

Fishery Data Series No. 07-52

**Subsistence and Personal Use Salmon Harvests in the
Alaska Portion of the Yukon River Drainage, 2005**

by

William H. Busher,

Toshihide Hamazaki

and

Amy M. Marsh

September 2007

Alaska Department of Fish and Game

Divisions of Sport Fish and Commercial Fisheries



FISHERY DATA SERIES NO. 07-52

**SUBSISTENCE AND PERSONAL USE SALMON HARVESTS IN THE
ALASKA PORTION OF THE YUKON RIVER DRAINAGE, 2005**

by

William H. Busher

Alaska Department of Fish and Game, Division of Commercial Fisheries, Fairbanks

and

Toshihide Hamazaki

Alaska Department of Fish and Game, Division of Commercial Fisheries, Anchorage

and

Amy M. Marsh

Alaska Department of Fish and Game, Division of Commercial Fisheries, Fairbanks

Alaska Department of Fish and Game
Division of Sport Fish, Research and Technical Services
333 Raspberry Road, Anchorage, Alaska, 99518

September 2007

This investigation was partially funded by U.S./Canada Salmon Research Cooperative Agreement Award Number NA03NMF4380185.

The Division of Sport Fish Fishery Data Series was established in 1987 for the publication of technically oriented results for a single project or group of closely related projects. Since 2004, the Division of Commercial Fisheries has also used the Fishery Data Series. Fishery Data Series reports are intended for fishery and other technical professionals. Fishery Data Series reports are available through the Alaska State Library and on the Internet: <http://www.sf.adfg.state.ak.us/statewide/divreports/html/intersearch.cfm> This publication has undergone editorial and peer review.

*William H. Busher,
Alaska Department of Fish and Game, Division of Commercial Fisheries,
1300 College Road, Fairbanks, AK 99701-1599, USA*

*Toshihide Hamazaki,
Alaska Department of Fish and Game, Division of Commercial Fisheries,
333 Raspberry Road, Anchorage, AK 99518-1599, USA*

*Amy M. Marsh
Alaska Department of Fish and Game, Division of Commercial Fisheries,
1300 College Road, Fairbanks, AK 99701-1599, USA*

This document should be cited as:

Busher, W. H., T. Hamazaki, and A. M. Marsh. 2007. Subsistence and personal use salmon harvests in the Alaskan portion of the Yukon River Drainage, 2005. Alaska Department of Fish and Game, Fishery Data Series No. 07-52, Anchorage.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau AK 99811-5526

U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington VA 22203

Office of Equal Opportunity, U.S. Department of the Interior, Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers:

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648, (Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact:

ADF&G, Sport Fish Division, Research and Technical Services, 333 Raspberry Road, Anchorage AK 99518 (907)267-2375.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	ii
LIST OF FIGURES.....	ii
LIST OF APPENDICES.....	iii
ABSTRACT.....	1
INTRODUCTION.....	1
OBJECTIVES.....	3
METHODS.....	4
Postseason Subsistence Surveys.....	4
Calendars.....	7
Permits.....	8
Statistical Methods.....	8
RESULTS.....	9
Overall Estimation of Harvest.....	9
Postseason Subsistence Surveys.....	10
Calendars.....	11
Permits.....	11
Subsistence.....	11
Personal Use.....	11
DISCUSSION.....	12
ACKNOWLEDGEMENTS.....	18
REFERENCES CITED.....	19
TABLES AND FIGURES.....	21
APPENDIX A. 2005 HARVEST INFORMATION.....	67
APPENDIX B. HISTORICAL INFORMATION.....	81
APPENDIX C. HISTORY OF REGULATORY CHANGES.....	107

LIST OF TABLES

Table	Page
1. Subsistence and personal use salmon harvest estimates which include commercially related and test fish harvests provided for subsistence use, and related information, Yukon Area, 2005.	22
2. Estimated number of households with dogs, number of households that feed fish to dogs, numbers of dogs, and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.	25
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, 2005.	26
4. Estimated number of salmon retained for dog food from subsistence harvests with corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.	27
5. Estimated number of salmon retained for dog food from commercial harvests with corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.	28
6. Estimated total number of households, sample size, number contacted, and percentage of sampled households that were contacted in surveyed villages, by harvest stratum, with village and district totals, Yukon Area, 2005.	29
7. Estimated number of subsistence fishing households in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.	31
8. Estimated number of people in households in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.	33
9. Subsistence salmon harvest estimates including commercially retained (not including test fish) and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.	35
10. Estimated number of salmon used for subsistence purposes and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.	37
11. Estimated subsistence harvest of pink salmon, whitefish, pike, and sheefish fish, by surveyed villages, Yukon Area, 2005.	39
12. Reported subsistence harvest of other miscellaneous fish species by surveyed villages, Yukon Area, 2005.	41
13. Estimated subsistence harvest (not including test fish) of Chinook salmon by fishing location in surveyed villages, Yukon Area, 2005.	43
14. Estimated subsistence harvest (not including test fish) of summer chum salmon by fishing location in surveyed villages, Yukon Area, 2005.	45
15. Estimated subsistence harvest (not including test fish) of fall chum salmon by fishing location in surveyed villages, Yukon Area, 2005.	47
16. Estimated subsistence harvest (not including test fish) of coho salmon by fishing location in surveyed villages, Yukon Area, 2005.	49
17. Responses to survey question assessing percentage of subsistence salmon needs being met, by community, by species, Yukon Area, 2005.	51
18. Reported subsistence and personal use fish harvested under the authority of a permit, listed by permit area, Yukon Area, 2005.	53
19. 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, 2005.	54

LIST OF FIGURES

Figure	Page
1. Alaskan portion of Yukon River drainage showing communities and fishing districts.	56
2. Yukon Area postseason subsistence salmon harvest survey form, 2005.	57
3. Subsistence salmon harvest reported on catch calendars by species from Districts 1 through 4 and a portion of District 5, Yukon Area, 1990–2005.	59
4. Fairbanks Nonsubsistence Area.	60
5. Estimated Chinook salmon subsistence harvest, Yukon Area, 1992–2005.	61
6. Estimated summer chum salmon subsistence harvest, Yukon Area, 1992–2005.	62
7. Estimated fall chum salmon subsistence harvest, Yukon Area, 1992–2005.	63
8. Estimated coho salmon subsistence harvest, Yukon Area, 1992–2005.	64
9. Estimated total subsistence salmon harvest, Yukon Area, 1992–2005.	65

LIST OF APPENDICES

Appendix	Page
A1. Estimated Chinook salmon subsistence harvest in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.....	68
A2. Estimated summer chum salmon subsistence harvest in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.....	69
A3. Estimated fall chum salmon subsistence harvest in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.....	70
A4. Estimated coho salmon subsistence harvest in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.....	71
A5. Estimated Chinook salmon subsistence use in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.....	72
A6. Estimated summer chum salmon subsistence use in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.....	73
A7. Estimated fall chum salmon subsistence use in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.....	74
A8. Estimated coho salmon subsistence use in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.....	75
A9. Estimated number of salmon given away by subsistence fishers to other subsistence households and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.....	76
A10. Estimated number of salmon given away by commercial fishers to another subsistence household and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.....	77
A11. Estimated total number of salmon provided to villages for subsistence use by test fish programs, Yukon Area, 2005.....	78
A12. Salmon reported lost in surveyed communities due to sick fish, weather, predators, and unknown causes, Yukon Area, 2005.....	79
B1. Chinook salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1995–2005.....	82
B2. Summer chum salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1995–2005.....	84
B3. Fall chum salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1995–2005.....	86
B4. Coho salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1995–2005.....	88
B5. Personal use salmon harvests taken under authority of a permit, Tanana River drainage, 1987–2005.....	90
B6. Subsistence salmon harvests taken under authority of a permit in portions of District 5, Yukon Area, 1974–2005.....	92
B7. Subsistence salmon harvests taken under authority of a permit, Tanana River drainage, 1973–2005.....	94
B8. Estimated number of salmon distributed from test fish projects, Yukon Area, 1992–2005.....	97
B9. Estimated pink salmon subsistence harvest by residents of surveyed villages, with village and district totals, Yukon Area, 1995–2005.....	100
B10. Households with dogs, number of dogs, and salmon fed to dogs, as estimated in surveyed villages or reported in permit areas, Yukon Area, 1990–2005.....	101
B11. Estimated and reported subsistence and personal use harvest of miscellaneous fish species, Yukon Area, 1995–2005.....	104
B12. Surveyed households which indicated that their subsistence salmon needs were not met, Yukon Area, 1992–2002.....	105
B13. Households’ response to the survey question assessing their success of subsistence salmon needs being met (in percent), by species, Yukon Area, 2003–2005.....	106
C1. A brief history of regulatory changes made to the Yukon Area Alaskan subsistence and personal use salmon fisheries since 1960.....	108

ABSTRACT

This annual study estimated the subsistence and personal use salmon harvest within the Alaskan portion of the Yukon Area drainage. Most Yukon Area communities have no regulatory requirements to report their subsistence salmon harvest. For these communities, the Alaska Department of Fish and Game (ADF&G) utilized a voluntary survey program. Harvest information was collected through postseason household interviews, follow-up telephone interviews and postal questionnaires, and harvest calendars. Stratified random sampling techniques were used to select Yukon Area households to be interviewed. In 2005, surveyors contacted 1,022 households in 33 communities. Data from surveyed households were expanded to estimate the harvest of unsurveyed households. In more accessible portions of the Yukon Area, fishers must document their harvest on a subsistence or personal use permit. In 2005, there were 424 subsistence and personal use permits issued, with 91% returned. Of these returned permits, 250 reported a harvest. This report also documents subsistence fish given to households from various test fish projects. The total subsistence and personal use harvest throughout the Yukon Area was estimated to be 53,547 Chinook *Oncorhynchus tshawytscha*, 93,411 summer chum *O. keta*, 91,667 fall chum *O. keta*, and 27,357 coho *O. kitsutch* salmon. The fishing gear types used were set gillnets (54%), drift gillnets (38%), and fish wheels (8%). Approximately 232 households fed an estimated 80,989 salmon to 5,984 dogs.

Key words: amount necessary for subsistence, Chinook, chum, coho, harvest, northern pike, personal use, salmon, sheefish, subsistence, Tanana River, whitefish, Yukon River

INTRODUCTION

Annual documentation of the subsistence salmon harvest is necessary to determine if sufficient salmon are returning to the Yukon Area for escapement and subsistence requirements, and if enough fishing opportunities are provided to meet subsistence needs. Since 1961, the Alaska Department of Fish and Game (ADF&G) has collected information on subsistence salmon harvest and use in the Yukon Area (ADF&G 2002). Most subsistence users along the Yukon River drainage are not required to record or report their harvest on permits, so the primary method of estimating this harvest is the annual subsistence salmon harvest survey conducted by ADF&G. In more accessible portions of the Yukon Area, salmon fishers must obtain a subsistence or personal use permit. Using a combination of survey and permit information, this report documents the estimated subsistence and personal use harvests within the Alaskan portion of the Yukon River drainage.

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 ten subdistricts. The Lower Yukon Area consists of coastal waters in the Yukon Area and the Yukon River drainage from its mouth to Old Paradise Village, 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 Canadian border and is divided into Districts 4, 5, and 6. The Coastal District includes the remainder of coastal Yukon Area waters not included in District 1. The difference between the Yukon River and the Yukon Area is that the Yukon Area includes the Coastal District. Only Yukon River harvests are considered when addressing U.S.-Canadian fishery concerns.

Five species of Pacific salmon are found in the Yukon River drainage: Chinook *Oncorhynchus tshawytscha*, chum *O. keta*, coho *O. kitsutch*, 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 (summer chum) and late (fall chum).

Many communities are located throughout the Yukon River drainage. The residents in these rural communities are primarily of Yupik Eskimo and Athabascan Indian descent. Excluding the greater Fairbanks area (approximately 87,000 people), the most recent census indicates the rural resident population in 2004 was approximately 21,700 people (Williams and Fried 2005). The recent 5-year (1999–2003) average population of rural residents within the Yukon Area, excluding the greater Fairbanks area, has remained stable at 21,000.

These Yukon Area communities have a long tradition of harvesting salmon for subsistence use. Chinook salmon are highly valued for human consumption, and harvests in the Lower and Upper Yukon areas are similar. Subsistence salmon harvested for human consumption are commonly dried, smoked, or frozen. There is usually little wastage of fish taken for subsistence purposes, although damp weather may cause some drying fish to spoil and some fish are lost to disease (e.g. *Ichthyophonus*) or predation (e.g. birds or bears).

In addition to human consumption, salmon are fed to dogs, which are used for recreation, transportation, and as haul animals. Small Chinook (“jacks”), summer chum, fall chum and coho salmon are primarily harvested to feed dogs in the Upper Yukon Area (Andersen 1992). Most subsistence salmon used for dog food are dried (summer chum salmon) or “cribbed” (frozen in the open air) in the case of fall chum and coho salmon. In the Lower Yukon Area, dogs are often fed scraps that become available during the processing of freshly harvested salmon; relatively few whole fresh salmon are fed to dogs. Today the practice of keeping sled dogs is more common in the Upper Yukon Area than 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 (Andersen 1992). Beginning in the early 1980s, there was a renewed interest in the recreational use and racing of sled dogs, thereby increasing the number of subsistence salmon harvested for dog food.

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. Fishing activities are usually based from a fish camp or a home village. Extended family groups, representing two or more households, often work together to harvest, cut, and preserve salmon for subsistence use. Some households from communities not located along the mainstem Yukon River, such as Shageluk, operate fish camps along the mainstem Yukon River (Figure 1).

Subsistence and personal use fishers in the Yukon Area primarily use drift gillnets, set gillnets, and fish wheels to harvest salmon. Set gillnets are utilized throughout the Yukon Area, whereas drift gillnets are only allowed from the mouth of the Yukon River to 18 miles below the community of Galena (River Mile 530). Although fish wheels are a legal gear type for subsistence fishing throughout the drainage, they are essentially used only in the Upper Yukon Area, where water conditions and fishing locations are more suitable for fish wheels and ample supplies of wood timbers are available for construction.

The total estimated salmon harvest in the Alaska portion of the Yukon River drainage is comprised of harvest from both subsistence and personal use fisheries. State regulations dictate that subsistence is the highest priority use of salmon, and subsistence is a primary consideration in fishery management actions. While subsistence salmon fishing in the Yukon Area primarily occurs in non-permit areas, some portions of the Yukon River and the entire Tanana River are

accessible from the road system, so more fishers from urban areas potentially travel there to subsistence fish. Subsistence permits are used to document harvest data, as otherwise much harvest would go unreported because of the transient nature of these fishers and the fact that most do not reside in a surveyed village. Personal use fishing occurs in the Fairbanks Nonsubsistence Area (Figure 4), which was established due to the heavy demand urban fishers may place on the resource. In this nonsubsistence area, fishers must possess a personal use permit and a sport fish license. State regulations dictate that personal use fishing has a lower priority than subsistence fishing. Similar to subsistence permits, personal use permits allow managers to track harvest.

Many Yukon Area residents participate in both commercial and subsistence salmon fishing. Restrictions on subsistence salmon fishing may be required during a commercial salmon fishing season to assist in the enforcement of commercial fishing regulations and the management of harvest amounts. However, during a typical salmon fishing season, substantially more time is allowed for subsistence fishing than for commercial fishing. Commercial fishing in the Upper Yukon River began in 1974 (ADF&G 2002). From 1974 through 1977, the sale of roe from subsistence caught salmon was legal. Salmon or their eggs harvested during subsistence openings can no longer be legally bought or sold under the State of Alaska regulations. However, flesh from commercially harvested salmon may be retained for subsistence use.

Although most subsistence and personal use salmon harvested in the Yukon Area originate from Yukon River drainage stocks, communities within the Coastal District may also harvest stocks bound for other areas. A salmon mark–recapture study, conducted in marine waters near Hooper Bay in 1986, documented the presence of Norton and Kotzebue Sound chum salmon stocks in the area (Kerkvliet 1986). This study, however, also showed that 89% of the recovered tagged summer chum salmon were of Yukon River origin.

Stevens Village is uniquely situated outside of a permit area on the Yukon River (Figure 1), and consequently is visited as part of the postseason subsistence survey, yet some residents of Stevens Village also travel to a permit area to fish. Some households' data will therefore be represented on both the survey and permit data. In these situations, survey data are used when calculating the subsistence harvest from Stevens Village. This overlap between the subsistence and permit areas can occasionally cause inconsistencies between numbers reported on the subsistence and permit tables. In these instances, readers should take note of footnotes accounting for the discrepancies.

OBJECTIVES

The specific objectives of this study:

1. Estimate and document the 2005 Yukon Area subsistence and personal use salmon harvest by species and harvest area;
2. Estimate and document the 2005 Yukon Area subsistence salmon “use” by species and harvest area;
3. Identify Yukon Area fishing households and the number of people in each household;
4. Determine the gear types used by Yukon Area subsistence and personal use fishers;

5. Include numbers of fish provided to communities for subsistence use that originated from Yukon Area test fishery programs;
6. Estimate, in selected Yukon Area communities, the number of dogs, number of households with dogs, number of households that feed fish to dogs, and the number of fish fed to dogs;
7. Record the number of nonsalmon, primarily freshwater fish species utilized by the communities which participate in the Yukon Area subsistence and personal use fisheries.

Additional objectives were to provide documentation of the number of households in surveyed communities, relative percent success in meeting their subsistence salmon needs, number of salmon “lost” and not available for human consumption, and review comments and concerns relayed by subsistence users.

METHODS

POSTSEASON SUBSISTENCE SURVEYS

The 2005 subsistence survey program estimated the salmon harvested by subsistence fishing households along the Alaskan portion of the Yukon River drainage. Survey data was collected through postseason interviews and follow-up telephone or postal surveys.

The first step in the interview program was to identify Yukon Area households and to select which households would be surveyed. ADF&G’s database of Yukon Area households (*families* database) was maintained and updated by using previous years’ survey information, which was obtained by contacting knowledgeable individuals in each community, who reviewed the household list. In 2005, the Yukon River Drainage Fisheries Association (YRDFA) supported ADF&G’s efforts by hiring local residents as Subsistence Assistants, who reviewed the household list as one of their duties. Village census lists, telephone and utility lists, and the Alaska Permanent Fund Dividend application list were also used to update ADF&G’s *families* database.

The *families* database formed the framework for the stratified random sampling program. Each household in the database was assigned to one of five user groups (strata or harvest level) based on the household’s harvest history. These harvest levels were identified as *Unknown*, *Do Not Fish*, *Light*, *Medium*, or *Heavy*. In 2005, households with historical harvest information were placed in a user group based upon a 2-year harvest average (all species combined). Data was selected from the most recent two years available, in the time period from 1999 to 2004. Typically, the most recent 5-year range is used, but the year 2000 was excluded because a poor fall chum salmon run that year led to fall season subsistence fishing restrictions and resulted in lower than normal harvests. If 2 recent years of harvest data were unavailable for a household, then the household’s user group remained unchanged. In the Yukon Area, an average harvest of 1 to 100 salmon was considered *Light*, a harvest of 101 to 500 salmon was considered *Medium*, and a harvest greater than 500 salmon was considered *Heavy*.

Next a stratified random sample (Cochran 1977) of households by community was drawn from the stratified population. In general, sample sizes were based upon the level of harvest. In 2005, 100% of the households in the *Unknown*, *Medium*, and *Heavy* user groups and 30% of the households in the *Light* and *Do Not Fish* user groups were selected to be sampled. If any stratum sample size contained five or fewer households, then the sample size was made equal to the

stratum size. All households were sampled in communities with 40 or fewer households. The percentage of households sampled was increased to 50% for the *Light* user group in Emmonak, Holy Cross, Pilot Station, and Tanana to improve the precision of harvest estimates in these larger communities.

In 2005, a total of 1,193 households were selected to be surveyed in 33 communities (Table 6). Surveyors traveled to 32 Yukon Area communities between September 6 and October 28 and from November 14 to November 18. Typically the surveys are finished by the end of October, but this year the survey trip to Hooper Bay was postponed due to a tragedy there. Surveyors had planned to visit Birch Creek, but that village was surveyed by telephone because of complications related to weather and flight schedules.

Surveys were conducted in early fall because the majority of salmon fishing was finished, yet fishers could still recall their harvest numbers because the season had ended recently. Before conducting interviews, surveyors were trained in surveying techniques, including suggestions on how to get the best information possible from people who may not know the exact number of fish they harvested or who are not used to quantifying their fish harvest. In addition, the surveyors were trained in salmon species name identification, as local names for salmon vary throughout the drainage. For example, fishers in many portions of the Yukon Area use the term “dog salmon” to refer to summer chum and “silvers” to refer to fall chum salmon. The surveyors were also briefed on any fishery issues or concerns from the 2005 subsistence and commercial salmon fishing season, in case the surveyors encountered these issues when conducting surveys. During interviews, both surveyors and surveyed individuals contributed to the quality of the estimate. Surveyors had a responsibility to attempt to contact all selected households, ask questions consistently and understandably, and foster a cooperative atmosphere. Surveyors attempted to interview a member of each selected household, preferably the primary harvester. Partial survey was possible, so the number of households contacted for any given question varies. Occasionally, interviews were conducted with households not pre-selected for the survey. This occurs when individuals voluntarily provide surveyors with their harvest information. Data from these additional surveys were incorporated into the results; the addition of these extra surveys is not statistically significant. After the interview was completed survey participants were given a small token of appreciation (magnetic refrigerator clip) for participating in the survey.

Interview questions were designed to provide a quantitative and qualitative assessment of each household’s subsistence salmon harvest (Figure 2). Household members were asked their total salmon harvest and use (by species) for the season, the fishing gear used, and areas fished. To determine distribution of fish within a village, households were asked how many families had fished together and how much of the group’s catch went to the selected household. Households were also asked whether the household had either given salmon to other families or whether they had received salmon from other households or from any test fishery project. In addition, households were asked how many salmon were harvested for dog food.

In order to keep data consistent and comparable between years, the subsistence survey questions generally have been kept the same from year to year. The 2005 survey form was the same as the previous year except for minor adjustments to the question assessing what percent success the household had in meeting its subsistence salmon needs. Households were asked to assess at what level their subsistence salmon needs were met, by species. The household responses were grouped into four categories: 0 to 25%, 26 to 50%, 51 to 75%, and greater than 75%. This year, a “0%” category was added. A “No need” checkbox was also added, to account for households

who did not harvest or use a species because they had no need, as opposed to those who did not harvest or use a particular species but wished to do so (met “0% of their need). Examples of “no need” include a species that may not be traditionally fished in a particular area (e.g., coho salmon are not commonly fished upriver of the village of Tanana) or the respondent may not have wished to harvest the species (e.g., the summer chum salmon run was sufficient, so the household did not fish for fall chum salmon).

The majority of the survey was intended to quantify the household’s total subsistence salmon catch. This number was derived by accounting for the various additions (e.g. fish retained for subsistence use from commercial openers) and losses (e.g. fish shared with other households). The survey also generated an estimate of total salmon use. Estimated use included both salmon harvested and kept by a household for the household’s own use as well as fish the household received from other subsistence fishers, test fish projects, or from commercial activities. For survey purposes, test fish were included in a household’s use rather than their harvest. For purposes of estimating the total number of fish killed and ultimately utilized for subsistence, the test fish numbers were included (Table 1).

Although most survey questions were straightforward, several questions required especially careful surveying technique. For example, “Catching” salmon meant any participation in the subsistence fishery, such as cutting fish. Several questions attempted to determine how much of the salmon harvested by a group was kept by individual households. This was necessary because the survey design assigned individual households to strata groups, so harvest numbers needed to be calculated at the household level. To determine the total use of each household, questions were asked about whether the household shared or received fish. Occasionally some survey questions are perceived as being intrusive, but the questions are necessary in order to calculate household harvest and use numbers and to reduce the possibility of fish being double-counted on multiple survey forms.

Households were also asked about their harvest of pink and sockeye salmon and miscellaneous nonsalmon species. Reported harvests of pink salmon, whitefish *Coregonus spp.*, northern pike *Esox lucius*, and sheefish/Inconnu *Stenodus leucichthys* were expanded to estimate total harvests for surveyed communities. Harvest for whitefish, northern pike, and sheefish was expanded because fishing for these species often coincides with salmon fishing, so the survey design, which is structured around salmon harvest levels, should also reasonably account for the harvest of any species caught while salmon fishing. The expanded harvests may be imprecise because the stratification system used for the expansion is based on a household’s historical salmon harvests. 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). The reported harvests of other nonsalmon species were not expanded because they fall outside the main intent of this survey and limited information is usually obtained. Even though sockeye is a salmon species, it was added with the nonsalmon harvest survey question to minimize required changes to the subsistence survey database. Sockeye salmon are caught infrequently in the Yukon River drainage, but in recent years fishers have increasingly reported catches of sockeye salmon. Unlike harvest of the other salmon species, the sockeye harvest was not expanded to estimate the harvest of households that were not surveyed. Reported sockeye salmon harvests were not expanded because these harvests were too low and only limited information was obtained.

In addition to estimating total salmon harvest, the survey also generated an estimate of total salmon use. Estimated use included both salmon harvested and kept by a household (for the household's own use), as well as fish the household received from other subsistence fishers, test fish projects, or from commercial activities.

After the households were interviewed, survey forms were edited. In addition to ensuring legibility and calculating harvest totals, the editing process sought to identify any matters requiring follow-up.

For example, the household may still have been fishing at the time of the interview, rendering a follow-up call necessary to obtain final harvest numbers. During editing, forms from fishing group members or forms of those who shared fish with each other were compared to identify discrepancies. Follow-up calls were made to try to settle discrepancies. Occasionally, fishing group members simply did not agree on numbers for salmon harvest and allocation. In this event, ADF&G made a judgment on how to best represent the fish harvest on the appropriate survey forms.

Fishers occasionally did not know the actual number of fish harvested, instead reporting harvest in alternative terms, such as the number of 5-gallon buckets, Ziploc bags, gunny sacs, or pounds. ADF&G has devised a conversion sheet to estimate fish numbers in these circumstances. A 5-gallon bucket of poke fish, for example, is about 25–30 dried summer chum salmon in seal oil. Any calculations were made when the completed surveys were edited.

CALENDARS

Calendars were distributed to households in surveyed communities in Districts 1–4 and a portion of District 5. Prior to the start of the 2005 salmon fishing season, ADF&G distributed subsistence harvest calendars via mass mailings to Lower Yukon and Upper Yukon Area households. Households were identified based on the updated Yukon Area subsistence survey database. As described above, each identified Yukon Area household was assigned a user group: *Unknown, Do Not Fish, Light, Medium, or Heavy*. In May 2005, calendars were mailed to all households except those in the *Do Not Fish* category. ADF&G has been experimenting with its calendar mailout strategy in recent years due to low response rates and the cost of large mailings. Prior to 2002, every identified Yukon River household received a calendar. In 2002, a more selective strategy was tried, with calendars mailed only to those households who had returned a calendar at least once in the last ten years (Brase and Hamner 2003). This attempt resulted in a higher return rate and reduced expense, but it missed a substantial number of current fishing households. In 2003, ADF&G again sent calendars to all households identified in the subsistence survey database (Busher and Hamazaki 2005). Once again the calendar return rate was low and the mailing cost was high. Beginning in 2004 and continuing in 2005, calendars were mailed to all identified subsistence salmon fishing households and to households with unknown subsistence salmon fishing habits. As always, extra calendars were also made available upon request.

Data from the returned calendars are not calculated directly into the Yukon Area harvest estimate, but the data does corroborate survey data. Calendars were occasionally used as the primary source of harvest data when contact was not made with a selected household. Calendars often included harvest from multiple households that fish together, so reported harvest may represent the efforts of multiple households. Every effort was made to contact the head of household to verify harvest information when using the calendars. Harvest information from

calendars returned before or during the subsistence survey was used to help fishers remember their harvest during postseason surveys. Calendars provided space for fishermen to record their daily salmon harvest by species. The timing of subsistence harvests by species can be compared to the timing of the salmon run passing through an area. Calendars also provided data for assigning households to the various harvest strata in the *families* database. This was particularly crucial for households that were not selected for interviews.

In an effort to increase the number of calendars returned during village surveys, posters were sent to village post offices to remind fishers to have their harvest calendars available for the surveyors. Additionally, survey schedules were broadcast over local radio stations before the surveyors' arrival. Everyone who returned a calendar became eligible for two \$100 lottery prizes.

PERMITS

Where the Yukon River drainage is accessible by the Alaska Highway road system, households must obtain subsistence or personal use fishing permits. Permits were issued for a portion of District 5 and all of District 6 (Tanana River). Permits were issued from department area offices in Fairbanks, Delta Junction, and Tok. In addition, permit applications for the current season were mailed to all users who returned their permits from the previous season. Subsistence permit applications sent outside Fairbanks included a letter explaining how to apply by mail, a postage paid return envelope, and a schedule of when a department representative would visit their community. In 2005, permit issuing trips were conducted in the communities of Central, Circle, Delta Junction, Dot Lake, Eagle, Manley, Minto, Nenana, Northway, Rampart, Tanacross, and Tok (Figure 1).

Permit holders were required to keep a record of their daily fish harvest on the permit and return the permit to ADF&G within 10 days of the expiration date. Households with expired permits that had not reported their harvest were mailed up to 2 reminder letters, 2 weeks apart. Telephone contact was attempted with households that did not respond to the reminder letters. Harvests were tabulated postseason for all permit holders who returned their permit, returned a completed reminder letter, or verbally reported their harvest information. These results were not expanded for users who did not return their permits.

STATISTICAL METHODS

In the postseason survey, classical stratified random sampling methods (Cochran 1977) were used to estimate the average and total number of fish caught by each of the five user groups in each surveyed Yukon Area community.

Denote that:

N_{kj} = number of households in j th ($j = 1 \dots 5$) user group of the k th community;

n_{kj} = number of sample households in the j th user group of the k th community; and

y_{kji} = response of i th sample household ($i = 1 \dots n_{kj}$) in the j th user group of the k th community.

Mean response of the j th user group of the k th community (\bar{y}_{kj}) was

$$\bar{y}_{kj} = \frac{\sum_{i=1}^{n_{kj}} y_{kji}}{n_{kj}} \quad (1)$$

and its standard error (SE_{kj}) was

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

The estimate of total responses of the k th community (\hat{T}_k) was

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

and its 95% confidence interval (95%CI_k) was

$$95\% \text{CI}_k = 1.96 \cdot \sqrt{\hat{V}(T_k)} \quad \text{where } \hat{V}(T_k) = \sum_{j=1}^5 N_{kj}^2 \left(\frac{N_{kj} - n_{kj}}{N_{kj}} \right) \left(\frac{s_{kj}^2}{n_{kj}} \right). \quad (4)$$

Because the estimates of the responses in each community were independent from each other, the estimate of survey wide total (\hat{T}) was

$$\hat{T} = \sum_{k=1} \hat{T}_k \quad (5)$$

and its 95% confidence interval (95%CI) was

$$95\% \text{CI} = 1.96 \cdot \sqrt{\hat{V}(T)} \quad \text{where } \hat{V}(T) = \sum_{k=1} \hat{V}(T_k). \quad (6)$$

RESULTS

OVERALL ESTIMATION OF HARVEST

Based on the 2005 postseason surveys, returned permits (subsistence and personal use), and salmon made available from test fish projects, an estimated 1,479 households harvested an estimated 53,547 Chinook, 93,411 summer chum, 91,667 fall chum, and 27,357 coho salmon in the Yukon Area (Table 1).

Test fish projects provided 2,308 Chinook, 3,379 summer chum, 3,441 fall chum, and 580 coho salmon to households for subsistence use (Table 1). The gear types used for subsistence and personal use salmon fishing throughout the Yukon Area were set gillnets (54%), drift gillnets (38%), and fish wheels (8%; Table 1).

Commercial fishers retained a total of 84 Chinook, 1,763 summer chum, 246 fall chum, 6 coho, and 10 pink salmon for subsistence use in the surveyed communities. The numbers given here are actual harvest numbers (with no expansion) and were included in the Yukon Area estimated subsistence harvest totals (Table 1).

Approximately 143 surveyed households and 91 permitted households reported feeding subsistence caught salmon to an estimated 5,972 dogs (Tables 2 and 3, Appendix B10). An estimated 80,989 salmon were retained for dog food (from both surveyed and permitted households) throughout the Yukon Area (Tables 3 and 4). In the surveyed communities, 667 summer chum, 211 fall chum, and 5 coho salmon were caught during commercial openers but retained for subsistence use as dog food (Table 5). In the permit community of Nenana and the Fairbanks Area of District 6, however, an estimated 10,467 fall chum and coho salmon were caught and not sold during the commercial roe fishery and were most likely retained by the fisher for subsistence use, most likely for dog food. These returned fish are presented in Table 1 as “Commercial Related” for District 6.

A total of 1,139 salmon (less than 1% of the total salmon harvested) were reported lost for consumption in the surveyed communities (Appendix A12). These losses included 208 Chinook, 549 summer chum, 273 fall chum, 70 coho, and 39 pink salmon. In addition, 590 salmon were lost for human consumption but were suitable for dog food and included 21 Chinook, 405 summer chum, 124 fall chum, and 40 coho salmon.

POSTSEASON SUBSISTENCE SURVEYS

Postseason surveys were conducted with 1,022 households (86% of total households selected; Table 6). Of the 2,231 total households identified in the survey area, an estimated 1,271 households (57%) participated in the 2005 subsistence fishery (Table 7). The total population of the surveyed communities was estimated at 8,499 people (Table 8). Approximately 42,118 Chinook, 86,477 summer chum, 44,680 fall chum, and 6,983 coho salmon were harvested in the surveyed villages (Table 9). Harvest by location is presented in Tables 13–16; fishers from some communities may fish in multiple districts or subdistricts. Households reported being given 4,781 Chinook, 7,104 summer chum, 3,992 fall chum, and 478 coho salmon from subsistence fishers (Appendix A9). Households also reported being given 80 Chinook, 6,468 summer chum, and 90 coho salmon from commercial fishers (Appendix A10). In 2005, seven communities received a total of 9,708 salmon from test fish projects (Appendix A11). Of the salmon harvested and/or given away to households, approximately 38,067 Chinook, 78,276 summer chum, 42,579 fall chum, and 6,405 coho salmon were used for subsistence purposes (Table 10). This estimate includes salmon used by fishing and non-fishing households in the surveyed communities, but the estimate does not include fish distributed to households outside the survey area.

The combined total harvest of pink salmon, whitefish, northern pike and sheefish in the Yukon Area was estimated to be 95,557 (Table 11). The pink salmon harvest was estimated to be 3,132 fish, of which approximately 80% were harvested by communities in the Coastal Districts. The reported harvest of other miscellaneous fish species, not estimated, in surveyed communities totaled 309,690 fish (Table 12). Blackfish *Dallia pectoralis* represent 65% of the nonsalmon reported harvest (estimated and non-estimated) and are primarily taken in the Lower Yukon Area (Tables 11 and 12; Appendix B11). The reported harvest of sockeye salmon was 648 (Table 12).

An estimated 4,188 dogs live in the surveyed Yukon River communities (Table 2). Although approximately 1,452 Yukon Area surveyed households own dogs, only about 143 households (10%) feed whole fish to dogs. Surveyed households indicated that they fed their dogs approximately 13,797 summer chum, 28,532 fall chum and 3,165 coho salmon from subsistence

harvests and 667 summer chum, 211 fall chum, and 5 coho salmon from commercial harvests (Tables 4 and 5).

The percent of households stating that they met half or less than their needs was 30% for Chinook, 29% for summer chum, 38% for fall chum, and 46% for coho salmon. The percent of households stating that they met greater than three quarters of their needs was 64% for Chinook, 64% for summer chum, 58% for fall chum, and 50% for coho salmon (Table 17). Not every household responded for each species, so the number of respondents varies by species. Far more households (749), for example, fished for Chinook salmon and commented on Chinook salmon success than for coho salmon (226). The number of all responses in 2005 was 14% higher than in 2004.

Survey information includes nine additional households not pre-selected for the survey. These surveys were conducted in Alakanuk (1), Holy Cross (2), Hooper Bay (2), Kaltag (3) and Ruby (1).

CALENDARS

In May 2005, a total of 1,395 calendars, 853 Lower Yukon and 542 Upper Yukon, were mailed. Additional calendars were mailed throughout the season in response to individual requests. In 2005, fishers returned a total of 326 subsistence harvest calendars (approximately 23% of total issued). A total of 279 calendars (86%) reported salmon harvest. The remaining households that returned harvest calendars in 2005 either indicated that they “did not fish” this season (10%) or the calendars were returned unused (4%). Reported harvest on calendars was 19,645 Chinook, 31,375 summer chum, 26,619 fall chum, 2,639 coho, and 935 pink salmon (Figure 3).

PERMITS

Subsistence

In 2005, 355 subsistence permits were returned, 91% of the total issued (Table 18). A total of 9,400 Chinook, 3,561 summer chum, 40,166 fall chum, 12,467 coho salmon, 3,587 whitefish, 152 sheefish, 71 burbot *Lota lota*, 639 pike, 291 suckers *Catostomus catostomus*, and 797 grayling *Thymallus arcticus* were reported by subsistence permit holders in 2005 (Tables 18 and 19). A total of 218 households reported participating in salmon and nonsalmon subsistence fisheries (Table 3). The gear types reported used were set gillnets (83%) and fish wheels (17%; Table 1). The largest percentage of salmon permits were issued for the Yukon River area near Circle and Eagle (23%), and the largest percentage of nonsalmon permits were pike permits issued for the Tolovana River drainage (20%; Table 18). From the permits, 91 households indicated that they fed salmon to dogs (Table 3). These households reported retaining 35,495 whole salmon for dog food. Harvest timing data by day and species are also gathered from completed permits for portions of Districts 5 and all of District 6. In District 5, a combination of data collection methods (calendars, permits, and surveys) provides a more complete picture of the area’s harvest. The 2005 permit harvest information is based on permits returned by June 1, 2006.

Personal Use

Personal use permits for salmon and nonsalmon species are only issued for the Fairbanks Nonsubsistence Area (Figure 4). In 2005, 69 personal use permits were returned, 95% of the total issued (Table 18). Of these, 32 permits reported fishing, 27 for salmon and 5 for nonsalmon

species. Personal use permit holders reported harvesting 138 Chinook, 152 summer chum, 133 fall chum, 107 coho salmon, 84 whitefish, 3 sheefish, 7 burbot, 2 pike, 403 suckers, and 3 grayling (Tables 18 and 19). Of the 27 households that fished for salmon, 26 used set gillnets and 1 used a fish wheel (Table 1). According to current interpretations of state regulations, fish caught under personal use guidelines cannot be fed to dogs (White 1991). Historically, the personal use salmon fishery was conducted as a subsistence fishery prior to the designation as a non-subsistence area. Historical harvest information for the personal use salmon fishery is summarized in Appendix B5. Since Appendix B.5 only includes salmon harvest, the number of returned permits on this appendix does not match the number of returned permits on Table 18, which also includes harvest of nonsalmon species.

DISCUSSION

The estimated 2005 Yukon Area subsistence salmon harvest (265,452 for all salmon species; Table 1) was an overall increase of approximately 142% above the recent 5-year average (187,577; 2000–2004, Appendix B1-B4): Chinook (+7%), summer chum (+17%), fall chum (136%), and coho salmon (+40%). The increase in fall chum salmon reflects the weak runs that are included in the 2000-2004 average. To put this into perspective, the estimated 2005 fall chum salmon harvest was still 10% below the 1995-1999 average.

Households in Districts 4 and 5 harvested the most Chinook salmon (59%), households in Districts 1 and 2 harvested the most summer chum salmon (56%), households in District 5 harvested the most fall chum salmon (56%), and households in District 6 harvested the most coho salmon (72%, Table 1).

In 2005, the Yukon River was ice-free on May 17, five days earlier than the 1979–2004 historic average of May 22 (JTC 2006). The first subsistence catch of Chinook salmon was reported in Aproka Slough near Emmonak on May 25, with the first subsistence catch of chum salmon reported on June 1. ADF&G's test fishing project recorded its first Chinook salmon on June 2. Early in the season, high water characterized the lower river.

ADF&G's outlook for the 2005 Chinook salmon run was to be below average and not as strong as the 2003 and 2004 runs (Bue and Lingnau 2005). Managers anticipated that the Chinook salmon run would provide for escapement, subsistence harvest, and some commercial harvest. The summer chum salmon run was expected to be average to below average. Managers were optimistic, however, due to the improved runs in 2003 and 2004 that productivity was rebounding. The 2005 Chinook salmon run ended up coming in stronger than anticipated, but it was still weaker than average. The 2005 summer chum salmon run came in strong with the Pilot Station passage estimate of 2,439,616 summer chum salmon well above the 1995 and 1997–2004 average of 1,253,856 fish (JTC 2007). The survey indicated that the Chinook salmon subsistence harvest was average to slightly above average and 7% above the recent 5-year average and 5% above the recent 10-year average (Appendix B1; Figure 5). The 2005 summer chum salmon subsistence harvest was 17% above the recent 5-year average and 1% below the recent 10-year average (Appendix B2; Figure 6).

July 16 marks the date fishery management changes from summer to fall management and is based historically on the average date fall chum salmon outnumber summer chum salmon in the Lower Yukon Area in District 1. Subsistence fishing efforts are usually light during the

transition period from summer to fall season, when relatively few chum salmon (both summer and fall stocks) are moving into the river. Some subsistence fishers are able to recognize and report the changes in proportion of the two runs in their catches based on size, skin color, and flesh color. The late arriving summer chum salmon are smaller in size, skin more watermarked, and flesh is pale. Fall chum salmon are difficult to manage because of their smaller run size and entry pattern. After entering the river, Chinook and summer chum salmon runs typically build to a peak and then subside, whereas fall chum salmon enter the river in pulses, having one to five distinct peaks throughout the run. This unpredictable entry pattern makes it hard to assess the run or compare runs from year to year. The fall chum salmon run overlaps with the later-arriving coho salmon run, and the two species are of similar size, which reduces the ability to manage by gear type, as is possible during the Chinook and summer chum salmon season.

The 2005 preseason outlook for fall chum salmon was for an average to above average run based on evident improvement in the production observed in 2003 and 2004 runs (Bue and Lingnau 2005). Yet, with a return of approximately 2 million fish, the run was the largest on record (reconstructed back to 1974). The coho salmon run was anticipated to be average to above average (Bue and Lingnau 2005). The Pilot Station Sonar passage estimate of 175,000 fish was the third highest since 1995, only behind 2003 and 2004, thus indicating that coho salmon stocks are continuing their trend of above average returns (JTC 2006). This survey indicated that the subsistence harvest on the record for 2005 fall chum salmon run was 236% above the 2000–2004 average but still 10% below the 1995–1999 average (Appendix B3; Figure 7). The coho salmon subsistence harvest was above the recent 5-year average (40%) and the 1995–1999 average (12%) (Appendix B4; Figure 8).

There are several methods for evaluating salmon run and whether fishers are meeting their subsistence needs. First, the US Fish and Wildlife (USFWS) complete weekly inseason surveys in selected villages to help managers understand how the subsistence season is unfolding. In 2005, these surveys suggested subsistence needs were being met by surveyed fishers in the villages of Emmonak, Holy Cross, Nulato, Galena, and Circle (Gerken 2006). In addition, YR DFA schedules weekly inseason teleconferences to provide fishers in the Yukon River Area an opportunity to discuss the ongoing run with fisheries managers. And managers have routinely maintained continual communications with fishers to obtain feedback on fishing success and concerns.

These methods give inseason insight into the runs, however, they do not provide a historical perspective. One method for assessing the relative success of Yukon Area fishers is to compare the annual drainage-wide estimated subsistence harvest to historic averages. In January 2001, the Alaska Board of Fisheries (BOF) used ADF&G's harvest data to adjust the "amount necessary for subsistence" (ANS), a measure which attempts to quantify the amount of salmon reasonably necessary for subsistence use in the Yukon Area. The BOF established maximum and minimum ANS harvest ranges based on the total historic estimated harvest for each species by all districts combined for the years from 1990 to 1999. The ANS levels represent the needs of all subsistence users drainage-wide and do not necessarily reflect the needs of specific individuals, communities, or sections of the drainage. The ANS will require periodic adjustments since the ANS cannot account for trends over time, such as changes in fishing patterns due to population shifts or changes in the fisheries. The ANS levels 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 5–8). When determining the ANS for fall chum and coho salmon, the fall

seasons for the years 1993 and 1998 were excluded due to fishing restrictions and closures implemented to meet escapement objectives in those years. In 2005, the estimated subsistence harvest of all salmon species were within the range of ANS. The fall chum salmon subsistence harvest barely met the lower ANS boundary, despite the record fall chum salmon run of 2005.

While comparing the annual drainage-wide harvest with ANS will give insight into the runs and relative success of all fishers, ANS levels are not specific for harvest area or sections of the drainage, which is the goal of this postseason survey project. The postseason survey provides a method for assessing the success of Yukon Area fishers in surveyed communities, as households were asked whether their subsistence salmon needs were met (Question 21, Figure 2). Unlike the broader ANS levels, the survey question provides data on a village-by-village basis. This question has evolved over the years of the survey. Beginning in 1992, ADF&G asked whether subsistence salmon needs were met (yes/no) and quality of run (very good, average, very poor) by species. In an attempt to capture more detailed and more representative data, question 21 was edited in 2003. The (yes/no) “needs met” was replaced with a percent needs met, and households were asked the percent success for each salmon species, rather than for all species combined. Breaking down the data by species is helpful because out of choice or opportunity fishers may fish for one species and not another, and fishers may have had differing success for different species. For example, the water levels may have been high during the Chinook salmon run hindering a household’s fishing success, while they were later able to successfully harvest fall chum salmon. When question 21 was edited in 2003, the (yes/no) “needs met” and “quality of run” questions were combined. A general assumption was made that the “needs met” and “run assessment” were linked, in that a higher percent needs met suggests that the run was sufficient to provide for most subsistence needs. However, even in years with relatively good escapement, approximately 20-30% of households state that their needs are not met (Brase and Hamner 2003). The changes to question 21 in 2003 rendered the data from this question not comparable with the historical data displayed in Appendix B12. The historical data prior to 2003 is displayed in Appendix B12, while the data for 2003 through 2005 is in Appendix B13.

Question 21 is a qualitative question, as its interpretation may vary from surveyor to surveyor and respondents must subjectively assign a percent to their success. In particular, it is hard to quantify the needs of people who don’t fish. Respondents must self-identify whether they have a need for salmon and to what extent that need was met. Data from the question have proved useful. First, the data provide a postseason “report card” on the season’s run strength, as ideally a strong run would be reflected in a strong subsistence harvest, with a higher percent needs met. Second, the data are unique in breaking down percent needs met by species and community (Table 17), and thus can provide a general indicator of how the fishing season went in specific communities.

Identifying the harvest and success of individual households is often difficult in a subsistence economy because harvest is frequently shared and accounted for on the level of extended families or fishing groups rather than on the level of individual households. One basic reality of subsistence economies is that the majority of households use or would like to use salmon, even if the household did not fish. Therefore even if a household neither harvested nor used salmon that year, the household might still have a need that was not met (C. Brown, Subsistence Division Resource Specialist, ADF&G, Fairbanks; personal communication). Common examples include elders who no longer fish but still have subsistence needs or households who wanted fish but had boat or motor problems that prevented them from harvesting. People who don’t fish generally

rely on receiving fish from friend, family, and others who fish. Fish is generally given to them throughout the winter, as the need arises. At the time of the survey, it may be hard for people to assess whether their needs are met because they haven't received their fish yet. Nobody knows yet whether there will be enough fish. Families and fishing groups often have a difficult time quantifying how fish is divided amongst different households.

Upstream and downstream communities on the mainstem Yukon River generally reported a similar level of success (Table 17). Lower success levels, however, were reported in the Coastal District, District 1, the upper Koyukuk River communities, and other tributary communities, such as Venetie and Birch Creek. The overall success for Chinook, summer chum, and fall chum salmon species was similar, with coho salmon success levels slightly lower. Community success rates do not account for where individual households fished. For example, in a tributary community some fishers may travel to the mainstem Yukon River to fish, yet their success data is not differentiated from households who fish on the tributary.

Many factors influenced whether subsistence needs were met, including gasoline prices, water and debris levels, and forest fires. In 2005, gasoline prices significantly increased in Yukon Area communities not on the road system from 2004 prices ranging from 4% higher in Tanana and Kotlik to 44% higher in Anvik (DCA 2005). According to some comments received during the survey, gasoline prices did negatively impact fishing efforts. Some households reported limiting their number of trips to fish camps because of fuel costs. For the second year in a row, severe fire conditions prevailed in Interior Alaska. Smoke conditions may have limited river travel to traditional fishing areas. Smoke especially hampered fishing effort in tributary villages such as Venetie, where many residents typically travel to the mainstem Yukon to fish for Chinook salmon. Some residents took advantage of work opportunities on fire crews for much of the summer and did not fish (JTC 2006).

If the household did not meet its subsistence needs, then surveyors inquired if there was a reason why fishing was poor. ADF&G is especially interested in knowing if there was a fishery-related issue, such as run strength or management actions, that prevented households from meeting their needs. The primary fishery-related reason given in 2005 was that the Board of Fisheries (BOF) windows schedule hindered fishing efforts, especially by creating conflicts with work schedules and weather conditions. In addition to fishery-related reasons, other reasons offered included bad drying weather, water conditions (e.g. water levels, debris), equipment failure, lack of time, work schedules, and health reasons. Often households did not meet their needs because they did not fish and no other household was able to provide them with fish. Common reasons for not fishing included being busy, work schedule, lack of gear or equipment failure (e.g. no boat or motor), being elderly, and health reasons.

Qualitative comments on the fishery were collected. Comments covered topics such as the BOF windows schedule, ADF&G's management decisions, commercial fishing, run timing, weather and water-related fishing conditions, and drift gillnetting in Subdistricts 4-B and 4-C. Due to the qualitative nature of the comments, their primary purpose is to provide managers insights into the fishery.

In 2001 the BOF implemented a new subsistence schedule on the Yukon River. This schedule was a response to poor runs and was intended as a conservation measure. The schedule laid out "windows" of allowed fishing time for each district. During these windows, salmon may migrate upriver with reduced exploitation. The schedule intended to reduce harvest early in the run,

when there is a much higher level of uncertainty in projecting the total run abundance. Another goal is to distribute the harvest throughout the run, thereby reducing the impact on any particular component of the run, and to spread subsistence harvest opportunities among users along the river. In 2003, the BOF clarified the windows schedule by allowing ADF&G to relax the subsistence schedule in districts where there was not anticipated to be any commercial fishing. Market interests have been lost in many areas of the middle Yukon due to the cost of getting product out of the remote communities.

The 2005 fishing season began with the windows schedule being implemented sequentially on pre-determined dates, based on when salmon historically begin to arrive in a district or sub-district. In District 1, for example, the windows schedule was implemented on May 30. Once the commercial season opened, the windows schedule reverted to the pre-2001 BOF subsistence fishing schedule, which allowed subsistence fishing to occur seven days per week, 24 hours per day except 18 hours prior to, during, and 12 hours after commercial openings in Districts 1, 2, and 3. The schedule was in place for approximately 3 weeks, at which point the schedule was liberalized because assessments showed the Chinook and summer chum salmon runs to be sufficient for escapement and additional harvestable surplus. This liberalized schedule was carried over to the fall season because the strong summer chum salmon run provided confidence in the preseason projection that the fall chum salmon run would be adequate for escapement and subsistence needs. Subsistence salmon fishing in much of the drainage was open 7 days per week during the fall season.

In 2005, surveyors received many comments, mostly unfavorable, about the windows schedule. Negative comments were primarily received from the Lower Yukon, but scattered negative comments were received from throughout the Yukon Area. Comments included the “windows schedule is too restrictive,” the windows schedule is a hardship to people with regular work hours, and there is more competition for fishing sites, since everyone in a village has to fish on the same schedule. Some fishers wanted to change the specific hours scheduled for their district. Others stated that fishing needs to be open on weekends, so that people who work can fish. In general, fishers point out that by restricting fishing times the windows schedule reduces the ability of fishers to adapt to circumstances such as poor weather, water levels, debris in the water, work schedules, etcetera. For some fishers, the windows schedule prevents them from catching all their fish at once and stretches out their season, an important consideration when gasoline costs and work schedules limit the number of possible trips to a fishcamp. In 2005, some fishers commented that the timings of openings were off, and that fish were not running during the open fishing periods. Many fishers seemed upset and uncertain about why the windows schedule is in place. The surveyors consistently heard comments to the effect that fishers only catch what they need to eat for subsistence and then they stop fishing. Fishers did not understand why ADF&G regulated their subsistence catch.

Households were asked to estimate the number of “lost” salmon, by species. “Lost” salmon were harvested but ended up being unusable for either human or dog consumption. The purpose of this question was to identify salmon harvest that might not usually be reported, as these additional harvest numbers are needed to help meet the survey’s goal of estimating the total number of fish killed. When reporting harvest, many fishers think about how many fish they have put away for the winter, so fishers might not report a batch of fish spoiled by weather while drying. “Lost” fish were not included in the household’s salmon use numbers provided in Table 10, since these fish were not usable. Salmon may become unusable for human

consumption but may still be suitable for dog food. Since feeding salmon to dogs is a subsistence use, these fish were not counted as lost and are included in the household's use numbers. The survey question aims at collecting numbers of lost fish and does not specifically ask the reason why fish were lost. Because of this, most fish were lost for "unknown" causes. But when noted, the most common reasons cited included spoilage from weather or flies, predation (e.g. bears and birds), and sick fish or fish that appeared to suffer from *Ichthyophonus hoferi* (Appendix A12).

Commercially caught fish that are not sold are occasionally kept for subsistence use, and the survey attempts to account for these fish in the total subsistence harvest. Commonly these fish were kept as an "eating fish" for that night's dinner. In 2005, the vast majority of commercially-caught salmon retained by the fishers for subsistence use came from the District 6 commercial fishery, which primarily targets roe. In the District 6 fishery, the fish retained by the fisher are required to be documented on commercial harvest tickets as "not sold" and are presented in Table 1 as "Commercial Related". The fish sold during the District 6 roe fishery, regulations requires that the salmon be processed at an approved processing facility. In the case of this roe fishery, the flesh was not marketable due to low value, so following extraction of the roe, many of the female carcasses were returned to fishers for subsistence use, reportedly for dog food. Many of these fishers would have fished for dog food anyway, so if there had not been a commercial roe fishery, then the total kill likely would have been higher, since the required fish would have been caught during subsistence openings. ADF&G has no means of knowing precisely how many of the fish returned from the District 6 commercial fishery were in fact used for subsistence. It is possible that some carcasses were simply discarded. To avoid double counting of salmon, efforts were made not to include this commercial harvest, previously documented on fish tickets, with the subsistence harvest reported on Table 1. An unknown commercial harvest may still be represented in the reported subsistence permit information for the community of Nenana.

In 2005 there was a 6% decrease in the number of dogs, compared to the 2000–2004 average (Appendix B10). The estimated amount of all species of whole salmon fed to dogs was 44% higher than the recent 5-year average. In surveyed communities, the estimated number of fish fed to dog was higher than the 5-year average for fall chum (+36%) and lower than the 5-year average for summer chum (-8%) and coho salmon (-36%). Chinook salmon are generally not fed to dogs, except for fish that have scarring, are late in the run and thus not suitable for human consumption, or perhaps small "jacks."

Appendices B1–B4 document the historical annual subsistence salmon harvest from 1995 to 2005 by species and by community of residence. Chinook and coho salmon subsistence harvests have remained relatively stable over the years, while the harvests of summer chum salmon has stabilized after a sharp decline in the 1998 season, and the 2005 harvest was 17% above the 2000–2004 average. Beginning in 2003, fall chum salmon returns showed improvement, and in 2005 the harvest was the highest since 1996 (136% above 2000–2004 average). Appendices B5–B7 document the historical subsistence and personal use harvest from permits, by species and by permit area.

Pink salmon harvest information has been collected in surveyed communities in the Yukon Area since 1994. Although pink salmon are often locally abundant in the Lower Yukon Area, they are not typically sought after and harvests remain low. Pink salmon exhibit a low (odd year) and high (even year) abundance 2-year cycle (ADF&G 2002), and in 2005, the Pilot Station Sonar

estimated 37,932 pink salmon (JTC 2007). This number should only be used as an index, since the sonar project does not attempt to estimate the passage of all pink salmon. The 2005 estimated harvest was 327% above the odd-year average for 1995–2004 and 19% below the odd-year and even-year averages for 1995–2004 (Appendix B9).

Harvest of many nonsalmon species occurs during the late fall and winter, often under the ice. Because the subsistence harvest surveys are conducted in the early fall, the nonsalmon harvests often include fish caught the previous year. For example, Arctic Lamprey *Lampetra camtschatica* is primarily harvested in November and December in Districts 2 and 3 and in the lower portion of District 4. Consequently, the 2004 subsistence lamprey harvest was documented during the 2005 survey.

ACKNOWLEDGEMENTS

Funding for the Yukon Area Subsistence Survey project was partially provided by U.S./Canada Yukon River Grant No. NA03NMF4380185. YRDFA funded the Community Subsistence Assistants program.

The authors would like to thank the 2005 Yukon River surveyors Diane Calamar Okonek and Lynden C. Grothe. Without their hard work and dedication this report would not be possible. We would also like to thank Laurie Boeck for her assistance in the issuance and retrieval of subsistence and personal use permits, as well as the data entry and editing of the same data. The authors would also like to acknowledge Seth Darr and Christopher Lawn for their support with the subsistence salmon survey database. The authors would like to thank Publications Technicians Katie Sechrist and Jamie Stafford for their support and expertise. The authors gratefully acknowledge Pat Costello for producing the 2005 harvest survey calendars, and her expertise in editing and reviewing documents related to this project. The authors also acknowledge Dan Bergstrom, Fred Bue, Bonnie Borba, Lara Dehn, and Caroline Brown for providing constructive comments during reviews of this report.

Thanks to Darcy King and YRDFA staff for coordinating of the Subsistence Assistant program. The authors would like to thank all of the individuals hired by YRDFA to assist ADF&G's survey crew. These individuals were Denis Shelden, Alakanuk; Pollock Simon, Sr., Alatna & Allakaket; Willie Nicholi, Anvik; Jake Holton, Bettles; Carol Thomas, Chalkyitsik; Dora Moore, Emmonak; Paul Herbert, Fort Yukon; David Huntington, Harley Keller, Tanya Korta, Galena; Brenda Deacon, Grayling; Rita Paul, Holy Cross; Aloysius B. Gump, Hooper Bay; Jack Ambrose, Hughes; Rosie Simon, Huslia; Wayne Nickoli, Kaltag; Benny Aparezuk, Jerald Fancyboy, Kotlik; Marilyn Roberts, Koyukuk; Frances Evan, Jack George, Marshall; Camilla "Cami" Beans, Mountain Village; Mary Pitka, Nulato; Crystal Fancyboy, Lyle Polty, Pilot Station; Agnes George, Pitka's Point; Dee Olin, Ruby; Simeon Housler, Russian Mission; Felix Walker, Scammon Bay; Harold Arrow, Shageluk; Stanley Charlie, Nunam Iqua; Agnes George, St Mary's; Diane George, Steven's Village; Blanche Edwin, Tanana; Grafton Biederman, Venetie.

REFERENCES CITED

- ADF&G (Alaska Department of Fish and Game). 2002. Annual management report Yukon Area, 2000. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A02-29, Anchorage.
- Andersen, D. B. 1992. The use of dog teams and the use of subsistence-caught fish for feeding sled dogs in the Yukon River drainage. Alaska Department of Fish and Game, Subsistence Division, Technical Paper No. 210, Juneau.
- Borba, B. M., and H. H. Hamner. 1998. Subsistence and personal use salmon harvest estimates, Yukon Area, 1997. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A98-23, Anchorage.
- Brase, A. L. J., and H. H. Hamner. 2003. Subsistence and personal use salmon harvests in the Alaska portion of the Yukon River, 2002. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A03-13, Anchorage.
- Bue, F. J., and T. L. Lingnau. 2005. 2005 Yukon Area subsistence, personal use, and commercial salmon fisheries outlook and management strategies. Alaska Department of Fish and Game, Division of Commercial Fisheries, Fishery Management Report No. 05-31, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/fds05-31.pdf>
- Busher, W. H., and T. Hamazaki. 2005. Subsistence and personal use salmon harvests in the Alaska portion of the Yukon River, 2003. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A04-33, Anchorage.
- Cochran, W. G. 1977. Sampling techniques, third edition. John Wiley and Sons, New York.
- DCA (Division of Community Advocacy) Report to the Commissioner. 2005. Current community conditions: fuel prices across Alaska. Research and Analysis Section, Division of Community Advocacy, Department of Commerce, Community, and Economic Development. http://www.commerce.state.ak.us/dca/pub/Community_Fuel_Report.pdf
- Gerken, J. D. 2006. Yukon River inseason salmon harvest interviews, 2005. U.S. Fish and Wildlife Service, Fairbanks Fish and Wildlife Field Office. Alaska Fisheries Data Series Number 2006-11, Fairbanks.
- JTC (Joint Technical Committee of the Yukon River US/Canada Panel). 2006. Yukon River salmon 2005 season summary and 2006 season outlook. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 3A06-03, Anchorage.
- JTC (Joint Technical Committee of the Yukon River US/Canada Panel). 2007. Yukon River salmon 2006 season summary and 2007 season outlook. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Report Series 3A07-01, Anchorage.
- Kerkvliet, C. M. 1986. 1986 Hooper Bay salmon tagging study. Bering Sea Fishermen's Association, Anchorage, Alaska.
- White, S. M. 1/3/1991. Use of subsistence and personal use salmon as dog food. Memorandum, to Honorable Don W. Collinsworth, Commissioner of Alaska Department of Fish and Game.
- Williams, J. G., and N. Fried. 2005. Media Release 06-30: Alaska Department of Labor and Workforce Development Releases State, Borough and Place 2005 Population. Sources: Alaska Department of Labor and Workforce Development, Research and Analysis Section; and the U.S. Census Bureau; <http://almis.labor.state.ak.us/>.

TABLES AND FIGURES

Table 1.—Subsistence and personal use salmon harvest estimates which include commercially related and test fish harvests provided for subsistence use, and related information, Yukon Area, 2005.

Community	Survey Date, Permit Area ^a	Number of Fishing Households ^b	Number of Dogs ^c	Estimated Harvest				Primary Gear Used ^d		
				Chinook	Chum	Chum	Coho	Set Gillnet	Drift Gillnet	Fish Wheels
Hooper Bay	11/14-18	118	217	157	9,771	1	0	44	1	0
Scammon Bay	9/10-11	56	158	691	4,586	69	279	22	1	0
Coastal District Total		174	375	848	14,357	70	279	66	2	0
Nunam Iqua ^e	9/8-9	22	65	338	2,794	310	241	15	1	0
Alakanuk ^f	9/8-10	83	199	860	5,687	627	322	16	22	0
Emmonak ^f	9/6-8	97	158	1,730	12,594	1,436	191	7	44	0
Kotlik ^f	10/4-6	50	60	2,130	6,620	516	222	16	7	0
District 1 Subtotal		252	482	5,058	27,695	2,889	976	54	74	0
Mountain Village ^f	9/12-14	105	157	2,383	8,861	1,290	246	9	41	0
Pitkas Point	9/17	18	42	618	1,023	6	30	3	12	0
St. Mary's	9/14-17	91	114	2,693	6,877	490	252	2	42	0
Pilot Station ^f	9/17-19	45	61	1,658	4,333	838	241	5	22	0
Marshall	9/20-22	48	189	1,804	3,183	633	341	3	20	0
District 2 Subtotal		307	563	9,156	24,277	3,257	1,110	22	137	0
Russian Mission	9/17-19	42	90	1,894	925	667	133	0	16	0
Holy Cross	9/20-22	39	70	2,817	760	582	84	8	16	0
Shageluk	9/25-26	15	54	420	4,081	55	0	8	4	0
District 3 Subtotal		96	214	5,131	5,766	1,304	217	16	36	0
Lower Yukon River Total		655	1,259	19,345	57,738	7,450	2,303	92	247	0
Anvik	9/23-24	18	81	1,206	529	497	406	10	6	0
Grayling	9/19-20	37	65	1,878	783	1,009	234	1	15	0
Kaltag ^f	10/4-5	44	51	3,367	680	1,089	307	1	14	0
Nulato	10/5-6	51	163	2,749	634	421	60	4	16	0
Koyukuk	10/4	11	51	396	537	803	37	1	7	0
Galena	10/1-10/4	75	277	2,864	1,013	2,695	607	12	14	2
Ruby	10/7-8	22	78	1,193	967	559	361	3	1	2
District 4 Yukon River Subtotal		258	766	13,653	5,143	7,073	2,012	32	73	4
Huslia	10/5-6	18	239	207	2,433	1,614	734	11	0	0
Hughes	10/6-7	8	70	33	2,230	111	20	8	0	0
Allakaket	9/26-27	8	139	68	2,535	557	205	6	0	0
Alatna	9/26-27	1	2	0	5	0	0	1	0	0
Bettles	9/27-28	4	109	3	4	50	0	1	1	0
Koyukuk River Subtotal		39	559	311	7,207	2,332	959	27	1	0
District 4 Subtotal		297	1,325	13,964	12,350	9,405	2,971	59	74	4

-continued-

Table 1.–Page 2 of 3.

Community	Survey Date, Permit Area ^a	Number of Fishing Households ^b	Number of Dogs ^c	Estimated Harvest				Primary Gear Used ^d		
				Chinook	Chum	Chum	Coho	Set Gillnet	Drift Gillnet	Fish Wheels
Tanana	10/12-13	41	566	3,729	4,832	20,545	1,616	17	0	12
Rampart	permits	4	31	411	315	358	10	4	0	0
Fairbanks NSB ^e	permits	64	216	2,584	780	1,682	10	61	0	3
Stevens Village ^h	10/27-28, permits	16	58	1,570	442	246	0	8	0	1
Birch Creek	10/14-16 tele	3	7	131	0	0	0	2	0	0
Beaver	10/25-26	14	25	957	68	179	0	9	0	0
Fort Yukon	10/10-11	53	391	3,591	67	8,088	394	12	0	15
Circle	permits	11	66	1,283	3	918	100	5	0	6
Central	permits	6	7	175	5	36	1	5	0	1
Eagle ^f	permits	32	252	2,566	235	17,356	15	25	0	7
Other District 5 ⁱ	permits	7	49	315	53	117	13	7	0	0
District 5 Yukon River Subtotal		251	1,668	17,312	6,800	49,525	2,159	155	0	45
Venetie	10/24-25	13	139	59	0	1,801	0	6	0	0
Chalkyitsik	10/27-28	5	43	53	0	337	0	4	0	0
Chandalar and Black Rivers Subtotal		18	182	112	0	2,138	0	10	0	0
District 5 Subtotal		269	1,850	17,424	6,800	51,663	2,159	165	0	45
Manley	permits	10	205	289	163	2,985	2,510	8	0	2
Minto	permits	4	163	35	21	600	0	4	0	0
Nenana ^j	permits	16	350	533	1,771	10,594	12,395	5	0	11
Healy	permits	5	96	0	14	2,061	1,601	5	0	0
Fairbanks NSB ^k	permits	36	270	1,109	197	6,824	3,139	35	0	1
Other District 6 ^l	permits	13	91	0	0	15	0	12	0	1
District 6 Tanana River Subtotal ^m		84	1,175	1,966	2,166	23,079	19,645	69	0	15
Upper Yukon River Total		650	4,350	33,354	21,316	84,147	24,775	293	74	64
Survey Village Subtotal		1,271	4,188	42,118	86,477	44,680	6,983	275	323	32
Subsistence Permit Subtotal ⁿ		181	1,796	8,983	3,403	40,166	12,467	150	0	31
Subsistence Test Fish Subtotal ^o		-	-	2,308	3,379	3,441	580	-	-	-
District 6 Commercial Related ^p				0	0	3,247	7,220	-	-	-
Subsistence Harvests Subtotal		1,452	5,984	53,409	93,259	91,534	27,250	425	323	63
Personal Use Permit Subtotals		27	-	138	152	133	107	26	0	1
Alaska, Yukon River Total ^q		1,305	5,609	52,699	79,054	91,597	27,078	385	321	64
Alaska, Yukon Area Total		1,479	5,984	53,547	93,411	91,667	27,357	451	323	64
AK, Yukon Area Percentages of the Total		-	-	20%	35%	34%	10%	54%	38%	8%

^a Data collected by Alaska Department of Fish and Game (ADF&G), Division of Commercial Fisheries. Survey data is expanded for number of fishing households, number of dogs, and harvest. Permit data is unexpanded, and is from all permits received as of June 1, 2006.

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

^c The number of dogs is based on survey information and from permits issued.

^d Primary Fishing Gear is not expanded for households that were not surveyed.

^e Formerly known as Sheldon or Sheldons Point.

^f Test fish have been added to the total fish harvested in a surveyed and permit required communities.

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

-continued-

Table 1.–Page 3 of 3.

- ^h Permit harvest information from Stevens Village residents was used to complement the information obtained by the survey.
- ⁱ "Other District 5" includes residents of Anderson, Manley, Minto, Eagle River, and the Upper Tanana River drainage villages of Northway and Tok who obtained a household permit and fished in a Yukon River permit required area
- ^j Includes 3,247 fall chum and 7,220 coho salmon "not sold" during commercial fishing but kept for subsistence use (commercial related harvest) .
- ^k Fairbanks North Star Borough (FNSB) households that obtained a subsistence and/or personal use permit and indicated they fished in the Tanana River permit required area.
- ^l "Other District 6" includes the Upper Tanana River drainage communities of Delta Junction, Tanacross, Tok, and Northway who obtained a permit and fished in the Tanana River.
- ^m Does not include harvest of coho and chum salmon sold commercially for roe and carcass returned to fishermen for dog food in Subdistrict 6-B.
- ⁿ Subsistence Permit Subtotal does not include Stevens Village.
- ^o Test fish given away for subsistence use.
- ^p District 6 "Commercial Related" included commercially-caught fish retained for subsistence use.
- ^q Does not include Coastal District.

Table 2.—Estimated number of households with dogs, number of households that feed fish to dogs, numbers of dogs, and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.

Community	Total Households	Households Contacted	Number of Households with Dogs		Number of Households that Feed Fish to Dogs		Number of Dogs	
			Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)
Hooper Bay	196	64	131	21	0	0	217	56
Scammon Bay	78	30	59	11	0	0	158	51
Coastal District	274	94	190	24	0	0	375	75
Nunam Iqua	33	23	32	1	0	0	65	9
Alakanuk	123	45	93	16	2	1	199	52
Emmonak	162	78	93	15	8	6	158	29
Kotlik	82	28	44	10	4	2	60	16
District 1	400	174	262	24	14	7	482	62
Mountain Village	135	56	93	17	10	7	157	30
Pitkas Point	24	20	17	2	0	0	42	14
St. Mary's	104	49	76	12	5	6	114	17
Pilot Station	94	52	41	9	0	0	61	13
Marshall	69	30	54	10	9	8	189	41
District 2	426	207	281	25	24	12	563	57
Russian Mission	56	19	28	13	2	0	90	27
Holy Cross	51	28	33	6	2	3	70	29
Shageluk	29	22	17	3	6	3	54	15
District 3	136	69	78	15	10	4	214	42
Anvik	34	30	28	2	5	1	81	6
Grayling	45	15	31	12	2	1	65	27
Kaltag	53	16	28	13	2	0	51	22
Nulato	82	30	58	12	8	8	163	75
Koyukuk	23	18	10	3	2	0	51	6
Galena	150	41	85	21	3	2	277	201
Ruby	59	15	43	12	1	0	78	26
Huslia	68	24	32	12	8	6	239	164
Hughes	22	15	15	3	3	0	70	4
Allakaket	43	16	23	10	5	5	139	51
Alatna	5	4	2	0	0	0	2	0
Bettles	19	13	9	3	0	0	109	72
District 4	603	237	364	36	39	11	1,325	288
Tanana	98	49	70	11	17	5	566	296
Stevens Village	25	14	19	1	1	0	58	6
Birch Creek	8	3	7	2	0	0	7	2
Beaver	29	23	11	3	2	1	25	10
Fort Yukon	150	56	118	15	18	9	391	70
Venetie	56	22	38	12	14	7	139	58
Chalkyitsik	26	18	14	4	4	2	43	23
District 5	392	185	277	22	56	12	1,229	310
Survey Totals	2,231	966	1,452	61	143	22	4,188	440

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, 2005.

Community	Permit Information ^a				Reported Household Information (based on permits issued)					
	Permits ^b		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 Feeding Whole Salmon to Dogs	Number of Whole Salmon Fed to Dogs
	Issued	Returned								
Subsistence Permits										
Central	7	7	100%	6	16	10	5	7	1	0
Circle	24	17	71%	11	67	41	21	66	11	665
Eagle	46	46	100%	32	112	70	33	252	18	7,111
Rampart	6	5	83%	4	13	18	3	31	3	540
Fairbanks (FNSB) ^d	157	144	92%	95	504	305	56	486	17	10,278
Healy	7	7	100%	5	19	17	4	96	3	1,629
Manley	14	13	93%	11	30	25	12	205	7	5,036
Minto	53	48	91%	14	163	98	19	163	9	600
Nenana	29	26	90%	16	96	67	23	350	14	9,635
Stevens Village ^e	6	5	83%	5	22	13	5	13	2	0
Upper Tanana Villages ^f	33	29	88%	17	106	70	24	62	3	1
Other ^g	9	8	89%	2	31	14	7	78	3	0
<i>Subsistence Permit Subtotal</i>	<i>391</i>	<i>355</i>	<i>91%</i>	<i>218</i>	<i>1,179</i>	<i>748</i>	<i>212</i>	<i>1,809</i>	<i>91</i>	<i>35,495</i>
Personal Use Permits										
Fairbanks (FNSB) ^d	69	65	94%	30	188	118	-	-	-	-
Other ^h	4	4	100%	2	12	6	-	-	-	-
<i>Personal Use Permit Subtotal</i>	<i>73</i>	<i>69</i>	<i>95%</i>	<i>32</i>	<i>200</i>	<i>124</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>
Permit Totals	464	424	91%	250	1,379	872	212	1,809	91	35,495

^a Permits returned as of June 1, 2006.

^b Includes 37 households that were "issued" permits for more than one area. Additionally, includes two households that were issued duplicate permits for same area.

^c Includes 9 households that "fished" in two different permit areas.

^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 village, but some residents fish in permit areas. Therefore this permit information is not included in any final harvest estimates on Table 1 to avoid double counting.

^f Upper Tanana Villages include residents from the communities of Delta Junction, Northway, Tanacross, and Tok.

^g Includes residents of Anderson, Denali Park, Eagle River, Gakona, Lake Minchumina, Tanana, and Wiseman who also applied for a subsistence permit.

^h Includes personal use permits from Nenana and Delta Junction.

Table 4.—Estimated number of salmon retained for dog food from subsistence harvests with corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.

Community	Total Households		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon ^a
	Households	Contacted ^b	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total
Hooper Bay	196	64	0	0	0	0	0	0	0
Scammon Bay	78	29	0	0	0	0	0	0	0
Coastal District	274	93	0	0	0	0	0	0	0
Nunam Iqua	33	23	0	0	0	0	0	0	0
Alakanuk	123	47	164	95	0	0	0	0	164
Emmonak	162	78	109	68	0	0	0	0	109
Kotlik	82	29	0	0	35	39	29	32	64
District 1	400	177	273	117	35	39	29	32	337
Mountain Village	135	58	379	58	0	0	50	0	429
Pitkas Point	24	19	0	0	0	0	0	0	0
St. Mary's	104	49	34	56	29	11	0	0	63
Pilot Station	94	52	0	0	0	0	0	0	0
Marshall	69	30	364	321	108	56	54	28	526
District 2	426	208	777	331	137	58	104	28	1,018
Russian Mission	56	19	400	0	300	0	70	0	770
Holy Cross	51	28	0	0	42	60	0	0	42
Shageluk	29	22	1,888	1,014	0	0	0	0	1,888
District 3	136	69	2,288	1,014	342	60	70	0	2,700
Anvik	34	30	476	5	383	0	400	0	1,259
Grayling	45	17	852	600	198	147	0	0	1,050
Kaltag	53	16	0	0	240	0	0	0	240
Nulato	82	29	423	619	48	81	60	102	531
Koyukuk	23	17	80	0	638	0	20	0	738
Galena	150	43	20	28	0	0	0	0	20
Ruby	59	16	0	0	400	0	300	0	700
Huslia	68	23	1,104	0	989	0	604	0	2,697
Hughes	22	16	2,138	0	40	0	20	0	2,198
Allakaket	43	16	900	480	300	480	60	96	1,260
Alatna	5	4	0	0	0	0	0	0	0
Bettles	19	13	0	0	0	0	0	0	0
District 4	603	240	5,993	988	3,236	509	1,464	140	10,693
Tanana	98	49	3,805	884	18,246	309	1,363	0	23,414
Stevens Village	25	14	44	0	216	0	0	0	260
Birch Creek	8	3	0	0	0	0	0	0	0
Beaver	29	24	0	0	29	18	0	0	29
Fort Yukon	150	56	617	346	4,190	1,236	135	59	4,942
Venetie	56	23	0	0	1,244	204	0	0	1,244
Chalkyitsik	26	18	0	0	857	580	0	0	857
District 5	392	187	4,466	949	24,782	1,415	1,498	59	30,746
Survey Totals	2,231	974	13,797	1,740	28,532	1,507	3,165	158	45,494

^a Does not include an undetermined amount of Chinook salmon 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.

Table 5.—Estimated number of salmon retained for dog food from commercial harvests with corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.

Community	Total Households		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon ^a
	Households	Contacted ^b	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total
Hooper Bay	196	64	0	0	0	0	0	0	0
Scammon Bay	78	29	0	0	0	0	0	0	0
Coastal District	274	93	0	0	0	0	0	0	0
Nunam Iqua	33	23	0	0	0	0	0	0	0
Alakanuk	123	48	0	0	0	0	0	0	0
Emmonak	162	79	0	0	11	6	5	3	16
Kotlik	82	29	29	32	0	0	0	0	29
District 1	400	179	29	32	11	6	5	3	45
Mountain Village	135	58	0	0	0	0	0	0	0
Pitkas Point	24	19	0	0	0	0	0	0	0
St. Mary's	104	49	0	0	0	0	0	0	0
Pilot Station	94	52	0	0	0	0	0	0	0
Marshall	69	30	538	282	0	0	0	0	538
District 2	426	208	538	282	0	0	0	0	538
Russian Mission	56	19	0	0	0	0	0	0	0
Holy Cross	51	29	0	0	0	0	0	0	0
Shageluk	29	22	0	0	0	0	0	0	0
District 3	136	70	0	0	0	0	0	0	0
Anvik	34	30	0	0	0	0	0	0	0
Grayling	45	17	0	0	0	0	0	0	0
Kaltag	53	17	0	0	0	0	0	0	0
Nulato	82	29	0	0	0	0	0	0	0
Koyukuk	23	17	0	0	0	0	0	0	0
Galena	150	44	0	0	0	0	0	0	0
Ruby	59	16	0	0	0	0	0	0	0
Huslia	68	26	0	0	0	0	0	0	0
Hughes	22	16	0	0	0	0	0	0	0
Allakaket	43	16	0	0	0	0	0	0	0
Alatna	5	4	0	0	0	0	0	0	0
Bettles	19	13	0	0	0	0	0	0	0
District 4	603	245	0	0	0	0	0	0	0
Tanana	98	48	100	0	200	0	0	0	300
Stevens Village	25	14	0	0	0	0	0	0	0
Birch Creek	8	3	0	0	0	0	0	0	0
Beaver	29	24	0	0	0	0	0	0	0
Fort Yukon	150	56	0	0	0	0	0	0	0
Venetie	56	23	0	0	0	0	0	0	0
Chalkyitsik	26	18	0	0	0	0	0	0	0
District 5	392	186	100	0	200	0	0	0	300
Survey Totals	2,231	981	667	284	211	6	5	3	883

^a Does not include an undetermined amount of Chinook salmon 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.

Table 6.—Estimated total number of households, sample size, number contacted, and percentage of sampled households that were contacted in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Community Totals			
	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C
Hooper Bay	2	2	2	100%	76	23	22	96%	99	30	25	83%	19	19	18	95%	-	-	-	-	196	74	67	91%
Scammon Bay	3	3	2	67%	23	7	6	86%	37	12	9	75%	15	15	13	87%	-	-	-	-	78	37	30	81%
<i>Coastal District</i>	5	5	4	80%	99	30	28	93%	136	42	34	81%	34	34	31	91%	-	-	-	-	274	111	97	87%
Nunam Iqua	-	-	-	-	6	6	2	33%	16	16	12	75%	11	11	10	91%	-	-	-	-	33	33	24	73%
Alakanuk	3	3	3	100%	43	13	12	92%	54	17	14	82%	23	23	22	96%	-	-	-	-	123	56	51	91%
Emmonak	12	12	8	67%	64	32	22	69%	58	29	23	79%	28	28	27	96%	-	-	-	-	162	101	80	79%
Kotlik	3	3	3	100%	22	7	4	57%	38	12	11	92%	19	19	17	89%	-	-	-	-	82	41	35	85%
<i>District 1</i>	18	18	14	78%	135	58	40	69%	166	74	60	81%	81	81	76	94%	-	-	-	-	400	231	190	82%
Mountain Village	4	4	3	75%	32	10	9	90%	68	21	16	76%	30	30	30	100%	1	1	1	100%	135	66	59	89%
Pitkas Point	-	-	-	-	7	7	6	86%	11	11	10	91%	6	6	5	83%	-	-	-	-	24	24	21	88%
St. Mary's	2	2	1	50%	25	8	8	100%	51	16	15	94%	26	26	25	96%	-	-	-	-	104	52	49	94%
Pilot Station	2	2	2	100%	34	17	16	94%	42	21	20	95%	16	16	14	88%	-	-	-	-	94	56	52	93%
Marshall	3	3	3	100%	19	6	5	83%	33	10	9	90%	14	14	13	93%	-	-	-	-	69	33	30	91%
<i>District 2</i>	11	11	9	82%	117	48	44	92%	205	79	70	89%	92	92	87	95%	1	1	1	100%	426	231	211	91%
Russian Mission	-	-	-	-	15	5	4	80%	35	11	10	91%	6	6	6	100%	-	-	-	-	56	22	20	91%
Holy Cross	4	4	3	75%	16	8	8	100%	19	10	10	100%	12	12	10	83%	-	-	-	-	51	34	31	91%
Shageluk	1	1	.	.	9	9	5	56%	11	11	10	91%	6	6	5	83%	2	2	2	100%	29	29	22	76%
<i>District 3</i>	5	5	3	60%	40	22	17	77%	65	32	30	94%	24	24	21	88%	2	2	2	100%	136	85	73	86%
Anvik	1	1	1	100%	13	13	11	85%	13	13	11	85%	7	7	7	100%	-	-	-	-	34	34	30	88%
Grayling	-	-	-	-	7	3	3	100%	31	10	8	80%	7	7	7	100%	-	-	-	-	45	20	18	90%
Kaltag	2	2	2	100%	9	3	2	67%	40	12	13	108%	2	2	1	50%	-	-	-	-	53	19	18	95%
Nulato	2	2	2	100%	28	9	8	89%	44	14	14	100%	8	8	6	75%	-	-	-	-	82	33	30	91%
Koyukuk	.	.	.	.	8	8	6	75%	11	11	9	82%	3	3	3	100%	1	1	1	100%	23	23	19	83%
Galena	3	3	3	100%	86	26	22	85%	52	16	14	88%	8	8	8	100%	1	1	-	0%	150	54	47	87%
Ruby	-	-	-	-	43	13	11	85%	10	3	1	33%	4	4	3	75%	2	2	2	100%	59	22	17	77%
Huslia	-	-	-	-	44	14	14	100%	18	6	6	100%	2	2	2	100%	4	4	4	100%	68	26	26	100%
Hughes	-	-	-	-	13	13	10	77%	4	4	3	75%	2	2	2	100%	3	3	3	100%	22	22	18	82%
Allakaket	-	-	-	-	25	8	6	75%	12	4	4	100%	4	4	4	100%	2	2	2	100%	43	18	16	89%
Alatna	-	-	-	-	3	3	2	67%	2	2	2	100%	-	-	-	-	-	-	-	-	5	5	4	80%
Bettles	2	2	1	50%	17	17	12	71%	-	-	-	-	-	-	-	-	-	-	-	19	19	13	68%	
<i>District 4</i>	10	10	9	90%	296	130	107	82%	237	95	85	89%	47	47	43	91%	13	13	12	92%	603	295	256	87%

-continued-

Table 6.–Page 2 of 2.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Community Totals			
	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C	N	n	C	%C
Tanana	1	1	1	100%	49	25	22	88%	31	16	13	81%	8	8	8	100%	9	9	9	100%	98	59	53	90%
Stevens Village	1	1	-	-	7	7	6	86%	13	13	7	54%	3	3	1	33%	1	1	1	100%	25	25	15	60%
Birch Creek	-	-	-	-	5	5	1	20%	3	3	2	67%	-	-	-	-	-	-	-	-	8	8	3	38%
Beaver	3	3	2	67%	13	13	11	85%	11	11	9	82%	2	2	2	100%	-	-	-	-	29	29	24	83%
Fort Yukon	9	9	5	56%	89	27	25	93%	36	11	11	100%	9	9	9	100%	7	7	7	100%	150	63	57	90%
Venetie	10	10	7	70%	27	9	6	67%	12	4	3	75%	5	5	5	100%	2	2	2	100%	56	30	23	77%
Chalkyitsik	-	-	-	-	18	18	13	72%	7	7	6	86%	1	1	1	100%	-	-	-	-	26	26	20	77%
District 5	24	24	15	63%	208	104	84	81%	113	65	51	78%	28	28	26	93%	19	19	19	100%	392	240	195	81%
Survey Totals	73	73	54	74%	895	392	320	82%	922	387	330	85%	306	306	284	93%	35	35	34	97%	2,231	1,193	1,022	86%

Note: Households contacted (C) may include some households not pre-selected resulting in a household contacted percentage (%C) greater than 100%. 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).

Table 7.—Estimated number of subsistence fishing households in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined						
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total	N	n	Total	Est	CI (95%)	(+/-)
Hooper Bay	2	2	0.5	0.0	76	22	0.5	0.1	99	25	0.6	0.1	19	18	1.0	0.0	-	-	-	-	196	67	118				21
Scammon Bay	3	2	0.5	0.3	23	6	0.3	0.2	37	9	0.9	0.1	15	13	0.9	0.0	-	-	-	-	78	30	56				11
Coastal District	5	4	0.5	0.2	99	28	0.4	0.1	136	34	0.7	0.1	34	31	1.0	0.0	-	-	-	-	274	97	174				24
Nunam Iqua	-	-	-	-	6	2	0.5	0.4	16	12	0.5	0.1	11	9	1.0	0.0	-	-	-	-	33	23	22				5
Alakanuk	3	3	0.7	0.0	43	12	0.5	0.1	54	14	0.7	0.1	23	22	0.9	0.0	-	-	-	-	123	51	83				16
Emmonak	12	8	0.0	0.0	64	22	0.5	0.1	58	23	0.7	0.1	28	27	0.9	0.0	-	-	-	-	162	80	97				14
Kotlik	3	3	0.3	0.0	22	4	0.3	0.2	38	10	0.7	0.1	19	16	0.9	0.0	-	-	-	-	82	33	50				14
District 1	18	14	0.2	0.0	135	40	0.4	0.1	166	59	0.7	0.1	81	74	0.9	0.0	-	-	-	-	400	187	252				26
Mountain Village	4	3	0.7	0.2	32	8	0.3	0.1	68	16	0.9	0.1	30	30	1.0	0.0	1	1	1.0	-	135	58	105				12
Pitkas Point	-	-	-	-	7	6	0.3	0.1	11	10	0.9	0.0	6	4	1.0	0.0	-	-	-	-	24	20	18				1
St. Mary's	2	1	1.0	-	25	8	0.8	0.1	51	15	0.9	0.1	26	25	1.0	0.0	-	-	-	-	104	49	91				10
Pilot Station	2	2	0.5	0.0	34	16	0.2	0.1	42	20	0.6	0.1	16	14	0.8	0.0	-	-	-	-	94	52	45				8
Marshall	3	3	1.0	0.0	19	5	0.2	0.2	33	9	0.9	0.1	14	13	0.8	0.0	-	-	-	-	69	30	48				9
District 2	11	9	0.8	0.1	117	43	0.3	0.1	205	70	0.8	0.0	92	86	0.9	0.0	1	1	1.0	-	426	209	307				20
Russian Mission	-	-	-	-	15	4	0.5	0.2	35	10	0.8	0.1	6	6	1.0	0.0	-	-	-	-	56	20	42				11
Holy Cross	4	3	0.7	0.2	16	8	0.6	0.1	19	10	0.8	0.1	12	10	0.9	0.0	-	-	-	-	51	31	39				6
Shageluk	1	0	-	-	9	5	0.2	0.1	11	10	0.5	0.1	6	5	1.0	0.0	2	2	1.0	0.0	29	22	15				3
District 3	5	3	0.7	0.2	40	17	0.5	0.1	65	30	0.7	0.1	24	21	1.0	0.0	2	2	1.0	0.0	136	73	96				12
Anvik	1	1	0.0	-	13	11	0.3	0.1	13	11	0.5	0.1	7	7	1.0	0.0	-	-	-	-	34	30	18				2
Grayling	-	-	-	-	7	3	1.0	0.0	31	8	0.8	0.1	7	7	1.0	0.0	-	-	-	-	45	18	37				9
Kaltag	2	2	1.0	0.0	9	2	0.0	0.0	40	13	1.0	0.0	2	1	1.0	-	-	-	-	-	53	18	44				0
Nulato	2	2	0.5	0.0	28	8	0.4	0.2	44	14	0.7	0.1	8	6	1.0	0.0	-	-	-	-	82	30	51				12
Koyukuk	-	-	-	-	8	6	0.2	0.1	11	8	0.5	0.1	3	3	1.0	0.0	1	1	1.0	-	23	18	11				2
Galena	3	2	1.0	0.0	86	22	0.3	0.1	52	14	0.8	0.1	8	8	1.0	0.0	1	0	-	-	150	46	75				17
Ruby	-	-	-	-	43	11	0.2	0.1	10	1	1.0	-	4	3	0.7	0.2	2	2	1.0	0.0	59	17	22				9
Huslia	-	-	-	-	44	14	0.1	0.1	18	6	0.3	0.2	2	2	1.0	0.0	4	4	1.0	0.0	68	26	18				9
Hughes	-	-	-	-	13	9	0.2	0.1	4	3	0.3	0.2	2	2	1.0	0.0	3	3	0.7	0.0	22	17	8				2
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	0.3	0.2	4	4	0.8	0.0	2	2	1.0	0.0	43	16	8				5
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	0.5	0.0	-	-	-	-	-	-	-	-	5	4	1				0
Bettles	2	1	0.0	-	17	12	0.3	0.1	-	-	-	-	-	-	-	-	-	-	-	-	19	13	4				2
District 4	10	8	0.6	0.0	296	106	0.2	0.0	237	84	0.7	0.0	47	43	1.0	0.0	13	12	0.9	0.0	603	253	297				27

-continued-

Table 7.–Page 2 of 2.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	n	Total	Est CI (95%) (+/-)
Tanana	1	1	1.0	-	49	20	0.1	0.0	31	13	0.7	0.1	8	8	0.9	0.0	9	9	1.0	0.0	98	51	41	7
Stevens Village	1	0	-	-	7	6	0.2	0.1	13	7	0.9	0.1	3	1	1.0	-	1	1	1.0	-	25	15	16	3
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	1.0	0.0	-	-	-	-	-	-	-	-	8	3	3	0
Beaver	3	2	0.5	0.3	13	11	0.2	0.0	11	9	0.8	0.1	2	2	1.0	0.0	-	-	-	-	29	24	14	2
Fort Yukon	9	5	0.8	0.1	89	25	0.1	0.1	36	11	0.5	0.1	9	9	0.9	0.0	7	7	1.0	0.0	150	57	53	14
Venetie	10	7	0.1	0.1	27	6	0.0	0.0	12	3	0.7	0.3	5	5	0.6	0.0	2	2	0.5	0.0	56	23	13	7
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	0.7	0.1	1	1	0.0	-	-	-	-	-	26	19	5	1
District 5	24	15	0.5	0.1	208	81	0.1	0.0	113	51	0.7	0.1	28	26	0.8	0.0	19	19	0.9	0.0	392	192	145	17
Survey Totals	73	53	0.5	0.0	895	315	0.3	0.0	922	328	0.7	0.0	306	281	0.9	0.0	35	34	0.9	0.0	2,231	1,011	1,271	53

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%). Dashes indicate indefinable values.

Table 8.—Estimated number of people in households in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	Total		CI (95%)	
																					N	n		Est	Total	(+/-)
Hooper Bay	2	2	4.0	0.0	76	22	4.3	0.5	99	23	4.8	0.4	19	18	5.1	0.1	-	-	-	-	196	65	907	110
Scammon Bay	3	2	6.5	0.9	23	6	4.8	1.0	37	9	6.0	0.6	15	13	7.0	0.2	-	-	-	-	78	30	458	67
Coastal District	5	4	5.5	0.5	99	28	4.4	0.5	136	32	5.1	0.3	34	31	5.9	0.1	-	-	-	-	274	95	1,365	129
Nunam Iqua	-	-	-	-	6	2	3.5	0.4	16	12	5.5	0.3	11	9	4.6	0.3	-	-	-	-	33	23	159	12
Alakanuk	3	3	5.3	0.0	43	11	3.3	0.6	54	14	5.6	0.5	23	20	5.1	0.2	-	-	-	-	123	48	575	75
Emmonak	12	8	2.6	0.3	64	22	4.6	0.4	58	23	4.9	0.5	28	26	5.4	0.1	-	-	-	-	162	79	762	79
Kotlik	3	3	3.7	0.0	22	3	3.3	1.7	38	10	5.7	0.4	19	15	4.9	0.2	-	-	-	-	82	31	395	82
District 1	18	14	3.3	0.2	135	38	3.9	0.4	166	59	5.4	0.3	81	70	5.1	0.1	-	-	-	-	400	181	1,891	137
Mountain Village	4	3	4.3	0.2	32	8	4.5	1.1	68	16	5.6	0.5	30	30	6.0	0.0	1	1	4.0	-	135	58	725	95
Pitkas Point	-	-	-	-	7	6	3.3	0.4	11	10	4.5	0.2	6	4	5.3	0.6	-	-	-	-	24	20	104	10
St. Mary's	2	1	3.0	-	25	8	4.1	0.7	51	15	3.7	0.5	26	25	4.6	0.1	-	-	-	-	104	49	420	61
Pilot Station	2	2	7.0	0.0	34	16	4.4	0.5	42	20	5.2	0.5	16	14	4.3	0.2	-	-	-	-	94	52	448	52
Marshall	3	3	3.3	0.0	19	5	5.2	0.7	33	9	5.1	0.3	14	13	4.8	0.1	-	-	-	-	69	30	344	32
District 2	11	9	4.3	0.1	117	43	4.4	0.4	205	70	4.9	0.2	92	86	5.1	0.1	1	1	4.0	-	426	209	2,041	129
Russian Mission	-	-	-	-	15	3	4.0	1.4	35	10	5.2	0.7	6	6	5.2	0.0	-	-	-	-	56	19	273	61
Holy Cross	4	3	1.7	0.3	16	8	4.0	0.6	19	10	3.6	0.4	12	9	4.1	0.2	-	-	-	-	51	30	188	26
Shageluk	1	0	-	-	9	5	1.8	0.4	11	10	3.6	0.2	6	5	4.2	0.4	2	2	2.5	0.0	29	22	86	9
District 3	5	3	1.7	0.3	40	16	3.5	0.6	65	30	4.5	0.4	24	20	4.4	0.1	2	2	2.5	0.0	136	71	547	67
Anvik	1	1	1.0	-	13	11	2.3	0.2	13	11	2.5	0.2	7	7	3.3	0.0	-	-	-	-	34	30	87	7
Grayling	-	-	-	-	7	3	4.7	0.9	31	8	3.1	0.6	7	6	3.3	0.2	-	-	-	-	45	17	153	36
Kaltag	2	2	4.5	0.0	9	2	1.0	0.0	40	12	4.2	0.5	2	1	4.0	-	-	-	-	-	53	17	193	37
Nulato	2	2	2.0	0.0	28	8	2.0	0.5	44	14	2.8	0.2	8	6	3.3	0.2	-	-	-	-	82	30	209	35
Koyukuk	-	-	-	-	8	6	1.8	0.3	11	8	2.0	0.3	3	3	3.3	0.0	1	1	2.0	-	23	18	49	8
Galena	3	2	2.0	0.6	86	22	2.0	0.2	52	14	3.4	0.3	8	6	2.5	0.3	1	0	-	-	150	44	372	48
Ruby	-	-	-	-	43	10	2.6	0.4	10	1	2.0	-	4	3	4.3	0.7	2	2	1.5	0.0	59	16	152	37
Huslia	-	-	-	-	44	13	3.3	0.5	18	6	2.2	0.6	2	2	2.0	0.0	4	4	3.5	0.0	68	25	203	47
Hughes	-	-	-	-	13	9	2.0	0.2	4	3	3.0	0.5	2	2	3.5	0.0	3	3	2.7	0.0	22	17	53	7
Allakaket	-	-	-	-	25	6	3.0	0.7	12	4	3.3	0.9	4	4	4.3	0.0	2	2	6.0	0.0	43	16	143	39
Alatna	-	-	-	-	3	2	1.0	0.0	2	2	2.5	0.0	-	-	-	-	-	-	-	-	5	4	8	0
Bettles	2	1	3.0	-	17	12	1.5	0.1	-	-	-	-	-	-	-	-	-	-	-	-	19	13	32	4
District 4	10	8	2.6	0.2	296	104	2.4	0.1	237	83	3.1	0.2	47	40	3.3	0.1	13	12	3.3	0.0	603	247	1,654	107

-continued-

Table 8.–Page 2 of 2.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	N	n	mean	SE	Total N	n	Est Total	CI (95%) (+/-)
Tanana	1	1	2.0	-	49	20	2.1	0.2	31	12	3.1	0.4	8	8	3.3	0.0	9	9	3.6	0.0	98	50	256	36
Stevens Village	1	0	-	-	7	6	1.3	0.1	13	6	2.8	0.4	3	1	4.0	-	1	1	5.0	-	25	14	63	11
Birch Creek	-	-	-	-	5	1	1.0	-	3	2	2.0	0.0	-	-	-	-	-	-	-	-	8	3	11	0
Beaver	3	2	2.5	0.9	13	11	1.8	0.1	11	8	2.5	0.3	2	2	2.0	0.0	-	-	-	-	29	23	63	9
Fort Yukon	9	5	3.0	0.6	89	25	2.2	0.2	36	11	2.8	0.2	9	9	2.4	0.0	7	6	4.0	0.3	150	56	378	44
Venetie	10	7	3.1	0.4	27	6	3.2	0.9	12	3	2.7	1.0	5	5	3.8	0.0	2	2	4.5	0.0	56	23	177	52
Chalkyitsik	-	-	-	-	18	12	2.0	0.2	7	5	1.8	0.3	1	1	4.0	-	-	-	-	-	26	18	53	8
District 5	24	15	3.0	0.3	208	81	2.2	0.2	113	47	2.8	0.2	28	26	3.1	0.0	19	18	3.9	0.1	392	187	1,001	79
Survey Totals	73	53	3.3	0.1	895	310	3.1	0.1	922	321	4.3	0.1	306	273	4.7	0.0	35	33	3.6	0.1	2,231	990	8,499	272

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Table 9.—Subsistence salmon harvest estimates including commercially retained (not including test fish) and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.

Community	Total Households	Households Contacted ^a	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total
Hooper Bay	196	66	157	52	9,771	2,450	1	0	0	0	9,929
Scammon Bay	78	28	691	359	4,586	2,187	69	35	279	316	5,625
Coastal District	274	94	848	363	14,357	3,284	70	35	279	316	15,554
Nunam Iqua	33	23	338	78	2,794	517	310	113	241	79	3,683
Alakanuk	123	51	660	169	5,537	1,442	427	245	322	134	6,946
Emmonak	162	80	975	178	11,179	2,392	543	256	79	21	12,776
Kotlik	82	31	1,655	656	6,420	2,707	491	150	222	112	8,788
District 1	400	185	3,628	705	25,930	3,923	1,771	402	864	192	32,193
Mountain Village	135	58	2,383	1,026	8,861	1,794	532	246	139	0	11,915
Pitkas Point	24	20	618	150	1,023	252	6	4	30	34	1,677
St. Mary's	104	49	2,693	535	6,877	1,069	490	244	252	173	10,312
Pilot Station	94	52	959	225	2,721	619	17	24	0	0	3,697
Marshall	69	29	1,804	348	3,183	909	633	112	341	60	5,961
District 2	426	208	8,457	1,238	22,665	2,374	1,678	365	762	186	33,562
Russian Mission	56	19	1,894	703	925	415	667	263	133	0	3,619
Holy Cross	51	30	2,817	484	760	293	582	236	84	67	4,243
Shageluk	29	21	420	118	4,081	1,545	55	22	0	0	4,556
District 3	136	70	5,131	861	5,766	1,626	1,304	354	217	67	12,418
Anvik	34	30	1,206	147	529	15	497	3	406	0	2,638
Grayling	45	18	1,878	610	783	0	1,009	641	234	131	3,904
Kaltag	53	18	3,367	1,031	680	983	345	89	187	247	4,579
Nulato	82	28	2,749	765	634	608	421	231	60	102	3,864
Koyukuk	23	16	396	168	537	395	803	59	37	2	1,773
Galena	150	46	2,864	1,166	1,013	289	2,695	386	607	230	7,179
Ruby	59	16	1,193	734	967	802	559	0	361	0	3,080
Huslia	68	23	207	82	2,433	240	1,614	0	734	0	4,988
Hughes	22	17	33	16	2,230	0	111	58	20	0	2,394
Allakaket	43	16	68	14	2,535	480	557	480	205	96	3,365
Alatna	5	4	0	0	5	0	0	0	0	0	5
Bettles	19	13	3	3	4	5	50	39	0	0	57
District 4	603	245	13,964	1,994	12,350	1,583	8,661	927	2,851	388	37,826

-continued-

Table 9.–Page 2 of 2.

Community	Households		Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
	Total	Contacted ^a	Estimated	CI (95%)	Estimated	CI (95%)	Estimated	CI (95%)	Estimated	CI (95%)	Estimated
			Total	(+/-)	Total	(+/-)	Total	(+/-)	Total	(+/-)	Total
Tanana	98	50	3,729	814	4,832	785	20,545	789	1,616	594	30,722
Stevens Village	25	14	1,570	371	442	291	246	0	0	0	2,258
Birch Creek	8	3	131	80	0	0	0	0	0	0	131
Beaver	29	24	957	306	68	13	179	20	0	0	1,204
Fort Yukon	150	57	3,591	1,379	67	0	8,088	953	394	118	12,140
Venetie	56	22	59	14	0	0	1,801	414	0	0	1,860
Chalkyitsik	26	19	53	25	0	0	337	170	0	0	390
District 5	392	189	10,090	1,674	5,409	838	31,196	1,316	2,010	605	48,705
Survey Totals	2,231	991	42,118	3,111	86,477	6,137	44,680	1,736	6,983	832	180,258

^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.

Table 10.—Estimated number of salmon used for subsistence purposes and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.

Community	Total Households	Households Contacted ^a	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total
Hooper Bay	196	66	146	52	8,373	2,100	1	0	0	0	8,520
Scammon Bay	78	28	714	369	4,641	2,370	69	35	186	171	5,610
Coastal District	274	94	860	373	13,014	3,166	70	35	186	171	14,130
Nunam Iqua	33	23	291	77	2,403	454	222	78	123	44	3,039
Alakanuk	123	51	620	163	5,227	1,431	368	164	322	134	6,537
Emmonak	162	80	847	139	8,732	1,700	517	254	67	19	10,163
Kotlik	82	31	1,420	577	6,105	2,696	432	150	222	112	8,179
District 1	400	185	3,178	621	22,467	3,523	1,539	346	734	181	27,918
Mountain Village	135	58	2,261	981	8,183	1,725	532	246	139	0	11,115
Pitkas Point	24	20	587	128	992	251	6	4	30	34	1,615
St. Mary's	104	49	2,497	510	6,152	984	484	240	243	173	9,376
Pilot Station	94	52	827	175	2,403	533	17	24	0	0	3,247
Marshall	69	29	1,658	395	2,943	902	358	112	216	60	5,175
District 2	426	208	7,830	1,194	20,673	2,259	1,397	362	628	186	30,528
Russian Mission	56	19	1,754	619	908	415	657	263	133	0	3,452
Holy Cross	51	30	2,656	454	745	282	492	201	84	67	3,977
Shageluk	29	21	391	118	3,529	1,136	53	21	0	0	3,973
District 3	136	70	4,801	777	5,182	1,242	1,202	332	217	67	11,402
Anvik	34	30	1,144	136	799	15	480	3	406	0	2,829
Grayling	45	18	1,730	564	783	0	855	631	234	131	3,602
Kaltag	53	18	3,256	1,029	680	983	305	89	187	247	4,428
Nulato	82	28	2,621	737	576	608	414	228	60	102	3,671
Koyukuk	23	17	324	126	537	395	744	59	32	2	1,637
Galena	150	46	2,587	1,097	959	289	2,522	386	528	205	6,596
Ruby	59	16	893	502	265	397	559	0	361	0	2,078
Huslia	68	23	194	82	1,333	240	1,348	0	734	0	3,609
Hughes	22	16	35	17	3,197	1,701	126	77	20	0	3,378
Allakaket	43	16	63	14	2,400	480	557	480	205	96	3,225
Alatna	5	4	0	0	5	0	0	0	0	0	5
Bettles	19	13	3	3	4	5	31	33	0	0	38
District 4	603	245	12,850	1,849	11,538	2,217	7,941	921	2,767	374	35,096

-continued-

Table 10.—Page 2 of 2.

Community	Total Households	Households Contacted ^a	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total
Tanana	98	50	3,488	815	4,825	785	20,251	794	1,516	594	30,080
Stevens Village	25	14	1,333	381	442	291	216	0	0	0	1,991
Birch Creek	8	3	131	80	0	0	0	0	0	0	131
Beaver	29	24	698	192	68	13	89	20	0	0	855
Fort Yukon	150	57	2,791	1,091	67	0	7,945	1,247	357	164	11,160
Venetie	56	22	54	14	0	0	1,592	279	0	0	1,646
Chalkyitsik	26	19	53	25	0	0	337	170	0	0	390
District 5	392	189	8,548	1,430	5,402	838	30,430	1,514	1,873	616	46,253
Survey Totals	2,231	991	38,067	2,831	78,276	5,891	42,579	1,872	6,405	788	165,327

^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.

Table 11.—Estimated subsistence harvest of pink salmon, whitefish, pike, and sheefish fish, by surveyed villages, Yukon Area, 2005.

Community	Estimated Subsistence Harvest with Corresponding Confidence Intervals (CI) (Expanded to Estimate Survey Village Harvest) ^a													Total Expanded Miscellaneous Fish Harvest
	Total Households Households	Households Contacted ^c	Pink Salmon		Large Whitefish ^b		Small Whitefish		Pike		Sheefish		Miscellaneous Fish Harvest	
			Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)		
Hooper Bay	196	66	860	853	115	121	1,885	667	1,078	742	22	7	3,960	
Scammon Bay Coastal District	78	28	1,645	1,252	1,084	556	1,455	748	3,271	2,591	122	140	7,577	
	274	94	2,505	1,515	1,199	569	3,340	1,002	4,349	2,695	144	140	11,537	
Nunam Iqua	33	23	132	75	496	282	2,136	722	161	51	1,126	512	4,051	
Alakanuk	123	51	49	35	461	210	2,382	591	1,853	832	1,098	354	5,843	
Emmonak	162	80	54	64	874	283	3,881	1,458	2,227	519	1,868	488	8,904	
Kotlik	82	31	155	37	301	272	3,696	2,029	1,017	717	1,680	779	6,849	
District 1	400	185	390	111	2,132	527	12,095	2,667	5,258	1,216	5,772	1,110	25,647	
Mountain Village	135	58	78	0	1,651	1,165	1,083	506	5,276	2,526	1,121	517	9,209	
Pitkas Point	24	20	2	2	268	94	30	26	118	71	119	80	537	
St. Mary's	104	49	144	61	1,057	303	643	145	1,887	1,392	924	220	4,655	
Pilot Station	94	52	0	0	762	271	89	95	681	227	845	264	2,377	
Marshall	69	30	6	3	1,476	510	135	62	4,432	1,964	399	128	6,448	
District 2	426	209	230	61	5,214	1,338	1,980	539	12,394	3,498	3,408	639	23,226	
Russian Mission	56	19	0	0	450	161	359	157	1,233	334	266	59	2,308	
Holy Cross	51	31	0	0	208	121	231	175	292	155	57	35	788	
Shageluk	29	21	0	0	169	127	310	114	425	70	144	50	1,048	
District 3	136	71	0	0	827	238	900	261	1,950	375	467	85	4,144	
Anvik	34	30	0	0	80	0	116	46	97	18	226	91	519	
Grayling	45	18	3	0	194	88	70	35	208	93	276	139	751	
Kaltag	53	18	4	0	103	121	36	61	214	205	169	161	526	
Nulato	82	28	0	0	257	183	6	4	114	112	142	98	519	
Koyukuk	23	17	0	0	39	14	300	0	139	14	54	3	532	
Galena	150	46	0	0	1,220	1,111	789	742	305	204	258	157	2,572	
Ruby	59	17	0	0	125	0	0	0	32	28	20	0	177	
Hushia	68	23	0	0	2,226	295	636	225	2,441	592	771	601	6,074	
Hughes	22	17	0	0	766	78	1,440	235	69	1	310	20	2,585	
Allakaket	43	16	0	0	1,030	337	1,310	96	619	60	480	179	3,439	
Alatna	5	4	0	0	100	0	0	0	8	0	0	0	108	
Bettles	19	13	0	0	0	0	0	0	0	0	6	4	6	
District 4	603	247	7	0	6,140	1,223	4,703	821	4,246	679	2,712	694	17,808	

-continued-

Table 11.–Page 2 of 2.

Estimated Subsistence Harvest with Corresponding Confidence Intervals (CI) (Expanded to Estimate Survey Village Harvest) ^a														
Community	Total Households	Households Contacted ^c	Pink Salmon		Large Whitefish ^b		Small Whitefish		Pike		Sheefish		Miscellaneous Fish Harvest	Total Expanded
			Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)		
Tanana	98	50	0	0	2,883	471	3,174	65	108	43	809	117	6,974	
Stevens Village	25	14	0	0	93	107	80	0	215	248	9	12	397	
Birch Creek	8	3	0	0	26	29	0	0	0	0	0	0	26	
Beaver	29	24	0	0	20	0	50	0	85	71	0	0	155	
Fort Yukon	150	57	0	0	2,140	1,474	683	440	655	360	399	122	3,877	
Venetie	56	22	0	0	65	0	0	0	37	8	12	0	114	
Chalkyitsik	26	19	0	0	1,118	676	0	0	502	431	32	24	1,652	
District 5	392	189	0	0	6,345	1,692	3,987	445	1,602	619	1,261	171	13,195	
Survey Totals	2,231	995	3,132	1,521	21,857	2,610	27,005	3,058	29,799	4,686	13,764	1,476	95,557	

^a Subsistence whitefish, pike, and sheefish estimates in surveyed communities is based on a stratified random sample of households as designated for the estimation of subsistence salmon harvests.

^b Large whitefish are considered those 4 pounds or larger and small whitefish are less than 4 pounds.

^c 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 12.—Reported subsistence harvest of other miscellaneous fish species by surveyed villages, Yukon Area, 2005.

Community	Reported Harvest of Miscellaneous Fish Species, (Not Expanded)										Total Not Expanded Miscellaneous Fish Harvest
	Total Households	Households Contacted ^a	Burbot	Lamprey	Tomcod	Grayling	Sucker	Arctic Char	Blackfish	Sockeye Salmon ^b	
Hooper Bay	196	66	115	0	1,234	0	0	0	9,615	0	10,964
Scammon Bay	78	28	36	0	1,552	0	0	2	22,768	23	24,381
Coastal District	274	94	151	0	2,786	0	0	2	32,383	23	35,345
Nunam Iqua	33	23	204	0	700	0	0	0	15,700	21	16,625
Alakanuk	123	51	103	150	255	2	0	1	47,880	20	48,411
Emmonak	162	80	431	2	658	0	0	3	70,384	23	71,501
Kotlik	82	31	124	0	413	16	0	10	8,162	79	8,804
District 1	400	185	862	152	2,026	18	0	14	142,126	143	145,341
Mountain Village	135	58	504	4,185	176	19	0	0	27,625	43	32,552
Pitkas Point	24	20	63	703	0	0	0	0	1,155	3	1,924
St. Mary's	104	49	308	3,373	0	25	0	2	38,050	27	41,785
Pilot Station	94	52	286	7,255	0	0	0	0	4,775	14	12,330
Marshall	69	30	161	3,815	0	0	0	0	8,050	31	12,057
District 2	426	209	1,322	19,331	176	44	0	2	79,655	118	100,648
Russian Mission	56	19	41	10,530	0	2	0	19	1,460	47	12,099
Holy Cross	51	31	21	810	0	15	0	0	150	17	1,013
Shageluk	29	21	2	0	0	0	1	3	0	3	9
District 3	136	71	64	11,340	0	17	1	22	1,610	67	13,121
Anvik	34	30	18	5,190	0	15	0	1	0	24	5,248
Grayling	45	18	35	2,100	0	57	0	8	0	52	2,252
Kaltag	53	18	0	0	0	10	0	0	0	0	10
Nulato	82	28	3	0	0	365	5	71	0	0	444
Koyukuk	23	17	10	0	0	5	0	0	0	0	15
Galena	150	46	106	0	0	16	0	0	700	10	832
Ruby	59	17	2	0	0	0	0	0	0	0	2
Huslia	68	23	45	0	0	10	94	70	3,400	160	3,779
Hughes	22	17	28	0	0	15	750	2	0	0	795
Allakaket	43	16	208	0	0	174	572	1	0	44	999
Alatna	5	4	0	0	0	20	6	0	0	0	26
Bettles	19	13	0	0	0	6	0	4	0	0	10
District 4	603	247	455	7,290	0	693	1,427	157	4,100	290	14,412

-continued-

Table 12.—Page 2 of 2.

Community	Total Households	Households Contacted ^a	Reported Harvest of Miscellaneous Fish Species, (Not Expanded)								Total Not Expanded Miscellaneous Fish Harvest
			Burbot	Lamprey	Tomcod	Grayling	Sucker	Arctic Char	Blackfish	Sockeye Salmon ^b	
Tanana	98	50	122	2	0	41	3	0	0	2	170
Stevens Village	25	14	1	0	0	0	0	0	0	0	1
Birch Creek	8	3	0	0	0	0	0	0	0	0	0
Beaver	29	24	0	0	0	0	0	0	0	0	0
Fort Yukon	150	57	147	0	0	64	17	0	0	5	233
Venetie	56	22	2	0	0	374	4	20	0	0	400
Chalkyitsik	26	19	12	0	0	7	0	0	0	0	19
District 5	392	189	284	2	0	486	24	20	0	7	823
Survey Totals	2,231	976	3,138	38,115	4,988	1,258	1,452	217	259,874	648	309,690

^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 Due to low harvest numbers of sockeye salmon and difficulties with identification by fishers, the harvest is not estimated.

Table 13.—Estimated subsistence harvest (not including test fish) of Chinook salmon by fishing location in surveyed villages, Yukon Area, 2005.

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	153	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	157
Scammon Bay	62	629	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	691
Coastal District	215	633	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	848
Nunam Iqua	0	338	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	338
Alakanuk	8	652	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	660
Emmonak	23	931	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	975
Kotlik	0	1,655	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,655
District 1	31	3,576	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,628
Mountain Village	0	558	1,825	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,383
Pitkas Point	0	23	595	0	0	0	0	0	0	0	0	0	0	0	0	0	0	618
St. Mary's	0	97	2,596	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,693
Pilot Station	0	0	959	0	0	0	0	0	0	0	0	0	0	0	0	0	0	959
Marshall	0	0	1,804	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,804
District 2	0	679	7,778	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,457
Russian Mission	0	0	0	1,894	0	0	0	0	0	0	0	0	0	0	0	0	0	1,894
Holy Cross	0	0	0	2,817	0	0	0	0	0	0	0	0	0	0	0	0	0	2,817
Shageluk	0	0	0	29	79	0	0	0	0	0	0	0	312	0	0	0	0	420
District 3	0	0	0	4,740	79	0	0	0	0	0	0	0	312	0	0	0	0	5,131
Anvik	0	0	0	0	1,206	0	0	0	0	0	0	0	0	0	0	0	0	1,206
Grayling	0	0	0	0	1,878	0	0	0	0	0	0	0	0	0	0	0	0	1,878
Kaltag	0	0	0	0	3,367	0	0	0	0	0	0	0	0	0	0	0	0	3,367
Nulato	0	0	0	0	2,749	0	0	0	0	0	0	0	0	0	0	0	0	2,749
Koyukuk	0	0	0	0	391	5	0	0	0	0	0	0	0	0	0	0	0	396
Galena	0	0	0	0	1,576	1,065	223	0	0	0	0	0	0	0	0	0	0	2,864
Ruby	0	0	0	0	0	2	1,191	0	0	0	0	0	0	0	0	0	0	1,193
Huslia	0	0	0	0	0	0	0	0	0	0	0	0	0	207	0	0	0	207
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	0	33	0	0	0	33
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	0	68	0	0	0	68
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	3	0	0	0	3
District 4	0	0	0	0	11,167	1,072	1,414	0	0	0	0	0	0	311	0	0	0	13,964

-continued-

Table 13.—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	282	3,447	0	0	0	0	0	0	0	0	0	3,729
Stevens Village	0	0	0	0	0	0	0	0	0	327	1,243	0	0	0	0	0	0	0	1,570
Birch Creek	0	0	0	0	0	0	0	0	0	0	131	0	0	0	0	0	0	0	131
Beaver	0	0	0	0	0	0	0	0	0	0	957	0	0	0	0	0	0	0	957
Fort Yukon	0	0	0	0	0	0	0	0	0	0	1,410	2,181	0	0	0	0	0	0	3,591
Venetie	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	4	0	0	59
Chalkyitsik	0	0	0	0	0	0	0	0	0	0	0	53	0	0	0	0	0	0	53
District 5	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>0</i>	<i>282</i>	<i>3,447</i>	<i>327</i>	<i>3,741</i>	<i>2,234</i>	<i>0</i>	<i>0</i>	<i>55</i>	<i>4</i>	<i>0</i>	<i>0</i>	<i>10,090</i>
Survey Totals	245	4,889	7,799	4,740	11,246	1,072	1,414	282	3,447	327	3,741	2,234	312	311	55	4	0	0	42,118

^a Harvest in Subdistrict 5-D near Ft. Yukon is divided according to whether fishing occurred upriver or downriver of the confluence between the Yukon and Porcupine rivers.

^b Totals may not be correct due to decimal rounding. Subsistence harvest estimates include fish caught during commercial openers but retained for subsistence use.

Table 14.—Estimated subsistence harvest (not including test fish) of summer chum salmon by fishing location in surveyed villages, Yukon Area, 2005.

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	Innokoy	Koyukuk	Chandalar	Porcupine		Black	
Hooper Bay	9,190	581	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9,771
Scammon Bay	1,652	2,934	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,586
Coastal District	10,842	3,515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14,357
Nunam Iqua	0	2,794	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,794
Alakanuk	143	5,394	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,537
Emmonak	436	10,535	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11,179
Kotlik	0	6,420	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,420
District 1	579	25,143	207	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,930
Mountain Village	0	3,614	5,247	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,861
Pitkas Point	0	370	653	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,023
St. Mary's	0	646	6,231	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6,877
Pilot Station	0	0	2,721	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2,721
Marshall	0	0	3,183	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3,183
District 2	0	4,630	18,035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22,665
Russian Mission	0	0	0	925	0	0	0	0	0	0	0	0	0	0	0	0	0	0	925
Holy Cross	0	0	0	760	0	0	0	0	0	0	0	0	0	0	0	0	0	0	760
Shageluk	0	0	0	0	33	0	0	0	0	0	0	0	4,048	0	0	0	0	0	4,081
District 3	0	0	0	1,685	33	0	0	0	0	0	0	0	4,048	0	0	0	0	0	5,766
Anvik	0	0	0	0	529	0	0	0	0	0	0	0	0	0	0	0	0	0	529
Grayling	0	0	0	0	783	0	0	0	0	0	0	0	0	0	0	0	0	0	783
Kaltag	0	0	0	0	680	0	0	0	0	0	0	0	0	0	0	0	0	0	680
Nulato	0	0	0	0	634	0	0	0	0	0	0	0	0	0	0	0	0	0	634
Koyukuk	0	0	0	0	209	328	0	0	0	0	0	0	0	0	0	0	0	0	537
Galena	0	0	0	0	113	793	107	0	0	0	0	0	0	0	0	0	0	0	1,013
Ruby	0	0	0	0	0	12	955	0	0	0	0	0	0	0	0	0	0	0	967
Huslia	0	0	0	0	0	0	0	0	0	0	0	0	0	2,433	0	0	0	0	2,433
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	0	2,230	0	0	0	0	2,230
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	0	2,535	0	0	0	0	2,535
Alatna	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
Bettles	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
District 4	0	0	0	0	2,948	1,133	1,062	0	0	0	0	0	0	7,207	0	0	0	0	12,350

-continued-

Table 14.–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	Innokok	Koyukuk	Chandalar	Porcupine		Black
Tanana	0	0	0	0	0	0	0	400	4,432	0	0	0	0	0	0	0	0	4,832
Stevens Village	0	0	0	0	0	0	0	0	0	295	147	0	0	0	0	0	0	442
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	68	0	0	0	0	0	0	68
Fort Yukon	0	0	0	0	0	0	0	0	0	0	67	0	0	0	0	0	0	67
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	400	4,432	295	282	0	0	0	0	0	0	5,409
Survey Totals	11,421	33,288	18,242	1,685	2,981	1,133	1,062	400	4,432	295	282	0	4,048	7,207	0	0	0	86,477

^a Harvest in Subdistrict 5-D near Ft. Yukon is divided according to whether fishing occurred upriver or downriver of the confluence between the Yukon and Porcupine rivers.

^b Totals may not be correct due to decimal rounding. Subsistence harvest estimates include fish caught during commercial openers but retained for subsistence use.

Table 15.—Estimated subsistence harvest (not including test fish) of fall chum salmon by fishing location in surveyed villages, Yukon Area, 2005.

Community	Coastal	Districts			Subdistricts ^a								River Drainages				Total by	
	District	1	2	3	4A	4B	4C	5A	5B	5C	5D-down	5D-up	Innoko	Koyukuk	Chandalar	Porcupine	Black	Community ^b
Hooper Bay	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Scammon Bay	52	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69
Coastal District	53	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70
Nunam Iqua	0	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	310
Alakanuk	0	427	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	427
Emmonak	6	516	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	543
Kotlik	0	491	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	491
District 1	6	1,744	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,771
Mountain Village	0	388	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	532
Pitkas Point	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
St. Mary's	0	8	482	0	0	0	0	0	0	0	0	0	0	0	0	0	0	490
Pilot Station	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Marshall	0	0	633	0	0	0	0	0	0	0	0	0	0	0	0	0	0	633
District 2	0	403	1,275	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,678
Russian Mission	0	0	0	667	0	0	0	0	0	0	0	0	0	0	0	0	0	667
Holy Cross	0	0	0	582	0	0	0	0	0	0	0	0	0	0	0	0	0	582
Shageluk	0	0	0	33	22	0	0	0	0	0	0	0	0	0	0	0	0	55
District 3	0	0	0	1,282	22	0	0	0	0	0	0	0	0	0	0	0	0	1,304
Anvik	0	0	0	0	497	0	0	0	0	0	0	0	0	0	0	0	0	497
Grayling	0	0	0	0	1,009	0	0	0	0	0	0	0	0	0	0	0	0	1,009
Kaltag	0	0	0	0	345	0	0	0	0	0	0	0	0	0	0	0	0	345
Nulato	0	0	0	0	421	0	0	0	0	0	0	0	0	0	0	0	0	421
Koyukuk	0	0	0	0	803	0	0	0	0	0	0	0	0	0	0	0	0	803
Galena	0	0	0	0	529	1,701	465	0	0	0	0	0	0	0	0	0	0	2,695
Ruby	0	0	0	0	0	429	130	0	0	0	0	0	0	0	0	0	0	559
Huslia	0	0	0	0	0	0	0	0	0	0	0	0	0	1,614	0	0	0	1,614
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	0	111	0	0	0	111
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	0	557	0	0	0	557
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	50	0	0	0	50
District 4	0	0	0	0	3,604	2,130	595	0	0	0	0	0	0	2,332	0	0	0	8,661

-continued-

Table 15.–Page 2 of 2.

Community	Coastal	Districts			Subdistricts ^a								River Drainages				Total by	
	District	1	2	3	4A	4B	4C	5A	5B	5C	5D-down	5D-up	Innoko	Koyukuk	Chandalar	Porcupine	Black	Community ^b
Tanana	0	0	0	0	0	0	0	638	19,907	0	0	0	0	0	0	0	0	20,545
Stevens Village	0	0	0	0	0	0	0	0	0	0	246	0	0	0	0	0	0	246
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	179	0	0	0	0	0	0	179
Fort Yukon	0	0	0	0	0	0	0	0	0	0	3,498	3,104	0	0	0	0	1,486	8,088
Venetie	0	0	0	0	0	0	0	0	0	0	0	0	0	1,441	360	0	0	1,801
Chalkyitsik	0	0	0	0	0	0	0	0	0	0	0	233	0	0	0	0	104	337
District 5	0	0	0	0	0	0	0	638	19,907	0	3,923	3,337	0	0	1,441	360	1,590	31,196
Survey Totals	59	2,164	1,296	1,282	3,626	2,130	595	638	19,907	0	3,923	3,337	0	2,332	1,441	360	1,590	44,680

^a Harvest in Subdistrict 5-D near Ft. Yukon is divided according to whether fishing occurred upriver or downriver of the confluence between the Yukon and Porcupine rivers.

^b Totals may not be correct due to decimal rounding. Subsistence harvest estimates include fish caught during commercial openers but retained for subsistence use.

Table 16.—Estimated subsistence harvest (not including test fish) of coho salmon by fishing location in surveyed villages, Yukon Area, 2005.

Community	Coastal	Districts			Subdistricts ^a								River Drainages				Total by	
	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	17	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	279
Coastal District	17	262	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	279
Nunam Iqua	0	241	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	241
Alakanuk	0	322	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	322
Emmonak	3	71	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79
Kotlik	0	222	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	222
District 1	3	856	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	864
Mountain Village	0	62	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	139
Pitkas Point	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
St. Mary's	0	9	243	0	0	0	0	0	0	0	0	0	0	0	0	0	0	252
Pilot Station	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marshall	0	0	341	0	0	0	0	0	0	0	0	0	0	0	0	0	0	341
District 2	0	71	691	0	0	0	0	0	0	0	0	0	0	0	0	0	0	762
Russian Mission	0	0	0	133	0	0	0	0	0	0	0	0	0	0	0	0	0	133
Holy Cross	0	0	0	84	0	0	0	0	0	0	0	0	0	0	0	0	0	84
Shageluk	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
District 3	0	0	0	217	0	0	0	0	0	0	0	0	0	0	0	0	0	217
Anvik	0	0	0	0	406	0	0	0	0	0	0	0	0	0	0	0	0	406
Grayling	0	0	0	0	234	0	0	0	0	0	0	0	0	0	0	0	0	234
Kaltag	0	0	0	0	187	0	0	0	0	0	0	0	0	0	0	0	0	187
Nulato	0	0	0	0	60	0	0	0	0	0	0	0	0	0	0	0	0	60
Koyukuk	0	0	0	0	37	0	0	0	0	0	0	0	0	0	0	0	0	37
Galena	0	0	0	0	157	230	220	0	0	0	0	0	0	0	0	0	0	607
Ruby	0	0	0	0	0	361	0	0	0	0	0	0	0	0	0	0	0	361
Huslia	0	0	0	0	0	0	0	0	0	0	0	0	734	0	0	0	0	734
Hughes	0	0	0	0	0	0	0	0	0	0	0	0	20	0	0	0	0	20
Allakaket	0	0	0	0	0	0	0	0	0	0	0	0	205	0	0	0	0	205
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	1,081	591	220	0	0	0	0	0	959	0	0	0	0	2,851

-continued-

Table 16.—Page 2 of 2.

Community	Coastal	Districts			Subdistricts ^a							River Drainages				Total by		
	District	1	2	3	4A	4B	4C	5A	5B	5C	5D-down	5D-up	Innoko	Koyukuk	Chandalar	Porcupine	Black	Community ^b
Tanana	0	0	0	0	0	0	0	100	1,516	0	0	0	0	0	0	0	0	1,616
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	304	0	0	0	0	0	90	394
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	100	1,516	0	0	304	0	0	0	0	90	2,010
Survey Totals	20	1,189	696	217	1,081	591	220	100	1,516	0	0	304	0	959	0	0	90	6,983

^a Harvest in Subdistrict 5-D near Ft. Yukon is divided according to whether fishing occurred upriver or downriver of the confluence between the Yukon and Porcupine rivers.

^b Totals may not be correct due to decimal rounding. Subsistence harvest estimates include fish caught during commercial openers but retained for subsistence use.

Table 17.—Responses to survey question assessing percentage of subsistence salmon needs being met, by community, by species, Yukon Area, 2005.

		Percent of Households (HH's) That Responded to Subsistence Needs Met Question, By Community, By Species ^a									
		Chinook Salmon					Summer Chum Salmon				
Community	Total Households	Total Number of Household Responses	% HH's Responses	% HH's Responses	% HH's Responses	% HH's Responses	Total Number of Household Responses	% HH's Responses	% HH's Responses	% HH's Responses	% HH's Responses
			0% to 25%	26 % to 50%	51% to 75%	76% to 100%		0% to 25%	26 % to 50%	51% to 75%	76% to 100%
Hooper Bay	196	45	31%	11%	20%	38%	61	21%	13%	16%	49%
Scammon Bay	78	26	15%	23%	4%	58%	26	15%	23%	4%	58%
Coastal District	274	71	25%	15%	14%	45%	87	20%	16%	13%	52%
Nunam Iqua	33	22	36%	18%	9%	36%	23	35%	17%	9%	39%
Alakanuk	123	37	38%	8%	8%	46%	41	12%	20%	15%	54%
Emmonak	162	67	27%	16%	6%	51%	69	14%	13%	10%	62%
Kotlik	82	26	12%	15%	19%	54%	28	7%	4%	11%	79%
District 1	400	152	28%	14%	9%	48%	161	16%	14%	11%	60%
Mountain Village	135	53	11%	8%	8%	74%	52	13%	6%	6%	75%
Pitkas Point	24	18	17%	28%	0%	56%	16	13%	38%	0%	50%
St. Mary's	104	47	6%	9%	2%	83%	44	2%	7%	7%	84%
Pilot Station	94	46	13%	15%	0%	72%	46	11%	15%	0%	74%
Marshall	69	28	11%	18%	4%	68%	30	10%	13%	3%	73%
District 2	426	192	11%	13%	3%	73%	188	10%	12%	4%	74%
Russian Mission	56	18	6%	0%	11%	83%	13	8%	0%	0%	92%
Holy Cross	51	25	8%	12%	0%	80%	16	19%	6%	0%	75%
Shageluk	29	14	14%	7%	7%	71%	10	20%	30%	0%	50%
District 3	136	57	9%	7%	5%	79%	39	15%	10%	0%	74%
Anvik	34	20	20%	10%	5%	65%	6	33%	0%	0%	67%
Grayling	45	14	0%	0%	0%	100%	7	29%	14%	0%	57%
Kaltag	53	14	0%	7%	0%	93%	2	0%	0%	0%	100%
Nulato	82	21	14%	14%	5%	67%	10	40%	0%	10%	50%
Koyukuk	23	10	0%	0%	0%	100%	3	0%	33%	0%	67%
Galena	150	25	4%	8%	4%	84%	10	10%	0%	0%	90%
Ruby	59	14	14%	7%	0%	79%	5	20%	0%	0%	80%
Huslia	68	9	11%	22%	11%	56%	6	0%	33%	17%	50%
Hughes	22	7	57%	0%	0%	43%	5	20%	0%	0%	80%
Allakaket	43	14	50%	7%	14%	29%	14	50%	7%	14%	29%
Alatna	5	2	50%	50%	0%	0%	2	50%	50%	0%	0%
Bettles	19	9	67%	11%	0%	22%	7	86%	14%	0%	0%
District 4	603	159	18%	9%	4%	69%	77	32%	9%	5%	53%
Tanana	98	33	21%	18%	3%	58%	10	20%	0%	0%	80%
Stevens Village	25	9	0%	33%	0%	67%	1	0%	0%	0%	100%
Birch Creek	8	1	0%	0%	0%	100%	0	-	-	-	-
Beaver	29	15	0%	7%	7%	87%	2	0%	0%	0%	100%
Fort Yukon	150	41	7%	10%	7%	76%	1	100%	0%	0%	0%
Venetie	56	8	50%	0%	13%	38%	1	0%	0%	0%	100%
Chalkyitsik	26	11	18%	9%	0%	73%	3	33%	0%	0%	67%
District 5	392	118	14%	13%	5%	69%	18	22%	0%	0%	78%
Survey Totals	2,231	749	18%	12%	6%	64%	570	17%	12%	7%	64%

-continued-

Table 17.—Page 2 of 2.

Percent of Households (HH's) That Responded to Subsistence Needs Met Question, By Community, By Species ^a											
Community	Total Households	Fall Chum Salmon					Coho Salmon				
		Total Number of Household Responses	% HH's Responses	% HH's Responses	% HH's Responses	% HH's Responses	Total Number of Household Responses	% HH's Responses	% HH's Responses	% HH's Responses	% HH's Responses
			0% to 25%	26 % to 50%	51% to 75%	76% to 100%		0% to 25%	26 % to 50%	51% to 75%	76% to 100%
Hooper Bay	196	0	-	-	-	-	0	-	-	-	-
Scammon Bay	78	12	42%	25%	0%	33%	15	27%	27%	0%	47%
Coastal District	274	12	42%	25%	0%	33%	15	27%	27%	0%	47%
Nunam Iqua	33	21	33%	24%	10%	33%	21	29%	29%	10%	33%
Alakanuk	123	29	28%	3%	0%	69%	13	31%	8%	0%	62%
Emmonak	162	40	43%	5%	5%	48%	19	26%	21%	5%	47%
Kotlik	82	16	44%	19%	6%	31%	12	33%	33%	0%	33%
District 1	400	106	37%	10%	5%	48%	65	29%	23%	5%	43%
Mountain Village	135	23	26%	0%	9%	65%	14	29%	14%	0%	57%
Pitkas Point	24	8	50%	25%	0%	25%	6	50%	17%	0%	33%
St. Mary's	104	18	39%	0%	0%	61%	10	20%	10%	0%	70%
Pilot Station	94	24	29%	13%	0%	58%	14	50%	14%	0%	36%
Marshall	69	19	11%	11%	5%	74%	11	18%	9%	0%	73%
District 2	426	92	28%	8%	3%	61%	55	33%	13%	0%	55%
Russian Mission	56	9	11%	0%	0%	89%	3	33%	0%	0%	67%
Holy Cross	51	13	23%	8%	0%	69%	2	50%	0%	0%	50%
Shageluk	29	3	33%	33%	0%	33%	1	100%	0%	0%	0%
District 3	136	25	20%	8%	0%	72%	6	50%	0%	0%	50%
Anvik	34	7	29%	14%	0%	57%	4	75%	0%	0%	25%
Grayling	45	9	11%	11%	11%	67%	7	14%	29%	0%	57%
Kaltag	53	3	0%	0%	0%	100%	6	0%	0%	0%	100%
Nulato	82	13	46%	0%	0%	54%	6	50%	0%	0%	50%
Koyukuk	23	6	0%	17%	0%	83%	3	0%	0%	0%	100%
Galena	150	10	10%	0%	0%	90%	8	13%	0%	0%	88%
Ruby	59	7	14%	0%	0%	86%	3	33%	0%	0%	67%
Huslia	68	4	0%	25%	25%	50%	3	0%	0%	33%	67%
Hughes	22	4	25%	0%	0%	75%	3	33%	0%	0%	67%
Allakaket	43	13	62%	8%	8%	23%	13	62%	8%	8%	23%
Alatna	5	2	100%	0%	0%	0%	2	100%	0%	0%	0%
Bettles	19	7	86%	0%	0%	14%	6	100%	0%	0%	0%
District 4	603	85	33%	6%	4%	58%	64	41%	5%	3%	52%
Tanana	98	27	22%	7%	0%	70%	14	14%	0%	7%	79%
Stevens Village	25	1	0%	0%	0%	100%	1	0%	0%	0%	100%
Birch Creek	8	0	-	-	-	-	0	-	-	-	-
Beaver	29	3	0%	0%	0%	100%	0	-	-	-	-
Fort Yukon	150	16	6%	6%	25%	63%	5	20%	20%	40%	20%
Venetie	56	9	33%	0%	0%	67%	0	-	-	-	-
Chalkyitsik	26	4	25%	0%	0%	75%	1	100%	0%	0%	0%
District 5	392	60	18%	5%	7%	70%	21	19%	5%	14%	62%
Survey Totals	2,231	380	30%	8%	4%	58%	226	33%	13%	4%	50%

^a In 2003 the survey asked whether 25%, 50%, 75%, or 100% of subsistence needs were met for each salmon species, and results combined household responses of 25% and 50% as (less than 50%) and 75% and 100% as (greater than 50%). In 2004 and 2005, the table categories were not combined and households responses are reported as indicated on survey.

Table 18.—Reported subsistence and personal use fish harvested under the authority of a permit, listed by permit area, Yukon Area, 2005.

Permit Fishing Area	Type	Permit ^a		Percent Returned	Number of Permits Returned that Fished ^c	Reported Harvest										
		Issued ^b	Returned			Summer Chum	Fall Chum	Chinook	Coho	Whitefish	Sheefish	Burbot	Pike	Suckers	Grayling	
Subsistence																
Koyukuk Middle and South Fork Rivers	SF	2	1	50%	1	0	0	0	0	0	6	0	1	0	22	22
Yukon River Rampart Area	SR	22	19	86%	17	1,721	663	2,023	10	22	0	21	0	2	4	
Yukon River near Haul Road Bridge	SY	76	72	95%	57	1,847	643	17	9	52	31	11	33	4	0	
Yukon River near Circle and Eagle ^d	SE	89	81	91%	55	4,004	241	18,427	130	245	56	17	46	101	741	
Tanana River Subdistrict 6A	SA	18	16	89%	11	291	166	3,015	2,414	13	0	0	4	0	0	
Tanana River Subdistrict 6B ^e	SB	70	67	96%	29	1,403	1,846	15,367	9,659	1,652	7	19	82	64	5	
Tanana River Upstream of Subdistrict 6C	SU	29	24	83%	13	0	0	15	0	1,235	0	2	47	61	25	
Kantishna River Subdistrict 6A	SK	6	6	100%	4	133	2	1,302	245	58	0	0	41	7	0	
Tolovana River Pike Subdistrict 6B	ST	79	69	87%	31	1	0	0	0	304	58	0	386	30	0	
Subsistence Permit Subtotals		391	355	91%	218	9,400	3,561	40,166	12,467	3,587	152	71	639	291	797	
Personal Use																
Tanana River Subdistrict 6C	PC	63	59	94%	27	138	152	133	107	3	3	3	1	0	0	
Tanana River Whitefish Upstream of Subdistrict 6C	PW	10	10	100%	5	0	0	0	0	81	0	4	1	403	3	
Personal Use Permit Subtotals		73	69	95%	32	138	152	133	107	84	3	7	2	403	3	
Permit Totals		464	424	91%	250	9,538	3,713	40,299	12,574	3,671	155	78	641	694	800	

^a Permits returned as of June 1, 2006.

^b Includes 37 households that were "issued" permits for more than one area. Additionally, includes two households that were issued duplicate permits for same area.

^c Includes nine households that "fished" in two different permit areas.

^d Does not include fish distributed to community households from ADF&G Eagle Sonar test fish project (179 Chinook and 2 summer chum salmon)

^e Does not include 3,247 fall chum and 7,220 coho salmon commercial related fish "not sold" during commercial fishing but retained for subsistence use.

Table 19.—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, 2005.

Community	Harvest by Drainage	Permits ^a		Percent Returned	No. of Permits Returned that Fished ^d	Reported Harvest ^b										
		Issued ^c	Returned			Summer	Fall	Chinook	Chum	Chum	Coho	Whitefish	Sheefish	Burbot	Pike	Sucker	Grayling
Subsistence Permit																
Central	Yukon River	7	7	100%	6	175	5	36	1	5	0	0	16	0	0	
Circle	Yukon River	24	17	71%	11	1,283	3	918	100	17	0	1	12	3	0	
Eagle ^e	Yukon River	46	46	100%	32	2,387	233	17,356	15	222	55	15	18	98	738	
Fairbanks (FNSB) ^f	Yukon River	83	78	94%	64	2,584	780	1,682	10	68	31	32	33	6	0	
	Tolovana River	53	46	87%	22	0	0	0	0	0	0	0	160	0	0	
	Kantishna River	1	1	100%	1	0	0	0	0	0	0	0	24	0	0	
	Tanana River	20	19	95%	8	971	45	6,691	3,032	532	2	4	6	8	0	
	<i>FNSB Subtotal</i>	157	144	92%	95	3,555	825	8,373	3,042	600	33	36	223	14	0	
Healy	Tanana River	6	6	100%	4	0	14	1,847	1,492	220	0	1	7	0	0	
	Kantishna River	1	1	100%	1	0	0	214	109	1	0	0	0	0	0	
	<i>Healy Subtotal</i>	7	7	100%	5	0	14	2,061	1,601	221	0	1	7	0	0	
Minto	Tanana River	12	11	92%	9	276	161	2,947	2,374	7	0	0	0	0	0	
	Kantishna River	1	1	100%	1	13	2	38	136	57	0	0	17	7	0	
	<i>Manley Subtotal</i>	14	13	93%	11	468	216	2,985	2,510	64	0	0	17	7	0	
	Yukon River	3	3	100%	1	50	0	0	0	0	0	0	0	0	0	
	Tolovana River	26	23	88%	9	1	0	0	0	304	58	0	226	30	0	
	<i>Minto Subtotal</i>	53	48	91%	14	85	21	600	0	386	62	0	278	30	0	
Nenana	Yukon River	1	0	0%	0	0	0	0	0	0	0	0	0	0	0	
	Tanana River	26	24	92%	15	413	1,771	6,297	5,175	824	1	14	21	56	5	
	Kantishna River	2	2	100%	1	120	0	1,050	0	0	0	0	0	0	0	
	<i>Nenana Subtotal</i>	29	26	90%	16	533	1,771	7,347	5,175	824	1	14	21	56	5	
Rampart	Yukon River	6	5	83%	4	411	315	358	10	6	0	0	0	0	4	
Stevens Village	Yukon River	6	5	83%	5	417	158	0	0	0	0	0	0	0	0	
Upper Tanana Villages (UTV) ^g	Yukon River	6	6	100%	4	77	0	117	13	1	1	1	0	0	3	
	Tanana River	27	23	85%	13	0	0	15	0	1,235	0	2	47	61	25	
	<i>UTV Subtotal</i>	33	29	88%	17	77	0	132	13	1,236	1	3	47	61	28	
Other Subsistence ^h	Yukon River	4	4	100%	1	9	0	0	0	0	0	0	0	0	0	
	Tanana River	2	2	100%	0	0	0	0	0	0	0	0	0	0	0	
	Kantishna River	1	1	100%	0	0	0	0	0	0	0	0	0	0	0	
	Upper Koyukuk River	2	1	50%	1	0	0	0	0	6	0	1	0	22	22	
	<i>Other Subtotal</i>	9	8	89%	2	9	0	0	0	6	0	1	0	22	22	
Subsistence Permit Subtotals		391	355	91%	218	9,400	3,561	40,166	12,467	3,587	152	71	639	291	797	

-continued-

Table 19.—Page 2 of 2.

Community	Harvest by Drainage	No. of Permits				Reported Harvest ^b									
		Permits ^a		Percent	Returned that Fished ^d	Summer		Fall		Coho	Whitefish	Sheefish	Burbot	Pike	Sucker	Grayling
Issued ^c	Returned	Returned	Chinook	Chum		Chum	Chum	Whitefish							
Personal Use Permit															
Fairbanks (FNSB) ^f	Tanana River	69	65	94%	30	138	152	133	107	77	3	7	2	240	3
Others Personal Use ⁱ	Tanana River	4	4	100%	2	0	0	0	0	7	0	0	0	163	0
<i>Personal Use Permit Subtotals</i>		73	69	95%	32	138	152	133	107	84	3	7	2	403	3
Permit Totals		464	424	91%	250	9,538	3,713	40,299	12,574	3,671	155	78	641	694	800

^a Permits returned as of June 1, 2006.

^b Does not include 3,247 fall chum and 7,220 coho commercial related salmon "not sold" during commercial fishing but retained for subsistence use.

^c Includes 37 households that were "issued" permits for more than one area. Additionally, includes two households that were issued duplicate permits for same area.

^d Includes nine households that "fished" in two different permit areas.

^e Does not include fish distributed to community households from ADF&G Eagle Sonar test fish project (179 Chinook and 2 summer chum salmon).

^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, Northway, Tanacross, and Tok.

^h "Other Subsistence" represents residents from Anderson, Denali Park, Eagle River, Gakona, Lake Minchumina, Tanana, and Wiseman who were issued a subsistence fishing permit for area indicated.

ⁱ "Others Personal Use" includes residents from Nenana and Delta Junction.

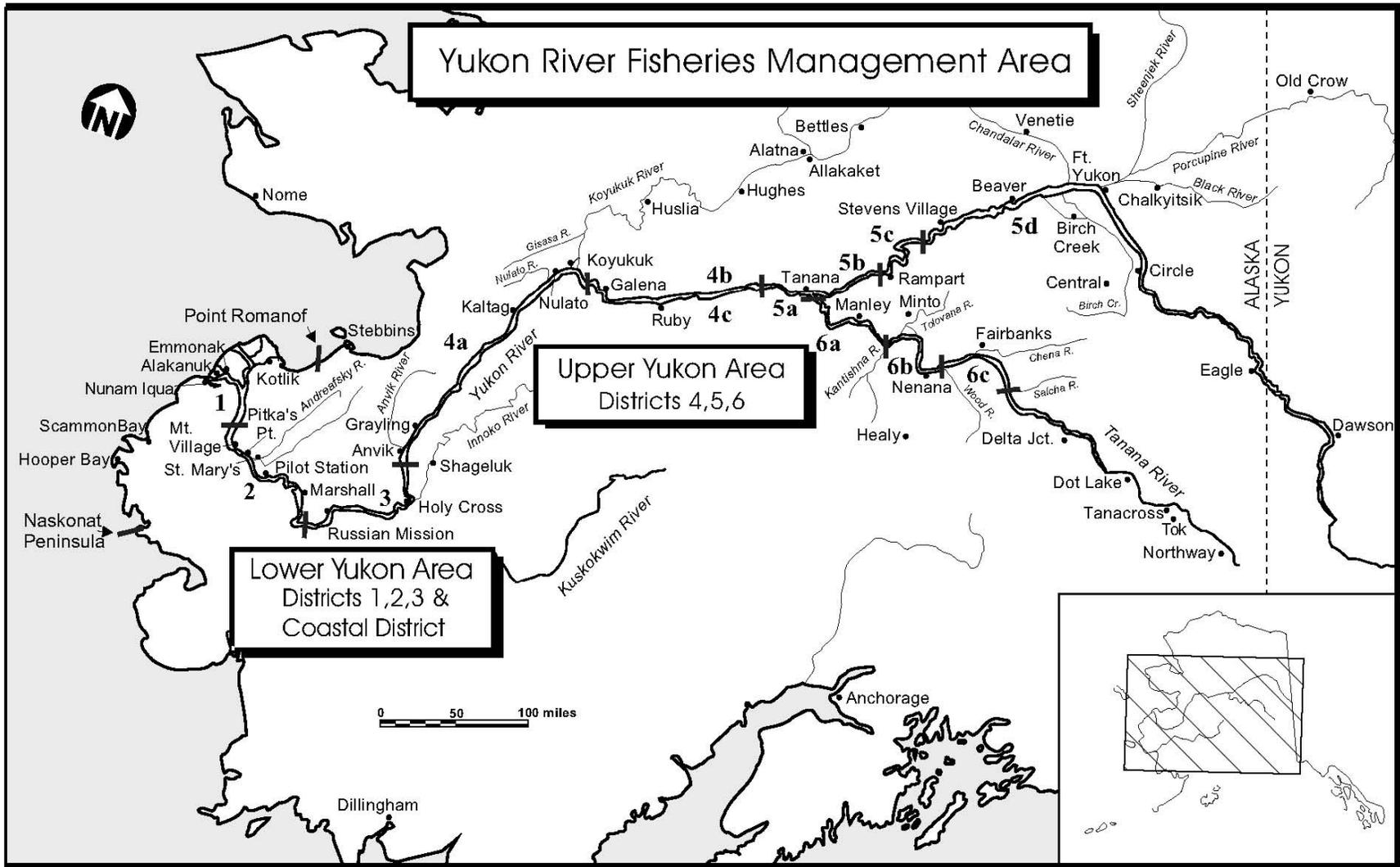


Figure 1.—Alaskan portion of Yukon River drainage showing communities and fishing districts.

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

2005 Yukon Area Post-Season Subsistence Salmon Harvest Survey
CONFIDENTIAL INFORMATION

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

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

2. How many people live in your household? _____

3. Did anyone in your household catch salmon for subsistence use this year? Yes _____ No _____ (If "No," go to area II)
 Includes salmon caught during commercial openings but retained for subsistence. IF YES, COMPLETE ALL OF PART ONE.

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

I. HOUSEHOLDS THAT CAUGHT SALMON

4. May I have your salmon catch calendar? Yes _____ No _____ Already sent in _____ (Are all fish harvested on calendar?)

5. How many total salmon did you or your fishing group catch this year? (Group may include other households)

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

6. How many households help catch these fish? _____ (Names) _____

***7. How many total salmon did your household catch for subsistence purposes this year?**

(Include only fish caught by this household, not the group, includes fish kept from commercial periods.)

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

8. Did you or anyone in this household commercial fish this year? Yes _____ No _____

9. If Yes. How many salmon caught during commercial openings did your household keep for subsistence use?

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

10. Did your household "lose" any salmon? (e.g. to bears, birds, spoilage, diseased fish, Ichthyophonus, etc.)

(If fish was not fit for humans but was fed to dogs, then it was not "lost.")

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

****11. 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 _____

12. Did your household share the salmon catch with any other households? (names, species and numbers)

13. Where do you catch your subsistence salmon? (Circle all that apply and show harvest by area if more than one)

Ocean 1 2 3 4A 4B C 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 _____

14. What is your household's primary type of salmon fishing gear? (In order of importance 1= primary)

SET NET _____ DRIFT NET _____ FISH WHEEL _____ HOOK & LINE _____ DIPNET _____ OTHER _____

Figure 2.–Yukon Area postseason subsistence salmon harvest survey form, 2005.

II. ALL HOUSEHOLDS

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) _____
 Did your household catch any sockeye (red) salmon this year? Yes _____ No _____ How many? _____

**16. 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 _____

17. How many dogs (including puppies) does your household have? _____ (if "No" on questions 3 and 16 go to question 22)

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 _____
 (commercial) CHINOOK _____ SUMMER CHUM _____ FALL CHUM _____ COHO _____

21. How successful was your household in meeting its subsistence salmon needs? (Indicate percent success with "x")
 "No Need" means there was no harvest or use of a species because there was no need for the species, e.g. species may not be traditionally fished in that area or respondent may not wish to harvest the species.
 (No Need)
 Chinook _____ (100%) _____ (75%) _____ (50%) _____ (25%) _____ (0%) If poor, why? _____
 Summer Chum _____ (100%) _____ (75%) _____ (50%) _____ (25%) _____ (0%) If poor, why? _____
 Fall Chum _____ (100%) _____ (75%) _____ (50%) _____ (25%) _____ (0%) If poor, why? _____
 Coho _____ (100%) _____ (75%) _____ (50%) _____ (25%) _____ (0%) If poor, why? _____

22. Additional Comments: _____

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:

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 **11 and **16)	
CHINOOK _____	SUMMER CHUM _____ FALL CHUM _____ COHO _____ PINK _____

Complete Survey _____ Partial Survey _____ No Survey _____

Figure 2.-Page 2 of 2.

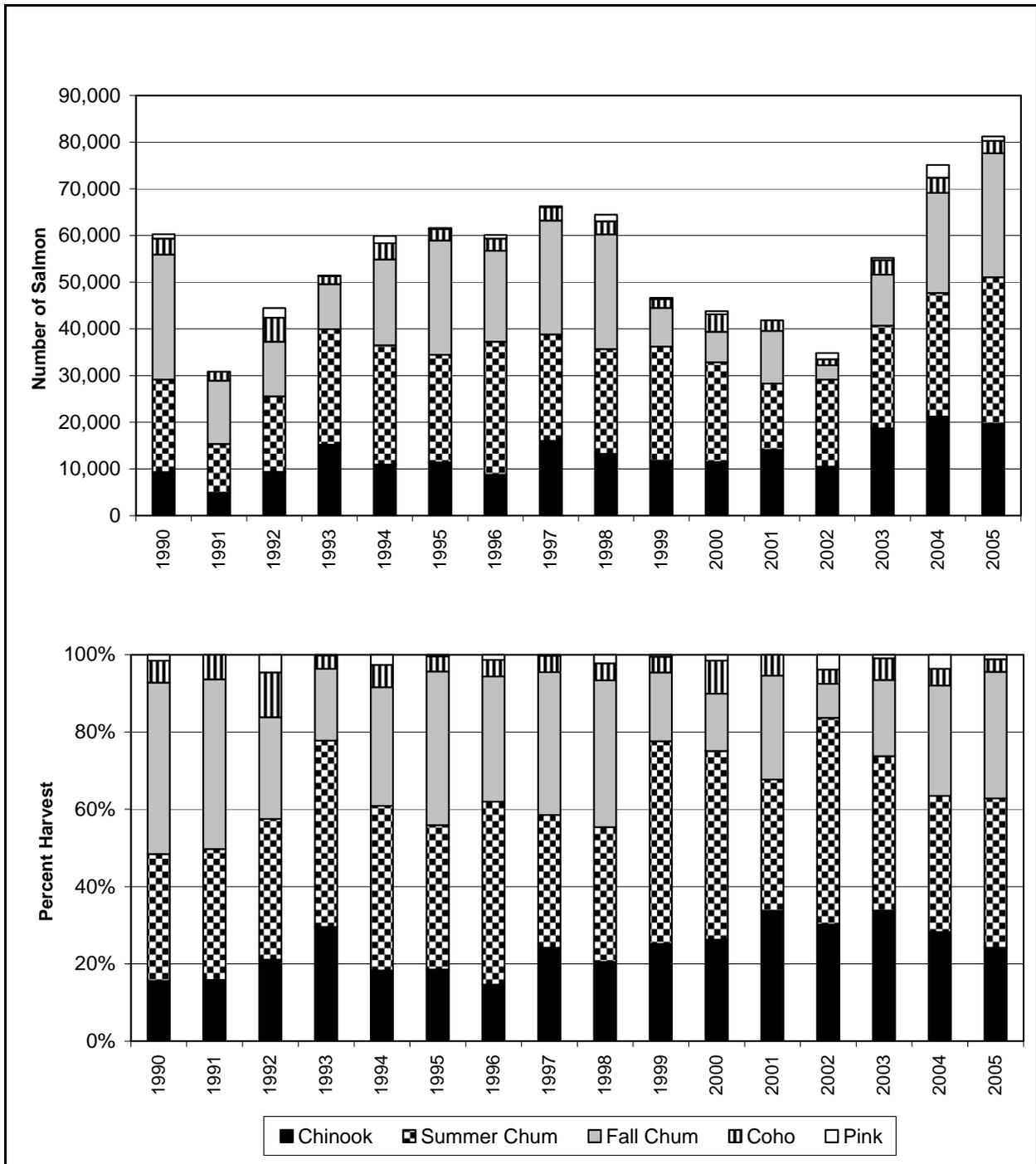


Figure 3.—Subsistence salmon harvest reported on catch calendars by species from Districts 1 through 4 and a portion of District 5, Yukon Area, 1990–2005.

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

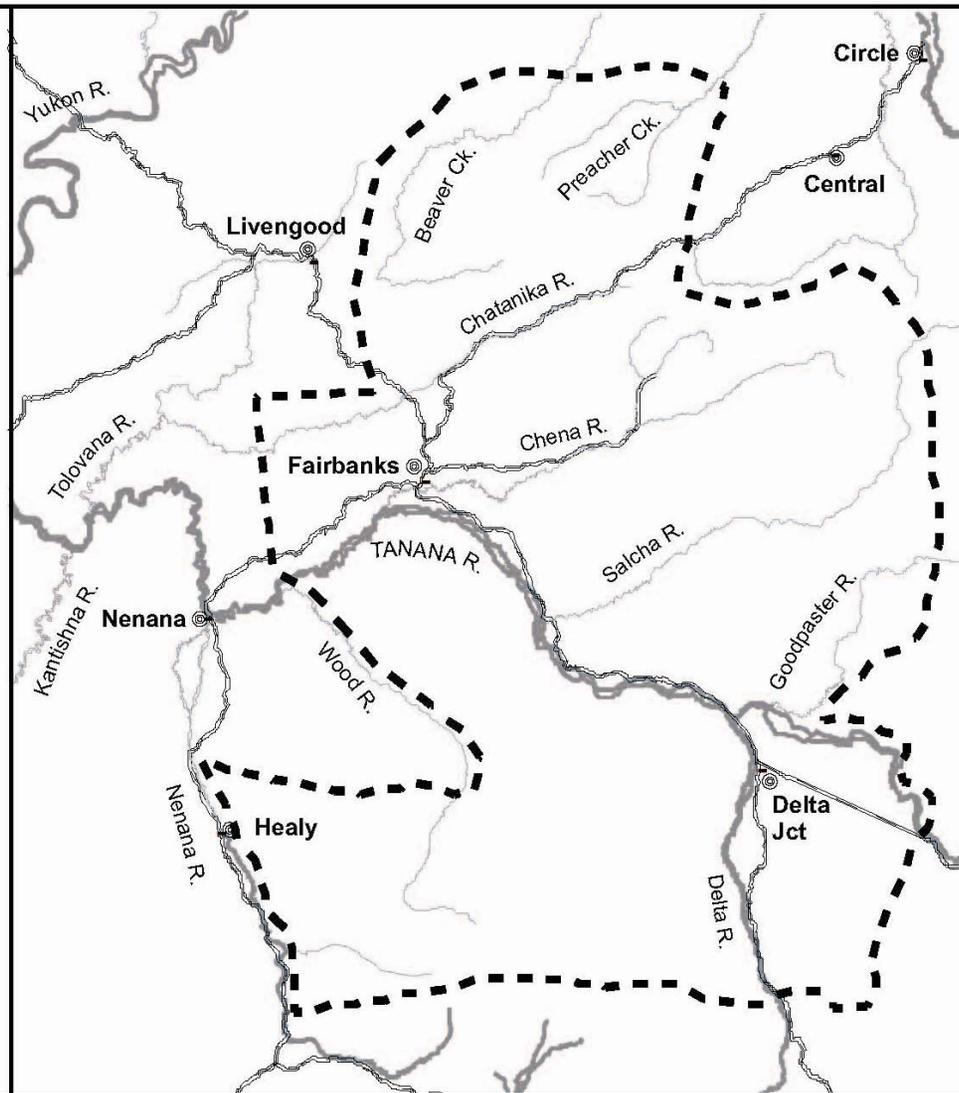
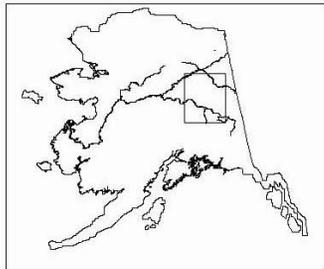
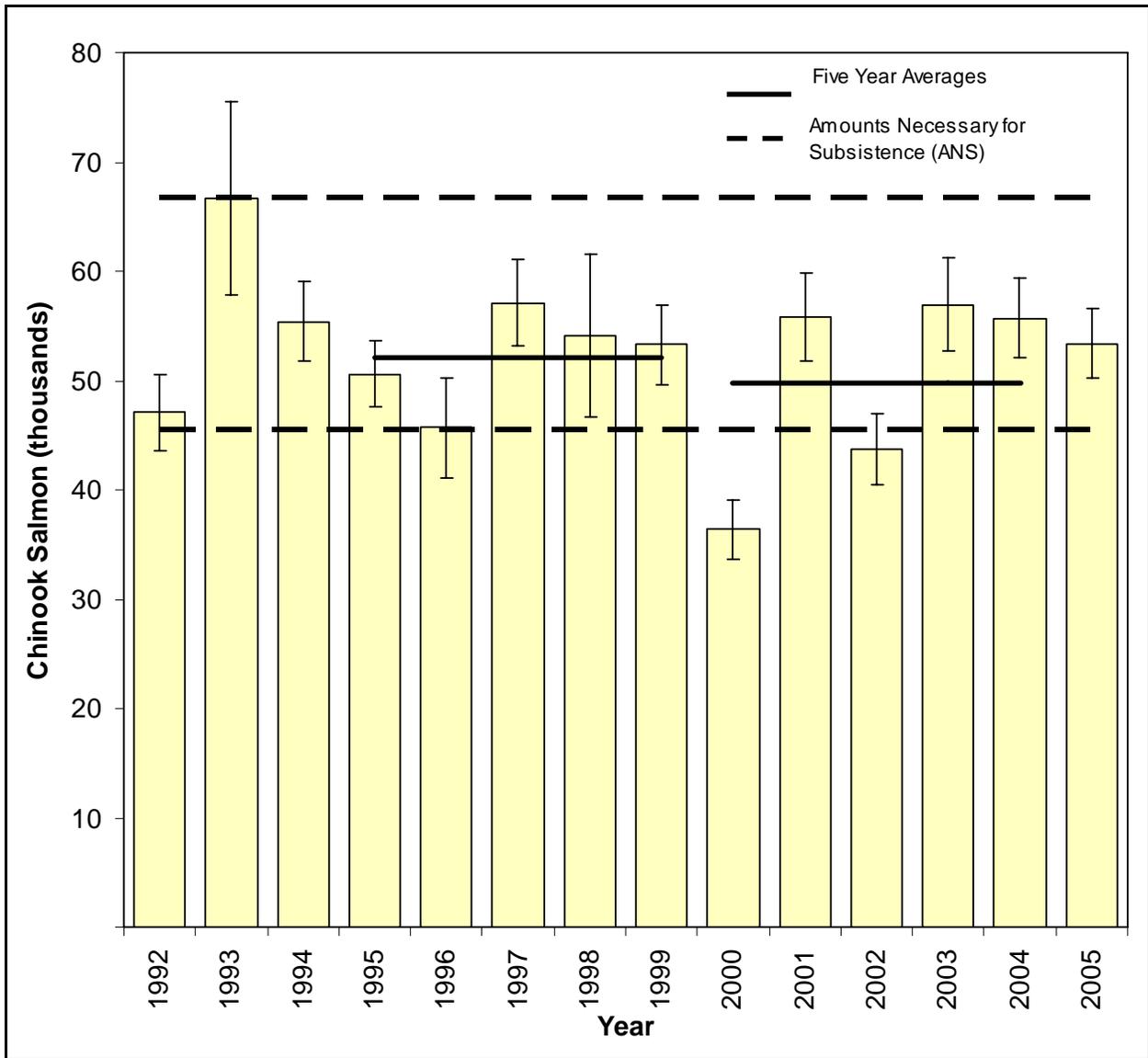
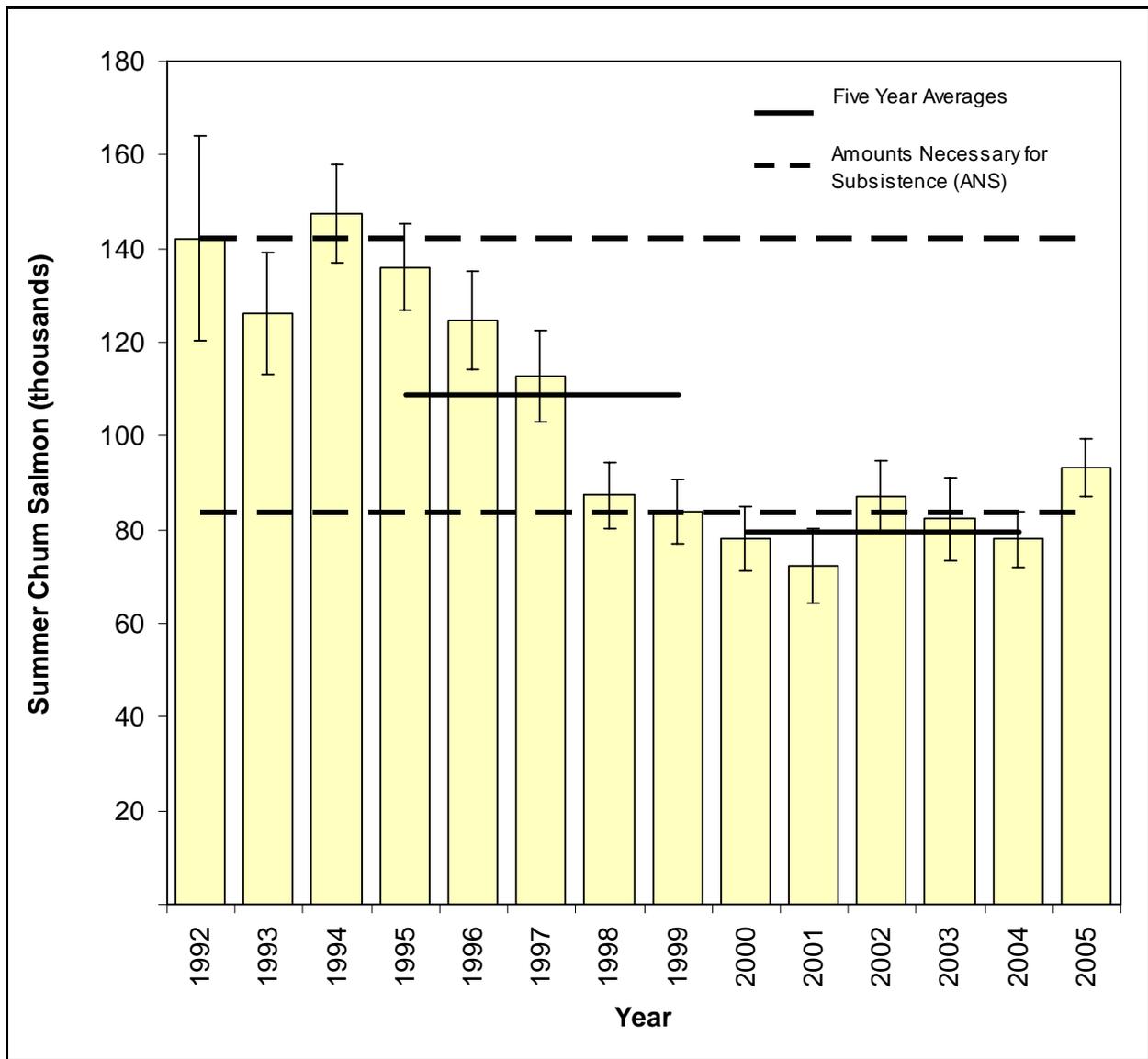


Figure 4.—Fairbanks Nonsubsistence Area.



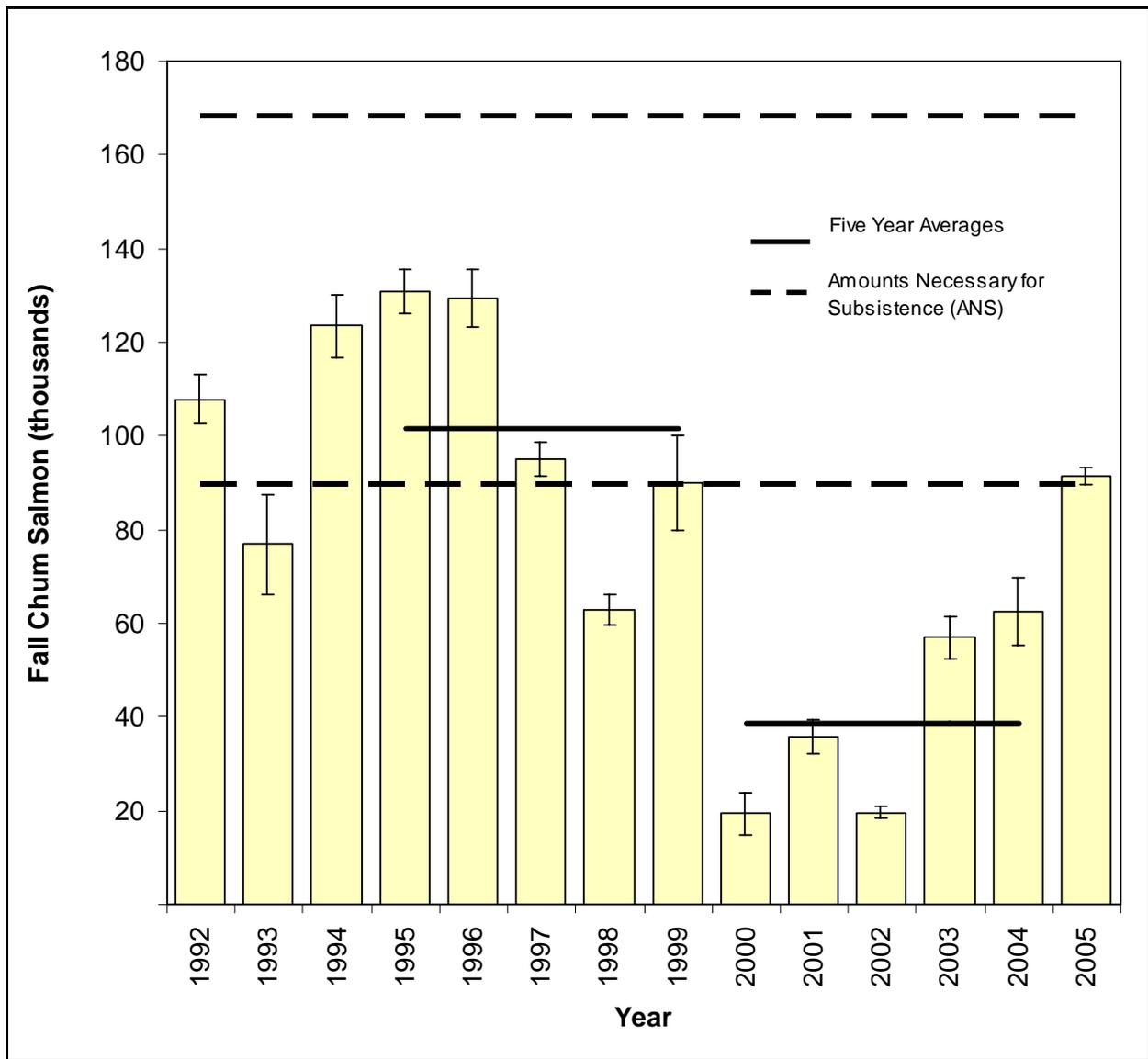
Note: Amount Necessary for Subsistence (ANS) of 45,500 to 66,704 Chinook salmon defined by the Board of Fisheries in 2001. Harvest estimates and 95% confidence interval are provided.

Figure 5.—Estimated Chinook salmon subsistence harvest, Yukon Area, 1992–2005.



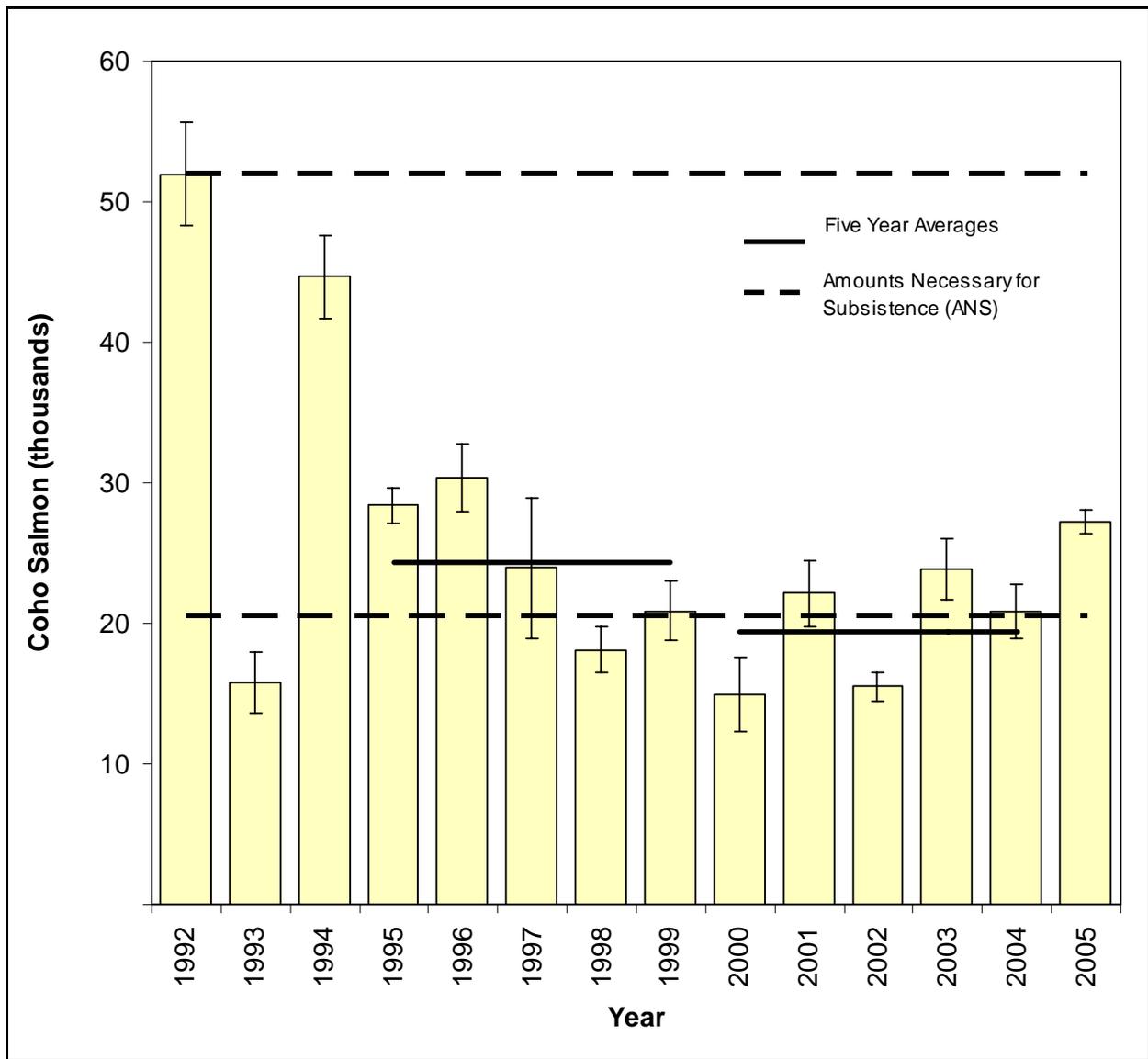
Note: Does not include summer chum salmon carcasses retained for subsistence use from the commercial roe fishery (most significant in 1995 and 1996). Amount Necessary for Subsistence (ANS) of 83,500 to 142,192 summer chum salmon defined by the Board of Fisheries in 2001. Harvest estimates and 95% confidence interval are provided.

Figure 6.—Estimated summer chum salmon subsistence harvest, Yukon Area, 1992–2005.



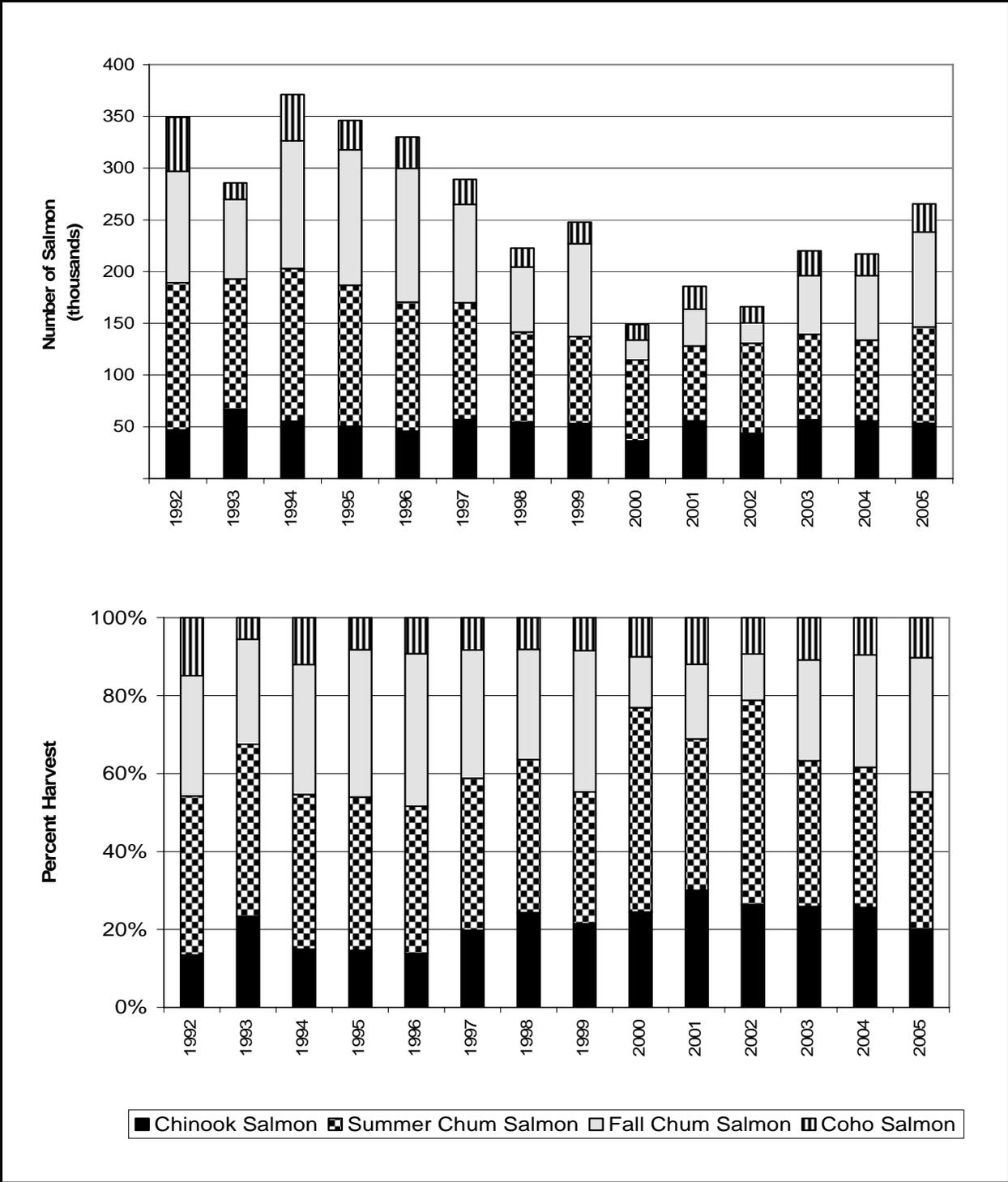
Note: Does not include fall chum salmon carcasses retained for subsistence use from the commercial fishery (most significant in 1995 and 1996). Does not include approximately 14,500 to 15,000 coho salmon obtained from Valdez Fisheries Development Association as part of Eagle's replacement subsistence salmon fishery in 2001 and 2003. Also includes the Amount Necessary for Subsistence (ANS) of 89,500 to 167,900 fall chum salmon as defined by the Board of Fisheries in 2001. Harvest estimates and 95% confidence interval are provided.

Figure 7.—Estimated fall chum salmon subsistence harvest, Yukon Area, 1992–2005.



Note: Coho salmon carcasses retained for subsistence use from the commercial fishery are not included (most significant in 2003). Also includes the Amount Necessary for Subsistence (ANS) of 20,500 to 51,980 coho salmon as defined by the Board of Fisheries in 2001. Harvest estimates and 95% confidence interval are provided.

Figure 8.—Estimated coho salmon subsistence harvest, Yukon Area, 1992–2005.



Note: Does not include summer chum, fall chum, and coho salmon carcasses retained for subsistence use from the commercial fishery. 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 9.—Estimated total subsistence salmon harvest, Yukon Area, 1992–2005.

APPENDIX A. 2005 HARVEST INFORMATION

Appendix A1.—Estimated Chinook salmon subsistence harvest in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester			Medium Harvester			Heavy Harvester			Combined						
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	n	Est Total	CI (95%) (+/-)
Hooper Bay	2	2	0.0	0.0	76	22	0.4	0.2	99	24	0.8	0.2	19	18	2.3	0.1	-	-	-	-	196	66	157	52
Scammon Bay	3	2	0.0	0.0	23	5	8.2	7.0	37	8	5.4	2.2	15	13	20.2	1.9	-	-	-	-	78	28	691	359
Coastal District	5	4	0.0	0.0	99	27	2.2	1.6	136	32	2.1	0.6	34	31	10.2	0.8	-	-	-	-	274	94	848	363
Nunam Iqua	-	-	-	-	6	2	0.0	0.0	16	12	11.3	2.3	11	9	14.3	1.2	-	-	-	-	33	23	338	78
Alakanuk	3	3	12.7	0.0	43	12	3.8	1.8	54	14	1.9	0.6	23	22	15.7	0.9	-	-	-	-	123	51	660	169
Emmonak	12	8	0.0	0.0	64	22	1.9	0.8	58	23	5.5	1.3	28	27	19.1	0.9	-	-	-	-	162	80	975	178
Kotlik	3	3	13.3	0.0	22	3	1.0	0.9	38	9	21.9	8.5	19	16	40.1	4.4	-	-	-	-	82	31	1,655	656
District 1	18	14	4.3	0.0	135	39	2.2	0.7	166	58	8.6	2.0	81	74	22.4	1.1	-	-	-	-	400	185	3,628	705
Mountain Village	4	3	10.3	2.9	32	8	0.1	0.1	68	16	20.4	7.7	30	30	29.6	0.0	1	1	59.0	-	135	58	2,383	1,026
Pitkas Point	-	-	-	-	7	6	3.3	1.3	11	10	15.9	1.8	6	4	70.0	12.3	-	-	-	-	24	20	618	150
St. Mary's	2	1	5.0	-	25	8	19.1	8.2	51	15	20.9	3.5	26	25	43.9	1.1	-	-	-	-	104	49	2,693	535
Pilot Station	2	2	3.0	0.0	34	16	1.8	1.0	42	20	13.3	2.5	16	14	20.9	1.8	-	-	-	-	94	52	959	225
Marshall	3	3	10.7	0.0	19	5	0.4	0.3	33	8	33.9	5.3	14	13	46.2	2.2	-	-	-	-	69	29	1,804	348
District 2	11	9	8.1	1.1	117	43	4.9	1.8	205	69	21.0	2.9	92	86	37.3	1.0	1	1	59.0	-	426	208	8,457	1,238
Russian Mission	-	-	-	-	15	3	17.7	14.1	35	10	37.3	8.3	6	6	53.8	0.0	-	-	-	-	56	19	1,894	703
Holy Cross	4	3	4.3	2.2	16	8	17.5	6.0	19	9	67.1	10.5	12	10	103.7	9.0	-	-	-	-	51	30	2,817	484
Shageluk	1	0	-	-	9	5	0.0	0.0	11	10	14.3	1.9	6	4	30.5	9.5	2	2	40.0	0.0	29	21	420	118
District 3	5	3	4.3	2.2	40	16	13.6	5.8	65	29	42.1	5.4	24	20	72.9	5.1	2	2	40.0	0.0	136	70	5,131	861
Anvik	1	1	0.0	-	13	11	1.9	0.4	13	11	42.7	5.7	7	7	89.4	0.0	-	-	-	-	34	30	1,206	147
Grayling	-	-	-	-	7	3	43.7	12.7	31	8	36.0	9.6	7	7	65.1	0.0	-	-	-	-	45	18	1,878	610
Kaltag	2	2	37.5	0.0	9	2	0.0	0.0	40	13	80.5	13.2	2	1	35.0	-	-	-	-	-	53	18	3,367	1,031
Nulato	2	2	0.0	0.0	28	7	17.1	9.3	44	13	31.0	6.1	8	6	113.2	14.2	-	-	-	-	82	28	2,749	765
Koyukuk	-	-	-	-	8	5	0.6	0.4	11	7	14.7	7.8	3	3	42.3	0.0	1	1	102.0	-	23	16	396	168
Galena	3	2	17.0	9.8	86	22	8.4	4.3	52	14	26.8	8.9	8	8	87.6	0.0	1	0	-	-	150	46	2,864	1,166
Ruby	-	-	-	-	43	11	7.1	4.8	10	0	-	-	4	3	200.0	78.4	2	2	44.0	0.0	59	16	1,193	734
Huslia	-	-	-	-	44	13	1.0	0.6	18	5	3.4	1.8	2	1	15.0	-	4	4	18.0	0.0	68	23	207	82
Hughes	-	-	-	-	13	9	1.1	0.6	4	3	0.0	0.0	2	2	0.5	0.0	3	3	6.0	0.0	22	17	33	16
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	0.8	0.6	4	4	11.0	0.0	2	2	7.5	0.0	43	16	68	14
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	0.0	0.0	-	-	-	-	-	-	-	-	5	4	0	0
Bettles	2	1	0.0	-	17	12	0.2	0.1	-	-	-	-	-	-	-	-	-	-	-	-	19	13	3	3
District 4	10	8	12.6	2.9	296	103	6.4	1.7	237	80	34.7	3.6	47	42	80.0	7.1	13	12	24.6	0.0	603	245	13,964	1,994
Tanana	1	1	19.0	-	49	19	1.1	0.8	31	13	28.3	13.3	8	8	125.3	0.0	9	9	197.7	0.0	98	50	3,729	814
Stevens Village	1	0	-	-	7	5	1.6	0.9	13	7	66.0	14.5	3	1	150.0	-	1	1	251.0	-	25	14	1,570	371
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	43.5	13.6	-	-	-	-	-	-	-	-	8	3	131	80
Beaver	3	2	48.0	27.7	13	11	1.6	0.4	11	9	60.6	12.0	2	2	63.0	0.0	-	-	-	-	29	24	957	306
Fort Yukon	9	5	25.6	7.3	89	25	12.5	7.4	36	11	18.7	6.3	9	9	81.2	0.0	7	7	120.7	0.0	150	57	3,591	1,379
Venetie	10	6	0.3	0.2	27	6	0.0	0.0	12	3	0.7	0.6	5	5	8.8	0.0	2	2	2.0	0.0	56	22	59	14
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	7.5	1.8	1	1	0.0	-	-	-	-	-	26	19	53	25
District 5	24	14	17.2	4.6	208	79	5.7	3.2	113	51	28.9	4.7	28	26	84.0	0.0	19	19	151.5	0.0	392	189	10,090	1,674
Survey Totals	73	52	10.0	1.6	895	307	5.3	1.0	922	319	21.8	1.4	306	279	44.0	1.2	35	34	97.4	0.0	2,231	991	42,118	3,111

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Appendix A2.—Estimated summer chum salmon subsistence harvest in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester			Medium Harvester				Heavy Harvester				Combined					
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	n	Total	Est	CI (95%) (+/-)
Hooper Bay	2	2.0	15.0	0.0	76	21	32.2	8.9	99	24	49.0	10.5	19	18	128.8	6.6	-	-	-	-	196	65	9,771		2,450
Scammon Bay	3	2	0.0	0.0	23	5	10.0	8.8	37	8	75.8	29.5	15	13	103.5	8.0	-	-	-	-	78	28	4,586		2,187
Coastal District	5	4	6.0	0.0	99	26	27.0	7.1	136	32	56.2	11.1	34	31	117.7	5.1	-	-	-	-	274	93	14,357		3,284
Nunam Iqua	-	-	-	-	6	2	2.5	2.0	16	12	65.7	10.5	11	9	157.1	18.4	-	-	-	-	33	23	2,794		517
Alakanuk	3	3	44.3	0.0	43	12	19.8	8.9	54	14	36.7	11.5	23	22	111.7	3.8	-	-	-	-	123	51	5,537		1,442
Emmonak	12	8	0.0	0.0	64	22	34.7	11.6	58	23	80.1	16.5	28	27	154.0	4.1	-	-	-	-	162	80	11,179		2,392
Kotlik	3	3	33.3	0.0	22	3	12.7	11.8	38	9	82.4	34.9	19	16	153.1	15.4	-	-	-	-	82	31	6,420		2,707
District 1	18	14	12.9	0.0	135	39	25.0	6.5	166	58	65.1	10.6	81	74	142.2	4.7	-	-	-	-	400	185	25,930		3,923
Mountain Village	4	3.0	9.3	3.9	32	8	6.8	4.7	68	16	67.4	13.3	30	30	122.8	0.0	1	1	341.0	-	135	58	8,861		1,794
Pitkas Point	-	-	-	-	7	6	52.8	15.5	11	10	44.2	3.6	6	4	27.8	9.4	-	-	-	-	24	20	1,023		252
St. Mary's	2	1.0	10.0	-	25	8	20.0	7.1	51	15	55.9	10.0	26	25	134.8	2.4	-	-	-	-	104	49	6,877		1,069
Pilot Station	2	2.0	9.0	0.0	34	16	7.4	3.7	42	20	35.2	6.6	16	14	60.9	5.5	-	-	-	-	94	52	2,721		619
Marshall	3	3.0	38.0	0.0	19	5	4.2	3.6	33	8	49.8	13.2	14	13	96.2	10.1	-	-	-	-	69	29	3,183		909
District 2	11	9	17.2	1.4	117	43	12.1	2.5	205	69	53.8	5.7	92	86	105.2	2.0	1	1	341.0	-	426	208	22,665		2,374
Russian Mission	-	-	-	-	15	3	0.0	0.0	35	10	15.0	6.0	6	6	66.7	0.0	-	-	-	-	56	19	925		415
Holy Cross	4	3.0	0.0	0.0	16	8	2.4	1.7	19	9	21.4	7.5	12	10	26.2	3.1	-	-	-	-	51	30	760		293
Shageluk	1	0.0	-	-	9	5	80.0	53.3	11	10	33.0	9.0	6	4	416.3	102.9	2	2	250.0	0.0	29	21	4,081		1,545
District 3	5	3	0.0	0.0	40	16	19.0	12.0	65	29	19.9	4.2	24	20	133.8	25.8	2	2	250.0	0.0	136	70	5,766		1,626
Anvik	1	1.0	0.0	-	13	11	0.0	0.0	13	11	3.2	0.6	7	7	69.7	0.0	-	-	-	-	34	30	529		15
Grayling	-	-	-	-	7	3	0.0	0.0	31	8	0.0	0.0	7	7	111.9	0.0	-	-	-	-	45	18	783		0
Kaltag	2	2	0.0	0.0	9	2	0.0	0.0	40	13	17.0	12.5	2	1	0.0	-	-	-	-	-	53	18	680		983
Nulato	2	2.0	43.5	0.0	28	7	15.1	11.0	44	13	2.1	1.0	8	6	4.0	0.9	-	-	-	-	82	28	634		608
Koyukuk	-	-	-	-	8	5	41.0	25.1	11	7	2.0	1.2	3	3	27.3	0.0	1	1	105.0	-	23	16	537		395
Galena	3	2	1.0	0.6	86	22	0.1	0.1	52	14	7.2	2.8	8	8	77.9	0.0	1	0	-	-	150	46	1,013		289
Ruby	-	-	-	-	43	11	7.3	6.3	10	0	-	-	4	3	160.7	76.9	2	2	6.0	0.0	59	16	967		802
Huslia	-	-	-	-	44	13	0.2	0.1	18	5	8.0	6.8	2	1	500.0	-	4	4	320.5	0.0	68	23	2,433		240
Hughes	-	-	-	-	13	9	0.0	0.0	4	3	0.0	0.0	2	2	115.0	0.0	3	3	666.7	0.0	22	17	2,230		0
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	25.0	20.4	4	4	173.3	0.0	2	2	771.0	0.0	43	16	2,535		480
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	2.5	0.0	-	-	-	-	-	-	-	-	5	4	5		0
Bettles	2	1	0.0	-	17	12	0.3	0.1	-	-	-	-	-	-	-	-	-	-	-	-	19	13	4		5
District 4	10	8	9.0	0.2	296	103	3.7	1.5	237	80	7.3	2.6	47	42	97.3	6.5	13	12	411.8	0.0	603	245	12,350		1,583
Tanana	1	1.0	0.0	-	49	19	0.2	0.2	31	13	23.3	12.9	8	8	63.4	0.0	9	9	399.1	0.0	98	50	4,832		785
Stevens Village	1	0	-	-	7	5	0.0	0.0	13	7	26.0	11.4	3	1	20.0	-	1	1	44.0	-	25	14	442		291
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	0.0	0.0	-	-	-	-	-	-	-	-	8	3	0		0
Beaver	3	2	0.0	0.0	13	11	0.2	0.1	11	9	2.3	0.6	2	2	20.0	0.0	-	-	-	-	29	24	68		13
Fort Yukon	9	5.0	0.0	0.0	89	25	0.0	0.0	36	11	0.0	0.0	9	9	0.0	0.0	7	7	9.6	0.0	150	57	67		0
Venetie	10	6	0.0	0.0	27	6	0.0	0.0	12	3	0.0	0.0	5	5	0.0	0.0	2	2	0.0	0.0	56	22	0		0
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	0.0	0.0	1	1	0.0	-	-	-	-	-	26	19	0		0
District 5	24	14	0.0	0.0	208	79	0.1	0.0	113	51	9.6	3.8	28	26	21.7	0.0	19	19	194.9	0.0	392	189	5,409		838
Survey Totals	73	52	7.6	0.2	895	306	10.4	1.5	922	319	36.8	3.0	306	279	109.8	2.7	35	34	279.0	0.0	2,231	990	86,477		6,137

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Appendix A3.—Estimated fall chum salmon subsistence harvest in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester			Medium Harvester			Heavy Harvester				Combined					
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Total	Est	CI (95%)			
Hooper Bay	2	2.0	0.0	0.0	76	22	0.0	0.0	99	24	0.0	0.0	19	18	0.1	0.0	-	-	-	-	196	66	1	0
Scammon Bay	3	2	0.0	0.0	23	5	0.0	0.0	37	8	1.1	0.4	15	13	1.8	0.6	-	-	-	-	78	28	69	35
Coastal District	5	4	0.0	0.0	99	27	0.0	0.0	136	32	0.3	0.1	34	31	0.8	0.2	-	-	-	-	274	94	70	35
Nunam Iqua	-	-	-	-	6	2	3.5	2.9	16	12	2.5	1.0	11	9	22.7	4.8	-	-	-	-	33	23	310	113
Alakanuk	3	3	0.7	0.0	43	12	1.3	0.8	54	14	3.8	2.2	23	22	7.3	0.7	-	-	-	-	123	51	427	245
Emmonak	12	8	0.0	0.0	64	22	2.6	1.9	58	23	1.4	0.7	28	27	10.5	0.7	-	-	-	-	162	80	543	256
Kotlik	3	3.0	30.0	0.0	22	3	0.0	0.0	38	9	2.7	1.5	19	16	15.8	2.6	-	-	-	-	82	31	491	150
District 1	18	14	5.1	0.0	135	39	1.8	0.9	166	58	2.6	0.8	81	74	12.5	0.9	-	-	-	-	400	185	1,771	402
Mountain Village	4	3.0	0.0	0.0	32	8	0.0	0.0	68	16	3.1	1.8	30	30	8.8	0.0	1	1	55.0	-	135	58	532	246
Pitkas Point	-	-	-	-	7	6	0.8	0.3	11	10	0.0	0.0	6	4	0.0	0.0	-	-	-	-	24	20	6	4
St. Mary's	2	1.0	0.0	-	25	8	2.5	2.1	51	15	4.3	2.2	26	25	8.1	0.7	-	-	-	-	104	49	490	244
Pilot Station	2	2.0	0.0	0.0	34	16	0.5	0.4	42	20	0.0	0.0	16	14	0.0	0.0	-	-	-	-	94	52	17	24
Marshall	3	3.0	100.0	0.0	19	5	0.0	0.0	33	8	1.3	1.1	14	13	20.8	3.2	-	-	-	-	69	29	633	112
District 2	11	9	27.3	0.0	117	43	0.7	0.5	205	69	2.3	0.8	92	86	8.3	0.5	1	1	55.0	-	426	208	1,678	365
Russian Mission	-	-	-	-	15	3	10.0	8.9	35	10	0.0	0.0	6	6	86.2	0.0	-	-	-	-	56	19	667	263
Holy Cross	4	3.0	16.7	8.3	16	8	1.3	0.9	19	9	11.2	3.7	12	10	23.5	7.5	-	-	-	-	51	30	582	236
Shageluk	1	0.0	-	-	9	5	0.0	0.0	11	10	5.0	1.0	6	4	0.0	0.0	2	2	0.0	0.0	29	21	55	22
District 3	5	3	16.7	8.3	40	16	4.3	3.4	65	29	4.1	1.1	24	20	33.3	3.8	2	2	0.0	0.0	136	70	1,304	354
Anvik	1	1.0	0.0	-	13	11	0.3	0.1	13	11	0.0	0.0	7	7	70.4	0.0	-	-	-	-	34	30	497	3
Grayling	-	-	-	-	7	3	0.3	0.3	31	8	21.9	10.5	7	7	47.0	0.0	-	-	-	-	45	18	1,009	641
Kaltag	2	2	0.0	0.0	9	2	0.0	0.0	40	13	1.6	1.1	2	1	140.0	-	-	-	-	-	53	18	345	89
Nulato	2	2.0	0.5	0.0	28	7	4.3	2.5	44	13	2.3	1.3	8	6	24.8	9.5	-	-	-	-	82	28	421	231
Koyukuk	-	-	-	-	8	5	0.0	0.0	11	7	4.6	2.8	3	3	66.7	0.0	1	1	553.0	-	23	16	803	59
Galena	3	2	2.5	1.4	86	22	0.1	0.1	52	14	5.9	3.8	8	8	296.9	0.0	1	0	-	-	150	46	2,695	386
Ruby	-	-	-	-	43	11	0.0	0.0	10	0	-	-	4	3	0.0	0.0	2	2	279.5	0.0	59	16	559	0
Huslia	-	-	-	-	44	13	0.0	0.0	18	5	0.0	0.0	2	1	100.0	-	4	4	353.5	0.0	68	23	1,614	0
Hughes	-	-	-	-	13	9	3.9	2.2	4	3	5.0	2.5	2	2	5.0	0.0	3	3	10.0	0.0	22	17	111	58
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	25.0	20.4	4	4	64.3	0.0	2	2	0.0	0.0	43	16	557	480
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	0.0	0.0	-	-	-	-	-	-	-	-	5	4	0	0
Bettles	2	1	0.0	-	17	12	2.9	1.2	-	-	-	-	-	-	-	-	-	-	-	-	19	13	50	39
District 4	10	8	0.9	0.4	296	103	0.8	0.3	237	80	6.7	2.0	47	42	92.4	1.6	13	12	213.0	0.0	603	245	8,661	927
Tanana	1	1.0	0.0	-	49	19	0.0	0.0	31	13	9.4	4.7	8	7	158.6	46.9	9	9	2109.6	0.0	98	49	20,545	789
Stevens Village	1	0	-	-	7	5	0.0	0.0	13	7	0.0	0.0	3	1	0.0	-	1	1	246.0	-	25	14	246	0
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	0.0	0.0	-	-	-	-	-	-	-	-	8	3	0	0
Beaver	3	2	0.0	0.0	13	11	0.0	0.0	11	9	2.2	0.9	2	2	77.5	0.0	-	-	-	-	29	24	179	20
Fort Yukon	9	5.0	70.0	46.7	89	25	0.0	0.0	36	11	8.2	6.8	9	9	111.7	0.0	7	7	879.7	0.0	150	57	8,088	953
Venetie	10	6	31.7	20.0	27	6	0.0	0.0	12	3	7.0	5.6	5	5	140.0	0.0	2	2	350.0	0.0	56	22	1,801	414
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	48.2	12.4	1	1	0.0	-	-	-	-	-	26	19	337	170
District 5	24	14	41.2	20.2	208	79	0.0	0.0	113	51	9.1	2.7	28	25	111.7	13.4	19	19	1373.2	0.0	392	188	31,196	1,316
Survey Totals	73	52	19.9	6.6	895	307	0.8	0.2	922	319	4.1	0.7	306	278	32.9	1.3	35	34	844.1	0.0	2,231	990	44,680	1,736

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Appendix A4.—Estimated coho salmon subsistence harvest in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	Est n	Total	CI (95%) (+/-)
Hooper Bay	2	2.0	0.0	0.0	76	22	0.0	0.0	99	24	0.0	0.0	19	18	0.0	0.0	-	-	-	-	196	66	0	0
Scammon Bay	3	2	0.0	0.0	23	5	0.0	0.0	37	8	7.4	4.4	15	13	0.4	0.1	-	-	-	-	78	28	279	316
Coastal District	5	4	0.0	0.0	99	27	0.0	0.0	136	32	2.0	1.2	34	31	0.2	0.1	-	-	-	-	274	94	279	316
Nunam Iqua	-	-	-	-	6	2	1.5	1.2	16	12	1.4	0.4	11	9	19.0	3.6	-	-	-	-	33	23	241	79
Alakanuk	3	3	0.0	0.0	43	12	0.8	0.5	54	14	2.3	1.1	23	22	7.1	0.9	-	-	-	-	123	51	322	134
Emmonak	12	8	0.0	0.0	64	22	0.0	0.0	58	23	0.3	0.1	28	27	2.2	0.2	-	-	-	-	162	80	79	21
Kotlik	3	3.0	0.0	0.0	22	3	0.0	0.0	38	9	1.3	0.8	19	16	9.0	2.6	-	-	-	-	82	31	222	112
District 1	18	14	0.0	0.0	135	39	0.4	0.2	166	58	1.3	0.4	81	74	7.5	0.8	-	-	-	-	400	185	864	192
Mountain Village	4	3.0	0.0	0.0	32	8	0.0	0.0	68	16	0.0	0.0	30	30	2.8	0.0	1	1	55.0	-	135	58	139	0
Pitkas Point	-	-	-	-	7	6	0.0	0.0	11	10	0.0	0.0	6	4	5.0	2.9	-	-	-	-	24	20	30	34
St. Mary's	2	1.0	0.0	-	25	8	0.1	0.1	51	15	2.1	1.7	26	25	5.5	0.8	-	-	-	-	104	49	252	173
Pilot Station	2	2.0	0.0	0.0	34	16	0.0	0.0	42	20	0.0	0.0	16	14	0.0	0.0	-	-	-	-	94	52	0	0
Marshall	3	3.0	50.0	0.0	19	5	0.0	0.0	33	8	0.0	0.0	14	13	13.6	2.2	-	-	-	-	69	29	341	60
District 2	11	9	13.6	0.0	117	43	0.0	0.0	205	69	0.5	0.4	92	86	4.9	0.4	1	1	55.0	-	426	208	762	186
Russian Mission	-	-	-	-	15	3	0.0	0.0	35	10	0.0	0.0	6	6	22.2	0.0	-	-	-	-	56	19	133	0
Holy Cross	4	3.0	0.0	0.0	16	8	0.0	0.0	19	9	0.0	0.0	12	10	7.0	2.9	-	-	-	-	51	30	84	67
Shageluk	1	0.0	-	-	9	5	0.0	0.0	11	10	0.0	0.0	6	4	0.0	0.0	2	2	0.0	0.0	29	21	0	0
District 3	5	3	0.0	0.0	40	16	0.0	0.0	65	29	0.0	0.0	24	20	9.0	1.4	2	2	0.0	0.0	136	70	217	67
Anvik	1	1.0	0.0	-	13	11	0.0	0.0	13	11	0.0	0.0	7	7	58.0	0.0	-	-	-	-	34	30	406	0
Grayling	-	-	-	-	7	3	0.0	0.0	31	8	2.5	2.2	7	7	22.3	0.0	-	-	-	-	45	18	234	131
Kaltag	2	2	0.0	0.0	9	2	0.0	0.0	40	13	4.2	3.1	2	1	9.0	-	-	-	-	-	53	18	187	247
Nulato	2	2.0	0.0	0.0	28	7	2.1	1.9	44	13	0.0	0.0	8	6	0.0	0.0	-	-	-	-	82	28	60	102
Koyukuk	-	-	-	-	8	5	0.0	0.0	11	7	0.1	0.1	3	3	8.3	0.0	1	1	10.0	-	23	16	37	2
Galena	3	2	22.5	13.0	86	22	0.1	0.1	52	14	4.1	2.1	8	8	39.5	0.0	1	0	-	-	150	46	607	230
Ruby	-	-	-	-	43	11	0.0	0.0	10	0	-	-	4	3	0.0	0.0	2	2	180.5	0.0	59	16	361	0
Huslia	-	-	-	-	44	13	0.0	0.0	18	5	0.0	0.0	2	1	5.0	-	4	4	181.0	0.0	68	23	734	0
Hughes	-	-	-	-	13	9	0.0	0.0	4	3	0.0	0.0	2	2	10.0	0.0	3	3	0.0	0.0	22	17	20	0
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	5.0	4.1	4	4	0.0	0.0	2	2	72.5	0.0	43	16	205	96
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	0.0	0.0	-	-	-	-	-	-	-	-	5	4	0	0
Bettles	2	1	0.0	-	17	12	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	19	13	0	0
District 4	10	8	6.8	3.9	296	103	0.2	0.2	237	80	2.3	0.8	47	42	20.2	0.0	13	12	103.3	0.0	603	245	2,851	388
Tanana	1	1.0	0.0	-	49	19	0.0	0.0	31	13	0.0	0.0	8	7	107.1	37.9	9	9	84.3	0.0	98	49	1,616	594
Stevens Village	1	0	-	-	7	5	0.0	0.0	13	7	0.0	0.0	3	1	0.0	-	1	1	0.0	-	25	14	0	0
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	0.0	0.0	-	-	-	-	-	-	-	-	8	3	0	0
Beaver	3	2	0.0	0.0	13	11	0.0	0.0	11	9	0.0	0.0	2	2	0.0	0.0	-	-	-	-	29	24	0	0
Fort Yukon	9	5.0	10.0	6.7	89	25	0.0	0.0	36	11	0.0	0.0	9	9	28.2	0.0	7	7	7.1	0.0	150	57	394	118
Venetie	10	6	0.0	0.0	27	6	0.0	0.0	12	3	0.0	0.0	5	5	0.0	0.0	2	2	0.0	0.0	56	22	0	0
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	0.0	0.0	1	1	0.0	-	-	-	-	-	26	19	0	0
District 5	24	14	3.9	2.6	208	79	0.0	0.0	113	51	0.0	0.0	28	25	39.7	10.8	19	19	42.6	0.0	392	188	2,010	605
Survey Totals	73	52	4.3	1.0	895	307	0.1	0.1	922	319	1.2	0.3	306	278	10.9	1.0	35	34	61.9	0.0	2,231	990	6,983	832

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Appendix A5.—Estimated Chinook salmon subsistence use in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined				
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	n	Total	Est	CI (95%) (+/-)
Hooper Bay	2	2	0.0	0.0	76	22	0.4	0.2	99	24	0.8	0.2	19	18	1.7	0.1	-	-	-	-	196	66	146		52
Scammon Bay	3	2	0.0	0.0	23	5	7.8	6.7	37	8	6.8	2.8	15	13	19.0	1.9	-	-	-	-	78	28	714		369
Coastal District	5	4	0.0	0.0	99	27	2.1	1.6	136	32	2.4	0.8	34	31	9.3	0.8	-	-	-	-	274	94	860		373
Nunam Iqua	-	-	-	-	6	2	0.0	0.0	16	12	10.1	2.3	11	9	11.8	1.4	-	-	-	-	33	23	291		77
Alakanuk	3	3	12.7	0.0	43	12	3.8	1.8	54	14	1.6	0.5	23	22	14.6	0.9	-	-	-	-	123	51	620		163
Emmonak	12	8	0.0	0.0	64	22	1.7	0.7	58	23	4.8	0.8	28	27	16.5	0.7	-	-	-	-	162	80	847		139
Kotlik	3	3	13.3	0.0	22	3	1.0	0.9	38	9	16.1	7.4	19	16	39.3	4.3	-	-	-	-	82	31	1,420		577
District 1	18	14	4.3	0.0	135	39	2.2	0.7	166	58	6.8	1.7	81	74	20.6	1.1	-	-	-	-	400	185	3,178		621
Mountain Village	4	3	9.0	2.4	32	8	0.1	0.1	68	16	19.7	7.4	30	30	27.4	0.0	1	1	59.0	-	135	58	2,261		981
Pitkas Point	-	-	-	-	7	6	3.0	1.1	11	10	15.3	1.8	6	4	66.3	10.3	-	-	-	-	24	20	587		128
St. Mary's	2	1	5.0	-	25	8	18.3	8.0	51	15	18.3	3.2	26	25	42.3	1.1	-	-	-	-	104	49	2,497		510
Pilot Station	2	2	3.0	0.0	34	16	1.8	1.0	42	20	10.4	1.9	16	14	20.1	1.7	-	-	-	-	94	52	827		175
Marshall	3	3	10.7	0.0	19	5	0.4	0.3	33	8	31.9	6.0	14	13	40.5	2.4	-	-	-	-	69	29	1,658		395
District 2	11	9	7.6	0.9	117	43	4.7	1.7	205	69	19.2	2.8	92	86	34.9	0.9	1	1	59.0	-	426	208	7,830		1,194
Russian Mission	-	-	-	-	15	3	17.7	14.1	35	10	34.1	6.7	6	6	49.2	0.0	-	-	-	-	56	19	1,754		619
Holy Cross	4	3	4.3	2.2	16	8	17.4	6.0	19	9	60.4	9.5	12	10	101.0	9.0	-	-	-	-	51	30	2,656		454
Shageluk	1	0	-	-	9	5	0.0	0.0	11	10	12.4	1.6	6	4	29.5	9.6	2	2	39.0	0.0	29	21	391		118
District 3	5	3	4.3	2.2	40	16	13.6	5.8	65	29	38.1	4.6	24	20	70.2	5.1	2	2	39.0	0.0	136	70	4,801		777
Anvik	1	1	0.0	-	13	11	1.5	0.4	13	11	40.5	5.3	7	7	85.3	0.0	-	-	-	-	34	30	1,144		136
Grayling	-	-	-	-	7	3	43.7	12.7	31	8	31.9	8.8	7	7	62.3	0.0	-	-	-	-	45	18	1,730		564
Kaltag	2	2	33.0	0.0	9	2	0.0	0.0	40	13	78.0	13.1	2	1	35.0	-	-	-	-	-	53	18	3,256		1,029
Nulato	2	2	0.0	0.0	28	7	16.7	9.3	44	13	28.8	5.6	8	6	110.5	13.6	-	-	-	-	82	28	2,621		737
Koyukuk	-	-	-	-	8	5	0.6	0.4	11	8	14.8	5.8	3	3	22.3	0.0	1	1	90.0	-	23	17	324		126
Galena	3	2	7.5	4.3	86	22	7.2	3.6	52	14	25.6	9.0	8	8	76.6	0.0	1	0	-	-	150	46	2,587		1,097
Ruby	-	-	-	-	43	11	5.6	3.6	10	0	-	-	4	3	144.0	51.0	2	2	37.5	0.0	59	16	893		502
Huslia	-	-	-	-	44	13	1.0	0.6	18	5	3.4	1.8	2	1	13.0	-	4	4	15.8	0.0	68	23	194		82
Hughes	-	-	-	-	13	9	1.1	0.6	4	3	0.0	0.0	2	2	0.5	0.0	3	2	6.5	0.9	22	16	35		17
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	0.8	0.6	4	4	11.0	0.0	2	2	5.0	0.0	43	16	63		14
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	0.0	0.0	-	-	-	-	-	-	-	-	5	4	0		0
Bettles	2	1	0.0	-	17	12	0.2	0.1	-	-	-	-	-	-	-	-	-	-	-	-	19	13	3		3
District 4	10	8	8.9	1.3	296	103	5.8	1.5	237	81	32.9	3.5	47	42	70.5	4.9	13	11	21.5	0.2	603	245	12,850		1,849
Tanana	1	1	14.0	-	49	19	1.1	0.8	31	13	27.7	13.4	8	8	102.9	0.0	9	9	193.4	0.0	98	50	3,488		815
Stevens Village	1	0	-	-	7	5	1.6	0.9	13	7	61.6	15.0	3	1	90.0	-	1	1	251.0	-	25	14	1,333		381
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	43.5	13.6	-	-	-	-	-	-	-	-	8	3	131		80
Beaver	3	2	23.0	13.3	13	11	1.6	0.4	11	9	43.8	8.1	2	2	63.0	0.0	-	-	-	-	29	24	698		192
Fort Yukon	9	5	24.0	7.2	89	25	10.3	5.9	36	11	14.6	4.8	9	9	62.4	0.0	7	7	81.6	0.0	150	57	2,791		1,091
Venetie	10	6	0.2	0.1	27	6	0.0	0.0	12	3	0.7	0.6	5	5	8.8	0.0	2	2	0.0	0.0	56	22	54		14
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	7.5	1.8	1	1	0.0	-	-	-	-	-	26	19	53		25
District 5	24	14	13.1	3.3	208	79	4.8	2.5	113	51	25.3	4.4	28	26	65.2	0.0	19	19	134.9	0.0	392	189	8,548		1,430
Survey Totals	73	52	8.0	1.1	895	307	4.8	0.9	922	320	20.0	1.3	306	279	39.3	0.9	35	33	87.0	0.1	2,231	991	38,067		2,831

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Appendix A6.—Estimated summer chum salmon subsistence use in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester			Medium Harvester			Heavy Harvester				Combined						
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	n	Total	Est	CI (95%) (+/-)
Hooper Bay	2	2	14.0	0.0	76	21	30.2	8.2	99	24	39.0	8.7	19	18	115.0	6.7	-	-	-	-	196	65	8,373		2,100
Scammon Bay	3	2	0.0	0.0	23	5	10.0	8.8	37	8	82.1	32.1	15	13	91.5	6.6	-	-	-	-	78	28	4,641		2,370
Coastal District	5	4	5.6	0.0	99	26	25.5	6.6	136	32	50.8	10.8	34	31	104.6	4.7	-	-	-	-	274	93	13,014		3,166
Nunam Iqua	-	-	-	-	6	2	0.0	0.0	16	12	60.4	9.9	11	9	130.6	15.3	-	-	-	-	33	23	2,403		454
Alakanuk	3	3	44.3	0.0	43	12	19.8	8.9	54	14	35.3	11.4	23	22	101.7	3.5	-	-	-	-	123	51	5,227		1,431
Emmonak	12	8	0.0	0.0	64	22	28.3	10.5	58	23	52.8	9.3	28	27	137.9	3.7	-	-	-	-	162	80	8,732		1,700
Kotlik	3	3	33.3	0.0	22	3	12.7	11.8	38	9	82.4	34.9	19	16	136.5	13.9	-	-	-	-	82	31	6,105		2,696
District 1	18	14	12.9	0.0	135	39	21.8	6.0	166	58	54.6	9.4	81	74	126.3	4.2	-	-	-	-	400	185	22,467		3,523
Mountain Village	4	3	8.3	3.4	32	8	6.8	4.7	68	16	65.4	12.7	30	30	105.6	0.0	1	1	321.0	-	135	58	8,183		1,725
Pitkas Point	-	-	-	-	7	6	52.8	15.5	11	10	41.4	3.5	6	4	27.8	9.4	-	-	-	-	24	20	992		251
St. Mary's	2	1	10.0	-	25	8	15.0	4.9	51	15	46.6	9.5	26	25	130.0	2.5	-	-	-	-	104	49	6,152		984
Pilot Station	2	2	9.0	0.0	34	16	7.4	3.7	42	20	27.8	5.4	16	14	60.4	5.5	-	-	-	-	94	52	2,403		533
Marshall	3	3	18.3	0.0	19	5	4.2	3.6	33	8	47.9	13.1	14	13	87.8	10.1	-	-	-	-	69	29	2,943		902
District 2	11	9	11.5	1.3	117	43	11.1	2.3	205	69	48.9	5.4	92	86	96.8	2.0	1	1	321.0	-	426	208	20,673		2,259
Russian Mission	-	-	-	-	15	3	0.0	0.0	35	10	15.0	6.0	6	6	63.8	0.0	-	-	-	-	56	19	908		415
Holy Cross	4	3	0.0	0.0	16	8	2.4	1.7	19	9	20.8	7.2	12	10	26.0	3.1	-	-	-	-	51	30	745		282
Shageluk	1	0	-	-	9	5	80.0	53.3	11	10	33.0	9.0	6	4	324.3	51.6	2	2	250.0	0.0	29	21	3,529		1,136
District 3	5	3	0.0	0.0	40	16	19.0	12.0	65	29	19.7	4.2	24	20	110.0	13.0	2	2	250.0	0.0	136	70	5,182		1,242
Anvik	1	1	0.0	-	13	11	0.0	0.0	13	11	3.2	0.6	7	7	108.3	0.0	-	-	-	-	34	30	799		15
Grayling	-	-	-	-	7	3	0.0	0.0	31	8	0.0	0.0	7	7	111.9	0.0	-	-	-	-	45	18	783		0
Kaltag	2	2	0.0	0.0	9	2	0.0	0.0	40	13	17.0	12.5	2	1	0.0	-	-	-	-	-	53	18	680		983
Nulato	2	2	14.5	0.0	28	7	15.1	11.0	44	13	2.1	1.0	8	6	4.0	0.9	-	-	-	-	82	28	576		608
Koyukuk	-	-	-	-	8	5	41.0	25.1	11	7	2.0	1.2	3	3	27.3	0.0	1	1	105.0	-	23	16	537		395
Galena	3	2	0.0	0.0	86	22	0.1	0.1	52	14	7.2	2.8	8	8	71.5	0.0	1	0	-	-	150	46	959		289
Ruby	-	-	-	-	43	11	5.5	4.7	10	0	-	-	4	3	4.7	2.3	2	2	6.0	0.0	59	16	265		397
Huslia	-	-	-	-	44	13	0.2	0.1	18	5	8.0	6.8	2	1	0.0	-	4	4	295.5	0.0	68	23	1,333		240
Hughes	-	-	-	-	13	9	0.0	0.0	4	3	0.0	0.0	2	2	100.0	0.0	3	2	999.0	289.3	22	16	3,197		1,701
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	25.0	20.4	4	4	173.3	0.0	2	2	703.5	0.0	43	16	2,400		480
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	2.5	0.0	-	-	-	-	-	-	-	-	5	4	5		0
Bettles	2	1	0.0	-	17	12	0.3	0.1	-	-	-	-	-	-	-	-	-	-	-	-	19	13	4		5
District 4	10	8	2.9	0.0	296	103	3.4	1.4	237	80	7.3	2.6	47	42	66.8	0.3	13	11	475.3	72.3	603	244	11,538		2,217
Tanana	1	1	0.0	-	49	19	0.2	0.2	31	13	23.3	12.9	8	8	68.8	0.0	9	9	393.6	0.0	98	50	4,825		785
Stevens Village	1	0	-	-	7	5	0.0	0.0	13	7	26.0	11.4	3	1	20.0	-	1	1	44.0	-	25	14	442		291
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	0.0	0.0	-	-	-	-	-	-	-	-	8	3	0		0
Beaver	3	2	0.0	0.0	13	11	0.2	0.1	11	9	2.3	0.6	2	2	20.0	0.0	-	-	-	-	29	24	68		13
Fort Yukon	9	4	0.0	0.0	89	25	0.0	0.0	36	11	0.0	0.0	9	9	0.0	0.0	7	7	9.6	0.0	150	56	67		0
Venetie	10	6	0.0	0.0	27	6	0.0	0.0	12	3	0.0	0.0	5	5	0.0	0.0	2	2	0.0	0.0	56	22	0		0
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	0.0	0.0	1	1	0.0	-	-	-	-	-	26	19	0		0
District 5	24	13	0.0	0.0	208	79	0.1	0.0	113	51	9.6	3.8	28	26	23.2	0.0	19	19	192.3	0.0	392	188	5,402		838
Survey Totals	73	51	5.9	0.2	895	306	9.5	1.4	922	319	32.9	2.8	306	279	95.2	1.7	35	33	299.3	25.5	2,231	988	78,276		5,891

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Appendix A7.—Estimated fall chum salmon subsistence use in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	n	Total	Est CI (95%) (+/-)
Hooper Bay	2	2	0.0	0.0	76	22	0.0	0.0	99	24	0.0	0.0	19	18	0.1	0.0	-	-	-	-	196	66	1	0
Scammon Bay	3	2	0.0	0.0	23	5	0.0	0.0	37	8	1.1	0.4	15	13	1.8	0.6	-	-	-	-	78	28	69	35
Coastal District	5	4	0.0	0.0	99	27	0.0	0.0	136	32	0.3	0.1	34	31	0.8	0.2	-	-	-	-	274	94	70	35
Nunam Iqua	-	-	-	-	6	2	1.0	0.8	16	12	2.5	1.0	11	9	16.0	3.2	-	-	-	-	33	23	222	78
Alakanuk	3	3	0.7	0.0	43	12	1.3	0.8	54	14	2.7	1.4	23	22	7.2	0.7	-	-	-	-	123	51	368	164
Emmonak	12	8	0.0	0.0	64	22	2.6	1.9	58	23	1.3	0.7	28	27	9.9	0.7	-	-	-	-	162	80	517	254
Kotlik	3	3	20.0	0.0	22	3	0.0	0.0	38	9	2.7	1.5	19	16	14.3	2.6	-	-	-	-	82	31	432	150
District 1	18	14	3.4	0.0	135	39	1.7	0.9	166	58	2.2	0.6	81	74	11.0	0.8	-	-	-	-	400	185	1,539	346
Mountain Village	4	3	0.0	0.0	32	8	0.0	0.0	68	16	3.1	1.8	30	30	8.8	0.0	1	1	55.0	-	135	58	532	246
Pitkas Point	-	-	-	-	7	6	0.8	0.3	11	10	0.0	0.0	6	4	0.0	0.0	-	-	-	-	24	20	6	4
St. Mary's	2	1	0.0	-	25	8	2.3	1.9	51	15	4.3	2.2	26	25	8.1	0.7	-	-	-	-	104	49	484	240
Pilot Station	2	2	0.0	0.0	34	16	0.5	0.4	42	20	0.0	0.0	16	14	0.0	0.0	-	-	-	-	94	52	17	24
Marshall	3	3	8.3	0.0	19	5	0.0	0.0	33	8	1.3	1.1	14	13	20.8	3.2	-	-	-	-	69	29	358	112
District 2	11	9	2.3	0.0	117	43	0.7	0.4	205	69	2.3	0.8	92	86	8.3	0.5	1	1	55.0	-	426	208	1,397	362
Russian Mission	-	-	-	-	15	3	10.0	8.9	35	10	0.0	0.0	6	6	84.5	0.0	-	-	-	-	56	19	657	263
Holy Cross	4	3	16.7	8.3	16	8	1.3	0.9	19	9	9.0	2.9	12	10	19.5	6.6	-	-	-	-	51	30	492	201
Shageluk	1	0	-	-	9	5	0.0	0.0	11	10	4.8	1.0	6	4	0.0	0.0	2	2	0.0	0.0	29	21	53	21
District 3	5	3	16.7	8.3	40	16	4.3	3.4	65	29	3.4	0.8	24	20	30.9	3.3	2	2	0.0	0.0	136	70	1,202	332
Anvik	1	1	0.0	-	13	11	0.3	0.1	13	11	0.0	0.0	7	7	68.0	0.0	-	-	-	-	34	30	480	3
Grayling	-	-	-	-	7	3	0.3	0.3	31	8	17.9	10.4	7	7	42.7	0.0	-	-	-	-	45	18	855	631
Kaltag	2	2	0.0	0.0	9	2	0.0	0.0	40	13	1.6	1.1	2	1	120.0	-	-	-	-	-	53	18	305	89
Nulato	2	2	0.5	0.0	28	7	4.3	2.5	44	13	2.2	1.2	8	6	24.8	9.5	-	-	-	-	82	28	414	228
Koyukuk	-	-	-	-	8	5	0.0	0.0	11	7	4.6	2.8	3	3	61.7	0.0	1	1	509.0	-	23	16	744	59
Galena	3	2	2.5	1.4	86	22	0.1	0.1	52	14	5.9	3.8	8	8	275.3	0.0	1	0	-	-	150	46	2,522	386
Ruby	-	-	-	-	43	11	0.0	0.0	10	0	-	-	4	3	0.0	0.0	2	2	279.5	0.0	59	16	559	0
Huslia	-	-	-	-	44	13	0.0	0.0	18	5	0.0	0.0	2	1	0.0	-	4	4	337.0	0.0	68	23	1,348	0
Hughes	-	-	-	-	13	9	3.9	2.2	4	3	5.0	2.5	2	2	5.0	0.0	3	2	15.0	8.7	22	16	126	77
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	25.0	20.4	4	4	64.3	0.0	2	2	0.0	0.0	43	16	557	480
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	0.0	0.0	-	-	-	-	-	-	-	-	5	4	0	0
Bettles	2	1	0.0	-	17	12	1.8	1.0	-	-	-	-	-	-	-	-	-	-	-	-	19	13	31	33
District 4	10	8	0.9	0.4	296	103	0.7	0.3	237	80	6.1	2.0	47	42	82.3	1.6	13	11	205.1	2.2	603	244	7,941	921
Tanana	1	1	0.0	-	49	19	0.0	0.0	31	13	8.8	4.7	8	7	150.4	47.2	9	9	2086.2	0.0	98	49	20,251	794
Stevens Village	1	0	-	-	7	5	0.0	0.0	13	7	0.0	0.0	3	1	0.0	-	1	1	216.0	-	25	14	216	0
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	0.0	0.0	-	-	-	-	-	-	-	-	8	3	0	0
Beaver	3	2	0.0	0.0	13	11	0.0	0.0	11	9	2.2	0.9	2	2	32.5	0.0	-	-	-	-	29	24	89	20
Fort Yukon	9	4	87.5	65.2	89	25	0.0	0.0	36	11	8.2	6.8	9	9	102.8	0.0	7	7	848.3	0.0	150	56	7,945	1,247
Venetie	10	6	19.8	12.5	27	6	0.0	0.0	12	3	7.0	5.6	5	5	138.0	0.0	2	2	310.0	0.0	56	22	1,592	279
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	48.2	12.4	1	1	0.0	-	-	-	-	-	26	19	337	170
District 5	24	13	42.9	26.1	208	79	0.0	0.0	113	51	9.0	2.7	28	25	103.0	13.5	19	19	1344.7	0.0	392	187	30,430	1,514
Survey Totals	73	51	16.2	8.5	895	307	0.8	0.2	922	319	3.8	0.6	306	278	30.0	1.3	35	33	825.5	0.8	2,231	988	42,579	1,872

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Appendix A8.—Estimated coho salmon subsistence use in surveyed villages, by harvest level, with village and district totals, Yukon Area, 2005.

Community	Unknown				Does Not Harvest Salmon				Light Harvester				Medium Harvester				Heavy Harvester				Combined			
	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	N	n	Mean	SE	Total N	n	Est Total	CI (95%) (+/-)
Hooper Bay	2	2	0.0	0.0	76	22	0.0	0.0	99	24	0.0	0.0	19	18	0.0	0.0	-	-	-	-	196	66	0	0
Scammon Bay	3	2	0.0	0.0	23	5	0.0	0.0	37	8	4.9	2.4	15	13	0.4	0.1	-	-	-	-	78	28	186	171
Coastal District	5	4	0.0	0.0	99	27	0.0	0.0	136	32	1.3	0.6	34	31	0.2	0.1	-	-	-	-	274	94	186	171
Nunam Iqua	-	-	-	-	6	2	1.5	1.2	16	12	1.4	0.4	11	9	8.3	1.9	-	-	-	-	33	23	123	44
Alakanuk	3	3	0.0	0.0	43	12	0.8	0.5	54	14	2.3	1.1	23	22	7.1	0.9	-	-	-	-	123	51	322	134
Emmonak	12	8	0.0	0.0	64	22	0.0	0.0	58	23	0.3	0.1	28	27	1.7	0.1	-	-	-	-	162	80	67	19
Kotlik	3	3	0.0	0.0	22	3	0.0	0.0	38	9	1.3	0.8	19	16	9.0	2.6	-	-	-	-	82	31	222	112
District 1	18	14	0.0	0.0	135	39	0.4	0.2	166	58	1.3	0.4	81	74	5.9	0.7	-	-	-	-	400	185	734	181
Mountain Village	4	3	0.0	0.0	32	8	0.0	0.0	68	16	0.0	0.0	30	30	2.8	0.0	1	1	55.0	-	135	58	139	0
Pitkas Point	-	-	-	-	7	6	0.0	0.0	11	10	0.0	0.0	6	4	5.0	2.9	-	-	-	-	24	20	30	34
St. Mary's	2	1	0.0	-	25	8	0.1	0.1	51	15	2.0	1.7	26	25	5.3	0.8	-	-	-	-	104	49	243	173
Pilot Station	2	2	0.0	0.0	34	16	0.0	0.0	42	20	0.0	0.0	16	14	0.0	0.0	-	-	-	-	94	52	0	0
Marshall	3	3	8.3	0.0	19	5	0.0	0.0	33	8	0.0	0.0	14	13	13.6	2.2	-	-	-	-	69	29	216	60
District 2	11	9	2.3	0.0	117	43	0.0	0.0	205	69	0.5	0.4	92	86	4.8	0.4	1	1	55.0	-	426	208	628	186
Russian Mission	-	-	-	-	15	3	0.0	0.0	35	10	0.0	0.0	6	6	22.2	0.0	-	-	-	-	56	19	133	0
Holy Cross	4	3	0.0	0.0	16	8	0.0	0.0	19	9	0.0	0.0	12	10	7.0	2.9	-	-	-	-	51	30	84	67
Shageluk	1	0	-	-	9	5	0.0	0.0	11	10	0.0	0.0	6	4	0.0	0.0	2	2	0.0	0.0	29	21	0	0
District 3	5	3	0.0	0.0	40	16	0.0	0.0	65	29	0.0	0.0	24	20	9.0	1.4	2	2	0.0	0.0	136	70	217	67
Anvik	1	1	0.0	-	13	11	0.0	0.0	13	11	0.0	0.0	7	7	58.0	0.0	-	-	-	-	34	30	406	0
Grayling	-	-	-	-	7	3	0.0	0.0	31	8	2.5	2.2	7	7	22.3	0.0	-	-	-	-	45	18	234	131
Kaltag	2	2	0.0	0.0	9	2	0.0	0.0	40	13	4.2	3.1	2	1	9.0	-	-	-	-	-	53	18	187	247
Nulato	2	2	0.0	0.0	28	7	2.1	1.9	44	13	0.0	0.0	8	6	0.0	0.0	-	-	-	-	82	28	60	102
Koyukuk	-	-	-	-	8	5	0.0	0.0	11	7	0.1	0.1	3	3	6.7	0.0	1	1	10.0	-	23	16	32	2
Galena	3	2	7.5	4.3	86	22	0.1	0.1	52	14	3.7	2.0	8	8	37.6	0.0	1	0	-	-	150	46	528	205
Ruby	-	-	-	-	43	11	0.0	0.0	10	0	-	-	4	3	0.0	0.0	2	2	180.5	0.0	59	16	361	0
Huslia	-	-	-	-	44	13	0.0	0.0	18	5	0.0	0.0	2	1	5.0	-	4	4	181.0	0.0	68	23	734	0
Hughes	-	-	-	-	13	9	0.0	0.0	4	3	0.0	0.0	2	2	10.0	0.0	3	2	0.0	0.0	22	16	20	0
Allakaket	-	-	-	-	25	6	0.0	0.0	12	4	5.0	4.1	4	4	0.0	0.0	2	2	72.5	0.0	43	16	205	96
Alatna	-	-	-	-	3	2	0.0	0.0	2	2	0.0	0.0	-	-	-	-	-	-	-	-	5	4	0	0
Bettles	2	1	0.0	-	17	12	0.0	0.0	-	-	-	-	-	-	-	-	-	-	-	-	19	13	0	0
District 4	10	8	2.3	1.3	296	103	0.2	0.2	237	80	2.2	0.8	47	42	19.8	0.0	13	11	103.3	0.0	603	244	2,767	374
Tanana	1	1	0.0	-	49	19	0.0	0.0	31	13	0.0	0.0	8	7	107.1	37.9	9	9	73.2	0.0	98	49	1,516	594
Stevens Village	1	0	-	-	7	5	0.0	0.0	13	7	0.0	0.0	3	1	0.0	-	1	1	0.0	-	25	14	0	0
Birch Creek	-	-	-	-	5	1	0.0	-	3	2	0.0	0.0	-	-	-	-	-	-	-	-	8	3	0	0
Beaver	3	2	0.0	0.0	13	11	0.0	0.0	11	9	0.0	0.0	2	2	0.0	0.0	-	-	-	-	29	24	0	0
Fort Yukon	9	4	12.5	9.3	89	25	0.0	0.0	36	11	0.0	0.0	9	9	21.6	0.0	7	7	7.1	0.0	150	56	357	164
Venetie	10	6	0.0	0.0	27	6	0.0	0.0	12	3	0.0	0.0	5	5	0.0	0.0	2	2	0.0	0.0	56	22	0	0
Chalkyitsik	-	-	-	-	18	12	0.0	0.0	7	6	0.0	0.0	1	1	0.0	-	-	-	-	-	26	19	0	0
District 5	24	13	4.9	3.6	208	79	0.0	0.0	113	51	0.0	0.0	28	25	37.5	10.8	19	19	37.3	0.0	392	187	1,873	616
Survey Totals	73	51	2.3	1.2	895	307	0.1	0.1	922	319	1.1	0.3	306	278	10.2	1.0	35	33	58.9	0.0	2,231	988	6,405	788

Note: The total number of households (N), the number of households contacted (n), standard error (SE), and includes 95 percent confidence interval, CI (95%).

Appendix A9.—Estimated number of salmon given away by subsistence fishers to other subsistence households and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.

Community	Total Households	Households Contacted ^a	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total
Hooper Bay	196	63	90	65	1,665	1,007	0	0	0	0	1,755
Scammon Bay	78	26	37	36	425	486	0	0	26	47	488
Coastal District	274	89	127	74	2,090	1,118	0	0	26	47	2,243
Nunam Iqua	33	22	47	26	225	124	12	9	17	17	301
Alakanuk	123	48	37	38	269	201	69	39	1	1	376
Emmonak	162	77	261	244	2,041	1,391	183	153	122	122	2,607
Kotlik	82	29	122	106	111	76	131	128	20	25	384
District 1	400	176	467	270	2,646	1,413	395	203	160	126	3,668
Mountain Village	135	57	104	70	483	322	9	15	0	0	596
Pitkas Point	24	18	29	13	111	66	19	8	6	3	165
St. Mary's	104	48	57	44	251	313	34	32	7	8	349
Pilot Station	94	52	73	45	122	114	0	0	0	0	195
Marshall	69	29	104	111	261	311	22	24	11	18	398
District 2	426	204	367	147	1,228	562	84	43	24	20	1,703
Russian Mission	56	19	71	51	45	61	0	0	14	23	130
Holy Cross	51	28	45	25	0	0	94	71	0	0	139
Shageluk	29	21	179	111	6	3	0	0	11	14	196
District 3	136	68	295	125	51	61	94	71	25	27	465
Anvik	34	30	39	14	56	5	14	7	6	0	115
Grayling	45	16	22	38	0	0	0	0	0	0	22
Kaltag	53	16	5	8	0	0	65	109	165	235	235
Nulato	82	26	93	54	4	7	38	48	0	0	135
Koyukuk	23	16	37	13	0	0	122	77	0	0	159
Galena	150	40	377	309	98	165	779	938	55	44	1,309
Ruby	59	14	638	445	13	22	153	95	13	22	817
Huslia	68	22	210	111	691	87	0	0	0	0	901
Hughes	22	15	13	13	30	0	18	0	0	0	61
Allakaket	43	16	59	56	131	214	42	71	0	0	232
Alatna	5	4	3	3	6	7	0	0	0	0	9
Bettles	19	13	20	13	1	2	4	0	0	0	25
District 4	603	228	1,516	560	1,030	285	1,235	956	239	240	4,020
Tanana	98	44	308	143	50	0	1,134	774	0	0	1,492
Stevens Village	25	13	55	28	0	0	8	9	0	0	63
Birch Creek	8	2	0	0	0	0	0	0	0	0	0
Beaver	29	23	245	125	0	0	24	18	0	0	269
Fort Yukon	150	52	1,289	677	0	0	360	409	0	0	1,649
Venetie	56	23	66	49	0	0	68	61	4	0	138
Chalkyitsik	26	18	46	17	9	7	590	587	0	0	645
District 5	392	175	2,009	705	59	7	2,184	1,056	4	0	4,256
Survey Totals	2,231	940	4,781	963	7,104	1,910	3,992	1,442	478	277	16,355

^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.

Appendix A10.—Estimated number of salmon given away by commercial fishers to another subsistence household and corresponding confidence intervals (CI) for surveyed villages, Yukon Area, 2005.

Community	Total Households	Households Contacted ^a	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Total Salmon
			Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total	CI (95%) (+/-)	Estimated Total
Hooper Bay	196	63	0	0	74	49	43	63	0	0	117
Scammon Bay	78	27	0	0	0	0	0	0	0	0	0
Coastal District	274	90	0	0	74	49	43	63	0	0	117
Nunam Iqua	33	22	0	0	0	0	0	0	0	0	0
Alakanuk	123	48	0	0	868	997	39	65	0	0	907
Emmonak	162	77	0	0	672	431	8	12	0	0	680
Kotlik	82	29	0	0	4,310	4,745	0	0	0	0	4,310
District 1	400	176	0	0	5,850	4,868	47	66	0	0	5,897
Mountain Village	135	57	80	136	544	816	0	0	0	0	624
Pitkas Point	24	18	0	0	0	0	0	0	0	0	0
St. Mary's	104	48	0	0	0	0	0	0	0	0	0
Pilot Station	94	52	0	0	0	0	0	0	0	0	0
Marshall	69	29	0	0	0	0	0	0	0	0	0
District 2	426	204	80	136	544	816	0	0	0	0	624
Russian Mission	56	19	0	0	0	0	0	0	0	0	0
Holy Cross	51	27	0	0	0	0	0	0	0	0	0
Shageluk	29	21	0	0	0	0	0	0	0	0	0
District 3	136	67	0	0	0	0	0	0	0	0	0
Anvik	34	30	0	0	0	0	0	0	0	0	0
Grayling	45	16	0	0	0	0	0	0	0	0	0
Kaltag	53	16	0	0	0	0	0	0	0	0	0
Nulato	82	26	0	0	0	0	0	0	0	0	0
Koyukuk	23	16	0	0	0	0	0	0	0	0	0
Galena	150	40	0	0	0	0	0	0	0	0	0
Ruby	59	14	0	0	0	0	0	0	0	0	0
Huslia	68	22	0	0	0	0	0	0	0	0	0
Hughes	22	14	0	0	0	0	0	0	0	0	0
Allakaket	43	16	0	0	0	0	0	0	0	0	0
Alatna	5	4	0	0	0	0	0	0	0	0	0
Bettles	19	13	0	0	0	0	0	0	0	0	0
District 4	603	227	0	0	0	0	0	0	0	0	0
Tanana	98	43	0	0	0	0	0	0	0	0	0
Stevens Village	25	13	0	0	0	0	0	0	0	0	0
Birch Creek	8	2	0	.	0	.	0	.	0	.	0
Beaver	29	23	0	0	0	0	0	0	0	0	0
Fort Yukon	150	52	0	0	0	0	0	0	0	0	0
Venetie	56	23	0	0	0	0	0	0	0	0	0
Chalkyitsik	26	18	0	0	0	0	0	0	0	0	0
District 5	392	174	0	0	0	0	0	0	0	0	0
Survey Totals	2,231	938	80	136	6,468	4,936	90	92	0	0	6,638

^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.

Appendix A11.—Estimated total number of salmon provided to villages for subsistence use by test fish programs, Yukon Area, 2005.

Yukon River Test Fishery Sites	Village where fish were distributed	Chinook Salmon	Summer Chum Salmon	Fall Chum Salmon	Coho Salmon	Total Salmon
Lower Yukon Test Fish Drift Gillnet (LYTF) ^a	Emmonak	755	1,415	893	112	3,175
	Kotlik	475	200	25	0	700
	Alakanuk	200	150	200	0	550
LYTF Project Subtotal:		<i>1,430</i>	<i>1,765</i>	<i>1,118</i>	<i>112</i>	<i>4,425</i>
Mountain Village Test Fish Drift Gillnet	Mountain Village	-	-	758	107	865
Pilot Station Sonar Test Fish Drift Gillnet	Pilot Station	699	1,612	821	241	3,373
Kaltag Test Fish Drift Gillnet	Kaltag	-	-	744	120	864
Eagle Sonar Test Fish Gillnet	Eagle	179	2	-	-	181
Test Fish Totals ^b		2,308	3,379	3,441	580	9,708

^a A drift test fishery operates both summer and fall seasons, however numbers include some fish from the summer season set gillnet test fishery.

^b Test fish catch totals as reported in Table 1.

Appendix A12.—Salmon reported lost in surveyed communities due to sick fish, weather, predators, and unknown causes, Yukon Area, 2005.

Reasons Given For Salmon Lost	Salmon Lost										Total Reported Salmon Lost		
	Chinook Salmon		Summer Chum Salmon		Fall Chum Salmon		Coho Salmon		Pink Salmon		Number	Percent	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent			
<i>LOST TO SICK FISH</i>													
Ichthyophonus h.	24	10.5%	10	1.0%	0	0.0%	0	0.0%	0	0.0%	34	2.0%	
Other fish with blemishes and sores	24	10.5%	43	4.5%	2	0.5%	0	0.0%	0	0.0%	69	4.0%	
<i>Subtotal</i>	<i>48</i>	<i>21.0%</i>	<i>53</i>	<i>5.6%</i>	<i>2</i>	<i>0.5%</i>	<i>0</i>	<i>0.0%</i>	<i>0</i>	<i>0.0%</i>	<i>103</i>	<i>6.0%</i>	
<i>LOST TO WEATHER / SPOILAGE</i>													
Rain/Sun Spoilage/Bad Weather	12	5.2%	191	20.0%	143	36.0%	30	27.3%	0	0.0%	376	21.7%	
Bad Freezer	9	3.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	9	0.5%	
<i>Subtotal</i>	<i>21</i>	<i>9.2%</i>	<i>191</i>	<i>20.0%</i>	<i>143</i>	<i>36.0%</i>	<i>30</i>	<i>27.3%</i>	<i>0</i>	<i>0.0%</i>	<i>385</i>	<i>22.3%</i>	
<i>LOST TO ANIMALS</i>													
Bears	15	6.6%	6	0.6%	70	17.6%	0	0.0%	0	0.0%	91	5.3%	
Birds/Seagulls/Flies	33	14.4%	29	3.0%	50	12.6%	40	36.4%	13	33.3%	165	9.5%	
Flies	18	7.9%	215	22.5%	33	8.3%	0	0.0%	0	0.0%	266	15.4%	
<i>Subtotal</i>	<i>66</i>	<i>28.8%</i>	<i>250</i>	<i>26.2%</i>	<i>153</i>	<i>38.5%</i>	<i>40</i>	<i>36.4%</i>	<i>13</i>	<i>33.3%</i>	<i>522</i>	<i>30.2%</i>	
<i>LOST UNKNOWN</i>	<i>Subtotal</i>	<i>94</i>	<i>41.0%</i>	<i>460</i>	<i>48.2%</i>	<i>99</i>	<i>24.9%</i>	<i>40</i>	<i>36.4%</i>	<i>26</i>	<i>66.7%</i>	<i>719</i>	<i>41.6%</i>
Total Salmon Lost ^a	229	13.2%	954	55.2%	397	23.0%	110	6.4%	39	2.3%	1,729	100%	
Salmon Fed to Dogs ^b	21	1.2%	405	23.4%	124	7.2%	40	2.3%	0	0.0%	590	34.1%	
Salmon Lost to Humans and Dogs ^c	208	12.0%	549	31.8%	273	15.8%	70	4.0%	39	2.3%	1,139	65.9%	

^a A total of 102 surveyed households reported losing salmon.

^b Salmon unfit for human consumption, but were retained for dog food.

^c Salmon lost and unfit for human consumptions and for dog food.

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 fish projects, Yukon Area, 1995–2005.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1995–1999	2000–2004
												Average	Average
Hooper Bay	1,500	1,127	613	13	173	114	2,150	282	722	1,042	157	685	862
Scammon Bay	585	1,238	526	378	938	449	732	840	1,128	996	691	733	829
Coastal District Total	2,085	2,365	1,139	391	1,111	563	2,882	1,122	1,850	2,038	848	1,418	1,691
Nunam Iqua	459	450	970	527	855	684	550	393	925	647	338	652	640
Alakanuk	1,191	662	2,058	1,930	1,236	1,109	973	1,773	1,707	1,317	860	1,415	1,376
Emmonak	1,711	702	3,080	2,396	3,337	2,205	2,473	1,751	2,763	2,768	1,730	2,245	2,392
Kotlik	2,599	1,832	1,442	2,389	1,420	1,893	3,093	1,686	937	1,148	2,130	1,936	1,751
District 1 Subtotal	5,960	3,646	7,550	7,242	6,848	5,891	7,089	5,603	6,332	5,880	5,058	6,249	6,159
Mountain Village	1,542	1,315	2,081	2,533	2,162	1,715	1,864	1,523	2,174	2,362	2,383	1,927	1,928
Pitkas Point	559	762	793	817	632	753	651	566	633	609	618	713	642
St. Marys	2,031	1,766	2,592	2,679	2,150	1,810	3,815	2,045	1,916	2,357	2,693	2,244	2,389
Pilot Station	1,614	1,811	2,373	1,715	2,715	2,378	2,614	2,530	2,886	2,406	1,658	2,046	2,563
Marshall	3,291	2,126	1,511	1,711	2,780	3,279	4,498	2,290	2,059	1,990	1,804	2,284	2,823
District 2 Subtotal	9,037	7,780	9,350	9,455	10,439	9,935	13,442	8,954	9,668	9,724	9,156	9,212	10,345
Russian Mission	2,450	2,709	1,459	1,314	2,722	1,860	3,428	1,887	2,057	2,337	1,894	2,131	2,314
Holy Cross	2,808	3,953	3,472	2,648	4,581	1,249	2,711	1,813	2,395	1,993	2,817	3,492	2,032
Shageluk	161	121	1,380	552	412	805	222	439	550	418	420	525	487
District 3 Subtotal	5,419	6,783	6,311	4,514	7,715	3,914	6,361	4,139	5,002	4,748	5,131	6,148	4,833
Lower Yukon River Total	20,416	18,209	23,211	21,211	25,002	19,740	26,892	18,696	21,002	20,352	19,345	21,610	21,336
Anvik	450	768	951	1,025	776	205	608	708	1,286	1,588	1,206	794	879
Grayling	1,340	1,036	2,391	2,177	2,476	839	1,077	2,249	1,613	1,869	1,878	1,884	1,529
Kaltag	1,890	994	1,036	1,870	2,051	1,074	1,506	1,435	1,838	1,656	3,367	1,568	1,502
Nulato	1,533	1,461	1,576	4,147	1,799	1,083	2,127	1,773	2,531	5,199	2,749	2,103	2,543
Koyukuk	146	402	851	800	506	175	449	323	860	400	396	541	441
Galena	1,336	2,770	2,350	1,668	2,539	788	1,755	1,522	3,112	3,296	2,864	2,133	2,095
Ruby/Kokrines	1,435	557	2,260	3,891	777	1,577	2,033	954	631	1,620	1,193	1,784	1,363
District 4 Subtotal (Excluding Koyukuk River)	8,130	7,988	11,415	15,578	10,924	5,741	9,555	8,964	11,871	15,628	13,653	10,807	10,352
Huslia	932	67	57	23	90	424	377	222	469	285	207	234	355
Hughes	77	54	34	91	105	50	144	67	113	291	33	72	133
Allakaket	321	82	423	85	108	41	76	200	306	65	68	204	138
Alatna	10	2	38	4	10	8	0	3	12	0	0	13	5
Bettles	4	0	39	20	1	0	0	0	0	0	3	13	0
Koyukuk River Subtotal	1,344	205	591	223	314	523	597	492	900	641	311	535	631
District 4 Total	9,474	8,193	12,006	15,801	11,238	6,264	10,152	9,456	12,771	16,269	13,964	11,342	10,982

-continued-

Appendix B1.–Page 2 of 2.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1995-1999 Average	2000-2004 Average
Tanana	2,398	2,741	3,596	5,212	3,388	2,895	4,112	2,379	5,332	2,689	3,729	3,467	3,481
Rampart ^a	1,461	1,751	2,203	885	2,018	847	1,857	852	1,411	287	411	1,664	1,051
Fairbanks ^b	1,447	1,166	955	1,231	851	1,342	1,125	1,767	1,932	1,997	2,584	1,130	1,633
Stevens Village	2,674	681	2,070	1,232	1,214	466	1,111	1,334	1,121	2,394	1,570	1,574	1,285
Birch Creek	93	0	373	48	24	72	0	67	78	82	131	108	60
Beaver	1,021	886	1,859	470	473	196	1,368	702	1,156	858	957	942	856
Fort Yukon	3,132	4,957	3,145	1,771	2,539	988	2,361	2,348	4,004	4,430	3,591	3,109	2,826
Circle	1,145	1,781	1,091	685	524	627	447	1,533	895	565	1,283	1,045	813
Central	171	131	146	170	91	26	84	58	144	83	175	142	79
Eagle	1,886	1,092	1,534	2,473	2,558	1,087	1,033	1,910	2,081	1,512	2,566	1,909	1,525
Other ^c	1,004	377	763	446	488	205	40	348	862	357	315	616	362
District 5 Subtotal (Excluding Chandalar and Black Rivers)	16,432	15,563	17,735	14,623	14,168	8,751	13,538	13,298	19,016	15,254	17,312	15,704	13,971
Venetie	434	134	314	168	127	103	28	77	125	352	59	235	137
Chalkyitsik	0	30	0	11	35	0	0	26	50	60	53	15	27
Chandalar and Black Rivers Subtotal	434	164	314	179	162	103	28	103	175	412	112	251	164
District 5 Total	16,866	15,727	18,049	14,802	14,330	8,854	13,566	13,401	19,191	15,666	17,424	15,955	14,136
Manley	335	134	242	209	136	58	534	336	213	239	289	211	276
Minto	535	523	1,208	275	317	0	197	19	317	35	35	572	114
Nenana	607	423	1,082	1,187	975	541	1,405	509	1,193	633	533	855	856
Fairbanks ^d	285	97	176	230	195	360	313	159	392	449	971	197	335
Other ^e	17	0	4	18	1	24	0	44	30	32	0	8	26
District 6 Tanana R. Total	1,779	1,177	2,712	1,919	1,624	983	2,449	1,067	2,145	1,388	1,828	1,842	1,606
Upper Yukon River Total	28,119	25,097	32,767	32,522	27,192	16,101	26,167	23,924	34,107	33,323	33,216	29,139	26,724
Alaska, Yukon River Total ^f	48,535	43,306	55,978	53,733	52,194	35,841	53,059	42,620	55,109	53,675	52,561	50,749	48,061
Alaska, Yukon Area Total	50,620	45,671	57,117	54,124	53,305	36,404	55,941	43,742	56,959	55,713	53,409	52,167	49,752

^a Rampart area harvest as reported from subsistence fishing permits established by the Alaska Board of Fisheries (BOF) in 2004.
^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. Does not include harvest by personal use permit holders.
^e Other permit holders who fished in District 6 but did not reside in the communities listed.
^f Does not include the Coastal District.

Appendix B2.—Summer chum salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1995–2005.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1995-1999 Average	2000-2004 Average
Hooper Bay	13,374	15,870	12,310	261	10,146	9,301	12,593	9,780	10,658	3,242	9,771	10,392	9,115
Scammon Bay	3,986	6,365	3,401	1,101	3,315	3,876	1,323	5,016	3,310	5,020	4,586	3,634	3,709
Coastal District Total	17,360	22,235	15,711	1,362	13,461	13,177	13,916	14,796	13,968	8,262	14,357	14,026	12,824
Nunam Iqua	2,979	2,634	2,603	1,872	1,343	3,309	1,942	1,897	2,561	2,698	2,794	2,286	2,481
Alakanuk	10,538	6,171	7,443	5,643	3,808	6,259	5,992	7,637	5,287	6,555	5,687	6,721	6,346
Emmonak	11,696	6,097	12,399	9,558	10,310	8,338	8,242	8,458	7,644	8,618	12,594	10,012	8,260
Kotlik	9,777	12,387	4,803	9,815	4,708	6,173	6,595	6,115	4,209	2,749	6,620	8,298	5,168
District 1 Subtotal	34,990	27,289	27,248	26,888	20,169	24,079	22,771	24,107	19,701	20,620	27,695	27,317	22,256
Mountain Village	10,554	9,285	11,310	9,596	10,059	7,074	8,484	6,657	6,497	10,676	8,861	10,161	7,878
Pitkas Point	1,665	1,619	747	1,302	849	1,728	862	639	800	717	1,023	1,236	949
St. Marys	5,950	6,736	8,874	9,047	6,752	8,094	10,026	7,284	4,521	6,994	6,877	7,472	7,384
Pilot Station	4,427	6,355	4,532	5,042	5,265	5,223	5,329	6,490	4,163	5,779	4,333	5,124	5,397
Marshall	4,594	4,431	1,508	1,293	1,212	3,212	1,602	2,484	792	1,765	3,183	2,608	1,971
District 2 Subtotal	27,190	28,426	26,971	26,280	24,137	25,331	26,303	23,554	16,773	25,931	24,277	26,601	23,578
Russian Mission	3,653	3,554	585	702	616	1,318	165	395	171	884	925	1,822	587
Holy Cross	948	1,700	487	269	264	569	460	155	214	276	760	734	335
Shageluk	7,542	6,114	9,244	5,501	4,868	1,800	684	1,956	5,473	1,798	4,081	6,654	2,342
District 3 Subtotal	12,143	11,368	10,316	6,472	5,748	3,687	1,309	2,506	5,858	2,958	5,766	9,209	3,264
Lower Yukon River Total	74,323	67,083	64,535	59,640	50,054	53,097	50,383	50,167	42,332	49,509	57,738	63,127	49,098
Anvik	9	185	6,306	2,139	848	425	94	1,089	844	248	529	1,897	540
Grayling	3,385	587	2,446	4,032	4,126	474	92	1,311	1,072	1,129	783	2,915	816
Kaltag	139	31	73	175	625	169	10	234	1,028	213	680	209	331
Nulato	228	1,003	115	3,518	1,945	377	208	269	180	198	634	1,362	246
Koyukuk	315	41	739	1,819	197	204	118	426	1,339	329	537	622	483
Galena	1,954	3,902	4,575	2,333	1,688	820	53	712	289	782	1,013	2,890	531
Ruby/Kokrines	4,445	2,016	3,286	2,251	1,697	1,233	1,025	1,406	876	2,010	967	2,739	1,310
District 4 Subtotal (Excluding Koyukuk River)	10,475	7,765	17,540	16,267	11,126	3,702	1,600	5,447	5,628	4,909	5,143	12,635	4,257
Huslia	4,885	2,372	840	449	1,192	745	833	3,178	6,187	3,844	2,433	1,948	2,957
Hughes	2,448	1,411	1,579	334	577	1,079	551	1,089	1,265	3,823	2,230	1,270	1,561
Allakaket	6,396	4,668	3,916	901	2,245	1,520	1,604	6,242	4,383	2,367	2,535	3,625	3,223
Alatna	140	209	145	13	99	0	0	15	50	16	5	121	16
Bettles	740	0	210	82	100	0	0	0	0	0	4	226	0
Koyukuk River Subtotal	14,609	8,660	6,690	1,779	4,213	3,344	2,988	10,524	11,885	10,050	7,207	7,190	7,758
District 4 Total	25,084	16,425	24,230	18,046	15,339	7,046	4,588	15,971	17,513	14,959	12,350	19,825	12,015

-continued-

Appendix B2.–Page 2 of 2.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1995-1999	2000-2004
												Average	Average
Tanana	3,660	5,190	2,526	1,966	1,214	2,848	1,407	3,321	3,075	1,490	4,832	2,911	2,428
Rampart ^a	1,168	1,188	738	19	60	47	0	14	9	103	315	635	35
Fairbanks ^b	722	2,958	424	57	346	275	165	295	89	280	780	901	221
Stevens Village	158	530	191	171	26	50	0	12	0	108	442	215	34
Beaver	36	572	2	15	91	7	328	77	7	2	68	143	84
Fort Yukon ^c	998	26	134	30	0	0	289	1,832	2,176	1,187	67	238	1,097
Circle	70	271	257	1	60	109	6	5	85	52	3	132	51
Central	2	53	25	1	0	1	0	0	0	0	5	16	0
Eagle	57	105	17	52	271	121	555	24	104	171	235	100	195
Other ^d	232	616	130	2	42	51	0	17	0	3	53	204	14
District 5 Subtotal (Excluding Chandalar and Black Rivers)	7,103	11,509	4,444	2,314	2,110	3,509	2,750	5,597	5,545	3,396	6,800	5,496	4,159
Venetie	552	0	76	0	166	0	106	13	0	15	0	159	27
Chalkyitsik	0	0	0	0	0	132	0	0	0	0	0	0	26
Chandalar and Black Rivers Subtotal	552	0	76	0	166	132	106	13	0	15	0	159	53
District 5 Total	7,655	11,509	4,520	2,314	2,276	3,641	2,856	5,610	5,545	3,411	6,800	5,655	4,213
Manley	1,657	1,219	576	211	272	240	338	93	65	296	163	787	206
Minto	1,320	1,421	1,056	148	173	3	19	10	625	7	21	824	133
Nenana	5,043	4,411	1,899	5,041	1,894	775	19	360	2,193	1,171	1,771	3,658	904
Fairbanks ^e	3,528	392	271	604	315	90	182	47	31	308	45	1,022	132
Other ^f	113	43	22	0	0	3	0	2	0	11	14	36	3
District 6 Tanana R. Total	11,661	7,486	3,824	6,004	2,654	1,111	558	512	2,914	1,793	2,014	6,326	1,378
Upper Yukon River Total	44,400	35,420	32,574	26,364	20,269	11,798	8,002	22,093	25,972	20,163	21,164	31,805	17,606
Alaska, Yukon River Total ^g	118,723	102,503	97,109	86,004	70,323	64,895	58,385	72,260	68,304	69,672	78,902	94,932	66,703
Alaska, Yukon Area Total	136,083	124,738	112,820	87,366	83,784	78,072	72,301	87,056	82,272	77,934	93,259	108,958	79,527

^a Rampart area harvest as reported from subsistence fishing permits established by the Alaska Board of Fisheries (BOF) in 2004.

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

^c Includes Birch Creek harvest of one summer chum salmon in 1997.

^d Other permit holders who fished in District 5 but did not reside in the communities listed.

^e Harvests by Fairbanks subsistence permit holders who fished in the Tanana River. Does not include harvest by personal use permit holders.

^f Other permit holders who fished in District 6 but did not reside in the communities listed.

^g Does not include the Coastal District.

Appendix B3.–Fall chum salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1995–2005.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1995-1999 Average	2000-2004 Average
Hooper Bay	207	392	0	0	0	78	364	44	40	264	1	120	158
Scammon Bay	147	0	0	34	204	11	195	240	106	56	69	77	122
Coastal District Total	354	392	0	34	204	89	559	284	146	320	70	197	280
Nunam Iqua	256	21	337	266	115	105	176	284	127	49	310	199	148
Alakanuk	631	100	900	665	558	505	1,032	222	348	953	627	571	612
Emmonak	1,614	1,501	1,039	867	1,849	1,165	1,272	1,261	1,257	785	1,436	1,374	1,148
Kotlik	2,197	2,525	856	1,365	3,980	3,519	957	114	407	280	516	2,185	1,055
District 1 Subtotal	4,698	4,147	3,132	3,163	6,502	5,294	3,437	1,881	2,139	2,067	2,889	4,328	2,964
Mountain Village	1,347	1,366	2,698	2,031	1,968	313	470	478	873	918	1,290	1,882	610
Pitkas Point	99	603	178	233	53	5	34	16	49	0	6	233	21
St. Marys	542	658	310	416	722	255	227	103	762	104	490	530	290
Pilot Station	575	448	1,106	1,162	1,155	852	1,522	680	823	1,108	838	889	997
Marshall	754	2,212	388	640	696	0	1,003	341	394	291	633	938	406
District 2 Subtotal	3,317	5,287	4,680	4,482	4,594	1,425	3,256	1,618	2,901	2,421	3,257	4,472	2,324
Russian Mission	865	587	0	137	100	37	76	164	615	172	667	338	213
Holy Cross	681	1,814	420	1,095	239	523	624	0	9	76	582	850	246
Shageluk	126	305	367	329	76	38	0	0	114	50	55	241	40
District 3 Subtotal	1,672	2,706	787	1,561	415	598	700	164	738	298	1,304	1,428	500
Lower Yukon River Total	9,687	12,140	8,599	9,206	11,511	7,317	7,393	3,663	5,778	4,786	7,450	10,229	5,787
Anvik	269	457	514	388	126	175	29	401	179	398	497	351	236
Grayling	1,155	1,759	1,531	648	1,370	284	314	52	441	267	1,009	1,293	272
Kaltag	644	1,049	1,142	499	764	190	607	314	725	687	1,089	820	505
Nulato	1,137	2,299	697	367	2,338	0	151	0	1,341	1,246	421	1,368	548
Koyukuk	814	2,458	1,954	1,583	1,544	239	517	255	835	344	803	1,671	438
Galena	3,202	6,620	3,370	1,915	1,932	564	420	349	1,510	1,587	2,695	3,408	886
Ruby/Kokrines	4,695	561	2,195	2,427	907	64	581	78	2,331	1,064	559	2,157	824
District 4 Subtotal (Excluding Koyukuk River)	11,916	15,203	11,403	7,827	8,981	1,516	2,619	1,449	7,362	5,593	7,073	11,066	3,708
Huslia	1,035	298	10	0	89	35	683	0	1,786	1,139	1,614	286	729
Hughes	263	274	51	60	84	157	0	0	497	97	111	146	150
Allakaket	260	961	270	11	20	36	50	100	105	968	557	304	252
Alatna	0	0	0	0	0	15	0	0	0	0	0	0	3
Bettles	583	50	0	0	0	0	0	0	0	0	50	127	0
Koyukuk River Subtotal	2,141	1,583	331	71	193	243	733	100	2,388	2,204	2,332	864	1,134
District 4 Total	14,057	16,786	11,734	7,898	9,174	1,759	3,352	1,549	9,750	7,797	9,405	11,930	4,841

-continued-

Appendix B3.–Page 2 of 3.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1995-1999 Average	2000-2004 Average
Tanana	14,409	21,420	25,058	24,956	22,305	9,384	9,779	6,255	14,308	23,118	20,545	21,630	12,569
Rampart ^a	1,403	896	646	100	4,324	0	183	0	365	0	358	1,474	110
Fairbanks ^b	2,184	2,727	491	96	681	8	0	0	105	43	1,682	1,236	31
Stevens Village	3,194	991	1,585	1,076	20	10	20	0	857	1,080	246	1,373	393
Beaver	1,231	9	243	409	16	0	21	1	192	48	179	382	52
Ft. Yukon ^c	9,196	8,144	6,119	3,035	9,702	355	2,209	3,523	7,963	7,302	8,088	7,239	4,270
Circle	5,102	5,308	3,707	37	2,722	0	2,588	74	499	1,022	918	3,375	837
Central	0	132	0	0	0	0	0	0	0	0	36	26	0
Eagle	13,115	14,916	14,488	543	11,292	32	2,714	339	2,871	5,482	17,356	10,871	2,288
Other ^d	830	505	421	50	65	1	0	100	0	13	117	374	23
District 5 Subtotal (Excluding Chandalar and Black Rivers)	50,664	55,048	52,758	30,302	51,127	9,790	17,514	10,292	27,160	38,108	49,525	47,980	20,573
Venetie	6,085	7,195	1,564	658	2,011	130	3,286	680	770	2,083	1,801	3,503	1,390
Chalkyitsik	845	1,230	936	433	442	0	73	4	340	479	337	777	179
Chandalar and Black Rivers Subtotal	6,930	8,425	2,500	1,091	2,453	130	3,359	684	1,110	2,562	2,138	4,280	1,569
District 5 Total	57,594	63,473	55,258	31,393	53,580	9,920	20,873	10,976	28,270	40,670	51,663	52,260	22,142
Manley	20,272	10,662	5,887	4,411	5,172	0	1,230	947	1,303	1,504	2,985	9,281	997
Minto	4,782	4,381	2,361	505	781	2	251	100	675	0	600	2,562	206
Nenana	15,500	14,207	3,799	6,781	5,619	8	999	1,070	7,802	5,367	10,594	9,181	3,049
Fairbanks ^e	6,384	5,736	4,031	960	1,630	0	201	229	1,949	1,024	6,691	3,748	681
Other ^f	2,230	1,481	3,472	1,713	2,269	300	855	856	1,257	1,058	2,076	2,233	865
District 6 Tanana R. Total	49,168	36,467	19,550	14,370	15,471	310	3,536	3,202	12,986	8,953	22,946	27,005	5,797
Upper Yukon River Total	120,819	116,726	86,542	53,661	78,225	11,989	27,761	15,727	51,006	57,420	84,014	91,195	32,781
Alaska, Yukon River Total ^g	130,506	128,866	95,141	62,867	89,736	19,306	35,154	19,390	56,784	62,206	91,464	101,423	38,568
Alaska, Yukon Area Total	130,860	129,258	95,141	62,901	89,940	19,395	35,713	19,674	56,930	62,526	91,534	101,620	38,848

^a Rampart area harvest as reported from subsistence fishing permits established by the Alaska Board of Fisheries (BOF) in 2004.
^b Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.
^c Includes Birch Creek harvest of zero fall chum salmon for all years surveyed.
^d Other permit holders who fished in District 5 but did not reside in the communities listed.
^e Harvests by Fairbanks subsistence permit holders who fished in the Tanana River. Does not include harvest by personal use permit holders.
^f Other permits holders who fished in District 6 but did not reside in the communities listed.
^g Does not include the Coastal District.

Appendix B4.—Coho salmon subsistence harvest totals by fishing district and community of residence, as estimated from postseason survey, returned permits and test fish projects, Yukon Area, 1995–2005.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	1995-1999 Average	2000-2004 Average
Hooper Bay	48	92	0	145	68	218	439	125	244	9	0	71	207
Scammon Bay	104	0	0	204	0	4	63	123	48	54	279	62	58
Coastal District Total	152	92	0	349	68	222	502	248	292	63	279	132	265
Nunam Iqua	419	138	51	229	51	5	32	56	117	79	241	178	58
Alakanuk	658	103	882	292	108	84	414	183	193	207	322	409	216
Emmonak	485	594	356	696	525	191	342	514	547	296	191	531	378
Kotlik	689	1,610	534	954	1,046	787	486	542	403	593	222	967	562
District 1 Subtotal	2,251	2,445	1,823	2,171	1,730	1,067	1,274	1,295	1,260	1,175	976	2,084	1,214
Mountain Village	921	276	1,089	954	665	376	423	361	745	521	246	781	485
Pitkas Point	554	691	427	305	302	139	112	47	130	0	30	456	86
St. Marys	154	292	329	290	536	117	610	209	276	258	252	320	294
Pilot Station	241	1,258	323	413	249	1,708	222	230	371	296	241	497	565
Marshall	272	958	256	335	1,041	11	73	386	64	425	341	572	192
District 2 Subtotal	2,142	3,475	2,424	2,297	2,793	2,351	1,440	1,233	1,586	1,500	1,110	2,626	1,622
Russian Mission	891	255	10	233	542	24	0	115	178	151	133	386	94
Holy Cross	0	0	20	100	62	70	0	0	498	27	84	36	119
Shageluk	0	189	736	67	6	0	0	0	35	106	0	200	28
District 3 Subtotal	891	444	766	400	610	94	0	115	711	284	217	622	241
Lower Yukon River Total	5,284	6,364	5,013	4,868	5,133	3,512	2,714	2,643	3,557	2,959	2,303	5,332	3,077
Anvik	10	44	24	20	282	0	13	0	12	288	406	76	63
Grayling	97	236	1,055	133	201	372	144	30	559	233	234	344	268
Kaltag	426	298	60	71	333	110	533	212	463	138	307	238	291
Nulato	25	149	444	34	170	60	258	78	928	203	60	164	305
Koyukuk	33	476	345	421	295	138	80	249	1,155	166	37	314	358
Galena	275	780	1,002	322	123	71	142	169	1,507	1,307	607	500	639
Ruby/Kokrines	607	376	474	1,459	620	173	871	69	648	1,540	361	707	660
District 4 Subtotal (Excluding Koyukuk River)	1,473	2,359	3,404	2,460	2,024	924	2,041	807	5,272	3,875	2,012	2,344	2,584
Huslia	307	18	50	128	15	132	83	60	375	764	734	104	283
Hughes ^a	153	51	250	5	10	12	117	100	20	110	20	94	72
Allakaket ^a	0	39	50	0	0	0	25	56	99	17	205	18	39
Alatna ^a	0	0	0	0	0	0	0	0	7	0	0	0	1
Bettles	1	0	0	0	0	0	0	0	0	0	0	0	0
Koyukuk River Subtotal	461	108	350	133	25	144	225	216	501	891	959	215	395
District 4 Total	1,934	2,467	3,754	2,593	2,049	1,068	2,266	1,023	5,773	4,766	2,971	2,559	2,979

-continued-

Appendix B4.–Page 2 of 3.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average	Average
Tanana	2,154	6,110	3,045	2,572	3,989	4,826	6,675	2,032	3,480	1,049	1,616	3,574	3,612
Rampart ^a	0	5	34	20	126	0	0	0	0	0	10	37	0
Fairbanks ^b	18	42	26	11	0	2	11	0	120	91	10	19	45
Stevens Village	1	2	1	63	0	0	2	0	0	100	0	13	20
Beaver	20	7	0	0	0	0	0	17	0	0	0	5	3
Fort Yukon ^c	4	157	251 j	39	124	129	972	14	0	19	394	115	227
Circle	0	0	210	0	0	0	0	0	244	100	100	42	69
Central	0	0	0	0	0	0	0	0	0	0	1	0	0
Eagle	1	1	2	132	0	0	0	1	0	14	15	27	3
Other ^d	7	0	0	2	2	30	0	0	25	0	13	2	11
District 5 Subtotal (Excluding Chandalar and Black Rivers)	2,205	6,324	3,569	2,839	4,241	4,987	7,660	2,064	3,869	1,373	2,159	3,836	3,991
Venetie	0	264	7	0	0	0	10	12	11	5	0	54	8
Chalkyitsik	0	0	7	0	0	0	4	0	7	45	0	1	11
Chandalar/Black River Subtotal	0	264	14	0	0	0	14	12	18	50	0	56	19
District 5 Total	2,205	6,588	3,583	2,839	4,241	4,987	7,674	2,076	3,887	1,423	2,159	3,891	4,009
Manley	7,395	2,462	3,236	2,362	3,244	2,180	2,637	1,617	886	1,384	2,510	3,740	1,741
Minto	338	1,223	364	31	0	3	0	250	423	5	0	391	136
Nenana	7,142	7,883	5,147	3,519	4,023	1,767	4,443	3,574	5,431	6,494	12,395	5,543	4,342
Fairbanks ^e	3,076	2,314	1,230	786	868	0	102	1,024	1,049	1,435	3,032	1,655	722
Other ^f	851	1,011	1,618	774	1,259	1,200	1,818	3,034	2,574	2,266	1,601	1,103	2,178
District 6 Tanana River Total	18,802	14,893	11,595	7,472	9,394	5,150	9,000	9,499	10,363	11,584	19,538	12,431	9,119
Upper Yukon Area Total	22,941	23,948	18,932	12,904	15,684	11,205	18,940	12,598	20,023	17,773	24,668	18,882	16,108
Alaska, Yukon River Total ^g	28,225	30,312	23,945	17,772	20,817	14,717	21,654	15,241	23,580	20,732	26,971	24,214	19,185
Alaska, Yukon Area Total	28,377	30,404	23,945	18,121	20,885	14,939	22,156	15,489	23,872	20,795	27,250	24,346	19,450

^a Rampart area harvest as reported from subsistence fishing permits established by the Alaska Board of Fisheries (BOF) in 2004.
^b Harvests by Fairbanks subsistence permit holders who fished in District 5 near the Yukon River bridge crossing.
^c Includes Birch Creek harvest of three coho salmon in 1997.
^d Other permit holders who fished in District 5 but did not reside in the communities listed.
^e Harvests by Fairbanks subsistence permit holders who fished in the Tanana River. Does not include harvest by personal use permit holders.
^f Other permits holders who fished in District 6 but did not reside in the communities listed.
^g Does not include the Coastal District.

Appendix B5.—Personal use salmon harvests taken under authority of a permit, Tanana River drainage, 1987–2005.

Subdistrict 6-C Personal Use Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1987	132 ^a	-	60 ^b			3,316	2,465
1988	208	162	120	317	1,182	2,074	1,125
1989	175	160	112	397	991	1,770	731
1990	152	144	102	442	918	1,353	1,120
1991	- ^c	-	-	-	-	-	-
1992	- ^c	-	-	-	-	-	-
1993	133	131	79	426	674	163	0
1994	- ^c	-	-	-	-	-	-
1995	139	138	91	399	780	863	417
1996	129	125	73	215	905	356	198
1997	112	109	61	313	391	284	350
1998	103	101	52	357	84	2	9
1999	103 ^d	103	67	331	382	261	147
2000	70	69	16	75	30	1	0
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
Five Year Average							
2000–2004	63	62	27	146	146	128	167
Ten Year Average							
1995–2004	90	88	48	234	327	240	196

Subdistrict 6-A Personal Use Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1987	no permits issued						
1988	1	1	0	0	0	0	0
1989	1	1	1	0	4	0	0
1990	1	1	0	0	0	0	0
1991	no permits issued						
1992	no permits issued						
1993	no permits issued						
1994	no permits issued						
1995	no permits issued						
1996	no permits issued						
1997	no permits issued ^e						
1988–1990							
Average	1	1	0	0	1	0	0

-continued-

Appendix B5.–Page 2 of 2.

Subdistrict 6-B Personal Use Salmon Fishery

Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1987	no permits issued						
1988	1	1	1	306	60	40	22
1989	1	1	1	56	220	0	0
1990	4	4	3	9	12	40	35
1991	no permits issued						
1992	no permits issued						
1993	no permits issued						
1994	no permits issued						
1995	no permits issued						
1996	no permits issued						
1997	^e no permits issued						
<hr/>							
1988–1990							
Average	2	2	2	124	97	27	19

Upper Tanana River Personal Use Salmon Fishery

Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1987	no permits issued						
1988	no permits issued						
1989	no permits issued						
1990	no permits issued						
1991	^f no permits issued						

^a Includes 60 former subsistence fishers who were reissued personal use permits to fish for fall chum salmon.

^b Some fishing families used both subsistence and personal use permits.

^c From July 1, 1990 through 1992, and in 1994, the regulations did not provide for a personal use fishery in this area.

^d Does not include 4 whitefish and sucker fishery permit holders, 2 of which fished, who reported a total harvest of 1 fall chum and 6 coho salmon in 1999.

^e After 1997 the regulations did not provide for a personal use fishery in these areas.

^f After July 1, 1991 the regulations did not provide for a personal use salmon fishery in this area.

Appendix B6.—Subsistence salmon harvests taken under authority of a permit in portions of District 5, Yukon Area, 1974–2005.

Yukon River "Bridge" Area Subsistence Salmon Fishery ^a							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum ^b	Fall Chum ^b	
1974	29	-	-	591	-	1,857	1,271
1975	19	-	-	727	-	778	70
1976	28	-	18	531	-	974	-
1977	38	-	-	467	-	2,567	-
1978	57	-	-	1,333	-	9,735	-
1979	55	-	41	2,194	-	12,374	-
1980	70	-	67	1,350	-	6,488	36
1981	57	-	24	1,095	-	12,034	-
1982	64	-	44	1,935	-	11,328	20
1983	68	-	46	2,672	-	15,059	-
1984	67	-	54	4,676	-	27,869	399
1985	55	-	42	2,618	-	21,832	33
1986	76	-	58	3,827	-	18,690	759
1987	16	-	14	1,818	2,091	7,631	6
1988	24	21	18	1,747	2,097	3,183	606
1989	26	20	13	2,483	574	1,157	309
1990	26	25	16	2,033	3,493	1,109	455
1991	52	46	34	2,529	1,295	3,953	20
1992	45	42	33	2,241	975	2,491	34
1993	49	47	36	3,767	492	2,915	16
1994	50	49	36	3,073	384	2,911	25
1995	59	59	39	3,253	954	2,244	59
1996	47	45	31	1,157	3,475	2,727	42
1997	44	42	28	1,588	683	491	26
1998	48	47	31	1,685	103	156	15
1999	66	64	47	1,653	356	701	2
2000	56	52	33	1,607	324	8	32
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
Five Year Average							
2000–2004	67	64	46	2,083	215	51	56
Ten Year Average							
1995–2004	60	58	41	1,975	664	657	43
Yukon River "Rampart Village" Area Subsistence Salmon Fishery ^c							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			Coho
				Chinook	Summer Chum	Fall Chum	
2004	14	11	9	832	249	0	0
2005	22	19	17	1,721	663	2,023	10
Two Year Average							
2004–2005	18	15	13	1,277	456	1,012	5

-continued-

Appendix B6.–Page 2 of 2.

Upper Yukon River "Circle-Eagle" Area Subsistence Salmon Fishery ^d							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum ^c	Fall Chum ^c	Coho
1979	75	-	6	4,063	-	30,475	114
1980	48	-	39	3,649	-	18,477	6
1981	71	-	51	4,510	-	38,333	-
1982	60	-	61	3,833	-	15,432	-
1983	53	-	52	2,831	-	23,708	-
1984	58	-	54	2,543	-	21,675	17
1985	59	-	36	2,419	-	19,059	2
1986	40	-	52	4,148	-	20,701	43
1987	51	51	58 ^e	3,602	2,495	27,369	0
1988	58	57	50	2,783	2,134	9,078	101
1989	59	56	42	1,186	68	7,515	1
1990	81	75	54	3,746	1,629	14,992	206
1991	70	69	48	3,219	658	14,898	5
1992	85	79	54	2,984	409	12,009	57
1993	79	79	49	1,910	118	2,419	95
1994	79	76	51	3,093	145	12,844	30
1995	87	87	53	3,628	129	19,047	1
1996	86	84	51	3,458	528	20,861	1
1997	98	93	60	3,148	393	18,616	212
1998	101	95	54	3,562	55	630	132
1999	119	116	71	3,404	364	14,079	0
2000	121	118	47	1,806	233	33	0
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
Five Year Average							
2000–2004	99	93	46	2,616	247	3,133	23
Ten Year Average							
1995–2004	99	94	52	3,028	270	8,890	46

Note: Prior to 1988 reported harvest was expanded for unreturned permits. Beginning in 1988, reported harvest was not expanded.

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

^b Summer chum and fall chum salmon undifferentiated from 1974-1986.

^c That portion of the Yukon River drainage from Garnet Island to Hess Creek. 2004 was the first year of permit requirement.

^d That portion of the Yukon River drainage from the upstream mouth of Twenty-Two Mile Slough (downstream of Circle) to the United States/Canadian border.

^e Harvest was reported from some fishers who did not have permits.

Appendix B7.—Subsistence salmon harvests taken under authority of a permit, Tanana River drainage, 1973–2005.

Subdistrict 6-A Subsistence Salmon Fishery								
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest				
				Chinook	Summer Chum	Fall Chum	Coho	
1988 ^a	28	24	18	845	1,389	9,165	3,455	
1989 ^{a,b}	29	28	24 ^c	651	1,918	25,266	5,292	
1990 ^b	42	36	26	1,369	2,250	27,957	8,408	
1991	45	41	31	420	1,716	17,472	8,486	
1992	38	35	26	508	450	5,999	5,028	
1993 ^b	42	41	22	331	784	2,617	1,317	
1994 ^d	37	37	30	576	3,793	18,076	12,449	
1995	41	38	29	456	4,898	23,522	11,344	
1996	31	29	23	209	1,338	18,931	5,959	
1997	33	32	21	887	542	10,621	3,703	
1998	31	31	19	512	519	4,726	1,526	
1999	24	24	14	137	525	5,712	3,464	
2000	24	24	12	80	240	0	2,441	
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	
Five Year Average 2000–2004	24	23	14	327	208	1,495	2,505	
Ten Year Average 1995–2004	28	27	18	384	886	7,099	3,852	
Subdistrict 6-B Subsistence Salmon Fishery								
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest ^e				
				Chinook	Summer Chum	Fall Chum	Coho	
1988	75	66	52	3,721	3,167	18,902	18,906	
1989 ^f	60	51	37 ^d	455	363	18,506	8,453	
1990 ^f	70	58	38	1,234	1,966	16,332	9,155	
1991 ^f	87	78	51	1,796	2,373	21,629	11,971	
1992 ^f	98	89	57	1,587	7,820	18,782	11,409	
1993	99	89	38	1,341	5,976	7,166	2,987	
1994	102	94	49	1,337	2,035	13,726	12,480	
1995	98	98	59	1,322	6,712	25,364	7,458	
1996	105	96	59	968	6,138	17,439	8,934	
1997	103	95	55	1,825	3,282	8,729	7,892	
1998	94	84	46	1,407	5,485	9,573	5,937	
1999	83	79	47	1,487	2,129	9,757	5,930	
2000	81	79	33	903	869	210	2,709	
2001	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	70	67	29	1,404	1,846	15,367	9,659	
Five Year Average 2000–2004	73	70	34	1,165	1,198	4,346	6,763	
Ten Year Average 1995–2004	85	80	44	1,284	2,973	9,259	6,997	

–continued–

Appendix B7.–Page 2 of 3.

Upper Tanana River Drainage Subsistence Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho
1988	0	0	0	0	0	0	0
1989	2	2	2	5	0	39	0
1990	1	1	0	0	0	0	0
1991	8	7	6	0	0	288	14
1992	11	11	4	0	0	36	1
1993	10	10	8	0	0	5	0
1994	7	7	3	0	0	202	15
1995	50	46	12	0	0	88	0
1996	42	39	15	0	10	97	0
1997	61	58	26	0	0	200	0
1998	46	46	17	0	0	71	9
1999	29	29	13	0	0	2	0
2000	41	36	16	0	2	100	0
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
Five Year Average							
2000–2004	41	36	17	6	0	26	0
Ten Year Average							
1995–2004	43	40	17	3	1	59	1
Subdistrict 6-C Subsistence Salmon Fishery							
Year	Number of Permits Issued	Number of Permits Returned	Number Reporting Harvest	Reported Harvest			
				Chinook	Summer Chum	Fall Chum	Coho ^g
1973	22	-	4	26	771	886	-
1974	70	-	-	38	1,373	1,580	-
1975	36	-	-	32	751	864	-
1976	110	-	-	31	1,314	1,512	-
1977	89	-	33	81	118	607	-
1978	160	-	126	126	2,729	1,188	-
1979	246	-	199	264	2,384	4,459	-
1980	315	-	254	282	3,729	4,059	-
1981	346	-	228	440	3,239	5,770	-
1982	330	-	209	451	2,708	4,521	-
1983	259	-	147	475	2,276	3,830	-
1984	308	-	212	321	3,177	5,134	-
1985	291	-	155	326	2,646	3,937	-
1986	323	-	211	637	4,031	4,437	-
1987 ^h	217	-	123	531	2,739	0	0
1988	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0
1990 ⁱ	19	18	6	15	69	279	50
1991	149	142	98	299	980	1,080	1,089
1992	149	146	90	343	1,234	896	1,116
1993 ^j	0	0	0	0	0	0	0
1994 ^{k,l}	145	142	107	457	1,198	1,600	1,545
All Years							
Average	163	64	116	235	1,703	2,120	475

-continued-

Appendix B7.—Page 3 of 3.

Note: Prior to 1988 reported harvest was expanded for unreturned permits. Beginning in 1988, reported harvest was not expanded. Dashes in the table indicate the information is not available.

- ^a Many Subdistrict 6-A fishermen did not obtain a permit in 1988 and 1989.
- ^b Includes salmon given away as part of ADF&G's test fishing project in Manley.
- ^c Harvest was reported from some fishers who did not have permits.
- ^d Beginning in 1994, a separate Kantishna River drainage permit was required. The Subdistrict 6-A harvest totals include those from the Kantishna River drainage.
- ^e Includes small numbers of salmon harvested and reported from the Tolovana River drainage (Subdistrict 6-B) subsistence pike permit, established in 1993.
- ^f Includes salmon given away as part of ADF&G's test fish project in Nenana.
- ^g Prior to 1988 fall chum and coho salmon were not reported as separate species.
- ^h Personal use fishery established for nonrural residents beginning in July of 1987.
- ⁱ Some fishermen had both personal use and subsistence permits. The McDowell Decision became effective July 1990 (midway through the season), and stated that all Alaskan residents were eligible subsistence participants.
- ^j Personal use fishery was established for those fishing for salmon in the Fairbanks Nonsubsistence Area, which includes Subdistrict 6-C.
- ^k No personal use permits were issued in 1994 for this area.
- ^l After 1994 subsistence regulations were repealed within the Fairbanks Nonsubsistence Area, which includes Subdistrict 6-C.

Appendix B8.—Estimated number of salmon distributed from test fish projects, Yukon Area, 1992–2005.

Chinook Salmon																	
Year	Set Gillnet	Drift Gillnet Test Fish Projects ^a									Test Fish Wheel Projects ^a						Total
	Test Fish Lower Yukon	Lower Yukon	Mountain Village	Pilot Station	Marshall	Marshall ^b	Russian Mission ^b	Kaltag	Rampart	Eagle	Galena	Manley	Kantishna	Nenana	Tanana	Fort Yukon	
1992	1,715	-	-	-	-	-	-	-	-	-	-	0	-	113	-	-	1,828
1993	1,584	-	-	471	-	-	-	-	-	-	-	0	-	0	0	-	2,055
1994	1,985	-	-	334	-	-	-	-	-	-	-	0	-	0	0	-	2,319
1995	1,715	-	1	166	-	-	-	-	-	-	2	1	-	0	0	0	1,885
1996	1,355	-	0	0	-	-	-	-	-	-	-	0	-	0	0	0	1,355
1997	1,825	-	2	330	-	-	-	-	-	-	-	0	-	0	0	-	2,157
1998	1,035	-	8	435	-	-	-	-	-	-	-	0	-	0	0	-	1,478
1999	1,656	-	1	359	773	-	-	1	-	-	-	0	-	0	0	-	2,790
2000	1,344	-	0	450	1,024	11	23	0	-	-	-	-	0	0	0	-	2,852
2001	1,379	535	0	561	-	27	11	0	-	-	-	-	0	0	-	-	2,513
2002	1,268	253	0	545	-	8	18	0	-	-	-	-	0	0	0	-	2,092
2003	^c	374	0	846	-	-	33	0	0	-	-	-	0	0	0	-	1,253
2004	^c	1,158	0	665	-	-	20	0	-	-	-	-	0	0	0	-	1,843
2005	^c	1,430	0	699	-	-	-	0	-	179	-	-	0	0	0	-	2,308
Five Year Average																	
2000–2004	1,330	580	0	613	1,024	15	21	0	0	-	-	-	0	0	0	-	2,111

Summer Chum Salmon																	
Year	Set Gillnet	Drift Gillnet Test Fish Projects ^a									Test Fish Wheel Projects ^a						Total
	Test Fish Lower Yukon	Lower Yukon	Mountain Village	Pilot Station	Marshall	Marshall ^b	Russian Mission ^b	Kaltag	Rampart	Eagle	Galena	Manley	Kantishna	Nenana	Tanana	Fort Yukon	
1992	3,989	-	-	-	-	-	-	-	-	-	-	0	-	112	-	-	4,101
1993	4,111	-	-	2,098	-	-	-	-	-	-	-	33	-	0	0	-	6,242
1994	7,060	-	-	2,998	-	-	-	-	-	-	-	0	-	0	0	-	10,058
1995	6,382	-	0	1,875	-	-	-	-	-	-	57	50	-	0	0	0	8,364
1996	7,052	-	0	276	-	-	-	-	-	-	-	0	-	0	0	0	7,328
1997	4,539	-	0	2,420	-	-	-	-	-	-	-	0	-	0	0	-	6,959
1998	2,290	-	0	2,209	-	-	-	-	-	-	-	0	-	0	147	-	4,646
1999	2,717	-	0	1,636	181	-	-	0	-	-	-	0	-	0	0	-	4,534
2000	2,499	-	0	2,141	335	0	0	0	-	-	-	-	5	0	0	-	4,980
2001	211	1,787	0	1,696	-	1	2	0	-	-	-	-	0	0	-	-	3,697
2002	199	2,209	0	2,174	-	10	0	0	-	-	-	-	0	0	0	-	4,592
2003	^c	1,801	0	2,060	-	-	5	0	0	-	-	-	0	0	0	-	3,866
2004	^c	868	0	1,848	-	-	29	0	-	-	-	-	0	0	0	-	2,745
2005	^c	1,765	0	1,612	-	-	-	0	-	2	-	-	0	0	0	-	3,379
Five Year Average																	
2000–2004	970	1,666	0	1,984	335	4	7	0	0	-	-	-	1	0	0	-	3,976

-continued-

Appendix B8.—Page 2 of 3.

Fall Chum Salmon																	
Year	Set Gillnet	Drift Gillnet Test Fish Projects ^a									Test Fish Wheel Projects ^a						Total
	Test Fish	Lower	Mountain	Pilot	Marshall	Marshall ^b	Russian	Kaltag	Rampart	Eagle	Galena	Manley	Kantishna	Nenana	Tanana	Fort	
	Lower Yukon	Yukon	Village	Station			Mission ^b									Yukon	
1992	2,462	-	-	-	-	-	-	-	-	-	-	0	-	110	-	-	2,572
1993	3,692	-	-	652	-	-	-	-	-	-	-	65	-	0	0	-	4,409
1994	2,566	-	-	1,349	-	-	-	-	-	-	-	0	-	7	1,895	-	5,817
1995	2,408	-	523	541	-	-	-	-	-	-	199	194	-	0	1,876	1,570	7,311
1996	1,421	-	319	150	-	-	-	-	-	-	-	0	-	0	0	1,081	2,971
1997	1,466	-	962	997	-	-	-	-	-	-	-	0	-	0	0	-	3,425
1998	2,000	-	664	1,110	-	-	-	-	-	-	-	0	-	0	0	-	3,774
1999	4,061	-	1,008	968	0	-	-	483	-	-	-	0	-	0	0	-	6,520
2000	2,921	-	269	834	0	0	0	190	-	-	-	-	0	0	0	-	4,214
2001	-	1,694	339	1,492	-	0	0	494	-	-	-	-	0	0	0	-	4,019
2002	-	1,050	175	680	-	0	0	314	-	-	-	-	0	0	0	-	2,219
2003	-	1,247	328	823	-	-	0	457	873	-	-	-	0	0	0	-	3,728
2004	-	635	425	726	-	-	0	592	-	-	-	-	0	0	0	-	2,378
2005	-	1,118	758	821	-	-	-	744	-	0	-	-	0	0	0	-	3,441
Five Year Average																	
2000–2004	2,921	1,157	307	911	0	0	0	409	873	-	-	-	0	0	0	-	3,312

Coho Salmon																	
Year	Set Gillnet	Drift Gillnet Test Fish Projects ^a									Test Fish Wheel Projects ^a						Total
	Test Fish	Lower	Mountain	Pilot	Marshall	Marshall ^b	Russian	Kaltag	Rampart	Eagle	Galena	Manley	Kantishna	Nenana	Tanana	Fort	
	Lower Yukon	Yukon	Village	Station			Mission ^b									Yukon	
1992	2,557	-	-	-	-	-	-	-	-	-	-	0	-	0	-	-	2,557
1993	1,210	-	-	222	-	-	-	-	-	-	-	0	-	0	0	-	1,432
1994	2,033	-	-	786	-	-	-	-	-	-	-	0	-	0	266	-	3,085
1995	579	-	559	205	-	-	-	-	-	-	0	0	-	0	164	0	1,507
1996	755	-	228	25	-	-	-	-	-	-	-	0	-	0	0	0	1,008
1997	593	-	309	283	-	-	-	-	-	-	-	0	-	0	0	-	1,185
1998	792	-	567	364	-	-	-	-	-	-	-	0	-	0	0	-	1,723
1999	649	-	2	180	0	-	-	70	-	-	-	0	-	0	0	-	901
2000	949	-	313	1,705	0	0	0	110	-	-	-	-	322	0	0	-	3,399
2001	-	492	302	180	-	0	0	251	-	-	-	-	0	0	0	-	1,225
2002	-	374	155	225	-	0	0	158	-	-	-	-	0	0	0	-	912
2003	-	635	362	371	-	-	0	23	0	-	-	-	0	0	0	-	1,391
2004	-	152	285	236	-	-	0	128	-	-	-	-	0	0	0	-	801
2005	-	112	107	241	-	-	-	120	-	0	-	-	0	0	0	-	580
Five Year Average																	
2000–2004	949	413	283	543	0	0	0	134	0	-	-	-	64	0	0	-	1,546

-continued-

Appendix B8.–Page 3 of 3.

Note: Dashes indicate test fish project was not in operation.

^a Does not include salmon that were accounted for by using the survey or permit methods.

^b Chinook salmon radio telemetry project.

^c Salmon caught in the Lower Yukon set gillnet test fishery are included with Lower Yukon drift gillnet totals.

Appendix B9.—Estimated pink salmon subsistence harvest by residents of surveyed villages, with village and district totals, Yukon Area, 1995–2005.

Community	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Estimated Total		
												Even Average	Odd Average	1996 to Average
Hooper Bay	326	3,212	265	1,941	99	902	32	5,475	473	5,418	860	3,390	239	1,814
Scammon Bay	559	305	0	1,791	527	96	362	417	997	2,508	1,645	1,023	489	756
Coastal District	885	3,517	265	3,732	626	998	394	5,892	1,470	7,926	2,505	4,413	728	2,570
Nunam Iqua	1	262	1	299	0	0	0	10	5	32	132	121	1	61
Alakanuk	124	35	33	239	0	38	0	130	0	233	49	135	31	83
Emmonak	5	46	35	145	17	0	9	39	4	32	54	52	14	33
Kotlik	2	100	0	907	15	263	0	849	198	318	155	487	43	265
District 1	132	443	69	1,590	32	301	9	1,028	207	615	390	795	90	443
Mountain Village	35	611	10	753	0	61	0	745	117	891	78	612	32	322
Pitkas Point	4	280	101	330	12	114	0	35	0	0	2	152	23	88
St. Mary's	0	42	4	467	1	54	0	7	0	137	144	141	1	71
Pilot Station	0	0	0	0	8	6	0	22	0	5	0	7	2	4
Marshall	6	0	0	0	0	0	0	473	0	105	6	116	1	58
District 2	45	933	115	1,550	21	235	0	1,282	117	1,138	230	1,028	60	544
Russian Mission	0	0	0	211	0	8	0	0	0	6	0	45	0	23
Holy Cross	0	140	0	150	0	20	0	0	0	0	0	62	0	31
Shageluk	0	40	0	1,256	0	0	0	0	130	0	0	259	26	143
District 3	0	180	0	1,617	0	28	0	0	130	6	0	366	26	196
Anvik	0	0	0	50	0	30	0	0	240	0	0	16	48	32
Grayling	0	4	0	649	1	0	0	30	3	0	3	137	1	69
Kaltag	0	0	11	1	1	0	0	0	0	10	4	2	2	2
Nulato	0	0	0	0	0	0	0	50	0	0	0	10	0	5
Koyukuk	0	0	23	0	0	0	0	4	0	0	0	1	5	3
Galena	0	52	0	0	0	0	0	50	0	0	0	20	0	10
Ruby	0	3	0	0	0	1	0	87	0	2	0	19	0	9
Huslia	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	59	34	700	2	31	0	221	243	12	7	205	56	130
Tanana	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0
Survey Totals	1,062	5,132	483	9,189	681	1,593	403	8,423	2,167	9,697	3,132	6,807	959	3,883
CI (95%)^a	635	2,204	290	2,511	621	559	416	4,091	964	2,829	1,521	-	-	-

^a Includes annual 95 percent confidence interval, CI (95%).

Appendix B10.—Households with dogs, number of dogs, and salmon fed to dogs, as estimated in surveyed villages or reported in permit areas, Yukon Area, 1990–2005.

Districts Survey or Permit and Year	Number of Households with Dogs	Number of Dogs	Summer Salmon Fed to Dogs	Fall Chum Salmon Fed to Dogs	Coho Salmon Fed to Dogs	Total Salmon Fed to Dogs
1990						
Coastal District Survey	-	-	-	-	-	-
District 1 Survey	-	455	2,859	372	0	3,231
District 2 Survey	-	775	3,278	415	3,665	7,358
District 3 Survey	-	272	8,248	120	166	8,534
District 4 Survey	-	1,385	91,256	6,911	2,511	100,678
District 5 Survey	-	1,286	5,697	72,424	9,118	87,239
District 5 Permit ^a	-	-	-	-	-	-
District 6 Permit	-	-	-	-	-	-
Totals	0	4,173	111,338	80,242	15,460	207,040
1991						
Coastal District Survey	-	-	-	-	-	-
District 1 Survey	-	349	30	0	16	46
District 2 Survey	-	543	723	652	874	2,249
District 3 Survey	-	145	1,747	150	0	1,897
District 4 Survey	-	1,660	169,866	903	591	171,360
District 5 Survey	-	1,520	28,518	54,657	2,754	85,929
District 5 Permit ^a	49	400	-	-	-	11,522
District 6 Permit	220	1,980	-	-	-	19,479
Totals	269	6,597	200,884	56,362	4,235	292,482
1992						
Coastal District Survey	133	513	659	0	0	659
District 1 Survey	262	617	512	1,000	153	1,665
District 2 Survey	285	971	694	247	2,237	3,178
District 3 Survey	113	507	4,893	74	37	5,004
District 4 Survey	436	2,065	139,513	6,950	3,323	149,786
District 5 Survey	323	1,577	12,897	38,529	14,529	65,955
District 5 Permit ^a	52	492	-	-	-	7,026
District 6 Permit	255	2,270	-	-	-	18,115
Totals	1,859	9,012	159,168	46,800	20,279	251,388
1993						
Coastal District Survey	150	391	0	0	0	0
District 1 Survey	280	690	654	70	22	746
District 2 Survey	232	880	794	260	670	1,724
District 3 Survey	118	447	2,671	734	162	3,567
District 4 Survey	435	1,645	44,793	3,905	579	49,277
District 5 Survey	348	1,840	5,490	38,888	5,147	49,525
District 5 Permit ^a	54	1,031	-	-	-	1,133
District 6 Permit	143	1,857	-	-	-	1,547
Totals	1,760	8,781	54,402	43,857	6,580	107,519
1994						
Coastal District Survey	161	367	1,287	0	0	1,287
District 1 Survey	288	819	267	144	384	795
District 2 Survey	286	1,074	1,066	653	2,470	4,189
District 3 Survey	123	413	5,279	0	162	5,441
District 4 Survey ^b	427	1,649	92,127	4,720	2,916	99,763
District 5 Survey	355	1,426	10,903	51,674	4,422	66,999
District 5 Permit ^a	103	534	-	-	-	9,824
District 6 Permit	212	2,269	-	-	-	34,111
Totals	1,955	8,551	110,929	57,191	10,354	222,409
1995						
Coastal District Survey	158	596	2,919	214	0	3,133
District 1 Survey	223	391	531	43	7	581
District 2 Survey	213	677	1,587	436	979	3,002
District 3 Survey	111	347	8,450	265	100	8,815
District 4 Survey	423	1,830	183,386	9,092	1,151	193,629
District 5 Survey	356	1,442	6,222	50,680	2,107	59,009
District 5 Permit ^a	54	495	-	-	-	17,980
District 6 Permit	103	1,723	-	-	-	50,731
Totals	1,641	7,501	203,095	60,730	4,344	336,880

-continued-

Appendix B10.–Page 2 of 3.

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
1996						
Coastal District Survey	159	406	0	0	0	0
District 1 Survey	298	682	1,847	250	38	2,135
District 2 Survey	251	1,044	1,460	1,724	1,423	4,607
District 3 Survey	134	513	3,558	0	0	3,558
District 4 Survey	468	1,607	130,575	5,771	1,324	137,670
District 5 Survey	325	1,289	10,155	48,836	5,966	64,957
District 5 Permit ^a	53	293	-	-	-	14,345
District 6 Permit	176	1,907	-	-	-	43,590
Totals	1,864	7,741	147,595	56,581	8,751	270,862
1997						
Coastal District Survey	174	494	837	0	0	837
District 1 Survey	255	683	103	0	0	103
District 2 Survey	301	1,075	779	498	142	1,419
District 3 Survey	111	492	11,418	400	746	12,564
District 4 Survey	430	1,209	63,850	4,481	3,141	71,472
District 5 Survey	254	1,146	2,943	33,188	2,961	39,092
District 5 Permit ^a	95	569	-	-	-	19,584
District 6 Permit	156	1,898	-	-	-	12,813
Totals	1,776	7,566	79,930	38,567	6,990	157,884
1998						
Coastal District Survey	185	503	0	0	0	0
District 1 Survey	259	555	1,711	270	0	1,981
District 2 Survey	293	966	682	110	137	929
District 3 Survey	106	394	4,288	32	202	4,522
District 4 Survey	560	1,731	14,468	3,394	1,935	19,797
District 5 Survey	356	1,342	2,029	29,448	2,680	34,157
District 5 Permit ^a	113	598	-	-	-	1,262
District 6 Permit	136	1,610	-	-	-	22,311
Totals	2,008	7,699	23,178	33,254	4,954	84,959
1999						
Coastal District Survey	163	276	135	0	0	135
District 1 Survey	252	451	254	20	25	299
District 2 Survey	312	982	778	52	1,277	2,107
District 3 Survey	95	374	4,153	50	240	4,443
District 4 Survey	481	1,502	15,546	3,399	1,513	20,458
District 5 Survey	273	1,233	1,436	36,006	3,844	41,286
District 5 Permit ^a	141	739	-	-	-	11,013
District 6 Permit	107	1,321	-	-	-	13,256
Totals	1,824	6,878	22,302	39,527	6,899	92,997
2000						
Coastal District Survey	215	451	0	0	0	0
District 1 Survey	247	552	1,240	741	0	1,981
District 2 Survey	307	941	467	30	30	527
District 3 Survey	111	374	419	150	70	639
District 4 Survey	441	1,318	4,237	846	329	5,412
District 5 Survey	236	811	1,263	5,972	1,791	9,026
District 5 Permit ^{a,c}	67	568	-	-	-	317
District 6 Permit ^c	70	1,327	-	-	-	3,082
Totals	1,694	6,342	7,626	7,739	2,220	20,984
2001						
Coastal District Survey	234	495	0	0	0	0
District 1 Survey	318	609	223	100	0	323
District 2 Survey	331	926	255	210	80	545
District 3 Survey	114	610	873	111	25	1,009
District 4 Survey	553	2,074	4,571	2,014	1,263	7,848
District 5 Survey	293	1,026	1,649	10,629	5,976	18,254
District 5 Permit ^{a,c}	121	583	-	-	-	8,065
District 6 Permit ^c	130	1,266	-	-	-	7,506
Totals	2,094	7,589	7,571	13,064	7,344	43,550

-continued-

Appendix B10.–Page 3 of 3.

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
2002						
Coastal District Survey	207	399	0	0	67	67
District 1 Survey	282	655	14	59	30	103
District 2 Survey	327	847	221	38	379	638
District 3 Survey	88	312	620	0	0	620
District 4 Survey	437	1,502	8,286	848	697	9,831
District 5 Survey	197	677	2,256	6,324	1,393	9,973
District 5 Permit ^{a, c}	81	546	-	-	-	689
District 6 Permit ^c	111	806	-	-	-	11,722
Totals	1,730	5,744	11,397	7,269	2,566	33,643
2003						
Coastal District Survey	132	365	0	0	0	0
District 1 Survey	239	483	115	0	38	153
District 2 Survey	236	729	635	0	58	693
District 3 Survey	87	298	3,650	0	0	3,650
District 4 Survey	384	1,728	15,648	4,118	3,271	23,037
District 5 Survey	221	864	3,268	19,267	2,862	25,397
District 5 Permit ^{a, c}	59	672	-	-	-	1,614
District 6 Permit ^c	161	866	-	-	-	12,717
Totals Totals	1,519	6,005	23,316	23,385	6,229	67,261
2004						
Coastal District Survey	151	300	13	0	0	13
District 1 Survey	235	505	435	21	0	456
District 2 Survey	270	630	1,030	62	376	1,468
District 3 Survey	97	272	1,228	0	0	1,228
District 4 Survey	421	1,424	12,608	3,382	3,232	19,222
District 5 Survey	241	853	2,134	31,266	1,103	34,503
District 5 Permit ^{a, c}	60	644	-	-	-	3,428
District 6 Permit ^c	149	1,003	-	-	-	18,261
Totals	1,624	5,631	17,448	34,731	4,711	78,579
2005						
Coastal District Survey	190	375	0	0	0	0
District 1 Survey	262	482	273	35	29	337
District 2 Survey	281	563	777	137	104	1,018
District 3 Survey	78	214	2,288	342	70	2,700
District 4 Survey	364	1,325	5,993	3,236	1,464	10,693
District 5 Survey	277	1,229	4,466	24,782	1,498	30,746
District 5 Permit ^{a, c}	59	609	-	-	-	8,316
District 6 Permit ^c	143	1,175	-	-	-	27,179
Totals	1,654	5,972	13,797	28,532	3,165	80,989
Five Year Average 2000 to 2004						
Coastal District Survey	184	381	25	0	11	36
District 1 Survey	262	543	380	157	16	553
District 2 Survey	297	843	564	65	367	996
District 3 Survey	99	373	1,824	52	56	1,932
District 4 Survey	453	1,591	10,149	2,435	1,718	14,301
District 5 Survey	244	911	2,001	18,244	2,828	23,073
District 5 Permit ^{a, c}	88	625	-	-	-	4,188
District 6 Permit ^c	121	1,098	-	-	-	11,091
Totals	1,748	6,365	14,943	20,953	4,995	56,169

Note: Beginning in 1993, the estimated number of salmon includes those retained from subsistence and commercial-related harvests. Dashes indicate information was not collected.

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

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

^c Does not include duplicate information from households with more than one permit.

Appendix B11.—Estimated and reported subsistence and personal use harvest of miscellaneous fish species, Yukon Area, 1995–2005.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Five Year Average 1995–1999	Five Year Average 2000–2004
Survey Estimates ^a													
Whitefish	58,660	63,610	77,630	70,261	50,748	45,292	86,200	78,489	68,416	64,039	48,862	64,182	68,487
Pike	17,646	18,833	29,540	22,459	16,928	9,174	16,753	18,906	22,341	18,738	29,799	21,081	17,182
Sheefish	12,186	17,793	19,538	19,159	12,550	6,581	14,384	15,960	14,280	16,896	13,764	16,245	13,620
Survey Reported													
Burbot	4,602	13,654	6,381	6,704	11,545	2,168	2,836	5,809	3,000	2,628	3,138	8,577	3,288
Lamprey	5,122	4,630	2,533	2,580	30,536	785	4,520	623	29,886	33,919	38,115	9,080	13,947
Tomcod	4,724	4,554	6,088	5,401	2,399	2,999	7,278	4,497	4,608	5,649	4,988	4,633	5,006
Grayling	1,285	1,664	1,600	1,578	1,476	346	1,503	1,408	2,421	1,645	1,258	1,521	1,465
Suckers	210	191	667	128	104	364	277	546	234	178	1,452	260	320
Arctic Char	265	210	131	206	131	32	251	198	376	116	217	189	195
Blackfish	233,890	145,752	275,469	302,623	165,252	42,110	85,938	432,967	161,703	229,833	259,874	224,597	190,510
Sockeye Salmon	ND	ND	ND	ND	ND	ND	ND	ND	ND	787	648	-	-
Permit Reported													
Whitefish	3,172	5,474	5,157	4,019	3,734	3,205	2,430	2,856	5,508	4,402	3,671	4,311	3,680
Pike	1,280	2,113	1,978	793	812	687	451	791	1,266	606	641	1,395	760
Sheefish	87	127	190	137	176	85	75	66	203	97	155	143	105
Burbot	187	105	215	137	101	95	124	65	129	127	78	149	108
Grayling	10	315	154	55	439	521	51	138	1,228	1,032	800	195	594
Suckers	456	1,156	858	459	986	739	236	344	978	341	694	783	528
Yukon Area Totals													
Whitefish	61,832	69,084	82,787	74,280	54,482	48,497	88,630	81,345	73,924	68,441	52,533	68,493	72,167
Pike	18,926	20,946	31,518	23,252	17,740	9,861	17,204	19,697	23,607	19,344	30,440	22,476	17,943
Sheefish	12,273	17,920	19,728	19,296	12,726	6,666	14,459	16,026	14,483	16,993	13,919	16,389	13,725
Burbot	4,789	13,759	6,596	6,841	11,646	2,263	2,960	5,874	3,129	2,755	3,216	8,726	3,396
Lamprey	5,122	4,630	2,533	2,580	30,536	785	4,520	623	29,886	33,919	38,115	9,080	13,947
Tomcod	4,724	4,554	6,088	5,401	2,399	2,999	7,278	4,497	4,608	5,649	4,988	4,633	5,006
Grayling	1,295	1,979	1,754	1,633	1,915	867	1,554	1,546	3,649	2,677	2,058	1,715	2,059
Suckers	666	1,347	1,525	587	1,090	1,103	513	890	1,212	519	2,146	1,043	847
Arctic Char	265	210	131	206	131	32	251	198	376	116	217	189	195
Blackfish	233,890	145,752	275,469	302,623	165,252	42,110	85,938	432,967	161,703	229,833	259,874	224,597	190,510
Sockeye Salmon	ND	ND	ND	ND	ND	ND	ND	ND	ND	787	648	-	-

^a Subsistence whitefish, pike, and sheefish estimates in surveyed communities is based on a stratified random sample of households as designated for the estimation of subsistence salmon harvests.

Appendix B12.—Surveyed households which indicated that their subsistence salmon needs were not met, Yukon Area, 1992–2002.

Year	Total Number of Households Contacted	Total Number of Responses Indicating Needs Were not Met ^a	Percent of Responses Indicating Needs Were not Met ^a	Percent of Responses Indicating Poor Salmon Returns
1992	870	272	31%	7%
1993	979	514	53%	8%
1994	933	345	37%	1%
1995	1,011	207	20%	1%
1996	951	230	24%	6%
1997	915	213	23%	6%
1998	970	593	61%	47%
1999	1,024	385	38%	18%
2000 ^b	932	592	64%	77%
2001	885 ^c	496	56%	27%
2002	799 ^c	437	55%	25%
<hr/>				
Eleven Year Average 1992 to 2003	934	389	42%	20%

^a This question was altered after 2002 season. Subsequent results are included in Appendix B13.

^b A different method from prior years was used from 2000 to 2002 to provide an indication of the quality of the salmon runs by species. The method used was a weighted average expressed in percent of Chinook, summer chum, fall chum, and coho salmon responses from households that indicated poor salmon runs by species contributed to not meeting their needs.

^c Total number of households that answered this survey question, rather than total number households contacted.

Appendix B13.—Households’ response to the survey question assessing their success of subsistence salmon needs being met (in percent), by species, Yukon Area, 2003–2005.

Year	Estimated Number of Households	Chinook Salmon				
		Total Household Responses ^a	Household Responses Indicated ≤ 50% Needs Met		Household Responses Indicated >50% Needs Met	
			Responses	Percent	Responses	Percent
2003 ^b	2,351	639	223	0.35	416	0.65
2004	2,274	693	203	0.29	490	0.71
2005	2,231	749	223	0.30	526	0.70
Average	2,285	694	216	0.31	477	0.69
Year	Estimated Number of Households	Summer Chum Salmon				
		Total Household Responses ^a	Household Responses Indicated ≤ 50% Needs Met		Household Responses Indicated >50% Needs Met	
			Responses	Percent	Responses	Percent
2003 ^b	2,351	421	152	0.36	269	0.64
2004	2,274	542	187	0.35	355	0.65
2005	2,231	570	165	0.29	405	0.71
Average	2,285	511	168	0.33	343	0.67
Year	Estimated Number of Households	Fall Chum Salmon				
		Total Household Responses ^a	Household Responses Indicated ≤ 50% Needs Met		Household Responses Indicated >50% Needs Met	
			Responses	Percent	Responses	Percent
2003 ^b	2,351	181	58	0.32	123	0.68
2004	2,274	210	81	0.39	129	0.61
2005	2,231	380	145	0.38	235	0.62
Average	2,285	257	95	0.37	162	0.63
Year	Estimated Number of Households	Coho Salmon				
		Total Household Responses ^a	Household Responses Indicated ≤ 50% Needs Met		Household Responses Indicated >50% Needs Met	
			Responses	Percent	Responses	Percent
2003 ^b	2,351	116	40	0.34	76	0.66
2004	2,274	177	71	0.40	106	0.60
2005	2,231	226	104	0.46	122	0.54
Average	2,285	173	72	0.41	101	0.59

^a Total number of households surveyed who answered this question.

^b In 2003, the survey question “How successful was your household in meeting its subsistence salmon needs?” (indicated by percent success) targeted primarily only those households selected to be surveyed that indicated they subsistence fished for salmon and does not necessarily include all selected households that did not fish.

APPENDIX C. HISTORY OF REGULATORY CHANGES

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

1960

- Alaska Department of Fish and Game is given responsibility to manage all Alaskan subsistence and commercial fisheries.
- Commercial fishing is open six 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 Alaskan 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 Alaskan portion of the Yukon River drainage.
- 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.

-continued-

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.

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.

-continued-

1986

- Personal use fisheries created for Alaska residents living in non-rural areas. Non-rural residents are classified as “personal use” fishers rather than subsistence fishers 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.
- 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.

-continued-

- 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.
- 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.

1994

- Subdistrict 5-A subsistence salmon fishing is allowed 5 days per 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.
- 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 is 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.

-continued-

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.
 - Subdistricts 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

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 seven 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 seven days a week subsistence fishing beginning October 1.

-continued-

- 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 in an effort to document harvest by transient fishermen. This change now requires a subsistence fishing permit in the entire Subdistrict 5-C.