishermen in Subdistricts 5-B and 5-C and District 6 harvested the remainder. Commercial harvests of coho salmon also occurred in 2011 and totaled 76,303 fish (Estensen and Borba 2011). The Lower Yukon Area commercial harvest represented 91% of the total coho salmon harvest. Subsistence harvests of fall chum salmon were just below the recent five year average (2006–2010; Appendix B3), and coho salmon subsistence harvests were 28% below the recent five year averages (Appendix B4). The number of fall chum salmon fed to dogs was the second largest within the recent five years (Appendix B9).

A total of 4,156 Chinook salmon were incidentally harvested and reported as caught but not sold during commercial chum salmon openings in Districts 1 and 2, including 66 Chinook salmon that were caught but not sold during the fall season (JTC 2012). Salmon reported on fish tickets as “Not Sold/Personal Use” were not added to subsistence harvest estimates in surveyed communities. Personal Use in this case means fish taken home for one’s own household’s use and is not referring to the designated fishery of personal use. In surveyed communities, salmon taken home from commercial periods for subsistence were included in the household’s subsistence harvest (Figure 4, questions 7 and 9). Commercially related harvest information was sometimes difficult to obtain. Surveyors often contacted the household member that processed and put up the fish. This person would know how many salmon the household harvested, but may not have been involved in catching the salmon and therefore not know the exact number of salmon taken from commercial or subsistence periods. Chinook salmon estimated from survey responses as retained from commercial fisheries was less than the number of Chinook salmon reported on fish tickets. However, retention of other species (summer chum, fall chum and coho salmon) was not reported on fish tickets, but was reported on surveys. In permit communities, salmon reported on fish tickets as “Not Sold/Personal Use” are added to community harvests as commercial related salmon (Table 1).

Commercial fishermen in Districts 1 and 2 gave 290 incidentally harvested Chinook salmon to Kwik’pak Fisheries LLC. These Chinook salmon were processed and donated by Kwik’pak Fisheries to other communities along the river. Donations consisted of approximately 75 fish to Emmonak, 10 fish to Kotlik, and 65 fish to Huslia. In addition, 140 Chinook salmon were donated to First Nations people in Whitehorse, Canada (Jack Schultheis, General Manager, Kwik’pak Fisheries LLC, Emmonak, personal communication). These fish were not added to subsistence harvest totals.

A question was added to the survey in 2010 to gain more information about Chinook salmon harvest by gear types (Figure 4, question 8A). During consideration of mesh size regulations by the Alaska Board of Fisheries (BOF) in 2009, concerns were raised about the number of Chinook salmon harvested by fish wheels. Response rates to the gear question were very high in 2010 and 2011, with over 95% of households that harvested Chinook salmon identifying the gear type(s) they used. An estimated 8% of Chinook salmon was harvested using fish wheels in 2010 and 12% were harvested using fish wheels in 2011.

## SALMON SURVEY AND AMOUNTS NECESSARY FOR SUBSISTENCE

Several inseason methods were used to evaluate salmon runs and to assess progress of fishermen in meeting their subsistence needs. Managers maintained contact with fishermen inseason to obtain information on fishing success in communities and to remain aware of impacts of fishery openings and closures on subsistence harvests. YRDFA conducted weekly inseason teleconferences to provide fishermen in the entire Yukon River drainage (including Canada) an opportunity to discuss the ongoing run assessments with fisheries managers, in an ongoing program since 1992. Each weekly teleconference typically consisted of a roll call of communities along the river during which community members participating in the call gave a brief report on local fishing and river conditions. In some communities, a resident conducted weekly interviews inseason with a subsample of fishermen and summarized their assessment of harvest goals, fishing conditions, and quality of subsistence catch (Hale et al. 2010; YRDFA 2011).

While inseason communications and assessments provide valuable information on salmon runs and subsistence fisheries, they do not provide a post season perspective on the success of fishing and nonfishing households in meeting their needs for all salmon species. Methods of assessing the relative success of Yukon Area fishermen include comparing the annual drainagewide estimated subsistence harvest to historical averages and to the "amounts (reasonably) necessary for subsistence" (ANS) harvest ranges established by the BOF (ADF&G 2001). The ANS represents the historical harvest drainagewide and not the harvest of salmon species by individuals, communities, or sections of the drainage. The annual subsistence harvest amounts used for comparison to ANS ranges include salmon harvests from permits, survey estimates, test fisheries and retained from commercial fisheries. Salmon harvested in the personal use fishery are not included. Coastal communities were included in determining Yukon Area ANS ranges as these communities harvest most of their salmon from Yukon River drainage salmon stocks. The ANS levels outlined in regulation 5 AAC 01.236 are 45,500–66,704 Chinook, 83,500–142,192 summer chum, 89,500–167,900 fall chum, and 20,500–51,980 coho salmon (Figures 7–10). In 2011, only the subsistence harvest of summer chum salmon was within its ANS range, harvest of each of the other salmon species were below their respective ANS ranges.

Salmon harvest estimates based on survey results indicated the Chinook salmon subsistence harvest was 10% below the recent five year average (2006–2010) and 23% below the previous five year average (2001–2005; Figure 7; Appendix B1). The 2011 summer chum salmon subsistence harvest was 4% above the recent five year average and 16% above the previous five year average (Appendix B2; Figure 8). The 2011 harvest of fall chum salmon was 2% below the recent five year average and 51% above the previous five year average (Figure 9; Appendix B3). Coho salmon harvest in 2011 was nearly 28% below the recent five year average and 44% below the previous five year average (Figure 10; Appendix B4). Overall, the 2011 Yukon Area subsistence salmon harvest of 229,546 Chinook, summer chum, fall chum, and coho salmon

combined (Appendices B1–B4) was approximately 3% below the recent five year average (2006–2010) of 237,065 fish and 9% above the previous five year average (2001–2005). This 10 year period includes years with very poor harvests and fishing restrictions, such as the closures during the first pulse of Chinook salmon in 2009 and the low returns of fall fish in the 2002 season (Figures 5 and 7–10).

Pink salmon exhibit a two year cycle with years of low (odd year) and high (even year) abundance (ADF&G 2011); the pink salmon run was expected to be low in 2011. Harvest of pink salmon in 2011 was estimated to be 2,291 fish and was 13% above the odd-year average for 2001–2009 and 51% below the all year (both odd and even-year) average for 2001–2010 (Appendix B8). Pink salmon are often abundant in the Lower Yukon Area; however they are not widely targeted for subsistence harvest.

Although personal use harvest is not taken into account in ANS it is accounted for in the Yukon management area. Personal use harvests in 2011 were below the recent five year average (2006–2010) for Chinook salmon, above average for summer chum salmon, and below average for both fall chum and coho salmon (Appendix B5).

The postseason subsistence survey results are unique in breaking down percent needs met by species and community (Table 14). The percentage of households that reported meeting over 50% of their needs for each species in 2011 was above the recent five year average for all species. Closures on the first pulse of Chinook salmon appear to have affected households less severely in 2011 than in 2009 when closures on the first pulse also occurred (Appendix B11).

Ideally, a strong run would be reflected in a strong subsistence harvest or at least that most households should report meeting subsistence needs. However, it has been observed that approximately 20–30% of households report they were not able to get enough salmon even in years with very good escapement (Appendix B11; Estensen et al. 2012). Analysis of responses to the needs met question (Figure 4, question 14) in this project is hampered by the low number of households that choose to respond and the qualitative nature of the question. The percentages of subsistence needs being met were calculated by comparing household responses to harvest, salmon received and needs met questions (Figure 4; Table 14; Appendix B11).

During the annual survey, households are asked to evaluate whether they met their subsistence needs for salmon (Figure 4, question 14). In 2011, surveyors often had difficulty getting responses to the "usually get" question format and were instructed to try several alternative questions ("How many would you put up in a good year?" or "How many did you get last year, and was that enough for the winter?" etc.). Approximately 66% of contacted households replied with Chinook salmon information in 2011, compared to 84% of contacted households in 2008 who provided responses to the previous version of this question (Appendix B11). Prior to 2009, if a household harvested zero fish of a species that they usually fish for, a response of zero percent of needs met was often entered. A household previously saying they met "0%" of their needs could now add information about unmet needs by saying they usually get, for example, one fish or 10 fish. If no answer was given, the question was left blank. Households had various reasons for not fully answering this question, including new households without an established harvest pattern, households that had undergone changes in the number of people, households that refused or were unable to provide an estimate and households that usually receive a highly variable number of fish each year or had not received their fish yet.

If the household fished and caught fewer fish than they usually harvest, then surveyors asked why (Figure 4, question 14; "Comment"). In 2011 these "needs met" comments were included in the database and categorized, allowing for easier summarization. Of the 109 households that provided a comment about why they were unable to meet their needs for Chinook salmon nearly one third (34) were unable to get enough Chinook salmon due to a variety of factors (fishing schedule, bad water or weather conditions, poor run, limited schedule). An equal number of households (34) said they were unable to get enough Chinook salmon due to lack of equipment (net, boat, motor, smokehouse, freezer). Over one third (41) were unable to meet their needs for Chinook salmon either due to personal reasons (health, travel, no time to fish, no crew to help) or that the year was bad for unspecified reasons. An additional 42 households commented that the run was good and they met their needs. More households (53) provided nonspecific comments such as the household "gets whatever they get" and they did not know the number of salmon that they usually harvest or receive.

Aside from irrelevant or unclear comments, 75 households provided a comment about summer chum salmon: that it was a good year (20), bad year (19), personal reasons that needs were not met (15), equipment problems (9), fishing/work schedule (4), weather (4), and poor summer chum salmon run (3). Of the 78 households that commented on fall chum or coho salmon, the largest number of comments (28) was that the households were unable to get enough fall fish due to personal reasons. Several households (21) said that it was a good year, while others were unable to get fall fish due to equipment (15), bad year (6), poor weather (5), or fishing schedules (3).

Access to salmon species varies throughout the Yukon River Area due to species distribution, travel patterns and run timing. Fishermen in the Upper Yukon Area are more limited in their options for salmon harvest. Large numbers of summer chum salmon spawn in the Tanana River, and are not usually available in good numbers for subsistence harvest to communities located in Subdistricts 5-C and 5-D above the confluence of the Yukon and Tanana rivers (Figure 1, Appendix B2). Coho salmon have a similar distribution as summer chum salmon and are found throughout the Tanana River drainage but are less abundant. Coho salmon run timing also often coincides with the formation of river ice. Lack of harvest opportunity for coho salmon is one factor contributing to the low number of coho salmon that are harvested annually (Appendix B1–B4). Salmon stocks are mixed until they segregate by the left and right bank orientation (e.g., Subdistricts 4-B, 4-C, 5-A and 5-B), or enter tributaries or areas that predominantly have only one salmon species present at a time. Subdistrict 5-D only has a Chinook salmon run followed by a fall chum salmon run, with a period between the two runs when very few salmon are present. Pink salmon are only available and harvested in large numbers in the Lower Yukon Area (Appendix B8).

Every year, a small number of fishermen travel to the Yukon River to fish in or near surveyed communities but are not present in the communities during the fall survey. These households are contacted by phone or mail at their winter residence and their harvest is included with the community nearest to where they fish. In 2011, this group consisted of 24 households and represents less than 1% of the total number of households. Information on this group is updated when possible but may be difficult to obtain if the household is not well known by residents in the nearby community.

## Nonsalmon Species

Harvest of nonsalmon fish species was most likely underestimated by this project. The stratification and harvest estimation system is based on a household's historical salmon harvest and may not adequately represent households that fish predominantly for other species. The correlation between the level of salmon harvest and the level of nonsalmon harvest has not been determined. In order to improve the harvest estimates of nonsalmon species, additional strata and sampling designs would need to be identified and developed (Borba and Hamner 1998). Additionally, the survey is timed to occur at the end of salmon fishing season, whereas nonsalmon species are often harvested throughout the fall and during the winter under the ice (Brown et al. 2005). During the annual survey, households were asked to estimate their harvest of nonsalmon species from the previous twelve months (Figure 4, question 15). This elevates the concern for recall as an error in the estimates. Methods to estimate community harvests of Arctic lamprey or to account for differences between reported subsistence harvests have not been developed for either the subsistence survey (Table 13) or the lamprey postcards (Table 17).

## Dogs

The estimated amount of all salmon species (summer and fall chum and coho salmon) fed whole to dogs from surveyed communities and permit areas was 11% higher than the recent five year average. Much of the increase was due to the large number of fall chum salmon harvested in 2011 in District five surveyed communities, which was 35% higher than the recent five year average (Appendix B9). The estimated number of fish fed to dogs in the Yukon Area was higher in 2011 than the recent five year average for summer chum (8%) and fall chum (19%) salmon, but coho salmon was lower than the recent five year average by 35% (Appendix B9). Fluctuation in the amount of salmon fed to dogs is partially due to owners feeding nonsalmon fish species, meat, or commercial dog food. The number of dogs in the Yukon Area (Appendix B9) in 2011 was 5% greater than the recent five year average and was the largest estimated number of dogs (5,353) from surveyed communities since 2006 (5,885 dogs; Bue et al. 2011). Households also feed salmon that are not fit for human consumption to dogs. The reported number of salmon fed to dogs due to poor flesh quality was very small (192 fish), and included 41 Chinook salmon that were fed to dogs from surveyed communities (Appendix A6).

## Survey Comments

During the survey, households have the opportunity to comment on any topic related to fishing they felt was important (Figure 4; question 21). The most numerous comments from the survey regarded fishing windows or fishing schedules that restricted openings, resulting in missed opportunity when salmon were running through the local fishing area (186 comments). Households also wanted earlier, longer, or more commercial openings (24), including 11 households that were opposed to the restrictions on the commercial sale of Chinook salmon. Some households (38) were pleased with the 2011 season and ADF&G management actions that included dividing Subdistrict 5-D into smaller areas, distribution of test fish in communities, and management efforts to increase escapement and conserve salmon. More fishermen commented that 2011 was a good year (64) than a bad year (42). Of the 106 households that commented on whether 2011 was good or bad, more households from Lower Yukon communities (60%) said the season was good than households from Upper Yukon communities (40%). Other issues that generated comments were opposition to the 7.5 inch mesh change or difficulties in changing mesh sizes (30) and improvements to sonar and test fishing projects (11). Fishermen also

commented that rain and bad weather conditions during processing caused the most loss of salmon. (Appendix A6).

Fishermen commented on wanting to change the specific hours of fishing scheduled for their district and allow more fishing time. The surveyors heard many comments to the effect that fishermen only catch what they need for subsistence and then stop fishing and that subsistence fishing restrictions were unnecessary. For some fishermen, the windows schedule prevented them from catching all their fish at once, which impacted processing and storage of fish. Short openings also stretched out the season, an important consideration when gasoline costs and work schedules limit the number of possible trips to a fish camp. Fishermen commented that by restricting fishing times, the windows schedule reduced the ability of fishermen to adapt to circumstances such as poor weather, water levels, or work schedules; they also expressed concern that it was difficult to know when fishing was open and that greater communication of schedules and management might help.

Overall harvests of summer and fall chum salmon were higher in 2011 than in 2010, but the Chinook and coho salmon harvest were 8% and 5% lower than 2010. However, the harvest of Chinook salmon in 2011 was 21% higher than 2009, when the first pulse closure management strategy was first enacted. While opportunities to harvest Chinook salmon were deliberately reduced through subsistence fishing closures in 2009, 2010, and 2011, harvest of Chinook salmon in 2011 may also have been lower compared with 2010 due to voluntary conservation efforts. Residents of the community of Eagle coordinated a reduced harvest plan (Dayna Green, Commercial Fisheries Biologist, ADF&G, Fairbanks, personal communication), and harvested only slightly more Chinook salmon in 2011 than in 2009, for their second lowest Chinook salmon harvest in the recent 10 years (2001–2010). Several other communities also harvested significantly fewer Chinook salmon than their recent five year (2006–2010) and previous five year averages (2001–2005, Appendix B1). Harvests of all species, except summer chum salmon, were lower than their respective five year averages (Appendices B1–B4). The poor Chinook salmon run necessitated closures in the summer season, however the subsistence harvest of summer chum salmon was the largest since 2006 (Appendix B2). The large subsistence harvest of summer chum salmon was coupled with the largest commercial harvest of summer chum salmon since 1992. Coho salmon subsistence harvests may have been reduced in 2011 due to a larger than average commercial harvest in the Lower Yukon relative to the size of the run (Estensen and Borba 2011), or other reasons such as run timing and timing of freeze up. As is typical, most of the subsistence harvest of coho salmon took place in the Upper Yukon Area (Appendix B4), in contrast with commercial harvest which is normally largest in the Lower Yukon Area.

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# TABLES AND FIGURES

Table 1.–Subsistence and personal use salmon harvest estimates, including commercially related and test fishery harvests provided for subsistence use, and related information, Yukon Area, 2011.

| Community | Survey Date or Permit[b] | Number of Fishing Households[c] | Number of Dogs[d] | Estimated Harvest | | | | Primary Gear Used[a] | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Chinook | Summer Chum | Fall Chum | Coho | Set Gillnet | Drift Gillnet | Fish Wheels |
| Hooper Bay[e] | 9/14-17 | 93 | 243 | 252 | 13,460 | 267 | 0 | 92 | 1 | 0 |
| Scammon Bay | 9/12-14 | 57 | 98 | 517 | 4,845 | 48 | 55 | 53 | 4 | 0 |
| Coastal District Total | | 150 | 341 | 769 | 18,305 | 315 | 55 | 145 | 5 | 0 |
| Nunam Iqua[f] | 9/12-13 | 20 | 46 | 250 | 2,077 | 51 | 23 | 20 | 0 | 0 |
| Alakanuk[e] | 9/9-12 | 80 | 161 | 1,464 | 7,447 | 881 | 431 | 28 | 52 | 0 |
| Emmonak[e, g] | 9/6-9 | 91 | 147 | 2,172 | 12,468 | 1,540 | 472 | 10 | 81 | 0 |
| Kotlik[e] | 9/10-12 | 76 | 148 | 2,369 | 6,598 | 962 | 201 | 37 | 39 | 0 |
| District 1 Subtotal | | 267 | 502 | 6,255 | 28,590 | 3,434 | 1,127 | 95 | 172 | 0 |
| Mountain Village[e] | 9/21-22 | 109 | 171 | 2,063 | 9,355 | 800 | 261 | 8 | 101 | 0 |
| Pitkas Point | 9/23 | 12 | 33 | 246 | 585 | 30 | 37 | 0 | 12 | 0 |
| St. Mary's[g] | 9/19-24 | 76 | 143 | 1,734 | 6,760 | 611 | 230 | 0 | 76 | 0 |
| Pilot Station[e] | 9/24-26 | 63 | 51 | 1,340 | 4,182 | 575 | 145 | 4 | 59 | 0 |
| Marshall | 9/27-28 | 61 | 126 | 2,686 | 3,810 | 562 | 150 | 0 | 61 | 0 |
| District 2 Subtotal | | 321 | 524 | 8,069 | 24,692 | 2,578 | 823 | 12 | 309 | 0 |
| Russian Mission | 9/28-29 | 47 | 121 | 1,550 | 1,225 | 11 | 0 | 15 | 32 | 0 |
| Holy Cross | 9/28-29 | 35 | 83 | 2,231 | 363 | 94 | 0 | 9 | 26 | 0 |
| Shageluk | 9/27-9/28 | 17 | 76 | 353 | 1,145 | 249 | 36 | 9 | 8 | 0 |
| District 3 Subtotal | | 99 | 280 | 4,134 | 2,733 | 354 | 36 | 33 | 66 | 0 |
| Lower Yukon River Total | | 687 | 1,306 | 18,458 | 56,015 | 6,366 | 1,986 | 140 | 547 | 0 |
| Anvik | 9/26-27 | 20 | 63 | 1,052 | 220 | 202 | 19 | 8 | 12 | 0 |
| Grayling | 9/25-26 | 35 | 99 | 1,374 | 838 | 1,152 | 119 | 15 | 20 | 0 |
| Kaltag | 10/6-8 | 41 | 66 | 2,488 | 163 | 196 | 258 | 0 | 41 | 0 |
| Nulato | 10/8-10 | 58 | 50 | 1,538 | 246 | 652 | 118 | 7 | 51 | 0 |
| Koyukuk | 10/5-6 | 34 | 91 | 1,349 | 890 | 1,388 | 137 | 2 | 32 | 0 |
| Galena | 10/10-13 | 67 | 259 | 1,434 | 3,414 | 2,739 | 1,013 | 32 | 35 | 0 |
| Ruby | 10/24-25 | 14 | 70 | 482 | 775 | 592 | 312 | 11 | 0 | 3 |
| District 4 Yukon River Subtotal | | 269 | 698 | 9,717 | 6,546 | 6,921 | 1,976 | 75 | 191 | 3 |
| Huslia | 10/9-11 | 17 | 151 | 121 | 3,166 | 183 | 70 | 17 | 0 | 0 |
| Hughes | 10/7-9 | 6 | 71 | 10 | 954 | 64 | 13 | 6 | 0 | 0 |
| Allakaket | 10/5-7 | 6 | 91 | 42 | 2,368 | 92 | 13 | 6 | 0 | 0 |
| Alatna | 10/5 | 4 | 4 | 3 | 132 | 0 | 0 | 4 | 0 | 0 |
| Bettles | phone | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Koyukuk River Subtotal | | 33 | 330 | 176 | 6,620 | 339 | 96 | 33 | 0 | 0 |
| District 4 Subtotal | | 302 | 1,028 | 9,893 | 13,166 | 7,260 | 2,072 | 108 | 191 | 3 |

-continued-

Table 1.–Page 2 of 3.

| Community | Survey Date or Permit[a] | Number of Fishing Households[b] | Number of Dogs[c] | Estimated Harvest | | | | Primary Gear Used[d] | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Chinook | Summer Chum | Fall Chum | Coho | Set Gillnet | Drift Gillnet | Fish Wheels |
| Tanana | 10/14-16 | 55 | 334 | 2,936 | 4,381 | 21,728 | 312 | 39 | 0 | 16 |
| Rampart | permits | 4 | 2 | 201 | 67 | 340 | 0 | 4 | 0 | 0 |
| Fairbanks NSB[h] | permits | 52 | 159 | 2,186 | 688 | 1,696 | 2 | 48 | 0 | 4 |
| Stevens Village[i] | 10/16-17[i] | 5 | 86 | 415 | 43 | 911 | 0 | 5 | 0 | 0 |
| Birch Creek | phone | 3 | 12 | 49 | 6 | 0 | 0 | 3 | 0 | 0 |
| Beaver | 10/17-18 | 13 | 28 | 356 | 393 | 122 | 0 | 11 | 0 | 2 |
| Fort Yukon | 10/26-28 | 76 | 616 | 2,472 | 1,297 | 7,188 | 1,040 | 38 | 1 | 37 |
| Circle | permits | 9 | 74 | 297 | 48 | 299 | 0 | 3 | 0 | 6 |
| Central | permits | 3 | 6 | 66 | 0 | 0 | 0 | 2 | 0 | 1 |
| Eagle[e] | permits | 32 | 273 | 728 | 2 | 17,455 | 1 | 23 | 0 | 9 |
| Other District 5[j] | permits | 15 | 105 | 777 | 784 | 208 | 0 | 15 | 0 | 0 |
| District 5 Yukon River Subtotal | | 267 | 1,695 | 10,483 | 7,709 | 49,947 | 1,355 | 191 | 1 | 75 |
| Venetie | 10/18-20 | 14 | 181 | 10 | 0 | 1,938 | 34 | 14 | 0 | 0 |
| Chalkyitsik | 10/28-29 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chandalar and Black Rivers Subtotal | | 14 | 206 | 10 | 0 | 1,938 | 34 | 14 | 0 | 0 |
| District 5 Subtotal | | 281 | 1,901 | 10,493 | 7,709 | 51,885 | 1,389 | 205 | 1 | 75 |
| Manley | permits | 10 | 73 | 287 | 142 | 2,333 | 1,482 | 9 | 0 | 1 |
| Minto | permits | 6 | 118 | 61 | 27 | 1,500 | 0 | 5 | 0 | 1 |
| Nenana[k] | permits | 25 | 120 | 681 | 477 | 5,268 | 3,304 | 14 | 0 | 11 |
| Healy | permits | 3 | 33 | 0 | 0 | 950 | 944 | 3 | 0 | 0 |
| Fairbanks NSB[k] | permits | 52 | 362 | 419 | 618 | 4,664 | 1,341 | 45 | 0 | 7 |
| Other District 6[l] | permits | 27 | 71 | 8 | 0 | 8 | 3 | 21 | 0 | 0 |
| District 6 Tanana River Subtotal[k] | | 123 | 777 | 1,456 | 1,264 | 14,723 | 7,074 | 97 | 0 | 20 |
| Upper Yukon River Total | | 706 | 3,706 | 21,842 | 22,139 | 73,868 | 10,535 | 410 | 192 | 98 |
| Survey Community Subtotal | | 1,305 | 3,957 | 32,586 | 85,991 | 43,052 | 4,675 | 503 | 744 | 58 |
| Subsistence Permit Subtotal[m] | | 200 | 1,396 | 5,265 | 2,414 | 32,723 | 6,127 | 158 | 0 | 38 |
| Subsistence Test Fishery Subtotal[n] | | - | - | 2,777 | 7,615 | 2,777 | 824 | - | - | - |
| District 6 Commercial Retained[o] | | - | - | 352 | 0 | 1,650 | 718 | - | - | - |
| Subsistence Harvests Subtotal | | 1,505 | 5,353 | 40,980 | 96,020 | 80,202 | 12,344 | 661 | 744 | 96 |
| Personal Use Permit Subtotals | | 38 | - | 89 | 439 | 347 | 232 | 34 | 0 | 2 |
| Alaska, Yukon River Total[p, q] | | 1,393 | 5,012 | 40,300 | 78,154 | 80,234 | 12,521 | 550 | 739 | 98 |
| Alaska, Yukon Area Total | | 1,543 | 5,353 | 41,069 | 96,459 | 80,549 | 12,576 | 695 | 744 | 98 |
| Species & gear percentage of Yukon Area Total | | | | 18% | 42% | 35% | 5% | 45% | 48% | 6% |

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[a] Data collected by Alaska Department of Fish and Game (ADF&G), Division of Commercial Fisheries using surveys and fishing permits. Survey data are expanded for number of fishing households, number of dogs, primary gear type and harvest. Permit data are unexpanded, and are from all permits received as of February 15, 2012.

[b] Estimated number of households that fished in surveyed communities or number of permit households who reported fishing in permit required areas. Does not include 27 Tolovana River pike permits issued in 2011.

[c] The number of dogs is based on survey information or from permits issued. Information about dogs is not collected on Personal Use permits.

[d] Primary gear is determined by the larger number of salmon harvested by gear types in the household. Number of households using each gear type is estimated in surveyed communities. Totals for primary gear and number of fishing households may not be equal due to a small number of fishermen using unknown or 'Other' gear types.

[e] Includes salmon given to communities from test fisheries.

[f] Formerly known as Sheldon or Sheldon's Point.

[g] Includes 10 Chinook and 30 summer chum salmon donated to Kwik'pak Fisheries from the Lower Yukon Test Fishery and donated to unknown communities.

[h] Fairbanks North Star Borough (FNSB) households that obtained a permit and indicated they fished in the Yukon River permit required area.

[i] Permit harvest information from Stevens Village residents was used to complement the information obtained by the survey.

[j] "Other District 5" includes residents of Anchorage, Manley, Minto, Nenana, Tanana, and Wiseman, and the Upper Tanana River drainage community of Tok who obtained a household permit and fished in a Yukon River permit required area.

[k] Includes harvest from the personal use permit area and salmon retained from commercial fishing from households that fished in the Tanana River.

[l] "Other District 6" includes residents of the Upper Tanana River drainage communities of Delta Junction, Dot Lake, Northway, Tanacross, and Tok, and the communities of Anderson and Eagle River who obtained a permit and fished in the Tanana River.

[m] Subsistence permit subtotal does not include Stevens Village permit information or commercially retained salmon from District 6.

[n] Test fish given away for subsistence use. Includes 5 Chinook and one fall chum salmon given to the permit community of Eagle from the Eagle Sonar test fish drift gillnet project.

[o] District 6 "Commercial Retained" included fish caught but not sold during commercial fishing periods but retained for subsistence use. These salmon are added to the Fairbanks NSB and Nenana community harvests.

[p] Does not include Coastal District for use in U.S./Canada negotiations.

[q] Based on survey estimates, 2,726 Chinook, 656 summer chum, 217 fall chum, and 82 coho salmon were retained from commercial harvests in Districts 1 and 2. Commercially related salmon are included in subsistence harvests from surveyed communities.

Table 2.–Estimated number of households with dogs, households that feed fish to dogs, numbers of dogs, and corresponding confidence intervals (CI 95%) for surveyed communities, Yukon Area, 2011.

| | | | Number of Households with Dogs | | Number of Households that Feed Fish to Dogs | | Number of Dogs | |
|---|---|---|---|---|---|---|---|---|
| Community | Total Households | Households Contacted | Estimated Total | CI 95% | Estimated Total | CI 95% | Estimated Total | CI 95% |
| Hooper Bay | 209 | 76 | 114 | 22 | 0 | 0 | 243 | 78 |
| Scammon Bay | 92 | 35 | 60 | 13 | 0 | 0 | 98 | 28 |
| Coastal District | 301 | 111 | 174 | 25 | 0 | 0 | 341 | 83 |
| Nunam Iqua | 36 | 27 | 22 | 4 | 0 | 0 | 46 | 15 |
| Alakanuk | 133 | 54 | 77 | 14 | 0 | 0 | 161 | 34 |
| Emmonak | 166 | 91 | 95 | 12 | 2 | 1 | 147 | 21 |
| Kotlik | 104 | 40 | 70 | 14 | 5 | 6 | 148 | 72 |
| District 1 | 439 | 212 | 264 | 23 | 7 | 6 | 502 | 84 |
| Mountain Village | 163 | 63 | 95 | 19 | 1 | 1 | 171 | 37 |
| Pitkas Point | 28 | 16 | 14 | 3 | 1 | 1 | 33 | 13 |
| St. Mary's | 121 | 47 | 67 | 16 | 1 | 1 | 143 | 53 |
| Pilot Station | 109 | 51 | 48 | 11 | 3 | 4 | 51 | 11 |
| Marshall | 70 | 27 | 51 | 16 | 1 | 1 | 126 | 27 |
| District 2 | 491 | 204 | 275 | 32 | 7 | 4 | 524 | 72 |
| Russian Mission | 66 | 25 | 48 | 11 | 3 | 5 | 121 | 68 |
| Holy Cross | 56 | 28 | 39 | 6 | 2 | 3 | 83 | 22 |
| Shageluk | 31 | 17 | 25 | 1 | 3 | 1 | 76 | 8 |
| District 3 | 153 | 70 | 112 | 13 | 8 | 6 | 280 | 71 |
| Anvik | 28 | 24 | 23 | 0 | 1 | 0 | 63 | 4 |
| Grayling | 48 | 17 | 35 | 10 | 7 | 8 | 99 | 38 |
| Kaltag | 61 | 16 | 38 | 15 | 1 | 1 | 66 | 33 |
| Nulato | 76 | 23 | 30 | 14 | 0 | 0 | 50 | 30 |
| Koyukuk | 51 | 16 | 29 | 15 | 6 | 5 | 91 | 44 |
| Galena | 169 | 64 | 125 | 16 | 8 | 6 | 259 | 81 |
| Ruby | 57 | 19 | 25 | 13 | 1 | 0 | 70 | 29 |
| Huslia | 82 | 28 | 49 | 14 | 8 | 5 | 151 | 46 |
| Hughes | 35 | 25 | 16 | 5 | 2 | 1 | 71 | 32 |
| Allakaket | 65 | 25 | 27 | 11 | 5 | 3 | 91 | 21 |
| Alatna | 9 | 6 | 3 | 1 | 1 | 0 | 4 | 1 |
| Bettles | 24 | 13 | 13 | 3 | 0 | 0 | 13 | 3 |
| District 4 | 705 | 276 | 413 | 39 | 40 | 13 | 1,028 | 129 |
| Tanana | 99 | 30 | 41 | 15 | 17 | 7 | 334 | 139 |
| Stevens Village | 15 | 9 | 11 | 2 | 2 | 0 | 86 | 11 |
| Birch Creek | 16 | 6 | 5 | 5 | 0 | 0 | 12 | 13 |
| Beaver | 31 | 24 | 13 | 3 | 3 | 2 | 28 | 11 |
| Fort Yukon | 219 | 72 | 132 | 22 | 37 | 17 | 616 | 246 |
| Venetie | 78 | 28 | 53 | 12 | 22 | 12 | 181 | 62 |
| Chalkyitsik | 21 | 12 | 17 | 2 | 0 | 0 | 25 | 2 |
| District 5 | 479 | 181 | 272 | 30 | 81 | 22 | 1,282 | 290 |
| Survey Totals | 2,568 | 1,054 | 1,510 | 69 | 143 | 27 | 3,957 | 353 |

*Note:* The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.

Table 3.–Household and dog information reported by subsistence and personal use permits issued and returned, listed by fishery and by community of residence, Yukon Area, 2011.

| | Permit Information[a] | | | | Reported Household Information (based on permits issued) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Permits[b] | | | | | | | | | |
| Subsistence Permits | Issued | Returned | Percent Returned | Numbers of Permits Returned that Fished[c] | Number of People | Number of Fishermen | Number of Households with Dogs | Number of Dogs | Number of Households Feeding Whole Salmon to Dogs | Number of Whole Salmon Fed to Dogs |
| Central | 6 | 6 | 100% | 3 | 14 | 10 | 4 | 6 | 2 | 0 |
| Circle | 23 | 21 | 91% | 9 | 62 | 36 | 17 | 74 | 8 | 289 |
| Eagle | 42 | 42 | 100% | 32 | 131 | 82 | 28 | 273 | 19 | 15,470 |
| Rampart | 4 | 4 | 100% | 4 | 8 | 8 | 2 | 2 | 1 | 0 |
| Fairbanks (FNSB)[d] | 171 | 169 | 99% | 92 | 525 | 373 | 64 | 521 | 21 | 4,063 |
| Healy | 5 | 5 | 100% | 3 | 13 | 15 | 5 | 33 | 3 | 1,894 |
| Manley | 15 | 15 | 100% | 11 | 35 | 28 | 11 | 75 | 7 | 3,552 |
| Minto | 42 | 39 | 93% | 12 | 125 | 76 | 22 | 207 | 15 | 1,200 |
| Nenana | 43 | 41 | 95% | 25 | 313 | 66 | 30 | 122 | 23 | 4,404 |
| Stevens Village[e] | 5 | 5 | 100% | 2 | 16 | 7 | 3 | 23 | 1 | 450 |
| Upper Tanana Villages[f] | 48 | 46 | 96% | 28 | 115 | 75 | 29 | 72 | 4 | 0 |
| Other Subsistence[g] | 14 | 14 | 100% | 8 | 37 | 27 | 5 | 11 | 1 | 27 |
| Subsistence Permit Subtotal | 418 | 407 | 97% | 229 | 1,394 | 803 | 220 | 1,419 | 105 | 31,349 |
| Personal Use Permits | | | | | | | | | | |
| Fairbanks (FNSB)[d] | 71 | 68 | 96% | 35 | 195 | 133 | - | - | - | - |
| Other Personal Use[h] | 3 | 3 | 100% | 3 | 6 | 5 | - | - | - | - |
| Personal Use Permit Subtotal | 74 | 71 | 96% | 38 | 201 | 138 | - | - | - | - |
| Permit Totals | 492 | 478 | 97% | 267 | 1,595 | 941 | 220 | 1,419 | 105 | 31,349 |

[a] Permits returned as of February 15, 2012.

[b] Includes 37 households that were "issued" permits for more than one area and eight permit holders that were issued an SE and SEU permit to track harvest above and below Eagle sonar.

[c] Includes nine households that "fished" in two different areas and four permit holders that fished above and below the Eagle sonar.

[d] Fairbanks North Star Borough (FNSB) includes residents from the communities of Ester, Fairbanks, North Pole, Salcha, and Two Rivers.

[e] Stevens Village is a surveyed community, but some residents fish in permit areas. Therefore this permit information is not included in any final harvest estimates to avoid double counting.

[f] Upper Tanana River communities include residents from the communities of Delta Junction, Dot Lake, Northway, Tanacross, and Tok.

[g] Includes residents from Anchorage, Clear, Denali Park, Tanana, Wasilla, Willow, and Wiseman who were issued a subsistence fishing permit for the Yukon, Tanana, Tolovana, Kantishna, and Upper Koyukuk rivers.

[h] Includes residents of Delta Junction and Nenana that applied for a personal use permit.

Table 4.–Estimated number of salmon retained for dog food from subsistence harvests with corresponding confidence intervals (CI 95%) for surveyed communities, Yukon Area, 2011.

| | | | Summer Chum Salmon | | Fall Chum Salmon | | Coho Salmon | | Total Salmon[a] |
|---|---|---|---|---|---|---|---|---|---|
| Community | Total Households | Households Contacted[b] | Estimated Total | CI 95% | Estimated Total | CI 95% | Estimated Total | CI 95% | Estimated Total |
| Hooper Bay | 209 | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scammon Bay | 92 | 34 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Coastal District | 301 | 106 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nunam Iqua | 36 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alakanuk | 133 | 54 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Emmonak | 166 | 91 | 38 | 25 | 0 | 0 | 0 | 0 | 38 |
| Kotlik[c] | 104 | 40 | 47 | 47 | 0 | 0 | 0 | 0 | 47 |
| District 1 | 439 | 212 | 85 | 72 | 0 | 0 | 0 | 0 | 85 |
| Mountain Village | 163 | 62 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Pitkas Point | 28 | 16 | 30 | 24 | 24 | 19 | 24 | 19 | 78 |
| St. Mary's | 121 | 46 | 0 | 0 | 46 | 32 | 91 | 63 | 137 |
| Pilot Station | 109 | 51 | 81 | 125 | 0 | 0 | 0 | 0 | 81 |
| Marshall | 70 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 2 | 491 | 200 | 111 | 127 | 70 | 37 | 115 | 66 | 296 |
| Russian Mission | 66 | 25 | 0 | 0 | 9 | 15 | 0 | 0 | 9 |
| Holy Cross | 56 | 27 | 78 | 120 | 0 | 0 | 0 | 0 | 78 |
| Shageluk | 31 | 15 | 450 | 272 | 0 | 0 | 0 | 0 | 450 |
| District 3 | 153 | 67 | 528 | 297 | 9 | 15 | 0 | 0 | 537 |
| Anvik | 28 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grayling | 48 | 16 | 160 | 272 | 0 | 0 | 0 | 0 | 160 |
| Kaltag | 61 | 16 | 0 | 0 | 0 | 0 | 120 | 96 | 120 |
| Nulato | 76 | 22 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Koyukuk | 51 | 16 | 793 | 296 | 465 | 541 | 113 | 88 | 1,371 |
| Galena | 169 | 63 | 2,848 | 2,684 | 214 | 230 | 617 | 1,018 | 3,679 |
| Ruby | 57 | 20 | 698 | 0 | 580 | 0 | 300 | 0 | 1,578 |
| Huslia | 82 | 27 | 2,770 | 265 | 100 | 0 | 0 | 0 | 2,870 |
| Hughes | 35 | 25 | 290 | 18 | 0 | 0 | 0 | 0 | 290 |
| Allakaket | 65 | 25 | 2,182 | 247 | 0 | 0 | 0 | 0 | 2,182 |
| Alatna | 9 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| Bettles | 24 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 4 | 705 | 273 | 9,743 | 2,738 | 1,359 | 588 | 1,150 | 1,026 | 12,252 |
| Tanana | 99 | 33 | 4,819 | 3,906 | 24,089 | 8,417 | 980 | 858 | 29,888 |
| Stevens Village | 15 | 10 | 0 | 0 | 911 | 0 | 0 | 0 | 911 |
| Birch Creek | 16 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Beaver | 31 | 24 | 310 | 230 | 136 | 131 | 0 | 0 | 446 |
| Fort Yukon | 219 | 72 | 1,216 | 1,859 | 5,575 | 3,312 | 176 | 163 | 6,967 |
| Venetie | 78 | 28 | 453 | 703 | 1,513 | 1,077 | 0 | 0 | 1,966 |
| Chalkyitsik | 21 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 5 | 479 | 185 | 6,798 | 4,388 | 32,224 | 9,110 | 1,156 | 873 | 40,178 |
| Survey Totals | 2,568 | 1,043 | 17,265 | 5,183 | 33,662 | 9,129 | 2,421 | 1,349 | 53,348 |

[a] Does not include Chinook salmon that were not fit for human consumption but possibly fed to dogs.

[b] The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.

[c] Includes 7 summer chum salmon reported as retained from commercial harvests and fed to dogs.

Table 5.–Estimated total number of households in surveyed communities, by harvest level, with community and district totals, Yukon Area, 2011.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Community Totals | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | 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 | 24 | 12 | 9 | 75% | 62 | 18 | 16 | 89% | 90 | 29 | 24 | 83% | 33 | 33 | 30 | 91% | - | - | - | - | 209 | 92 | 79 | 86% |
| Scammon Bay | 20 | 13 | 9 | 69% | 21 | 7 | 6 | 86% | 35 | 11 | 8 | 73% | 16 | 16 | 14 | 88% | - | - | - | - | 92 | 47 | 37 | 79% |
| Coastal District | 44 | 25 | 18 | 72% | 83 | 25 | 22 | 88% | 125 | 40 | 32 | 80% | 49 | 49 | 44 | 90% | - | - | - | - | 301 | 139 | 116 | 83% |
| Nunam Iqua | 7 | 6 | 6 | 100% | 10 | 10 | 6 | 60% | 9 | 9 | 7 | 78% | 10 | 10 | 9 | 90% | - | - | - | - | 36 | 35 | 28 | 80% |
| Alakanuk | 27 | 22 | 18 | 82% | 32 | 9 | 6 | 67% | 57 | 17 | 17 | 100% | 17 | 17 | 13 | 76% | - | - | - | - | 133 | 65 | 54 | 83% |
| Emmonak | 23 | 15 | 11 | 73% | 48 | 24 | 23 | 96% | 64 | 32 | 30 | 94% | 30 | 30 | 27 | 90% | 1 | 1 | 1 | 100% | 166 | 102 | 92 | 90% |
| Kotlik | 13 | 12 | 7 | 58% | 25 | 8 | 7 | 88% | 51 | 16 | 15 | 94% | 15 | 15 | 11 | 73% | - | - | - | - | 104 | 51 | 40 | 78% |
| District 1 | 70 | 55 | 42 | 76% | 115 | 51 | 42 | 82% | 181 | 74 | 69 | 93% | 72 | 72 | 60 | 83% | 1 | 1 | 1 | 100% | 439 | 253 | 214 | 85% |
| Mountain Village | 30 | 24 | 18 | 75% | 34 | 10 | 8 | 80% | 71 | 22 | 17 | 77% | 28 | 28 | 23 | 82% | - | - | - | - | 163 | 84 | 66 | 79% |
| Pitkas Point | 3 | 1 | 1 | 100% | 6 | 6 | 2 | 33% | 13 | 13 | 9 | 69% | 6 | 6 | 5 | 83% | - | - | - | - | 28 | 26 | 17 | 65% |
| St. Mary's | 7 | 3 | 3 | 100% | 24 | 8 | 6 | 75% | 66 | 21 | 18 | 86% | 24 | 24 | 21 | 88% | - | - | - | - | 121 | 56 | 48 | 86% |
| Pilot Station | 9 | 8 | 5 | 63% | 38 | 19 | 17 | 89% | 47 | 24 | 19 | 79% | 15 | 15 | 14 | 93% | - | - | - | - | 109 | 66 | 55 | 83% |
| Marshall | 3 | 2 | 1 | 50% | 16 | 5 | 2 | 40% | 38 | 12 | 12 | 100% | 13 | 13 | 13 | 100% | - | - | - | - | 70 | 32 | 28 | 88% |
| District 2 | 52 | 38 | 28 | 74% | 118 | 48 | 35 | 73% | 235 | 92 | 75 | 82% | 86 | 86 | 76 | 88% | - | - | - | - | 491 | 264 | 214 | 81% |
| Russian Mission | 5 | 4 | 4 | 100% | 21 | 7 | 5 | 71% | 34 | 11 | 11 | 100% | 6 | 6 | 5 | 83% | - | - | - | - | 66 | 28 | 25 | 89% |
| Holy Cross | 6 | 6 | 5 | 83% | 15 | 7 | 7 | 100% | 22 | 11 | 10 | 91% | 13 | 13 | 7 | 54% | - | - | - | - | 56 | 37 | 29 | 78% |
| Shageluk | 13 | 3 | 1 | 33% | 7 | 7 | 6 | 86% | 10 | 10 | 10 | 100% | - | - | - | - | 1 | 1 | 1 | 100% | 31 | 21 | 18 | 86% |
| District 3 | 24 | 13 | 10 | 77% | 43 | 21 | 18 | 86% | 66 | 32 | 31 | 97% | 19 | 19 | 12 | 63% | 1 | 1 | 1 | 100% | 153 | 86 | 72 | 84% |
| Anvik | 2 | 0 | 0 | - | 8 | 8 | 8 | 100% | 11 | 11 | 9 | 82% | 6 | 6 | 6 | 100% | 1 | 1 | 1 | 100% | 28 | 26 | 24 | 92% |
| Grayling | 8 | 2 | 2 | 100% | 4 | 2 | 2 | 100% | 28 | 9 | 9 | 100% | 8 | 8 | 5 | 63% | - | - | - | - | 48 | 21 | 18 | 86% |
| Kaltag | 1 | 1 | 1 | 100% | 13 | 4 | 3 | 75% | 41 | 11 | 8 | 73% | 6 | 6 | 5 | 83% | - | - | - | - | 61 | 22 | 17 | 77% |
| Nulato | - | - | - | - | 19 | 6 | 6 | 100% | 53 | 16 | 14 | 88% | 4 | 4 | 4 | 100% | - | - | - | - | 76 | 26 | 24 | 92% |
| Koyukuk | 15 | 3 | 2 | 67% | 15 | 5 | 5 | 100% | 15 | 5 | 5 | 100% | 5 | 5 | 3 | 60% | 1 | 1 | 1 | 100% | 51 | 19 | 16 | 84% |
| Galena | 30 | 26 | 22 | 85% | 70 | 22 | 19 | 86% | 62 | 19 | 18 | 95% | 5 | 5 | 5 | 100% | 2 | 2 | 2 | 100% | 169 | 74 | 66 | 89% |
| Ruby | 5 | 4 | 4 | 100% | 35 | 10 | 7 | 70% | 12 | 4 | 4 | 100% | 4 | 4 | 4 | 100% | 1 | 1 | 1 | 100% | 57 | 23 | 20 | 87% |
| Huslia | 17 | 6 | 5 | 83% | 45 | 13 | 12 | 92% | 13 | 4 | 4 | 100% | 6 | 6 | 6 | 100% | 1 | 1 | 1 | 100% | 82 | 30 | 28 | 93% |
| Hughes | 15 | 10 | 7 | 70% | 13 | 13 | 11 | 85% | 5 | 5 | 5 | 100% | 2 | 2 | 2 | 100% | - | - | - | - | 35 | 30 | 25 | 83% |
| Allakaket | 15 | 8 | 5 | 63% | 34 | 11 | 9 | 82% | 9 | 3 | 4 | 133% | 5 | 5 | 5 | 100% | 2 | 2 | 2 | 100% | 65 | 29 | 25 | 86% |
| Alatna | 3 | 1 | 1 | 100% | 4 | 4 | 4 | 100% | 2 | 2 | 2 | 100% | - | - | - | - | - | - | - | - | 9 | 7 | 7 | 100% |
| Bettles | 7 | 7 | 3 | 43% | 16 | 16 | 11 | 69% | 1 | 1 | 0 | 0% | - | - | - | - | - | - | - | - | 24 | 24 | 14 | 58% |
| District 4 | 118 | 68 | 52 | 76% | 276 | 114 | 97 | 85% | 252 | 90 | 82 | 91% | 51 | 51 | 45 | 88% | 8 | 8 | 8 | 100% | 705 | 331 | 284 | 86% |

-continued-

Table 5.–Page 2 of 2.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Community Totals | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | C | %C | N | n | C | %C | N | n | C | %C | N | n | C | %C | N | n | C | %C | N | n | C | %C |
| Tanana | 8 | 5 | 3 | 60% | 47 | 24 | 14 | 58% | 27 | 14 | 9 | 64% | 7 | 7 | 5 | 71% | 10 | 10 | 7 | 70% | 99 | 60 | 38 | 63% |
| Stevens Village | 1 | 0 | 0 | - | 3 | 3 | 2 | 67% | 8 | 8 | 6 | 75% | 3 | 3 | 3 | 100% | - | - | - | - | 15 | 14 | 11 | 79% |
| Birch Creek | 2 | 2 | 0 | 0% | 10 | 10 | 4 | 40% | 4 | 4 | 3 | 75% | - | - | - | - | - | - | - | - | 16 | 16 | 7 | 44% |
| Beaver | 5 | 3 | 3 | 100% | 12 | 12 | 10 | 83% | 14 | 14 | 12 | 86% | - | - | - | - | - | - | - | - | 31 | 29 | 25 | 86% |
| Fort Yukon | 63 | 30 | 22 | 73% | 107 | 33 | 30 | 91% | 31 | 9 | 7 | 78% | 9 | 9 | 8 | 89% | 9 | 9 | 9 | 100% | 219 | 90 | 76 | 84% |
| Venetie | 25 | 20 | 12 | 60% | 37 | 11 | 9 | 82% | 13 | 4 | 4 | 100% | 2 | 2 | 2 | 100% | 1 | 1 | 1 | 100% | 78 | 38 | 28 | 74% |
| Chalkyitsik | 7 | 1 | 1 | 100% | 13 | 13 | 10 | 77% | 1 | 1 | 1 | 100% | - | - | - | - | - | - | - | - | 21 | 15 | 12 | 80% |
| District 5 | 111 | 61 | 41 | 67% | 229 | 106 | 79 | 75% | 98 | 54 | 42 | 78% | 21 | 21 | 18 | 86% | 20 | 20 | 17 | 85% | 479 | 262 | 197 | 75% |
| Survey Totals | 419 | 260 | 191 | 73% | 864 | 365 | 293 | 80% | 957 | 382 | 331 | 87% | 298 | 298 | 255 | 86% | 30 | 30 | 27 | 90% | 2,568 | 1,335 | 1,097 | 82% |

*Note*: Total number of households (N), the sample size (n), the number of households contacted (C), and the percent of the sampled households that were contacted (%C) in each harvest group in surveyed communities. Households contacted (C) may include some households not pre-selected resulting in a household contacted percentage (%C) greater than 100%. Dashes indicate indefinable values.

Table 6.–Estimated number of subsistence fishing households in surveyed communities, by harvest level, with community and district totals, Yukon Area, 2011.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | PF | SE | N | n | PF | SE | N | n | PF | SE | N | n | PF | SE | N | n | PF | SE | N | n | Total | 95% |
| Hooper Bay | 24 | 9 | 0.2 | 0.1 | 62 | 16 | 0.3 | 0.1 | 90 | 24 | 0.5 | 0.1 | 33 | 30 | 0.8 | 0.0 | - | - | - | - | 209 | 79 | 93 | 21 |
| Scammon Bay | 20 | 9 | 0.6 | 0.1 | 21 | 6 | 0.5 | 0.2 | 35 | 8 | 0.6 | 0.2 | 16 | 14 | 0.9 | 0.0 | - | - | - | - | 92 | 37 | 57 | 14 |
| Coastal District | 44 | 18 | 0.4 | 0.1 | 83 | 22 | 0.4 | 0.1 | 125 | 32 | 0.5 | 0.1 | 49 | 44 | 0.8 | 0.0 | - | - | - | - | 301 | 116 | 150 | 25 |
| Nunam Iqua | 7 | 6 | 0.5 | 0.1 | 10 | 6 | 0.3 | 0.1 | 9 | 7 | 0.4 | 0.1 | 10 | 9 | 0.9 | 0.0 | - | - | - | - | 36 | 28 | 20 | 3 |
| Alakanuk | 27 | 18 | 0.5 | 0.1 | 32 | 6 | 0.3 | 0.2 | 57 | 17 | 0.8 | 0.1 | 17 | 13 | 0.5 | 0.1 | - | - | - | - | 133 | 54 | 80 | 16 |
| Emmonak | 23 | 11 | 0.3 | 0.1 | 48 | 23 | 0.3 | 0.1 | 64 | 30 | 0.7 | 0.1 | 30 | 27 | 0.8 | 0.0 | 1 | 1 | 1.0 | - | 166 | 92 | 91 | 11 |
| Kotlik | 13 | 7 | 0.9 | 0.1 | 25 | 7 | 0.4 | 0.2 | 51 | 15 | 0.8 | 0.1 | 15 | 11 | 0.9 | 0.0 | - | - | - | - | 104 | 40 | 76 | 13 |
| District 1 | 70 | 42 | 0.5 | 0.0 | 115 | 42 | 0.3 | 0.1 | 181 | 69 | 0.8 | 0.0 | 72 | 60 | 0.8 | 0.0 | 1 | 1 | 1.0 | - | 439 | 214 | 267 | 23 |
| Mountain Village | 30 | 18 | 0.6 | 0.1 | 34 | 8 | 0.1 | 0.1 | 71 | 17 | 0.8 | 0.1 | 28 | 23 | 1.0 | 0.0 | - | - | - | - | 163 | 66 | 109 | 14 |
| Pitkas Point | 3 | 1 | 1.0 | - | 6 | 2 | 0.0 | 0.0 | 13 | 9 | 0.4 | 0.1 | 6 | 5 | 0.6 | 0.1 | - | - | - | - | 28 | 17 | 12 | 3 |
| St. Mary's | 7 | 3 | 0.3 | 0.3 | 24 | 6 | 0.3 | 0.2 | 66 | 18 | 0.7 | 0.1 | 24 | 21 | 0.9 | 0.0 | - | - | - | - | 121 | 48 | 76 | 16 |
| Pilot Station | 9 | 5 | 0.2 | 0.1 | 38 | 17 | 0.3 | 0.1 | 47 | 19 | 0.8 | 0.1 | 15 | 14 | 0.9 | 0.0 | - | - | - | - | 109 | 55 | 63 | 10 |
| Marshall | 3 | 1 | 0.0 | - | 16 | 2 | 0.5 | 0.5 | 38 | 12 | 0.9 | 0.1 | 13 | 13 | 0.9 | 0.0 | - | - | - | - | 70 | 28 | 61 | 7 |
| District 2 | 52 | 28 | 0.5 | 0.1 | 118 | 35 | 0.2 | 0.1 | 235 | 75 | 0.8 | 0.0 | 86 | 76 | 0.9 | 0.0 | - | - | - | - | 491 | 214 | 321 | 24 |
| Russian Mission | 5 | 4 | 0.8 | 0.1 | 21 | 5 | 0.6 | 0.2 | 34 | 11 | 0.7 | 0.1 | 6 | 5 | 1.0 | 0.0 | - | - | - | - | 66 | 25 | 47 | 12 |
| Holy Cross | 6 | 5 | 0.4 | 0.1 | 15 | 7 | 0.1 | 0.1 | 22 | 10 | 0.8 | 0.1 | 13 | 7 | 1.0 | 0.0 | - | - | - | - | 56 | 29 | 35 | 5 |
| Shageluk | 13 | 1 | 0.0 | - | 7 | 6 | 0.0 | 0.0 | 10 | 10 | 0.9 | 0.0 | - | - | - | - | 1 | 1 | 1.0 | - | 31 | 18 | 17 | 0 |
| District 3 | 24 | 10 | 0.6 | 0.1 | 43 | 18 | 0.3 | 0.1 | 66 | 31 | 0.8 | 0.1 | 19 | 12 | 1.0 | 0.0 | 1 | 1 | 1.0 | - | 153 | 72 | 99 | 13 |
| Anvik | 2 | 0 | - | - | 8 | 8 | 0.4 | 0.0 | 11 | 9 | 1.0 | 0.0 | 6 | 6 | 0.8 | 0.0 | 1 | 1 | 0.0 | - | 28 | 24 | 20 | 0 |
| Grayling | 8 | 2 | 0.0 | 0.0 | 4 | 2 | 1.0 | 0.0 | 28 | 9 | 0.9 | 0.1 | 8 | 5 | 0.8 | 0.1 | - | - | - | - | 48 | 18 | 35 | 5 |
| Kaltag | 1 | 1 | 0.0 | - | 13 | 3 | 0.3 | 0.3 | 41 | 8 | 0.8 | 0.1 | 6 | 5 | 1.0 | 0.0 | - | - | - | - | 61 | 17 | 41 | 14 |
| Nulato | - | - | - | - | 19 | 6 | 0.7 | 0.2 | 53 | 14 | 0.8 | 0.1 | 4 | 4 | 1.0 | 0.0 | - | - | - | - | 76 | 24 | 58 | 12 |
| Koyukuk | 15 | 2 | 0.5 | 0.5 | 15 | 5 | 0.4 | 0.2 | 15 | 5 | 0.8 | 0.2 | 5 | 3 | 1.0 | 0.0 | 1 | 1 | 1.0 | - | 51 | 16 | 34 | 11 |
| Galena | 30 | 22 | 0.4 | 0.1 | 70 | 19 | 0.2 | 0.1 | 62 | 18 | 0.6 | 0.1 | 5 | 5 | 0.8 | 0.0 | 2 | 2 | 1.0 | 0.0 | 169 | 66 | 67 | 16 |
| Ruby | 5 | 4 | 0.3 | 0.1 | 35 | 7 | 0.1 | 0.1 | 12 | 4 | 0.3 | 0.2 | 4 | 4 | 1.0 | 0.0 | 1 | 1 | 1.0 | - | 57 | 20 | 14 | 10 |
| Huslia | 17 | 5 | 0.0 | 0.0 | 45 | 12 | 0.2 | 0.1 | 13 | 4 | 0.3 | 0.2 | 6 | 6 | 0.8 | 0.0 | 1 | 1 | 1.0 | - | 82 | 28 | 17 | 10 |
| Hughes | 15 | 7 | 0.0 | 0.0 | 13 | 11 | 0.3 | 0.1 | 5 | 5 | 0.0 | 0.0 | 2 | 2 | 1.0 | 0.0 | - | - | - | - | 35 | 25 | 6 | 1 |
| Allakaket | 15 | 5 | 0.0 | 0.0 | 34 | 9 | 0.0 | 0.0 | 9 | 4 | 0.3 | 0.2 | 5 | 5 | 0.4 | 0.0 | 2 | 2 | 1.0 | 0.0 | 65 | 25 | 6 | 3 |
| Alatna | 3 | 1 | 1.0 | - | 4 | 4 | 0.0 | 0.0 | 2 | 2 | 0.5 | 0.0 | - | - | - | - | - | - | - | - | 9 | 7 | 4 | 0 |
| Bettles | 7 | 3 | 0.0 | 0.0 | 16 | 11 | 0.0 | 0.0 | 1 | 0 | - | - | - | - | - | - | - | - | - | - | 24 | 14 | 0 | 0 |
| District 4 | 118 | 52 | 0.2 | 0.0 | 276 | 97 | 0.2 | 0.0 | 252 | 82 | 0.7 | 0.0 | 51 | 45 | 0.9 | 0.0 | 8 | 8 | 0.9 | 0.0 | 705 | 284 | 302 | 31 |

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Table 6.–Page 2 of 2.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | PF | SE | N | n | PF | SE | N | n | PF | SE | N | n | PF | SE | N | n | PF | SE | N | n | Total | 95% |
| Tanana | 8 | 3 | 0.3 | 0.3 | 47 | 14 | 0.4 | 0.1 | 27 | 9 | 0.6 | 0.1 | 7 | 5 | 1.0 | 0.0 | 10 | 6 | 1.0 | 0.0 | 99 | 37 | 55 | 14 |
| Stevens Village | 1 | 0 | - | - | 3 | 2 | 0.0 | 0.0 | 8 | 6 | 0.2 | 0.1 | 3 | 3 | 1.0 | 0.0 | - | - | - | - | 15 | 11 | 5 | 1 |
| Birch Creek | 2 | 0 | - | - | 10 | 4 | 0.0 | 0.0 | 4 | 3 | 0.7 | 0.2 | - | - | - | - | - | - | - | - | 16 | 7 | 3 | 1 |
| Beaver | 5 | 3 | 0.0 | 0.0 | 12 | 10 | 0.2 | 0.1 | 14 | 12 | 0.8 | 0.0 | - | - | - | - | - | - | - | - | 31 | 25 | 13 | 2 |
| Fort Yukon | 63 | 22 | 0.2 | 0.1 | 107 | 30 | 0.2 | 0.1 | 31 | 7 | 0.7 | 0.2 | 9 | 8 | 0.6 | 0.1 | 9 | 9 | 1.0 | 0.0 | 219 | 76 | 76 | 19 |
| Venetie | 25 | 12 | 0.0 | 0.0 | 37 | 9 | 0.1 | 0.1 | 13 | 4 | 0.5 | 0.2 | 2 | 2 | 1.0 | 0.0 | 1 | 1 | 1.0 | - | 78 | 28 | 14 | 9 |
| Chalkyitsik | 7 | 1 | 0.0 | - | 13 | 10 | 0.0 | 0.0 | 1 | 1 | 0.0 | - | - | - | - | - | - | - | - | - | 21 | 12 | 0 | 0 |
| District 5 | 111 | 41 | 0.2 | 0.0 | 229 | 79 | 0.2 | 0.0 | 98 | 42 | 0.6 | 0.1 | 21 | 18 | 0.8 | 0.0 | 20 | 16 | 1.0 | 0.0 | 479 | 196 | 166 | 26 |
| Survey Totals | 419 | 191 | 0.3 | 0.0 | 864 | 293 | 0.3 | 0.0 | 957 | 331 | 0.7 | 0.0 | 298 | 255 | 0.9 | 0.0 | 30 | 26 | 1.0 | 0.0 | 2,568 | 1,096 | 1,305 | 60 |

*Note*: The number of fishing households was estimated from the total number of households (N), the number of households contacted (n), the proportion of households that fished (PF), and the standard error (SE) for each harvest group in each community. Estimated total number of fishing households includes 95% confidence interval (CI 95%). Dashes indicate indefinable values.

Table 7.–Estimated number of people in households in surveyed communities, by harvest level, with community and district totals, Yukon Area, 2011.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Hooper Bay | 24 | 9 | 4.2 | 0.5 | 62 | 16 | 3.5 | 0.7 | 90 | 23 | 5.1 | 0.4 | 33 | 30 | 6.2 | 0.2 | - | - | - | - | 209 | 78 | 984 | 112 |
| Scammon Bay | 20 | 7 | 4.3 | 0.7 | 21 | 6 | 3.7 | 0.5 | 35 | 6 | 4.3 | 0.9 | 16 | 10 | 7.6 | 0.6 | - | - | - | - | 92 | 29 | 436 | 72 |
| Coastal District | 44 | 16 | 4.3 | 0.4 | 83 | 22 | 3.5 | 0.5 | 125 | 29 | 4.9 | 0.4 | 49 | 40 | 6.6 | 0.2 | - | - | - | - | 301 | 107 | 1,420 | 133 |
| Nunam Iqua | 7 | 6 | 4.3 | 0.2 | 10 | 6 | 6.2 | 0.8 | 9 | 7 | 4.0 | 0.4 | 10 | 9 | 4.9 | 0.2 | - | - | - | - | 36 | 28 | 177 | 18 |
| Alakanuk | 27 | 16 | 4.8 | 0.3 | 32 | 6 | 3.5 | 0.8 | 57 | 17 | 5.3 | 0.7 | 17 | 13 | 5.4 | 0.3 | - | - | - | - | 133 | 52 | 635 | 93 |
| Emmonak | 23 | 11 | 2.8 | 0.4 | 48 | 21 | 3.9 | 0.5 | 64 | 30 | 5.0 | 0.4 | 30 | 23 | 4.6 | 0.2 | 1 | 1 | 3.0 | - | 166 | 86 | 712 | 75 |
| Kotlik | 13 | 5 | 4.4 | 0.4 | 25 | 6 | 4.5 | 0.8 | 51 | 15 | 5.5 | 0.7 | 15 | 11 | 5.0 | 0.3 | - | - | - | - | 104 | 37 | 524 | 81 |
| District 1 | 70 | 38 | 4.0 | 0.2 | 115 | 39 | 4.1 | 0.3 | 181 | 69 | 5.2 | 0.3 | 72 | 56 | 4.9 | 0.1 | 1 | 1 | 3.0 | - | 439 | 203 | 2,048 | 145 |
| Mountain Village | 30 | 17 | 4.6 | 0.4 | 34 | 8 | 3.1 | 0.4 | 71 | 15 | 4.9 | 0.5 | 28 | 19 | 5.6 | 0.3 | - | - | - | - | 163 | 59 | 752 | 85 |
| Pitkas Point | 3 | 1 | 3.0 | - | 6 | 2 | 4.5 | 2.0 | 13 | 7 | 4.7 | 0.6 | 6 | 5 | 4.4 | 0.2 | - | - | - | - | 28 | 15 | 124 | 28 |
| St. Mary's | 7 | 2 | 4.5 | 3.0 | 24 | 5 | 4.6 | 1.3 | 66 | 17 | 3.9 | 0.6 | 24 | 21 | 4.6 | 0.1 | - | - | - | - | 121 | 45 | 512 | 107 |
| Pilot Station | 9 | 3 | 7.3 | 3.1 | 38 | 15 | 5.3 | 0.6 | 47 | 19 | 6.8 | 0.4 | 15 | 12 | 6.8 | 0.4 | - | - | - | - | 109 | 49 | 688 | 79 |
| Marshall | 3 | 1 | 8.0 | - | 16 | 2 | 2.0 | 0.9 | 38 | 12 | 5.4 | 0.5 | 13 | 13 | 4.8 | 0.0 | - | - | - | - | 70 | 28 | 380 | 50 |
| District 2 | 52 | 24 | 5.2 | 0.7 | 118 | 32 | 4.4 | 0.4 | 235 | 70 | 5.1 | 0.3 | 86 | 70 | 5.3 | 0.1 | - | - | - | - | 491 | 196 | 2,456 | 167 |
| Russian Mission | 5 | 3 | 2.7 | 0.8 | 21 | 5 | 3.8 | 0.8 | 34 | 11 | 5.7 | 0.6 | 6 | 5 | 4.2 | 0.2 | - | - | - | - | 66 | 24 | 313 | 53 |
| Holy Cross | 6 | 5 | 3.2 | 0.3 | 15 | 7 | 3.6 | 0.6 | 22 | 10 | 2.7 | 0.3 | 13 | 7 | 3.6 | 0.6 | - | - | - | - | 56 | 29 | 179 | 27 |
| Shageluk | 13 | 1 | 1.0 | - | 7 | 6 | 1.5 | 0.1 | 10 | 10 | 2.9 | 0.0 | - | - | - | - | 1 | 1 | 4.0 | - | 31 | 18 | 75 | 2 |
| District 3 | 24 | 9 | 3.0 | 0.4 | 43 | 18 | 3.3 | 0.4 | 66 | 31 | 4.3 | 0.3 | 19 | 12 | 3.8 | 0.4 | 1 | 1 | 4.0 | - | 153 | 71 | 567 | 60 |
| Anvik | 2 | 0 | - | - | 8 | 8 | 2.0 | 0.0 | 11 | 9 | 3.8 | 0.3 | 6 | 6 | 3.2 | 0.0 | 1 | 1 | 1.0 | - | 28 | 24 | 84 | 8 |
| Grayling | 8 | 2 | 4.0 | 0.9 | 4 | 2 | 3.0 | 1.4 | 28 | 9 | 3.8 | 0.6 | 8 | 5 | 4.0 | 0.3 | - | - | - | - | 48 | 18 | 182 | 37 |
| Kaltag | 1 | 1 | 1.0 | - | 13 | 1 | 1.0 | - | 41 | 7 | 3.0 | 0.4 | 6 | 5 | 4.8 | 0.3 | - | - | - | - | 61 | 14 | 194 | 41 |
| Nulato | - | - | - | - | 19 | 6 | 2.3 | 0.7 | 53 | 13 | 3.2 | 0.4 | 4 | 4 | 2.0 | 0.0 | - | - | - | - | 76 | 23 | 219 | 52 |
| Koyukuk | 15 | 2 | 2.5 | 1.4 | 15 | 4 | 2.3 | 0.5 | 15 | 5 | 1.2 | 0.2 | 5 | 3 | 2.0 | 0.0 | 1 | 1 | 5.0 | - | 51 | 15 | 95 | 23 |
| Galena | 30 | 22 | 3.2 | 0.1 | 70 | 17 | 2.2 | 0.3 | 62 | 18 | 3.2 | 0.3 | 5 | 3 | 3.3 | 0.8 | 2 | 1 | 3.0 | - | 169 | 61 | 467 | 56 |
| Ruby | 5 | 3 | 1.3 | 0.2 | 35 | 7 | 2.0 | 0.6 | 12 | 4 | 3.0 | 0.6 | 4 | 4 | 2.0 | 0.0 | 1 | 1 | 2.0 | - | 57 | 19 | 123 | 45 |
| Huslia | 17 | 5 | 3.8 | 0.8 | 45 | 12 | 3.4 | 0.6 | 13 | 4 | 4.0 | 1.5 | 6 | 6 | 3.8 | 0.0 | 1 | 1 | 4.0 | - | 82 | 28 | 297 | 69 |
| Hughes | 15 | 7 | 2.9 | 0.3 | 13 | 11 | 2.5 | 0.2 | 5 | 5 | 3.0 | 0.0 | 2 | 2 | 2.0 | 0.0 | - | - | - | - | 35 | 25 | 95 | 11 |
| Allakaket | 15 | 5 | 2.8 | 0.4 | 34 | 9 | 2.3 | 0.5 | 9 | 3 | 2.7 | 1.4 | 5 | 5 | 2.4 | 0.0 | 2 | 2 | 6.0 | 0.0 | 65 | 24 | 169 | 40 |
| Alatna | 3 | 1 | 5.0 | - | 4 | 3 | 5.3 | 0.3 | 2 | 2 | 3.5 | 0.0 | - | - | - | - | - | - | - | - | 9 | 6 | 43 | 3 |
| Bettles | 7 | 2 | 1.5 | 0.4 | 16 | 11 | 1.5 | 0.1 | 1 | 0 | - | - | - | - | - | - | - | - | - | - | 24 | 13 | 37 | 7 |
| District 4 | 118 | 50 | 3.1 | 0.2 | 276 | 91 | 2.4 | 0.2 | 252 | 79 | 3.1 | 0.2 | 51 | 43 | 3.2 | 0.1 | 8 | 7 | 3.8 | 0.0 | 705 | 270 | 2,005 | 134 |

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Table 7.–Page 2 of 2.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Combined Est. | Combined CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Tanana | 8 | 0 | - | - | 47 | 12 | 2.2 | 0.3 | 27 | 7 | 2.6 | 0.6 | 7 | 5 | 2.2 | 0.4 | 10 | 5 | 2.4 | 0.4 | 99 | 29 | 229 | 46 |
| Stevens Village | 1 | 0 | - | - | 3 | 1 | 4.0 | - | 8 | 6 | 3.3 | 0.2 | 3 | 3 | 4.7 | 0.0 | - | - | - | - | 15 | 10 | 56 | 3 |
| Birch Creek | 2 | 0 | - | - | 10 | 4 | 1.8 | 0.4 | 4 | 3 | 2.0 | 0.0 | - | - | - | - | - | - | - | - | 16 | 7 | 29 | 8 |
| Beaver | 5 | 1 | 2.0 | - | 12 | 10 | 1.8 | 0.2 | 14 | 12 | 2.0 | 0.1 | - | - | - | - | - | - | - | - | 31 | 23 | 60 | 7 |
| Fort Yukon | 63 | 22 | 3.0 | 0.4 | 107 | 29 | 2.8 | 0.3 | 31 | 7 | 2.4 | 0.6 | 9 | 8 | 3.3 | 0.3 | 9 | 7 | 2.0 | 0.2 | 219 | 73 | 608 | 83 |
| Venetie | 25 | 12 | 1.8 | 0.3 | 37 | 9 | 2.8 | 0.5 | 13 | 4 | 3.5 | 0.2 | 2 | 2 | 4.5 | 0.0 | 1 | 1 | 7.0 | - | 78 | 28 | 208 | 36 |
| Chalkyitsik | 7 | 1 | 3.0 | - | 13 | 10 | 3.0 | 0.3 | 1 | 1 | 3.0 | - | - | - | - | - | - | - | - | - | 21 | 12 | 63 | 7 |
| District 5 | 111 | 36 | 2.6 | 0.3 | 229 | 75 | 2.6 | 0.2 | 98 | 40 | 2.6 | 0.2 | 21 | 18 | 3.2 | 0.2 | 20 | 13 | 2.5 | 0.2 | 479 | 182 | 1,253 | 103 |
| Survey Totals | 419 | 173 | 3.5 | 0.1 | 864 | 277 | 3.1 | 0.1 | 957 | 318 | 4.3 | 0.1 | 298 | 239 | 4.8 | 0.1 | 30 | 22 | 2.9 | 0.2 | 2,568 | 1,029 | 9,749 | 315 |

*Note*: The number of people in surveyed communities was estimated from the total number of households (N), the number of households contacted (n), average number of people in households (Mean), standard error (SE), and includes 95% confidence interval (CI 95%). Dashes indicate indefinable values.

Table 8.–Estimated subsistence harvest including commercially related (not including test fish) of Chinook salmon by fishing location in surveyed communities, Yukon Area, 2011.

| Community | Coastal District | Districts | | | Subdistricts[a] | | | | | | | | River Drainages | | | | | Total by Community[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4A | 4B | 4C | 5A | 5B | 5C | 5D-down | 5D-up | Innoko | Koyukuk | Chandalar | Porcupine | Black | |
| Hooper Bay | 246 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 246 |
| Scammon Bay | 32 | 485 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 517 |
| Coastal District | 278 | 485 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 763 |
| Nunam Iqua | 0 | 250 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 250 |
| Alakanuk | 0 | 1,130 | 241 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,371 |
| Emmonak | 0 | 1,244 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,252 |
| Kotlik | 212 | 1,176 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,388 |
| District 1 | 212 | 3,800 | 249 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,261 |
| Mountain Village | 0 | 259 | 1,311 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,570 |
| Pitkas Point | 0 | 0 | 246 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 246 |
| St. Mary's | 0 | 79 | 1,574 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,653 |
| Pilot Station | 0 | 0 | 1,142 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,142 |
| Marshall | 0 | 0 | 2,686 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,686 |
| District 2 | 0 | 338 | 6,959 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7,297 |
| Russian Mission | 0 | 0 | 47 | 1,503 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,550 |
| Holy Cross | 0 | 0 | 0 | 2,231 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,231 |
| Shageluk | 0 | 0 | 0 | 178 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 144 | 0 | 0 | 0 | 0 | 353 |
| District 3 | 0 | 0 | 47 | 3,912 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 144 | 0 | 0 | 0 | 0 | 4,134 |
| Anvik | 0 | 0 | 0 | 0 | 1,052 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,052 |
| Grayling | 0 | 0 | 0 | 0 | 1,374 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,374 |
| Kaltag | 0 | 0 | 0 | 0 | 2,488 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,488 |
| Nulato | 0 | 0 | 0 | 0 | 1,538 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,538 |
| Koyukuk | 0 | 0 | 0 | 0 | 1,273 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,348 |
| Galena | 0 | 0 | 0 | 0 | 662 | 195 | 537 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 0 | 0 | 0 | 1,435 |
| Ruby | 0 | 0 | 0 | 0 | 108 | 302 | 72 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 482 |
| Huslia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 121 | 0 | 0 | 0 | 121 |
| Hughes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 10 |
| Allakaket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 0 | 0 | 0 | 42 |
| Alatna | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| Bettles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 4 | 0 | 0 | 0 | 0 | 8,495 | 572 | 609 | 0 | 0 | 0 | 0 | 0 | 0 | 217 | 0 | 0 | 0 | 9,893 |

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Table 8.–Page 2 of 2.

| Community | Coastal District | Districts 1 | 2 | 3 | Subdistricts[a] 4A | 4B | 4C | 5A | 5B | 5C | 5D-down | 5D-up | River Drainages Innoko | Koyukuk | Chandalar | Porcupine | Black | Total by Community[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 2,822 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,936 |
| Stevens Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 320 | 95 | 0 | 0 | 0 | 0 | 0 | 0 | 415 |
| Birch Creek | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 49 |
| Beaver | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 356 | 0 | 0 | 0 | 0 | 0 | 0 | 356 |
| Fort Yukon | 0 | 0 | 0 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 2,050 | 289 | 0 | 0 | 0 | 0 | 0 | 2,472 |
| Venetie | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 10 |
| Chalkyitsik | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *District 5* | *0* | *0* | *0* | *0* | *133* | *0* | *0* | *114* | *2,822* | *320* | *2,550* | *289* | *0* | *0* | *10* | *0* | *0* | *6,238* |
| Survey Totals | 490 | 4,623 | 7,255 | 3,912 | 8,659 | 572 | 609 | 114 | 2,822 | 320 | 2,550 | 289 | 144 | 217 | 10 | 0 | 0 | 32,586 |

*Note*: Commercially related fish are salmon harvested during commercial fishing that were not sold, but retained and used for subsistence purposes.

[a] Harvest in Subdistrict 5-D near Ft. Yukon is divided according to whether harvest occurred downriver (5D-down) or upriver (5D-up) of the confluence of the Porcupine River with the Yukon River.

[b] Totals may not add in both directions due to decimal rounding.

Table 9.–Estimated subsistence harvest including commercially related (not including test fish) of summer chum salmon by fishing location in surveyed communities, Yukon Area, 2011.

| | Coastal | Districts | | | Subdistricts[a] | | | | | | | | River Drainages | | | | | Total by |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | District | 1 | 2 | 3 | 4A | 4B | 4C | 5A | 5B | 5C | 5D-down | 5D-up | Innoko | Koyukuk | Chandalar | Porcupine | Black | Community[b] |
| Hooper Bay | 13,175 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13,175 |
| Scammon Bay | 1,471 | 3,374 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,845 |
| Coastal District | 14,646 | 3,374 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18,020 |
| Nunam Iqua | 0 | 2,077 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,077 |
| Alakanuk | 0 | 6,951 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,951 |
| Emmonak | 0 | 8,532 | 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8,738 |
| Kotlik | 893 | 4,582 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,475 |
| District 1 | 893 | 22,142 | 206 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23,241 |
| Mountain Village | 0 | 2,201 | 6,829 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9,030 |
| Pitkas Point | 0 | 0 | 585 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 585 |
| St. Mary's | 0 | 794 | 5,850 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,644 |
| Pilot Station | 0 | 0 | 2,642 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,642 |
| Marshall | 0 | 0 | 3,810 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,810 |
| District 2 | 0 | 2,995 | 19,716 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22,711 |
| Russian Mission | 0 | 0 | 94 | 1,131 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,225 |
| Holy Cross | 0 | 0 | 0 | 363 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 363 |
| Shageluk | 0 | 0 | 0 | 285 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 782 | 0 | 0 | 0 | 0 | 1,145 |
| District 3 | 0 | 0 | 94 | 1,779 | 78 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 782 | 0 | 0 | 0 | 0 | 2,733 |
| Anvik | 0 | 0 | 0 | 0 | 220 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 |
| Grayling | 0 | 0 | 0 | 0 | 838 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 838 |
| Kaltag | 0 | 0 | 0 | 0 | 163 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 163 |
| Nulato | 0 | 0 | 0 | 0 | 246 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 246 |
| Koyukuk | 0 | 0 | 0 | 0 | 861 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 890 |
| Galena | 0 | 0 | 0 | 0 | 46 | 3,043 | 325 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,414 |
| Ruby | 0 | 0 | 0 | 0 | 0 | 728 | 47 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 775 |
| Huslia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3,166 | 0 | 0 | 0 | 3,166 |
| Hughes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 954 | 0 | 0 | 0 | 954 |
| Allakaket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2,368 | 0 | 0 | 0 | 2,368 |
| Alatna | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 132 | 0 | 0 | 0 | 132 |
| Bettles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 4 | 0 | 0 | 0 | 0 | 2,374 | 3,800 | 372 | 0 | 0 | 0 | 0 | 0 | 0 | 6,620 | 0 | 0 | 0 | 13,166 |

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Table 9.–Page 2 of 2.

| Community | Coastal District | Districts | | | Subdistricts[a] | | | | | | | | River Drainages | | | | | Total by Community[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4A | 4B | 4C | 5A | 5B | 5C | 5D-down | 5D-up | Innoko | Koyukuk | Chandalar | Porcupine | Black | |
| Tanana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 344 | 4,037 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4,381 |
| Stevens Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 |
| Birch Creek | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |
| Beaver | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 393 | 0 | 0 | 0 | 0 | 0 | 0 | 393 |
| Fort Yukon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,265 | 32 | 0 | 0 | 0 | 0 | 0 | 1,297 |
| Venetie | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chalkyitsik | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 344 | 4,037 | 43 | 1,664 | 32 | 0 | 0 | 0 | 0 | 0 | 6,120 |
| Survey Totals | 15,539 | 28,511 | 20,016 | 1,779 | 2,452 | 3,800 | 372 | 344 | 4,037 | 43 | 1,664 | 32 | 782 | 6,620 | 0 | 0 | 0 | 85,991 |

*Note*: Commercially related fish are salmon harvested during commercial fishing that were not sold, but retained and used for subsistence purposes.

[a] Harvest in Subdistrict 5-D near Ft. Yukon is divided according to whether harvest occurred downriver (5D-down) or upriver (5D-up) of the confluence of the Porcupine River with the Yukon River.

[b] Totals may not add in both directions due to decimal rounding.

Table 10.–Estimated subsistence harvest including commercially related (not including test fish) of fall chum salmon by fishing location in surveyed communities, Yukon Area, 2011.

| | Coastal | Districts | | | Subdistricts[a] | | | | | | | | River Drainages | | | | | Total by |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | District | 1 | 2 | 3 | 4A | 4B | 4C | 5A | 5B | 5C | 5D-down | 5D-up | Innoko | Koyukuk | Chandalar | Porcupine | Black | Community[b] |
| Hooper Bay | 267 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 267 |
| Scammon Bay | 25 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 48 |
| Coastal District | 292 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 315 |
| Nunam Iqua | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 |
| Alakanuk | 0 | 785 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 785 |
| Emmonak | 0 | 261 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 261 |
| Kotlik | 0 | 471 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 471 |
| District 1 | 0 | 1,568 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,568 |
| Mountain Village | 0 | 0 | 399 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 399 |
| Pitkas Point | 0 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 30 |
| St. Mary's | 0 | 0 | 611 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 611 |
| Pilot Station | 0 | 0 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 66 |
| Marshall | 0 | 0 | 562 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 562 |
| District 2 | 0 | 0 | 1,668 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,668 |
| Russian Mission | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 |
| Holy Cross | 0 | 0 | 0 | 94 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 |
| Shageluk | 0 | 0 | 0 | 153 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 0 | 0 | 0 | 0 | 249 |
| District 3 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 0 | 0 | 0 | 0 | 354 |
| Anvik | 0 | 0 | 0 | 0 | 202 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 202 |
| Grayling | 0 | 0 | 0 | 0 | 1,152 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,152 |
| Kaltag | 0 | 0 | 0 | 0 | 196 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 196 |
| Nulato | 0 | 0 | 0 | 0 | 652 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 652 |
| Koyukuk | 0 | 0 | 0 | 0 | 815 | 573 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,388 |
| Galena | 0 | 0 | 0 | 0 | 198 | 902 | 1,458 | 0 | 0 | 0 | 0 | 0 | 0 | 181 | 0 | 0 | 0 | 2,739 |
| Ruby | 0 | 0 | 0 | 0 | 0 | 592 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 592 |
| Huslia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 183 | 0 | 0 | 0 | 183 |
| Hughes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 0 | 0 | 0 | 64 |
| Allakaket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 92 | 0 | 0 | 0 | 92 |
| Alatna | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bettles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 4 | 0 | 0 | 0 | 0 | 3,215 | 2,067 | 1,458 | 0 | 0 | 0 | 0 | 0 | 0 | 520 | 0 | 0 | 0 | 7,260 |

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Table 10.–Page 2 of 2.

| Community | Coastal District | Districts 1 | 2 | 3 | Subdistricts[a] 4A | 4B | 4C | 5A | 5B | 5C | 5D-down | 5D-up | River Drainages Innoko | Koyukuk | Chandalar | Porcupine | Black | Total by Community[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,732 | 14,996 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21,728 |
| Stevens Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 536 | 375 | 0 | 0 | 0 | 0 | 0 | 0 | 911 |
| Birch Creek | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Beaver | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | 0 | 0 | 0 | 0 | 0 | 0 | 122 |
| Fort Yukon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5,369 | 1,414 | 0 | 0 | 0 | 405 | 0 | 7,188 |
| Venetie | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1,938 | 0 | 0 | 1,938 |
| Chalkyitsik | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6,732 | 14,996 | 536 | 5,866 | 1,414 | 0 | 0 | 1,938 | 405 | 0 | 31,887 |
| Survey Totals | 292 | 1,591 | 1,668 | 258 | 3,215 | 2,067 | 1,458 | 6,732 | 14,996 | 536 | 5,866 | 1,414 | 96 | 520 | 1,938 | 405 | 0 | 43,052 |

*Note*: Commercially related fish are salmon harvested during commercial fishing that were not sold, but retained and used for subsistence purposes.

[a] Harvest in Subdistrict 5-D near Ft. Yukon is divided according to whether harvest occurred downriver (5D-down) or upriver (5D-up) of the confluence of the Porcupine River with the Yukon River.

[b] Totals may not add in both directions due to decimal rounding.

Table 11.–Estimated subsistence harvest including commercially related (not including test fish) of coho salmon by fishing location in surveyed communities, Yukon Area, 2011.

| | Coastal | Districts | | | Subdistricts[a] | | | | | | | | River Drainages | | | | | Total by |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | District | 1 | 2 | 3 | 4A | 4B | 4C | 5A | 5B | 5C | 5D-down | 5D-up | Innoko | Koyukuk | Chandalar | Porcupine | Black | Community[b] |
| Hooper Bay | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Scammon Bay | 23 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |
| Coastal District | 23 | 32 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 |
| Nunam Iqua | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| Alakanuk | 0 | 391 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 391 |
| Emmonak | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 69 |
| Kotlik | 10 | 73 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 |
| District 1 | 10 | 556 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 566 |
| Mountain Village | 0 | 9 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 |
| Pitkas Point | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
| St. Mary's | 0 | 0 | 230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 |
| Pilot Station | 0 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 |
| Marshall | 0 | 0 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150 |
| District 2 | 0 | 9 | 551 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 560 |
| Russian Mission | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Holy Cross | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Shageluk | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 36 |
| District 3 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 36 |
| Anvik | 0 | 0 | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| Grayling | 0 | 0 | 0 | 0 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 |
| Kaltag | 0 | 0 | 0 | 0 | 258 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 258 |
| Nulato | 0 | 0 | 0 | 0 | 118 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 118 |
| Koyukuk | 0 | 0 | 0 | 0 | 113 | 24 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 137 |
| Galena | 0 | 0 | 0 | 0 | 2 | 950 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 0 | 0 | 1,013 |
| Ruby | 0 | 0 | 0 | 0 | 0 | 312 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 312 |
| Huslia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 0 | 0 | 0 | 70 |
| Hughes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 13 |
| Allakaket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 13 |
| Alatna | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bettles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 4 | 0 | 0 | 0 | 0 | 629 | 1,286 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 114 | 0 | 0 | 0 | 2,072 |

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Table 11.–Page 2 of 2.

| Community | Coastal District | Districts 1 | 2 | 3 | Subdistricts[a] 4A | 4B | 4C | 5A | 5B | 5C | 5D-down | 5D-up | River Drainages Innoko | Koyukuk | Chandalar | Porcupine | Black | Total by Community[b] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 312 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 312 |
| Stevens Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Birch Creek | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Beaver | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fort Yukon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 1,022 | 0 | 0 | 0 | 0 | 0 | 1,040 |
| Venetie | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 0 | 0 | 34 |
| Chalkyitsik | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 312 | 0 | 18 | 1,022 | 0 | 0 | 34 | 0 | 0 | 1,386 |
| Survey Totals | 33 | 597 | 551 | 13 | 629 | 1,286 | 43 | 0 | 312 | 0 | 18 | 1,022 | 23 | 114 | 34 | 0 | 0 | 4,675 |

*Note*: Commercially related fish are salmon harvested during commercial fishing that were not sold, but retained and used for subsistence purposes.

[a] Harvest in Subdistrict 5-D near Ft. Yukon is divided according to whether harvest occurred downriver (5D-down) or upriver (5D-up) of the confluence of the Porcupine River with the Yukon River.

[b] Totals may not add in both directions due to decimal rounding.

Table 12.–Estimated subsistence harvest of pink salmon, whitefish, pike, and sheefish by surveyed communities, Yukon Area, 2011.

| | | | Estimated Subsistence Harvest | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Pink Salmon | | Large Whitefish[a] | | Small Whitefish[a] | | Northern Pike | | Sheefish | | Expanded |
| | Total | Households | Estimated | CI | Estimated | CI | Estimated | CI | Estimated | CI | Estimated | CI | Miscellaneous |
| Community | Households | Contacted[b] | Total | 95% | Total | 95% | Total | 95% | Total | 95% | Total | 95% | Fish Harvest |
| Hooper Bay | 209 | 79 | 210 | 159 | 554 | 255 | 3,574 | 1,367 | 304 | 226 | 101 | 126 | 4,743 |
| Scammon Bay | 92 | 37 | 1,888 | 895 | 957 | 745 | 2,755 | 1,786 | 940 | 343 | 76 | 54 | 6,616 |
| Coastal District | 301 | 116 | 2,098 | 909 | 1,511 | 787 | 6,329 | 2,249 | 1,244 | 410 | 177 | 138 | 11,359 |
| Nunam Iqua | 36 | 28 | 8 | 7 | 248 | 137 | 511 | 348 | 26 | 8 | 542 | 162 | 1,335 |
| Alakanuk | 133 | 54 | 13 | 22 | 380 | 223 | 2,018 | 1,798 | 354 | 303 | 793 | 804 | 3,558 |
| Emmonak | 166 | 91 | 0 | 0 | 864 | 449 | 1,714 | 872 | 496 | 224 | 627 | 186 | 3,701 |
| Kotlik | 104 | 40 | 32 | 42 | 347 | 136 | 1,152 | 773 | 467 | 355 | 1,052 | 583 | 3,050 |
| District 1 | 439 | 213 | 53 | 48 | 1,839 | 537 | 5,395 | 2,171 | 1,343 | 517 | 3,014 | 1,024 | 11,644 |
| Mountain Village | 163 | 66 | 24 | 18 | 3,424 | 1,884 | 993 | 628 | 2,159 | 1,120 | 1,106 | 468 | 7,706 |
| Pitkas Point | 28 | 17 | 0 | 0 | 467 | 138 | 75 | 85 | 72 | 36 | 117 | 55 | 731 |
| St. Mary's | 121 | 47 | 1 | 1 | 2,336 | 797 | 201 | 103 | 1,833 | 1,018 | 560 | 276 | 4,931 |
| Pilot Station | 109 | 54 | 0 | 0 | 1,059 | 605 | 52 | 76 | 45 | 26 | 225 | 92 | 1,381 |
| Marshall | 70 | 28 | 66 | 99 | 1,677 | 503 | 310 | 341 | 1,477 | 1,317 | 396 | 210 | 3,926 |
| District 2 | 491 | 212 | 91 | 101 | 8,963 | 2,196 | 1,631 | 731 | 5,586 | 2,007 | 2,404 | 593 | 18,675 |
| Russian Mission | 66 | 24 | 0 | 0 | 912 | 604 | 210 | 125 | 490 | 257 | 412 | 303 | 2,024 |
| Holy Cross | 56 | 29 | 0 | 0 | 557 | 408 | 7 | 10 | 259 | 218 | 290 | 259 | 1,113 |
| Shageluk | 31 | 17 | 9 | 5 | 2,341 | 833 | 0 | 0 | 392 | 177 | 189 | 52 | 2,931 |
| District 3 | 153 | 70 | 9 | 5 | 3,810 | 1,107 | 217 | 126 | 1,141 | 380 | 891 | 401 | 6,068 |
| Anvik | 28 | 24 | 0 | 0 | 63 | 34 | 0 | 0 | 97 | 32 | 61 | 9 | 221 |
| Grayling | 48 | 17 | 40 | 51 | 688 | 426 | 140 | 175 | 56 | 51 | 317 | 132 | 1,241 |
| Kaltag | 61 | 17 | 0 | 0 | 134 | 109 | 0 | 0 | 18 | 9 | 34 | 33 | 186 |
| Nulato | 76 | 24 | 0 | 0 | 379 | 259 | 0 | 0 | 16 | 28 | 284 | 212 | 679 |
| Koyukuk | 51 | 16 | 0 | 0 | 430 | 252 | 71 | 88 | 2,734 | 4,076 | 293 | 72 | 3,528 |
| Galena | 169 | 66 | 0 | 0 | 1,757 | 774 | 53 | 46 | 100 | 60 | 165 | 66 | 2,075 |
| Ruby | 57 | 20 | 0 | 0 | 63 | 13 | 50 | 0 | 3 | 0 | 3 | 3 | 119 |
| Huslia | 82 | 28 | 0 | 0 | 1,873 | 1,251 | 0 | 0 | 590 | 292 | 240 | 50 | 2,703 |
| Hughes | 35 | 25 | 0 | 0 | 959 | 762 | 0 | 0 | 150 | 0 | 141 | 21 | 1,250 |
| Allakaket | 65 | 25 | 0 | 0 | 1,612 | 935 | 1,650 | 2,641 | 526 | 10 | 623 | 176 | 4,411 |
| Alatna | 9 | 7 | 0 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 90 |
| Bettles | 24 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 30 | 0 | 0 | 18 |
| District 4 | 705 | 283 | 40 | 51 | 8,018 | 1,986 | 1,964 | 2,648 | 4,308 | 4,087 | 2,191 | 327 | 16,521 |

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Table 12.–Page 2 of 2.

| Community | Total Households | Households Contacted[b] | Estimated Subsistence Harvest: Pink Salmon Estimated Total | Pink Salmon CI 95% | Large Whitefish[a] Estimated Total | Large Whitefish[a] CI 95% | Small Whitefish[a] Estimated Total | Small Whitefish[a] CI 95% | Northern Pike Estimated Total | Northern Pike CI 95% | Sheefish Estimated Total | Sheefish CI 95% | Total Expanded Miscellaneous Fish Harvest |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 99 | 37 | 0 | 0 | 1,719 | 901 | 1,609 | 1,263 | 211 | 204 | 1,111 | 526 | 4,650 |
| Stevens Village | 15 | 11 | 0 | 0 | 11 | 0 | 0 | 0 | 16 | 6 | 11 | 0 | 38 |
| Birch Creek | 16 | 7 | 0 | 0 | 3 | 4 | 0 | 0 | 3 | 4 | 0 | 0 | 6 |
| Beaver | 31 | 25 | 0 | 0 | 15 | 8 | 38 | 35 | 12 | 10 | 1 | 1 | 66 |
| Fort Yukon | 219 | 76 | 0 | 0 | 956 | 755 | 385 | 262 | 365 | 310 | 335 | 298 | 2,041 |
| Venetie | 78 | 28 | 0 | 0 | 61 | 29 | 411 | 701 | 15 | 21 | 4 | 0 | 491 |
| Chalkyitsik | 21 | 12 | 0 | 0 | 5 | 5 | 0 | 0 | 26 | 24 | 0 | 0 | 31 |
| District 5 | 479 | 196 | 0 | 0 | 2,770 | 1,176 | 2,443 | 1,468 | 648 | 373 | 1,462 | 604 | 7,323 |
| Survey Totals | 2,568 | 1,090 | 2,291 | 918 | 26,911 | 3,505 | 17,979 | 4,415 | 14,270 | 4,632 | 10,139 | 1,432 | 71,590 |

*Note*: The estimated harvest in surveyed communities is based on a stratified random sample of households as designated for the estimation of subsistence salmon harvests. Estimates include a 95% confidence interval (CI 95%).

[a] Large whitefish are considered those 4 pounds or larger and small whitefish are less than 4 pounds.

[b] The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.

Table 13.–Reported subsistence harvest of other miscellaneous fish species by surveyed communities, Yukon Area, 2011.

| Community | Total Households | Households Contacted [a] | Reported Harvest of Miscellaneous Fish Species (Not Expanded) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Burbot | Arctic Lamprey [b] | Tomcod | Arctic Grayling | Longnose Sucker | Arctic Char | Alaska Blackfish | Sockeye Salmon [c] |
| Hooper Bay | 209 | 79 | 22 | 0 | 2,847 | 0 | 0 | 15 | 5,670 | 19 |
| Scammon Bay | 92 | 37 | 88 | 0 | 1,868 | 0 | 0 | 20 | 9,000 | 5 |
| Coastal District | 301 | 116 | 110 | 0 | 4,715 | 0 | 0 | 35 | 14,670 | 24 |
| Nunam Iqua | 36 | 28 | 54 | 0 | 310 | 0 | 0 | 0 | 3,950 | 4 |
| Alakanuk | 133 | 54 | 126 | 0 | 595 | 20 | 0 | 0 | 2,590 | 2 |
| Emmonak | 166 | 91 | 127 | 45 | 890 | 0 | 0 | 0 | 37,346 | 7 |
| Kotlik | 104 | 40 | 68 | 0 | 195 | 4 | 0 | 2 | 2,050 | 11 |
| District 1 | 439 | 213 | 375 | 45 | 1,990 | 24 | 0 | 2 | 45,936 | 24 |
| Mountain Village | 163 | 66 | 1,304 | 161 | 50 | 176 | 0 | 11 | 13,310 | 44 |
| Pitkas Point | 28 | 17 | 67 | 0 | 0 | 26 | 0 | 0 | 1,904 | 20 |
| St. Mary's | 121 | 47 | 97 | 655 | 40 | 22 | 0 | 2 | 5,740 | 60 |
| Pilot Station | 109 | 54 | 68 | 221 | 0 | 0 | 0 | 0 | 2,234 | 14 |
| Marshall | 70 | 28 | 141 | 695 | 0 | 40 | 4 | 2 | 470 | 28 |
| District 2 | 491 | 212 | 1,677 | 1,732 | 90 | 264 | 4 | 15 | 23,658 | 166 |
| Russian Mission | 66 | 24 | 97 | 2,463 | 0 | 4 | 0 | 5 | 2,800 | 7 |
| Holy Cross | 56 | 29 | 10 | 65 | 0 | 5 | 0 | 0 | 0 | 16 |
| Shageluk | 31 | 17 | 6 | 20 | 2 | 0 | 0 | 0 | 0 | 0 |
| District 3 | 153 | 70 | 113 | 2,548 | 2 | 9 | 0 | 5 | 2,800 | 23 |
| Anvik | 28 | 24 | 1 | 1,100 | 0 | 56 | 0 | 0 | 0 | 4 |
| Grayling | 48 | 17 | 33 | 612 | 0 | 70 | 0 | 0 | 0 | 0 |
| Kaltag | 61 | 17 | 0 | 0 | 0 | 103 | 0 | 9 | 0 | 0 |
| Nulato | 76 | 24 | 6 | 0 | 0 | 225 | 0 | 114 | 0 | 0 |
| Koyukuk | 51 | 16 | 11 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Galena | 169 | 66 | 47 | 0 | 0 | 3 | 2 | 4 | 0 | 0 |
| Ruby | 57 | 20 | 0 | 0 | 0 | 42 | 0 | 1 | 0 | 0 |
| Huslia | 82 | 28 | 5 | 0 | 0 | 14 | 10 | 2 | 0 | 20 |
| Hughes | 35 | 25 | 0 | 0 | 0 | 14 | 20 | 0 | 0 | 0 |
| Allakaket | 65 | 25 | 50 | 0 | 0 | 38 | 228 | 15 | 0 | 13 |
| Alatna | 9 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bettles | 24 | 14 | 0 | 0 | 0 | 11 | 0 | 3 | 0 | 0 |
| District 4 | 705 | 283 | 153 | 1,712 | 0 | 576 | 262 | 148 | 0 | 37 |

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Table 13.–Page 2 of 2.

| Community | Total Households | Households Contacted[a] | Reported Harvest of Miscellaneous Fish Species (Not Expanded) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Burbot | Arctic Lamprey[b] | Tomcod | Arctic Grayling | Longnose Sucker | Arctic Char | Alaska Blackfish | Sockeye Salmon [c] |
| Tanana | 99 | 37 | 31 | 0 | 0 | 25 | 15 | 0 | 0 | 0 |
| Stevens Village | 15 | 11 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Birch Creek | 16 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Beaver | 31 | 25 | 2 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| Fort Yukon | 219 | 76 | 10 | 0 | 0 | 0 | 5 | 0 | 0 | 5 |
| Venetie | 78 | 28 | 0 | 0 | 0 | 370 | 0 | 0 | 0 | 0 |
| Chalkyitsik | 21 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *District 5* | *479* | *196* | *49* | *0* | *0* | *400* | *20* | *0* | *0* | *5* |
| Survey Totals | 2,568 | 1,090 | 2,477 | 6,037 | 6,797 | 1,273 | 286 | 205 | 87,064 | 279 |

[a] The number of households contacted per species may vary. The number of households indicated is the greatest number of households contacted for a given species.

[b] Surveys are conducted before the Arctic lamprey fishery occurs in November and December. Consequently totals are for previous year harvest, i.e., the 2011 reported harvest is for the 2010 calendar year.

[c] Due to low harvest numbers of sockeye salmon and difficulties with identification by fishermen, the harvest is not estimated.

Table 14.–Responses to survey question assessing percentage of subsistence salmon needs being met, by community, by species, Yukon Area, 2011.

| | | Percent of Households (HH's) That Responded to Subsistence Needs Met Question, By Community, By Species | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Chinook Salmon | | | | | Summer Chum Salmon | | | | |
| Community | Total HHs | Total Number of HH Responses | % HH's Responses 0% to 25% | % HH's Responses 26 % to 50% | % HH's Responses 51% to 75% | % HH's Responses 76% to 100% | Total Number of HH Responses | % HH's Responses 0% to 25% | % HH's Responses 26 % to 50% | % HH's Responses 51% to 75% | % HH's Responses 76% to 100% |
| Hooper Bay | 212 | 51 | 67% | 12% | 2% | 20% | 52 | 13% | 13% | 2% | 71% |
| Scammon Bay | 90 | 30 | 27% | 27% | 3% | 43% | 25 | 16% | 4% | 12% | 68% |
| Coastal District | 302 | 81 | 52% | 17% | 2% | 28% | 77 | 14% | 10% | 5% | 70% |
| Nunam Iqua | 37 | 22 | 45% | 18% | 9% | 27% | 21 | 43% | 10% | 10% | 38% |
| Alakanuk | 139 | 39 | 46% | 13% | 3% | 38% | 36 | 28% | 11% | 11% | 50% |
| Emmonak | 169 | 63 | 51% | 10% | 10% | 30% | 48 | 35% | 10% | 2% | 52% |
| Kotlik | 105 | 33 | 33% | 6% | 12% | 48% | 31 | 32% | 3% | 10% | 55% |
| District 1 | 450 | 157 | 45% | 11% | 8% | 36% | 136 | 34% | 9% | 7% | 50% |
| Mountain Village | 161 | 51 | 37% | 10% | 6% | 47% | 48 | 27% | 17% | 8% | 48% |
| Pitkas Point | 27 | 14 | 43% | 29% | 0% | 29% | 13 | 38% | 8% | 15% | 38% |
| St. Mary's | 120 | 36 | 31% | 19% | 11% | 39% | 35 | 26% | 29% | 6% | 40% |
| Pilot Station | 111 | 33 | 18% | 24% | 9% | 48% | 26 | 15% | 15% | 12% | 58% |
| Marshall | 73 | 24 | 29% | 21% | 8% | 42% | 21 | 24% | 5% | 10% | 62% |
| District 2 | 492 | 158 | 31% | 18% | 8% | 43% | 143 | 25% | 17% | 9% | 49% |
| Russian Mission | 65 | 23 | 26% | 13% | 4% | 57% | 17 | 18% | 18% | 6% | 59% |
| Holy Cross | 60 | 20 | 15% | 20% | 25% | 40% | 6 | 17% | 33% | 17% | 33% |
| Shageluk | 27 | 9 | 11% | 33% | 22% | 33% | 8 | 38% | 13% | 0% | 50% |
| District 3 | 152 | 52 | 19% | 19% | 15% | 46% | 31 | 23% | 19% | 6% | 52% |

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Table 14.–Page 2 of 4.

| | | Percent of Households (HH's) That Responded to Subsistence Needs Met Question, By Community, By Species | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Chinook Salmon | | | | | Summer Chum Salmon | | | | |
| Community | Total HHs | Total Number of HH Responses | % HH's Responses 0% to 25% | % HH's Responses 26 % to 50% | % HH's Responses 51% to 75% | % HH's Responses 76% to 100% | Total Number of Household Responses | % HH's Responses 0% to 25% | % HH's Responses 26 % to 50% | % HH's Responses 51% to 75% | % HH's Responses 76% to 100% |
| Anvik | 28 | 21 | 10% | 19% | 5% | 67% | 8 | 13% | 13% | 0% | 75% |
| Grayling | 45 | 10 | 20% | 10% | 20% | 50% | 6 | 50% | 0% | 17% | 33% |
| Kaltag | 63 | 12 | 25% | 8% | 25% | 42% | 2 | 50% | 0% | 0% | 50% |
| Nulato | 79 | 16 | 19% | 6% | 13% | 63% | 0 | - | - | - | - |
| Koyukuk | 41 | 15 | 33% | 7% | 7% | 53% | 4 | 0% | 0% | 0% | 100% |
| Galena | 159 | 40 | 38% | 8% | 8% | 48% | 5 | 20% | 0% | 0% | 80% |
| Ruby | 58 | 14 | 43% | 7% | 0% | 50% | 1 | 0% | 0% | 0% | 100% |
| Huslia | 73 | 9 | 33% | 33% | 0% | 33% | 7 | 29% | 29% | 0% | 43% |
| Hughes | 30 | 6 | 50% | 17% | 0% | 33% | 4 | 50% | 0% | 0% | 50% |
| Allakaket | 58 | 3 | 67% | 33% | 0% | 0% | 2 | 0% | 0% | 100% | 0% |
| Alatna | 8 | 4 | 100% | 0% | 0% | 0% | 1 | 0% | 0% | 0% | 100% |
| Bettles | 28 | 0 | - | - | - | - | 0 | - | - | - | - |
| District 4 | 670 | 150 | 32% | 11% | 8% | 49% | 40 | 25% | 8% | 8% | 60% |
| Tanana | 99 | 31 | 32% | 16% | 3% | 48% | 1 | 0% | 0% | 0% | 100% |
| Stevens Village | 15 | 7 | 29% | 29% | 14% | 29% | 1 | 0% | 0% | 0% | 100% |
| Birch Creek | 16 | 4 | 25% | 25% | 0% | 50% | 1 | 0% | 0% | 0% | 100% |
| Beaver | 31 | 5 | 40% | 40% | 0% | 20% | 0 | - | - | - | - |
| Fort Yukon | 219 | 57 | 63% | 16% | 2% | 19% | 5 | 40% | 0% | 0% | 60% |
| Venetie | 78 | 7 | 57% | 29% | 0% | 14% | 0 | - | - | - | - |
| Chalkyitsik | 21 | 9 | 67% | 22% | 0% | 11% | 1 | 100% | 0% | 0% | 0% |
| District 5 | 479 | 120 | 51% | 19% | 3% | 28% | 9 | 33% | 0% | 0% | 67% |
| Survey Totals | 2,568 | 718 | 38% | 16% | 7% | 38% | 436 | 26% | 10% | 6% | 58% |

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Table 14.–Page 3 of 4.

| | | Percent of Households (HH's) That Responded to Subsistence Needs Met Question, By Community, By Species | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Fall Chum Salmon | | | | | Coho Salmon | | | | |
| Community | Total HHs | Total Number of HH Responses | % HH's Responses 0% to 25% | % HH's Responses 26 % to 50% | % HH's Responses 51% to 75% | % HH's Responses 76% to 100% | Total Number of Household Responses | % HH's Responses 0% to 25% | % HH's Responses 26 % to 50% | % HH's Responses 51% to 75% | % HH's Responses 76% to 100% |
| Hooper Bay | 212 | 3 | 33% | 0% | 0% | 67% | 2 | 50% | 0% | 0% | 50% |
| Scammon Bay | 90 | 5 | 60% | 0% | 0% | 40% | 6 | 67% | 0% | 0% | 33% |
| Coastal District | 302 | 8 | 50% | 0% | 0% | 50% | 8 | 63% | 0% | 0% | 38% |
| Nunam Iqua | 37 | 12 | 75% | 8% | 8% | 8% | 6 | 100% | 0% | 0% | 0% |
| Alakanuk | 139 | 19 | 58% | 11% | 0% | 32% | 9 | 56% | 0% | 0% | 44% |
| Emmonak | 169 | 25 | 76% | 4% | 8% | 12% | 17 | 65% | 6% | 12% | 18% |
| Kotlik | 105 | 9 | 78% | 0% | 0% | 22% | 7 | 29% | 14% | 0% | 57% |
| District 1 | 450 | 65 | 71% | 6% | 5% | 18% | 39 | 62% | 5% | 5% | 28% |
| Mountain Village | 161 | 19 | 47% | 5% | 16% | 32% | 10 | 50% | 10% | 0% | 40% |
| Pitkas Point | 27 | 4 | 75% | 0% | 0% | 25% | 4 | 75% | 0% | 0% | 25% |
| St. Mary's | 120 | 7 | 29% | 0% | 0% | 71% | 6 | 33% | 0% | 0% | 67% |
| Pilot Station | 111 | 2 | 50% | 0% | 0% | 50% | 1 | 100% | 0% | 0% | 0% |
| Marshall | 73 | 7 | 29% | 14% | 14% | 43% | 3 | 67% | 0% | 0% | 33% |
| District 2 | 492 | 39 | 44% | 5% | 10% | 41% | 24 | 54% | 4% | 0% | 42% |
| Russian Mission | 65 | 3 | 33% | 33% | 0% | 33% | 1 | 100% | 0% | 0% | 0% |
| Holy Cross | 60 | 3 | 33% | 0% | 0% | 67% | 0 | - | - | - | - |
| Shageluk | 27 | 5 | 20% | 20% | 0% | 60% | 3 | 0% | 0% | 0% | 100% |
| District 3 | 152 | 11 | 27% | 18% | 0% | 55% | 4 | 25% | 0% | 0% | 75% |

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Table 14.–Page 4 of 4.

| Community | Total HHs | Percent of Households (HH's) That Responded to Subsistence Needs Met Question, By Community, By Species | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Fall Chum Salmon | | | | | Coho Salmon | | | | |
| | | Total Number of HH Responses | % HH's Responses 0% to 25% | % HH's Responses 26 % to 50% | % HH's Responses 51% to 75% | % HH's Responses 76% to 100% | Total Number of Household Responses | % HH's Responses 0% to 25% | % HH's Responses 26 % to 50% | % HH's Responses 51% to 75% | % HH's Responses 76% to 100% |
| Anvik | 28 | 8 | 25% | 13% | 0% | 63% | 1 | 0% | 0% | 0% | 100% |
| Grayling | 45 | 6 | 33% | 17% | 17% | 33% | 3 | 67% | 0% | 0% | 33% |
| Kaltag | 63 | 4 | 50% | 0% | 0% | 50% | 2 | 50% | 0% | 0% | 50% |
| Nulato | 79 | 11 | 18% | 27% | 0% | 55% | 4 | 25% | 0% | 0% | 75% |
| Koyukuk | 41 | 8 | 50% | 0% | 0% | 50% | 3 | 0% | 0% | 0% | 100% |
| Galena | 159 | 21 | 48% | 10% | 5% | 38% | 7 | 14% | 14% | 0% | 71% |
| Ruby | 58 | 7 | 57% | 0% | 0% | 43% | 2 | 0% | 0% | 0% | 100% |
| Huslia | 73 | 6 | 67% | 0% | 0% | 33% | 4 | 50% | 0% | 0% | 50% |
| Hughes | 30 | 1 | 0% | 0% | 0% | 100% | 0 | - | - | - | - |
| Allakaket | 58 | 1 | 100% | 0% | 0% | 0% | 1 | 100% | 0% | 0% | 0% |
| Alatna | 8 | 2 | 100% | 0% | 0% | 0% | 0 | - | - | - | - |
| Bettles | 28 | 0 | - | - | - | - | 0 | - | - | - | - |
| *District 4* | *670* | *75* | *44%* | *9%* | *3%* | *44%* | *27* | *30%* | *4%* | *0%* | *67%* |
| Tanana | 99 | 20 | 30% | 20% | 0% | 50% | 3 | 33% | 0% | 0% | 67% |
| Stevens Village | 15 | 2 | 0% | 0% | 50% | 50% | 0 | - | - | - | - |
| Birch Creek | 16 | 2 | 50% | 50% | 0% | 0% | 1 | 100% | 0% | 0% | 0% |
| Beaver | 31 | 1 | 0% | 0% | 0% | 100% | 0 | - | - | - | - |
| Fort Yukon | 219 | 23 | 48% | 9% | 9% | 35% | 6 | 50% | 0% | 0% | 50% |
| Venetie | 78 | 4 | 25% | 0% | 0% | 75% | 0 | - | - | - | - |
| Chalkyitsik | 21 | 3 | 100% | 0% | 0% | 0% | 0 | - | - | - | - |
| *District 5* | *479* | *55* | *40%* | *13%* | *5%* | *42%* | *10* | *50%* | *0%* | *0%* | *50%* |
| Survey Totals | 2,568 | 253 | 46% | 9% | 4% | 42% | 112 | 47% | 2% | 1% | 50% |

*Note*: Dashes indicate indefinable values.

Table 15.–Reported subsistence and personal use fish harvested under the authority of a permit, listed by permit area, Yukon Area, 2011.

| Permit Fishing Area | Permit[a] Type | Issued[b] | Returned | Percent Returned | Number of Permits Returned that Fished[c] | Reported Harvest Chinook[d] | Summer Chum[d] | Fall Chum[d] | Coho[d] | Whitefish | Sheefish | Burbot | Northern Pike | Longnose Sucker | Arctic Grayling |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subsistence Permit | | | | | | | | | | | | | | | |
| Koyukuk Middle and South Fork Rivers | SF | 1 | 1 | 100% | 1 | 0 | 0 | 0 | 0 | 25 | 0 | 0 | 1 | 20 | 45 |
| Yukon River Rampart Area | SR | 29 | 29 | 100% | 24 | 1,586 | 429 | 768 | 1 | 76 | 1 | 0 | 11 | 0 | 0 |
| Yukon River near[e] Haul Road Bridge | SY | 74 | 73 | 99% | 43 | 1,552 | 1,139 | 1,828 | 1 | 315 | 5 | 12 | 36 | 20 | 1 |
| Yukon River near | SE | 60 | 58 | 97% | 31 | 768 | 51 | 5,374 | 0 | 180 | 42 | 3 | 56 | 108 | 348 |
| Circle and Eagle[f] | SEU | 27 | 27 | 100% | 18 | 370 | 0 | 12,477 | 1 | 127 | 22 | 2 | 15 | 12 | 1 |
| Tanana River Subdistrict 6A | SA | 24 | 24 | 100% | 16 | 330 | 98 | 4,565 | 1,435 | 236 | 4 | 6 | 5 | 0 | 0 |
| Tanana River Subdistrict 6B | SB | 86 | 82 | 95% | 43 | 684 | 678 | 7,463 | 4,584 | 641 | 27 | 13 | 4 | 12 | 1 |
| Tanana River Upstream of Subdistrict 6C | SU | 41 | 39 | 95% | 23 | 0 | 0 | 0 | 0 | 3,131 | 0 | 24 | 58 | 78 | 79 |
| Kantishna River Subdistrict 6A | SK | 6 | 5 | 83% | 3 | 1 | 49 | 698 | 105 | 28 | 1 | 9 | 33 | 28 | 0 |
| Tolovana River Pike Subdistrict 6B | ST | 70 | 69 | 99% | 27 | 0 | 0 | 0 | 0 | 36 | 0 | 70 | 100 | 0 | 0 |
| Subsistence Permit Subtotals | | 418 | 407 | 97% | 229 | 5,291 | 2,444 | 33,173 | 6,127 | 4,795 | 102 | 139 | 319 | 278 | 475 |
| Personal Use Permit | | | | | | | | | | | | | | | |
| Tanana River Salmon Subdistrict 6C | PC | 67 | 64 | 96% | 33 | 89 | 439 | 347 | 232 | 20 | 1 | 1 | 0 | 0 | 0 |
| Tanana River Upstream of Subdistrict 6C | PW | 7 | 7 | 100% | 5 | 0 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 136 | 0 |
| Personal Use Permit Subtotals | | 74 | 71 | 96% | 38 | 89 | 439 | 347 | 232 | 56 | 1 | 1 | 0 | 136 | 0 |
| Permit Totals | | 492 | 478 | 97% | 267 | 5,380 | 2,883 | 33,520 | 6,359 | 4,851 | 103 | 140 | 319 | 414 | 475 |

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*Note*: Permit "Type" is the letter code used on permits and refers to the fishery type (subsistence or personal use), permit fishing area or species targeted.

[a] Permits returned as of February 15, 2012.

[b] Includes 37 households that were "issued" permits for more than one area, including 8 permit holders issued an additional SE or SEU permit to track harvest above and below Eagle sonar project.

[c] Includes nine households that "fished" in two different permit areas and 4 households that fished in SE and SEU.

[d] Does not include District 6 commercial related harvest of 352 Chinook, 1,650 fall chum, and 718 coho salmon caught but not sold during commercial fishing and retained for subsistence use in 2011.

[e] Includes Stevens Village.

[f] Does not include five Chinook salmon and one fall chum salmon that could not be released live from the ADF&G Eagle sonar test fishery project and were given to residents of Eagle. Harvest taking place between the Eagle Sonar and the U.S./Canada border is reported on SEU permits.

Table 16.–Reported subsistence and personal use fish harvested under the authority of a permit, listed by fishery, by community of residence, and by drainage, Yukon Area, 2011.

| Community | Harvest by Drainage | Permits[a] Issued[b] | Returned | Percent Returned | Number of Permits Returned that Fished[c] | Reported Harvest: Chinook[d] | Summer Chum[d] | Fall Chum[d] | Coho[d] | Whitefish | Sheefish | Burbot | Northern Pike | Longnose Sucker | Arctic Grayling |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subsistence Permit | | | | | | | | | | | | | | | |
| Central | Yukon River | 6 | 6 | 100% | 3 | 66 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Circle | Yukon River | 23 | 21 | 91% | 9 | 297 | 48 | 299 | 0 | 20 | 0 | 1 | 40 | 30 | 20 |
| Eagle[e] | Yukon River | 42 | 42 | 100% | 32 | 723 | 2 | 17,454 | 1 | 287 | 64 | 2 | 31 | 90 | 326 |
| Fairbanks (FNSB)[f] | Yukon River | 85 | 84 | 99% | 52 | 2,186 | 688 | 1,696 | 2 | 240 | 6 | 2 | 21 | 0 | 1 |
| | Tanana River | 29 | 28 | 97% | 16 | 146 | 185 | 3,359 | 871 | 181 | 4 | 7 | 1 | 0 | 0 |
| | Tolovana River | 55 | 55 | 100% | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 69 | 29 | 0 | 0 |
| | Kantishna River | 2 | 2 | 100% | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 0 | 0 |
| | FNSB Subtotal | 171 | 169 | 99% | 92 | 2,332 | 873 | 5,055 | 873 | 421 | 10 | 78 | 76 | 0 | 1 |
| Healy | Tanana River | 4 | 4 | 100% | 3 | 0 | 0 | 950 | 944 | 81 | 10 | 6 | 0 | 0 | 0 |
| | Kantishna River | 1 | 1 | 100% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Healy Subtotal | 5 | 5 | 100% | 3 | 0 | 0 | 950 | 944 | 81 | 10 | 6 | 0 | 0 | 0 |
| Manley | Yukon River | 1 | 1 | 100% | 1 | 268 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Tanana River | 13 | 13 | 100% | 9 | 286 | 93 | 2,321 | 1,425 | 52 | 4 | 0 | 4 | 0 | 0 |
| | Kantishna River | 1 | 1 | 100% | 1 | 1 | 49 | 12 | 57 | 14 | 1 | 0 | 8 | 0 | 0 |
| | Manley Subtotal | 15 | 15 | 100% | 11 | 555 | 151 | 2,333 | 1,482 | 66 | 5 | 0 | 12 | 0 | 0 |
| Minto | Yukon River | 6 | 6 | 100% | 3 | 202 | 660 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Tanana River | 23 | 21 | 91% | 6 | 61 | 27 | 1,500 | 0 | 190 | 13 | 0 | 0 | 2 | 0 |
| | Tolovana River | 13 | 12 | 92% | 3 | 0 | 0 | 0 | 0 | 36 | 0 | 1 | 64 | 0 | 0 |
| | Minto Subtotal | 42 | 39 | 93% | 12 | 263 | 687 | 1,575 | 0 | 226 | 13 | 1 | 64 | 2 | 0 |
| Nenana | Yukon River | 2 | 2 | 100% | 1 | 60 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Tanana River | 39 | 38 | 97% | 23 | 513 | 471 | 3,890 | 2,776 | 346 | 0 | 5 | 3 | 8 | 1 |
| | Kantishna River | 2 | 1 | 50% | 1 | 0 | 0 | 686 | 48 | 14 | 0 | 9 | 0 | 28 | 0 |
| | Nenana Subtotal | 43 | 41 | 95% | 25 | 573 | 476 | 4576 | 2824 | 360 | 0 | 14 | 3 | 36 | 1 |
| Rampart | Yukon River | 4 | 4 | 100% | 4 | 201 | 67 | 340 | 0 | 30 | 0 | 0 | 1 | 0 | 0 |
| Stevens Village | Yukon River | 5 | 5 | 100% | 2 | 26 | 30 | 450 | 0 | 100 | 0 | 10 | 15 | 20 | 0 |
| Villages (UTV)[g] | Yukon River | 8 | 8 | 100% | 4 | 28 | 1 | 33 | 0 | 0 | 0 | 2 | 0 | 0 | 3 |
| | Tanana River | 40 | 38 | 95% | 24 | 0 | 0 | 0 | 0 | 3,131 | 0 | 24 | 65 | 78 | 79 |
| | UTV Subtotal | 48 | 46 | 96% | 28 | 28 | 1 | 33 | 0 | 3,131 | 0 | 26 | 65 | 78 | 82 |

-continued-

Table 16.–Page 2 of 2.

| Community | Harvest by Drainage | Permits[a] Issued[b] | Permits[a] Returned | Percent Returned | Number of Permits Returned that Fished[c] | Reported Harvest Chinook[d] | Summer Chum[d] | Fall Chum[d] | Coho[d] | Whitefish | Sheefish | Burbot | Northern Pike | Longnose Sucker | Arctic Grayling |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Subsistence[h] | Yukon River | 9 | 9 | 100% | 6 | 219 | 109 | 100 | 0 | 46 | 0 | 0 | 11 | 20 | 45 |
| | Tanana River | 4 | 4 | 100% | 2 | 8 | 0 | 8 | 3 | 27 | 0 | 1 | 1 | 2 | 0 |
| | Tolovana River | 1 | 1 | 100% | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | Other Subtotal | 14 | 14 | 100% | 8 | 227 | 109 | 108 | 3 | 73 | 0 | 1 | 12 | 22 | 45 |
| Subsistence | Permit Subtotals | 418 | 407 | 97% | 229 | 5,291 | 2,444 | 33,173 | 6,127 | 4,795 | 102 | 139 | 319 | 278 | 475 |
| Personal Use Permit Fairbanks (FNSB)[f] | Tanana River | 71 | 68 | 96% | 35 | 89 | 433 | 347 | 232 | 22 | 1 | 1 | 0 | 0 | 0 |
| Other Personal Use[i] | Tanana River | 3 | 3 | 100% | 3 | 0 | 6 | 0 | 0 | 34 | 0 | 0 | 0 | 136 | 0 |
| Personal Use | Permit Subtotals | 74 | 71 | 96% | 38 | 89 | 439 | 347 | 232 | 56 | 1 | 1 | 0 | 136 | 0 |
| Permit Totals | | 492 | 478 | 97% | 267 | 5,380 | 2,883 | 33,520 | 6,359 | 4,851 | 103 | 140 | 319 | 414 | 475 |

[a] Permits returned as of February 15, 2012.

[b] Includes 37 households that were "issued" permits for more than one area.

[c] Includes eight households issued SE and SEU permits, and four household that "fished" in both permit areas.

[d] Does not include District 6 commercial related harvest of 352 Chinook, 1,650 fall chum, and 718 coho salmon caught but not sold during commercial fishing and retained for subsistence use in 2011.

[e] Does not include test fish.

[f] Fairbanks North Star Borough (FNSB) includes residents from the communities of Ester, Fairbanks, North Pole, Salcha, and Two Rivers.

[g] Upper Tanana Villages (UTV) include residents from the communities of Delta Junction, Dot Lake, Northway, Tanacross, and Tok.

[h] "Other Subsistence" represents residents from Anchorage, Clear, Denali Park, Tanana, Wasilla, Willow, and Wiseman who were issued a subsistence fishing permit for Yukon, Tanana, Tolovana, Kantishna, and Upper Koyukuk rivers.

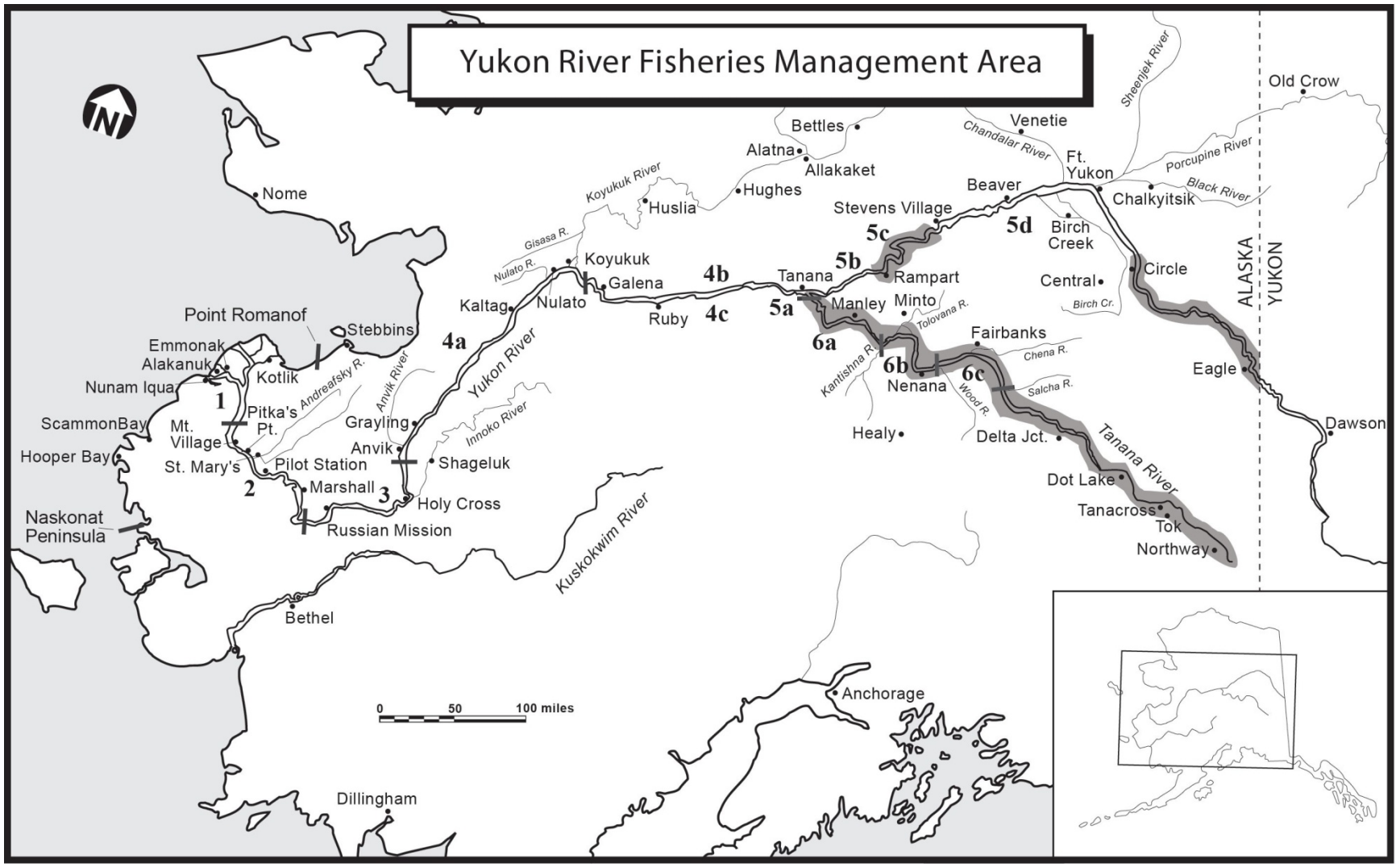
[i] "Other Personal Use" includes residents from Nenana and Delta Junction.

Table 17.–Reported subsistence and commercial harvest of Arctic lamprey from postseason postcards for the October 1 to December 31, 2010 fishing period.

| Community | Households Mailed Postcards | Returned Postcards | Reported Subsistence Fishing | Subsistence Lamprey Harvested[a] | Reported Commercial Fishing[a] | Commercial Lamprey Harvested[a] | Number of Lamprey Given away[a] | Number of Lamprey Received[b] |
|---|---|---|---|---|---|---|---|---|
| Mountain Village | 140 | 27 | 11 | 258 | 1 | 0 | 24 | 675 |
| Pitkas Point | 27 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| St. Mary's | 119 | 26 | 3 | 81 | 0 | 0 | 0 | 381 |
| Pilot Station | 103 | 16 | 8 | 657 | 1 | 0 | 276 | 162 |
| Marshall | 73 | 14 | 6 | 1,620 | 0 | 0 | 255 | 30 |
| Russian Mission | 67 | 16 | 5 | 1,140 | 0 | 0 | 150 | 465 |
| Holy Cross | 54 | 12 | 3 | 12 | 0 | 0 | 0 | 60 |
| Anvik | 28 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grayling | 46 | 2 | 2 | 855 | 1 | 18,390 | 0 | 0 |
| Totals | 657 | 122 | 38 | 4,623 | 3 | 18,390 | 705 | 1,773 |
| Percent | | 19% | 6% | | | | | |

*Note:* Postcards were mailed on November 10, 2010, to all households in the subsistence survey database in the above communities. Arctic lamprey harvest occurs after communities have been surveyed. The 2011 survey asks about harvests from the previous winter.

[a] Arctic lamprey are estimated to weigh 1/3 of a pound each for converting between pounds and number harvested.




*Note:* Subsistence and personal use permit areas are shaded. The permit area along the south fork of the Koyukuk River near the community of Wiseman is not shown.

Figure 1.–Map of Alaska portion of Yukon River drainage showing communities and fishing districts.

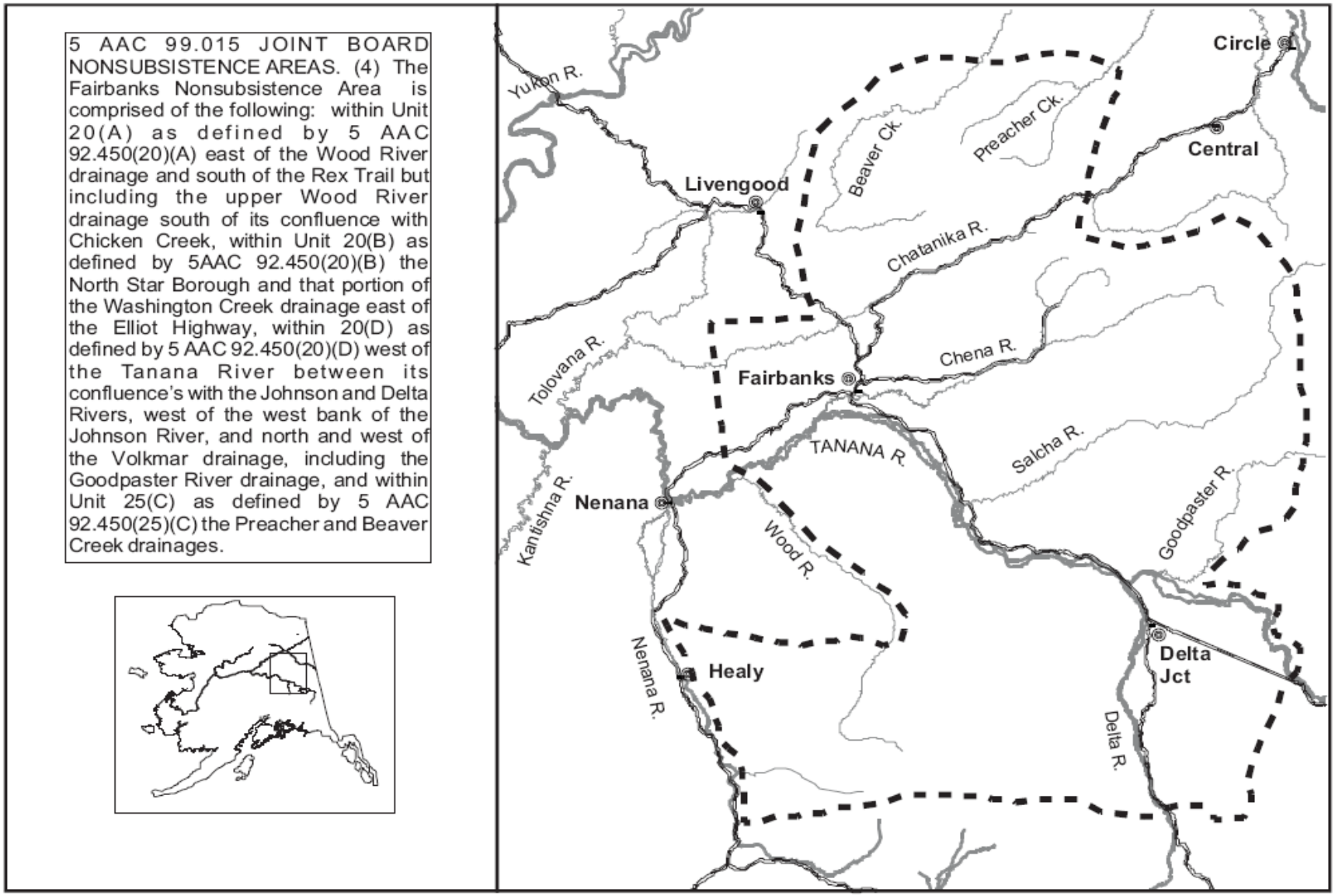



Figure 2.–Map of the Fairbanks Nonsubsistence Area.

## 2010 Yukon River Lamprey Harvest Survey

*ALASKA DEPARTMENT OF FISH AND GAME*
*DIVISION OF COMMERCIAL FISHERIES, FAIRBANKS*
*Telephone (907) 459-7274, Fax (907) 459-7271*

**The Alaska Department of Fish and Game would like your help to better manage the lamprey fishery in the Yukon River. Please fill out and return this pre-paid postcard to help us understand the importance of lamprey harvests to your household. Thank you for your assistance.**

**1. DID YOU FISH FOR LAMPREY (EELS) FROM SEPTEMBER THROUGH DECEMBER, 2010?** **YES** **NO**
(please circle)

**2. PLEASE ESTIMATE THE AMOUNT OF LAMPREY CAUGHT AND DATE(S) OF HARVEST:**

**SUBSISTENCE** _____ ***POUNDS*** **DATES:** _____

**COMMERCIAL** _____ ***POUNDS*** **DATES:** _____

**3. PLEASE ESTIMATE THE AMOUNT OF SUBSISTENCE LAMPREY GIVEN AWAY AND/OR RECEIVED:**

**GIVEN AWAY**_____ ***POUNDS*** **RECEIVED**_____ ***POUNDS***

**4. CIRCLE THE COMMUNITY NEAREST TO WHERE YOU FISHED:**

***MOUNTAIN VILLAGE*** ***PITKAS POINT*** ***ST. MARYS*** ***PILOT STATION*** ***MARSHALL***

***RUSSIAN MISSION*** ***HOLY CROSS*** ***ANVIK*** ***GRAYLING***

***OTHER COMMUNITY*** _____

***Comments about the lamprey fishery?*** _____


*Note*: Yukon Area postseason subsistence Arctic lamprey harvest survey postcards were mailed November 2010 to all households in the communities listed in Districts Y-2, Y-3, and Subdistrict 4-A communities of Anvik and Grayling. Postcards were not sent to the community of Shageluk, which is located on the Innoko River. Surveys took place in these communities in September 2011, and asked about lamprey harvested in the winter of 2010.

Figure 3.–Supplemental postcard mailed to Arctic lamprey harvesting communities.

Date of Survey _____
Person Interviewed _____
Relation to HH _____
Interviewer _____

Community LABEL HHID#
Head of Household LABEL
Significant Other LABEL
Mailing Address LABEL Telephone#

**CONFIDENTIAL INFORMATION - 2011 Yukon Area Post-Season Subsistence Salmon Harvest Survey**

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

Head of Household _____ Permanent Note _____
Mailing Address _____ Telephone _____
Significant Other _____ Permanent Note _____

2. **How many people live in your household?** _____
3. **Did anyone in your household harvest salmon for subsistence use OR keep fish for subsistence use from commercial fishing?**
   Yes ____ No ____

**Harvest includes catching or cutting salmon.** If household retained fish from commercial openings, or subsistence fished, complete all of PART 1. Otherwise go to PART 2.

Adult household member declined to be interviewed. [ ] Reason given: _____

4. **May I have your salmon catch calendar?** Yes ____ No ____ Already mailed ____ (Entire harvest on calendar? ____ )

**PART 1: HOUSEHOLDS THAT CAUGHT SALMON**

5. **How many total salmon did you or your fishing GROUP catch?**
   CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____
6. **How many households helped to catch these fish?** _____ (Names) _____

*7. **Where did you harvest your salmon? How many total salmon did your household harvest for subsistence purposes?**
(Include only fish caught by this household, not the group, includes fish kept from commercial periods.)

Ocean 1 2 3 4A 4B 4C 5A 5B 5C 5D (Ft Yukon ↑ or ↓) Innoko Koyukuk Chandalar Porcupine Black

**Area** _____ CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____
**Area** _____ CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____
Total (two areas) CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

8. **What is your household's PRIMARY type of salmon fishing GEAR?** ('Primary' is gear that catches the most salmon)
(1= primary, 2 = secondary) SET NET ____ DRIFT NET ____ FISH WHEEL ____ HOOK & LINE ____ OTHER _____

♦ 8A. **For households that harvested Chinook salmon: Estimate number of Chinook salmon caught by each gear type.**
SET NET _____ DRIFT NET _____ FISH WHEEL _____ HOOK & LINE _____ OTHER _____

9. **How many subsistence fish did your household retain from COMMERCIAL fishing?** ( ___ Did not commercial fish)
   CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

10. **Did your household "LOSE" any salmon? (e.g. to bears, birds, flies, spoilage, diseased fish, etc.)** ( ____ None lost)
(If fish was not fit for humans but was fed to dogs, then it was not "lost.")
   CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____
   Reason(s) for LOSS: _____

11. **Did your household SHARE the salmon catch with any other households?** (names, species and numbers)
_____
_____

**12. **How many salmon did you KEEP for your household's use?** (do not include fish given away or 'lost")
   CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

Figure 4.–Yukon Area postseason subsistence salmon harvest survey form, 2011.

**PART 2: TO BE ASKED OF ALL HOUSEHOLDS**

****13. Was your household GIVEN any salmon? Yes ____ No ____** Code: S=Subsistence, C=Commercial, T=Test Fish

Code: _____ Fishermen/Project (Name) _____

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

Code: _____ Fishermen/Project (Name) _____

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

**14. Did YOUR household get enough salmon this year? (compared to Question 7 or 13).** If the household has no need or usually does not harvest the species, indicate '0'. If the number needed/wanted is more/less than the household got, ask why.)

Were you able to harvest or receive enough:

| | | | |
|---|---|---|---|
| CHINOOK ? | Y / N | How many did you need/want: _____ | Comment:_____ |
| SUMMER CHUM ? | Y / N | How many did you need/want: _____ | Comment:_____ |
| FALL CHUM ? | Y / N | How many did you need/want:_____ | Comment:_____ |
| COHO ? | Y / N | How many did you need/want:_____ | Comment:_____ |

**15. Did your household catch any OTHER FISH besides salmon? Yes _____ No _____**

(Harvest numbers should include from September/October of last year to now. Large Whitefish are 4 pounds or greater.)

LG WHITEFISH _____ SM WHITEFISH _____ SHEEFISH _____ BURBOT _____ PIKE _____ BLACKFISH _____

GRAYLING _____ SUCKERS _____ TROUT (Arctic Char) _____ EELS (Lamprey) _____ TOMCOD (Saffron) _____

**16. How many SOCKEYE (red) salmon did your household catch?** _____ (Mark '0' if household didn't fish for sockeye)

**17. How many DOGS (including puppies) does your household have?** _____ (if "none" go to question 21)

**18. Do you feed WHOLE salmon to your dogs?** Yes _____ No _____ Only Feed **SCRAPS** ____ (if "No" go to question 21)

**19. Were any of the salmon put up for the dogs from the commercial fishery?** Yes _____ No _____

**20. Estimate harvest of salmon put up for dogs this year by fishery** (numbers should represent WHOLE FISH, not scraps):

(Subsistence) CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

(Commercial) CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

21. Do you have any additional comments?_____

_____

_____

How did this year compare to last year?_____

THANK YOU! THIS INFORMATION IS USED TO DOCUMENT THE SUBSISTENCE SALMON HARVEST WITHIN THE YUKON RIVER DRAINAGE AND TO TRY TO ENSURE THERE WILL BE ENOUGH SALMON FOR THE FUTURE.

**Surveyor Comments:**

Reminder: How many people live in this Household? _____ Please verify correct address and phone numbers

**Official Use - This area is to be filled in by Fish and Game.**

**HOUSEHOLD'S TOTAL SUBSISTENCE SALMON CATCH (Totals from question *7)**

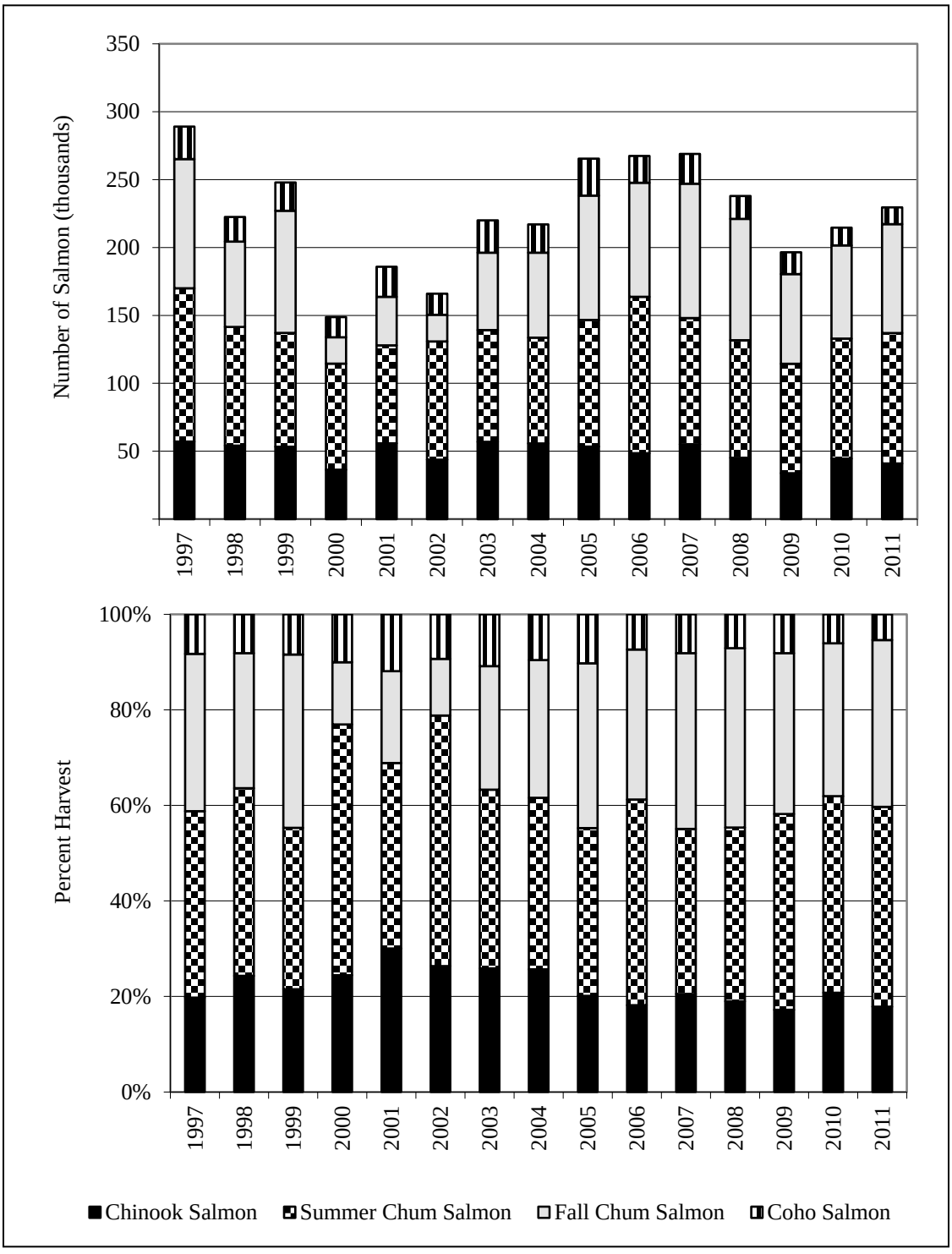
CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

**HOUSEHOLD'S TOTAL SUBSISTENCE SALMON USE (Add totals from questions **12 and **13)**

CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

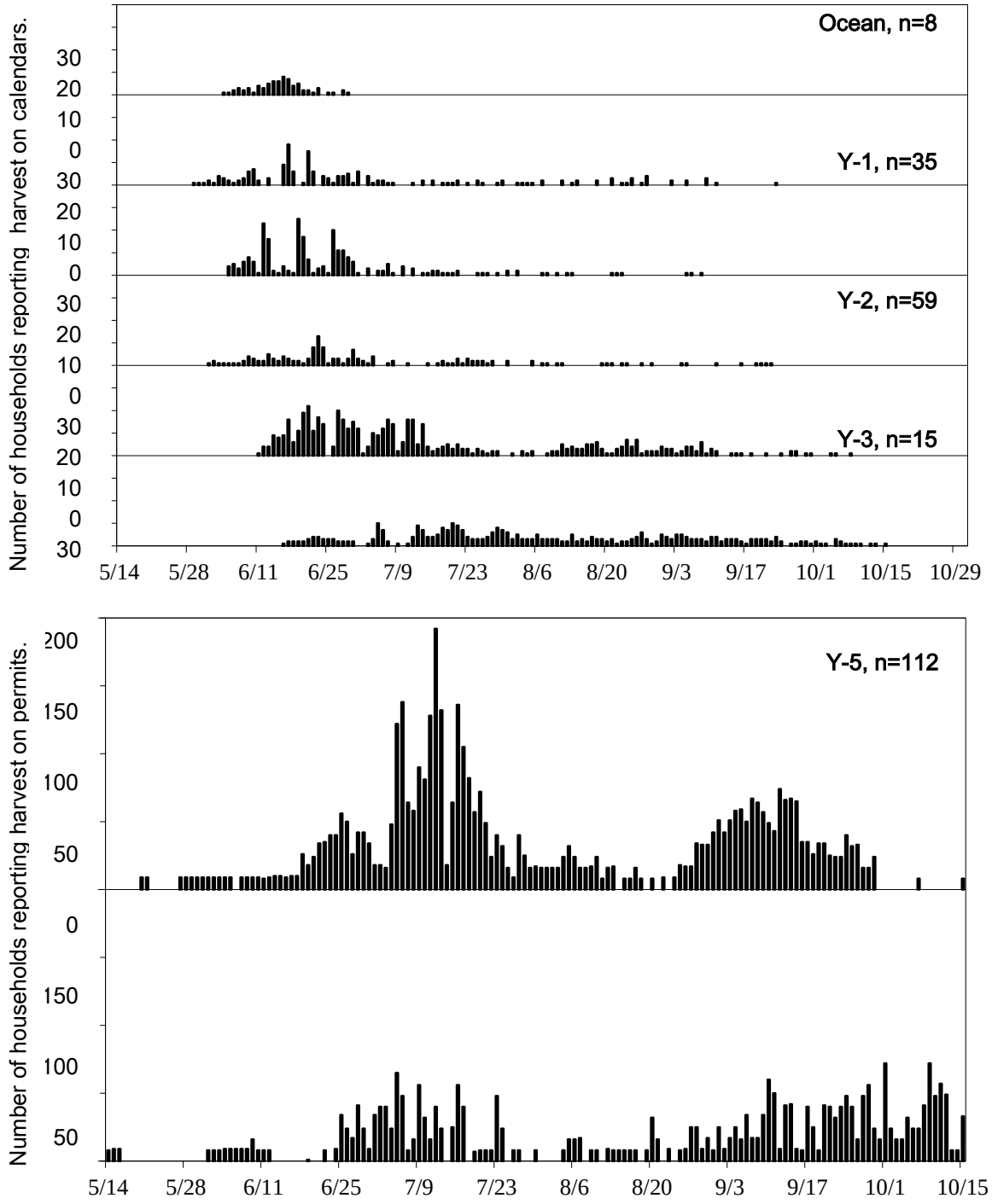
Complete Survey _____ Partial Survey _____ No Survey _____

Figure 4.–Page 2 of 2.



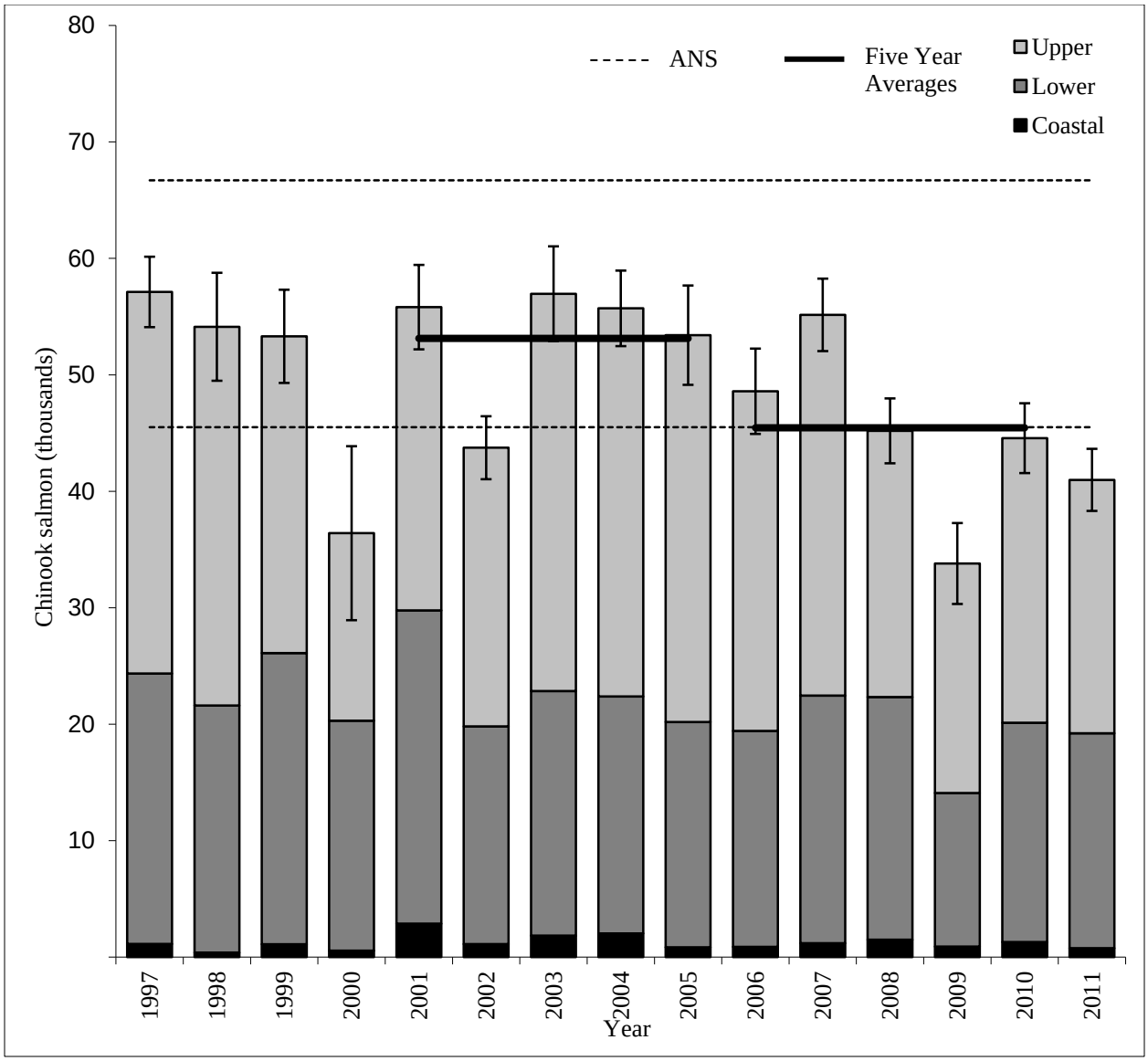

*Note*: Harvest of salmon species by number (top) and proportion (bottom). Totals include survey, permit, test fish and retained from commercial. Does not include salmon caught in the personal use fishery or summer chum, fall chum, and coho salmon carcasses retained from the commercial fishery and used for subsistence. Does not include approximately 14,500 to 15,000 coho salmon obtained from Valdez Fisheries Development Association as part of Eagle's replacement subsistence salmon fishery in 2001 and 2003.

Figure 5.–Estimated total subsistence salmon harvest by species, Yukon Area, 1997–2011.



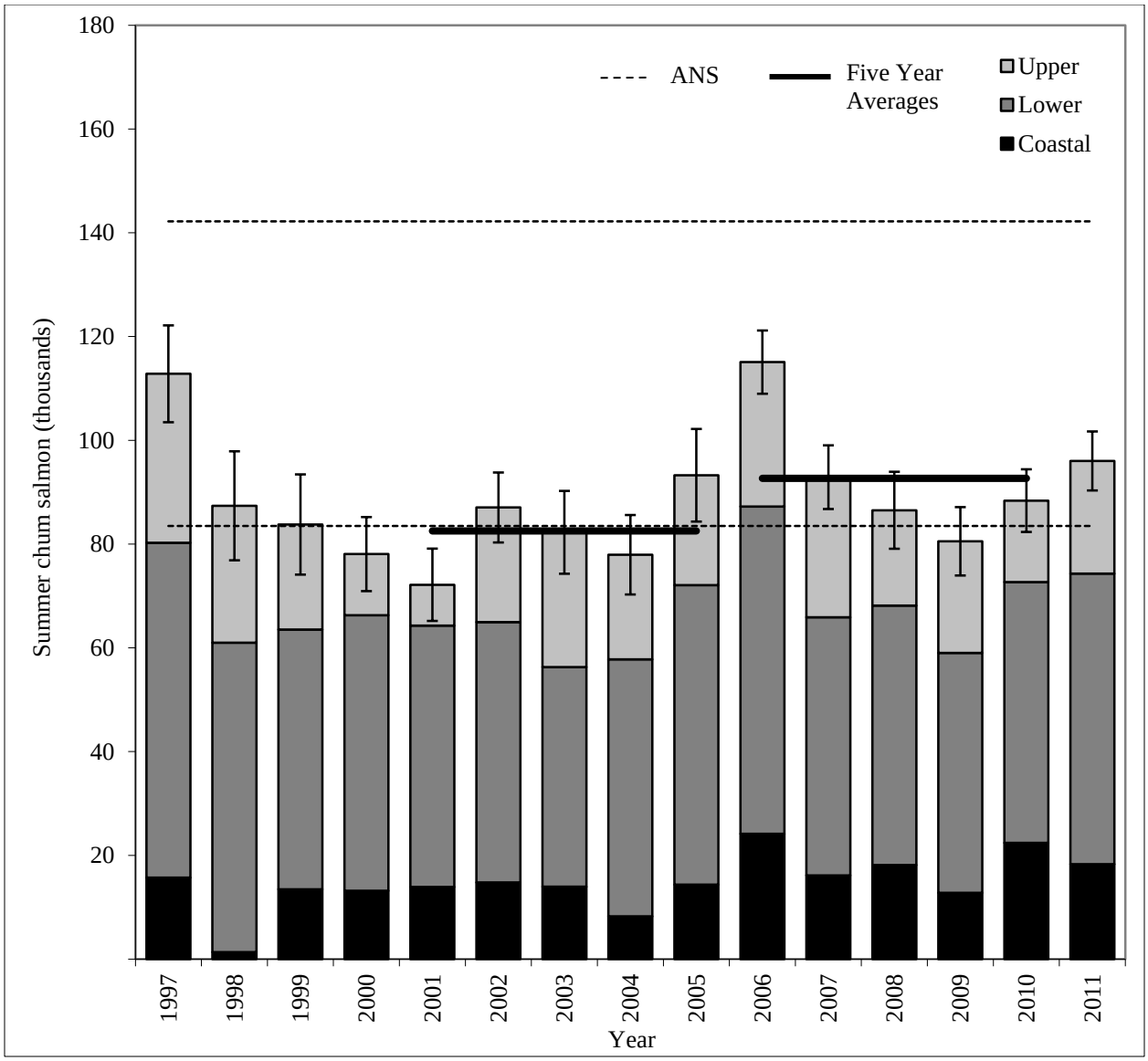

Note: Top panel: fishing effort by day as recorded on harvest calendars. Bottom panel: fishing effort by day as recorded on permits. District 5 is represented in both panels because it includes survey and permit communities. N represents the number of households in each district that recorded harvest by day on calendars or permits.

Figure 6.–Number of households reporting fishing effort by day and by district, 2011.



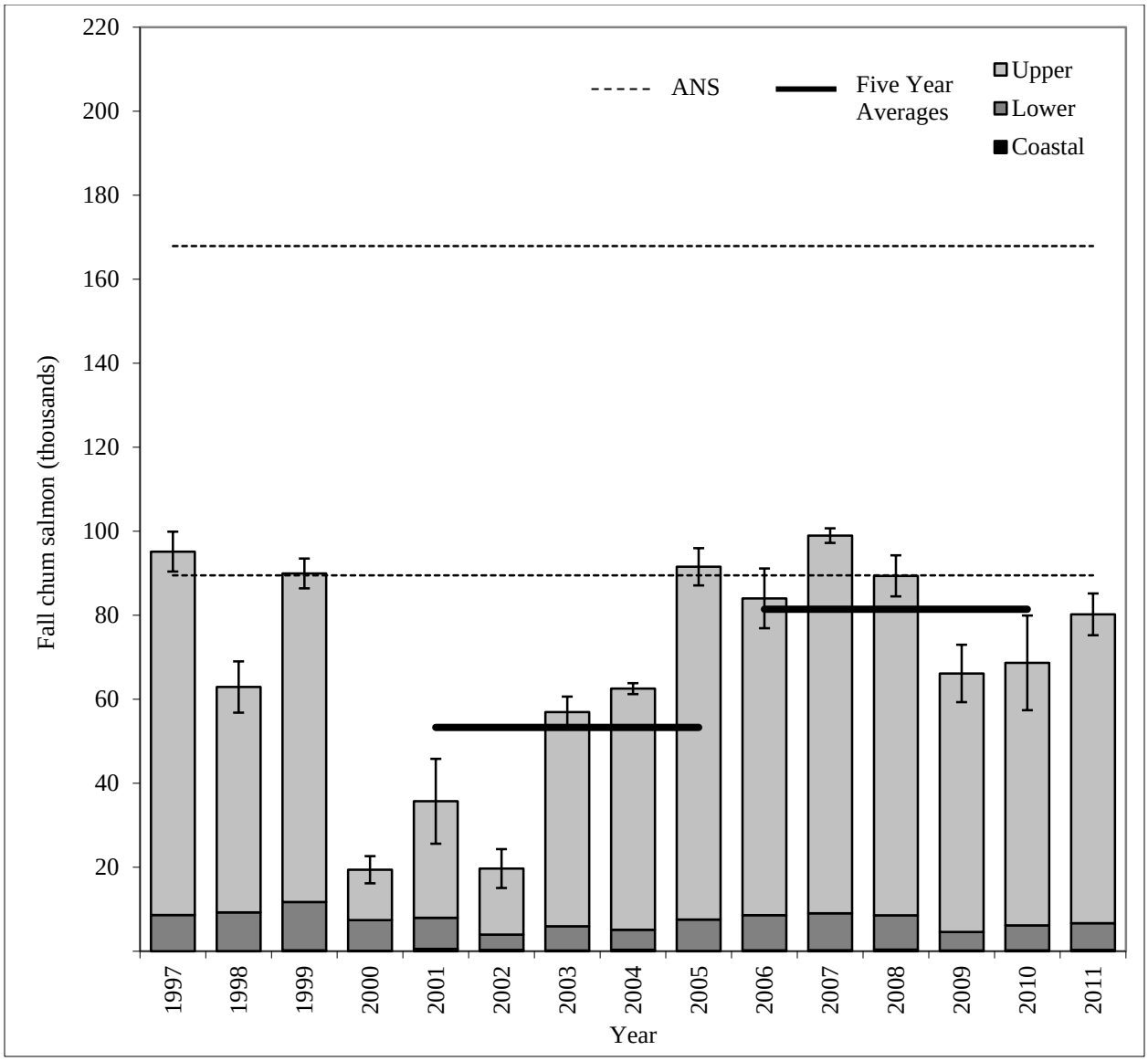

*Note:* Harvest estimates and 95% confidence interval are provided. In 2001 the Alaska Board of Fisheries defined the Amount Necessary for Subsistence (ANS) as 45,500 to 66,704 Chinook salmon. ANS ranges and harvest amounts do not include salmon from the personal use fishery.

Figure 7.–Estimated Chinook salmon subsistence harvest, Yukon Area, 1997–2011.



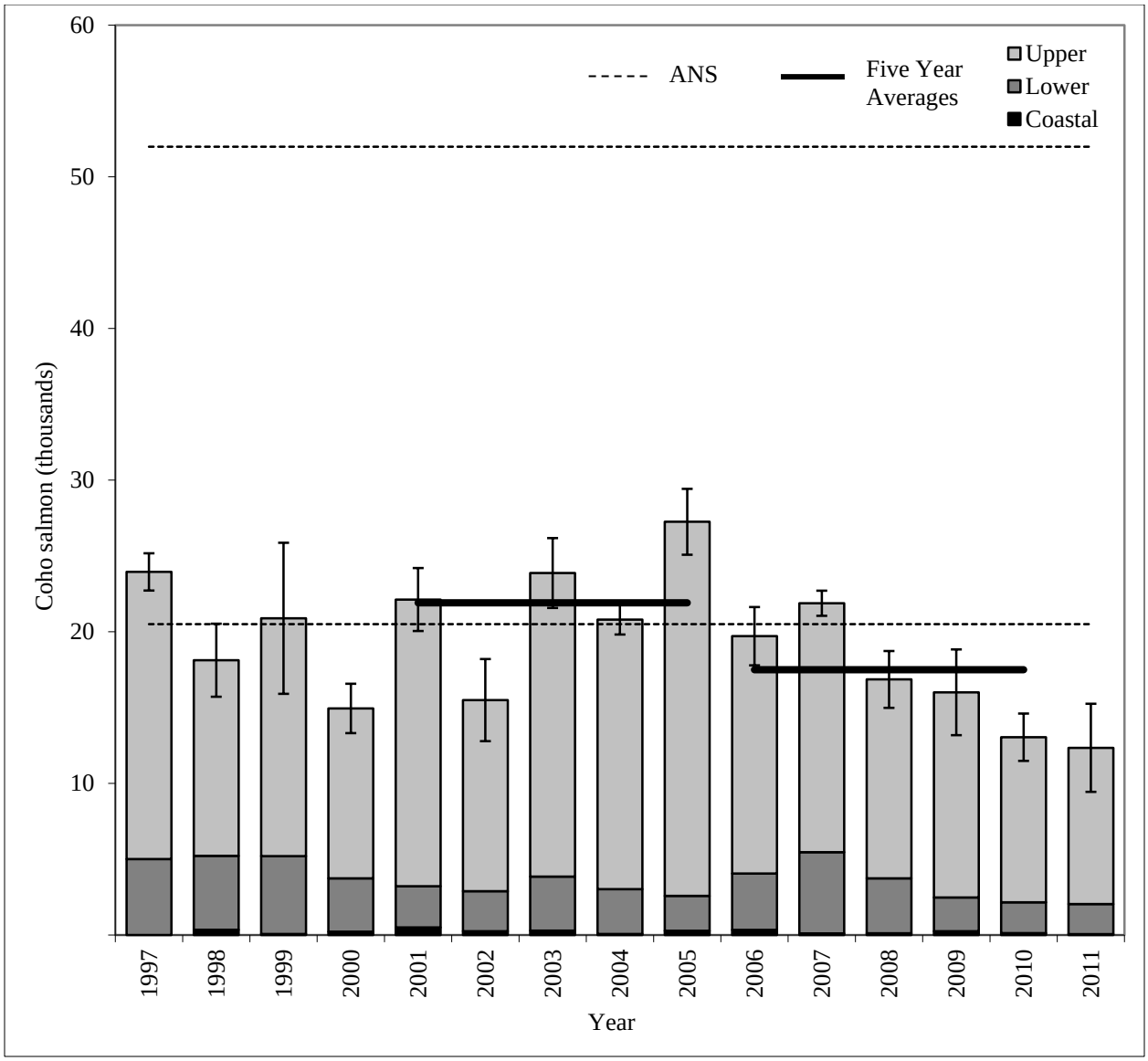

*Note*: Harvest estimates and 95% confidence interval are provided. In 2001, the Alaska Board of Fisheries defined the Amount Necessary for Subsistence (ANS) as 83,500 to 142,192 summer chum salmon. ANS ranges and harvest amounts do not include salmon from the personal use fishery.

Figure 8.–Estimated summer chum salmon subsistence harvest, Yukon Area, 1997–2011.




*Note:* Harvest estimates and 95% confidence interval are provided. In 2001, the Alaska Board of Fisheries defined the Amount Necessary for Subsistence (ANS) as 89,500 to 167,900 fall chum salmon. Does not include fall chum salmon sold commercially for roe and carcasses returned to fishermen in District 6. ANS ranges and harvest amounts do not include salmon from the personal use fishery.

Figure 9.–Estimated fall chum salmon subsistence harvest, Yukon Area, 1997–2011.




Note: Harvest estimates and 95% confidence interval are provided. In 2001, the Alaska Board of Fisheries defined the Amount Necessary for Subsistence (ANS) as 20,500 to 51,980 coho salmon. Does not include carcasses returned to fishermen from coho salmon sold commercially for roe in District 6. Does not include approximately 14,500 to 15,000 coho salmon obtained from Valdez Fisheries Development Association as part of Eagle's replacement subsistence salmon fishery in 2001 and 2003. ANS ranges and harvest amounts do not include salmon from the personal use fishery.

Figure 10.–Estimated coho salmon subsistence harvest, Yukon Area, 1997–2011.

# APPENDIX A. 2011 HARVEST INFORMATION

Appendix A1.–Estimated Chinook salmon subsistence harvest in surveyed communities, by harvest level, with community and district totals, Yukon Area, 2011.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Hooper Bay | 24 | 9 | 0.7 | 0.5 | 62 | 16 | 0.5 | 0.4 | 90 | 24 | 1.3 | 0.6 | 33 | 30 | 2.5 | 0.2 | - | - | - | | 209 | 79 | 246 | 126 |
| Scammon Bay | 20 | 9 | 7.1 | 2.5 | 21 | 6 | 0.8 | 0.7 | 35 | 8 | 3.5 | 1.8 | 16 | 14 | 14.6 | 1.4 | - | - | - | - | 92 | 37 | 517 | 164 |
| Coastal District | 44 | 18 | 3.6 | 1.2 | 83 | 22 | 0.6 | 0.4 | 125 | 32 | 1.9 | 0.7 | 49 | 44 | 6.5 | 0.5 | - | - | - | - | 301 | 116 | 763 | 207 |
| Nunam Iqua | 7 | 6 | 9.0 | 1.8 | 10 | 6 | 2.3 | 1.1 | 9 | 7 | 2.4 | 0.7 | 10 | 9 | 14.2 | 1.3 | - | - | - | - | 36 | 28 | 250 | 43 |
| Alakanuk | 27 | 18 | 5.7 | 1.8 | 32 | 6 | 0.7 | 0.6 | 57 | 17 | 17.6 | 7.7 | 17 | 13 | 11.2 | 2.6 | - | - | - | - | 133 | 54 | 1,371 | 866 |
| Emmonak | 23 | 11 | 8.5 | 3.4 | 48 | 23 | 5.8 | 2.4 | 64 | 30 | 6.8 | 1.2 | 30 | 27 | 10.6 | 0.8 | 1 | 1 | 26.0 | - | 166 | 92 | 1,252 | 314 |
| Kotlik | 13 | 7 | 18.1 | 4.6 | 25 | 7 | 1.4 | 0.7 | 51 | 14 | 10.4 | 3.0 | 15 | 11 | 39.2 | 7.3 | - | - | - | - | 104 | 39 | 1,388 | 385 |
| District 1 | 70 | 42 | 9.2 | 1.6 | 115 | 42 | 3.1 | 1.0 | 181 | 68 | 11.0 | 2.6 | 72 | 60 | 17.2 | 1.7 | 1 | 1 | 26.0 | - | 439 | 213 | 4,261 | 999 |
| Mountain Village | 30 | 18 | 8.4 | 2.0 | 34 | 8 | 1.5 | 1.3 | 71 | 17 | 9.2 | 2.2 | 28 | 23 | 22.0 | 1.5 | - | - | - | - | 163 | 66 | 1,570 | 345 |
| Pitkas Point | 3 | 1 | 2.0 | - | 6 | 2 | 0.0 | 0.0 | 13 | 9 | 11.6 | 3.4 | 6 | 5 | 15.0 | 3.4 | - | - | - | - | 28 | 17 | 246 | 96 |
| St. Mary's | 7 | 3 | 8.3 | 6.3 | 24 | 6 | 7.2 | 5.0 | 66 | 18 | 8.8 | 1.6 | 24 | 20 | 35.0 | 3.2 | - | - | - | - | 121 | 47 | 1,653 | 355 |
| Pilot Station | 9 | 5 | 3.0 | 2.0 | 38 | 17 | 5.9 | 2.5 | 47 | 19 | 13.3 | 1.9 | 15 | 14 | 17.7 | 0.9 | - | - | - | - | 109 | 55 | 1,142 | 261 |
| Marshall | 3 | 1 | 0.0 | - | 16 | 2 | 6.5 | 6.1 | 38 | 12 | 41.5 | 9.9 | 13 | 13 | 38.1 | 0.0 | - | - | - | - | 70 | 28 | 2,686 | 951 |
| District 2 | 52 | 28 | 6.6 | 1.5 | 118 | 35 | 4.4 | 1.5 | 235 | 75 | 15.3 | 1.8 | 86 | 75 | 26.8 | 1.1 | - | - | - | - | 491 | 213 | 7,297 | 1,108 |
| Russian Mission | 5 | 3 | 13.3 | 4.2 | 21 | 5 | 9.4 | 5.4 | 34 | 11 | 29.1 | 8.8 | 6 | 5 | 49.4 | 5.6 | - | - | - | - | 66 | 24 | 1,550 | 634 |
| Holy Cross | 6 | 5 | 11.0 | 2.8 | 15 | 7 | 2.3 | 1.7 | 22 | 10 | 38.5 | 10.1 | 13 | 7 | 98.7 | 11.9 | - | - | - | - | 56 | 29 | 2,231 | 533 |
| Shageluk | 13 | 1 | 0.0 | - | 7 | 6 | 0.0 | 0.0 | 10 | 10 | 19.5 | 0.0 | - | - | - | - | 1 | 1 | 10.0 | - | 31 | 18 | 353 | 0 |
| District 3 | 24 | 9 | 12.1 | 2.4 | 43 | 18 | 5.4 | 2.7 | 66 | 31 | 30.8 | 5.7 | 19 | 12 | 83.1 | 8.3 | 1 | 1 | 10.0 | - | 153 | 71 | 4,134 | 828 |
| Anvik | 2 | 0 | - | - | 8 | 8 | 4.5 | 0.0 | 11 | 9 | 48.2 | 3.8 | 6 | 6 | 68.3 | 0.0 | 1 | 1 | 0.0 | - | 28 | 24 | 1,052 | 87 |
| Grayling | 8 | 2 | 0.0 | 0.0 | 4 | 2 | 18.0 | 0.0 | 28 | 8 | 33.6 | 8.3 | 8 | 5 | 45.0 | 14.2 | - | - | - | - | 48 | 17 | 1,374 | 505 |
| Kaltag | 1 | 1 | 0.0 | - | 13 | 3 | 10.0 | 8.8 | 41 | 8 | 47.1 | 10.3 | 6 | 5 | 71.0 | 7.4 | - | - | - | - | 61 | 17 | 2,488 | 858 |
| Nulato | - | - | - | - | 19 | 6 | 8.7 | 4.6 | 53 | 14 | 23.1 | 6.3 | 4 | 4 | 36.8 | 0.0 | - | - | - | - | 76 | 24 | 1,538 | 678 |
| Koyukuk | 15 | 2 | 6.5 | 6.1 | 15 | 5 | 10.4 | 8.1 | 15 | 5 | 36.4 | 7.8 | 5 | 3 | 40.0 | 4.3 | 1 | 1 | 50.0 | - | 51 | 16 | 1,349 | 472 |
| Galena | 30 | 22 | 4.7 | 1.2 | 70 | 19 | 2.1 | 1.2 | 62 | 18 | 11.7 | 3.6 | 5 | 5 | 75.8 | 0.0 | 2 | 2 | 21.0 | 0.0 | 169 | 66 | 1,434 | 471 |
| Ruby | 5 | 4 | 10.5 | 4.7 | 35 | 7 | 1.4 | 1.3 | 12 | 4 | 0.0 | 0.0 | 4 | 4 | 35.3 | 0.0 | 1 | 1 | 238.0 | - | 57 | 20 | 482 | 99 |
| Huslia | 17 | 5 | 0.0 | 0.0 | 45 | 12 | 0.1 | 0.1 | 13 | 4 | 0.0 | 0.0 | 6 | 6 | 11.2 | 0.0 | 1 | 1 | 50.0 | - | 82 | 28 | 121 | 6 |
| Hughes | 15 | 7 | 0.0 | 0.0 | 13 | 11 | 0.3 | 0.1 | 5 | 5 | 0.0 | 0.0 | 2 | 2 | 3.0 | 0.0 | - | - | - | - | 35 | 25 | 10 | 1 |
| Allakaket | 15 | 5 | 0.0 | 0.0 | 34 | 9 | 0.0 | 0.0 | 9 | 4 | 1.3 | 0.9 | 5 | 5 | 0.2 | 0.0 | 2 | 2 | 15.0 | 0.0 | 65 | 25 | 42 | 16 |
| Alatna | 3 | 1 | 1.0 | - | 4 | 4 | 0.0 | 0.0 | 2 | 2 | 0.0 | 0.0 | - | - | - | - | - | - | - | - | 9 | 7 | 3 | 0 |
| Bettles | 7 | 3 | 0.0 | 0.0 | 16 | 11 | 0.0 | 0.0 | 1 | 0 | - | - | - | - | - | - | - | - | - | - | 24 | 14 | 0 | 0 |
| District 4 | 118 | 52 | 2.0 | 0.4 | 276 | 97 | 2.8 | 0.8 | 252 | 81 | 23.6 | 2.5 | 51 | 45 | 41.9 | 2.4 | 8 | 8 | 51.3 | 0.0 | 705 | 283 | 9,893 | 1,384 |

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Appendix A1.–Page 2 of 2.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Tanana | 8 | 3 | 36.3 | 28.7 | 47 | 14 | 9.6 | 4.0 | 27 | 9 | 8.2 | 3.0 | 7 | 5 | 71.2 | 20.7 | 10 | 6 | 147.2 | 38.4 | 99 | 37 | 2,936 | 1,005 |
| Stevens Village | 1 | 0 | - | - | 3 | 2 | 0.0 | 0.0 | 8 | 6 | 5.0 | 2.5 | 3 | 3 | 115.7 | 0.0 | - | - | - | - | 15 | 11 | 415 | 42 |
| Birch Creek | 2 | 0 | - | - | 10 | 4 | 0.0 | 0.0 | 4 | 3 | 10.7 | 5.3 | - | - | - | - | - | - | - | - | 16 | 7 | 49 | 48 |
| Beaver | 5 | 3 | 0.0 | 0.0 | 12 | 10 | 0.4 | 0.2 | 14 | 12 | 25.1 | 3.2 | - | - | - | - | - | - | - | - | 31 | 25 | 356 | 87 |
| Fort Yukon | 63 | 22 | 20.9 | 10.1 | 107 | 30 | 3.8 | 1.7 | 31 | 7 | 6.1 | 2.7 | 9 | 8 | 29.8 | 4.7 | 9 | 9 | 31.8 | 0.0 | 219 | 76 | 2,472 | 1,302 |
| Venetie | 25 | 12 | 0.0 | 0.0 | 37 | 9 | 0.0 | 0.0 | 13 | 4 | 0.0 | 0.0 | 2 | 2 | 5.0 | 0.0 | 1 | 1 | 0.0 | - | 78 | 28 | 10 | 0 |
| Chalkyitsik | 7 | 1 | 0.0 | - | 13 | 10 | 0.0 | 0.0 | 1 | 1 | 0.0 | - | - | - | - | - | - | - | - | - | 21 | 12 | 0 | 0 |
| District 5 | 111 | 41 | 14.9 | 6.2 | 229 | 79 | 3.8 | 1.1 | 98 | 42 | 8.6 | 1.3 | 21 | 18 | 53.5 | 7.2 | 20 | 16 | 87.9 | 19.2 | 479 | 196 | 6,238 | 1,648 |
| Survey Totals | 419 | 190 | 8.0 | 1.8 | 864 | 293 | 3.2 | 0.5 | 957 | 329 | 15.3 | 1.0 | 298 | 254 | 29.2 | 1.0 | 30 | 26 | 73.5 | 12.8 | 2,568 | 1,092 | 32,586 | 2,754 |

*Note*: The number of Chinook salmon harvested was estimated using the total number of households (N), the number of households contacted (n), the average number of salmon harvested by households (Mean), standard error (SE), and includes 95% confidence interval (CI 95%). Dashes indicate indefinable values.

Appendix A2.–Estimated summer chum salmon subsistence harvest in surveyed communities, by harvest level, with community and district totals, Yukon Area, 2011.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Hooper Bay | 24 | 9 | 53.1 | 42.0 | 62 | 16 | 26.3 | 13.0 | 90 | 24 | 60.6 | 16.3 | 33 | 30 | 146.0 | 6.3 | - | - | - | - | 209 | 79 | 13,175 | 3,854 |
| Scammon Bay | 20 | 9 | 16.2 | 5.2 | 21 | 6 | 33.3 | 16.7 | 35 | 8 | 51.9 | 15.6 | 16 | 14 | 125.3 | 8.6 | - | - | - | - | 92 | 37 | 4,845 | 1,316 |
| Coastal District | 44 | 18 | 36.3 | 23.0 | 83 | 22 | 28.1 | 10.6 | 125 | 32 | 58.1 | 12.5 | 49 | 44 | 139.2 | 5.1 | - | - | - | - | 301 | 116 | 18,020 | 4,072 |
| Nunam Iqua | 7 | 6 | 18.3 | 6.9 | 10 | 6 | 50.0 | 20.0 | 9 | 7 | 16.4 | 6.9 | 10 | 9 | 130.1 | 10.1 | - | - | - | - | 36 | 28 | 2,077 | 466 |
| Alakanuk | 27 | 18 | 22.8 | 9.0 | 32 | 6 | 50.0 | 45.1 | 57 | 17 | 67.1 | 18.0 | 17 | 13 | 53.5 | 9.1 | - | - | - | - | 133 | 54 | 6,951 | 3,515 |
| Emmonak | 23 | 11 | 30.5 | 15.5 | 48 | 23 | 25.0 | 11.0 | 64 | 30 | 60.8 | 11.1 | 30 | 26 | 81.9 | 5.5 | 1 | 1 | 486.0 | - | 166 | 91 | 8,738 | 1,900 |
| Kotlik | 13 | 7 | 60.9 | 19.0 | 25 | 7 | 7.3 | 5.0 | 51 | 14 | 41.4 | 10.0 | 15 | 11 | 159.3 | 19.6 | - | - | - | - | 104 | 39 | 5,475 | 1,271 |
| District 1 | 70 | 42 | 31.9 | 7.1 | 115 | 42 | 30.3 | 13.5 | 181 | 68 | 55.1 | 7.5 | 72 | 59 | 98.0 | 5.3 | 1 | 1 | 486.0 | - | 439 | 212 | 23,241 | 4,219 |
| Mountain Village | 30 | 18 | 40.1 | 8.5 | 34 | 8 | 1.3 | 1.1 | 71 | 17 | 71.5 | 15.4 | 28 | 23 | 96.7 | 6.1 | - | - | - | - | 163 | 66 | 9,030 | 2,229 |
| Pitkas Point | 3 | 1 | 25.0 | - | 6 | 2 | 0.0 | 0.0 | 13 | 9 | 23.9 | 7.2 | 6 | 5 | 33.2 | 8.3 | - | - | - | - | 28 | 17 | 585 | 208 |
| St. Mary's | 7 | 3 | 21.7 | 16.4 | 24 | 6 | 9.8 | 7.1 | 66 | 18 | 58.4 | 11.7 | 24 | 20 | 100.1 | 7.6 | - | - | - | - | 121 | 47 | 6,644 | 1,601 |
| Pilot Station | 9 | 5 | 7.0 | 4.7 | 38 | 17 | 12.8 | 5.5 | 47 | 18 | 30.0 | 5.2 | 15 | 14 | 45.4 | 2.6 | - | - | - | - | 109 | 54 | 2,642 | 644 |
| Marshall | 3 | 1 | 0.0 | - | 16 | 2 | 9.0 | 8.4 | 38 | 12 | 44.4 | 10.2 | 13 | 13 | 96.2 | 0.0 | - | - | - | - | 70 | 28 | 3,810 | 989 |
| District 2 | 52 | 28 | 28.7 | 5.5 | 118 | 35 | 7.5 | 2.7 | 235 | 74 | 52.5 | 6.0 | 86 | 75 | 84.2 | 3.0 | - | - | - | - | 491 | 212 | 22,711 | 2,994 |
| Russian Mission | 5 | 3 | 19.3 | 7.3 | 21 | 5 | 7.8 | 3.4 | 34 | 11 | 17.2 | 4.6 | 6 | 5 | 63.4 | 9.8 | - | - | - | - | 66 | 24 | 1,225 | 362 |
| Holy Cross | 6 | 5 | 0.0 | 0.0 | 15 | 7 | 0.0 | 0.0 | 22 | 10 | 6.8 | 3.4 | 13 | 7 | 16.4 | 5.6 | - | - | - | - | 56 | 29 | 363 | 205 |
| Shageluk | 13 | 1 | 0.0 | - | 7 | 6 | 0.0 | 0.0 | 10 | 10 | 61.5 | 0.0 | - | - | - | - | 1 | 1 | 50.0 | - | 31 | 18 | 1,145 | 0 |
| District 3 | 24 | 9 | 8.8 | 3.3 | 43 | 18 | 3.8 | 1.7 | 66 | 31 | 20.4 | 2.6 | 19 | 12 | 31.3 | 5.0 | 1 | 1 | 50.0 | - | 153 | 71 | 2,733 | 416 |
| Anvik | 2 | 0 | - | - | 8 | 8 | 1.6 | 0.0 | 11 | 9 | 6.7 | 0.9 | 6 | 6 | 19.7 | 0.0 | 1 | 1 | 0.0 | - | 28 | 24 | 220 | 20 |
| Grayling | 8 | 2 | 0.0 | 0.0 | 4 | 2 | 5.0 | 3.5 | 28 | 7 | 25.7 | 9.2 | 8 | 5 | 12.2 | 7.3 | - | - | - | - | 48 | 16 | 838 | 520 |
| Kaltag | 1 | 1 | 0.0 | - | 13 | 3 | 0.0 | 0.0 | 41 | 8 | 2.1 | 1.3 | 6 | 5 | 12.6 | 2.7 | - | - | - | - | 61 | 17 | 163 | 107 |
| Nulato | - | - | - | - | 19 | 6 | 0.0 | 0.0 | 53 | 14 | 4.6 | 3.1 | 4 | 4 | 0.0 | 0.0 | - | - | - | - | 76 | 24 | 246 | 325 |
| Koyukuk | 15 | 2 | 11.0 | 10.2 | 15 | 5 | 4.0 | 3.3 | 15 | 5 | 1.0 | 0.8 | 5 | 3 | 40.7 | 19.7 | 1 | 1 | 350.0 | - | 51 | 16 | 890 | 308 |
| Galena | 30 | 22 | 80.6 | 41.1 | 70 | 19 | 0.0 | 0.0 | 62 | 18 | 1.2 | 0.8 | 5 | 5 | 15.2 | 0.0 | 2 | 2 | 424.0 | 0.0 | 169 | 66 | 3,414 | 2,416 |
| Ruby | 5 | 4 | 0.0 | 0.0 | 35 | 7 | 0.0 | 0.0 | 12 | 4 | 0.0 | 0.0 | 4 | 4 | 19.3 | 0.0 | 1 | 1 | 698.0 | - | 57 | 20 | 775 | 0 |
| Huslia | 17 | 5 | 0.0 | 0.0 | 45 | 12 | 0.8 | 0.7 | 13 | 4 | 25.0 | 20.8 | 6 | 6 | 400.5 | 0.0 | 1 | 1 | 400.0 | - | 82 | 28 | 3,166 | 534 |
| Hughes | 15 | 7 | 0.0 | 0.0 | 13 | 11 | 11.8 | 3.0 | 5 | 5 | 0.0 | 0.0 | 2 | 2 | 400.0 | 0.0 | - | - | - | - | 35 | 25 | 954 | 77 |
| Allakaket | 15 | 5 | 0.0 | 0.0 | 34 | 9 | 0.0 | 0.0 | 9 | 4 | 18.8 | 14.0 | 5 | 5 | 73.2 | 0.0 | 2 | 2 | 916.5 | 0.0 | 65 | 25 | 2,368 | 247 |
| Alatna | 3 | 1 | 30.0 | - | 4 | 4 | 0.0 | 0.0 | 2 | 2 | 21.0 | 0.0 | - | - | - | - | - | - | - | - | 9 | 7 | 132 | 0 |
| Bettles | 7 | 3 | 0.0 | 0.0 | 16 | 11 | 0.0 | 0.0 | 1 | 0 | - | - | - | - | - | - | - | - | - | - | 24 | 14 | 0 | 0 |
| District 4 | 118 | 52 | 24.8 | 12.2 | 276 | 97 | 1.0 | 0.3 | 252 | 80 | 7.0 | 1.7 | 51 | 45 | 82.7 | 2.3 | 8 | 8 | 516.1 | 0.0 | 705 | 282 | 13,166 | 2,583 |

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| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Tanana | 8 | 3 | 0.0 | 0.0 | 47 | 14 | 0.6 | 0.5 | 27 | 9 | 0.1 | 0.1 | 7 | 5 | 29.4 | 14.2 | 10 | 6 | 414.5 | 148.5 | 99 | 37 | 4,381 | 2,918 |
| Stevens Village | 1 | 0 | - | - | 3 | 2 | 0.0 | 0.0 | 8 | 6 | 0.0 | 0.0 | 3 | 3 | 13.3 | 0.0 | - | - | - | - | 15 | 11 | 43 | 0 |
| Birch Creek | 2 | 0 | - | - | 10 | 4 | 0.0 | 0.0 | 4 | 3 | 1.3 | 0.4 | - | - | - | - | - | - | - | - | 16 | 7 | 6 | 4 |
| Beaver | 5 | 3 | 0.0 | 0.0 | 12 | 10 | 0.0 | 0.0 | 14 | 12 | 28.1 | 8.2 | - | - | - | - | - | - | - | - | 31 | 25 | 393 | 226 |
| Fort Yukon | 63 | 22 | 0.1 | 0.1 | 107 | 30 | 10.0 | 8.5 | 31 | 7 | 3.1 | 2.5 | 9 | 8 | 0.0 | 0.0 | 9 | 9 | 13.8 | 0.0 | 219 | 76 | 1,297 | 1,785 |
| Venetie | 25 | 12 | 0.0 | 0.0 | 37 | 9 | 0.0 | 0.0 | 13 | 4 | 0.0 | 0.0 | 2 | 2 | 0.0 | 0.0 | 1 | 1 | 0.0 | - | 78 | 28 | 0 | 0 |
| Chalkyitsik | 7 | 1 | 0.0 | - | 13 | 10 | 0.0 | 0.0 | 1 | 1 | 0.0 | - | - | - | - | - | - | - | - | - | 21 | 12 | 0 | 0 |
| District 5 | 111 | 41 | 0.1 | 0.0 | 229 | 79 | 4.8 | 4.0 | 98 | 42 | 5.1 | 1.4 | 21 | 18 | 11.7 | 4.7 | 20 | 16 | 213.5 | 74.3 | 479 | 196 | 6,120 | 3,429 |
| Survey Totals | 419 | 190 | 20.6 | 4.4 | 864 | 293 | 9.6 | 2.4 | 957 | 327 | 34.7 | 2.7 | 298 | 253 | 87.8 | 1.9 | 30 | 26 | 297.8 | 49.5 | 2,568 | 1,089 | 85,991 | 7,871 |

*Note*: The number of summer chum salmon harvested was estimated using the total number of households (N), the number of households contacted (n), the average number of salmon harvested by households (Mean), standard error (SE), and includes 95% confidence interval (CI 95%). Dashes indicate indefinable values.

Appendix A3.–Estimated fall chum salmon subsistence harvest in surveyed communities, by harvest level, with community and district totals, Yukon Area, 2011.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | | | | | | | | | | Est. | CI |
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Hooper Bay | 24 | 9 | 0.0 | 0.0 | 62 | 16 | 0.0 | 0.0 | 90 | 24 | 0.0 | 0.0 | 33 | 30 | 8.1 | 2.4 | - | - | - | - | 209 | 79 | 267 | 158 |
| Scammon Bay | 20 | 9 | 0.0 | 0.0 | 21 | 6 | 0.5 | 0.4 | 35 | 8 | 0.0 | 0.0 | 16 | 14 | 2.4 | 0.6 | - | - | - | - | 92 | 37 | 48 | 27 |
| Coastal District | 44 | 18 | 0.0 | 0.0 | 83 | 22 | 0.1 | 0.1 | 125 | 32 | 0.0 | 0.0 | 49 | 44 | 6.2 | 1.7 | - | - | - | - | 301 | 116 | 315 | 160 |
| Nunam Iqua | 7 | 6 | 0.0 | 0.0 | 10 | 6 | 0.0 | 0.0 | 9 | 7 | 2.0 | 0.6 | 10 | 9 | 3.3 | 0.7 | - | - | - | - | 36 | 28 | 51 | 18 |
| Alakanuk | 27 | 18 | 1.3 | 0.6 | 32 | 6 | 14.8 | 12.7 | 57 | 17 | 3.4 | 1.6 | 17 | 13 | 5.0 | 2.2 | - | - | - | - | 133 | 54 | 785 | 818 |
| Emmonak | 23 | 11 | 1.9 | 1.4 | 48 | 23 | 0.0 | 0.0 | 64 | 30 | 1.2 | 0.5 | 30 | 25 | 4.6 | 0.7 | 1 | 1 | 0.0 | - | 166 | 90 | 261 | 97 |
| Kotlik | 13 | 7 | 5.4 | 3.2 | 25 | 7 | 0.0 | 0.0 | 51 | 14 | 6.6 | 3.6 | 15 | 11 | 4.1 | 1.1 | - | - | - | - | 104 | 39 | 471 | 369 |
| District 1 | 70 | 42 | 2.1 | 0.8 | 115 | 42 | 4.1 | 3.5 | 181 | 68 | 3.5 | 1.1 | 72 | 58 | 4.4 | 0.6 | 1 | 1 | 0.0 | - | 439 | 211 | 1,568 | 902 |
| Mountain Village | 30 | 18 | 3.9 | 1.2 | 34 | 8 | 0.0 | 0.0 | 71 | 17 | 1.1 | 0.7 | 28 | 23 | 7.4 | 2.2 | - | - | - | - | 163 | 66 | 399 | 170 |
| Pitkas Point | 3 | 1 | 0.0 | - | 6 | 2 | 0.0 | 0.0 | 13 | 9 | 0.0 | 0.0 | 6 | 5 | 5.0 | 2.0 | - | - | - | - | 28 | 17 | 30 | 24 |
| St. Mary's | 7 | 3 | 0.0 | 0.0 | 24 | 6 | 2.5 | 2.2 | 66 | 18 | 5.8 | 4.0 | 24 | 20 | 6.9 | 1.2 | - | - | - | - | 121 | 47 | 611 | 536 |
| Pilot Station | 9 | 5 | 0.0 | 0.0 | 38 | 17 | 0.1 | 0.1 | 47 | 19 | 1.3 | 1.0 | 15 | 13 | 0.0 | 0.0 | - | - | - | - | 109 | 54 | 66 | 94 |
| Marshall | 3 | 1 | 0.0 | - | 16 | 2 | 0.0 | 0.0 | 38 | 12 | 5.1 | 2.8 | 13 | 13 | 18.5 | 0.0 | - | - | - | - | 70 | 28 | 562 | 274 |
| District 2 | 52 | 28 | 2.2 | 0.7 | 118 | 35 | 0.6 | 0.5 | 235 | 75 | 3.0 | 1.3 | 86 | 74 | 7.5 | 0.8 | - | - | - | - | 491 | 212 | 1,668 | 633 |
| Russian Mission | 5 | 3 | 0.0 | 0.0 | 21 | 5 | 0.4 | 0.3 | 34 | 11 | 0.0 | 0.0 | 6 | 5 | 0.4 | 0.2 | - | - | - | - | 66 | 24 | 11 | 14 |
| Holy Cross | 6 | 5 | 0.0 | 0.0 | 15 | 7 | 0.0 | 0.0 | 22 | 10 | 1.5 | 0.9 | 13 | 7 | 4.7 | 2.7 | - | - | - | - | 56 | 29 | 94 | 78 |
| Shageluk | 13 | 1 | 0.0 | - | 7 | 6 | 0.0 | 0.0 | 10 | 9 | 14.4 | 2.4 | - | - | - | - | 1 | 1 | 0.0 | - | 31 | 17 | 249 | 81 |
| District 3 | 24 | 9 | 0.0 | 0.0 | 43 | 18 | 0.2 | 0.2 | 66 | 30 | 2.7 | 0.5 | 19 | 12 | 3.4 | 1.8 | 1 | 1 | 0.0 | - | 153 | 70 | 354 | 114 |
| Anvik | 2 | 0 | - | - | 8 | 8 | 0.6 | 0.0 | 11 | 9 | 11.3 | 3.1 | 6 | 6 | 9.7 | 0.0 | 1 | 1 | 0.0 | - | 28 | 24 | 202 | 73 |
| Grayling | 8 | 2 | 0.0 | 0.0 | 4 | 2 | 8.5 | 6.0 | 28 | 9 | 32.7 | 10.9 | 8 | 5 | 25.4 | 9.5 | - | - | - | - | 48 | 18 | 1,152 | 618 |
| Kaltag | 1 | 1 | 0.0 | - | 13 | 3 | 0.0 | 0.0 | 41 | 8 | 4.3 | 1.9 | 6 | 5 | 3.6 | 0.8 | - | - | - | - | 61 | 17 | 196 | 153 |
| Nulato | - | - | - | - | 19 | 6 | 1.7 | 1.4 | 53 | 14 | 5.9 | 1.9 | 4 | 4 | 77.5 | 0.0 | - | - | - | - | 76 | 24 | 652 | 201 |
| Koyukuk | 15 | 2 | 5.0 | 4.7 | 15 | 5 | 0.0 | 0.0 | 15 | 5 | 0.0 | 0.0 | 5 | 3 | 192.0 | 56.9 | 1 | 1 | 20.0 | - | 51 | 16 | 1,388 | 790 |
| Galena | 30 | 22 | 16.8 | 4.2 | 70 | 19 | 1.3 | 1.1 | 62 | 18 | 5.7 | 2.7 | 5 | 5 | 99.4 | 0.0 | 2 | 2 | 647.5 | 0.0 | 169 | 66 | 2,739 | 438 |
| Ruby | 5 | 4 | 0.0 | 0.0 | 35 | 7 | 0.0 | 0.0 | 12 | 4 | 1.0 | 0.8 | 4 | 4 | 0.0 | 0.0 | 1 | 1 | 580.0 | - | 57 | 20 | 592 | 19 |
| Huslia | 17 | 5 | 0.0 | 0.0 | 45 | 12 | 0.0 | 0.0 | 13 | 4 | 2.5 | 2.1 | 6 | 6 | 8.3 | 0.0 | 1 | 1 | 100.0 | - | 82 | 28 | 183 | 53 |
| Hughes | 15 | 7 | 0.0 | 0.0 | 13 | 11 | 3.5 | 1.4 | 5 | 5 | 0.0 | 0.0 | 2 | 2 | 9.0 | 0.0 | - | - | - | - | 35 | 25 | 64 | 35 |
| Allakaket | 15 | 5 | 0.0 | 0.0 | 34 | 9 | 0.0 | 0.0 | 9 | 4 | 0.0 | 0.0 | 5 | 5 | 16.0 | 0.0 | 2 | 2 | 6.0 | 0.0 | 65 | 25 | 92 | 0 |
| Alatna | 3 | 1 | 0.0 | - | 4 | 4 | 0.0 | 0.0 | 2 | 2 | 0.0 | 0.0 | - | - | - | - | - | - | - | - | 9 | 7 | 0 | 0 |
| Bettles | 7 | 3 | 0.0 | 0.0 | 16 | 11 | 0.0 | 0.0 | 1 | 0 | - | - | - | - | - | - | - | - | - | - | 24 | 14 | 0 | 0 |
| District 4 | 118 | 52 | 5.0 | 1.3 | 276 | 97 | 0.8 | 0.3 | 252 | 82 | 7.6 | 1.5 | 51 | 45 | 43.1 | 5.8 | 8 | 8 | 250.9 | 0.0 | 705 | 284 | 7,260 | 1,128 |

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| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Tanana | 8 | 3 | 0.0 | 0.0 | 47 | 14 | 1.9 | 1.2 | 27 | 9 | 1.0 | 0.8 | 7 | 5 | 130.0 | 51.2 | 10 | 6 | 2,070.3 | 400.7 | 99 | 37 | 21,728 | 7,886 |
| Stevens Village | 1 | 0 | - | - | 3 | 2 | 0.0 | 0.0 | 8 | 6 | 0.0 | 0.0 | 3 | 3 | 283.3 | 0.0 | - | - | - | - | 15 | 11 | 911 | 0 |
| Birch Creek | 2 | 0 | - | - | 10 | 4 | 0.0 | 0.0 | 4 | 3 | 0.0 | 0.0 | - | - | - | - | - | - | - | - | 16 | 7 | 0 | 0 |
| Beaver | 5 | 3 | 0.0 | 0.0 | 12 | 10 | 10.0 | 4.1 | 14 | 12 | 0.2 | 0.1 | - | - | - | - | - | - | - | - | 31 | 25 | 122 | 96 |
| Fort Yukon | 63 | 22 | 43.5 | 22.9 | 107 | 30 | 0.2 | 0.1 | 31 | 7 | 43.1 | 37.7 | 9 | 8 | 0.0 | 0.0 | 9 | 9 | 343.9 | 0.0 | 219 | 76 | 7,188 | 3,633 |
| Venetie | 25 | 12 | 0.0 | 0.0 | 37 | 9 | 5.6 | 4.8 | 13 | 4 | 112.5 | 68.7 | 2 | 2 | 35.0 | 0.0 | 1 | 1 | 200.0 | - | 78 | 28 | 1,938 | 1,786 |
| Chalkyitsik | 7 | 1 | 0.0 | - | 13 | 10 | 0.0 | 0.0 | 1 | 1 | 0.0 | - | - | - | - | - | - | - | - | - | 21 | 12 | 0 | 0 |
| District 5 | 111 | 41 | 25.3 | 13.3 | 229 | 79 | 1.9 | 0.9 | 98 | 42 | 28.9 | 15.0 | 21 | 18 | 87.1 | 17.1 | 20 | 16 | 1199.9 | 200.3 | 479 | 196 | 31,887 | 8,865 |
| Survey Totals | 419 | 190 | 9.1 | 3.7 | 864 | 293 | 1.4 | 0.5 | 957 | 329 | 6.6 | 1.6 | 298 | 251 | 18.0 | 1.6 | 30 | 26 | 866.8 | 133.6 | 2,568 | 1,089 | 43,052 | 9,006 |

*Note*: The number of fall chum salmon harvested was estimated using the total number of households (N), the number of households contacted (n), the average number of salmon harvested by households (Mean), standard error (SE), and includes 95% confidence interval (CI 95%). Dashes indicate indefinable values.

Appendix A4.–Estimated coho salmon subsistence harvest in surveyed communities, by harvest level, with community and district totals, Yukon Area, 2011.

| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Hooper Bay | 24 | 9 | 0.0 | 0.0 | 62 | 16 | 0.0 | 0.0 | 90 | 24 | 0.0 | 0.0 | 33 | 30 | 0.0 | 0.0 | - | - | - | - | 209 | 79 | 0 | 0 |
| Scammon Bay | 20 | 9 | 0.0 | 0.0 | 21 | 6 | 0.8 | 0.7 | 35 | 8 | 0.0 | 0.0 | 16 | 14 | 2.4 | 0.6 | - | - | - | - | 92 | 37 | 55 | 35 |
| Coastal District | 44 | 18 | 0.0 | 0.0 | 83 | 22 | 0.2 | 0.2 | 125 | 32 | 0.0 | 0.0 | 49 | 44 | 0.8 | 0.2 | - | - | - | - | 301 | 116 | 55 | 35 |
| Nunam Iqua | 7 | 6 | 0.0 | 0.0 | 10 | 6 | 0.0 | 0.0 | 9 | 7 | 0.7 | 0.3 | 10 | 9 | 1.7 | 0.3 | - | - | - | - | 36 | 28 | 23 | 7 |
| Alakanuk | 27 | 18 | 0.6 | 0.3 | 32 | 6 | 8.7 | 7.5 | 57 | 17 | 0.3 | 0.2 | 17 | 13 | 4.8 | 2.2 | - | - | - | - | 133 | 54 | 391 | 474 |
| Emmonak | 23 | 11 | 0.0 | 0.0 | 48 | 23 | 0.1 | 0.1 | 64 | 30 | 0.6 | 0.2 | 30 | 25 | 1.0 | 0.1 | 1 | 1 | 0.0 | - | 166 | 90 | 69 | 29 |
| Kotlik | 13 | 7 | 3.7 | 1.2 | 25 | 7 | 0.3 | 0.2 | 51 | 14 | 0.4 | 0.2 | 15 | 11 | 0.4 | 0.1 | - | - | - | - | 104 | 39 | 83 | 38 |
| District 1 | 70 | 42 | 0.9 | 0.3 | 115 | 42 | 2.5 | 2.1 | 181 | 68 | 0.4 | 0.1 | 72 | 58 | 1.9 | 0.5 | 1 | 1 | 0.0 | - | 439 | 211 | 566 | 477 |
| Mountain Village | 30 | 18 | 1.8 | 0.8 | 34 | 8 | 0.0 | 0.0 | 71 | 17 | 0.5 | 0.3 | 28 | 23 | 0.2 | 0.1 | - | - | - | - | 163 | 66 | 94 | 61 |
| Pitkas Point | 3 | 1 | 0.0 | - | 6 | 2 | 0.0 | 0.0 | 13 | 9 | 0.6 | 0.3 | 6 | 5 | 5.0 | 2.0 | - | - | - | - | 28 | 17 | 37 | 25 |
| St. Mary's | 7 | 3 | 0.0 | 0.0 | 24 | 6 | 0.3 | 0.3 | 66 | 18 | 1.2 | 1.0 | 24 | 20 | 6.1 | 1.7 | - | - | - | - | 121 | 47 | 230 | 152 |
| Pilot Station | 9 | 5 | 0.0 | 0.0 | 38 | 17 | 0.0 | 0.0 | 47 | 19 | 1.1 | 0.8 | 15 | 13 | 0.0 | 0.0 | - | - | - | - | 109 | 54 | 49 | 75 |
| Marshall | 3 | 1 | 0.0 | - | 16 | 2 | 0.0 | 0.0 | 38 | 12 | 1.3 | 0.8 | 13 | 13 | 5.0 | 0.0 | - | - | - | - | 70 | 28 | 150 | 74 |
| District 2 | 52 | 28 | 1.1 | 0.5 | 118 | 35 | 0.1 | 0.1 | 235 | 75 | 0.9 | 0.4 | 86 | 74 | 2.9 | 0.5 | - | - | - | - | 491 | 212 | 560 | 196 |
| Russian Mission | 5 | 3 | 0.0 | 0.0 | 21 | 5 | 0.0 | 0.0 | 34 | 11 | 0.0 | 0.0 | 6 | 5 | 0.0 | 0.0 | - | - | - | - | 66 | 24 | 0 | 0 |
| Holy Cross | 6 | 5 | 0.0 | 0.0 | 15 | 7 | 0.0 | 0.0 | 22 | 10 | 0.0 | 0.0 | 13 | 7 | 0.0 | 0.0 | - | - | - | - | 56 | 29 | 0 | 0 |
| Shageluk | 13 | 1 | 0.0 | - | 7 | 6 | 0.0 | 0.0 | 10 | 9 | 2.1 | 0.4 | - | - | - | - | 1 | 1 | 0.0 | - | 31 | 17 | 36 | 15 |
| District 3 | 24 | 9 | 0.0 | 0.0 | 43 | 18 | 0.0 | 0.0 | 66 | 30 | 0.3 | 0.1 | 19 | 12 | 0.0 | 0.0 | 1 | 1 | 0.0 | - | 153 | 70 | 36 | 15 |
| Anvik | 2 | 0 | - | - | 8 | 8 | 0.0 | 0.0 | 11 | 9 | 0.0 | 0.0 | 6 | 6 | 3.0 | 0.0 | 1 | 1 | 0.0 | - | 28 | 24 | 19 | 0 |
| Grayling | 8 | 2 | 0.0 | 0.0 | 4 | 2 | 4.0 | 2.8 | 28 | 9 | 3.7 | 2.7 | 8 | 5 | 0.0 | 0.0 | - | - | - | - | 48 | 18 | 119 | 151 |
| Kaltag | 1 | 1 | 0.0 | - | 13 | 3 | 0.0 | 0.0 | 41 | 8 | 0.0 | 0.0 | 6 | 5 | 43.0 | 10.8 | - | - | - | - | 61 | 17 | 258 | 127 |
| Nulato | - | - | - | - | 19 | 6 | 0.0 | 0.0 | 53 | 14 | 2.1 | 1.3 | 4 | 4 | 1.0 | 0.0 | - | - | - | - | 76 | 24 | 118 | 138 |
| Koyukuk | 15 | 2 | 0.0 | 0.0 | 15 | 5 | 0.0 | 0.0 | 15 | 5 | 0.0 | 0.0 | 5 | 3 | 13.3 | 5.6 | 1 | 1 | 30.0 | - | 51 | 16 | 137 | 77 |
| Galena | 30 | 22 | 9.1 | 4.7 | 70 | 19 | 0.0 | 0.0 | 62 | 18 | 11.1 | 9.0 | 5 | 5 | 4.0 | 0.0 | 2 | 2 | 16.5 | 0.0 | 169 | 66 | 1,013 | 1,130 |
| Ruby | 5 | 4 | 0.0 | 0.0 | 35 | 7 | 0.0 | 0.0 | 12 | 4 | 1.0 | 0.8 | 4 | 4 | 0.0 | 0.0 | 1 | 1 | 300.0 | - | 57 | 20 | 312 | 19 |
| Huslia | 17 | 5 | 0.0 | 0.0 | 45 | 12 | 0.0 | 0.0 | 13 | 4 | 0.0 | 0.0 | 6 | 6 | 3.3 | 0.0 | 1 | 1 | 50.0 | - | 82 | 28 | 70 | 0 |
| Hughes | 15 | 7 | 0.0 | 0.0 | 13 | 11 | 0.9 | 0.4 | 5 | 5 | 0.0 | 0.0 | 2 | 2 | 0.5 | 0.0 | - | - | - | - | 35 | 25 | 13 | 9 |
| Allakaket | 15 | 5 | 0.0 | 0.0 | 34 | 9 | 0.0 | 0.0 | 9 | 4 | 0.0 | 0.0 | 5 | 5 | 0.0 | 0.0 | 2 | 2 | 6.5 | 0.0 | 65 | 25 | 13 | 0 |
| Alatna | 3 | 1 | 0.0 | - | 4 | 4 | 0.0 | 0.0 | 2 | 2 | 0.0 | 0.0 | - | - | - | - | - | - | - | - | 9 | 7 | 0 | 0 |
| Bettles | 7 | 3 | 0.0 | 0.0 | 16 | 11 | 0.0 | 0.0 | 1 | 0 | - | - | - | - | - | - | - | - | - | - | 24 | 14 | 0 | 0 |
| District 4 | 118 | 52 | 2.7 | 1.4 | 276 | 97 | 0.1 | 0.0 | 252 | 82 | 3.6 | 2.3 | 51 | 45 | 7.6 | 1.4 | 8 | 8 | 53.3 | 0.0 | 705 | 284 | 2,072 | 1,159 |

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| | Unknown | | | | Does Not Harvest Salmon | | | | Light Harvester | | | | Medium Harvester | | | | Heavy Harvester | | | | Combined Total | | Est. | CI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Community | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Mean | SE | N | n | Total | 95% |
| Tanana | 8 | 3 | 0.0 | 0.0 | 47 | 14 | 0.0 | 0.0 | 27 | 9 | 0.0 | 0.0 | 7 | 5 | 0.0 | 0.0 | 10 | 6 | 31.2 | 15.2 | 99 | 37 | 312 | 298 |
| Stevens Village | 1 | 0 | - | - | 3 | 2 | 0.0 | 0.0 | 8 | 6 | 0.0 | 0.0 | 3 | 3 | 0.0 | 0.0 | - | - | - | - | 15 | 11 | 0 | 0 |
| Birch Creek | 2 | 0 | - | - | 10 | 4 | 0.0 | 0.0 | 4 | 3 | 0.0 | 0.0 | - | - | - | - | - | - | - | - | 16 | 7 | 0 | 0 |
| Beaver | 5 | 3 | 0.0 | 0.0 | 12 | 10 | 0.0 | 0.0 | 14 | 12 | 0.0 | 0.0 | - | - | - | - | - | - | - | - | 31 | 25 | 0 | 0 |
| Fort Yukon | 63 | 22 | 0.0 | 0.0 | 107 | 30 | 0.0 | 0.0 | 31 | 7 | 29.1 | 25.1 | 9 | 8 | 0.0 | 0.0 | 9 | 9 | 15.2 | 0.0 | 219 | 76 | 1,040 | 1,523 |
| Venetie | 25 | 12 | 0.0 | 0.0 | 37 | 9 | 0.0 | 0.0 | 13 | 4 | 2.3 | 1.1 | 2 | 2 | 2.5 | 0.0 | 1 | 1 | 0.0 | - | 78 | 28 | 34 | 28 |
| Chalkyitsik | 7 | 1 | 0.0 | - | 13 | 10 | 0.0 | 0.0 | 1 | 1 | 0.0 | - | - | - | - | - | - | - | - | - | 21 | 12 | 0 | 0 |
| District 5 | 111 | 41 | 0.0 | 0.0 | 229 | 79 | 0.0 | 0.0 | 98 | 42 | 9.5 | 7.9 | 21 | 18 | 0.2 | 0.0 | 20 | 16 | 22.4 | 7.6 | 479 | 196 | 1,386 | 1,552 |
| Survey Totals | 419 | 190 | 1.0 | 0.4 | 864 | 293 | 0.4 | 0.3 | 957 | 329 | 2.3 | 1.0 | 298 | 251 | 2.7 | 0.3 | 30 | 26 | 29.2 | 5.1 | 2,568 | 1,089 | 4,675 | 2,004 |

*Note*: The number of coho salmon harvested was estimated using the total number of households (N), the number of households contacted (n), the average number of salmon harvested by households (Mean), standard error (SE), and includes 95% confidence interval (CI 95%). Dashes indicate indefinable values.

Appendix A5.–Estimated number of salmon provided to communities for subsistence use by test fishery programs, Yukon Area, 2011.

| Yukon River Test Fishery Sites | Community where fish were distributed | Chinook Salmon | Summer Chum Salmon | Fall Chum Salmon | Coho Salmon | Total Salmon |
|---|---|---|---|---|---|---|
| Lower Yukon Test Fish Gillnet (LYTF) [a] | Alakanuk | 93 | 496 | 96 | 40 | 725 |
| | Emmonak | 920 | 3,730 | 1,279 | 403 | 6,332 |
| | Hooper Bay | 6 | 285 | 0 | 0 | 291 |
| | Kotlik | 981 | 1,123 | 491 | 118 | 2,713 |
| | Scammon Bay | 0 | 0 | 0 | 0 | 0 |
| | St. Mary's[b] | 71 | 86 | 0 | 0 | 0 |
| | Unknown[c] | 10 | 30 | 0 | 0 | 0 |
| LYTF Project Subtotal: | | *2,081* | *5,750* | *1,866* | *561* | *10,061* |
| Mountain Village Test Fish Drift Gillnet | Mountain Village | 493 | 325 | 401 | 167 | 1,386 |
| Pilot Station Sonar Test Fish Drift Gillnet | Pilot Station | 198 | 1,540 | 509 | 96 | 2,343 |
| Eagle Sonar Test Fish Drift Gillnet | Eagle | 5 | 0 | 1 | 0 | 6 |
| Test Fishery Totals | | 2,777 | 7,615 | 2,777 | 824 | 13,796 |

[a] Includes both set and drift gillnet test fishery catches.

[b] These salmon were donated to the community of St. Mary's and a nearby fish camp for subsistence from the Middle Mouth test fishery near Emmonak.

[c] These salmon were donated to the processor, Kwik'pak Fisheries, from the Middle Mouth test fishery project near Emmonak for distribution to households in unknown communities for subsistence.

Appendix A6.–Salmon reported lost in surveyed communities due to sick fish, weather, predators, and unknown causes, Yukon Area, 2011.

| Reasons Given For Salmon Lost | Chinook Salmon | | Summer Chum Salmon | | Fall Chum Salmon | | Coho Salmon | | Total Reported Salmon Lost | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Number | Percent | Number | Percent | Number | Percent | Number | Percent | Number | Percent |
| LOST DUE TO SICK FISH | | | | | | | | | | |
| Ichthyophonus h. | 1 | 1.4% | 13 | 1.3% | 0 | 0.0% | 0 | 0.0% | 14 | 1.3% |
| Cuts, bruises, rotten | 0 | 0.0% | 48 | 4.9% | 0 | 0.0% | 0 | 0.0% | 48 | 4.3% |
| Worms, pus, parasites | 40 | 56.3% | 21 | 2.1% | 0 | 0.0% | 0 | 0.0% | 61 | 5.5% |
| Subtotal | 41 | 57.7% | 82 | 8.3% | 0 | 0.0% | 0 | 0.0% | 123 | 11.0% |
| LOST DUE TO WEATHER / SPOILAGE | | | | | | | | | | |
| Spoilage | 0 | 0.0% | 40 | 4.0% | 0 | 0.0% | 0 | 0.0% | 40 | 3.6% |
| Rain/Bad Weather | 23 | 32.4% | 605 | 61.2% | 46 | 97.9% | 7 | 0.0% | 681 | 61.0% |
| Insects | 0 | 0.0% | 31 | 3.1% | 0 | 0.0% | 0 | 0.0% | 31 | 2.8% |
| Subtotal | 23 | 32.4% | 676 | 68.4% | 46 | 97.9% | 7 | 0.0% | 752 | 67.3% |
| LOST DUE TO ANIMALS | | | | | | | | | | |
| Bears | 4 | 5.6% | 134 | 13.6% | 0 | 0.0% | 0 | 0.0% | 138 | 12.4% |
| Birds | 0 | 0.0% | 6 | 0.6% | 0 | 0.0% | 0 | 0.0% | 6 | 0.5% |
| Seal/whale | 1 | 1.4% | 1 | 0.1% | 1 | 2.1% | 0 | 0.0% | 3 | 0.3% |
| Subtotal | 5 | 7.0% | 141 | 14.3% | 1 | 2.1% | 0 | 0.0% | 147 | 13.2% |
| LOST UNKNOWN Subtotal | 2 | 2.8% | 89 | 9.0% | 0 | 0.0% | 4 | 0.0% | 0<br>95 | 8.5% |
| SALMON REPORTED LOST Total | 71 | | 988 | | 47 | | 11 | | 1,117 | |
| Use of Lost salmon | | | | | | | | | | |
| Salmon Fed to Dogs[a] | 41 | 3.7% | 151 | 13.5% | 0 | 0.0% | 0 | 0.0% | 192 | 17.2% |
| Salmon Lost to Humans and Dogs[b] | 30 | 2.7% | 837 | 74.9% | 47 | 4.2% | 11 | 1.0% | 925 | 82.8% |
| Total Salmon Lost[c] | 71 | 6.4% | 988 | 88.5% | 47 | 4.2% | 11 | 1.0% | 1,117 | 100.0% |

[a] Salmon unfit for human consumption, but reported retained for dog food.

[b] Salmon lost and unfit for human consumptions and for dog food.

[c] A total of 69 surveyed households reported losing salmon.

Appendix A7.–Subsistence salmon fishing closures and gear restrictions, Lower Yukon Area, 2011.

| | Coastal District[a] | | | | |
|---|---|---|---|---|---|
| | Southern[b] | Northern[c] | District 1 | District 2 | District 3[d] |
| 6/1 | Open | Open | Open | Open | Open |
| 6/2 | Open | Open | Open | Open | Open |
| 6/3 | Open | Open | Open | Open | Open |
| 6/4 | Open | Open | Open | Open | Open |
| 6/5 | Open | Open | Open | Open | Open |
| 6/6 | 6" mesh | Open | Open | Open | Open |
| 6/7 | 6" mesh | Open | Open | Open | Open |
| 6/8 | 6" mesh | Open | Close 8am | Open | Open |
| 6/9 | 6" mesh | Open | Open 8pm | Open | Open |
| 6/10 | 6" mesh | Open | Open | Close 8am | Open |
| 6/11 | 6" mesh | Open | Close 8am | Closed | Open |
| 6/12 | 6" mesh | Open | Closed | Open 8pm | Open |
| 6/13 | Open | Close 8pm | Closed | Open | Open |
| 6/14 | 24 Hours/day | Closed | Closed | Close 8am | Close 8am |
| 6/15 | 7 Days/week | Closed | Closed | Closed | Open 8pm |
| 6/16 | | Open 8pm | Open 8pm | Closed | Open |
| 6/17 | | Open | Open | Closed | Close 8am |
| 6/18 | | Open | Close 8am | Closed | Closed |
| 6/19 | | Open | Closed | Open 8pm | Closed |
| 6/20 | | Close 8pm | Closed | Open | Closed |
| 6/21 | | Open 2pm | Open 2pm | | Closed |
| 6/22 | | Open | Close 8am | Closed | Open 8pm |
| 6/23 | | 24 Hours/day | Closed | Closed | Open |
| 6/24 | | 7 Days/week | Open 6pm[e, f] | Closed | Close 8am |
| 6/25 | | | Close 12 noon | Closed | Closed |
| 6/26 | | | Closed | Open 8pm[e] | Closed |
| 6/27 | | | Open 8pm, 6" mesh[e, f] | Open | Closed |
| 6/28 | | | Open, 6" mesh | Close 8am[g] | Closed |
| 6/29 | | | Close 8am[f, g, h] | Open 8pm, 6" mesh | Open 8pm |
| 6/30 | | | Open 8pm, 6" mesh | Open, 6" mesh | Open |
| 7/1 | Open | Open | Open, 6" mesh[f, h] | Close 8am | Close 8am |
| 7/2 | 24 Hours/day | 24 Hours/day | Close 8am | Closed | Closed |
| 7/3 | 7 Days/week | 7 Days/week | Closed[f, g, h] | Open 8pm, 6" mesh | Open 8pm |
| 7/4 | | | Open 8pm, 6" mesh[e, f, h] | Open, 6" mesh | Open |
| 7/5 | | | Open, 6" mesh | Close 8am | Close 8am |
| 7/6 | | | Close 8am[g] | Open 8pm, 6" mesh[f, g, i] | Open 8pm |
| 7/7 | | | Open 2pm, 6" mesh | Open, 6" mesh[e, f, j] | Open |
| 7/8 | | | Close 3am[f, g] | Close 8am, Open 6pm | Close 8am |
| 7/9 | | | Open 6pm, 6" mesh | 6" mesh, Close 9pm | Closed |
| 7/10 | | | Close 4pm | Closed[f, g] | Open 8pm |
| 7/11 | | | Closed[f, g] | Open 12-6pm, 6"mesh[f, g] | Open |
| 7/12 | | | Open 10am, 6" mesh[e,f] | Open 3pm, 6" mesh[f,g] | Close 8am |
| 7/13 | | | Close 6am-noon, 6"mesh | Close noon[f,g] | Open 8pm |
| 7/14 | | | Close 3am[f, g] | Open 9am, 7.5" mesh | Open |
| 7/15 | | | Open 3am, 7.5" mesh | Close 6am[f, g] | Close 8am |
| 7/16 | | | Open | Open 3am | Closed |
| 7/17 | | | Open | Close 3am[f, g] | Open 8pm |
| 7/18 | | | Close 3am[f, k] | Open 3am | Open 24 Hours/day |
| 7/19 | | | Open noon | | 7 Days/week |

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Appendix A7.–Page 2 of 3.

| | Coastal District[a] | | | | |
|---|---|---|---|---|---|
| | Southern[b] | Northern[c] | District 1 | District 2 | District 3[d] |
| 7/20 | | | Open | Open | |
| 7/21 | | | Close 3am[f, k] | 24 Hours/day | Open |
| 7/22 | | | Open noon | 7 Days/week | 24 Hours/day |
| 7/23 | | | Open | except 12 hrs | 7 Days/week |
| 7/24 | | | Close midnight[k] | before, during and | |
| 7/25 | | | Closed[f, k] | after commercial | |
| 7/26 | | | Open 9am | openings | |
| 7/27 | | | Open | | |
| 7/28 | Open | Open | Open 24 Hours/day | Open | Open |
| 7/29 | 24 Hours/day | 24 Hours/day | 7 Days/week | | 24 Hours/day |
| 7/30 | 7 Days/week | 7 Days/week | except 12 hrs before | | 7 Days/week |
| 7/31 | | | during, and after | | |
| 8/1 | | | commercial periods | Close 3am[g] | |
| 8/2 | | | Close 3am[g] | Open 9am | |
| 8/3 | | | Open 9am | | |
| 8/4 | | | Close 3am[g] | | |
| 8/5 | | | Open noon | Close 9pm[g] | |
| 8/6 | | | Open | Closed[g] | |
| 8/7 | | | Close 6am[g] | Open 6am | |
| 8/8 | | | Open noon | | |
| 8/9 | | | Open | Close 12am[g] | |
| 8/10 | | | Close midnight | Open 9am | |
| 8/11 | | | Closed[g] | | |
| 8/12 | | | Open noon | | |
| 8/13 | | | Close midnight[k] | Close 9pm | |
| 8/14 | | | Closed [k] | Closed[g] | |
| 8/15 | Open | Open | Open 9am | Open 6am | |
| 8/16 | 24 Hours/day | 24 Hours/day | Open | Close 9pm | |
| 8/17 | 7 Days/week | 7 Days/week | Close 9pm | Closed[g] | |
| 8/18 | | | Closed[g] | Open 6am | |
| 8/19 | | | Open 9am | | |
| 8/20 | | | Close midnight[k] | | |
| 8/21 | | | Closed[k] | | |
| 8/22 | | | Open 6am | Close 9pm | |
| 8/23 | | | Open | Closed[g] | |
| 8/24 | | | Close 9pm | Open 6am | |
| 8/25 | | | Closed[g] | | |
| 8/26 | | | Open 6am | | |
| 8/27 | | | Close midnight[k] | Open | |
| 8/28 | | | Closed[k] | 24 Hours/day | |
| 8/29 | | | Open 9am | 7 Days/week | |
| 8/30 | | | Close midnight[k] | | |
| 8/31 | | | Closed[k] | | |
| 9/1 | | | Close midnight | | |
| 9/2 | | | Closed[g] | | |
| 9/3 | | | Open 9am | | |
| 9/4 | | | Close 8pm | | |
| 9/5 | | | Closed[g] | | |
| 9/6 | | | Open 5am[l] | | |

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*Note:* Shaded areas indicate windowed fishery closures or around commercial openings, outlined shaded days were closed to protect the first and second pulses of Chinook salmon. Mesh size was restricted to 7.5-inch or less in all districts and subdistricts in 2011.

[a] The Coastal District was split for management purposes based on which mouths various salmon species were entering the delta.

[b] The portion of the Coastal District from the Naskonat Peninsula north to 62 degrees North latitude, including communities of Chevak, Hooper Bay, and Scammon Bay.

[c] The portion of the Coastal District from 62 degrees North latitude to Point Romanoff and 3 miles offshore.

[d] The Innoko River remained open to subsistence fishing 24 hours a day, 7 days per week for the entire season.

[e] Commercial opening concurrent with subsistence opening.

[f] Commercial opening restricted to 6" mesh.

[g] Commercial opening during a subsistence closure. In Districts 1 and 2, subsistence fishing is typically closed before, during, and after a commercial opening. Subsistence closures before and after commercial openings ranged from zero to 18 hours by emergency orders.

[h] Commercial opening restricted to South Mouth of District 1.

[i] Commercial opening restricted to the lower portion of District 2 from the Districts 1 and 2 boundary to below the confluence of the Andreafsky River.

[j] Commercial opening restricted to a lower portion of District 2 from the Districts 1 and 2 boundary to downriver of the slough at the community of Pilot Station.

[k] Coastal Set Net Only Area opened to commercial fishing and closed to subsistence fishing three hours earlier than the rest of District 1 to correspond more closely with tides. Subsistence fishing closed for 12 hours before, during and after commercial openings.

[l] District 1 remained open for subsistence fishing 24 hours a day, seven days a week except for a closure from 9 pm September 9 to 6 am September 10 around a commercial opening.

Appendix A8.–Subsistence salmon fishing closures and gear restrictions, Upper Yukon Area, 2011.

| | Subdistrict 4-A[a] | | Sub 4-B / | 5-A/5-B / | Subdistrict 5-D[b] | | |
|---|---|---|---|---|---|---|---|
| | Lower | Upper | 4-C | 5-C | Lower[c] | Middle[d] | Upper[e] |
| 6/13 | Open | Open | Open | Open | Open | Open | Open |
| 6/14 | 24 Hours/day | 24 Hours/day | 24 Hours/day | 24 Hours/day | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 6/15 | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week |
| 6/16 | | | | | | | |
| 6/17 | Close 6pm | Close 6pm | | | | | |
| 6/18 | Closed | Closed | | | | | |
| 6/19 | Open 6pm | Open 6pm | Open | Open | Open | Open | Open |
| 6/20 | Open | Open | 24 Hours/day | 24 Hours/day | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 6/21 | Close 6pm | Close 6pm | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week |
| 6/22 | Closed | Open 6pm | | | | | |
| 6/23 | Closed | Open | | | | | |
| 6/24 | Closed | Close 6pm | Close 6pm | Open | Open | Open | Open |
| 6/25 | Closed | Closed | Closed | 24 Hours/day | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 6/26 | Open 6pm | Closed | Open 6pm | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week |
| 6/27 | Open | Closed | Open | | | | |
| 6/28 | Close 6pm | Closed | Close 6pm | | | | |
| 6/29 | Closed | Open 6pm | Closed | Close 6pm | Open | Open | Open |
| 6/30 | Closed | Open | Closed | Closed | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 7/1 | Closed | Close 6pm | Closed | Closed | 7 Days/week | 7 Days/week | 7 Days/week |
| 7/2 | Closed | Closed | Closed | Closed | | | |
| 7/3 | Open 6pm | Closed | Open 6pm | Closed | Close 6pm | Open | Open |
| 7/4 | Open | Closed | Open | Open 6pm | Closed | 24 Hours/day | 24 Hours/day |
| 7/5 | Close 6pm | Closed | Close 6pm | Open | Closed | 7 Days/week | 7 Days/week |
| 7/6 | Open 6pm | Open 6am[f] | Closed | Close 12pm | Closed | | |
| 7/7 | Open | Open | Closed | Closed | Closed | Close 6pm | Open |
| 7/8 | Close 6pm | Close 6pm | Closed | Closed | Open 6pm | Closed | 24 Hours/day |
| 7/9 | Closed | Closed | Closed | Closed | Open | Closed | 7 Days/week |
| 7/10 | Open 6pm | Open 6pm | Open 6pm | Closed | Open | Closed | |
| 7/11 | Open | Open | Open | Open 6pm | Close 6pm | Closed | |
| 7/12 | Close 6pm | Close 6pm | Close 6pm | Open | Closed | Open 6pm | Close 6pm |
| 7/13 | Open 6pm | Open 6pm | Open 6pm | Close 6pm | Closed | Open | Closed |
| 7/14 | Open | Open | Open | Closed | Closed | Close 6pm | Closed |
| 7/15 | Close 6pm | Close 6pm | Close 6pm | Open 6pm | Open 6am | Closed | Closed |
| 7/16 | Closed | Closed | Closed | Open | | Closed | Closed |
| 7/17 | Open 6pm | Open 6pm | Open 6pm | Close 6pm | Open | Open 6pm | Open 6pm |
| 7/18 | Open | Open | Open | Closed | 24 Hours/day | Open | Open |
| 7/19 | Close 6pm | Close 6pm | Close 6pm | Open 6pm | 7 Days/week | | Close 6pm |
| 7/20 | Open 6pm | Open 6pm | Open 6pm | Open | | Open | Closed |
| 7/21 | Open | Open | Open | Close 6pm | | | Closed |
| 7/22 | Close 6pm | Close 6pm | Close 6pm | Open 6pm | Open | Open | Closed |
| 7/23 | Closed | Closed | Closed | Open | 24 Hours/day | Close 6pm | Closed |
| 7/24 | Open 6pm | Open 6pm | Open 6pm | Close 6pm | 7 Days/week | Closed | Open 6 pm |
| 7/25 | Open | Open | Open | Closed | | Closed | Close 6pm |
| 7/26 | Close 6pm | Close 6pm | Close 6pm | Open 6pm | | Closed | Closed |
| 7/27 | Open 6pm | Open 6pm | Open 6pm | Open | Open | Open 6pm | Closed |
| 7/28 | Open | Close 6pm | Open | Close 6pm | 24 Hours/day | | Closed |
| 7/29 | | Closed | Close 6pm | Open 6pm | 7 Days/week | | Open 6pm[g] |

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| | Subdistrict 4-A[a] | | Sub 4-B / | 5-A/5-B / | Subdistrict 5-D[b] | | |
|---|---|---|---|---|---|---|---|
| | Lower | Upper | 4-C | 5-C | Lower[c] | Middle[d] | Upper[e] |
| 7/30 | Open | Open 6pm | Closed | Open | Open | Open | Open |
| 7/31 | Close 6pm | Close 6pm | Open 6pm | Close 6pm | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 8/1 | | | | Closed | 7 Days/week | 7 Days/week | 7 Days/week |
| 8/2 | Open 6pm | Open 6pm | Open | Open 6pm | | | |
| 8/3 | | | | Open | | | |
| 8/4 | Open | Open | Open | Close 6pm | Open | Open | Open |
| 8/5 | | | Close 6pm | Open 6pm[h] | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 8/6 | Open | Open | | Open[h] | 7 Days/week | 7 Days/week | 7 Days/week |
| 8/7 | Close 6pm | Close 6pm | Open 6pm | Close 6pm | | | |
| 8/8 | | | | Closed | | | |
| 8/9 | Open 6pm | Open 6pm | Open | Open 6pm[h] | | | |
| 8/10 | | | | Open [h] | | | |
| 8/11 | Open | Open | Open | Open [h] | | | |
| 8/12 | | | Close 6pm | Open [h] | | | |
| 8/13 | Open | Open | | Open [h] | | | |
| 8/14 | Close 6pm | Close 6pm | Open 6pm | Close 6pm | | | |
| 8/15 | | | | Closed | Open | Open | Open |
| 8/16 | Open 6pm | Open 6pm | Open | Open 6pm [h] | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 8/17 | | | | Open [h] | 7 Days/week | 7 Days/week | 7 Days/week |
| 8/18 | Open | Open | Open | Open [h] | | | |
| 8/19 | | | Close 6pm | Open [h] | | | |
| 8/20 | Open | Open | | Open [h] | | | |
| 8/21 | Close 6pm | Close 6pm | Open 6pm | Close 6pm | | | |
| 8/22 | | | | Closed | | | |
| 8/23 | Open 6pm | Open 6pm | Open | Open 6pm | | | |
| 8/24 | | | | | | | |
| 8/25 | Open | Open | Open | Open | | | |
| 8/26 | | | Close 6pm | | | | |
| 8/27 | Open | Open | | Open | | | |
| 8/28 | Close 6pm | Close 6pm | Open 6pm | Close 6pm | | | |
| 8/29 | | | | Closed | | | |
| 8/30 | Open 6pm | Open 6pm | Open | Open 6pm | | | |
| 8/31 | | | | | | | |
| 9/1 | Open | Open | Open | Open | | | |
| 9/2 | 24 Hours/day | 24 Hours/day | 24 Hours/day | | | | |
| 9/3 | 7 Days/week | 7 Days/week | 7 Days/week | Open | Open | Open | Open |
| 9/4 | | | | Close 6pm | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 9/5 | Open | Open | Open | Closed | 7 Days/week | 7 Days/week | 7 Days/week |
| 9/6 | 24 Hours/day | 24 Hours/day | 24 Hours/day | Open 6pm | | | |
| 9/7 | 7 Days/week | 7 Days/week | 7 Days/week | | | | |
| 9/8 | | | | Open | | | |
| 9/9 | Open | Open | Open | | | | |
| 9/10 | 24 Hours/day | 24 Hours/day | 24 Hours/day | Open | | | |
| 9/11 | 7 Days/week | 7 Days/week | 7 Days/week | Close 6pm | | | |
| 9/12 | | | | Closed | | | |
| 9/13 | Open | Open | Open | Open 6pm | Open | Open | Open |
| 9/14 | 24 Hours/day | 24 Hours/day | 24 Hours/day | Open 24 Hours/day | 24 Hours/day | 24 Hours/day | 24 Hours/day |
| 9/15 | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week | 7 Days/week |

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*Note:* Shaded areas indicate windowed fishery closures, outlined shaded days were closed to protect the first and second pulses of Chinook salmon. Unless noted, mesh size was restricted to 7.5 inch or less in all districts and subdistricts in 2011. Other upper Yukon River areas remained on their regulatory schedules; the Koyukuk River remained open seven days per week, the Old Minto Area was open for one five-day per week period from 6pm Fridays until 6pm Wednesdays, District 6 (Tanana River) was open for two 42-hour periods per week from 6pm Monday until 12 noon Wednesdays, and from 6pm Fridays until 12 noon Sundays. Subsistence and commercial openings can be concurrent in these areas. Six commercial periods occurred in District 6 and were held concurrently with subsistence openings. Personal use fishing within one-half mile of the mouth of the Chena River was closed from July 22 to August 12.

[a] Subdistrict 4-A was divided into two separate areas above and below Stink Creek to protect the first pulse of Chinook salmon as it passed through this long section of river.

[b] Subdistrict 5-D was divided into three separate areas to protect the first pulse of Chinook salmon as it passed through this long section of river.

[c] Subdistrict 5-D Lower: from the ADF&G marker two miles downstream of Waldron Creek upstream to the Hadweenzic River.

[d] Subdistrict 5-D Middle: from the Hadweenzic River upstream to 22 Mile Slough.

[e] Subdistrict 5-D Upper: from 22 Mile Slough to the U.S./Canada border.

[f] Subsistence fishing open for an extra 12 hours in addition to normal schedule in the upper portion of Subdistrict 4-A.

[g] The Upper portion of Subdistrict 5-D was further divided. Subsistence fishing upstream of the Charlie River to the U.S./Canada Border was closed for an additional three days.

[h] Commercial fishing during the fall season was open concurrently with subsistence and only in Subdistricts 5-B and 5-C to harvest up river stocks.

# APPENDIX B. HISTORICAL INFORMATION

Appendix B1.–Chinook salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fishery projects, Yukon Area, 2001–2011.

| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2001-2005 Average | 2006-2010 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hooper Bay | 2,150 | 282 | 722 | 1,042 | 157 | 376 | 430 | 388 | 183 | 584 | 252 | 871 | 392 |
| Scammon Bay | 732 | 840 | 1,128 | 996 | 691 | 507 | 768 | 1,104 | 722 | 716 | 517 | 877 | 763 |
| Coastal District Total | 2,882 | 1,122 | 1,850 | 2,038 | 848 | 883 | 1,198 | 1,492 | 905 | 1,300 | 769 | 1,748 | 1,156 |
| Nunam Iqua | 550 | 393 | 925 | 647 | 338 | 371 | 907 | 163 | 200 | 404 | 250 | 571 | 409 |
| Alakanuk | 973 | 1,773 | 1,707 | 1,317 | 860 | 690 | 1,257 | 1,238 | 634 | 944 | 1,464 | 1,326 | 953 |
| Emmonak | 2,473 | 1,751 | 2,763 | 2,768 | 1,730 | 2,311 | 2,326 | 2,696 | 1,634 | 2,194 | 2,172 | 2,297 | 2,232 |
| Kotlik | 3,093 | 1,686 | 937 | 1,148 | 2,130 | 1,750 | 1,569 | 2,066 | 1,657 | 2,314 | 2,369 | 1,799 | 1,871 |
| District 1 Subtotal | 7,089 | 5,603 | 6,332 | 5,880 | 5,058 | 5,122 | 6,059 | 6,163 | 4,125 | 5,856 | 6,255 | 5,992 | 5,465 |
| Mountain Village | 1,864 | 1,523 | 2,174 | 2,362 | 2,383 | 1,659 | 2,077 | 1,645 | 1,482 | 1,601 | 2,063 | 2,061 | 1,693 |
| Pitkas Point | 651 | 566 | 633 | 609 | 618 | 274 | 320 | 544 | 265 | 580 | 246 | 615 | 397 |
| St. Mary's | 3,815 | 2,045 | 1,916 | 2,357 | 2,693 | 2,233 | 3,573 | 1,756 | 1,929 | 2,800 | 1,734 | 2,565 | 2,458 |
| Pilot Station | 2,614 | 2,530 | 2,886 | 2,406 | 1,658 | 1,976 | 2,028 | 1,597 | 1,258 | 1,585 | 1,340 | 2,419 | 1,689 |
| Marshall | 4,498 | 2,290 | 2,059 | 1,990 | 1,804 | 1,897 | 2,555 | 3,284 | 1,201 | 2,110 | 2,686 | 2,528 | 2,209 |
| District 2 Subtotal | 13,442 | 8,954 | 9,668 | 9,724 | 9,156 | 8,039 | 10,553 | 8,826 | 6,135 | 8,676 | 8,069 | 10,189 | 8,446 |
| Russian Mission | 3,428 | 1,887 | 2,057 | 2,337 | 1,894 | 1,851 | 1,301 | 2,949 | 978 | 924 | 1,550 | 2,321 | 1,601 |
| Holy Cross | 2,711 | 1,813 | 2,395 | 1,993 | 2,817 | 3,165 | 2,902 | 2,509 | 1,745 | 3,098 | 2,231 | 2,346 | 2,684 |
| Shageluk | 222 | 439 | 550 | 418 | 420 | 358 | 448 | 397 | 201 | 277 | 353 | 410 | 336 |
| District 3 Subtotal | 6,361 | 4,139 | 5,002 | 4,748 | 5,131 | 5,374 | 4,651 | 5,855 | 2,924 | 4,299 | 4,134 | 5,076 | 4,621 |
| Lower Yukon River Total | 26,892 | 18,696 | 21,002 | 20,352 | 19,345 | 18,535 | 21,263 | 20,844 | 13,184 | 18,831 | 18,458 | 21,257 | 18,531 |
| Anvik | 608 | 708 | 1,286 | 1,588 | 1,206 | 958 | 1,321 | 1,433 | 796 | 1,069 | 1,052 | 1,079 | 1,115 |
| Grayling | 1,077 | 2,249 | 1,613 | 1,869 | 1,878 | 1,702 | 1,500 | 1,761 | 1,133 | 2,122 | 1,374 | 1,737 | 1,644 |
| Kaltag | 1,506 | 1,435 | 1,838 | 1,656 | 3,367 | 2,833 | 1,456 | 2,403 | 1,970 | 3,191 | 2,488 | 1,960 | 2,371 |
| Nulato | 2,127 | 1,773 | 2,531 | 5,199 | 2,749 | 2,707 | 2,431 | 1,250 | 1,551 | 2,989 | 1,538 | 2,876 | 2,186 |
| Koyukuk | 449 | 323 | 860 | 400 | 396 | 835 | 811 | 513 | 982 | 867 | 1,349 | 486 | 802 |
| Galena | 1,755 | 1,522 | 3,112 | 3,296 | 2,864 | 2,380 | 2,511 | 2,232 | 1,370 | 1,357 | 1,434 | 2,510 | 1,970 |
| Ruby/Kokrines | 2,033 | 954 | 631 | 1,620 | 1,193 | 304 | 1,594 | 637 | 542 | 1,102 | 482 | 1,286 | 836 |
| District 4 Subtotal | 9,555 | 8,964 | 11,871 | 15,628 | 13,653 | 11,719 | 11,624 | 10,229 | 8,344 | 12,697 | 9,717 | 11,934 | 10,923 |
| Huslia | 377 | 222 | 469 | 285 | 207 | 258 | 146 | 255 | 969 | 65 | 121 | 312 | 339 |
| Hughes | 144 | 67 | 113 | 291 | 33 | 8 | 8 | 61 | 101 | 63 | 10 | 130 | 48 |
| Allakaket | 76 | 200 | 306 | 65 | 68 | 23 | 53 | 58 | 90 | 63 | 42 | 143 | 57 |
| Alatna | 0 | 3 | 12 | 0 | 0 | 14 | 0 | 16 | 10 | 0 | 3 | 3 | 8 |
| Bettles | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Koyukuk River Subtotal | 597 | 492 | 900 | 641 | 311 | 303 | 207 | 390 | 1,170 | 191 | 176 | 588 | 452 |
| District 4 Total (Incl. Koyukuk R.) | 10,152 | 9,456 | 12,771 | 16,269 | 13,964 | 12,022 | 11,831 | 10,619 | 9,514 | 12,888 | 9,893 | 12,522 | 11,375 |

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| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2001-2005 Average | 2006-2010 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 4,112 | 2,379 | 5,332 | 2,689 | 3,729 | 3,794 | 5,498 | 3,981 | 2,950 | 3,215 | 2,936 | 3,648 | 3,888 |
| Rampart[a] | 1,857 | 852 | 1,411 | 287 | 411 | 429 | 250 | 136 | 528 | 262 | 201 | 964 | 321 |
| Fairbanks[b] | 1,125 | 1,767 | 1,932 | 1,997 | 2,584 | 2,184 | 2,510 | 1,898 | 1,509 | 1,670 | 2,186 | 1,881 | 1,954 |
| Stevens Village | 1,111 | 1,334 | 1,121 | 2,394 | 1,570 | 1,245 | 610 | 753 | 405 | 469 | 415 | 1,506 | 696 |
| Birch Creek | 0 | 67 | 78 | 82 | 131 | 174 | 113 | 32 | 15 | 73 | 49 | 72 | 81 |
| Beaver | 1,368 | 702 | 1,156 | 858 | 957 | 830 | 1,244 | 546 | 516 | 198 | 356 | 1,008 | 667 |
| Fort Yukon | 2,361 | 2,348 | 4,004 | 4,430 | 3,591 | 3,144 | 4,076 | 1,991 | 846 | 1,683 | 2,472 | 3,347 | 2,348 |
| Circle | 447 | 1,533 | 895 | 565 | 1,283 | 694 | 1,057 | 519 | 372 | 324 | 297 | 945 | 593 |
| Central | 84 | 58 | 144 | 83 | 175 | 130 | 334 | 48 | 167 | 90 | 66 | 109 | 154 |
| Eagle | 1,033 | 1,910 | 2,081 | 1,512 | 2,566 | 2,303 | 1,999 | 1,068 | 446 | 867 | 728 | 1,820 | 1,337 |
| Other[c] | 40 | 348 | 862 | 357 | 315 | 330 | 472 | 362 | 541 | 779 | 777 | 384 | 497 |
| District 5 Subtotal (Excluding Chandalar and Black Rivers) | 13,538 | 13,298 | 19,016 | 15,254 | 17,312 | 15,257 | 18,163 | 11,334 | 8,295 | 9,630 | 10,483 | 15,684 | 12,536 |
| Venetie | 28 | 77 | 125 | 352 | 59 | 667 | 1,002 | 292 | 622 | 767 | 10 | 128 | 670 |
| Chalkyitsik | 0 | 26 | 50 | 60 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 0 |
| Chandalar/Black River Subtotal | 28 | 103 | 175 | 412 | 112 | 667 | 1,002 | 292 | 622 | 767 | 10 | 166 | 670 |
| District 5 Total | 13,566 | 13,401 | 19,191 | 15,666 | 17,424 | 15,924 | 19,165 | 11,626 | 8,917 | 10,397 | 10,493 | 15,850 | 13,206 |
| Manley | 534 | 336 | 213 | 239 | 289 | 361 | 333 | 106 | 345 | 337 | 287 | 322 | 296 |
| Minto | 197 | 19 | 317 | 35 | 35 | 31 | 82 | 12 | 0 | 43 | 61 | 121 | 34 |
| Nenana | 1,405 | 509 | 1,193 | 633 | 533 | 712 | 893 | 322 | 458 | 658 | 681 | 855 | 609 |
| Fairbanks[d] | 191 | 159 | 392 | 449 | 971 | 125 | 409 | 108 | 396 | 91 | 330 | 432 | 226 |
| Other[e] | 0 | 44 | 30 | 32 | 0 | 0 | 0 | 57 | 86 | 14 | 8 | 21 | 31 |
| District 6 Tanana R. Total | 2,327 | 1,067 | 2,145 | 1,388 | 1,828 | 1,229 | 1,717 | 605 | 1,285 | 1,143 | 1,367 | 1,751 | 1,196 |
| Upper Yukon River Total | 26,045 | 23,924 | 34,107 | 33,323 | 33,216 | 29,175 | 32,713 | 22,850 | 19,716 | 24,428 | 21,753 | 30,123 | 25,776 |
| Alaska, Yukon River Total[f] | 52,937 | 42,620 | 55,109 | 53,675 | 52,561 | 47,710 | 53,976 | 43,694 | 32,900 | 43,259 | 40,211 | 51,380 | 44,308 |
| Alaska, Yukon Area Total | 55,819 | 43,742 | 56,959 | 55,713 | 53,409 | 48,593 | 55,174 | 45,186 | 33,805 | 44,559 | 40,980 | 53,128 | 45,463 |

*Note:* Does not include harvests from personal use permits.

[a] Rampart area harvest as reported from subsistence fishing permits. Subsistence surveys were conducted 2001–2003 and permits were used 2004 to present.

[b] Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.

[c] Other permit holders who fished in District 5 but did not reside in the communities listed.

[d] Harvest by Fairbanks subsistence permit holders who fished in the Tanana River.

[e] Other permit holders who fished in District 6 but did not reside in the communities listed.

[f] Does not include the Coastal District for use in U.S./Canada negotiations.

Appendix B2.–Summer chum salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fishery projects, Yukon Area, 2001–2011.

| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2001-2005 Average | 2006-2010 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hooper Bay | 12,593 | 9,780 | 10,658 | 3,242 | 9,771 | 19,468 | 12,234 | 12,007 | 9,195 | 17,020 | 13,460 | 9,209 | 13,985 |
| Scammon Bay | 1,323 | 5,016 | 3,310 | 5,020 | 4,586 | 4,703 | 3,887 | 6,113 | 3,602 | 5,405 | 4,845 | 3,851 | 4,742 |
| Coastal District Total | 13,916 | 14,796 | 13,968 | 8,262 | 14,357 | 24,171 | 16,121 | 18,120 | 12,797 | 22,425 | 18,305 | 13,060 | 18,727 |
| Nunam Iqua | 1,942 | 1,897 | 2,561 | 2,698 | 2,794 | 2,903 | 2,325 | 1,949 | 2,280 | 2,267 | 2,077 | 2,378 | 2,345 |
| Alakanuk | 5,992 | 7,637 | 5,287 | 6,555 | 5,687 | 7,790 | 7,611 | 6,881 | 5,152 | 7,722 | 7,447 | 6,232 | 7,031 |
| Emmonak | 8,242 | 8,458 | 7,644 | 8,618 | 12,594 | 11,899 | 9,256 | 9,646 | 9,038 | 10,918 | 12,468 | 9,111 | 10,151 |
| Kotlik | 6,595 | 6,115 | 4,209 | 2,749 | 6,620 | 5,289 | 5,017 | 4,291 | 7,528 | 4,265 | 6,598 | 5,258 | 5,278 |
| District 1 Subtotal | 22,771 | 24,107 | 19,701 | 20,620 | 27,695 | 27,881 | 24,209 | 22,767 | 23,998 | 25,172 | 28,590 | 22,979 | 24,805 |
| Mountain Village | 8,484 | 6,657 | 6,497 | 10,676 | 8,861 | 13,119 | 8,104 | 7,559 | 7,204 | 7,071 | 9,355 | 8,235 | 8,611 |
| Pitkas Point | 862 | 639 | 800 | 717 | 1,023 | 680 | 515 | 1,246 | 994 | 633 | 585 | 808 | 814 |
| St. Mary's | 10,026 | 7,284 | 4,521 | 6,994 | 6,877 | 7,394 | 8,107 | 6,451 | 5,831 | 7,443 | 6,760 | 7,140 | 7,045 |
| Pilot Station | 5,329 | 6,490 | 4,163 | 5,779 | 4,333 | 6,070 | 3,711 | 6,012 | 4,888 | 6,196 | 4,182 | 5,219 | 5,375 |
| Marshall | 1,602 | 2,484 | 792 | 1,765 | 3,183 | 4,392 | 3,070 | 3,023 | 2,172 | 2,395 | 3,810 | 1,965 | 3,010 |
| District 2 Subtotal | 26,303 | 23,554 | 16,773 | 25,931 | 24,277 | 31,655 | 23,507 | 24,291 | 21,089 | 23,738 | 24,692 | 23,368 | 24,856 |
| Russian Mission | 165 | 395 | 171 | 884 | 925 | 1,328 | 759 | 2,400 | 849 | 528 | 1,225 | 508 | 1,173 |
| Holy Cross | 460 | 155 | 214 | 276 | 760 | 825 | 320 | 441 | 194 | 463 | 363 | 373 | 449 |
| Shageluk | 684 | 1,956 | 5,473 | 1,798 | 4,081 | 1,381 | 977 | 130 | 103 | 350 | 1,145 | 2,798 | 588 |
| District 3 Subtotal | 1,309 | 2,506 | 5,858 | 2,958 | 5,766 | 3,534 | 2,056 | 2,971 | 1,146 | 1,341 | 2,733 | 3,679 | 2,210 |
| Lower Yukon River Total | 50,383 | 50,167 | 42,332 | 49,509 | 57,738 | 63,070 | 49,772 | 50,029 | 46,233 | 50,251 | 56,015 | 50,026 | 51,871 |
| Anvik | 94 | 1,089 | 844 | 248 | 529 | 387 | 5,250 | 340 | 277 | 451 | 220 | 561 | 1,341 |
| Grayling | 92 | 1,311 | 1,072 | 1,129 | 783 | 644 | 641 | 660 | 1,429 | 1,612 | 838 | 877 | 997 |
| Kaltag | 10 | 234 | 1,028 | 213 | 680 | 159 | 109 | 916 | 50 | 102 | 163 | 433 | 267 |
| Nulato | 208 | 269 | 180 | 198 | 634 | 838 | 356 | 468 | 133 | 416 | 246 | 298 | 442 |
| Koyukuk | 118 | 426 | 1,339 | 329 | 537 | 394 | 995 | 1,104 | 1,378 | 352 | 890 | 550 | 845 |
| Galena | 53 | 712 | 289 | 782 | 1,013 | 1,205 | 571 | 758 | 1,718 | 1,702 | 3,414 | 570 | 1,191 |
| Ruby/Kokrines | 1,025 | 1,406 | 876 | 2,010 | 967 | 1,714 | 416 | 655 | 603 | 1,971 | 775 | 1,257 | 1,072 |
| District 4 Subtotal | 1,600 | 5,447 | 5,628 | 4,909 | 5,143 | 5,341 | 8,338 | 4,901 | 5,588 | 6,606 | 6,546 | 4,545 | 6,155 |
| Huslia | 833 | 3,178 | 6,187 | 3,844 | 2,433 | 1,122 | 3,243 | 4,377 | 2,554 | 1,349 | 3,166 | 3,295 | 2,529 |
| Hughes | 551 | 1,089 | 1,265 | 3,823 | 2,230 | 3,254 | 1,213 | 944 | 1,723 | 878 | 954 | 1,792 | 1,602 |
| Allakaket | 1,604 | 6,242 | 4,383 | 2,367 | 2,535 | 5,170 | 3,451 | 3,229 | 4,924 | 2,864 | 2,368 | 3,426 | 3,928 |
| Alatna | 0 | 15 | 50 | 16 | 5 | 110 | 11 | 66 | 163 | 23 | 132 | 17 | 75 |
| Bettles | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 6 | 0 | 0 | 1 | 1 |
| Koyukuk River Subtotal | 2,988 | 10,524 | 11,885 | 10,050 | 7,207 | 9,656 | 7,918 | 8,616 | 9,370 | 5,114 | 6,620 | 8,531 | 8,135 |
| District 4 Total(Incl. Koyukuk R) | 4,588 | 15,971 | 17,513 | 14,959 | 12,350 | 14,997 | 16,256 | 13,517 | 14,958 | 11,720 | 13,166 | 13,076 | 14,290 |

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| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2001-2005 Average | 2006-2010 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 1,407 | 3,321 | 3,075 | 1,490 | 4,832 | 5,474 | 5,229 | 2,877 | 4,665 | 1,856 | 4,381 | 2,825 | 4,020 |
| Rampart[a] | 0 | 14 | 9 | 103 | 315 | 135 | 25 | 27 | 112 | 161 | 67 | 88 | 92 |
| Fairbanks[b] | 165 | 295 | 89 | 280 | 780 | 1,341 | 564 | 119 | 44 | 427 | 688 | 322 | 499 |
| Stevens Village | 0 | 12 | 0 | 108 | 442 | 972 | 254 | 163 | 6 | 28 | 43 | 112 | 285 |
| Beaver | 328 | 77 | 7 | 2 | 68 | 117 | 41 | 27 | 22 | 22 | 393 | 96 | 46 |
| Fort Yukon | 289 | 1,832 | 2,176 | 1,187 | 67 | 2,165 | 2,365 | 230 | 275 | 722 | 1,297 | 1,110 | 1,151 |
| Circle | 6 | 5 | 85 | 52 | 3 | 58 | 200 | 5 | 0 | 37 | 48 | 30 | 60 |
| Central | 0 | 0 | 0 | 0 | 5 | 2 | 0 | 0 | 2 | 0 | 0 | 1 | 1 |
| Eagle | 555 | 24 | 104 | 171 | 235 | 974 | 15 | 14 | 0 | 25 | 2 | 218 | 206 |
| Other[c] | 0 | 17 | 0 | 3 | 53 | 117 | 81 | 25 | 29 | 144 | 790 | 15 | 79 |
| District 5 Subtotal (Excluding Chandalar and Black Rivers) | 2,750 | 5,597 | 5,545 | 3,396 | 6,800 | 11,355 | 8,774 | 3,487 | 5,155 | 3,422 | 7,709 | 4,818 | 6,439 |
| Venetie | 106 | 13 | 0 | 15 | 0 | 475 | 107 | 50 | 143 | 0 | 0 | 27 | 155 |
| Chalkyitsik | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 133 | 0 | 0 | 27 |
| Chandalar/Black River Subtotal | 106 | 13 | 0 | 15 | 0 | 475 | 107 | 50 | 143 | 133 | 0 | 27 | 182 |
| District 5 Total | 2,856 | 5,610 | 5,545 | 3,411 | 6,800 | 11,830 | 8,881 | 3,537 | 5,298 | 3,555 | 7,709 | 4,844 | 6,620 |
| Manley | 338 | 93 | 65 | 296 | 163 | 89 | 140 | 144 | 367 | 102 | 142 | 191 | 168 |
| Minto | 19 | 10 | 625 | 7 | 21 | 460 | 82 | 9 | 1 | 8 | 27 | 136 | 112 |
| Nenana | 19 | 360 | 2,193 | 1,171 | 1,771 | 388 | 1,419 | 753 | 506 | 83 | 471 | 1,103 | 630 |
| Fairbanks[d] | 36 | 47 | 31 | 308 | 45 | 73 | 255 | 94 | 372 | 183 | 185 | 93 | 195 |
| Other[e] | 0 | 2 | 0 | 11 | 14 | 0 | 0 | 311 | 7 | 46 | 0 | 5 | 73 |
| District 6 Tanana R. Total | 412 | 512 | 2,914 | 1,793 | 2,014 | 1,010 | 1,896 | 1,311 | 1,253 | 422 | 825 | 1,529 | 1,178 |
| Upper Yukon River Total | 7,856 | 22,093 | 25,972 | 20,163 | 21,164 | 27,837 | 27,033 | 18,365 | 21,509 | 15,697 | 21,700 | 19,450 | 22,088 |
| Alaska, Yukon River Total[f] | 58,239 | 72,260 | 68,304 | 69,672 | 78,902 | 90,907 | 76,805 | 68,394 | 67,742 | 65,948 | 77,715 | 69,475 | 73,959 |
| Alaska, Yukon Area Total | 72,155 | 87,056 | 82,272 | 77,934 | 93,259 | 115,078 | 92,926 | 86,514 | 80,539 | 88,373 | 96,020 | 82,535 | 92,686 |

*Note:* Does not include harvest from personal use permits.

[a] Rampart area harvest as reported from subsistence fishing permits established by the Board of Fisheries (BOF) in 2004. Subsistence surveys were conducted 2001–2003 and permits were used 2004 to present.

[b] Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.

[c] Other permit holders who fished in District 5 but did not reside in the communities listed.

[d] Harvests by Fairbanks subsistence permit holders who fished in the Tanana River.

[e] Other permit holders who fished in District 6 but did not reside in the communities listed.

[f] Does not include the Coastal District for use in U.S./Canada negotiations.

Appendix B3.–Fall chum salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fishery projects, Yukon Area, 2001–2011.

| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2001-2005 Average | 2006-2010 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hooper Bay | 364 | 44 | 40 | 264 | 1 | 146 | 64 | 329 | 41 | 116 | 267 | 143 | 139 |
| Scammon Bay | 195 | 240 | 106 | 56 | 69 | 41 | 170 | 57 | 117 | 70 | 48 | 133 | 91 |
| Coastal District Total | 559 | 284 | 146 | 320 | 70 | 187 | 234 | 386 | 158 | 186 | 315 | 276 | 230 |
| Nunam Iqua | 176 | 284 | 127 | 49 | 310 | 735 | 152 | 59 | 41 | 143 | 51 | 189 | 226 |
| Alakanuk | 1,032 | 222 | 348 | 953 | 627 | 624 | 1,348 | 423 | 116 | 860 | 881 | 636 | 674 |
| Emmonak | 1,272 | 1,261 | 1,257 | 785 | 1,436 | 2,056 | 2,360 | 1,670 | 1,589 | 1,718 | 1,540 | 1,202 | 1,879 |
| Kotlik | 957 | 114 | 407 | 280 | 516 | 487 | 530 | 671 | 171 | 481 | 962 | 455 | 468 |
| District 1 Subtotal | 3,437 | 1,881 | 2,139 | 2,067 | 2,889 | 3,902 | 4,390 | 2,823 | 1,917 | 3,202 | 3,434 | 2,483 | 3,247 |
| Mountain Village | 470 | 478 | 873 | 918 | 1,290 | 2,398 | 1,073 | 926 | 926 | 133 | 800 | 806 | 1,091 |
| Pitkas Point | 34 | 16 | 49 | 0 | 6 | 5 | 44 | 101 | 76 | 10 | 30 | 21 | 47 |
| St. Mary's | 227 | 103 | 762 | 104 | 490 | 417 | 825 | 830 | 106 | 387 | 611 | 337 | 513 |
| Pilot Station | 1,522 | 680 | 823 | 1,108 | 838 | 785 | 741 | 917 | 265 | 833 | 575 | 994 | 708 |
| Marshall | 1,003 | 341 | 394 | 291 | 633 | 410 | 789 | 748 | 190 | 56 | 562 | 532 | 439 |
| District 2 Subtotal | 3,256 | 1,618 | 2,901 | 2,421 | 3,257 | 4,015 | 3,472 | 3,522 | 1,563 | 1,419 | 2,578 | 2,691 | 2,798 |
| Russian Mission | 76 | 164 | 615 | 172 | 667 | 251 | 530 | 578 | 205 | 104 | 11 | 339 | 334 |
| Holy Cross | 624 | 0 | 9 | 76 | 582 | 224 | 248 | 920 | 627 | 21 | 94 | 258 | 408 |
| Shageluk | 0 | 0 | 114 | 50 | 55 | 5 | 147 | 323 | 105 | 1,200 | 249 | 44 | 356 |
| District 3 Subtotal | 700 | 164 | 738 | 298 | 1,304 | 480 | 925 | 1,821 | 937 | 1,325 | 354 | 641 | 1,098 |
| Lower Yukon River Total | 7,393 | 3,663 | 5,778 | 4,786 | 7,450 | 8,397 | 8,787 | 8,166 | 4,417 | 5,946 | 6,366 | 5,814 | 7,143 |
| Anvik | 29 | 401 | 179 | 398 | 497 | 118 | 429 | 317 | 176 | 169 | 202 | 301 | 242 |
| Grayling | 314 | 52 | 441 | 267 | 1,009 | 691 | 317 | 1,012 | 490 | 202 | 1,152 | 417 | 542 |
| Kaltag | 607 | 314 | 725 | 687 | 1,089 | 823 | 910 | 620 | 200 | 658 | 196 | 684 | 642 |
| Nulato | 151 | 0 | 1,341 | 1,246 | 421 | 751 | 1,345 | 729 | 552 | 1,049 | 652 | 632 | 885 |
| Koyukuk | 517 | 255 | 835 | 344 | 803 | 1,147 | 927 | 1,177 | 578 | 792 | 1,388 | 551 | 924 |
| Galena | 420 | 349 | 1,510 | 1,587 | 2,695 | 1,632 | 1,471 | 1,364 | 4,306 | 1,968 | 2,739 | 1,312 | 2,148 |
| Ruby/Kokrines | 581 | 78 | 2,331 | 1,064 | 559 | 227 | 1,959 | 657 | 134 | 1,026 | 592 | 923 | 801 |
| District 4 Subtotal | 2,619 | 1,449 | 7,362 | 5,593 | 7,073 | 5,389 | 7,358 | 5,876 | 6,436 | 5,864 | 6,921 | 4,819 | 6,185 |
| Huslia | 683 | 0 | 1,786 | 1,139 | 1,614 | 313 | 272 | 64 | 86 | 403 | 183 | 1,044 | 228 |
| Hughes | 0 | 0 | 497 | 97 | 111 | 240 | 0 | 127 | 288 | 0 | 64 | 141 | 131 |
| Allakaket | 50 | 100 | 105 | 968 | 557 | 393 | 939 | 1,345 | 572 | 521 | 92 | 356 | 754 |
| Alatna | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 1 |
| Bettles | 0 | 0 | 0 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 |
| Koyukuk River Subtotal | 733 | 100 | 2,388 | 2,204 | 2,332 | 946 | 1,218 | 1,536 | 946 | 924 | 339 | 1,551 | 1,114 |
| District 4 Total (Incl. Koyukuk R.) | 3,352 | 1,549 | 9,750 | 7,797 | 9,405 | 6,335 | 8,576 | 7,412 | 7,382 | 6,788 | 7,260 | 6,371 | 7,299 |

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| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2001-2005 Average | 2006-2010 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 9,779 | 6,255 | 14,308 | 23,118 | 20,545 | 23,167 | 21,596 | 17,478 | 19,595 | 14,984 | 21,728 | 14,801 | 19,364 |
| Rampart[a] | 183 | 0 | 365 | 0 | 358 | 250 | 250 | 1,000 | 1,000 | 735 | 340 | 181 | 647 |
| Fairbanks[b] | 0 | 0 | 105 | 43 | 1,682 | 5,269 | 2,126 | 659 | 229 | 822 | 1,696 | 366 | 1,821 |
| Stevens Village | 20 | 0 | 857 | 1,080 | 246 | 50 | 199 | 643 | 770 | 2,706 | 911 | 441 | 874 |
| Beaver | 21 | 1 | 192 | 48 | 179 | 0 | 354 | 13 | 120 | 37 | 122 | 88 | 105 |
| Ft. Yukon | 2,209 | 3,523 | 7,963 | 7,302 | 8,088 | 5,178 | 8,264 | 14,252 | 2,829 | 6,006 | 7,188 | 5,817 | 7,306 |
| Circle | 2,588 | 74 | 499 | 1,022 | 918 | 664 | 1,286 | 3,198 | 110 | 927 | 299 | 1,020 | 1,237 |
| Central | 0 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 |
| Eagle | 2,714 | 339 | 2,871 | 5,482 | 17,356 | 16,801 | 18,676 | 15,269 | 10,941 | 15,008 | 17,455 | 5,752 | 15,339 |
| Other[c] | 0 | 100 | 0 | 13 | 117 | 44 | 46 | 3,183 | 71 | 120 | 208 | 46 | 693 |
| District 5 Subtotal (Excluding Chandalar and Black Rivers) | 17,514 | 10,292 | 27,160 | 38,108 | 49,525 | 51,423 | 52,797 | 55,695 | 35,665 | 41,345 | 49,947 | 28,520 | 47,385 |
| Venetie | 3,286 | 680 | 770 | 2,083 | 1,801 | 520 | 721 | 1,563 | 2,373 | 2,989 | 1,938 | 1,724 | 1,633 |
| Chalkyitsik | 73 | 4 | 340 | 479 | 337 | 215 | 213 | 0 | 45 | 0 | 0 | 247 | 95 |
| Chandalar/Black River Subtotal | 3,359 | 684 | 1,110 | 2,562 | 2,138 | 735 | 934 | 1,563 | 2,418 | 2,989 | 1,938 | 1,971 | 1,728 |
| District 5 Total | 20,873 | 10,976 | 28,270 | 40,670 | 51,663 | 52,158 | 53,731 | 57,258 | 38,083 | 44,334 | 51,885 | 30,490 | 49,113 |
| Manley | 1,230 | 947 | 1,303 | 1,504 | 2,985 | 3,374 | 3,419 | 2,490 | 4,126 | 2,696 | 2,333 | 1,594 | 3,221 |
| Minto | 251 | 100 | 675 | 0 | 600 | 242 | 155 | 28 | 0 | 70 | 1,500 | 325 | 99 |
| Nenana | 999 | 1,070 | 7,802 | 5,367 | 10,594 | 10,530 | 21,863 | 6,585 | 7,623 | 6,802 | 5,268 | 5,166 | 10,681 |
| Fairbanks[d] | 191 | 229 | 1,949 | 1,024 | 6,691 | 1,311 | 3,325 | 340 | 3,460 | 678 | 4,317 | 2,017 | 1,823 |
| Other[e] | 855 | 856 | 1,257 | 1,058 | 2,076 | 1,468 | 1,131 | 6,692 | 870 | 1,145 | 958 | 1,220 | 2,261 |
| District 6 Tanana R. Total | 3,526 | 3,202 | 12,986 | 8,953 | 22,946 | 16,925 | 29,893 | 16,135 | 16,079 | 11,391 | 14,376 | 10,323 | 18,085 |
| Upper Yukon River Total | 27,751 | 15,727 | 51,006 | 57,420 | 84,014 | 75,418 | 92,200 | 80,805 | 61,544 | 62,513 | 73,521 | 47,184 | 74,496 |
| Alaska, Yukon River Total[f] | 35,144 | 19,390 | 56,784 | 62,206 | 91,464 | 83,815 | 100,987 | 88,971 | 65,961 | 68,459 | 79,887 | 52,998 | 81,639 |
| Alaska, Yukon Area Total | 35,703 | 19,674 | 56,930 | 62,526 | 91,534 | 84,002 | 101,221 | 89,357 | 66,119 | 68,645 | 80,202 | 53,273 | 81,869 |

*Note:* Does not include harvest from personal use permits.

[a] Rampart area harvest as reported from subsistence fishing permits established by the Board of Fisheries (BOF) in 2004. Subsistence surveys were conducted 2001–2003 and permits were used 2004 to present.

[b] Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.

[c] Other permit holders who fished in District 5 but did not reside in the communities listed.

[d] Harvests by Fairbanks subsistence permit holders who fished in the Tanana River.

[e] Other permits holders who fished in District 6 but did not reside in the communities listed.

[f] Does not include the Coastal District for use in U.S./Canada negotiations.

Appendix B4.–Coho salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fishery projects, Yukon Area, 2001–2011.

| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2001-2005 Average | 2006-2010 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hooper Bay | 439 | 125 | 244 | 9 | 0 | 175 | 26 | 66 | 24 | 45 | 0 | 163 | 67 |
| Scammon Bay | 63 | 123 | 48 | 54 | 279 | 160 | 84 | 50 | 222 | 79 | 55 | 113 | 119 |
| Coastal District Total | 502 | 248 | 292 | 63 | 279 | 335 | 110 | 116 | 246 | 124 | 55 | 277 | 186 |
| Nunam Iqua | 32 | 56 | 117 | 79 | 241 | 392 | 92 | 24 | 71 | 73 | 23 | 105 | 130 |
| Alakanuk | 414 | 183 | 193 | 207 | 322 | 101 | 857 | 157 | 194 | 449 | 431 | 264 | 352 |
| Emmonak | 342 | 514 | 547 | 296 | 191 | 450 | 1,032 | 717 | 401 | 362 | 472 | 378 | 592 |
| Kotlik | 486 | 542 | 403 | 593 | 222 | 234 | 284 | 313 | 181 | 238 | 201 | 449 | 250 |
| District 1 Subtotal | 1,274 | 1,295 | 1,260 | 1,175 | 976 | 1,177 | 2,265 | 1,211 | 847 | 1,122 | 1,127 | 1,196 | 1,324 |
| Mountain Village | 423 | 361 | 745 | 521 | 246 | 1,856 | 1,027 | 518 | 413 | 127 | 261 | 459 | 788 |
| Pitkas Point | 112 | 47 | 130 | 0 | 30 | 16 | 38 | 130 | 45 | 116 | 37 | 64 | 69 |
| St. Mary's | 610 | 209 | 276 | 258 | 252 | 171 | 97 | 591 | 151 | 92 | 230 | 321 | 220 |
| Pilot Station | 222 | 230 | 371 | 296 | 241 | 225 | 263 | 268 | 203 | 189 | 145 | 272 | 230 |
| Marshall | 73 | 386 | 64 | 425 | 341 | 191 | 922 | 490 | 245 | 33 | 150 | 258 | 376 |
| District 2 Subtotal | 1,440 | 1,233 | 1,586 | 1,500 | 1,110 | 2,459 | 2,347 | 1,997 | 1,057 | 557 | 823 | 1,374 | 1,683 |
| Russian Mission | 0 | 115 | 178 | 151 | 133 | 19 | 259 | 372 | 96 | 300 | 0 | 115 | 209 |
| Holy Cross | 0 | 0 | 498 | 27 | 84 | 16 | 213 | 38 | 120 | 0 | 0 | 122 | 77 |
| Shageluk | 0 | 0 | 35 | 106 | 0 | 48 | 267 | 0 | 105 | 53 | 36 | 28 | 95 |
| District 3 Subtotal | 0 | 115 | 711 | 284 | 217 | 83 | 739 | 410 | 321 | 353 | 36 | 265 | 381 |
| Lower Yukon River Total | 2,714 | 2,643 | 3,557 | 2,959 | 2,303 | 3,719 | 5,351 | 3,618 | 2,225 | 2,032 | 1,986 | 2,835 | 3,389 |
| Anvik | 13 | 0 | 12 | 288 | 406 | 0 | 807 | 40 | 137 | 28 | 19 | 144 | 202 |
| Grayling | 144 | 30 | 559 | 233 | 234 | 224 | 271 | 25 | 318 | 132 | 119 | 240 | 194 |
| Kaltag | 533 | 212 | 463 | 138 | 307 | 106 | 204 | 45 | 40 | 0 | 258 | 331 | 79 |
| Nulato | 258 | 78 | 928 | 203 | 60 | 214 | 130 | 195 | 171 | 242 | 118 | 305 | 190 |
| Koyukuk | 80 | 249 | 1,155 | 166 | 37 | 330 | 189 | 84 | 198 | 254 | 137 | 337 | 211 |
| Galena | 142 | 169 | 1,507 | 1,307 | 607 | 137 | 425 | 558 | 2,353 | 549 | 1,013 | 746 | 804 |
| Ruby/Kokrines | 871 | 69 | 648 | 1,540 | 361 | 11 | 168 | 291 | 314 | 148 | 312 | 698 | 186 |
| District 4 Subtotal | 2,041 | 807 | 5,272 | 3,875 | 2,012 | 1,022 | 2,194 | 1,238 | 3,531 | 1,353 | 1,976 | 2,801 | 1,868 |
| Huslia | 83 | 60 | 375 | 764 | 734 | 105 | 592 | 100 | 323 | 289 | 70 | 403 | 282 |
| Hughes | 117 | 100 | 20 | 110 | 20 | 150 | 100 | 0 | 89 | 0 | 13 | 73 | 68 |
| Allakaket | 25 | 56 | 99 | 17 | 205 | 25 | 66 | 152 | 43 | 88 | 13 | 80 | 75 |
| Alatna | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Bettles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Koyukuk River Subtotal | 225 | 216 | 501 | 891 | 959 | 280 | 758 | 252 | 455 | 377 | 96 | 558 | 424 |
| District 4 Total (Incl. Koyukuk R.) | 2,266 | 1,023 | 5,773 | 4,766 | 2,971 | 1,302 | 2,952 | 1,490 | 3,986 | 1,730 | 2,072 | 3,360 | 2,292 |

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| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2001-2005 Average | 2006-2010 Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 6,675 | 2,032 | 3,480 | 1,049 | 1,616 | 3,619 | 2,369 | 1,511 | 2,373 | 2,314 | 312 | 2,970 | 2,437 |
| Rampart[a] | 0 | 0 | 0 | 0 | 10 | 0 | 50 | 0 | 0 | 24 | 0 | 2 | 15 |
| Fairbanks[b] | 11 | 0 | 120 | 91 | 10 | 79 | 26 | 7 | 13 | 2 | 2 | 46 | 25 |
| Stevens Village | 2 | 0 | 0 | 100 | 0 | 0 | 0 | 0 | 90 | 428 | 0 | 20 | 104 |
| Beaver | 0 | 17 | 0 | 0 | 0 | 0 | 354 | 6 | 0 | 1 | 0 | 3 | 72 |
| Fort Yukon[c] | 972 | 14 | 0 | 19 | 394 | 35 | 567 | 1,618 | 2 | 244 | 1,040 | 280 | 493 |
| Circle | 0 | 0 | 244 | 100 | 100 | 22 | 0 | 0 | 13 | 164 | 0 | 89 | 40 |
| Central | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Eagle | 0 | 1 | 0 | 14 | 15 | 0 | 0 | 0 | 0 | 1 | 1 | 6 | 0 |
| Other[c] | 0 | 0 | 25 | 0 | 13 | 0 | 0 | 61 | 7 | 0 | 0 | 8 | 14 |
| District 5 Subtotal (Excluding Chandalar and Black Rivers) | 7,660 | 2,064 | 3,869 | 1,373 | 2,159 | 3,755 | 3,366 | 3,203 | 2,498 | 3,178 | 1,355 | 3,425 | 3,200 |
| Venetie | 10 | 12 | 11 | 5 | 0 | 24 | 0 | 0 | 0 | 159 | 34 | 8 | 37 |
| Chalkyitsik | 4 | 0 | 7 | 45 | 0 | 0 | 0 | 0 | 0 | 267 | 0 | 11 | 53 |
| Chandalar/Black River Subtotal | 14 | 12 | 18 | 50 | 0 | 24 | 0 | 0 | 0 | 426 | 34 | 19 | 90 |
| District 5 Total | 7,674 | 2,076 | 3,887 | 1,423 | 2,159 | 3,779 | 3,366 | 3,203 | 2,498 | 3,604 | 1,389 | 3,444 | 3,290 |
| Manley | 2,637 | 1,617 | 886 | 1,384 | 2,510 | 1,671 | 1,126 | 1,901 | 2,308 | 1,832 | 1,482 | 1,807 | 1,768 |
| Minto | 0 | 250 | 423 | 5 | 0 | 14 | 155 | 0 | 0 | 0 | 0 | 136 | 34 |
| Nenana | 4,443 | 3,574 | 5,431 | 6,494 | 12,395 | 7,032 | 4,487 | 2,775 | 3,475 | 2,313 | 3,304 | 6,467 | 4,016 |
| Fairbanks[d] | 68 | 1,024 | 1,049 | 1,435 | 3,032 | 745 | 609 | 230 | 577 | 212 | 1,109 | 1,322 | 475 |
| Other[e] | 1,818 | 3,034 | 2,574 | 2,266 | 1,601 | 1,109 | 1,468 | 3,522 | 691 | 1,198 | 947 | 2,259 | 1,598 |
| District 6 Tanana River Total | 8,966 | 9,499 | 10,363 | 11,584 | 19,538 | 10,571 | 7,845 | 8,428 | 7,051 | 5,555 | 6,842 | 11,990 | 7,890 |
| Upper Yukon Area Total | 18,906 | 12,598 | 20,023 | 17,773 | 24,668 | 15,652 | 14,163 | 13,121 | 13,535 | 10,889 | 10,303 | 18,794 | 13,472 |
| Alaska, Yukon River Total[f] | 21,620 | 15,241 | 23,580 | 20,732 | 26,971 | 19,371 | 19,514 | 16,739 | 15,760 | 12,921 | 12,289 | 21,629 | 16,861 |
| Alaska, Yukon Area Total | 22,122 | 15,489 | 23,872 | 20,795 | 27,250 | 19,706 | 19,624 | 16,855 | 16,006 | 13,045 | 12,344 | 21,906 | 17,047 |

*Note:* Does not include harvest from personal use permits.

[a] Rampart area harvest as reported from subsistence fishing permits established by the Board of Fisheries (BOF) in 2004. Subsistence surveys were conducted 2001–2003 and permits were used 2004 to present.

[b] Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.

[c] Other permit holders who fished in District 5 but did not reside in the communities listed.

[d] Harvests by Fairbanks subsistence permit holders who fished in the Tanana River.

[e] Other permits holders who fished in District 6 but did not reside in the communities listed.

[f] Does not include the Coastal District for use in U.S./Canada negotiations.

Appendix B5.–Personal use salmon harvests taken under authority of a permit, Tanana River drainage, 2001–2011.

| | Subdistrict 6-C Personal Use Salmon Fishery | | | | | | |
|---|---|---|---|---|---|---|---|
| | Number of Permits | Number of Permits | Number Reporting | Reported Harvest | | | |
| Year | Issued[a] | Returned[a] | Harvest[a] | Chinook | Summer Chum | Fall Chum | Coho |
| 2001 | 54 | 51 | 24 | 122 | 146 | 10 | 34 |
| 2002 | 57 | 55 | 29 | 126 | 175 | 3 | 20 |
| 2003 | 67 | 67 | 32 | 204 | 148 | 394 | 549 |
| 2004 | 68 | 66 | 35 | 201 | 231 | 230 | 233 |
| 2005 | 63 | 59 | 27 | 138 | 152 | 133 | 107 |
| 2006 | 60 | 60 | 35 | 89 | 262 | 333 | 279 |
| 2007 | 65 | 63 | 32 | 136 | 184 | 173 | 135 |
| 2008 | 51 | 50 | 25 | 126 | 138 | 181 | 50 |
| 2009 | 57 | 57 | 22 | 127 | 308 | 78[b] | 70[b] |
| 2010 | 67 | 67 | 38 | 162 | 319 | 3,209[c] | 1,062 |
| 2011 | 67 | 64 | 33 | 89 | 439 | 347 | 232 |
| 5 Year Average 2006-2010 | 60 | 59 | 30 | 128 | 242 | 795 | 319 |
| 10 Year Average 2001-2010 | 61 | 60 | 30 | 143 | 206 | 474 | 254 |

*Note:* Salmon permits began in 1987 and are presented in the 2009 and earlier years of this annual report (Busher et al. 2009).

[a] Does not include personal use Tanana River whitefish/sucker permits.

[b] Harvest includes seven fall chum and five coho salmon incidentally harvested by a household with a personal use Tanana River whitefish/sucker permit.

[c] Harvest includes one fall chum salmon incidentally harvested by a household with a personal use Tanana River whitefish/sucker permit.

Appendix B6.–Subsistence salmon harvests taken under authority of a permit in portions of District 5, Yukon Area, 2001–2011.

| | Yukon River "Rampart Village" Area Subsistence Salmon Fishery[a] | | | | | | |
|---|---|---|---|---|---|---|---|
| | Permits | Permits | Reporting | Reported Harvest | | | |
| Year | Issued | Returned | Harvest | Chinook | Summer Chum | Fall Chum | Coho |
| 2004 | 14 | 11 | 9 | 832 | 249 | 0 | 0 |
| 2005 | 22 | 19 | 17 | 1,721 | 663 | 2,023 | 10 |
| 2006 | 19 | 19 | 16 | 1,083 | 647 | 318 | 0 |
| 2007 | 23 | 19 | 15 | 1,744 | 495 | 2,050 | 50 |
| 2008 | 18 | 18 | 15 | 1,049 | 43 | 1,000 | 0 |
| 2009 | 25 | 24 | 20 | 1,404 | 159 | 1,070 | 4 |
| 2010 | 28 | 27 | 22 | 1,344 | 304 | 1,235 | 24 |
| 2011 | 29 | 29 | 24 | 1,586 | 429 | 768 | 1 |
| 5 Year Average 2006-2010 | 23 | 21 | 18 | 1,325 | 330 | 1,135 | 16 |
| | Yukon River "Bridge" Area Subsistence Salmon Fishery[b] | | | | | | |
| | Permits | Permits | Reporting | Reported Harvest | | | |
| Year | Issued | Returned | Harvest | Chinook | Summer Chum | Fall Chum | Coho |
| 2001 | 65 | 62 | 38 | 1,819 | 176 | 0 | 13 |
| 2002 | 60 | 58 | 45 | 2,285 | 320 | 100 | 0 |
| 2003 | 86 | 80 | 62 | 2,670 | 89 | 104 | 145 |
| 2004 | 69 | 67 | 51 | 2,032 | 164 | 43 | 91 |
| 2005 | 76 | 72 | 57 | 1,847 | 643 | 17 | 9 |
| 2006 | 68 | 66 | 53 | 1,952 | 1,063 | 4,855 | 79 |
| 2007 | 85 | 80 | 51 | 1,707 | 177 | 626 | 26 |
| 2008 | 73 | 68 | 44 | 1,434 | 130 | 705 | 7 |
| 2009 | 68 | 66 | 38 | 1,248 | 28 | 996 | 106 |
| 2010 | 85 | 81 | 43 | 1,300 | 448 | 422 | 2 |
| 2011 | 74 | 73 | 43 | 1,552 | 1,139 | 1,828 | 1 |
| 5 Year Average 2006-2010 | 76 | 72 | 46 | 1,528 | 369 | 1,521 | 44 |
| 10 Year Average 2001-2010 | 74 | 70 | 48 | 1,829 | 324 | 787 | 48 |
| | Upper Yukon River "Circle-Eagle" Area Subsistence Salmon Fishery[c] | | | | | | |
| | Permits | Permits | Reporting | Reported Harvest | | | |
| Year | Issued | Returned | Harvest | Chinook | Summer Chum | Fall Chum | Coho |
| 2001 | 98 | 93 | 33 | 1,688 | 561 | 5,322 | 0 |
| 2002 | 94 | 87 | 42 | 3,877 | 29 | 418 | 1 |
| 2003 | 95 | 85 | 58 | 3,406 | 189 | 3,374 | 0 |
| 2004 | 89 | 83 | 50 | 2,304 | 223 | 6,517 | 114 |
| 2005 | 89 | 81 | 55 | 4,004 | 241 | 18,427 | 130 |
| 2006 | 85 | 82 | 59 | 3,302 | 1,034 | 17,866 | 22 |
| 2007 | 78 | 71 | 51 | 3,548 | 218 | 20,005 | 0 |
| 2008[d] | 96 | 87 | 50 | 1,808 | 19 | 18,496 | 0 |
| 2009[d] | 73 | 70 | 34 | 1,092 | 2 | 11,051 | 13 |
| 2010[d] | 93 | 89 | 56 | 1,415 | 62 | 15,955 | 165 |
| 2011[d] | 87 | 85 | 49 | 1,138 | 51 | 17,851 | 1 |
| 5 Year Average 2006-2010 | 85 | 80 | 50 | 2,233 | 267 | 16,675 | 40 |
| 10 Year Average 2001-2010 | 89 | 83 | 49 | 2,644 | 258 | 11,743 | 45 |

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*Note:* Issuing permits began in 1974 and results prior to 2001 are presented in earlier years of this annual report (Busher et al. 2009). Permit harvest numbers from 2006 and 2007 are preliminary. A permit area was established in 2004 for the South Fork of the Koyukuk River drainage upstream from the mouth of the Jim River, and the Middle Fork of the Koyukuk River upstream from the mouth of the North Fork, but no salmon have been harvested from this permit area.

[a] That portion of the Yukon River drainage from Garnet Island to Hess Creek. Permits were not required in this area until 2004 was a survey area associated with community of Rampart.

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

[c] That portion of the Yukon River drainage from the upstream mouth of Twenty-Two Mile Slough (downstream of Circle) to the U. S./Canada border.

[d] Beginning in 2008, permits were issued for sub-area SEU to record harvest taken upriver of the Eagle sonar site. These duplicate permits issued to households using both areas were included in the permit numbers. From 2008 to 2011, the number of households fishing above the sonar has ranged from 13 to 20 households.

Appendix B7.–Subsistence salmon harvests taken under authority of a permit, Tanana River drainage, 2001–2011.

| | Subdistrict 6-A Subsistence Salmon Fishery | | | | | | |
|---|---|---|---|---|---|---|---|
| | Number of Permits | Number of Permits | Number Reporting | Reported Harvest[a] | | | |
| Year | Issued | Returned | Harvest | Chinook | Summer Chum | Fall Chum | Coho |
| 2001 | 26 | 24 | 14 | 398 | 327 | 1,541 | 3,319 |
| 2002 | 24 | 23 | 20 | 542 | 101 | 1,341 | 2,246 |
| 2003 | 23 | 21 | 13 | 276 | 65 | 2,445 | 2,514 |
| 2004 | 23 | 23 | 12 | 339 | 308 | 2,148 | 2,004 |
| 2005 | 24 | 22 | 15 | 424 | 168 | 4,317 | 2,659 |
| 2006 | 24 | 24 | 18 | 503 | 114 | 3,694 | 2,283 |
| 2007 | 22 | 22 | 14 | 333 | 144 | 3,779 | 2,121 |
| 2008 | 38 | 35 | 19 | 115 | 241 | 2,583 | 2,002 |
| 2009 | 28 | 27 | 19 | 543 | 422 | 4,649 | 2,680 |
| 2010 | 26 | 26 | 14 | 361 | 106 | 3,176 | 1,986 |
| 2011 | 30 | 29 | 19 | 331 | 147 | 5,263 | 1,540 |
| 5 Year Average 2006-2010 | 28 | 27 | 17 | 371 | 205 | 3,576 | 2,214 |
| 10 Year Average 2001-2010 | 26 | 25 | 16 | 383 | 200 | 2,967 | 2,381 |

| | Subdistrict 6-B Subsistence Salmon Fishery | | | | | | |
|---|---|---|---|---|---|---|---|
| | Number of Permits | Number of Permits | Number Reporting | Reported Harvest[b] | | | |
| Year | Issued | Returned | Harvest | Chinook | Summer Chum | Fall Chum | Coho |
| 2001[c] | 87 | 81 | 44 | 1,511 | 74 | 1,983 | 5,646 |
| 2002 | 62 | 60 | 25 | 525 | 711 | 2,193 | 8,032 |
| 2003 | 77 | 72 | 40 | 1,839 | 2,849 | 10,537 | 7,849 |
| 2004 | 60 | 56 | 30 | 1,049 | 1,485 | 6,805 | 9,580 |
| 2005[c] | 70 | 67 | 29 | 1,404 | 1,846 | 15,367 | 9,659 |
| 2006[c] | 78 | 76 | 42 | 423 | 896 | 13,053 | 7,899 |
| 2007[c] | 79 | 75 | 39 | 1,139 | 1,752 | 12,478 | 4,521 |
| 2008 | 73 | 71 | 35 | 486 | 854 | 7,815 | 4,009 |
| 2009[c] | 69 | 68 | 37 | 730 | 831 | 9,112 | 4,064 |
| 2010 | 93 | 85 | 32 | 583 | 316 | 7,625 | 3,429 |
| 2011 | 86 | 82 | 43 | 684 | 678 | 7,463 | 4,584 |
| 5 Year Average 2006-2010 | 78 | 75 | 37 | 672 | 930 | 10,017 | 4,784 |
| 10 Year Average 2001-2010 | 75 | 71 | 35 | 969 | 1,161 | 8,697 | 6,469 |

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| | Upper Tanana River Drainage Subsistence Salmon Fishery | | | | | | |
|---|---|---|---|---|---|---|---|
| | Number of Permits | Number of Permits | Number Reporting | Reported Harvest[d] | | | |
| Year | Issued | Returned | Harvest | Chinook | Summer Chum | Fall Chum | Coho |
| 2001 | 57 | 50 | 22 | 0 | 0 | 2 | 1 |
| 2002 | 32 | 31 | 16 | 0 | 0 | 25 | 0 |
| 2003 | 38 | 32 | 17 | 30 | 0 | 4 | 0 |
| 2004 | 35 | 30 | 14 | 0 | 0 | 0 | 0 |
| 2005 | 29 | 24 | 13 | 0 | 0 | 15 | 0 |
| 2006 | 23 | 22 | 17 | 0 | 0 | 10 | 0 |
| 2007 | 34 | 33 | 17 | 0 | 0 | 41 | 5 |
| 2008 | 58 | 50 | 19 | 0 | 0 | 17 | 6 |
| 2009 | 42 | 40 | 17 | 0 | 0 | 84 | 0 |
| 2010 | 41 | 34 | 19 | 10 | 0 | 12 | 0 |
| 2011 | 41 | 39 | 23 | 0 | 0 | 0 | 0 |
| 5 Year Average 2006-2010 | 40 | 36 | 18 | 2 | 0 | 33 | 2 |
| 10 Year Average 2001-2010 | 39 | 35 | 17 | 4 | 0 | 21 | 1 |

*Note:* Permits began in 1988 and are available in a previous report (Busher et al. 2009). Reported harvest is not expanded. Permit harvest numbers from 2006 and 2007 are preliminary.

[a] That portion of the Tanana River drainage from confluence with Yukon River upstream to the upstream edge of the confluence with the Kantishna River. Includes salmon harvests reported on permits for the Kantishna River proper.

[b] That portion of the Tanana River drainage upstream of the confluence of the Kantishna River to the upstream edge of the confluence of the Wood River.

[c] Includes small numbers of salmon harvested and reported on the Tolovana River drainage (Subdistrict 6-B) subsistence pike permit, established in 1993.

[d] That portion of the Tanana River drainage upstream of the mouth of the Volkmar River (including the Volkmar River) on the north bank and the Johnson River (including the Johnson River) on the south bank.

Appendix B8.–Estimated pink salmon subsistence harvest by residents of surveyed communities, with community and district totals, Yukon Area, 2001–2011.

| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Estimated Total Even Years Average | Estimated Total Odd Years Average | Estimated Total All Years Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hooper Bay | 32 | 5,475 | 473 | 5,418 | 860 | 1,433 | 113 | 1,013 | 957 | 219 | 210 | 2,712 | 487 | 1,599 |
| Scammon Bay | 362 | 417 | 997 | 2,508 | 1,645 | 1,381 | 1,435 | 2,766 | 1,186 | 2,245 | 1,888 | 1,863 | 1,125 | 1,494 |
| Coastal District | 394 | 5,892 | 1,470 | 7,926 | 2,505 | 2,814 | 1,548 | 3,779 | 2,143 | 2,464 | 2,098 | 4,575 | 1,612 | 3,094 |
| Nunam Iqua | 0 | 10 | 5 | 32 | 132 | 555 | 170 | 757 | 61 | 306 | 8 | 332 | 74 | 203 |
| Alakanuk | 0 | 130 | 0 | 233 | 49 | 115 | 32 | 494 | 24 | 151 | 13 | 225 | 21 | 123 |
| Emmonak | 9 | 39 | 4 | 32 | 54 | 225 | 51 | 641 | 5 | 206 | 0 | 229 | 25 | 127 |
| Kotlik | 0 | 849 | 198 | 318 | 155 | 219 | 129 | 1,161 | 42 | 124 | 32 | 534 | 105 | 319 |
| District 1 | 9 | 1,028 | 207 | 615 | 390 | 1,114 | 382 | 3,053 | 132 | 787 | 53 | 1,319 | 224 | 772 |
| Mountain Village | 0 | 745 | 117 | 891 | 78 | 616 | 87 | 500 | 6 | 217 | 24 | 594 | 58 | 326 |
| Pitkas Point | 0 | 35 | 0 | 0 | 2 | 44 | 66 | 15 | 0 | 143 | 0 | 47 | 14 | 30 |
| St. Mary's | 0 | 7 | 0 | 137 | 144 | 236 | 32 | 367 | 5 | 543 | 1 | 258 | 36 | 147 |
| Pilot Station | 0 | 22 | 0 | 5 | 0 | 1 | 0 | 34 | 3 | 22 | 0 | 17 | 1 | 9 |
| Marshall | 0 | 473 | 0 | 105 | 6 | 3 | 0 | 26 | 0 | 21 | 66 | 126 | 1 | 63 |
| District 2 | 0 | 1,282 | 117 | 1,138 | 230 | 900 | 185 | 942 | 14 | 946 | 91 | 1,042 | 109 | 575 |
| Russian Mission | 0 | 0 | 0 | 6 | 0 | 8 | 3 | 436 | 0 | 2 | 0 | 90 | 1 | 46 |
| Holy Cross | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 20 | 0 | 0 | 0 | 7 | 0 | 4 |
| Shageluk | 0 | 0 | 130 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 28 | 14 |
| District 3 | 0 | 0 | 130 | 6 | 0 | 25 | 3 | 456 | 9 | 2 | 9 | 98 | 28 | 63 |
| Anvik | 0 | 0 | 240 | 0 | 0 | 0 | 0 | 23 | 2 | 0 | 0 | 5 | 48 | 27 |
| Grayling | 0 | 30 | 3 | 0 | 3 | 0 | 0 | 200 | 0 | 0 | 40 | 46 | 1 | 24 |
| Kaltag | 0 | 0 | 0 | 10 | 4 | 0 | 0 | 383 | 0 | 0 | 0 | 79 | 1 | 40 |
| Nulato | 0 | 50 | 0 | 0 | 0 | 1 | 0 | 35 | 0 | 0 | 0 | 17 | 0 | 9 |
| Koyukuk | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 0 | 0 | 14 | 0 | 7 |
| Galena | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 0 | 0 | 16 | 0 | 8 |
| Ruby | 0 | 87 | 0 | 2 | 0 | 0 | 0 | 184 | 0 | 0 | 0 | 55 | 0 | 27 |
| Huslia | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 0 | 0 | 0 | 20 | 0 | 10 |
| Hughes | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Allakaket | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Alatna | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Bettles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District 4 | 0 | 221 | 243 | 12 | 7 | 1 | 0 | 1,023 | 2 | 0 | 40 | 251 | 50 | 151 |

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| Community | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | Estimated Total Even Years Average | Estimated Total Odd Years Average | Estimated Total All Years Average |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Tanana | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 0 | 0 | 16 | 0 | 8 |
| Stevens Village | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Birch Creek | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Beaver | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Fort Yukon | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 196 | 0 | 0 | 0 | 39 | 0 | 20 |
| Venetie | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Chalkyitsik | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| *District 5* | *0* | *0* | *0* | *0* | *0* | *0* | *0* | *276* | *0* | *0* | *0* | 55 | 0 | 28 |
| Survey Totals | 403 | 8,423 | 2,167 | 9,697 | 3,132 | 4,854 | 2,118 | 9,529 | 2,300 | 4,199 | 2,291 | 7,340 | 2,024 | 4,682 |
| CI (95%) | 416 | 4,091 | 964 | 2,829 | 1,521 | 990 | 739 | 1,818 | 1,184 | 1,209 | 918 | - | - | - |

*Note:* CI (95%) is the annual 95% confidence interval. Dashes indicate indefinable values. Averages do not include the current year.

Appendix B9.–Households with dogs, number of dogs, and salmon fed to dogs, as estimated in surveyed communities or reported in permit areas, Yukon Area, 2006–2011.

| Districts Survey or Permit and Year | 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 |
|---|---|---|---|---|---|---|
| 2006 | | | | | | |
| Coastal District Survey | 197 | 397 | 0 | 37 | 63 | 100 |
| District 1 Survey | 272 | 457 | 270 | 147 | 0 | 417 |
| District 2 Survey | 294 | 612 | 373 | 355 | 318 | 1,046 |
| District 3 Survey | 109 | 288 | 95 | 95 | 0 | 190 |
| District 4 Survey | 426 | 1,251 | 9,885 | 1,298 | 77 | 11,260 |
| District 5 Survey | 238 | 1,257 | 7,664 | 23,607 | 3,236 | 34,507 |
| District 5 Permit[a, b] | 62 | 596 | - | - | - | 12,934 |
| District 6 Permit[b] | 140 | 1,027 | - | - | - | 15,194 |
| Totals | 1,738 | 5,885 | 18,287 | 25,539 | 3,694 | 75,648 |
| 2007 | | | | | | |
| Coastal District Survey | 132 | 214 | 142 | 0 | 0 | 142 |
| District 1 Survey | 230 | 517 | 1,096 | 38 | 59 | 1,193 |
| District 2 Survey | 267 | 521 | 763 | 232 | 443 | 1,438 |
| District 3 Survey | 86 | 285 | 375 | 0 | 30 | 405 |
| District 4 Survey | 305 | 982 | 12,326 | 2,807 | 1,096 | 16,229 |
| District 5 Survey | 247 | 949 | 7,233 | 26,600 | 2,763 | 36,596 |
| District 5 Permit[a, b] | 52 | 567 | - | - | - | 17,891 |
| District 6 Permit[b] | 175 | 890 | - | - | - | 15,945 |
| Totals | 1,494 | 4,925 | 21,935 | 29,677 | 4,391 | 89,839 |
| 2008 | | | | | | |
| Coastal District Survey | 155 | 325 | 141 | 0 | 0 | 141 |
| District 1 Survey | 304 | 595 | 110 | 0 | 0 | 110 |
| District 2 Survey | 277 | 546 | 53 | 131 | 136 | 320 |
| District 3 Survey | 110 | 314 | 72 | 157 | 0 | 229 |
| District 4 Survey | 395 | 1,178 | 11,416 | 10,342 | 650 | 22,408 |
| District 5 Survey | 244 | 887 | 2,575 | 27,958 | 2,346 | 32,879 |
| District 5 Permit[a, b] | 55 | 552 | - | - | - | 14,103 |
| District 6 Permit[b] | 186 | 882 | - | - | - | 10,345 |
| Totals | 1,726 | 5,279 | 14,367 | 38,588 | 3,132 | 80,535 |

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| Districts Survey or Permit and Year | 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 |
|---|---|---|---|---|---|---|
| 2009 | | | | | | |
| Coastal District Survey | 104 | 133 | 0 | 0 | 0 | 0 |
| District 1 Survey | 228 | 390 | 632 | 75 | 0 | 707 |
| District 2 Survey | 269 | 457 | 100 | 0 | 44 | 144 |
| District 3 Survey | 90 | 237 | 0 | 160 | 72 | 232 |
| District 4 Survey | 371 | 938 | 12,973 | 2,855 | 2,502 | 18,330 |
| District 5 Survey | 231 | 913 | 3,385 | 20,459 | 1,678 | 25,522 |
| District 5 Permit[a, b] | 47 | 522 | - | - | - | 7,649 |
| District 6 Permit[b] | 155 | 630 | - | - | - | 14,253 |
| Totals | 1,495 | 4,220 | 17,090 | 23,549 | 4,296 | 66,837 |
| 2010 | | | | | | |
| Coastal District Survey | 207 | 410 | 118 | 0 | 0 | 118 |
| District 1 Survey | 299 | 595 | 20 | 0 | 0 | 20 |
| District 2 Survey | 284 | 494 | 27 | 0 | 104 | 131 |
| District 3 Survey | 85 | 235 | 63 | 61 | 183 | 307 |
| District 4 Survey | 379 | 990 | 6,111 | 2,551 | 595 | 9,257 |
| District 5 Survey | 255 | 910 | 2,024 | 21,167 | 2,207 | 25,398 |
| District 5 Permit[a, b] | 59 | 432 | - | - | - | 13,707 |
| District 6 Permit[b] | 184 | 998 | - | - | - | 12,011 |
| Totals | 1,752 | 5,064 | 8,363 | 23,779 | 3,089 | 60,949 |
| 2011 | | | | | | |
| Coastal District Survey | 174 | 341 | 0 | 0 | 0 | 0 |
| District 1 Survey | 264 | 502 | 85 | 0 | 0 | 85 |
| District 2 Survey | 275 | 524 | 111 | 70 | 115 | 296 |
| District 3 Survey | 112 | 280 | 528 | 9 | 0 | 537 |
| District 4 Survey | 413 | 1,028 | 9,743 | 1,359 | 1,150 | 12,252 |
| District 5 Survey | 272 | 1,282 | 6,798 | 32,224 | 1,156 | 40,178 |
| District 5 Permit[a, b] | 55 | 363 | - | - | - | 15,759 |
| District 6 Permit[b] | 162 | 1,033 | - | - | - | 15,140 |
| Totals | 1,727 | 5,353 | 17,265 | 33,662 | 2,421 | 84,247 |
| 5 Year Average 2006 to 2010 | | | | | | |
| Coastal District Survey | 159 | 296 | 80 | 7 | 13 | 100 |
| District 1 Survey | 267 | 511 | 426 | 52 | 12 | 489 |
| District 2 Survey | 278 | 526 | 263 | 144 | 209 | 616 |
| District 3 Survey | 96 | 272 | 121 | 95 | 57 | 273 |
| District 4 Survey | 375 | 1,068 | 10,542 | 3,971 | 984 | 15,497 |
| District 5 Survey | 243 | 983 | 4,576 | 23,958 | 2,446 | 30,980 |
| District 5 Permit[a, b] | 55 | 534 | - | - | - | 13,257 |
| District 6 Permit[b] | 168 | 885 | - | - | - | 13,550 |
| Totals | 1,641 | 5,075 | 16,008 | 28,226 | 3,720 | 74,762 |

*Note:* Beginning in 1993, the estimated number of salmon includes those retained from subsistence and commercial related harvests. Dashes indicate information was not collected. Harvest data back to 1992 are presented in earlier years of this annual report (Busher et al. 2009).

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

[b] Does not include duplicate information from households with more than one permit.

Appendix B10.–Estimated and reported subsistence and personal use harvest of miscellaneous fish species, Yukon Area, 2001–2011.

| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 5 Year Average 2001-2005 | 5 Year Average 2006-2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Survey Estimates[a] | | | | | | | | | | | | | |
| Whitefish | 86,200 | 78,489 | 68,416 | 64,039 | 48,862 | 60,923 | 64,338 | 54,729 | 51,778 | 50,232 | 44,890 | 69,201 | 56,400 |
| Northern Pike | 16,753 | 18,906 | 22,341 | 18,738 | 29,799 | 28,133 | 25,947 | 16,053 | 8,061 | 14,086 | 14,270 | 21,307 | 18,456 |
| Sheefish | 14,384 | 15,960 | 14,280 | 16,896 | 13,764 | 12,745 | 13,203 | 10,154 | 7,861 | 9,231 | 10,139 | 15,057 | 10,639 |
| Survey Reported | | | | | | | | | | | | | |
| Burbot | 2,836 | 5,809 | 3,000 | 2,628 | 3,138 | 5,069 | 3,500 | 3,273 | 2,027 | 2,743 | 2,477 | 3,482 | 3,322 |
| Arctic Lamprey[b] | 4,520 | 623 | 29,886 | 33,919 | 38,115 | 2,092 | 12,584 | 803 | 1,699 | 10,863 | 6,037 | 21,413 | 5,608 |
| Tomcod | 7,278 | 4,497 | 4,608 | 5,649 | 4,988 | 13,652 | 7,121 | 6,391 | 2,709 | 3,978 | 6,797 | 5,404 | 6,770 |
| Arctic Grayling | 1,503 | 1,408 | 2,421 | 1,645 | 1,258 | 1,145 | 2,296 | 857 | 667 | 1,571 | 1,273 | 1,647 | 1,307 |
| Longnose Suckers | 277 | 546 | 234 | 178 | 1,452 | 105 | 225 | 25 | 59 | 273 | 286 | 537 | 137 |
| Arctic Char | 251 | 198 | 376 | 116 | 217 | 345 | 181 | 184 | 43 | 148 | 205 | 232 | 180 |
| Alaska Blackfish | 85,938 | 432,967 | 161,703 | 229,833 | 259,874 | 218,695 | 131,712 | 110,356 | 47,320 | 68,873 | 87,064 | 234,063 | 115,391 |
| Sockeye Salmon | - | - | - | 787 | 648 | 333 | 493 | 213 | 216 | 263 | 279 | - | 304 |
| Permit Reported | | | | | | | | | | | | | |
| Whitefish | 2,430 | 2,856 | 5,508 | 4,402 | 3,671 | 3,399 | 3,328 | 3,402 | 4,039 | 3,040 | 4,851 | 3,773 | 3,442 |
| Northern Pike | 451 | 791 | 1,266 | 606 | 641 | 1,008 | 2,094 | 1,678 | 733 | 257 | 319 | 751 | 1,154 |
| Sheefish | 75 | 66 | 203 | 97 | 155 | 80 | 83 | 111 | 76 | 121 | 103 | 119 | 94 |
| Burbot | 124 | 65 | 129 | 127 | 78 | 127 | 99 | 89 | 119 | 45 | 140 | 105 | 96 |
| Arctic Grayling | 51 | 138 | 1,228 | 1,032 | 800 | 507 | 525 | 488 | 363 | 201 | 475 | 650 | 417 |
| Longnose Suckers | 236 | 344 | 978 | 341 | 694 | 770 | 243 | 298 | 518 | 170 | 414 | 519 | 400 |
| Yukon Area Totals | | | | | | | | | | | | | |
| Whitefish | 88,630 | 81,345 | 73,924 | 68,441 | 52,533 | 64,322 | 67,666 | 58,131 | 55,817 | 53,272 | 49,741 | 72,975 | 59,842 |
| Northern Pike | 17,204 | 19,697 | 23,607 | 19,344 | 30,440 | 29,141 | 28,041 | 17,731 | 8,794 | 14,343 | 14,589 | 22,058 | 19,610 |
| Sheefish | 14,459 | 16,026 | 14,483 | 16,993 | 13,919 | 12,825 | 13,286 | 10,265 | 7,937 | 9,352 | 10,242 | 15,176 | 10,733 |
| Burbot | 2,960 | 5,874 | 3,129 | 2,755 | 3,216 | 5,196 | 3,599 | 3,362 | 2,146 | 2,788 | 2,617 | 3,587 | 3,418 |
| Arctic Lamprey | 4,520 | 623 | 29,886 | 33,919 | 38,115 | 2,092 | 12,584 | 803 | 1,699 | 10,863 | 6,037 | 21,413 | 5,608 |
| Tomcod | 7,278 | 4,497 | 4,608 | 5,649 | 4,988 | 13,652 | 7,121 | 6,391 | 2,709 | 3,978 | 6,797 | 5,404 | 6,770 |
| Arctic Grayling | 1,554 | 1,546 | 3,649 | 2,677 | 2,058 | 1,652 | 2,821 | 1,345 | 1,030 | 1,772 | 1,748 | 2,297 | 1,724 |
| Longnose Suckers | 513 | 890 | 1,212 | 519 | 2,146 | 875 | 468 | 323 | 577 | 443 | 700 | 1,056 | 537 |
| Arctic Char | 251 | 198 | 376 | 116 | 217 | 345 | 181 | 184 | 43 | 148 | 205 | 232 | 180 |
| Alaska Blackfish | 85,938 | 432,967 | 161,703 | 229,833 | 259,874 | 218,695 | 131,712 | 110,356 | 47,320 | 68,873 | 87,064 | 234,063 | 115,391 |
| Sockeye Salmon | - | - | - | 787 | 648 | 333 | 493 | 213 | 216 | 263 | 279 | - | 304 |

*Note:* Dashes indicate information was not collected. 'Whitefish' includes various Coregonus species and round whitefish (*Prosopium cylindraceum*).

[a] Subsistence whitefish, pike, and sheefish harvests are estimated by the annual subsistence household survey using methods targeted for salmon harvest estimates.

[b] Harvest of lamprey reported on surveys is from October-December of the previous year.

Appendix B11.–Households responses assessing their success of subsistence salmon needs being met (in percent), by species, Yukon Area, 2005–2011.

| | | | Chinook Salmon | | | | |
|---|---|---|---|---|---|---|---|
| | | | Total Number | Household Responses | | Household Responses | |
| | Total | Households | of Household | Indicated ≤ 50% Needs Met | | Indicated > 50% Needs Met | |
| Year | Households | Contacted | Responses[a] | Responses | Percent | Responses | Percent |
| 2005 | 2,231 | 1,022 | 749 | 223 | 30% | 526 | 70% |
| 2006 | 2,398 | 1,057 | 856 | 401 | 47% | 455 | 53% |
| 2007 | 2,353 | 1,086 | 914 | 422 | 46% | 492 | 54% |
| 2008 | 2,470 | 1,153 | 970 | 488 | 50% | 482 | 50% |
| 2009[b] | 2,366 | 1,036 | 618 | 457 | 74% | 161 | 26% |
| 2010[b] | 2,528 | 1,153 | 517 | 317 | 61% | 200 | 39% |
| 2011[b] | 2,568 | 1,094 | 718 | 388 | 54% | 330 | 46% |
| 2006-2010 Avg | 2,423 | 1,097 | 763 | 417 | 56% | 358 | 44% |

| | | | Summer Chum Salmon | | | | |
|---|---|---|---|---|---|---|---|
| | | | Total Number | Household Responses | | Household Responses | |
| | Total | Households | of Household | Indicated ≤ 50% Needs Met | | Indicated > 50% Needs Met | |
| Year | Households | Contacted | Responses[a] | Responses | Percent | Responses | Percent |
| 2005 | 2,231 | 1,022 | 570 | 165 | 29% | 405 | 71% |
| 2006 | 2,398 | 1,057 | 686 | 247 | 36% | 439 | 64% |
| 2007 | 2,353 | 1,086 | 706 | 299 | 42% | 407 | 58% |
| 2008 | 2,470 | 1,153 | 685 | 265 | 39% | 420 | 61% |
| 2009[b] | 2,366 | 1,036 | 382 | 228 | 60% | 154 | 40% |
| 2010[b] | 2,528 | 1,153 | 363 | 203 | 56% | 160 | 44% |
| 2011[b] | 2,568 | 1,094 | 436 | 157 | 36% | 279 | 64% |
| 2006-2010 Avg | 2,423 | 1,097 | 547 | 248 | 47% | 316 | 53% |

| | | | Fall Chum Salmon | | | | |
|---|---|---|---|---|---|---|---|
| | | | Total Number | Household Responses | | Household Responses | |
| | Total | Households | of Household | Indicated ≤ 50% Needs Met | | Indicated > 50% Needs Met | |
| Year | Households | Contacted | Responses[a] | Responses | Percent | Responses | Percent |
| 2005 | 2,231 | 1,022 | 380 | 145 | 38% | 235 | 62% |
| 2006 | 2,398 | 1,057 | 408 | 220 | 54% | 188 | 46% |
| 2007 | 2,353 | 1,086 | 580 | 396 | 68% | 184 | 32% |
| 2008 | 2,470 | 1,153 | 470 | 289 | 61% | 181 | 39% |
| 2009[b] | 2,366 | 1,036 | 196 | 165 | 84% | 31 | 16% |
| 2010[b] | 2,528 | 1,153 | 133 | 100 | 75% | 33 | 25% |
| 2011[b] | 2,568 | 1,094 | 253 | 139 | 55% | 114 | 45% |
| 2006-2010 Avg | 2,423 | 1,097 | 346 | 234 | 69% | 123 | 31% |

| | | | Coho Salmon | | | | |
|---|---|---|---|---|---|---|---|
| | | | Total Number | Household Responses | | Household Responses | |
| | Total | Households | of Household | Indicated ≤ 50% Needs Met | | Indicated > 50% Needs Met | |
| Year | Households | Contacted | Responses[a] | Responses | Percent | Responses | Percent |
| 2005 | 2,231 | 1,022 | 226 | 104 | 46% | 122 | 54% |
| 2006 | 2,398 | 1,057 | 181 | 109 | 60% | 72 | 40% |
| 2007 | 2,353 | 1,086 | 399 | 283 | 71% | 116 | 29% |
| 2008 | 2,470 | 1,153 | 272 | 204 | 75% | 68 | 25% |
| 2009[b] | 2,366 | 1,036 | 103 | 90 | 87% | 13 | 13% |
| 2010[b] | 2,528 | 1,153 | 85 | 56 | 66% | 29 | 34% |
| 2011[b] | 2,568 | 1,094 | 112 | 55 | 49% | 57 | 51% |
| 2006-2010 Avg | 2,423 | 1,097 | 197 | 148 | 72% | 60 | 28% |

*Note:* Estimates from 2003 and 2004 are included in previous year's reports (Busher et al. 2009).

[a] Total number of households surveyed who answered this question.

[b] Beginning in 2009 the question was changed from asking households to give a percentage of needs met, to asking households how many salmon they usually harvest or need to receive to meet subsistence needs. Percentage of needs met was calculated from the response and the number of salmon harvested or received.

# APPENDIX C. HISTORY OF REGULATORY CHANGES

Appendix C1.–Definitions and a brief history of regulatory changes made to the Yukon Area Alaskan subsistence and personal use salmon fisheries since 1960.

**State of Alaska Statutes Definitions**: Sec. 16.05.940. In AS 16.05 - AS 16.40

(25) "personal use fishing" means the taking, fishing for, or possession of finfish, shellfish, or other fishery resources, by Alaska residents for personal use and not for sale or barter, with gill or dip net, seine, fish wheel, long line, or other means defined by the Board of Fisheries

(31) "subsistence fishing" means the taking of, fishing for, or possession of fish, shellfish, or other fisheries resources by a resident domiciled in a rural area of the state for subsistence uses with gill net, seine, fish wheel, long line, or other means defined by the Board of Fisheries;

(33) "subsistence uses" means the noncommercial, customary and traditional uses of wild, renewable resources by a resident domiciled in a rural area of the state for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation, for the making and selling of handicraft articles out of nonedible by-products of fish and wildlife resources taken for personal or family consumption, and for the customary trade, barter, or sharing for personal or family consumption; in this paragraph, "family" means persons related by blood, marriage, or adoption, and a person living in the household on a permanent basis.

(2) “barter” means the exchange or trade of fish or game, or their parts, taken for subsistence uses

(A) for other fish or game or their parts: or

(B) for other food or for nonedible items other than money if the exchange is of a limited and noncommercial nature

Customary trade

5AAC 39.010. Retention of fish taken in a commercial fishery. (a) A person engaged in commercial fishing may retain finfish from lawfully taken commercial catch for that person’s own use, including for the use as bait in a commercial fishery. Finfish retained under this section may not be sold or bartered. **5**

AAC 93.350. General authorizations for use of salmon:

(a) Notwithstanding AS 16.05.831(a) and 5 AAC 93.310, and unless otherwise prohibited by law, under the authorization of this subsection a person may use salmon taken in a hatchery cost recovery fishery, or in a commercial, sport, personal use, or subsistence fishery for bait.

5 AAC 39.130. (c) (See regulation for full text) At the time of delivery, or as otherwise directed by the department, fish tickets must include the following:

(10) the number of fish of any species retained by a commercial fisherman for that person's own use as specified in 5 AAC 39.010.

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**Brief history of regulatory changes:**

1960

- Alaska Department of Fish and Game is given responsibility to manage all Alaskan subsistence and commercial fisheries.
- Commercial fishing is open 6 days per week; subsistence fishing is open 5.5 days per week.
- Once commercial fishing season ends, subsistence fishing is open 7 days per week.

1961

- Lower Yukon Area (Districts 1 – 3) commercial fisheries are open 4 days per week.
- Directed fall chum salmon fishery begins.

1962

- Four commercial fishing districts established within Alaska portion of the Yukon River drainage.
- Subsistence fishing in the Lower Yukon Area is reduced to 4 days per week (concurrent with commercial).

1974

- Six commercial fishing districts established within Alaska portion of the Yukon River drainage by splitting the size of the existing four districts.
- Subsistence fishing restrictions are implemented along the southern portion of the Dalton Highway.
- Upper Yukon Area (Districts 4 – 6) begins concurrent subsistence and commercial fishing 5 days per week.
- Subsistence fishing schedules are linked to commercial fishing schedules in Districts 1-6.

1974–77

- Legalized sale of salmon roe from Yukon Area subsistence caught salmon.

1976

- Limited entry begins for Yukon River commercial fisheries.
- Streams crossing the Dalton Highway north of the Yukon River are closed to subsistence fishing.

1977

- Lower Yukon Area is reduced to subsistence/commercial fishing 3 days per week during the commercial Chinook salmon season.
- Lower Yukon Area is reduced to subsistence/commercial fishing 3.5 days per week during the fall chum salmon season.

1978

- Passage of the *State of Alaska Subsistence Act*, which provides a rural subsistence priority in times of shortage.
- Commercial salmon roe fishery begins in the Upper Yukon Area.

1979

- Lower Yukon Area is reduced to subsistence/commercial fishing 3 days per week during the fall chum salmon season.

1980

- ANILCA (*Alaska National Interest Lands Conservation Act*) provides for a rural subsistence priority on Federal lands.

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1980–89

- Unified management of subsistence fishing by the State of Alaska consistent with ANILCA and the *State of Alaska Subsistence Act.*

1981

- Commercial fishing periods in the Lower Yukon Area can be established inseason by state emergency order.

1982

- Tanana River Subdistrict 6-C Subsistence Management Plan established.

1983–84

- Lower Yukon Area subsistence periods established inseason by emergency order.

1986

- Personal use fisheries created for Alaska residents living in non-rural areas. Non-rural residents are classified as "personal use" fishermen rather than subsistence fishermen regardless of where they fish.

1987

- Regulations for a personal use fall chum salmon fishery established in the Yukon Area.
- Regulatory *Yukon Area Fall Chum Salmon Management Plan* established.

1988

- Subdistricts 6-A, 6-B and 6-C subsistence and personal use periods are limited to two 42 hour periods per week.
- "Old Minto Area" is open to subsistence salmon fishing 5 days per week.
- Upper Tanana Area remains open to subsistence fishing 7 days per week.
- Regulations for personal use fisheries for all salmon species established in the Yukon Area.

1990

- Court case removes rural residency requirement for subsistence participation (*McDowell v. State*).
- Regulatory *Yukon River Summer Chum Salmon Management Plan* established.
- Regulatory *Tanana River Salmon Management Plan* established.

1992

- Alaska divided into subsistence and non-subsistence areas. Personal use fishing only allowed within the non-subsistence areas. Qualifications were based on where one fished and no longer based on where one lived.
- Upper Yukon Area commercial periods established inseason by emergency order.

1993

- Regulations implemented separating subsistence and commercial salmon fishing times in Districts 1-3 and Subdistrict 4-A (prior to 1993 subsistence and commercial periods coincided).
    - In Districts 1-3 subsistence salmon fishing is open 24 hours/day until commercial season begins. Once commercial fishing begins subsistence fishing is closed 18 hours before, during and 12 hours after each commercial period. Additional periods for subsistence salmon fishing may be authorized.
    - Subdistricts 4-B, 4-C, 5-B and 5-C subsistence salmon fishing is open 7 days per week until commercial season begins, then commercial and subsistence periods coincide. Additional periods for subsistence salmon fishing may be authorized.

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  - Koyukuk River, Kantishna River and Subdistrict 5-D remain open to subsistence salmon fishing 7 days per week.
- Court case declares subsistence and non-subsistence areas are unconstitutional and subsistence salmon fishing again allowed statewide (*State v. Kenaitze Indian Tribe*).
- Regulatory *Toklat River Fall Chum Salmon Rebuilding Management Plan* established.
- Amounts necessary for subsistence was defined for Yukon-Northern Area:
  - 348,000–503,000 (all salmon species combined).

1994

- Subdistrict 5-A subsistence salmon fishing allowed 5 days/week once commercial season ends.
- Regulatory *Anvik River Chum Salmon Fishery Management Plan* established.

1995

- Alaska Supreme Court reverses decision in *Kenaitze* case and Alaska is again divided into subsistence and non-subsistence areas. Personal use fishing is only allowed within the non-subsistence areas and is based on where one fished and no longer based on where one lived.
- Ninth Circuit Court finds that Federal jurisdiction for fisheries should be extended to navigable waters on Federal lands (*State of Alaska v. Babbitt* a.k.a. *Katie John decision*). US Senator Stevens delays implementation.

1998

- Subdistrict 5-A subsistence salmon fishing allowed 7 days per week once commercial season ends.
- Regulatory *Yukon River King Salmon Management Plan* established.

1999

- Subdistrict 5-A subsistence salmon fishing is returned to 5 days per week once commercial season ends because in 1998 Toklat River escapement goals were not met.
- Regulatory *Yukon River Coho Salmon Management Plan* established.

2000

- U.S. Fish and Wildlife Service begins first season of joint subsistence fisheries management authority with ADF&G in portions of the Yukon Area.

2001

- Subsistence fishing schedule “windows” established for times of conservation implemented throughout the entire Yukon River Area when there is no commercial fishing season:
  - Districts 1-3 area open to subsistence salmon fishing for two 36 hour periods per week.
  - District 4 and Subdistricts 5-B and 5-C are open to subsistence salmon fishing for two 48 hour periods per week.
  - Subdistrict 5-A, 6-A and 6-B (includes the Kantishna River) are open to subsistence salmon fishing for two 42 hour periods per week.
  - The “Old Minto Area” is open to subsistence salmon fishing 5 days per week.
  - The Coastal District, Koyukuk River and Subdistrict 5-D are open to subsistence salmon fishing 7 days per week.
  - Subdistrict 6-C is open to personal use salmon fishing for two 42 hour periods per week.
- Amounts necessary for subsistence defined by salmon species for Yukon Area:
  - Chinook salmon: 45,500–66,704 fish
  - Summer chum salmon: 83,500–142,192 fish
  - Fall chum salmon: 89,500–167,900 fish
  - Coho salmon: 20,500–51,980 fish

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- Feeding of Chinook salmon to dogs:
    - In the Yukon River drainage, king salmon must be used primarily for human consumption and may not be targeted for dog food. Dried king salmon may not be used for dog food throughout the Yukon River drainage, except that whole fish that are unfit for human consumption, scraps, and fish under 16 inches in length may be fed to dogs. Whole king salmon caught incidentally during a subsistence chum salmon fishery in the following areas may also be fed to dogs:
        - After July 10, in the Koyukuk River drainage;
        - After August 10, in Subdistrict 5-D, upstream of Circle City.

2004

- *Yukon River King Salmon Management Plan*.
    - During times of chum salmon conservation, the commercial fish wheel season may be closed by emergency order and immediately reopen the season during which set gillnet gear may be used instead of a fish wheel.
- *Yukon River Drainage Fall Chum Salmon Management Plan* revised.
    - Plan to be implemented from July 16 through December 31 to ensure adequate escapement for fall chum salmon into the Yukon River drainage and to provide management guidelines to ADF&G.
    - Subsistence fishing schedule of 7 days a week fishing in the Kantishna River.
    - Returned Subdistrict 5-A to two 48-hour periods per week from 6:00 pm. Tuesdays until 6:00 p.m. Thursdays and from 6:00 pm. Fridays until 6:00 p.m. Sundays.
- *Toklat River Fall Chum Salmon Rebuilding Management Plan* repealed and elements of the plan incorporated into the *Yukon River Drainage Fall Chum Salmon Management Plan*.
- *Tanana River Salmon Management Plan.*
    - In Subdistricts 6-A and 6-B, through September 30, the subsistence salmon fishing periods are from 6:00 p.m. Fridays until 12:00 noon Sundays and from 6:00 p.m. Mondays until 12:00 Wednesdays, unless altered by emergency order. This allows for possible 7 days a week subsistence fishing beginning October 1.
- In Subdistrict 4-A, king salmon may be taken during the commercial fishing season with drift gillnet gear only for two 48-hour fishing periods per week, by emergency order from 6:00 p.m. Sundays until 6:00 p.m. Tuesdays and from 6:00 p.m. Wednesdays until 6:00 p.m. Fridays.
- New subsistence required permit areas in portions of the Koyukuk River along the Dalton Highway and Yukon River drainage from Garnet Island to Hess Creek:
    - South Fork of the Koyukuk River drainage upstream from the mouth of the Jim River and the Middle Fork of the Koyukuk River drainage upstream from the mouth of the North Fork. The Koyukuk River areas along the Dalton Highway were closed but are now opened for subsistence fishing for nonsalmon species with permit and gear stipulations. Gillnets gear may be used only from November 1 through June 30 and a gillnet mesh size may not exceed three and one-half inches.
    - Yukon River drainage upstream from the westernmost tip of Garnet Island to the mouth of Hess Creek of Subdistrict 5-C (encompassing the community or Rampart) in an effort to document harvest by transient fishermen. This change now requires a subsistence fishing permit in the entire Subdistrict 5-C.

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2005

- Under federal regulation *100.27 (i) (3) (XV) (C)* In the Yukon River mainstem, Subdistricts 4B and 4C with a Federal subsistence fishing permit, you may take Chinook salmon during the weekly subsistence fishing opening(s) by drift gillnets no more than 150 feet long and no more than 35 meshes deep, from June 10 through July 14.

2007

- Chinook salmon harvests in Districts 1 through 3 between June 1 and July 15 must be marked by the removal of both lobes of the tail. This is a change from the requirement to remove the dorsal fin, which is more difficult to remove, and potentially exposes the flesh.
- Coho salmon management plan was revised.
    - Must be projected to provide a harvestable surplus.
    - Linked to Yukon River Drainage fall chum salmon management plan. Was adjusted from assessment of 625,000 to 550,000 fall chum salmon.
    - Fall chum salmon are considered incidental harvest during directed coho salmon openings.
    - End dates of plan in districts and subdistricts were adjusted.

2011

- Fishermen in all districts and subdistricts of the Yukon River Area, including the Coastal District, may not use gillnets larger than 7.5 inch mesh.