# Cook Inlet Customary and Traditional Subsistence Fisheries Assessment

Technical Paper No. 285

by

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## Abstract

This report provides information about past, present, and potential noncommercial harvests and uses of fish in waters of the Cook Inlet Management Area that are under the jurisdiction of the Federal Subsistence. Board. Phase One consisted of a literature review, key respondent interviews, and four scoping meetings. Phase Two consisted of a survey of 355 households in five study communities: Cooper Landing, Hope, Nikolaevsk, Ninilchik, and Seldovia. Three stakeholder meetings to review the study findings also took place.

The Dena'ina (Kenaitze) and other local residents harvested fish for subsistence use in the study area until pre-statehood federal authorities prohibited subsistence fishing in freshwater in 1952. Since then, substantial economic development has brought rapid population growth; most household heads in the study communities have lived there less than 10 years. Most households in the five study communities harvested and used fish in the 2002/03 study year, but harvests were relatively low in the road-connected communities, and higher in Seldovia. In four of the study communities, rod and reel fishing under sport fishing regulations provided most of the harvest. Most households recommended federal subsistence fisheries identical to state sport fisheries and most found state personal use fisheries adequate for their needs.



**Key Words**: Cook Inlet, Cooper Landing, Dena'ina Athabascan Indians, Dolly Varden, Hope, Kenai Peninsula, Nikolaevsk, Ninilchik, salmon, Seldovia, subsistence fishing, trout

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# CHAPTER ONE: INTRODUCTION, OBJECTIVES, AND METHODS

## INTRODUCTION

This two-phase project collected information related to issues arising from the potential development of new federal subsistence fisheries for salmon, Dolly Varden, char, trout, and other freshwater fish within the waters under federal jurisdiction on the Kenai Peninsula and western Cook Inlet (Cook Inlet Management Area) (Fig. I-1). The project collected, analyzed, and reported information for the Federal Subsistence Board's consideration of customary and traditional (c&t) use findings and subsistence fishery regulation development. The Division of Subsistence of the Alaska Department of Fish and Game undertook this project at the request of the Office of Subsistence Management (OSM) of the US Fish and Wildlife Service.

The Federal Subsistence Board (FSB) has identified three nonrural areas on the Kenai Peninsula: the Homer Nonrural Area (including Homer, Anchor Point [portion], Kachemak City, and Fritz Creek [portion]), the Kenai Nonrural Area (including Clam Gulch, Kalifornsky, Kasilof, Kenai, Nikiski, Salamatof, Soldotna, and Sterling), and the Seward Nonrural Area (including Seward and Moose Pass). The residents of the rest of the Kenai Peninsula Borough are considered rural residents by the FSB. Table I-1 lists these rural areas and their populations in 2000.[1]

Under the Alaska National Interest Lands Conservation Act (ANILCA), the FSB is required to identify customary and traditional (c&t) uses of fish stocks in federally managed waters and provide subsistence opportunities to qualifying rural residents. Identification of c&t uses of fish in federal waters and development of appropriate regulations for Kenai Peninsula stocks poses a challenge because of the area's complex history, economy, and demography. Pre-statehood federal authorities closed all the freshwater streams and lakes of the Kenai Peninsula tributary to Cook Inlet to subsistence salmon fishing in 1952. Fishing for "personal use" with a rod and reel remained open (Fall and Stanek 1990:6). Since statehood, subsistence and personal use salmon fisheries have occurred in the marine waters of Cook Inlet and the lower reaches of the Kenai and Kasilof rivers (state waters). Previous Division of Subsistence research demonstrates that a majority of the salmon harvested for home use by residents of most Kenai Peninsula rural communities on the road system is taken with rod and reel under sport fishing regulations, although removal from commercial catches and personal use fisheries are important in some places as well (Seitz et al. 1994:137; Fall et al. 2000; Scott et al. 2001; Davis et al. 2003). Most freshwater species are taken with rod and reel. (See Chapter Two for more historical background.)

In December 2001, the FSB deferred action on c&t findings of Cook Inlet fish stocks pending the gathering of additional information. One question is whether these c&t use determinations

[1] It should be noted that rural and nonrural classifications are subject to periodic review and may change. For example, in 2000, the FSB reclassified the entire Kenai Peninsula Borough as rural (population 49,691 in 2000). But in June 2001, the FSB reconsidered this decision, and the places listed above again became nonrural. The FSB intends to reexamine these rural/nonrural classifications in the future, using 2000 US Census data. It may also consider using a new methodology, such as the one developed under contract to OSM by Wolfe and Fischer (2003). Thus the populations eligible to participate in any new Kenai Peninsula federal subsistence fishery may increase or decrease in size depending upon this reexamination of rural and nonrural areas.

should be specific to communities and fish stocks, as opposed to broad findings for all rural residents and fish species. Also, the FSB established subsistence fisheries regulations in the Cook Inlet Management Area waters under its management authority. These federal regulations for take, methods/means, and seasons are identical to State of Alaska sport fishing regulations. This is viewed by the FSB as an interim step pending gathering of information on potential subsistence harvests and use patterns, including the information collected in this study.

## OBJECTIVES

As stated in the investigation plan, the overall goals of the two-phase project were to: 1) gather information to determine past, present, and potential community harvest levels and use patterns of stocks of salmon, Dolly Varden, char, trout, and other freshwater fish on Federal public lands on the Kenai Peninsula and western Cook Inlet; 2) explore the potential effects that the pre-statehood federal regulatory closure of subsistence fishing for salmon in freshwater in 1952 might have had on past rural residents' uses of fisheries resources and the development of potential new use patterns; 3) identify the issues and concerns of all users of these fisheries resources about the development of new subsistence fisheries; and 4) develop steps for implementation of the federal subsistence program through a public process.[2]

The objectives for Phase I were:

1. A preliminary Investigation Plan for the over-all two-phase project.
2. A GIS database with background information on current stock status and trends, and existing commercial, sport, and personal use fisheries, including a description of subsistence fisheries on these stocks prior to the 1950s regulatory closures, to the extent such information is available in written sources and through limited key respondent interviewing. To the extent possible, this GIS database was to utilize and build upon existing databases (such as the ADF&G Anadromous Fish Catalog).
3. Scoping meetings to gather initial information about historic and current uses and potential harvest levels for these fishery resources on federal public lands for the development of a survey instrument to be used during Phase II. These meetings were to take place in both rural and non-rural sites on the Kenai Peninsula and in Anchorage, and involve a range of potential rural participants and other current users of the fisheries resources in the Cook Inlet Area, as well as appropriate staff. The result of these meetings was identification of issues and research questions about the potential new subsistence fisheries that could be investigated through systematic household surveys, key respondent interviews, and other research in Phase II of the project.
4. An updated Investigation Plan for the second phase of the project, including the survey instruments to be used for the systematic data gathering.

[2] This fourth goal could, of course, only be addressed in part through this project. It was addressed by holding the scoping meetings and otherwise providing background information on the federal c&t findings and regulatory process; by collecting and reporting information for use in developing c&t findings and regulatory proposals; and through public review of the study findings. Further steps, such as additional public meetings, regional advisory council discussions, draft regulatory proposals, and staff analyses of these proposals, are beyond the scope of this project.

The objectives for Phase II were:

1. Identification of preferred/potential areas for subsistence fishing for salmon, Dolly Varden, char, trout, and other freshwater fish
2. Identification of preferred gear types for subsistence fishing
3. Identification of appropriate annual limits for subsistence fisheries, if any
4. Estimates of the number of participants in subsistence fisheries under various regulatory scenarios (e.g. set net, dip net, rod and reel fisheries)
5. Background information on fisheries history and other topics for c&t determinations
6. Review comments on the survey findings, developed during public meetings
7. An update of the GIS database developed in Phase One.

## METHODS

### *Delimitations*

The study area was confined to federal waters under federal authority (i.e. those of the Kenai National Wildlife Refuge and the Chugach National Forest) for subsistence management on the Kenai Peninsula itself and the limited federal waters along west Cook Inlet at Tuxedni and Chinitna bays (Lake Clark NP and Alaska Maritime NWR), but not including waters of the upper Yentna River drainage. Further, study communities/populations included some, but not all of those along the Kenai Peninsula road system classified by the FSB as rural (see below), and did not include Halibut Cove and adjacent areas off the road system (again, see below). Also, Nanwalek and Port Graham were not included because they are unlikely to participate to any great extent in any federal subsistence fisheries; they are very distant from federal subsistence fishing jurisdiction; and have little to no prior history of fishing in these waters on the Kenai Peninsula or western Cook Inlet north of Kamishak Bay. Both communities traditionally engaged in subsistence activities in the present day Kenai Fjords National Park, but under federal law (ANILCA) that park is closed to all subsistence hunting and fishing (Stanek 1985:52-53, Stanek 2000:61-62).

### *Characteristics of customary and traditional uses*

Information about locations of fishing in the past, gear types, harvest levels, methods of preservation, and other topics related to the eight factors of customary and traditional uses (used by the FSB to establish c&t findings) was obtained through key respondent interviews, scoping meetings, the literature review, and the systematic household interviews. Table I-2 lists the eight factors.

### *Literature review*

Federal and state fisheries reports were examined for information about noncommercial fisheries, especially those that might have taken place prior to the 1950s closures in freshwater. Community histories and ethnographic studies (e.g. Pedersen 1983, Mishler 1985, Kalifornsky 1991) were examined, as were reports of archaeological investigations to establish a longer temporal perspective.

### *Key respondent interviews*

Approximately ten open-ended key respondent interviews were conducted, primarily in Phase I of the project. Individuals who have lived near, or have used, waters presently under federal authority for subsistence management prior to statehood were identified by consulting long-term residents and others knowledgeable of the history of these communities. Questions focused on species present, species used, gear types, participation levels, harvest levels, and preservation techniques (e.g. Lean 1999). It was anticipated that, given the demographic and economic history of the communities, the number of people with specific knowledge of these topics would be found to be small, but that considerable staff time would be necessary to locate such individuals.

### *Scoping meetings*

Four scoping meetings took place in Phase I, in Ninilchik, Kenai, Cooper Landing, and Anchorage.[3] These meetings were attended by a limited number of invited participants (about eight to twelve), chosen to represent a range of user groups and experiences. Meetings were facilitated to explore a set of research questions, such as knowledge of past and present fishing activities, stock status trends, potential regulatory scenarios for federal subsistence fisheries, and potential effects of these scenarios. Maps of federal waters and the location of current fisheries were utilized to help guide the discussion. These meetings took place in the evenings and lasted approximately two hours. Participants received a small honorarium for their time. Project staff intended to use the information from these scoping meetings to develop a set of subsistence fishery regulatory scenarios, as well as other research questions, to be explored through subsequent systematic household interviewing and any additional key respondent interviewing in Phase II. It is important to emphasize that participants in the scoping meetings were asked to provide input into the research design for Phase II, as well as provide historical perspective; their participation in the scoping sessions was not an endorsement of any particular outcome. Chapter Three provides more details on the scoping meetings.

### *Systematic household interviews*

The primary data-gathering method in the second phase of the project was systematic household interviews in selected rural communities on the Kenai Peninsula. Surveys were conducted face to face with a sample of households, selected from Borough housing stock records supplemented by key respondents and ground-truthing of Borough maps by project personnel. Interviews were voluntary and household level data are held confidential. The initial goal was to interview a random sample of 50 percent of the permanent households in Cooper Landing (81 interviews), Hope (which includes Sunrise) (43 interviews), and Nikolaevsk [4](48 interviews), 50 households in Seldovia (about 25 percent), and 100 interviews (about 19 percent) in Ninilchik (which

[3] A fifth scoping meeting was planned for Seldovia, but did not take place due to lack of interest in the community.
[4] The Old Believer community within the Nikolaevsk CDP includes three distinct Old Believer communities that are geographically contiguous. These are Nikolaevsk (the largest), Nahodka, and Kluchevaya. Each has its own church and separate governing body (Fall et al. 2000:34).

includes the Happy Valley CDP). The preliminary estimate was a total of approximately 322 interviews (Table I-2).

In addition to Nanwalek and Port Graham (see above) interviews were not conducted in four other of the rural areas (as identified by the FSB) listed in Table I-1: North Fork Road, Fritz Creek East, Fox River, and Halibut Cove. The limited project budget could not support a relatively large sample size in all the potential study communities; a large number of interviews was considered necessary in each sample area because of the potential range of survey responses. Also, based on the input from the scoping meetings, the survey instrument included detailed questions on present, past, and potential fisheries involvement, and it was anticipated that interviews would require approximately 30 minutes to an hour to complete (this estimate was correct – see below). Therefore, project staff selected a subset of study communities that were likely to provide reliable results. It should be noted that except for Halibut Cove and a portion of the Fox River CDP, recent survey data are available on fisheries participation and harvests for the communities that were not surveyed in this project (Fall 2000 and Table 3).

Project staff with the Division of Subsistence developed a draft survey instrument, based on previously-administered household surveys and the input from the scoping meetings. Project staff met several times with an advisory panel consisting of staff from the USFWS Office of Subsistence Management to review the draft questionnaire, and modifications were made to some questions based on the consensus developed within this group. One significant change was that specific federal subsistence fishery scenarios, based on the input from the scoping meetings, were not included in the survey instrument. Rather, an open-ended question was developed to obtain suggestions about potential fisheries from the respondents.

The survey instrument is included as Appendix A. The instrument was pre-tested in Cooper Landing in mid to late March 2003 and then revised slightly. Training of the study teams took place on March 25 and 26, 2003 in Soldotna prior to beginning the interviewing in Ninilchik, Cooper Landing, Hope, and Nikolaevsk. Training of locally hired research assistants for Seldovia took place later in that community. A training manual was developed to guide the training.

One study team of four people was based out of Cooper Landing and also worked in Hope. Interviewing began in Cooper Landing in late March 2003 and ended in mid-April. Surveys began in Hope on April 7 and were finished by April 22. A second study team of four people was based out of Ninilchik. A contract between ADF&G and the Ninilchik Tribal Council provided two additional researchers. Interviewing in Ninilchik began around March 28 and was completed about three and one half weeks later. Members of the Ninilchik-based study team also conducted the interviews in Nikolaevsk, after first meeting with the community's Russian Orthodox priest. In a few cases, family members provided translation assistance. Interviewing took place in Nikolaevsk between April 11 and April 18. Finally, ADF&G developed a contract with the Seldovia Village Tribe to hire two local residents to conduct interviews there. Fieldwork in Seldovia began after work in the other study communities was completed. Three Division of Subsistence staff and one staff member from the OSM traveled to Seldovia on May 28 to train the local assistants and help with the interviewing. All work in Seldovia was finished by June 10, 2003.

The following information was collected for each interviewed household for a 12-month study year from April 1, 2002 through March 31, 2003:

- Household size
- For each household member:
    - age
    - place of birth
    - ethnicity
    - length of residency in a Kenai Peninsula community and the state
    - whether engaged any fishing for salmon, other nonsalmon freshwater fish, or marine fish, in the study year
    - whether engaged in subsistence/personal use (PU) fishing, sport fishing, or ice fishing within the last 10 years.
- For the 2002/2003 study year:
    - identify fish used and fished for, location, and harvest level by gear type
    - timing of harvests
    - comparisons with other years
    - salmon preservation methods
- For length of residence in the community:
    - identify if have ever fished in selected areas for salmon, Dolly Varden, char, trout, and other freshwater fish and identify gear used and approximate amounts harvested
- Household's assessment of amount of fish needed annually
- Evaluation of current opportunities provided by the federal subsistence fishing regulations and state PU fisheries.
- Elicit one or more potential subsistence fishery scenario for federally managed waters, including location, gear type, and annual limits.

### *Sample Achievement*

Several changes took place in the sampling design after fieldwork commenced. Many more vacant and seasonally-occupied houses were encountered in Cooper Landing and Hope than anticipated. Due to the considerable time involved in locating households and an adjustment downward in the estimate of total year-round households, it was decided to interview every year-round household that consented to be interviewed rather than retain the 50 percent random sample goal. In Nikolaevsk, Old Believer and other households were handled as separate strata due to potential differences in demography and resource use patterns. Thus Nikolaevsk became a stratified random sample, rather than a simple random sample. There were no changes to the sampling strategies in Ninilchik or Seldovia.

Table I-4 provides an overview of sample achievement. In total, 355 households were interviewed, exceeding the initial estimate of 322. To achieve this total, the study teams attempted to contact 1,048 households in the five study communities. In addition to the 355 interviews, there were 102 households that, after repeated attempts (at least three), could not be

contacted, 61 households that declined to be interviewed, and 530 vacant or seasonal households. The refusal rate was 14.7 percent (61 of the 416 households that were contacted). This compares favorably with the refusal rate of 15.2 percent encountered during a study of resource uses in five Kenai Peninsula communities in 1999 (Fall et al. 2000:21) and the 24.6 percent refusal rate for a household survey in Seward conducted in 2000 (Davis et al. 2003:13).

On average, interviews took 0.77 hours (46 minutes) to complete (Tale I-5). The range for study communities was: Ninilchik, 0.83 hours (50 minutes); Hope, 0.82 hours (49 minutes); Seldovia, 0.82 hours (49 minutes); Cooper Landing 0.74 hours (44 minutes); and Nikolaevsk, 0.57 hours (34 minutes).

### *Data coding and analysis*

Data were coded for computer entry and analysis using the Statistical Package for the Social sciences (SPSS) program. Findings are summarized at the community level in a series of tables and figures in this report.

### *Stakeholder group meetings*

After results of the survey, plus key respondent interviews and literature search, were available, a second series of meetings took place to discuss the results and potential impact of different regulatory scenarios in Cooper Landing, Kenai, and Ninilchik.[5] Representatives of key stakeholder groups were invited to these meetings, including local rural residents, regional advisory council (RAC) members, local fish and game advisory committee members, commercial fishing organizations, sport fishing organizations, sport fish guiding organizations, and visitor industry representatives. A similar discussion took place at a meeting of the Southcentral Federal Subsistence RAC. Chapter Five provides details on these meetings.

[5] Attempts were made to organize stakeholder meetings in Hope, Nikolaevsk, and Seldovia, or invite representatives of those communities to participate in the meetings in Cooper Landing, Soldotna, or Ninilchik, but these attempts were unsuccessful. See Chapter Five.

Table I-1. Estimate of Population of Rural Areas of the Kenai Peninsula, 2000

| Place | Population | Occupied Dwellings | Alaska Native Population | |
|---|---|---|---|---|
| | | | Number of People | Percent of People |
| Proposed Study Communities: | | | | |
| Anchor Point (portion)[1] | 467 | 166 | 9 | 1.9% |
| Cooper Landing | 369 | 162 | 18 | 4.9% |
| Fox River | 616 | 170 | 1 | 0.2% |
| Fritz Creek (portion)[2] | 434 | 150 | 2 | 0.5% |
| Halibut Cove | 35 | 18 | 1 | 2.9% |
| Happy Valley | 489 | 196 | 46 | 9.4% |
| Hope | 137 | 77 | 8 | 5.8% |
| Nikolaevsk | 345 | 96 | 17 | 4.9% |
| Ninilchik[3] | 772 | 320 | 128 | 16.6% |
| Seldovia (city) | 286 | 134 | 66 | 23.1% |
| Seldovia Village CDP | 144 | 62 | 58 | 40.3% |
| Sunrise | 18 | 9 | 2 | 11.1% |
| Sub Total | 4,112 | 1,560 | 356 | 8.7% |
| Other Rural Communities | | | | |
| Nanwalek | 177 | 45 | 165 | 93.2% |
| Port Graham | 171 | 70 | 151 | 88.3% |
| Subtotal | 348 | 115 | 316 | 90.8% |
| Totals | 4,460 | 1,675 | 672 | 15.1% |

[1] A portion of the Anchor Point CDP is classified as rural by the FSB. Population here as reported in Fall et al. 2000:36, where it is called "North Fork Road."

[2] A portion of the Fritz Creek CDP is classified as rural by the FSB. Population here as reported in Fall et al. 2000:36, where it is called "Fritz Creek East."

[3] For the 2000 census, the Ninilchik CDP was expanded to the north up to Clam Gulch

## Table I-2. Eight Factors Used by the Federal Subsistence Board to Identify Fish Stocks and Wildlife Populations with Customary and Traditional Uses

1. A long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area

2. A pattern of use recurring in specific seasons for many years

3. A pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics

4. The consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area

5. A means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate

6. A pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation

7. A pattern of use in which the harvest is shared or distributed within a definable community of persons

8. A pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to the community or area

Table I-3. Sample Goals for Household Survey

| Community | Total Households[4] | Interview Goal | Percent |
|---|---|---|---|
| Cooper Landing | 162 | 81 | 50.0% |
| Hope[1] | 86 | 43 | 50.0% |
| Nikolaevsk | 96 | 48 | 50.0% |
| Ninilchik[2] | 516 | 100 | 19.4% |
| Seldovia[3] | 196 | 50 | 25.5% |
| Estimated Totals | 1,056 | 322 | 30.5% |

[1] Includes Sunrise

[2] Includes Happy Valley

[3] Includes City of Seldovia and Seldovia Village CDP

[4] See Table I-1. This is based on US Census estimate of number of occupied dwellings.

Table I-4. Sample Achievement

| | Cooper Landing[1] | Hope | Nikolaevsk[2] | | | Ninilchik[2] | Seldovia[2] | Total |
|---|---|---|---|---|---|---|---|---|
| | | | Old Believer | Other | Total | | | |
| Initial Estimated Households | 313 | 182 | 51 | 47 | 98 | 996 | 439 | 2,028 |
| Preliminary Interview Goal | 81 | 86 | 25 | 23 | 48 | 100 | 50 | 365 |
| Households Interviewed | 103 | 60 | 29 | 13 | 42 | 100 | 50 | 355 |
| Households Failed to Contact | 18 | 8 | 7 | 19 | 26 | 38 | 12 | 102 |
| Households Refused | 15 | 6 | 8 | 2 | 10 | 22 | 8 | 61 |
| Moved/Vacant/Non-Resident Households | 176 | 107 | 7 | 13 | 20 | 116 | 111 | 530 |
| Total Households Atempted | 312 | 181 | 51 | 47 | 98 | 276 | 181 | 1,048 |
| Refusal Rate | 12.7% | 9.1% | 21.6% | 13.3% | 19.2% | 18.0% | 13.8% | 14.7% |
| Final Estimate of Number of Households | 136 | 74 | 44 | 34 | 78 | 577 | 169 | 1,034 |
| Percentage Interviewed | 75.7% | 81.1% | 65.9% | 38.2% | 53.8% | 17.3% | 29.6% | 34.3% |
| Interview Weighting Factor | 1.320 | 1.233 | 1.517 | 2.615 | NA | 5.770 | 3.380 | NA |
| Sampled Population | 229 | 122 | | | 179 | 281 | 113 | 924 |
| Estimated Population | 302 | 150 | | | 316 | 1,621 | 382 | 2,771 |

[1] The initial goal was a random sample of 50 percent of the year-round households. So many seasonal households were encountered, however, that the sampling strategy was modified to a census sample.

[2] Random samples.

Table I-5. Average Length of Interviews

| Community | Number of Surveys | Length of Interviews (hours) | | |
|---|---|---|---|---|
| | | Mean | Maximum | Minimum |
| Cooper Landing | 103 | 0.74 | 2.25 | 0.12 |
| Hope | 60 | 0.82 | 2.25 | 0.17 |
| Nikolaevsk | 42 | 0.57 | 1.42 | 0.12 |
| Ninilchik | 100 | 0.83 | 2.70 | 0.08 |
| Seldovia | 50 | 0.82 | 2.17 | 0.25 |
| Total | 355 | 0.77 | 2.70 | 0.08 |

SOURCE: Alaska Department of Fish and Game,
Division of Subsistence, Household Survey, 2003.

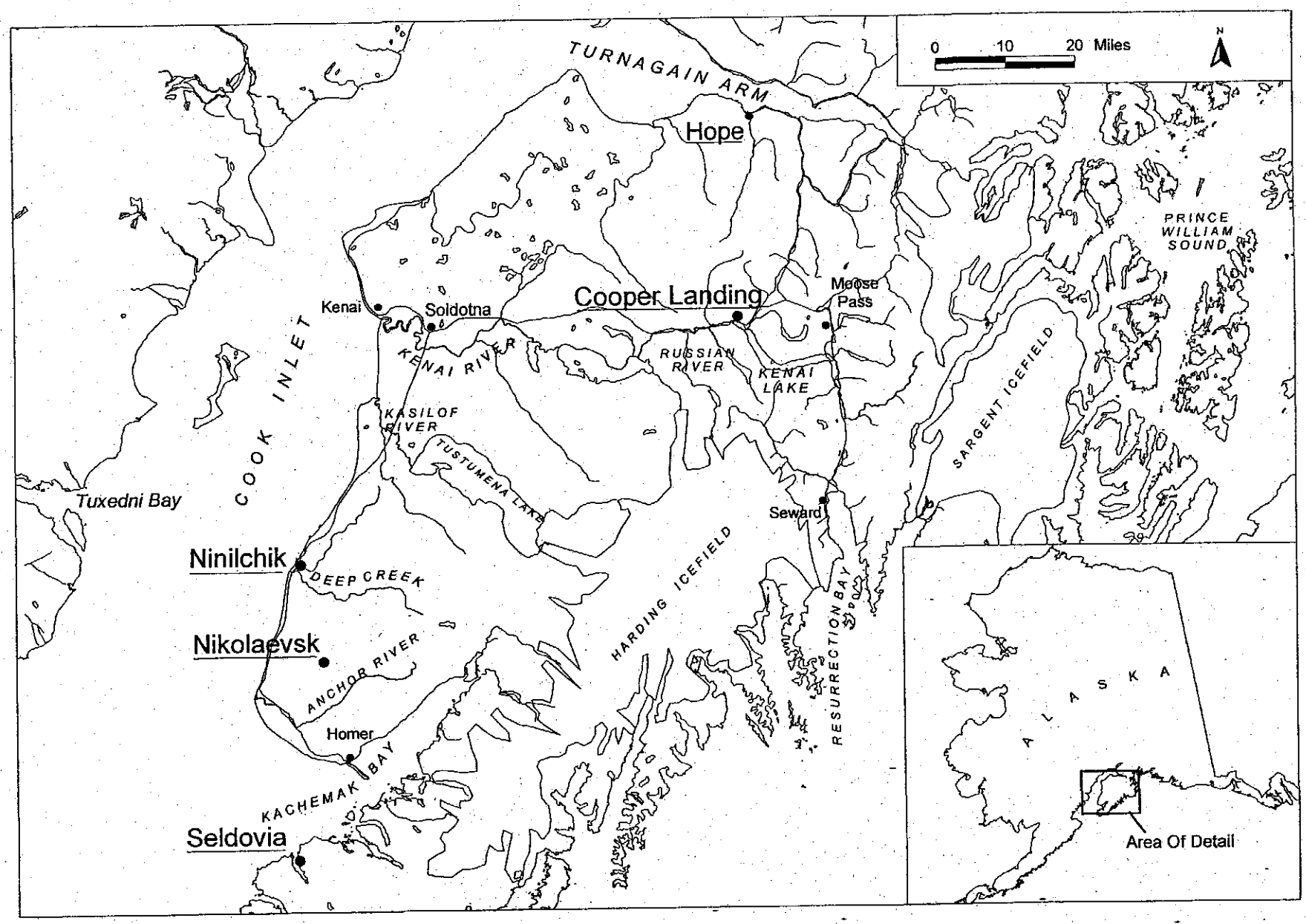



Figure I-1. Kenai Peninsula Showing Study Communities (Underlined)

# CHAPTER TWO: HISTORICAL BACKGROUND

## POPULATION HISTORY

The Dena'ina Athabascans are the indigenous people of most of the Kenai Peninsula and today call themselves "Kenaitze" (Osgood 1937, Ackerman 1975). In the 19th century there were several Dena'ina bands with somewhat distinct territories, including (but not limited to): *Kahnuht'ana*, Kenai River Dena'ina; *Q'es Dudilent Ht'ana*, Skilak Lake Dena'ina; *Sqilan Ht'ana*, Kenai Lake Dena'ina; and *Tsaht'ana*, Kenai Mountains Dena'ina. Dena'ina subsistence activities included harvests of most marine, anadromous, and freshwater fish. Faunal remains from a late 19th century Dena'ina house in the Squilantnu district near the confluence of the Kenai and Russian rivers consisted of 60 percent fish bones, mostly salmonids (Yesner 1996:23). The Dena'ina population was decimated by epidemic diseases in the 19th and early 20th centuries and consolidated in the community of Kenai (Mishler 1991). Feodore Sasha, the last Dena'ina from the Kenai Mountains area, died in a cabin fire in Kenai in 1945 (Kalifornsky 1991:v). Most of the Kenaitze who live in the Kenai Peninsula Borough now live in the Kenai area. Areas of the Borough on the road system classified as rural by the FSB were 93.7 percent non-Alaska Native in 2000. Fifty-five percent (128 of 231 people) of the Alaska Native population of these rural areas lives in Ninilchik. (This "rural" Alaska Native population is by no means primarily Kenaitze, however, in that Alaska Natives from other parts of the state have resettled in Kenai Peninsula communities.)

The size of the Kenai Peninsula Dena'ina population at contact with Euro-Americans in the late 1700's is unknown. The population of all Dena'ina-speaking groups, including those of the Cook Inlet basin, the Iliamna/Lake Clark area, and the Stoney River drainage may have been as high as 4,000 to 5,000 (Townsend 1981:637). In 1818, after years of conflict and epidemic disease, the Russian-American Company estimated the Native population of the entire Cook Inlet area at 1,471 (Rollins 1978). In 1860, following the smallpox epidemic of the late 1830s, the Alaska Native population "living along Kenai Bay [Cook Inlet]" was estimated at 938 (Tikhmenev 1978:416; Rollins 1978).

Commercial fisheries and commercial fish processing dominated the economy of the Kenai Peninsula beginning in the 1880s and for much of the 20th century. The Sterling Highway connecting Kenai and other Peninsula communities to Anchorage and each other was completed in 1951. Oil and gas discoveries in the 1950s transformed the local economy and resulted in a very rapid population growth, further supported by North Slope oil development and a growing tourism industry. In the last several decades of the 20th century, sport fisheries on the Kenai Peninsula developed rapidly, and very popular personal use dip net fisheries for sockeye salmon were established in the lower Kenai and Kasilof rives (state waters). The fisheries resources of the Kenai Peninsula are viewed by managers as fully allocated and under steady or increasing harvest pressure (Fox and Shields 2001, Sweet and Rutz 2001)

After the early declines, throughout the remainder of the Russian and early American periods the population of the Kenai Peninsula remained small. US Census data for the period 1880 through 2000 and the Alaska Department of Labor estimates for 2003 for the Kenai Peninsula are reported in Figure II-1. The rapid population growth after 1950 was triggered initially by local

oil and gas development and the completion of roads linking Kenai Peninsula communities with Anchorage and each other. In addition, more recent increases in population since the 1970s are related to the construction and operation of the trans-Alaska oil pipeline and the further development of the tourism industry on the Kenai Peninsula. As a result of this economic development, the Kenai Peninsula Borough's population grew from less than 5,000 in 1950 (4,831) to 49,691 in 2000 and 51,220 in 2003 (see also Reed 1985:12-26). Based upon previous Division of Subsistence research, a large majority of household heads in the rural areas along the Kenai Peninsula Borough's road system were born outside of Alaska (generally 80 to 90 percent) and have lived in these rural areas for 15 years or less (Seitz et al. 1994:28; Fall et al. 2000:35-39). (For study findings regarding length of residency, see Chapter Four.)

Table II-1 provides available census data for the study communities. Although blanks in the census coverage do not necessarily mean that the population of an area was zero, they do indicate that the population of the area was so low as to not warrant identification as a separate "census designated place." Despite these data gaps, it is evident that the populations of Hope, Cooper Landing, and Ninilchik/Happy Valley have all increased rapidly and substantially since the 1970s. In contrast, the population of Seldovia in 2003 is virtually identical to what it was in the 1940s and 1950s.

## PRECONTACT AND HISTORICAL SUBSISTENCE USES OF COOK INLET SALMON AND FRESHWATER FISH

The focus of this discussion is the historical use of salmon and freshwater fish by groups on the Kenai Peninsula and the west side of Cook Inlet. It will not repeat the detail that can be found in other sources (e.g. Osgood 1937, Kalifornsky 1991, Stanek 2000). Rather, the purpose is to summarize broad patterns and trends. Additionally, some details about harvest and use patterns in the mid 20$^{th}$ century, not readily available elsewhere, will be presented below.

### *Cook Inlet Pre-Contact and Contact Demography*

The aboriginal occupants of the Cook Inlet Area were of two distinct groups, Marine and Riverine Kachemak Tradition Eskimos and Dena'ina Athabascan Indians (de Laguna 1976:146; Workman 1996; Boraas 2002:1-2; Osgood 1937:13). The first to occupy the inlet were Kachemak Tradition Eskimos. Their occupation appears to have occurred from around 1000 B.C to A.D. 1000 (Workman 1996). The Kachemak Tradition was replaced at around A.D. 1000 by the Dena'ina Athabascan Indians in most of the inlet (Reger and Boraas 1996:166-169). Boraas et al. (2002:3) attributes the cultural shift to extreme northern hemispheric climatic changes and corresponding fluctuations in salmon abundance in the north Pacific Ocean.

At the time of contact with European explorers, at least eight groups of the Dena'ina inhabited the Kenai Peninsula. One group known as the Mountain People or *Tsaht'ana*, occupied the upland, mountainous areas. Another occupied the area around Kenai Lake, the *Sqilan Ht'ana*, while the *Q'es Dudilent Ht'ana* lived around Skilak Lake. Those people inhabiting the lowland areas at the mouth of the Kenai River and the Cook Inlet shoreline were the *Kahtnuht'ana* (Kari 1994:62). There were settlements at *Laida* near Anchor Point , Ninilchik, Kasilof, Stepanka's near Skilak Lake, Nikishka, and Point Possession. A summary of upper Kenai River Dena'ina

placenames recorded by the Russian mining engineer Peter Doroshin in 1865 is provided by Mishler (1991:4,23-28). Additional small seasonal camps were distributed along the shoreline of Cook Inlet, the Kenai and Kasilof rivers and many of their tributaries (Osgood 1937:13). Other Dena'ina groups occupied and used the west side of Cook Inlet and had settlements at Polly Creek (the *Taɬin Ch'iltant Ht'ana),* Kustatan (the *Qezdeghtna*), Tyonek (*Tubughna*), and the Upper Inlet throughout the Susitna River Drainage (many band names), and Knik Arm (*K'enaht'ana*) (Kari 1994:61; Osgood 1937:15; de Laguna 1975:134-139; Kari and Fall 2003). Contemporary Cook Inlet Dena'ina villages include Tyonek and Eklutna, while Dena'ina also live in essentially all communities in the Cook Inlet area.

***Pre-contact and Contact Uses by the Riverine Kachemak and Dena'ina Athabascan Cultures***

Prior to Dena'ina occupation of Cook Inlet, Kachemak Tradition people utilized both marine and riverine ecosystems, relying on marine mammals and fishes was well as abundant runs of salmon in the major rivers (de Laguna 1975; Boraas 2003). On the Kenai Peninsula, along the Kenai and Kasilof rivers, Boraas et al. (2002:13-20) found archaeological evidence of salmon fishing by the Riverine Kachemak culture that used a drift net technology. Prehistoric sites located along both rivers provide incontrovertible evidence of village sites and associated drift net technology used to harvest sockeye salmon runs. Countless numbers of notched stones used as net weights were unearthed at sites near Soldotna, along with evidence that nets were made of spruce root webbing. Also, birch bark baskets were found still intact with remains of what appeared to be boiled fish. Large numbers of fish bones were also found in earthen storage pits.

Before the arrival of Europeans to the Cook Inlet region in the 1770s and 1780s, and throughout the 19th and early 20th centuries, the Dena'ina living near the Inlet and along major rivers flowing into the inlet traditionally relied on a variety of subsistence foods from the land and the sea. There is little question, however, that salmon were the most critical resource for almost all the Dena'ina groups (Osgood 1937, Ackerman 1975, Fall 1987).[1] Dolly Varden, referred to as salmon trout by Osgood (1937:30) were abundant in almost all streams and were taken in large numbers too. In general, the Dena'ina used all five species of Alaska salmon wherever they were available. Osgood (1937) provides an assessment of uses of each species for five geographical subgroups of Cook Inlet Dena'ina. With the exception of chinook salmon, which were not readily available to the Kachemak Bay Dena'ina, all five species were used throughout Cook Inlet. In addition, freshwater species including Dolly Varden were taken by alder drag nets.

Although the Dena'ina used all five kinds of salmon plus trout and Dolly Varden, three species had particular significance. As noted by Osgood (1937), "the most important of all (salmon), especially since they come at a time when food is scarce, are the red and king salmon, which the Dena'ina look for in May" (cf. Fall 1987:32). The special importance of kings was indicated by the Dena'ina name for June, "*ɬiq'aka'a n'u*," that is, "king salmon month." Coho salmon were also valued because of their availability late in the year (September and October) and far upstream (Osgood 1937:28, Fall 1987:32).

[1] Portions of lower Cook Inlet below Seldovia were (and are) occupied by the Alutiiq (Pacific Yup'ik or "Aleut") people. For a discussion of historic and contemporary uses of salmon in the Alutiiq communities of English Bay and Port Graham, see Stanek (1985).

Osgood (1937:28-29) and Kari and Boraas (1991:209, 219) describe several methods by which the Dena'ina caught salmon. These included weirs and v-shaped traps made of logs, basket traps of alders, drag nets of spruce root lines, spears, and dip nets. The latter were sometimes used from platforms of poles called "*tanik'edi*" that were constructed over the inlet's mud flats (Alexan 1965; Kari and Fall 2003:64-65). Kenai Peninsula Dena'ina occupying up-river tributary streams commonly utilized a weir system to harvest salmon, and this method moved the focus of the harvest away from the mainstem rivers. Correlated with the weir method of harvest were complex social relationships involving division of labor during harvest by family members, unique preservation methods, and resource distribution systems among dispersed family groups (Boraas 2002:26). By the 1930s, the Dena'ina were regularly using gill nets for subsistence fishing (cf. Kalifornsky 1977:21).

The Dena'ina have used diverse methods to preserve salmon for winter use, including drying, smoking, and fermenting. For descriptions of traditional and more modern methods used in Tyonek today, see Fall, Foster and Stanek (1984). Similar methods were used elsewhere among the Inlet Dena'ina groups. One key preservation method used by the Peninsula Dena'ina was freezing in subterranean pits dug into permafrost (Boraas 2002:24). Exploiting tributary stream systems enabled the Dena'ina to harvest fish, particularly coho salmon, late in the season and preserve these fish in earthen pits. By building the pits into layers of permafrost and catching coho salmon late in the fall, fish were frozen and would last into the summer months. In this way, reserves of preserved salmon were available throughout most of the year, and extra quantities of salmon could be traded with other groups of Indians whose supplies had been diminished.

### *Use Pattern Changes in the Early Post-Contact Period*

Traditional Dena'ina resource use patterns gradually changed throughout the early 1800s. Russian fur traders brought about disruptive economic, social, and health conditions. The fur trade was the first major external economic force to change the Dena'ina way of life. During the Russian and early American periods, it was legal only for Alaska Natives to harvest fur. Russian traders introduced cash and other trade items into the Dena'ina economy. The increased pressure on the Dena'ina due to the fur trade placed an emphasis on a highly structured socio-economic system (Znamenski 2003:10-11; Fall 1981:254) and altered much of the traditional annual cycle of resource harvest. Dena'ina demographic patterns also changed as survivors from Dena'ina villages, decimated by disease, moved to settlements focused around trading posts at Kenai, Alexandrovsk, Tyonek, and Seldovia (DeArmond 1969). By the end of the Russian period in 1867, and the beginning of the American occupation of Alaska, more and more Euro-American immigrant settlers moved to the area. Competition with the Hudson's Bay Company in Interior Alaska and Canada also intensified the demand for fur (Znamenski 2003:11). Yesner (1996:228) describes the transition in the Dena'ina diet brought about by contact with fur trade era Euro-Americans. The American period brought about another surge in fur exploitation, and the Dena'ina became more nomadic, traveling much of the year in search of fur.

Although the first commercial fish packing operation was established by the Alaska Commercial Company at its Kenai River trading station in 1878, the large commercial salmon fisheries in

Cook Inlet did not begin until in the 1880s, with the first cannery established at Kasilof in 1882 (DeArmond 1969:2-5). In the 1890s the fur trade collapsed and some fur traders began dealing in salmon. Fish traps operated by the canneries were set directly in the mouths of the Kenai and Kasilof rivers. This dramatically reduced the amounts of fish escaping upriver, and forced Dena'ina residents to go to work for the canneries (Mishler 1991:20). The Dena'ina began working in the canneries and fishing in the net fisheries or working on traps. In the cannery system of credit and debt, the Dena'ina usually ended the fishing season owing more than they earned (Braund and Behnke 1980:169-170). To compensate for their losses many Dena'ina fished fall runs of coho salmon up-river along the Kenai and Kasilof rivers. Their fishing locations were at traditional settlements like Stepanka at a major spawning ground, or camps along the Killy and other tributary rivers. All these locations were used for generations. Moose hide boats, and later wooden dories, were lined up-river and used to haul harvests back to Kenai (Showalter 2002, Hermanson 2002). Some of these fish were sold to pay for winter provisions.

### *Use Pattern Changes in the Middle and Late Settlement Period*

The gold rush of the late 1890s produced the first major influx of Euro-Americans to the Cook Inlet area, who established settlements at Kenai, Knik, and Hope. They began moving into the interior parts of the territory. Competition for wild resources between the Dena'ina and the newcomers intensified. More diseases brought by the immigrants further devastated the Dena'ina. This loss of population throughout the Dena'ina territory forced their remaining people to consolidate into a few villages (Znamenski 2003, Mishler 1991:21). The Dena'ina annual cycle at the turn of the century, involved a pattern of commercial fishing in the inlet and at the mouth of the Kenai River during the spring and summer, and going up-river in the fall to harvest the fall run of silvers, hunt moose, fish for freshwater fish, and trap furbearers. This pattern experienced a major disruption in the 1940s with the creation of the Kenai National Moose Range (Dolchok 1998; Lindgren 1998). In the early years of the moose range, many Dena'ina continued their traditional pattern of going to their Stepanka camps, frequently circumventing enforcement efforts on the new federal refuge (Showalter 2002).

As the Non-native population of the Cook Inlet region grew during the early 20th century, others besides the Dena'ina and the Alutiiq began using the salmon resources of the area for commercial sale and home use (Mishler 1991:19). In 1904, building the predecessor of the Alaska Railroad set the stage for the first sport fishery on the Kenai Peninsula. It began with fishermen from Seward traveling to Kenai Lake and Cooper Landing to fish for large rainbow trout. Cooper Creek was a focal point for trophy rainbow fishing. As word spread about the exceptional size of these fish, sportsmen from the lower 48 and Europe began traveling to Seward and lodges on Kenai Lake (Painter 1983; Lean 1999). Trophy hunting and fishing took hold with lodges and guide services focused on the Kenai Peninsula (Hopkins 1946). Local non-Alaska Natives fished for trout and put up large amounts of salmon for dogs and personal food supplies. Oscar Watsjold (2002) was a Seward resident who regularly traveled to "Cooper's Landing" to fish rainbows during the 1930s and 1940s. Another local resident, Nick Lean, was born in Seward in 1921 and lived at Cooper Landing for 18 years. The largest rainbow trout he recalled was 34 inches and weighed 17 pounds. But Cooper Landing residents did not fish just for recreation. They caught their winter supplies of salmon at Quartz Creek and the Russian River (Lean 1999). Several thousand salmon were caught each fall and dried or smoked. Coho

salmon that arrived throughout the fall and into early winter were taken on a daily basis right up until the river froze. Commercial fish traps located at the mouth of the Kenai River affected the upriver harvest of salmon to the extent that residents at Kenai Lake filed a complaint in the summer of 1923. Nets were fished in the river and, as reported in the Seward Gateway on August 25, 1923 (page 2), although Thomas Donohue had put up about 160 salmon that season, there would normally be thousands of salmon taken for local use. By 1919, local residents of Cooper Landing saw very few Dena'ina (Lean 1984). The economics of the fur trade, the commercial fishing industry, and the flu epidemic concentrated most Dena'ina around the village of Kenai.

Kenai village Alaska Natives maintained their connection with village sites, traplines, and camps in the interior areas of the Kenai Peninsula through the 1930s and 1940s. In the fall of the year, the Peninsula Dena'ina moved from summer homes around Kenai to their winter homes on the upper Kenai River around Stepanka. Here they fished for fall coho salmon, steelhead, and trout. The river remained ice-free in this area, several miles below the mouth of Skilak Lake, and the Dena'ina drifted nets and set nets in eddies to catch winter supplies of fish. Sarah F. Lindgren, Emil Dolchok, and Alfred Wik provide accounts of traveling by dogsled and dory to Stepanka. Aimes (*in* Dolchok 1984:206) describes the Denai'na's use of nets.

> In the days before World War II, before the days of the Moose Range and the refuge, subsistence fishing was done in the river with nets, as well. And those big eddies alongside the land that we are talking about here were naturals for putting a net in the water and catching fish.

Swan (1981:5-6), Kalifornsky (1977:21,29), and Pedersen (1983:12,15,23,27) discuss Dena'ina (Kenaitze) uses of salmon in the 1930s, 1940s and 1950s, including Kenaitze involvement in commercial fisheries. Swan notes that subsistence fishing became "difficult" with the construction of roads, consequent population growth, and the closure of the Kenai River to subsistence fishing with gill nets in the 1950s. She also lists several sites along Cook Inlet where the Kenaitze have fished for salmon and notes that fishing took place in both salt and fresh water (Swan 1981:7). Swan (1981:10) discusses preferred species and preservation methods for the Kenaitze. Kings and cohos are "favorites" because they make good smoked and dried fish. Sockeyes are popular for canning. "It appears that with modern methods of preserving more fish of different species are being used" (Swan 1981:10).

Homesteaders arrived on the Kenai Peninsula in the 1930s and 1940s, and commercial and subsistence fishing became important aspects of their annual cycle of economic activities. Pedersen (1983) includes numerous accounts of Kenai Peninsula life in the 1940s and 1950s, which mention the importance of the salmon harvest for commercial sale and personal use (e.g. Pedersen 1983:94,97,109,127; cf. Reed 1985:66).

In freshwater, gill nets and seines were used in the Kenai, Skilak, and Tustumena lakes to harvest pike, lake trout, grayling, whitefish, and char. Some people fished in this manner commercially to sell their catch in Anchorage, Kenai, and Kasilof, while fish were also removed for personal consumption from the same gear (Hermanson 2002; Showalter 2002). Trappers running their lines along the upper Kenai River maintained gillnets at certain rest stops and caught salmon or

trout for personal use. Hermanson (2002) described running his father's trapline along the Killy River in the 1930s. Upon arriving at one of their line cabins they immediately got out a length of gillnet.

> My great, great grandfather made nets for the cannery in the winter time. When I was growing up we never heard of a hook and line. Every trapping cabin, about 12 miles apart. Along the river and across country. In the winter they used to take their dog teams. In the winter they trapped. They had trout nets in the loft of every cabin, when they arrived at the cabin they unhooked the dogs, unloaded the sled, got the net and went to the creek, punched three holes in the ice, strung the net. You went and started the fire and got ready for dinner, then went down to the river and there was dinner. They caught mostly rainbows and Dolly Varden. There were a couple lakes they called sucker lakes and we never bothered them. We used them (suckers) for dog feed

Showalter (2002) describes fall fishing during the 1940s in the upper Kenai River for coho salmon.

> In the fall, again in the Kenai, there were drift nets used in the Kenai River and setnets on the beach for personal use. Although it wasn't called personal use then, it was called subsistence, or fresh fish. The nets were 25 fathoms. The fall fisheries were for cohos. In the winter up on the trapline, they used 10-fathom nets for silvers. They would come in under the ice in the wintertime, and steelhead below Skilak Lake. We would drift the river with the net.

Referring to fishing at the Stepanka site with nets before and after the closure in 1952, the following discussion ensued at the Kenai scoping meeting held for this project in 2002:

> Participant A- The areas fished in the early 1940s were along the beaches and at the mouth of the Kenai River for kings. All these fish were shared and this was prior to the regulations. This was done before commercial fishing started (in the spring). Fishermen had fish camps. At the end of May, and as commercial fishing began we processed kings; we had our smoke houses set up nearby and we did our smoking, sun drying, and salting. In the fall, again in the Kenai, there were drift nets used in the Kenai River and setnets on the beach for personal use. Although it wasn't called personal use then, it was called subsistence, or fresh fish.
> Participant B - How long were the nets?
> A - 25 fathom nets. The fall fisheries were for cohos. In the winter up on the trapline, (late fall) they use 10 fathom nets for silvers they would come in under the ice in the winter time, and steelhead below Skilak Lake. We would drift the river with the net.
> B - What year was this, was this before the road?
> A - In the 1950s, and late 1940s.
> B - The road to Homer was gravel then.

> A - Prior to the road system to our family traveled up there. People used dog teams and snowshoes to travel. After the road was built, there was less of this activity because it was regulated against.
> ADF&G - How long after the road was finished did that kind of thing (going up river to Skilak) continue?
> A - We were regulated out so we had to be careful or we would get caught.

Information relative to subsistence fishing on the Kenai River in the 1920s, 1930s and 1940s is contained in court documents pertaining to unresolved 1970s allotment claims of several Kenaitze people. In the 1970s land claims hearings affidavits, attesting to traditional uses of lands and cabins along the upper Kenai River, and fishing in the river, were provided at hearings held in the City Council Chambers in Kenai (cf. Lindgren 1984; Gagnon 1984; Dolchok 1993). Emil Dolchok (1993) in court testimony relative to land claims in the Kenai National Wildlife Refuge described his brother Alec and father's trapping activities near Stepanka in 1939. They trapped for furbearers and maintained traplines, cabins, and camps at and near Stepanka, in the area between the Kenai River and Tustumena Lake into the mid 1940s**.** Court testimonies of June Gagnon and Alfred Wik (1984) provide additional information on subsistence fishing on the middle and upper Kenai River during the 1930s and 1940s.

Sarah Lindgren (1984) describes her family's fishing, hunting, trapping, and gathering activities at their camp located near Stepanka at Skilak Lake during the late 1920s and 1930s. In the winters of 1932, 1933, and 1935 she traveled to Stepanka by dogsled with her step father, Alex Wilson, her mother, and brother, Jimmy Brown. They had gone to the area to get rabbits and fish to bring back to Kenai. The trip took around 10 hours under good conditions. Other friends and relatives were also upriver in the same area gathering food. They stayed overnight in a cabin that was made partly from an old barabara (a traditional semi-subterranean house) and a more recently built log structure. She also described her father fishing from a skin boat.

> My dad was in a skin boat and my brother held the rope and walked along with him up and down the river and helped take the fish out of the net when he pulled my dad ashore.

Establishment of the Kenai National Moose Range in 1941 precluded exclusive use of cabins previously built by trappers and subsistence fishermen, except by permit. In spite of federal rules prohibiting use of cabins on refuge lands, a number of Alaska Natives continued their annual trapping, hunting and fishing activities based from their ancestral locations.

After World War II, lands were opened on the Kenai Peninsula for homesteading with preference for war veterans. The first such settlement was at Sterling in 1942 (Pedersen 1983:51). Homesteaders took fish for household consumption by several methods. Snagging with a rod and reel was one of the most efficient methods for people unfamiliar with riverine net fishing. Homesteaders found snagging to be the most economical and efficient legal method and it worked well in the fast flowing waters of many rivers and streams where nets would be swept away or caught on snags. Nets were effective in parts of the river, especially near stream mouths and in quiet eddies or pools. In 1952, gillnets in many freshwaters were made illegal (U.S.D.I. 1953; Table II-2). This eliminated one of the Kenai Peninsula Dena'inas' primary reasons for

their fall occupation of their upriver sites. To cope with the closures in the river, people pursued a number of ways to catch fish as described in narratives from the 2002 scoping meeting at the Kenai River Center in Soldotna held for this project (ADF&G 2002):

> Participant C - The past 1950s we used to go out in the fall and fill up a barge and bring it into the river and beach and everyone would come down and take all the fish they wanted. That's when they were still eating whale burgers and stuff like that. I was told by these guys that they would load up a barge, the scows, they would just load them up with fish and bring them in and everybody would just come help themselves. That was one method of getting their fish.
> Participant D - There was a fish trap right there below Edie's (on Salamatof Beach). That's where the homesteaders came down to the beach and headed north because there was no road up past Nikiski. And that's how they subsisted off of the beach. There was nowhere else. Bishop Creek is the first closest freshwater area where fish were at. So the homesteaders out at Nikiski used the beach and the trap at Edie's. The third thing I had was over in Tuxedni Bay, my father-in-law was the watchman for Snug Harbor Seafoods for 16 years. He subsisted over there basically he subsisted with his commercial net. Their main additional subsistence food was the clams. The clams were great over there in Tuxedni. They would go clamming on every low tide. I know my father-in-law shot bear and he shot moose and I don't ever think he had a fishing or hunting license. And that was prior to 1952.

In freshwater, snagging became the primary harvest method for those living along the river. Snagging was restricted to the head in 1969 (Boraas 2001). By 1973, snagging any part of the fish was made illegal. This rule greatly reduced the local meat fishermen's ability to harvest fish for home use. More local residents headed to the beaches of Cook Inlet to fish with gill nets in the subsistence fishery.

In the early1970s, the sportfishing industry was growing and techniques for catching chinook salmon with colored lures, smell, and methods of moving the lure with the current were refined by Spence Divito. A similar technique, known as the "Kenai flip", was soon developed for catching sockeye salmon. Along with the new techniques for catching salmon came the sportsman image cast by Mr. Divito holding his record book chinook salmon in 1973 (Jackinsky 2001; Boraas 2002). By the early 1980s the sportfishing industry was growing rapidly on the Kenai Peninsula and became a major competitor with the commercial and subsistence fisheries. In the 1980s, the Alaska Board of Fisheries added more restrictions on both subsistence and personal use fishing along the Kenai Peninsula's Cook Inlet beaches; beaches were closed to subsistence gillnetting and by the mid 1990s only two personal use fisheries remained at the mouths of the Kenai and Kasilof rivers.

### *West Cook Inlet*

At the turn of the century, Dena'ina occupying the west side of Cook Inlet lived in villages at Polly Creek, Harriet Point, Kustatan, and North Forelands (Tyonek). They also used all the river systems in all major bays such as Chinitna, Iliamna, Ursus, Redoubt, and Trading. Trail systems

connected the Cook Inlet side of the Chigmit Mountains with the Lake Iliamna and Lake Clark drainages, and active trade and social interactions took place between the Inland and Outer Inlet groups of Dena'ina. Waves of diseases, such as the influenza epidemics, brought by Euro-Americans had devastating impacts on the west Cook Inlet Dena'ina, similar to those described for those who lived on the Kenai Peninsula (Znamenski 2003; Fall 1987). An active fur trade took place along the shores and inland areas of west Cook Inlet into the late 1800s, and the Russian Orthodox Church also maintained an active presence at several locations. Clergy also made regular visits to the west side of Cook Inlet from their headquarters in Kenai.

West Cook Inlet differed from the Kenai Peninsula side of the inlet in that, after the diseases killed most of the Native inhabitants, the survivors moved to Tyonek and Kenai. Henceforth, other than Tyonek, there were no major villages remaining on the west side. The commercial fishing industry did establish itself at several locations, of which Tuxedni Bay was the first and primary focal point. In the 1800s Tuxedni Bay offered the only deepwater anchorage for large vessels plying the upper inlet with equipment and supplies for the new industry, as well as transporting gold miners and settlers.[2] Cannery operations were established in 1919 at Snug Harbor on Chisik Island by the Surf Packing Company for processing salmon and clams (DeArmond 1969). The only other sites where packing plants were set up were Kustatan and Ladd, to the north of Tyonek. Eventually, these two locations were abandoned, leaving only Tuxedni Bay as the lasting site for a large cannery operation.

Perhaps unique to the west side was the settlement of independent fishermen, trappers, and miners at a number of locations including Kustatan, Harriet Point, Polly Creek, Squarehead Cove, Fossil Point, Tuxedni Island, Johnson River, and several sites in Chinitna Bay and Iliamna Bay. Some people occupied the area year round, while others moved seasonally from Kenai, Ninilchik, Homer, Seldovia, Tyonek, and Anchorage to their cabins and campsites (Elvsaas 2003). These people were Alaska Natives and non-natives alike, some of whom had ancestral ties to the area, while others moved there to harvest a bounty of fish and furs to earn a cash income, and to live away from populated areas. While staple supplies were usually obtained from cannery-related tenders or barges transiting the area, these people relied heavily on the local resources for their daily sustenance. To this day, the area remains relatively remote and inaccessible. Other than by light aircraft, boats are the only means of access and navigating the inlet requires an extensive knowledge of tides and weather. Because of their isolation, west side residents harvested most of the available wild resources for their personal use. All the salmon species, the majority of freshwater fish, halibut, smelt and clams were taken from area waters, marine mammals including seals and beluga whales were harvested, while moose, bear, caribou, and many small game species were used (Elvsaas 2003).

People living on the east side of the inlet also utilize resources along the western shore. Oskolkoff (2002) described traveling across the inlet from Ninilchik with his family in the 1970s and 1980s to harvest salmon for commercial and subsistence purposes, as well as to hunt for moose, black bear, and harbor seals. This family usually stayed on their boats, but they also had campsites in Tuxedni Bay, and stayed with friends who had cabins and homesteads while they spent weeks hunting and fishing in the area.

[2] A detailed history of the cannery operations and commercial fishing activities at Chisik Island is presently in preparation by Katherine Johnson of the National Park Service (Johnson 2003).

A number of Alaska Natives have allotment claims on the west side of Cook Inlet. For example, Alec Dolchok used and occupied a cabin site near West Foreland since the early 1930s (U.S. DOI 1972). Non-native residents acquired land in the area through homesteading. Herman Lindgren (1987) describes the area around Chinitna Bay and Tuxedni Bay and the residents living there in the 1930 and 1940s. Many of these residences have been passed down through several generations of homesteaders (for example the Haeg family in Chinitna Bay), and continue to be occupied to the present time.

Subsistence fishing on the west side of Cook Inlet has been regulated much the same as the rest of the management area. Prior to restrictions on subsistence fishing in the early 1980s, residents were able to catch fish for home use generally in accordance with subsistence regulations. They also removed salmon for home use from their commercial harvests. In addition, on days when catches were too small for delivery to a tender or transport to the east side, local commercial fishers saved these salmon for personal use. For the most part, since the early 1980s when subsistence fishing was closed throughout most of the inlet, some noncommercial set net fishing has taken place along western Cook Inlet outside of the regulations. The only legal subsistence fishery remaining in place is in the Tyonek Subdistrict, over 80 miles to the north of Tuxedni Bay.[3] Local residents have submitted proposals for subsistence fisheries for other western Cook Inlet areas to the Alaska Board of Fisheries, but these were not passed.[4] Also, freshwater fishing is subject to sport fishing regulations with no subsistence fisheries available.

## SUBSISTENCE SALMON FISHING REGULATIONS BEFORE STATEHOOD[5]

With a few exceptions, prior to statehood, subsistence salmon fishing was open in Cook Inlet marine waters consistent with commercial regulations (Table II-2). [6] For example, older Tyonek residents recall that in the 1930s, they fished commercially with traps during the week, and fished with set gill nets for home use on the weekends. Kenai Peninsula residents fished with nets in the lower Kenai River for the early runs of chinook salmon (Hermanson 2002; Showalter 2002). Until 1952, freshwater streams were open to subsistence fishing as well. Table II-2 summarizes regulations governing the taking of salmon for personal or subsistence use in the Cook Inlet Area fresh and salt waters from 1942 to 1964. There is no specific mention of subsistence fishing in the Cook Inlet regulations from 1942 through 1950. In 1951, the first closures of fresh water streams in the Cook Inlet Area occurred. These were four creeks in the

[3] The Alaska Joint Board of Fisheries and Game classifies all the waters of western Cook Inlet except those of the Tyonek Subdistrict as nonsubsistence areas. State law prohibits subsistence fishing in nonsubsistence areas, although noncommercial, nonrecreational fisheries, called “personal use fisheries” may be authorized by the Board of Fisheries.

[4] For example, at its March 1988 meeting, the Board of Fisheries rejected Proposal 406, submitted by residents of Chinitna Bay, to reopen Chinitna Bay to subsistence salmon fishing. In doing so, the Board reaffirmed its finding of 1981 that there are no customary and traditional uses of the salmon of the Chinitna Bay area.

[5] Much of the discussion in this section and the following section is based upon an unpublished Alaska Board of Fisheries report prepared by Fall and Stanek (1990).

[6] Federal regulations from 1951 - 1959 refer to the taking of fish for any purposes other than sale or barter as "personal use fishing." This activity became "subsistence fishing" in the first state regulations in 1960 (Braund 1980:12).

Anchorage area: Fish Creek, Ship Creek, Campbell Creek, and Cottonwood Creek. Local homesteaders and other fishermen heavily fished these streams.[7] Catherwood (1985) homesteaded along the lower reaches of Campbell Creek and told of net fishing chinook salmon in Campbell Creek for his annual supply of fish. More streams were closed in 1952, including all the tributaries to Knik Arm, Willow Creek, and all the streams and lakes of the Kenai Peninsula tributaries to Cook Inlet. Fishing for "personal use" with a rod or hook and line remained open in these waters, however. Until 1959, subsistence fishing in salt water otherwise remained open subject to commercial fishing regulations. Subsistence fishing was also open five miles above tidewater in streams south and west of the Susitna River. Knik Arm (closed to commercial fishing after 1953) was also open to subsistence fishing before August 6 (Braund 1980:44).

Most of the impetus for the widespread closures on chinook salmon in area rivers and streams was their declining returns. Before 1940, commercial fishermen harvested approximately 60,000 chinook salmon annually, and Alaska Natives and homesteaders took moderate numbers for subsistence uses. Beginning in 1941, however, the annual commercial harvests more than doubled over the next decade. In the early 1950s, chinook salmon stocks began a steady decline and by 1960, were considered to be only remnants of their original numbers. Although chinook salmon assessments in the 1960s determined that Kenai Peninsula stocks were not over-harvested, the decline was most noticeable in the streams of the Northern District and Susitna River Basin (ADF&G 1972:1-2).

## SUBSISTENCE SALMON FISHING REGULATIONS SINCE STATEHOOD

With statehood in 1959, subsistence fishing in Cook Inlet at first had to conform to commercial fishing regulations, except that fishing was allowed in the Susitna River above Alexander Creek. Braund (1980) summarizes the subsequent history of subsistence salmon fishing regulations from statehood to 1980. Other important summaries are an overview of subsistence fishing regulations in Cook Inlet prepared by the department in 1972 (ADF&G 1972) and a report prepared for the Alaska Board of Fisheries (BOF) by the Division of Subsistence of ADF&G in 1990 that supplemented the Braund report (Fall and Stanek 1990). Nelson et al. (1999) also contains good detail on the regulatory histories of Cook Inlet personal use, subsistence, and educational fisheries. The following discussion draws from Braund's findings, the 1990 BOF report, and Nelson et al. (1999), and briefly updates this history up to the 2002/03 study year.

A few general points should be kept in mind while reviewing post-statehood subsistence and personal use regulations for the Cook Inlet Area, including the Kenai Peninsula. First, all noncommercial gill net fisheries in the Cook Inlet Area were classified by state regulations as "subsistence fisheries" until 1981. Until the late 1970s there was a great deal of stability in subsistence salmon fishing regulations in Cook Inlet (Fall and Stanek 1990).

In the late 1970s, several significant changes occurred in Cook Inlet subsistence fisheries regulations as a result of the Comprehensive Management Policy for Upper Cook Inlet (adopted in December 1977) and the perception of a rapid growth in Cook Inlet subsistence salmon

[7] Formerly, there had been Upper Inlet Dena'ina fish camps at these locations as well, but they were largely displaced by the 1950s (Fall et al. 2003).

catches. The management policy allocated chinook and coho salmon to noncommercial uses and the other species largely to commercial uses. According to Braund (1980:19), the closure of commercial fishing for coho salmon inadvertently drew attention to the permitted subsistence fishery on these stocks when commercial fishermen, who had previously removed coho salmon from their commercial catches for home use, obtained subsistence permits in 1978, thereby causing a notable rise in the number of permits issued (Braund 1980:18).

Another important cause of change occurred in 1978 with the new state subsistence law, which defined subsistence uses of fish and wildlife as "customary and traditional uses" and granted a priority to subsistence uses whenever harvests needed to be restricted. In the fall of 1980, the Board of Fisheries adopted ten criteria to identify customary and traditional uses (later adopted by the Joint Board as the "eight criteria" [5 AAC 99.010]). In the spring of 1981, the board applied these criteria to Cook Inlet salmon fisheries and determined that only the communities of Tyonek, English Bay (now Nanwalek), and Port Graham met all the criteria and only they qualified for participation in subsistence fisheries in Cook Inlet. The Board then adopted regulations allowing subsistence salmon fishing only in the Tyonek and Port Graham subdistricts. Consequently, all other noncommercial net fisheries ceased, by regulation, to qualify as subsistence fisheries and were eliminated.

Nevertheless, as a result of several preliminary court injunctions, noncommercial set gill net fisheries continued to occur in several districts in 1981 and 1982. In March 1982, the Board created the "personal use" fishing category and opened several personal use set gill net and dipnet fisheries. The purpose of these fisheries was to provide fishing opportunities for Alaskans who no longer qualified to fish with nets under subsistence regulations (5 AAC 77.001).

In 1985, as a result of the Alaska Supreme Court's decision in Madison vs. Alaska Board of Fisheries, all Alaskans were eligible to participate in subsistence fisheries. In that year, the department opened subsistence fishing in most portions of the Cook Inlet Area that had been open after statehood. With the passage of the state's revised subsistence law in 1986, the 1984 noncommercial net fisheries regulations again were in effect.

In 1989, the Ninth Circuit Court of Appeals, in Kenaitze Indian Tribe vs. State of Alaska, ruled that the state's definition of "rural area" was not consistent with the requirements of the Alaska National Interest Lands Conservation Act (ANILCA). Consequently, a noncommercial net fishery only open to Kenaitze Tribal members operated in the Kenai River under court orders in 1989 and 1990. The issues involved in this case were unresolved when, in December 1989, in McDowell vs. State, the Alaska Supreme Court ruled the rural subsistence preference in state law unconstitutional. Thus, although a preference for subsistence fisheries remained, these fisheries could no longer be limited to residents of particular rural communities. As of July 1, 1990, the department will issue permits to any Alaska resident for any subsistence fishery authorized by the Board of Fisheries.

In December 1990, the BOF adopted the “Upper Cook Inlet Subsistence Salmon Management Plan,” that opened subsistence salmon fishing in most Cook Inlet marine waters normally open to commercial fishing with set gills nets. The personal use dip net fisheries in the lower Kenai and Kasilof rivers also operated as subsistence fisheries (Nelson et al. 1999:146-148).

In 1992, a new Alaska subsistence statute required that the Joint Board of Fisheries and Game identify "nonsubsistence areas," where "dependence upon subsistence is not a principal characteristic of the economy, culture, and way of life of the area or community" (AS 16.05.258(c)). In November 1992, the Joint Board classified most of the Cook Inlet Area, except the Tyonek Subdistrict and the waters around Seldovia, Port Graham, and Nanwalek, as a nonsubsistence area. In nonsubsistence areas, noncommercial net fisheries authorized by the Board of Fisheries take place under personal use regulations.

Following this Joint Board action, the BOF met to review and revise subsistence and personal use fishing regulations to comply with the new subsistence statute and the new nonsubsistence area. The dip net fisheries in the Kasilof and Kenai rivers and set net fisheries at the mouth of the Kasilof River and in Kachemak Bay again became personal use fisheries. The remaining marine waters with within the nonsubsistence area were closed to noncommercial net fishing (Nelson et al. 1999:149).

A ruling of the Alaska Superior Court in Kenaitze v. Alaska in October 1993 found the provisions of the 1992 state subsistence law pertaining to nonsubsistence areas to be unconstitutional. Consequently, the BOF readopted the Upper Cook Inlet Subsistence Salmon Management Plan that had been in effect prior to the creation of the nonsubsistence area. In May 1995, the Alaska Supreme Court overturned the Superior Court's decision. Again, the nonsubsistence areas were in place, with personal use dip net and set net fisheries operating as they had in 1993 (Nelson et al. 1999:149-150).

In March 1996, the BOF made an important change to the management plan for the Kasilof and Kenai river personal use dip net fisheries. Before 1996, the seasonal openings for these personal use fisheries had been triggered by sonar counts and a minimum escapement of sockeye salmon. The board's action in 1996 established a fixed season of July 10 through August 5 for both fisheries and also established a permit requirement (Nelson et al. 1999:150, 157).

## CURRENT PERSONAL USE AND SUBSISTENCE SALMON FISHERIES IN COOK INLET

The remainder of this regulatory overview will focus on the Cook Inlet Area personal use and subsistence fisheries that were most accessible to study community residents in the study year of 2002/03. For more detailed discussion of the regulatory history of these fisheries than appears above, see Fall and Stanek (1990) and Nelson et al. (1999).[8]

### *Kasilof River Dip Net Fishery*

This fishery first operated in 1981. The Board of Fisheries adopted a personal use salmon dip net fishery management plan for the Kasilof River and the Kenai River in March 1982 that has since been amended. In the Kasilof River, personal use dip netting for salmon other than chinook salmon is open from June 25 through August 7, 24 hours per day. Fishing is open from

[8] Not discussed here are the subsistence fisheries of the Port Graham Subdistrict, the Tyonek Subdistrict, and the Yentna River. Participation in these subsistence fisheries by residents of the study communities is rare.

regulatory markers on the Cook Inlet beaches outside the terminus of the river to one mile upstream. There is an annual limit of 25 salmon for a head of household and 10 salmon for each additional household member.[9] Any chinook salmon taken must be returned to the river unharmed. There is no overall harvest cap for this fishery.

### *Kenai River Dip Net Fishery*

Personal use dip net fishing for salmon in the Kenai River was first authorized by the Board of Fisheries in 1981. Fishing is open from July 10 through July 31, seven days per week from 6 a.m. to 11 p.m. The open area extends from regulatory markers outside the river terminus on Cook Inlet beaches upstream to the downstream side of the Warren Ames Bridge. The annual limit is 25 salmon for a head of household and 10 for each additional household member; only one salmon may be a chinook salmon. There is no overall harvest cap for this fishery.

### *Kasilof River Setnet Fishery*

The Alaska Board of Fisheries established this personal use fishery in response to a court action and in lieu of a subsistence fishery in 1982. The fishery is open from June 15 through June 24 with daily fishing periods from 6 a.m. to 11 p.m. The open area includes the waters on either side of the terminus of the Kasilof River as indicated by regulatory markers. Legal gear is one set gill net up to 10 fathoms in length, six-inch mesh size and 45 meshes in depth per household. Setnets must be at least 100 feet apart. Each household may obtain a permit to take up to 25 fish for the household head and 10 salmon for each additional household member.

### *Kachemak Bay Set Net Coho Salmon Fishery*

This fishery takes place in Kachemak Bay from August 16 through September 15 for two 48-hour periods per week. The fishery closes by emergency order when a guideline harvest range of 1,000 to 2,000 coho salmon have been taken. Legal gear is set nets not to exceed 35 fathoms in length, six inches in mesh size, and 45 meshes in depth. Set nets must be at least 600 feet apart. Each household may obtain a permit to take up to 25 fish for the household head and 10 salmon for each additional household member.

### *Seldovia Chinook Salmon Fishery*

This is a subsistence set gillnet fishery that was established in the fall of 1995 by the Alaska Board of Fisheries, following a positive customary and traditional use finding. The fishery is located on the south side of Kachemak Bay in the vicinity of the community of Seldovia in the Southern District of the Lower Cook Inlet Area. The fishery targets chinook salmon runs passing through lower Cook Inlet and a separate enhanced chinook run returning to Seldovia Bay. Coho salmon are targeted in a fall fishery.

The fishery operates in a split season with two parts, the first occurring from April 1 through May 30 and the second occurring during the first two weekends in August. In the early season

[9] Note that these seasonal household limits for Cook Inlet personal use fisheries pertain to all fisheries in combination.

fishing is allowed during two 48-hour periods each week, while in the late season fishing is continuous during the two-day weekends. There is a guideline harvest limit of 200 chinook salmon set for the early season and an annual possession limit of 20 chinook per household. There are no seasonal limits for the other species.

The area open to subsistence set gillnetting includes those waters along the eastern shore of Seldovia Bay as well as a short stretch outside Seldovia Bay proper to the west of Point Naskowhak. The gear allowed includes set gillnets no longer than 35 fathoms, no deeper that 45 meshes, and no larger than a six inch stretched mesh.

## EDUCATIONAL FISHERIES

Under the provisions of 5 AAC 93.210, ADF&G issues educational fishery permits to applicants who propose to operate educational fisheries in compliance with the standards set out in the regulation. The Kenaitze Tribe has conducted an educational fishery since 1989, and the Ninilchik Traditional Council has done so since 1993. The specific provisions for these fisheries have varied over the years, but in each year the educational permits have allowed the tribes to operate a single set gill net in the Kenai River and Ninilchik River, respectively. The Kenaitze Educational fishery in 2004 was allowed to harvest up to 8,000 salmon, the Ninilchik Traditional Council fishery was allowed up to 850 salmon, and the Ninilchik Native Descendants fishery was also allowed 850 salmon. For additional background on the regulatory history of these educational fisheries, see Nelson et al. (1999:158-167).

## CONCLUSIONS

The major points of this section describing historical uses and the regulatory history of subsistence and personal use fishing in the Kenai Peninsula Area are summarized as follows.

1. The noncommercial subsistence/personal use of five species of salmon has a long history that predates the Euro-American colonization of Alaska. This use continued through the Russian, territorial, and statehood periods.
2. The Kenai Peninsula has undergone rapid and pronounced demographic growth and socioeconomic change, especially in the second half of the twentieth century. Linked to this change is increased pressure on Cook Inlet fisheries resources and, consequently, fisheries managers view these resources as fully allocated.
3. Since the development of commercial salmon fisheries in Cook Inlet in the 1880s, subsistence and personal use fisheries have accounted for a relatively small percentage of the overall take of salmon.
4. In 1952, the closure of rivers to net fishing by federal authorities required subsistence fishermen to either adopt rod and reel as a gear-type in the snag fishery until the early 1970s, or to rely on saltwater setnet fishing.
5. Closure of the Kenai River to net fishing eliminated the Stepanka fishery that had been a long-standing source of salmon for Dena'ina (Kenaitze) Indians. It also eliminated harvests of salmon with means other than rod and reel by Cooper Landing residents.
6. In the early and mid 1900s, several fisheries sustained Kenai Peninsula area residents: chinook salmon in the early summer along the lower river and in Cook Inlet saltwater,

sockeye salmon in the mid to late summer along tributary streams, coho salmon in the fall and into early winter, and freshwater fish caught in lakes and streams throughout the year.
7. Since the mid 1950s, all permitted subsistence fishing in the Cook Inlet Area has occurred in marine waters, with a brief exception in the early 1990s when the relatively new personal use dip net fisheries in the lower Kasilof and Kenai rivers were classified as subsistence fisheries.
8. Subsistence regulations for the Cook Inlet Area were fairly stable until the late 1970s, when management policies and perceived growth in subsistence catches resulted in a series of regulatory restrictions that were met with court challenges. The limitation of subsistence fisheries to rural Alaska residents and the Alaska Board of Fisheries 1981 finding regarding customary uses of Cook Inlet salmon, plus the development of the personal use fishing category, resulted in another period of relatively stable regulations until 1990, interrupted by the Madison decision in 1985 and the Kenaitze decision in 1989.
9. Permit levels and reported catch levels were relatively low until the late 1970s, although many people participated in subsistence fisheries without obtaining a permit. Data for the 1980s are probably an accurate measure of participation in subsistence and personal use fisheries.
10. Subsistence and personal use fishing regulations for the Cook Inlet Area were in a state of flux due to several court decisions and statutory changes in the early 1990s. Passage of a new state subsistence law in 1992 and the creation of a nonsubsistence area covering most of the Cook Inlet Area resulted in most noncommercial fishing with nets in the area occurring under the personal use category.
11. Access to open fishing areas significantly influences participation and harvest levels. Fisheries along highways are accessible to a large population. However, there is also a high potential for shifts in fishing pressure because of the mobility of the population. Subsistence/personal use fishermen from the Kenai Peninsula have tended to localize their fishing activities when large areas were open to noncommercial net fishing, but travel further when opportunities have been reduced. For example, closing fisheries in the Knik Arm area and other parts of the upper Inlet, such as in the late 1970s and early 1980s, has resulted in some families traveling further to the lower Inlet where more fishing opportunity was available.
12. Permanent west Cook Inlet residents presently have no opportunity outside sport and commercial fishing regulations to engage in subsistence or personal use salmon or freshwater fish fisheries. Distances to personal use fisheries on the east side of the inlet are too great, and travel too hazardous to obtain and care for any harvest.
13. Seasonal west side residents also at present have little opportunity for either salmon or freshwater fish harvest for personal use as they customarily have fished for home use while at their west side homes.
14. In summary, although archaeological and ethnohistorical information document subsistence uses of fisheries resources in Kenai Peninsula waters now under Federal Subsisence Board management more than 50 years ago, demographic, economic, and regulatory conditions have changed radically. Most Kenai Peninsula residents, including a large majority of those living in rural areas along the road system, are relatively recent arrivals and likely have little to no experience with or knowledge about former subsistence fisheries. Recent (the last 50 years) noncommercial fishing has been with set and dip nets in marine waters (Cook Inlet) or the lower portions of rivers (the Kenai River and the

Kasilof River primarily) under state management, or with rod and reel under sport fishing regulations. Current demographic conditions on the Kenai Peninsula and recent experience with personal use and subsistence fisheries by study community residents were topics explored by the systematic household survey administered as part of this project (see Chapter One), and are discussed further in Chapter Four.

Table II-1 Population of Selected Areas of the Kenai Peninsula, 1880 to 2003

| | 1880[a] | 1890[c] | 1900 | 1910 | 1920 | 1929 | 1939 | 1950 | 1960 | 1970 | 1980 | 1990 | 2000 | 2003 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Cooper Landing | | | | | | | | 60 | 88 | 31 | | | 369 | 358 |
| Hope | | | | | 44 | 15 | 71 | 63 | 44 | 51 | | | 137 | 161 |
| Happy Valley | | | | | | | | | | | | 309 | 489 | 503 |
| Nikolaevsk | | | | | | | | | | | | 371 | 345 | 313 |
| Ninilchik | 53 | 81 | | | 87 | 124 | 132 | 97 | 169 | 134 | 341 | 456 | 772 | 777 |
| Seldovia | 74 | 99 | 149 | 173 | 258 | 379 | 410 | 437 | 460 | 437 | | | 430 | 438 |
| Skilakh | 44 | | | | | | | | | | | | | |
| Sunrise | | | 130 | | | | | | | | | | 18 | 15 |
| Total | | | | | | | | | | | | | | |

[a] 1880 census for Ninilchik: 53 "creole." Seldovia includes "Ostrovki" and includes 38 "Creole" and 36 "Eskimo" (Rollins 1978:1880-9) Skilakh includes 44 "Athabaskan."

[c] 1890 census for Ninilchik: 12 "white," 53 "mixed," 16 "Indian" (ie. Alaska Native; no Aleut or Eskimo categories used in this census) (Rollins 1978:1890-7).

Source: Rollins 1978; Alaska Department of Labor 1991, 1999

**Table II-2. Summary of Subsistence Salmon Fishing Regulations, Cook Inlet, with Emphasis on Freshwater Systems, 1942 – 1964**

| Year | Regulation |
|---|---|
| 1942-1950 | No mention of subsistence fishing in Cook Inlet section of the commercial fisheries regulations. |
| 1951 | Notification of intent to take salmon for "personal use" required for the first time, including statement of type of gear to be used, area, time, and number of fish to be taken, and intended disposition of harvest. |
| 1952 | No intent notification required. More streams closed to subsistence fishing, including all tributaries to Knik Arm, Willow Creek, Campbell Creek and all streams and lakes of Kenai Peninsula tributaries to Cook Inlet. This closure did not apply to "fishing with rod, hook and line," for "personal use." This was evidently the first time that many Cook Inlet streams were closed to use of nets for personal use or subsistence fishing. |
| 1953 | Same as 1952; snagging prohibited for the first time.<br><br>Personal use fishing prohibited within 500 yards of all other streams or lakes except with hand rod, hook, and line. Bag limit of two per day per person.<br><br>Fishing subject to laws regulating commercial fishing 48 hours before and continuing 48 hours after each fishing period, except for fall season and places greater than 25 miles from waters open to commercial fishing. |
| 1954 | Same as 1953 with additions that commercial gear could be used for personal fishing during any fall season, and fishing was allowed more than five (5) miles upstream from tidewater on all streams and lakes of Cook Inlet drainage south and west of the Susitna River. |
| 1955 | Same as 1954. |
| 1956 | Same as 1954, except rod and line fishermen restricted to two salmon over 16 inches per person per day. |
| 1957 | Same as 1954 |
| 1958 | Same as 1954, with addition of series of regulations designed to try to stop snagging, including limiting size of hooks and making illegal the use of weights with multiple hooks. |

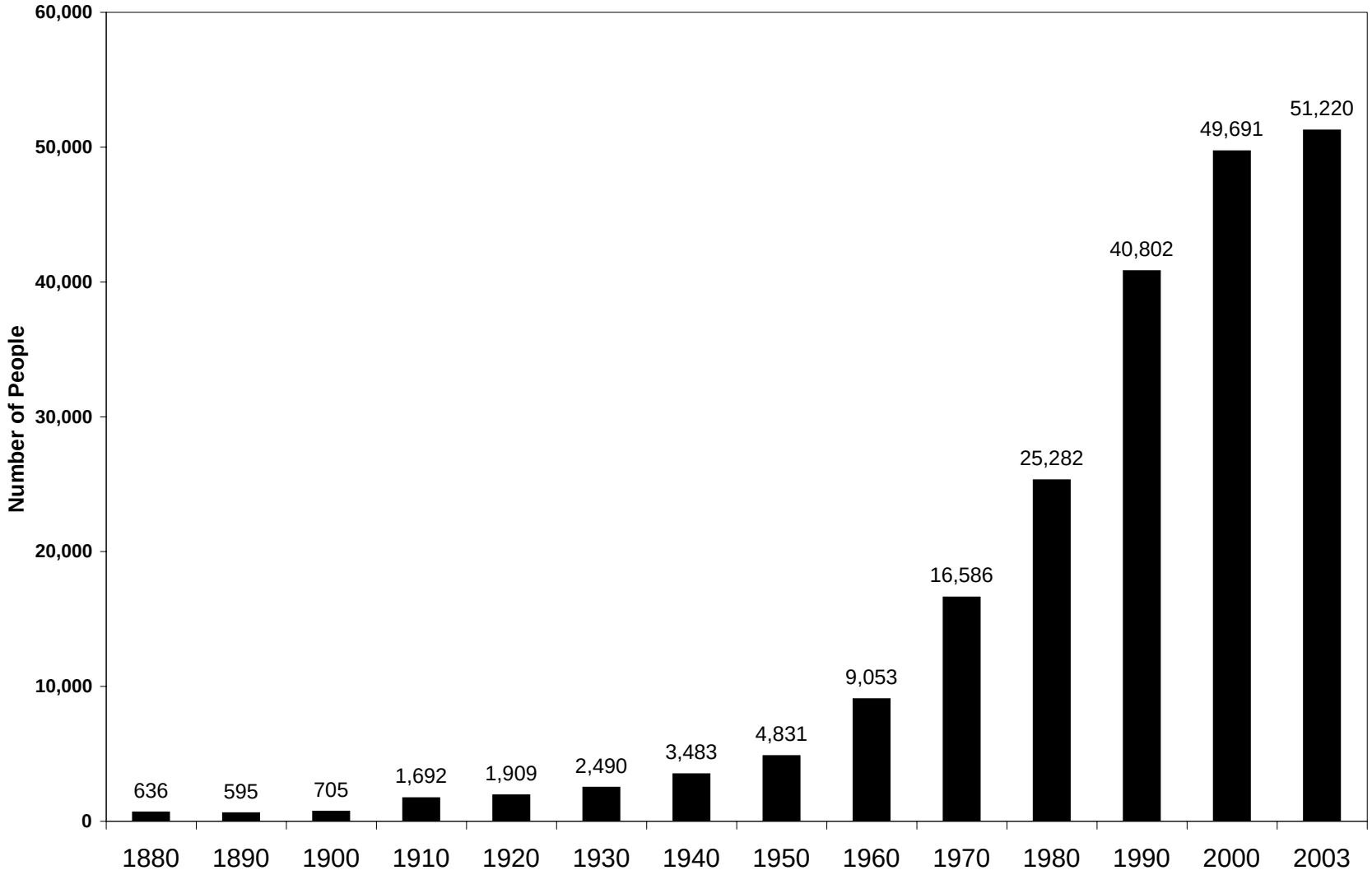
[continued]

**Table II-2, continued**

| | |
|---|---|
| 1959 | Personal use fishing allowed in the main stem of the Susitna River above Alexander Creek, with nets less than 30 feet long and more that 100 yards from other setnets and tributary streams.<br><br>Person use fishing had to be done in conformance with commercial fishing regulations (closed Knik and Turnagain arms). Many Kenai Peninsula streams closed above markers placed from 3 to 5 miles up from the mouth. Closed Cooper Creek, Little Willow Creek, and Montana Creek. |
| 1960 | Personal use fishing allowed on northwest shore of Knik Arm; otherwise, same as 1959 |
| 1961 | Susitna River closed to personal use (subsistence) fishing.<br><br>Other freshwater subsistence fishing for salmon: could only be done under the authority of a permit issued by the department "for such areas and at times…warranted." No written record of the issuance of any such permits exists. |
| 1962 | Permit requirement added. |
| 1963 | Same as 1962. |
| 1964 | Except for portions of Knik Arm, subsistence fishing for salmon open in areas only open to commercial fishing. |

Source: Alaska Department of Fish and Game 1972, as summarized in Fall and Stanek 1990

**Figure II-1. Population of Kenai Peninsula Borough Area, 1880 - 2003**



# CHAPTER THREE: SCOPING MEETINGS

## BACKGROUND AND PLANNING

In the fall of 2002, Division of Subsistence personnel, along with a representative from the USFWS Office of Subsistence Management (OSM), traveled to several Kenai Peninsula communities to meet with knowledgeable individuals about this upcoming project. A meeting with knowledgeable individuals from Anchorage was also held. The purpose of these "scoping meetings" was to collect information about the history of the fisheries in the federally-managed lands on the Kenai Peninsula and in Tuxedni Bay; the "who, when, where, why, how, and how much" of the fisheries both before and after the pre-statehood federal subsistence regulatory closure of the 1950s. The number of participants at the scoping meetings was limited by design, but the individuals who attended were particularly knowledgeable about the characteristics of the local fisheries, the regulatory histories, and the issues surrounding those fisheries. In addition to providing basic historic background, the scoping meeting discussions guided Division of Subsistence and OSM personnel in drafting the survey instrument, focusing the questions on specific issues related to fish stocks, gear types, seasonality, personal histories, sharing, and geographic patterns of resource use.

Scoping meetings took place in Ninilchik, Kenai, Cooper Landing, and Anchorage. Table III-1 summarizes attendance at each. Discussion was loosely organized around the issues of past fishing activity on federal lands and waters on the Kenai Peninsula, current fishing patterns, and the foreseeable situation on those waters in the event of new federal subsistence regulations. The background of the participants included careers as fish and wildlife resource managers, sportsmen club organizers, local historians, longtime users of fish and game resources, descendants of longtime residents, Alaska Native leaders, fish and game contract researchers, and others involved in fisheries issues from the local, Kenai Peninsula perspective.

Table III-1. Scoping Meetings Overview

| | | Participants | | |
|---|---|---|---|---|
| Location | Date | Public | Staff[1] | Total |
| Cooper Landing | 10/8/2002 | 4 | 5 | 9 |
| Kenai | 11/20/2002 | 5 | 2 | 7 |
| Ninilchik | 11/21/2002 | 4 | 3 | 7 |
| Anchorage | 11/13/2002 | 3 | 5 | 8 |

[1] Staff from ADF&G and federal agencies.

Participants were asked for their recollections about fishing on the Kenai Peninsula and in Tuxedni Bay, both from personal experience and from communications they had from others. They were also asked for their opinions on several topics, including certain hypothetical fisheries proposals, such as special federal subsistence seasons or gear types; the effects of specific events in the past, such as fisheries closures and road openings; the desirability of particular regulation

changes; and the likelihood of people participating in fisheries tens of miles away from their home town.

## KEY OBSERVATIONS AND THEMES FROM THE SCOPING MEETINGS

The participants at the Cooper Landing meeting said that, historically, their community depended on salmon, rainbow trout, and Dolly Varden taken from the waters of Kenai Lake tributaries, the Russian River, and the upper Kenai River. Oral histories and photographs document the extent to which individual families utilized those fisheries for home use in the 1930s and 1940s. All scoping meeting participants referenced the former coho salmon rod and reel fishery on Quartz Creek as an important source of fish for home use in winter before being closed by the Alaska Board of Fisheries. They expected a local harvest of about 500 coho salmon if a federal subsistence season were established at Quartz Creek.

Kenai residents at the Kenai scoping meeting recalled stories of individuals in the past traveling to the Skilak Lake and Kenai Lake areas, hunting in the fall and fishing while at hunting camps. Ninilchik participants said that trips to the interior of the Kenai Peninsula were mostly for hunting, and that fishing provided food to be consumed while at hunting camps. This kind of fishing often involved setting nets under the ice to harvest coho salmon, rainbow trout, and Dolly Varden.

Respondents at several scoping meetings said that on the Kenai Peninsula, particularly before the roads connected the communities to Anchorage and to each other, fishing gear was used without concern for rules or regulations. Nets, rod and reel, snagging hooks, fish traps, and gaffs were all used to harvest fish from Kenai Peninsula waters for food. The Ninilchik, Cooper Landing, and Kenai participants reported that all species were taken using whatever gear was handy and effective. The opening of the road to Skilak Lake in the 1950s ended much of the local people's (that is, people from Kenai) fishing there because regulations began to be enforced.

Anchorage was connected to the Kenai Peninsula by road in the 1950s. While some Anchorage residents are known to have traveled by boat, plane, and horseback to the Kenai in the 1940s and 50s, the community did not "discover" the Kenai Peninsula and start using the waters intensively until the 1970s or 80s. Before the 1980s, Anchorage fishers were said to depend more on the rivers of the Susitna River drainage.

In addition to providing information on past use of the fisheries, some of the participants at the scoping meetings expressed concerns with the creation and management of new subsistence fisheries by the Federal Subsistence Board. Ninilchik participants proposed that Alaska residents be allowed only one type of fishing permit, either commercial, sport, or subsistence, and that all their home use requirements be taken under that permit. Cooper Landing residents said that any difference between subsistence and sport regulations in the upper Kenai River area would create tension between user groups, and that local support for a distinct set of federal subsistence regulations would be difficult to garner. Ninilchik meeting attendees stressed the importance of maintaining fishing "opportunity" even if current uses are not particularly high.

The participants at the Anchorage scoping meeting commented on the scheduled household survey project, urging that the "need" for subsistence resources be assessed by determining each interviewed household's effort at obtaining all resources. Attendees at this meeting viewed breadth of harvest as an indicator of economic dependence on subsistence uses and, likewise, potential benefit from new subsistence regulations. Understanding each community's degree of sharing and of transmission of knowledge was also emphasized by the Anchorage participants; they viewed inter-household and inter-generational connections being of great importance to a subsistence economy.

Several scoping meeting participants raised issues regarding the gear allowed in a hypothetical federal subsistence fishery. While snagging was seen as an efficient way of harvesting subsistence fish in the past, the idea of legalizing snagging did not sit well with Kenai participants, who saw it as a way to encourage over-harvesting as well as causing considerable mortality to fish that were not successfully harvested. Cooper Landing participants did not support the idea of using nets in the Russian River or the Kenai River. They were concerned about resource conservation and envisioned conflicts with sport fishers in the same area.

In Cooper Landing, the suggestion of an increased bag limit or a slightly earlier season for subsistence fishing under federal regulations seemed the least problematic, but the general consensus was to adopt regulations that were the same as the state's sport fishing regulations. Participants in the Anchorage meeting appeared to agree with this approach – that the FSB adopt state sport fishing regulations but perhaps allow a higher bag limit for eligible fishers.

Topics outside the scope of a federally managed Kenai Peninsula subsistence fishery also arose during the scoping meetings. Kenai and Ninilchik participants emphasized the need for more beach access along Cook Inlet for subsistence and personal use fishing, as well as increased enforcement at the Kenai River personal use dip net fishery. Some participants in the Kenai meeting stated that the state's seasonal limits for the personal use fishery are too high. Ninilchik, Kenai, and Anchorage participants were all interested in the ongoing discussion of a subsistence halibut fishery.[1] At the Kenai scoping meeting, participants voiced their objections to the Federal Subsistence Board's ruling on rural and nonrural places on the Kenai Peninsula. In their view, the rural and nonrural classifications create a problem because many longtime families live in nonrural Kenai and Soldotna but many newly arrived families with little to no experience with local fisheries live in rural Ninilchik and Cooper Landing.

In summary, the scoping meetings provided good historical information and useful insights for staff for survey instrument design. Most important, scoping meeting participants expressed support for the proposed research, an encouraging outcome for project staff.

[1] The National Marine Fisheries Service enacted new subsistence halibut fishing regulations in May 2003, based on actions taken by the North Pacific Fisheries Management Council in 2002. Questions came up at the scoping meeting about the details of the proposed new rules.

# CHAPTER FOUR: HOUSEHOLD SURVEY FINDINGS

## DEMOGRAPHY

### *Population Size and Trends*

Table IV-1 reports survey findings about the characteristics of the study communities' populations. Estimated populations sizes were: Ninilchik (which includes the Ninilchik and Happy Valley CDPs), 1,621; Seldovia, 382; Nikolaevsk, 316; Cooper Landing, 302; and Hope (which includes Sunrise CDP), 150. (Appendix Tables C-1 through C-5 provide a population profile for each study community.) Table IV-2 compares survey population estimates with other recent estimates. The Alaska Department of Labor population estimates for 2002 differ somewhat from the estimates produced by the Division of Subsistence household survey. The survey found Cooper Landing, Hope, and Seldovia to be slightly more populous, Ninilchik to be significantly more populous, and Nikolaevsk to be very close to the estimates developed by the Alaska Department of Labor for 2002.

The Ninilchik population estimates may differ from each other because of the large number of houses in the community that are occupied seasonally. In contacting households for the survey, researchers determined whether the house was vacant, seasonally occupied, or occupied full time but with the residents being unavailable (called "occupied—no contact"). If houses that were seasonal or vacant were counted as "occupied--no contact" then the average household size would be applied to those dwellings with the population estimates rising accordingly for the study estimate. The inverse may be true of the population estimates from the survey for Cooper Landing, Hope, and Seldovia, with homes that are occupied (or were counted as permanent residences by the Department of Labor study) being counted as seasonal or vacant, thus with a decreased end result for population size.

In two of the study communities. Alaska Natives made up a relatively large component of the total population. These were Ninilchik (estimated population of 289 Alaska Natives; 17.8 percent of the total) and Seldovia (108 people; 28.3 percent). The other three study communities had very small Alaska Native populations: Cooper Landing (17 people; 5.7 percent), Hope (7 people; 4.9 percent), and Nikolaevsk (3 people; 1.0 percent). In comparison, the 2000 US Census estimated the following Alaska Native populations in the study communities (see Table I-1 in Chapter One): Ninilchik (including Happy Valley), 174 people, 13.9 percent of the total population; Seldovia (city and CDP), 124 people, 28.8 percent; Cooper Landing, 18 people, 4.9 percent; Nikolaevsk, 17 people, 4.9 percent; and Hope (including Sunrise), 10 people, 6.5 percent).

The village of Nikolaevsk, founded in 1968 as a community of Old Believers, has recently become home for numerous non-Old Believer households. Most of the Old Believers live along the two main roads, near the Nikolaevsk School and the Russian Orthodox Church, while the non-Old Believers live in a subdivision removed about one-quarter mile to the west. Approximately 56 percent of the community's households are Old Believers, and 44 percent are non-Old Believers. The survey was administered to both Old Believers and non-Old Believers alike, but a greater percentage of Old Believers were surveyed than non-Old Believers (66

percent to 38 percent). As noted in Chapter One, the Nikolaevsk data were analyzed as a stratified sample in order to account for these differences in the sampling fractions for these two groups.

### *Birthplace and Length of Residency*[1]

Table IV-3 reports the place of birth of the population of each study community.[2] The data contain some indication of the degree to which families remain in their community over the generations. All the study communities had a majority of residents who were born in states other than Alaska or in other countries, ranging from a high 74.3 percent in Cooper Landing, to 67.2 percent in Hope, 61.6 percent in Ninilchik, 59.3 percent in Seldovia, and 57.7 percent in Nikolaevsk. The highest percentage of the population born in a Kenai Peninsula community was at Nikolaevsk (38.9 percent) (likely due to the relatively large number of children), followed by Seldovia (33.6 percent), Ninilchik (24.2 percent), Hope (18.8 percent), and Cooper Landing (12.6 percent).

If just the birthplaces of household heads are examined (Table IV-4; Fig. IV-1), that is, if children are excluded from the analysis, the study findings show that an even smaller percentage in each community was born in Alaska. The highest percentage is Seldovia, where 22.9 percent of household heads were born in Alaska, and 20.5 percent were born in a Kenai Peninsula community (most of these in Seldovia itself). Next, 16.9 percent of the household heads in Ninilchik were born in Alaska, and 7.9 percent were born in a Kenai Peninsula community. For Hope, 15.7 percent of household heads were born in Alaska, as were 11.9 percent of the household heads living in Cooper Landing, and 9.0 percent in Nikolaevsk.

For each household member, three lengths of residency were recorded: in the study community, in any Kenai Peninsula community, and in Alaska (Table IV-1). For each measure, household heads in Seldovia had the highest averages: 19.9 years living in Seldovia, 22.0 years living in any Kenai Peninsula community, and 30.6 years living in Alaska (Fig. IV-2). For length of residency in the study community, the shortest average duration for household heads was in Cooper Landing, at 12.9 years, although household heads in this community had lived in Alaska over twice as long: 26.1 years on average. This likely reflects Cooper Landing's role as a retirement community. Patterns similar to that of Cooper Landing were in evidence in Hope and Ninilchik, which also attract retired people from other Alaska communities (for Ninilchik, see Fall et al. 2000:54). Nikolaevsk had a different pattern, with not a great deal of difference between length of residence in the study community and in Alaska, reflecting the movement of the Old Believer population directly to Nikolaevsk and its lesser role as a retirement community.

Table IV-5 reports the length of residency of household heads in the study community, in any Kenai Peninsula community, and in Alaska in 5-year increments. As shown in Figure IV-3, a

[1] Demographic information such as birthplace and length of residency is relevant to c&t Factor One, "a long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area" and c&t Factor Six, "A pattern of use which includes the handing down of knowledge of fishing and hunting skills, values, and lore from generation to generation" (see Table I-2) in that such data may demonstrate the presence or absence over time of human communities that have established traditional patterns of use of resource populations in those locations.

[2] Note that respondents were asked to report the place of residence of the parents of each household member when that household member was born, so as not to simply record the location of the hospital where a child was born.

majority of household heads in Cooper Landing, Hope, and Ninilchik had lived in the study community for 10 years or less. A large majority of household heads in all five study communities had lived in the study community for 20 years or less. A similar pattern obtained for length of residency in any Kenai Peninsula community (Fig. IV-4). Although length of residency in Alaska was longer for household heads than in either the study community or the Kenai Peninsula, a majority of household heads in Nikolaevsk (80.3 percent), Ninilchik (57.3 percent), Hope (51.7 percent), and Cooper Landing (50.2 percent) had lived in Alaska 20 years or less, as had 43.2 percent of household heads in Seldovia (Fig IV-5; Table IV-5). These findings are consistent with population trends for the Kenai Peninsula Borough, which has doubled in population over the last 20 years (see Fig. II-1 in Chapter Two).

## FISH HARVESTS AND USES IN 2002/03

### *Levels of Participation (Household and Individual)*[3]

Table IV-6 reports the percentage of the population of each study community that was involved in salmon fishing, fishing for resident species, fishing for marine species, and any fishing for home use during the 2002/03 study year. A majority of the population in all five study communities fished for salmon: 61.9 percent in Ninilchik, 58.4 percent in Seldovia, 58.1 percent in Nikolaevsk, 56.8 percent in Cooper Landing, and 53.3 percent in Hope. There was more disparity between study communities for the other fishing activities. A relatively large percentage of Cooper Landing residents fished for freshwater fish (44.5 percent), but participation was much lower in the other four communities: 26.2 percent in Hope, 24.6 percent in Ninilchik, 20.2 percent in Nikolaevsk, and 19.5 percent in Seldovia. This likely reflects availability of freshwater species near each community. For marine fishing, Ninilchik (41.3 percent) and Seldovia (40.7 percent), the two communities closest to Cook Inlet, had notably higher levels of individual participation than did Nikolaevsk (26.8 percent), Cooper Landing (22.3 percent), or Hope (18.0 percent).

For any fishing activity, levels of individual involvement ranged from 68.3 percent in Ninilchik, to 68.1 percent in Seldovia, 65.5 percent in Cooper Landing, 62.5 percent in Nikolaevsk, and 57.4 percent in Hope. Figure IV-6 compares individual involvement in any fishing activity in the study communities in the study year with the same measure for the most recent previous study year. Levels of involvement were virtually identical for Cooper Landing, Nikolaevsk, and Ninilchik, while individual involvement was lower in the 2000/03 study year in Hope and Seldovia.[4] Data on individual involvement in the three subcategories of fishing are not available for previous years.

A large majority of households in all five study communities used fish in the 2002/2003 study year: 100 percent in Seldovia, 96.6 percent in Nikolaevsk, 96.0 percent in Ninilchik, 90.3

[3] Information about levels of participation in harvest and use, as well as harvest and use levels (see next sections), are relevant to c&t Factor 1, "A long-term, consistent pattern of use, excluding interruptions beyond the control of the community or area" (see Table I-2) (as of course is the information provided in Chapter Two).

[4] While data are available for only one previous study year for Cooper Landing and Hope (1990; Seitz et al. 1994:95), and Nikolaevsk and Ninilchik (1998; Fall et al. 2000:75), three years of data are available for Seldovia. These are 1991 (77.8 percent of population fishing), 1992 (77.5 percent), and 1993 (78.1 percent) (Stanek et al. 1995:42).

percent in Cooper Landing, and 83.3 percent in Hope. Most households also fished for home use: 86.0 percent in Seldovia, 80.8 percent in Nikolaevsk, 76.7 percent in Cooper Landing, 75.0 percent in Ninilchik, and 68.3 percent in Hope (Table IV-7 through Table IV-11).

Figure IV-7 compares the percentage of households in each study community using fish in the 2002/03 study year with the most recent previous study year. Percentages were very similar across study years. However, a smaller percentage of households in Hope used fish in 2002/03 (83.3 percent) than had in 1990 (92.1 percent). In Seldovia, 90.8 percent of sampled households in 1993 used fish, compared to 100 percent in 2002/03.[5]

### *Fish Harvest Estimates*[6]

As measured in pounds usable weight per person, harvests of fish for home use in the study communities in 2000/2003 were as follows (Table IV-7 through Table IV-11; Fig. IV-8): Cooper Landing, 61.7 pounds per person; Hope, 62.4 pounds per person, Nikolaevsk, 73.7 pounds per person; Ninilchik, 81.8 pounds per person; and Seldovia, 161.3 pounds per person. At the category level, salmon harvests were largest at Seldovia (90.9 pounds per person), with salmon harvests in the other four study communities very similar to each other: Ninilchik, 46.8 pounds person; Hope, 46.7 pounds per person; Nikolaevsk, 44.4 pounds per person; and Cooper Landing, 44.4 pounds per person. Seldovia also had the highest harvests of marine fish (67.5 pounds per person, followed by Ninilchik (33.5 pounds per person) and Nikolaevsk (27.1 pounds per person). Hope (13.5 pounds per person) and Cooper Landing (12.1 pounds per person) had notably lower marine fish harvests. As measured in usable pounds, freshwater fish harvests were relatively low in all five study communities. The highest harvests were at Cooper Landing (5.2 pounds per person), followed by Seldovia (2.9 pounds per person), Hope (2.2 pounds per person), Nikolaevsk (2.2 pounds per person), and Ninilchik (1.5 pounds per person).

Table IV-12 shows the top ten resources as measured in pounds per person in each of the study communities in 2002/2003. Halibut ranked first in two communities (Nikolaevsk and Ninilchik), second in Seldovia, and third in Cooper Landing and Hope. Coho salmon ranked first at Hope and was in the top three in the other four communities. Sockeye salmon ranked first at Cooper Landing and ranked in the top three in all the other communities except Seldovia, which lacks direct access to sockeyes. Chinook salmon ranked first at Seldovia. In all five communities, two or three resources accounted for 50 percent or more of the total fish harvest in the study year.

As expressed as a percentage of the total harvest in pounds, the composition of the fish harvest by category in the three "coastal" communities of Nikolaevsk, Ninilchik, and Seldovia was very similar, with salmon contributing the largest portion (around 60 percent) but marine fish also significant at around 40 percent, and freshwater fish harvest relatively very small (3 percent or less) (Fig. IV-9). In the two "inland" communities of Cooper Landing and Hope,[7] marine fish

[5] In 1992, 95.4 percent of Seldovia households used fish. In 1991, 97.0 percent of Seldovia households used fish (Scott et al. 2001).

[6] In addition to being relevant to c&t Factor 1 (see note for previous section), data presented in the tables in this section are relevant to c&t Factor 7, "A pattern of use in which the harvest is shared or distributed within a definable community of persons" (see Table I-2).

[7] Although Hope is located on Turnagain Arm, there are few fisheries resources in that water body due to its extreme tides and turbidity.

harvests were less significant at around 20 percent of the total with a corresponding increase in the contribution of salmon to over 70 percent. Freshwater fish harvests contributed a slightly higher percentage of the total fish harvest in Cooper Landing (8.4 percent) and Hope (3.5 percent) than the other three study communities.

### *Household-Level Harvests of Fish*[8]

In most Alaska communities, a subset of households accounts for most of the wild resource harvests. A "rule of thumb" is the "30/70 rule" – that, typically, about 30 percent of a community's households harvest about 70 percent of the wild resources (Wolfe 1987). This was clearly the case in 1998 five Kenai Peninsula communities in the area defined by the FSB as rural (Fall et al. 2000:187-194).

Very large differences in household level harvests of fish occurred in each of the study communities for 2002/03, exceeding the specialization predicted by the "30/70" rule. In Cooper Landing, about 24.3 percent of the households accounted for 70.5 percent of the community's fish harvest (Fig. IV-10). In Hope, 70.2 percent of the fish harvest was taken by 16.7 percent of the households (Fig. IV-11). In Nikolaevsk, 69.0 percent of the fish harvest was taken by 26.2 percent of the households (Fig. IV-12). In Ninilchik, 27.0 percent of the households accounted for 70.6 percent of the total fish harvest (Fig. IV-13). And at Seldovia, 69.9 percent of the total fish harvest was taken by just 14 percent of the households (Fig. IV-14).

Table IV-13 reports the percentage of each community's total harvest taken by four percentiles of households. By this measure, fish harvests were most concentrated at Seldovia and Hope. In Seldovia, the top 25 percent of harvesting households accounted for 82.6 percent of the community's total fish harvest, and in Hope, this percentile accounted for 81.8 percent of the total fish harvest. Conversely, the lower half of harvesting households in Seldovia accounted for just 4.6 percent of the total fish harvest, and at Hope this group accounted for just 1.8 percent of the total. Strong differences among households in fish harvests were in evidence in the other three study communities as well.

These findings demonstrate that while most households and individuals in all five study communities fish, most households harvest resources for home use in very small quantities. On the other hand, in each community there is a small set of households (generally less than 25 percent of the total), that harvest well above what is typical in the community.

### *Fish Harvests by Alaska Native and Old Believer Subpopulations*

Participants at the stakeholder meetings held to review preliminary study findings (see Chapter Five) suggested that harvest levels of Alaska Native and other households be compared. Table IV-14 compares estimated per capita harvests of fish in the 2002/03 study year for the Alaska Native subpopulation and other households in Ninilchik and Seldovia. Also compared are per

[8] This section provides information to help assess how well community averages depict community patterns of harvest and use of fish. This information is relevant to c&t Factor 8, "a pattern of use which relates to reliance upon a wide diversity of fish and wildlife resources of the area and which provides substantial cultural, economic, social, and nutritional elements to the community or area" (see Table I-2).

capita fish harvest estimates for the Old Believer community and other households in Nikolaevsk. Because the number of Alaska Native households in Cooper Landing and Hope was very small, no separate analysis of those populations' harvests is reported here.

In Seldovia, fish harvests for home use as measured in pounds usable weight per capita were virtually identical for Alaska Native households (168.6 pounds per person) and other households (157.7 pounds per person). In Ninilchik, while the per capita fish harvest for Alaska Native households (98.4 pounds per person) was somewhat higher than that for other households (76.4 pounds per person), this difference was not statistically significant. In a study of all wild resource harvests in Ninilchik in 1998, no significant difference was found for total harvests between Alaska Native and other households in the community (Fall et al. 2000:194-195). At Nikolaevsk, fish harvests by Old Believer households (92.4 pounds per person) were notably higher than those of other households in that community (36.1 pounds per person) (Table IV-14).

### *Length of Residency in Study Communities and Fish Harvests*

Participants in the stakeholder meetings (see Chapter Five) also suggested that there might be a relationship between length of residency in the study communities and fish harvest levels. Table IV-15 reports per capita fish harvests for three household groupings in each study community based on length of residency: one to ten years, eleven to twenty years, and more than twenty years. No significant differences were found between these groupings in Cooper Landing, Hope, Ninilchik, or Nikolaevsk. This is consistent with previous findings for Ninilchik (Fall et al. 2000:198-199). This finding supports a conclusion from a previous study of wild resources harvests in several federally-classified rural places on the Kenai Peninsula that many people who have moved to these communities over the last 20 years have located there in part because of their interest in recreational fishing (Fall et al. 2000:255-256).

There was, apparently, a different pattern in Seldovia, where those households that had lived in the community for more than 20 years (about 48 percent of the households in the community) harvested fish in much higher amounts (256.9 pounds per person) than did households that had lived there for 11 to 20 years (96.1 pounds per person) or ten years or less (60.4 pounds per person). This suggests that long-term resident households in Seldovia have a different pattern of resource harvests and uses than do more recent arrivals. A parametric (ANOVA) test suggested a difference of mean harvests of these groups in Seldovia, but the variances are significantly different between categories, so the parametric test is not reliable. Nonparametric tests (Kruskal-Wallis, median) indicate no difference between any subgroups in terms of fish harvests. We conclude that there are no meaningful statistically significant differences or correlations between length of residency and harvest levels of fish within the study communities.

### *Use Estimates*

In addition to amounts harvested, interviewed households were asked to estimate the amount of each resource they received from other households, and the amount of each resource that they gave away.[9] The latter could include giving away portions of the household's harvests as well as

[9] It should be noted that Division of Subsistence household surveys do not usually ask for amounts received or given away. Therefore there are no comparative data from other years for the findings regarding "use amounts."

redistributing resources received from other households. The total of each resource that was harvested by the household and was received, minus the amount given away, is an estimate of the quantity of that resource that was consumed by the household in the 2002/03 study year.

Table IV-16 through Table IV-20 report for each study community the estimated total harvest of each resource, the estimated total received for each resource, the estimated total given away for each resource, and the estimated total used of each resource. Also reported are the household averages and per capita estimates for each resource for each of these categories. Table IV-21 through Table IV-25 report the same data in pounds usable weight.

Overall, there was little difference between the mean household harvests and per capita harvests of fisheries resources in the study communities and the mean household and per capita "use" of fish. In other words, within the study communities, the amount of total fisheries resources received and given away were about the same. Figure IV-15 compares estimated per capita harvest and use estimates for the five study communities for salmon, other fish, and total fish. Only in Cooper Landing was per capita use more than 10 percent different (10 percent higher) than harvest. There, use of fish other than salmon was 31.2 percent higher than the community's estimated harvest due to importing a relatively large amount of halibut. (Note, however, that this difference is only 5.4 pounds per person.) Seldovia was the only community that appeared to be a net exporter of fish resources. The three communities with significant numbers of commercial fishers – Nikolaevsk, Ninilchik, and Seldovia – all gave away more halibut than they received, accounting for a small net exporting of fish other than salmon from these three communities

These findings demonstrate that estimated household harvests are a good measure of local use and consumption in the study communities. There is not a large net export or import of wild resources into any of these communities that results in a significantly lower or higher level of use at the community level.

### *Commercial Fisheries as a Source of Fish for Home Use*

No households in Cooper Landing or Hope obtained any fish for home use from involvement in commercial fisheries in 2002/03. Conversely, a relatively large number of households in Nikolaevsk (36.4 percent) removed fish for home use from commercial fisheries in which they were involved (Table IV-26). In Seldovia, 14.0 percent of households obtained fish for home use from commercial fisheries as did 7.0 percent in Ninilchik.

Correspondingly, study communities differed notably in the contribution of fish removed from commercial harvests to their overall harvest for home use (Fig. IV-16, Fig. IV-17 ; Table IV-27 to Table IV-31). In Cooper Landing (Table IV-27) and Hope (Table IV-28), commercial removals provided no fish for home use in either community (Fig. IV-17). Commercial removals were moderately important in Ninilchik (14.7 percent of the total fish harvest [12.0 pounds per person]; Table IV-30) and Seldovia (25.5 percent [41.1 pounds per person]; Table IV-31). At Nikolaevsk, most fish harvest for home use (50.3 percent [37.1 pounds per person]; Table IV-29) was retained from commercial harvests.

Findings for the study year were similar to previous study findings in three communities: Cooper Landing, Hope, and Ninilchik. In all three, the pounds of fish per capita removed from commercial fisheries for home use (Fig. IV-17) and the percentage of the total fish harvest for home use that was removed from commercial fisheries (Fig. IV-16) were about the same in 2002/03 as in the most recent previous study year (1990 for Cooper Landing and Hope, 1998 for Ninilchik). In Nikolaevsk, while the percentage of the total fish harvest removed from commercial fisheries was about the same as the previous study year (1998), the per capita harvest dropped from 55.9 pounds per person to 37.1 pounds per person. In Seldovia, a larger percentage of the total home use fish harvest was removed from commercial harvests in 2002/03 (25.5 percent) than in 1993, the most recent previous study year (15.9 percent). The pounds of fish removed from commercial fisheries for home use in Seldovia rose from 29.1 pounds in 1993 to 41.1 pounds in 2002/03.[10]

### *Sport Fishing Charter Involvement as a Source of Fish for Home Use*

This question was asked to evaluate the role of involvement in commercial sport fishing charter businesses in providing access to fish for home use. [Note that this question does not pertain to use of a sport fish charter service. Rather it pertains to "retention" of fish by households who were involved in operating such a service.] It corresponds to the questions about commercial fishing in this survey, documenting a means, other than subsistence, personal use, or sport fishing, to obtain fish for home use. As shown in Table IV-32, relatively few households in the study communities in 2002/03 obtained fish through their involvement in a commercial sport fish charter business. The highest percentage (and total number) of households was Ninilchik, at 9.0 percent, followed by: Seldovia, 8.0 percent; Cooper Landing, 7.8 percent; Nikolaevsk, 3.4 percent; and Hope, 3.3 percent. Halibut was the most frequently obtained fish.

Obtaining fish through involvement in sport fishing charter services provided a very small percentage of the total fish harvest in each study community in 2002/03, ranging from a high of 4.1 percent in Ninilchik to 3.9 percent for Seldovia, 1.8 percent in Nikolaevsk, 1.4 percent for Cooper Landing, and 1.2 percent for Hope (Table IV-27 through Table IV-31). For salmon, this source accounted for between 1.6 percent (at Ninilchik) and 0.6 percent (at Nikolaevsk) of the total fish harvested (Fig. IV-18). For fish other than salmon, involvement in sport fish guiding resulted in between 3.0 percent of the total harvest in Ninilchik to no fish in Hope (Table IV-27 through Table IV-31).

### *Use of Halibut Charters*

Households were asked whether or not they utilized the services of a charter operation to harvest halibut in the study year. The goal of this question was to refine study findings related to methods used to obtain fish for home use. As shown in Table IV-33, there were two distinct patterns related to the use of halibut charters in the study communities. In Hope and Cooper Landing (communities removed from Cook Inlet and whose residents are less likely to own boats capable of operating in marine waters), the majority of the halibut harvest, 56.6 percent and 77.8 percent respectively, was taken while using a charter fishing service. In both communities, most

[10] Data are available for two other study years for Seldovia: 1991 (17.4 percent of total fish harvest; 35.8 pounds per person) and 1992 (24.7 percent; 35.9 pounds per person) (Scott et al. 2001).

of the households that fished for halibut only did so by using a charter service. In contrast, use of charters only resulted in about three to four percent of the halibut harvest in Nikolaevsk, Ninilchik, and Seldovia, and few households in those communities used a charter service. Fishing from one's own boat or that of a friend accounted for 84.9 percent of the halibut harvest by Ninilchik households and 74.4 percent by Seldovia households. At Nikolaevsk, removal from commercial harvests provided most of the halibut for home use (54.1 percent); this was also a source of 12.6 percent of the halibut at Seldovia and 6.2 percent at Ninilchik.

### *Gear Type*[11]

**Salmon**

Table IV-34 through Table IV-38 report salmon harvests by gear type[12] for each study community in estimated numbers of fish and in estimated usable pounds. Table IV-39 through Table IV-43 report the percentage of the estimated salmon harvest in each study community by gear type.[13] There were two distinct patterns depending upon the significance of removal of salmon for home use from commercial fisheries. In Cooper Landing and Hope, commercial fisheries removal provided no salmon for home use in the study year, and retention of salmon for home use during sport guiding operations was negligible (as it was in all five communities). In both Cooper Landing and Hope, rod and reel fishing provided the very large majority of salmon, 87.3 percent and 84.6 percent respectively as calculated in numbers of fish (Fig. IV-18) (and 88.2 percent and 85.2 percent as calculated in usable pounds; Fig. IV-19). Subsistence/personal use fisheries provided 11.8 percent of the salmon harvest by Cooper Landing residents and 13.9 percent in Hope.

Removal of salmon for home use from commercial fisheries played a major role in the other three study communities. In Nikolaevsk, the majority of salmon (50.7 percent) were removed from commercial harvests. Nikolaevsk was the only study community in which rod and reel catches were not the primary source of salmon for home use, in fact ranking third after

[11] Information in this section pertains to c&t Factor 3, "a pattern of use consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost, conditioned by local characteristics" (see Table I-2).

[12] In Tables IV-30 through IV-45, "removed from commercial catch" means fish retained from a household's commercial harvest (a harvest achieved during a commercial fisheries opening using legal gear for that commercial fishery); "removed from guided catch" means a rod and reel harvest achieved while a member of the household was acting as a sport fishing guide; "subsistence methods" means any gear, other than rod and reel, used in an authorized subsistence or personal use fishery (within this category, "other" may refer to drift gill nets, seines, or spears); and "rod and reel" means rod and reel gear almost always used under sport fishing regulations.

[13] In Tables IV-34 through IV-43, the final column, labeled "Any Method" reports the harvest quantity or percentage of harvest achieved by using any of the methods listed in the previous columns. In Tables IV-39 through IV-43, the "percent base" column provides labels for the rows that report the percentage of the community's harvest by resource, gear type, or total salmon harvest achieved by each gear type/resource combination. Using Table IV-39 (Cooper Landing) as an example, coho salmon "removed from guided catch" represented 50.0 percent of all the salmon harvested in Cooper Landing through removal from guided catch (and 57.14 percent of the usable pounds of salmon harvested with this gear type), 1.86 percent of the total number of coho salmon harvested by the community with all gear types, and 0.44 percent of the total number of salmon numbers harvested. For a second example from this table, Chinook salmon harvested with any subsistence gear (see preceding footnote) represented 2.26 percent of all salmon taken with subsistence gear by Cooper Landing households, 9.68 percent of the Chinook salmon harvest, and 0.27 percent of the total salmon harvest.

subsistence/personal use methods. Commercial removal contributed 28.5 percent of the salmon for home use in Seldovia and 24.6 percent in Ninilchik. Of the five communities, Ninilchik had the largest percentage of salmon harvested in subsistence/personal use fisheries (35.9 percent of number of salmon), but rod and reel still accounted for the largest portion of the salmon harvest both at Ninilchik (37.8 percent by numbers, 45.8 percent by weight) and Seldovia (48.9 percent by numbers, 53.0 percent by weight) (Fig. IV-18, Fig. IV-19).

A majority of households in all five study communities harvested salmon for home use with rod and reel (Table IV-44, Fig. IV-20).[14] The largest percentage of households harvesting salmon in personal use/subsistence fisheries was at Ninilchik (30.0 percent), followed by Nikolaevsk (23.3 percent), Seldovia (12.0 percent), Hope (11.7 percent), and Cooper Landing (11.7 percent).

Within the subsistence/personal use gear type category, dip net was the most frequently used gear in all the communities but Seldovia, where set nets prevailed (Table IV-38; Fig. IV-21). This reflects current state subsistence and personal use regulations as well as communities' access to set net or dip net fisheries. Within this category, dip nets accounted for most of the subsistence/personal use harvest in Hope (89.9 percent), Nikolaevsk (88.7 percent), and Cooper Landing (58.7 percent). Subsistence set nets provided the largest percentage at Seldovia (79.5 percent), while at Ninilchik, set net harvests (51.0 percent) and dip net harvests (49.0 percent) were almost equal.

**Other Fish**

Table IV-45 reports the percentage of households in each study community that harvested fish other than salmon by gear type in the 2002/03 study year.[15] [Removal from commercial fishing and obtaining fish through involvement in sport fishing guiding services were discussed above.] By far, the most frequently used gear for nonsalmon fishing was rod and reel in open water, ranging from 62.0 percent of the households in Seldovia, to 58.0 percent in Ninilchik, 56.3. percent in Cooper Landing, 40.1 percent in Nikolaevsk, and 36.7 percent in Hope. Far fewer households engaged in ice fishing: 7.8 percent in Nikolaevsk, 5.0 percent in Hope, 2.9 percent in Cooper Landing, 2.0 percent in Ninilchik, and no households in Seldovia. Except in Nikolaevsk, very few households used noncommercial nets or seines for nonsalmon fishing; 26.2 percent of households in Nikolaevsk used these methods, mostly for eulachon fishing. Use of noncommercial nets for nonsalmon fishing in the other study communities ranged from 8.3 percent of the households in Hope, 8.0 percent in Seldovia, 5.0 percent in Ninilchik, and 2.9 percent in Cooper Landing.

Table IV-46 through Table IV-50 report nonsalmon harvests by gear type for each study community in 2002/03. Rod and reel was the dominant gear type in three study communities: Cooper Landing (91.7 percent of all nonsalmon fish harvested), Hope (89.9 percent), and

[14] In Tables IV-44 and IV-45, the "any method" column reports the percentage of households harvesting the resource using any of the methods listed in the columns to the left. Because household members might use more than one method, the sum of the percentages in the specific method columns does not necessarily equal the value in the "any method" column.

[15] For background on the definition of gear types and the organization of these tables, see the footnotes in the previous section on salmon.

Ninilchik (84.1 percent), and provided the majority of the harvest in Seldovia (55.2 percent). Removal from commercial harvests was the primary source of nonsalmon fish for home use in Nikolaevsk (59.7 percent), and contributed significantly in Seldovia (33.5 percent) and less so at Ninilchik (7.2 percent) (Fig. IV-22). Involvement in sport fish guiding operations resulted in 7.0 percent of the nonsalmon fish harvest in Ninilchik (primarily halibut and secondarily Pacific cod) and 6.7 percent in Seldovia. Ice fishing contributed only a very small percentage of the total nonsalmon fish harvest in the study communities. Other methods included some use of dip nets and seines for taking eulachon. There was some incidental harvest of flounders and lingcod in subsistence salmon set nets in Seldovia.

### *Location of Harvests*[16]

Table IV-51 through Table IV-55 report the location of noncommercial fishing activities by study community households in 2002/03. Locations are listed in two categories: those managed as federal public lands and waters, and other lands and waters. Note that these tables do not include the locations of commercial fisheries in which household members participated and from which they removed fish for home use.

For Cooper Landing (Table IV-51), the Upper Kenai River and the Russian River, both in the federal public lands category, were particularly important. Kenai Lake and its tributary streams, also federally-managed, were a primary fishing location for Dolly Varden and lake trout. The lower Kenai River, which managed by the state, was an important source of chinook salmon, sockeye salmon, and coho salmon for Cooper Landing residents in 2002/03.

For Hope (Table IV-52), "Kenai Mountain streams," in the federal public lands category, were the location of most fishing for coho salmon and Dolly Varden. The upper Kenai River and Russian River (federal public lands) and lower Kenai River (non-federal) were used by the most Hope households for sockeye salmon fishing.

Nikolaevsk households fished in Kachemak Bay (non-federal) for chinook and coho salmon, and the lower Kenai River (also non-federal) primarily (and Kachemak Bay secondarily) for sockeye salmon. Except for a few households (1.95 percent) that fished for sockeye salmon in the Russian River, no fishing in federal public lands and waters was reported by interviewed Nikolaevsk households (Table IV-53).

Federal public lands and waters were also relatively unimportant as fishing locations for interviewed Ninilchik residents in 2002/2003 (Table IV-54), with a few households (4.0 percent) fishing for sockeye salmon in the Russian River and even fewer (1.0 percent) fishing for rainbow trout and lake trout in Kenai Lake or Kenai Mountain streams. The Ninilchik River and Deep Creek, both under state management, were key fishing locations for Ninilchik households for chinook salmon, coho salmon, and Dolly Varden. Most Ninilchik households fished that fished for sockeye salmon used the lower Kenai River (which is outside federal subsistence fisheries jurisdiction), with the Kasilof River and the Ninilchik River also important for sockeyes.

[16] Information in this section pertains to c&t Factor 4, "the consistent harvest and use of fish or wildlife as related to past methods and means of taking: near, or reasonably accessible from the community or area" (see Table I-2).

No interviewed Seldovia households reported using any federal public lands or waters for fishing in 2002/2003 (Table IV-55). For Seldovia residents, Kachemak Bay was by far the key fishing location. Very few Seldovia residents fished in streams on the Kenai Peninsula road system.

### *Preservation Methods*[17]

As shown in Table IV-56A, in the study year the most commonly used method to preserve salmon harvests in each study community was freezing. Smoking and canning/jarring were also used by more than 25 percent of the households in each study community. Only in Nikolaevsk and Seldovia, communities with a relatively large percentage of households involved in commercial fishing, did more than 25 percent of households use salting as a salmon preservation method. In Seldovia, pickling (30 percent of households) and drying (22 percent) were used by a relatively large percentage of households.

When households were asked about methods they had used in past years for preserving salmon for home use, the relative rankings of methods did not vary much from that of the 2002/02003 study year (Table IV-56B). Freezing ranked first everywhere, with smoking second and canning/jarring third. No other method had been used by over 50 percent of the households in any study community. Around 40 percent of households in Nikolaevsk and Seldovia had salted fish, again most likely reflecting involvement in commercial fishing. Thirty six percent of Seldovia households had dried salmon in the past, reflecting that community's Alaska Native heritage.

### *Timing of Harvests*[18]

Table IV-57 through Table IV-66 report the months in which interviewed households fished for selected fish species in 2002/03 as well as their preferred month for each species. For all communities, the preferred months for fishing for chinook salmon were May and June, and June and July for sockeyes. August was the preferred month for fishing for coho salmon, with interest in Cooper Landing in coho fishing in September and October. Preferred fishing months for Dolly Varden were more variable, but generally included June through September. July and August were the most popular months for rainbow trout fishing, followed by June and September. Although no Ninilchik households fished for steelhead in the study year, households expressed a preference for steelhead fishing in September and October.

### *Evaluation of Study Year Compared to Other Years*

For each salmon species and for five types of nonsalmon fish (eulachon, Dolly Varden, lake trout, rainbow trout, and steelhead), households were asked to evaluate their harvests and uses in the study year with "other recent years." The goal was to evaluate if the study year was typical or atypical for most households and to also identify trends and changes. The results are reported

[17] Information in this section pertains to c&t Factor 5, "a means of handling, preparing, preserving, and storing fish or wildlife which has been traditionally used by past generations, including consideration of alteration of past practices due to recent technological advances, where appropriate" (see Table I-2).
[18] Information in this section pertains to c&t Factor 2, "a pattern of use recurring in specific seasons for many years" (Table I-2).

in Table IV-67 through Table IV-71. In addition to reporting the percentage of interviewed households that reported that uses were "higher," "lower," or "about the same," the tables also report the percentage of households that could not make a comparison because they have not used the resource. A large majority in all five study communities had never used steelhead, and half or more of the households in four communities had never used lake trout – the exception being Hope, where 48.3 percent had not used it.

As noted earlier, sockeye salmon account for a large portion of the harvest in the study communities, and most households have used sockeye salmon. Figure IV-23 reports respondents' evaluations for sockeye salmon, removing the non-using households. A majority of households in all five study communities said that their harvests and uses of sockeye salmon in 2002/03 were about the same as other recent years, ranging from a high of 75.0 percent in Hope, to 66.3 percent in Ninilchik, 62.9 percent at Seldovia, 57.5 percent at Cooper Landing, and 55.5 percent at Nikolaevsk. Correspondingly, Nikolaevsk was the community with the most households reporting that their uses of sockeye salmon were down from other recent years, 37.9 percent, which is consistent with the lower per capita harvest estimated for 2002/03 for this community compared to 1998 (see below). Findings were similar in Cooper Landing, where 35.7 percent of households said their sockeye salmon uses were down.

A strong majority of households in all five study communities reported that their uses of chinook salmon in the 2002/03 study year were similar to other recent years (Fig. IV-24). As with sockeyes, about 20 to 30 percent of households said their chinook salmon harvests were lower.

Evaluations for coho salmon were generally very similar to those for chinook salmon (Fig. IV-25). One exception was Hope, where 34.7 percent of households reported lower coho uses in the 2002/03 study year than other recent years.

Evaluations were more mixed for Dolly Varden (Fig. IV-26). In three communities – Hope, Nikolaevsk, and Ninilchik – a strong majority of 70 percent or more said that Dolly Varden uses were about the same as other recent years. However, this evaluation of similar levels of use dropped to 59.4 percent in Cooper Landing and just 50.0 percent in Seldovia, where 45.0 percent of the households said Dolly Varden uses were down.

As mentioned above, in all the study communities but Seldovia, more than half the interviewed households had never used rainbow trout. And for those who had in those four communities, most (about 60 percent or more) said uses were about the same in 2002/03 as in other recent years (Fig. IV-27). About 40 percent of households in Cooper Landing said their rainbow trout uses were down. Seldovia households had a more mixed assessment – half the households said their rainbow trout uses were about the same, 33.3 percent said they were down, and 16.7 percent said they had increased.

Households that reported using less of any fish resource in the study year compared to other recent years were asked to provide a reason for the change. For salmon, as shown in Table IV-72, a large majority of households with lower uses of salmon said that their uses were down because they had little or no time to fish (usually due to work) or due to other personal reasons (such as "never got around to fishing," illness, or "need less fish"). Few cited the status of the

resource or regulatory restrictions as a reason for why their salmon harvests were down. An exception was at Hope, where 29.4 percent of those households with lower uses of coho salmon cited a weak run as the cause. The pattern was similar for other fish: lack of time to fish or other personal reasons were usually given as an explanation for lower harvests or uses, rather than a scarcity of fish or regulatory restrictions (Table IV-73).

## COMPARISONS WITH OTHER STUDY YEARS

Figure IV-28 compares the study communities' estimated harvests of salmon, marine fish, and freshwater fish, as measured in pound per person, in study year and other recent years for which survey data are available. In three study communities, the estimated harvest in 2000/03 was very similar to the other most recent study year. These were Cooper Landing (53.9 pounds per person of fish in 1990, 61.7 pounds in 2002/03), Hope (65.8 pounds in 1990, 62.4 pounds in 2002/03), and Ninilchik (80.8 pounds in 1998, 81.7 pounds in 2002/03).

In Nikolaevsk, the estimate for 2002/03 of 73.7 pounds per person was lower than the 100.2 pounds per person estimated for 1998. This may be related to depressed commercial fisheries and consequent lower amounts of fish removed from commercial harvests for home use.

In Seldovia, the 2002/03 estimate of 161.3 pounds per person was higher than the most recent previous estimate of 107.9 pounds of fish for 1993/94. It was also higher than the 1991/92 estimate of 132.8 pounds per person and the 1992/93 estimate of 99.6 pounds per person (Stanek et al. 1995:44).

## ESTIMATES OF AMOUNT NEEDED

Respondents were asked to estimate the amount of nine specific fish resources that their household "could use in a typical year for its own consumption." They were asked to include fish that they receive but not include fish they give away (in order to avoid double-counting shared fish in responses to question about "use."). Table IV-74 reports the findings. In all communities, sockeye salmon had the highest mean number of fish required, and this average was very similar across communities: 17.1 sockeye in Nikolaevsk, 17.1 sockeye in Seldovia, 19.3 sockeye in Cooper Landing, 19.3 sockeye in Hope, and 20.5 sockeye in Ninilchik. It should be noted that these household means are all below the annual limits for sockeye in state personal use fisheries (see discussion below). As shown in Figure IV-29, more than 60 percent of the responding households in each study community said that they required 20 sockeye salmon or less: 74.5 percent in Seldovia, 73.6 percent in Nikolaevsk, 64.1 percent in Cooper Landing, 63.6 percent in Hope, and 62.0 percent in Ninilchik.

Coho salmon generally ranked second to sockeye salmon in terms of harvests, uses, and perceived household requirements. For the latter, household means were very similar for four communities (Hope, Nikolaevsk, Ninilchik, and Seldovia) at around 12 coho salmon, with a slightly lower mean at Cooper Landing, 7.1 coho (Table IV-74).

Average number of chinook salmon required was more variable, and not surprisingly was highest at Seldovia (where there is a subsistence set net fishery focused on chinook salmon), at 11.6

chinook per household, followed by Ninilchik at 7.7, Nikolaevsk at 4.7, Hope at 3.9, and Cooper Landing at 2.0. As estimated by survey respondents, the mean number of pink salmon required per household was very low at about two fish or less at Cooper Landing, Nikolaevsk, and Ninilchik, but slightly higher at Hope (6.8 pink salmon ) and Seldovia (7.3 pink salmon). This likely reflects the relative local availability of pink salmon. Average number of chum required was low everywhere, reflecting their relative scarcity except around Seldovia (4.2 chum per household) (Table IV-74).

For total salmon, mean household responses for the number needed to provide for households' annual consumption ranged from a high of 53.1 salmon at Seldovia, to 44.3 at Ninilchik, 43.5 at Hope, 35.8 at Nikolaevsk, and 29.3 at Cooper Landing (Table IV-74).

For freshwater fish other than salmon, the mean number of fish per household that could be used in a typical year was universally low for all species for all study communities, and in no community more than 7.0 fish other than salmon per year per household. For the four species for which data were systematically collected (Dolly Varden, lake trout, rainbow trout, and steelhead), the mean average number of fish that could be used per household was highest at Hope at 19.6 fish per household, followed by Cooper Landing (18.6 fish), Ninilchik (13.0 fish), Nikolaevsk (11.8 fish), and Seldovia (9.8 fish) (Table IV-74). It should be noted that this question was not asked for any marine species.

Table IV-75 compares mean household estimates of total number of fish required for one year with mean household harvests and mean household uses for the study year. The greatest disparity was at Hope, where the mean household estimate of 43.5 salmon that could be used annually was about twice that of the mean harvest of 22.1 salmon and the mean use of 22.3 salmon. There was also a disparity at Seldovia, where the mean household estimate of the number of salmon that could be used annually was 53.1 fish, compared with a mean household harvest of 30.1 salmon and a mean household use of 31.7 salmon. While the average amount households estimated they could use annually was greater than the mean harvest in 2002/03 in the other three study communities, the disparity was less than among interviewed households in Hope or Seldovia. At Nikolaevsk, the average number of salmon households could use (35.8 fish) was lower than the average number used in 2002/03 (38.3 salmon).

There was more disparity for nonsalmon fish (Table IV-75). In all communities, for the four species combined (rainbow trout, steelhead, Dolly Varden, and lake trout), the mean amount households could use was twice as high or more than the mean household harvest or use in 2002/03. It should be noted, however, the estimates of the number of these fish that could be used in a year were quite low in each community (see above).

## PAST FISHERY INVOLVEMENT

Table IV-76 reports the percentage of households in each study community that have ever participated in various fisheries. Not surprisingly, a large majority had participated in rod and reel fisheries. Regarding the Cook Inlet personal use dip net fisheries (created in 1981; see Chapter Two), most households in Nikolaevsk (64.0 percent) and Ninilchik (63.0 percent) had participated, although the percentage of households participating in either fishery in the study

year was lower, 21.4 percent and 19.0 percent, respectively (Fig. IV-30). Most households in the other three study communities had never participated in the Cook Inlet dip net fishery.

In each study community, only a minority of households had any experience participating in Cook Inlet noncommercial set net fisheries. The largest percentage was at Ninilchik (32.0 percent), followed by Seldovia (22.0 percent), Nikolaevsk (15.0 percent), Hope (11.7 percent), and Cooper Landing (8.7 percent). Participation in these fisheries in the study year was much lower in each study community (Fig. IV-31).

Few households had had any involvement in personal use or subsistence fisheries outside the Cook Inlet Area. There was some historic participation in the dip net fishery at Chitina (by road, several hundred miles away).

## EVAULATIONS OF CURRENT PERSONAL USE AND FEDERAL SUBSISTENCE REGULATIONS

In order to assess current opportunities for study community residents to harvest fish for home use, survey respondents were asked to evaluate state personal use regulations for salmon and federal subsistence fishing regulations. The first question asked, "Should federal subsistence fishing regulations match state sport fishing regulations?" In the study year, federal subsistence regulations allowed eligible rural residents to fish in accordance with state sport fishing regulations if they obtained a federal subsistence permit. They did not then have to obtain a state sport fishing license to fish with rod and reel gear. As shown in Table IV-77, a majority of respondents in Cooper Landing (73.8 percent), Ninilchik (59.0 percent), and Hope (55.0 percent) agreed, as did 42.1 percent in Nikolaevsk and 32.0 percent in Seldovia. In these latter two communities, a large portion of respondents, 36.2 percent and 32.0 percent respectively, said they did not have an opinion, reflecting the lack of federally-managed waters within the current harvest areas of these communities. In all the study communities, a relatively small percentage of respondents said they disagreed with this statement, ranging from 24.0 percent in Seldovia, to 20.0 percent in Ninilchik, 18.3 percent in Hope, 13.6 percent in Cooper Landing, and 12.5 percent in Nikolaevsk. This presumably means that some of these respondents would like to see the Federal Subsistence Board develop expanded opportunities for subsistence fishing for qualifying rural residents. But others said they disagreed with the statement because they do not want to see any federal subsistence fishing regulations at all.[19]

The second question asked for the respondent's opinion of the current seasonal limit for the state's personal use fisheries in the Cook Inlet Area. These are 25 salmon for the household head and 10 for each additional household member. They were asked if this limit is "too high," "too low," or "about right." If not about right, they were asked to suggest alternative annual limits.

As shown in Table IV-78, a majority of respondents in all five study communities said that current annual limits for state personal use salmon fisheries are "about right," including 76.7 percent in Hope, 66.0 percent in Ninilchik, 64.0 percent in Seldovia, 56.5 percent in Nikolaevsk, and 54.4 percent in Cooper Landing. With the exception of Hope (where the percentages were

[19] For example, one third of the respondents in Cooper Landing (five of fifteen) who disagreed with the statement said they did so because they do not support federal subsistence fishing regulations of any kind.

about even), most respondents who said that current limits were not satisfactory said they were too high; in Cooper Landing, Nikolaevsk, and Ninilchik, twice as many or more respondents said personal use harvest limits are too high as opposed to too low. Concern about over harvesting and waste of fish was the reason given most often to explain why the annual limits for personal use fisheries should be lower.

In combination, the responses to both questions suggest that, overall, most residents of these study communities are satisfied with present fishing opportunities and want no substantial changes.

## FEDERAL SUBSISTENCE FISHERY SCENARIOS

### *Introduction: Qualifications*

As noted in Chapter One, the initial plan for the survey was to present several scenarios for federal subsistence fisheries to interviewed households and ask for their responses, but the survey design working group decided to use an open ended approach. Interviewed households were asked, "If federal regulations allowed you to subsistence fish in federal waters, where would you likely fish?" After naming locations, they were also asked to suggest accompanying regulations such as gear, fishing periods, and seasonal limits. Interviewers had a map available that depicted federal lands and waters to assist in focusing responses.

As shown in Table IV-79, of the 355 households interviewed for this project, 230 (64.8 percent) declined to provide any federal subsistence fishery scenario for the Cook Inlet Management Area. There were several reasons for this lack of response. Some households are opposed to federal management of subsistence fisheries; some are opposed to any subsistence fisheries in freshwater; many expressed concern about conservation of fisheries resources if nets are allowed in freshwater or if seasonal limits are liberalized; many are happy with current fishing opportunities and support no changes; and some want expanded opportunities in non-federal waters but have no interest in subsistence fisheries in federal waters.

An additional 15 households only provided scenarios for state-managed waters. Although these households wanted changes to state-managed subsistence fisheries in the Cook Inlet area, primarily those occurring in marine waters, they had no interest in developing new subsistence fisheries in federal waters. Ten households mentioned only non-Cook Inlet sites (Table IV-79).

Deleting nonresponses and suggestions pertaining to state waters leaves 125 households (35.2 percent) that offered federal subsistence fisheries scenarios. This response rate must be further qualified in that most of these households had already said that they were satisfied with the current federal subsistence regulations that allow subsistence fishing in accordance with state sport fishing rules (see discussion, above), and did not see any need for a modified federal subsistence fishery. Upon encouragement from the interviewers, these households did offer some suggestions, but this should not be seen as an endorsement of these scenarios in particular or federal subsistence management in general. As shown in Table IV-80, 57.6 percent households that provided a federal subsistence fishery scenario said that they agreed that federal subsistence fishing regulations for the Cook Inlet Area should be the same as state sport fishing

rules, as did 70.6 percent of those Cooper Landing households that provided a scenario, 51.4 percent of the Hope households, 54.5 percent of the Nikolaevsk respondents, 56.3 of the respondents in Ninilchik, and 46.2 percent of the Seldovia households.

### *Locations*

#### Cooper Landing

Cooper Landing households mentioned 20 places as potential sites of federal subsistence fisheries (Table IV-81). Of these, 10 sites were only identified a single time by individual households. Thirteen households mentioned the upper Kenai River, the most frequently mentioned location; 8 others mentioned the Kenai River in general and two more mentioned the lower or middle Kenai River. Nine households mentioned the Russian River as a potential federal fishery location, and four mentioned Kenai Lake. Since the mid 1990s, all sport fishing for coho salmon has been closed in the Kenai River and its tributaries after October 1. It should also be noted that four households mentioned Quartz Creek, the former site of a popular fall rod and reel fishery for coho salmon, closed by the Alaska Board of Fisheries to sport fishing in the late 1960s.

#### Hope

In Hope, two local streams were frequently mentioned as potential sites for federal subsistence fisheries: Six Mile Creek (which according to local residents has all salmon species but sockeyes), mentioned by 23 households; and Resurrection Creek (which according to local residents has the same four species as Six Mile Creek), mentioned by 19 households (Table IV-82). Six households mentioned the Kenai River in general, while one specifically mentioned the lower Kenai and another the upper Kenai. Four Hope households mentioned the Russian River. Of the 23 sites mentioned in response to the potential scenarios question, all but 8 were mentioned by just one household. It should be noted that the two primary sites mentioned by Hope households were the closest to a consensus about the possible location of federal subsistence fisheries reached in any of the study communities.

#### Nikolaevsk

Very few of the people interviewed in Nikolaevsk were willing to offer any suggestions for potential federal subsistence fisheries (only 8 of the 42 households interviewed; Table IV-83). Most likely, this is because the areas they are interested in fishing are not under federal jurisdiction, and federal waters are distant from the community. As shown in Table IV-83, 4 respondents mentioned “the Kenai River” and two more specified the upper Kenai. Three mentioned the Russian River.

#### Ninilchik

Only 42 of the 100 Ninilchik households interviewed for this project offered suggestions about possible locations for federal subsistence fisheries (Table IV-84). This is most likely because Ninilchik residents are particularly interested in fishing in Cook Inlet and in local streams such

as Deep Creek, which are not part of the federal subsistence program (with the exception of Tuxedni Bay on the west side of Cook Inlet, mentioned by one household). The most frequent suggestion from Ninilchik households for the location of federal subsistence fisheries was the general "Kenai National Wildlife Refuge" (8 households). Five mentioned Tustumena Lake, four the Kenai Fjords National Park (which is closed to all subsistence hunting and fishing), and four mentioned Lake Clark National Park in general. The upper Kenai River (4), the Russian River (1), Skilak Lake (3), and the Chugach National Forest in general (2) were mentioned by a few households.

**Seldovia**

Most likely due to the remoteness of Seldovia from any waters involved in the federal subsistence program, few Seldovia respondents offered any suggestions for federal subsistence fisheries (15 of 50 interviewed households; Table IV-85). The most frequent suggestions, mentioned by four households each, were the Kenai Fjords National Park (which is closed to all subsistence hunting and fishing) and the Kenai National Wildlife Refuge in general. Only one other location, the Swanson River, was mentioned by more than one household. Three locations on western Cook Inlet were mentioned, each by one Seldovia household: Chinitna Bay, Tuxedni Bay, and the general west side of Cook Inlet.

### *Gear Types*

Of those households that offered federal subsistence fishing scenarios, a large majority recommended rod and reel as the only allowable gear type (Table IV-86). This reflects their experience as well as concerns about conservation. Only a few offered scenarios involving set nets or dip nets.

## SUMMARY OF SURVEY FINDINGS

Following is a brief synopsis of the major points of this chapter based on the findings from the systematic household survey.

1. All the study communities had a majority of residents who were born in states other than Alaska or in other countries.
2. A majority of household heads in Cooper Landing, Hope, and Ninilchik had lived in the study community for 10 years or less.
3. Although most households harvested and used fish in the 2002/03 study year, harvests were relatively low in the road-connected communities (and higher in Seldovia) and most took place with rod and reel under sport fishing regulations.
4. There were no significant statistical differences in fish harvest levels between the Alaska Native and non-Native populations of Ninilchik and Seldovia (the only two study communities with sizable Alaska Native populations), nor was there any significant relationship between length of residency and levels of harvest of fish resources in any community.

5. Hope and Cooper Landing households reported that fishing activities on federal public lands and waters was important, but use of federal public lands and waters for fishing by residents of Ninilchik, Nikolaevsk, and Seldovia was minimal in 2002/03.
6. A majority of households had participated in recreational (rod and reel) fisheries, and most households in Nikolaevsk and Ninilchik had participated in Cook Inlet personal use dip net fisheries (these take place in state-managed waters). Most households in the other three study communities had never participated in the dip net fisheries, and in no study community did a majority of the households have any experience participating in Cook Inlet noncommercial set net fisheries.
7. Most households recommended federal subsistence fisheries identical to state sport fisheries and most found state personal use fisheries adequate for their needs.
8. Most households declined to provide suggestions for the location of potential federal subsistence fisheries, because they are opposed to federal management, or are opposed to freshwater subsistence fisheries, or are concerned about the conservation implications of such fisheries. Some households would like expanded subsistence or personal use fishing opportunities in non-federal waters.
9. Of those households offering scenarios for new federal subsistence fisheries, a large majority recommended rod and reel as the only allowable gear type.

Table IV-1. Demographic Characteristics of Households, Study Communities, 2003

| Characteristics | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
|---|---|---|---|---|---|
| Sampled Households | 103 | 60 | 42 | 100 | 50 |
| Number of Households in the Community | 136 | 74 | 78 | 577 | 169 |
| Percentage of Households Sampled | 75.7% | 81.1% | 53.8% | 17.3% | 29.6% |
| Household Size | | | | | |
| Mean | 2.2 | 2.0 | 4.0 | 2.8 | 2.3 |
| Minimum | 1 | 1 | 2 | 1 | 1 |
| Maximum | 7 | 6 | 10 | 12 | 6 |
| Sample Population | 229 | 122 | 179 | 281 | 113 |
| Estimated Community Population | 302 | 150 | 316 | 1,621 | 382 |
| Age | | | | | |
| Mean (years) | 46.4 | 41.4 | 28.0 | 37.4 | 42.9 |
| Minimum | 0.5 | 1.0 | 1.0 | 1.0 | 1.0 |
| Maximum | 98.0 | 82.0 | 82.0 | 83.0 | 78.0 |
| Median | 49.0 | 47.0 | 20.3 | 40.0 | 50.0 |
| Length of Residency[1] - Household Heads | | | | | |
| Mean (years) | 12.9 | 16.6 | 17.1 | 16.7 | 19.9 |
| Minimum | 0.5 | 0.5 | 1.0 | 1.0 | 2.0 |
| Maximum | 56.0 | 64.0 | 48.0 | 74.0 | 72.0 |
| Length of Residency[1] - Population | | | | | |
| Mean (years) | 11.7 | 14.3 | 12.8 | 13.9 | 17.3 |
| Minimum | 0.5 | 0.5 | 1.0 | 0.5 | 1.0 |
| Maximum | 56.0 | 64.0 | 48.0 | 74.0 | 72.0 |
| Length of Residency Kenai Peninsula - Household Heads | | | | | |
| Mean (years) | 15.0 | 18.7 | 18.1 | 18.4 | 22.0 |
| Minimum | 0.5 | 0.5 | 1.0 | 1.0 | 2.0 |
| Maximum | 56.0 | 64.0 | 48.0 | 74.0 | 72.0 |
| Length of Residency Kenai Peninsula - Population | | | | | |
| Mean (years) | 14.0 | 16.4 | 13.5 | 15.1 | 18.9 |
| Minimum | 0.5 | 0.5 | 1.0 | 0.5 | 1.0 |
| Maximum | 56.0 | 64.0 | 48.0 | 74.0 | 72.0 |
| Length of Residency Alaska - Household Heads | | | | | |
| Mean (years) | 26.1 | 25.8 | 21.5 | 27.1 | 30.6 |
| Minimum | 0.5 | 1.0 | 1.0 | 1.0 | 6.0 |
| Maximum | 70.0 | 64.0 | 48.0 | 75.0 | 72.0 |
| Length of Residency Alaska - Population | | | | | |
| Mean (years) | 23.6 | 22.6 | 15.5 | 21.1 | 26.0 |
| Minimum | 0.5 | 1.0 | 1.0 | 0.5 | 1.0 |
| Maximum | 82.0 | 64.0 | 48.0 | 75.0 | 72.0 |
| Sex | | | | | |
| Males | | | | | |
| Number | 164 | 83 | 169 | 814 | 186 |
| Percentage | 54.1% | 54.9% | 53.7% | 50.2% | 48.7% |
| Females | | | | | |
| Number | 139 | 68 | 146 | 808 | 196 |
| Percentage | 45.9% | 45.1% | 46.3% | 49.8% | 51.3% |
| Alaska Native | | | | | |
| Households (Either Head)[2] | | | | | |
| Number | 8 | 4 | 0 | 133 | 51 |
| Percentage | 5.8% | 5.0% | 0.0% | 23.0% | 30.0% |
| Estimated Population | | | | | |
| Number | 17 | 7 | 3 | 289 | 108 |
| Percentage | 5.7% | 4.9% | 1.0% | 17.8% | 28.3% |

[1] Length of residency in study community.

[2] A household was classified as "Alaska Native" if either or both of the household heads was Alaska Native.

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-2. Comparison of Population Estimates

| | 2000 US Census | AK Dept of Labor 2003 | ADF&G Survey, 2003 |
|---|---|---|---|
| Cooper Landing | 369 | 358 | 302 |
| Hope | 155 | 176 | 150 |
| Hope CDP | 137 | 161 | |
| Sunrise CDP | 18 | 15 | |
| Nikolaevsk | 345 | 313 | 316 |
| Ninilchik | 1,261 | 1,280 | 1,621 |
| Ninilchik CDP | 772 | 777 | |
| Happy Valley CDP | 489 | 503 | |
| Seldovia | 430 | 538 | 382 |
| Seldovia City | 286 | 300 | |
| Seldovia Village CDP | 144 | 238 | |

Source: for 2003, Alaska Department of Labor and Workforce Development 2004

Table IV-3. Place of Birth, Study Communities, Entire Population

| | Percentage of Estimated Population | | | | | |
|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikoalevsk | Ninilchik | Seldovia | All Study Communities |
| Alaska | 25.7% | 32.8% | 42.3% | 38.4% | 40.7% | 37.7% |
| Kenai Peninsula | 12.6% | 18.8% | 38.9% | 24.2% | 33.6% | 25.7% |
| Cooper Landing | 5.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.6% |
| Hope | 0.0% | 17.2% | 0.0% | 0.0% | 0.0% | 0.9% |
| Nikolaevsk | 0.0% | 0.0% | 35.9% | 0.0% | 0.0% | 4.1% |
| Ninilchik | 0.0% | 0.8% | 0.0% | 19.2% | 0.0% | 11.3% |
| Seldovia | 0.0% | 0.0% | 0.0% | 0.0% | 31.0% | 4.3% |
| Other Kenai Peninsula | 7.4% | 0.8% | 3.0% | 5.0% | 2.7% | 4.5% |
| Other Alaska | 13.1% | 14.0% | 3.4% | 14.2% | 7.1% | 11.9% |
| Other United States | 69.9% | 64.8% | 39.2% | 58.7% | 57.5% | 58.1% |
| Outside United States | 4.4% | 2.5% | 18.5% | 2.1% | 1.8% | 4.2% |
| Missing | 0.0% | 0.0% | 0.0% | 0.7% | 0.0% | 0.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-4. Place of Birth of Household Heads, Study Communities

| | Percentage of Household Heads | | | | | |
|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikoalevsk | Ninilchik | Seldovia | All Study Communities |
| Alaska | 11.9% | 15.7% | 8.8% | 16.9% | 22.9% | 16.4% |
| Kenai Peninsula | 4.5% | 9.0% | 7.0% | 7.9% | 20.5% | 9.4% |
| Cooper Landing | 2.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.3% |
| Hope | 0.0% | 6.7% | 0.0% | 0.0% | 0.0% | 0.4% |
| Nikolaevsk | 0.0% | 0.0% | 5.2% | 0.0% | 0.0% | 0.4% |
| Ninilchik | 0.0% | 0.0% | 0.0% | 5.1% | 0.0% | 2.9% |
| Seldovia | 0.0% | 0.0% | 0.0% | 0.0% | 16.9% | 2.6% |
| Other Kenai Peninsula | 2.3% | 2.2% | 1.8% | 2.8% | 3.6% | 2.8% |
| Other Alaska | 7.4% | 6.7% | 1.8% | 9.0% | 2.4% | 7.0% |
| Other United States | 83.5% | 80.9% | 56.1% | 80.3% | 74.7% | 77.9% |
| Outside United States | 4.5% | 3.4% | 35.1% | 1.7% | 2.4% | 5.0% |
| Missing | 0.0% | 0.0% | 0.0% | 1.1% | 0.0% | 0.6% |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-5. Length of Residency of Household Heads, 2003

A. Length of Residency in the Study Community

| | Percentage of Household Heads | | | | |
|---|---|---|---|---|---|
| Years: | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| 5 or less | 35.8% | 33.9% | 24.2% | 23.9% | 18.6% |
| 6 to 10 | 22.3% | 19.8% | 18.0% | 27.5% | 24.8% |
| 11 to 15 | 13.5% | 9.9% | 29.2% | 13.9% | 13.3% |
| 16 to 20 | 11.4% | 13.2% | 14.0% | 12.1% | 11.5% |
| 21 to 25 | 5.7% | 11.6% | 1.1% | 9.6% | 7.1% |
| 26 to 30 | 4.8% | 1.7% | 4.5% | 4.6% | 3.5% |
| 31 to 35 | 3.9% | 0.8% | 6.2% | 2.1% | 12.4% |
| 36 to 40 | 0.4% | 0.8% | 1.7% | 1.8% | 2.7% |
| 41 to 45 | 0.9% | 3.3% | 0.0% | 2.1% | 0.9% |
| 46 to 50 | 0.4% | 0.8% | 1.1% | 1.1% | 0.9% |
| > 50 | 0.9% | 4.1% | 0.0% | 1.1% | 4.4% |

B. Length of Residency in Any Kenai Peninsula Community

| | Percentage of Household Heads | | | | |
|---|---|---|---|---|---|
| Years: | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| 5 or less | 27.9% | 23.3% | 20.8% | 21.0% | 9.8% |
| 6 to 10 | 21.8% | 19.2% | 18.5% | 25.6% | 27.7% |
| 11 to 15 | 15.7% | 15.0% | 30.9% | 16.7% | 14.3% |
| 16 to 20 | 11.8% | 15.0% | 15.2% | 11.4% | 11.6% |
| 21 to 25 | 5.7% | 12.5% | 1.1% | 8.9% | 9.8% |
| 26 to 30 | 7.4% | 4.2% | 3.9% | 5.3% | 3.6% |
| 31 to 35 | 5.7% | 0.8% | 6.7% | 3.2% | 11.6% |
| 36 to 40 | 1.3% | 0.8% | 1.7% | 2.8% | 4.5% |
| 41 to 45 | 1.3% | 3.3% | 0.0% | 1.4% | 0.9% |
| 46 to 50 | 0.4% | 0.8% | 1.1% | 2.1% | 0.9% |
| > 50 | 0.9% | 5.0% | 0.0% | 1.4% | 5.4% |

C. Length of Residency in Alaska

| | Percentage of Household Heads | | | | |
|---|---|---|---|---|---|
| Years: | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| 5 or less | 14.0% | 9.2% | 19.1% | 13.9% | 5.4% |
| 6 to 10 | 10.9% | 15.8% | 14.0% | 20.6% | 9.0% |
| 11 to 15 | 15.3% | 10.8% | 30.9% | 11.4% | 17.1% |
| 16 to 20 | 10.0% | 15.8% | 16.3% | 11.4% | 11.7% |
| 21 to 25 | 7.0% | 17.5% | 1.1% | 10.3% | 9.9% |
| 26 to 30 | 10.0% | 12.5% | 5.1% | 7.8% | 8.1% |
| 31 to 35 | 10.0% | 1.7% | 9.0% | 5.3% | 12.6% |
| 36 to 40 | 8.3% | 0.0% | 2.8% | 4.6% | 9.9% |
| 41 to 45 | 4.4% | 4.2% | 0.6% | 4.3% | 4.5% |
| 46 to 50 | 2.2% | 3.3% | 1.1% | 5.0% | 3.6% |
| > 50 | 7.9% | 9.2% | 0.0% | 5.3% | 8.1% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-6. Individual Participation in Fisheries, Study Communities, 2002/2003

| | | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
|---|---|---|---|---|---|---|
| Estimated Total Population | | 302.4 | 150.5 | 315.5 | 1,621.4 | 381.9 |
| Fished for Salmon | Number | 171.7 | 80.2 | 183.5 | 1,004.0 | 223.1 |
| | Percentage | 56.8% | 53.3% | 58.1% | 61.9% | 58.4% |
| Fished for Non-salmon in Freshwater | Number | 134.7 | 39.5 | 63.7 | 398.1 | 74.4 |
| | Percentage | 44.5% | 26.2% | 20.2% | 24.6% | 19.5% |
| Fished for Non-salmon in Marine Waters | Number | 67.3 | 27.1 | 84.6 | 669.3 | 155.5 |
| | Percentage | 22.3% | 18.0% | 26.8% | 41.3% | 40.7% |
| Any Fishing Activity | Number | 198.1 | 86.3 | 197.1 | 1,107.8 | 260.3 |
| | Percentage | 65.5% | 57.4% | 62.5% | 68.3% | 68.1% |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey 2003

Table IV-7. Estimated Harvest and Use of Fish, Cooper Landing, 2002/03

| Resource Name | Percentage of Households | | | | | Pounds Harvested | | | Amount Harvested | | | 95% Conf Limit (+/-) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Use | Att | Harv | Recv | Give | Total | Mean HH | Percapita | Total | Mean HH | | Harvest | Percapita |
| Fish | 90.3 | 76.7 | 72.8 | 71.8 | 49.5 | 18,669 | 137.3 | 61.7 | 18,669 lbs | 137.3 | | 16% | 16% |
| Salmon | 85.4 | 68.9 | 66.0 | 56.3 | 45.6 | 13,438 | 98.8 | 44.4 | 2,968 ea. | 21.8 | | 13% | 15% |
| Chum Salmon | 1.0 | 1.0 | 0.0 | 1.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Coho Salmon | 58.3 | 47.6 | 44.7 | 22.3 | 17.5 | 3,687 | 27.1 | 12.2 | 709 ea. | 5.2 | | 29% | 29% |
| Chinook Salmon | 44.7 | 32.0 | 18.4 | 29.1 | 8.7 | 1,269 | 9.3 | 4.2 | 82 ea. | 0.6 | | 42% | 43% |
| Pink Salmon | 2.9 | 2.9 | 2.9 | 0.0 | 0.0 | 16 | 0.1 | 0.1 | 7 ea. | 0.0 | | 64% | 64% |
| Sockeye Salmon | 79.6 | 64.1 | 62.1 | 43.7 | 40.8 | 8,466 | 62.2 | 28.0 | 2,171 ea. | 16.0 | | 12% | 13% |
| Non-Salmon Fish | 78.6 | 62.1 | 56.3 | 58.3 | 23.3 | 5,231 | 38.5 | 17.3 | 5,231 lbs | 38.5 | | 21% | 21% |
| Herring | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | | 0% | 0% |
| Herring Roe | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | | 0% | 0% |
| Herring Sac Roe | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | | 0% | 0% |
| Herring Spawn on Kelp | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | | 0% | 0% |
| Smelt | 12.6 | 1.9 | 1.9 | 10.7 | 2.9 | 172 | 1.3 | 0.6 | 53 gal | 0.4 | | 69% | 69% |
| Eulachon (hooligan, candlefish) | 12.6 | 1.9 | 1.9 | 10.7 | 2.9 | 172 | 1.3 | 0.6 | 53 gal | 0.4 | | 69% | 69% |
| Cod | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 8 | 0.1 | 0.0 | 3 ea. | 0.0 | | 98% | 98% |
| Pacific Cod (gray) | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 8 | 0.1 | 0.0 | 3 ea. | 0.0 | | 98% | 98% |
| Pacific Tom Cod | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Walleye Pollock (whiting) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Flounder | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Starry Flounder | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Greenling | 6.8 | 2.9 | 1.9 | 4.9 | 0.0 | 16 | 0.1 | 0.1 | 4 ea. | 0.0 | | 73% | 73% |
| Lingcod | 6.8 | 2.9 | 1.9 | 4.9 | 0.0 | 16 | 0.1 | 0.1 | 4 ea. | 0.0 | | 73% | 73% |
| Unknown Greenling | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Halibut | 70.9 | 34.0 | 29.1 | 52.4 | 18.4 | 3,182 | 23.4 | 10.5 | 3,182 lbs | 23.4 | | 25% | 26% |
| Rockfish | 8.7 | 4.9 | 4.9 | 3.9 | 0.0 | 267 | 2.0 | 0.9 | 158 ea. | 1.2 | | 82% | 74% |
| Black Rockfish | 3.9 | 2.9 | 2.9 | 1.0 | 0.0 | 220 | 1.6 | 0.7 | 147 ea. | 1.1 | | 88% | 88% |
| Red Rockfish | 6.8 | 3.9 | 3.9 | 2.9 | 0.0 | 48 | 0.3 | 0.2 | 12 ea. | 0.1 | | 49% | 49% |
| Unknown Rockfish | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Sablefish (black cod) | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Shark | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Unknown Shark | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Burbot | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Char | 38.8 | 38.8 | 33.0 | 13.6 | 5.8 | 1,107 | 8.1 | 3.7 | 791 ea. | 5.8 | | 31% | 30% |
| Dolly Varden | 31.1 | 30.1 | 26.2 | 11.7 | 4.9 | 427 | 3.1 | 1.4 | 305 ea. | 2.2 | | 26% | 26% |
| Lake Trout | 19.4 | 17.5 | 15.5 | 4.9 | 1.0 | 680 | 5.0 | 2.2 | 486 ea. | 3.6 | | 42% | 41% |
| Grayling | 7.8 | 9.7 | 6.8 | 1.0 | 0.0 | 38 | 0.3 | 0.1 | 54 ea. | 0.4 | | 46% | 45% |
| Pike | 1.9 | 1.0 | 1.0 | 1.0 | 1.0 | 12 | 0.1 | 0.0 | 4 ea. | 0.0 | | 98% | 98% |
| Unknown Pike | 1.9 | 1.0 | 1.0 | 1.0 | 1.0 | 12 | 0.1 | 0.0 | 4 ea. | 0.0 | | 98% | 98% |
| Trout | 24.3 | 24.3 | 20.4 | 4.9 | 2.9 | 379 | 2.8 | 1.3 | 271 ea. | 2.0 | | 26% | 25% |
| Rainbow Trout | 23.3 | 24.3 | 20.4 | 3.9 | 2.9 | 375 | 2.8 | 1.2 | 268 ea. | 2.0 | | 26% | 25% |
| Steelhead | 2.9 | 1.9 | 1.9 | 1.0 | 0.0 | 7 | 0.1 | 0.0 | 5 ea. | 0.0 | | 77% | 77% |
| Whitefish | 4.9 | 4.9 | 4.9 | 1.0 | 1.0 | 46 | 0.3 | 0.2 | 26 ea. | 0.2 | | 55% | 54% |
| Unknown Whitefish | 4.9 | 4.9 | 4.9 | 1.0 | 1.0 | 46 | 0.3 | 0.2 | 26 ea. | 0.2 | | 55% | 54% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-8. Estimated Harvest and Use of Fish, Hope, 2002/03.

| Resource Name | Percentage of Households | | | | | Pounds Harvested | | | Amount Harvested | | | 95% Conf Limit (+/-) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Use | Att | Harv | Recv | Give | Total | Mean HH | Percapita | Total | | Mean HH | Harvest | Percapita |
| Fish | 83.3 | 68.3 | 66.7 | 58.3 | 28.3 | 9,387 | 126.8 | 62.4 | 9,387 | lbs | 126.8 | 20% | 21% |
| Salmon | 76.7 | 60.0 | 56.7 | 53.3 | 25.0 | 7,023 | 94.9 | 46.7 | 1,628 | ea. | 22.0 | 20% | 20% |
| Chum Salmon | 11.7 | 11.7 | 11.7 | 0.0 | 1.7 | 513 | 6.9 | 3.4 | 95 | ea. | 1.3 | 38% | 39% |
| Coho Salmon | 66.7 | 46.7 | 45.0 | 35.0 | 15.0 | 2,681 | 36.2 | 17.8 | 516 | ea. | 7.0 | 24% | 24% |
| Chinook Salmon | 31.7 | 18.3 | 11.7 | 23.3 | 6.7 | 631 | 8.5 | 4.2 | 41 | ea. | 0.6 | 54% | 55% |
| Pink Salmon | 25.0 | 21.7 | 21.7 | 5.0 | 5.0 | 977 | 13.2 | 6.5 | 407 | ea. | 5.5 | 50% | 51% |
| Sockeye Salmon | 46.7 | 31.7 | 30.0 | 26.7 | 16.7 | 2,222 | 30.0 | 14.8 | 570 | ea. | 7.7 | 22% | 21% |
| Non-Salmon Fish | 58.3 | 41.7 | 40.0 | 36.7 | 13.3 | 2,363 | 31.9 | 15.7 | 2,363 | lbs | 31.9 | 28% | 29% |
| Herring | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | gal | 0.0 | 0% | 0% |
| Herring Roe | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | gal | 0.0 | 0% | 0% |
| Herring Sac Roe | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | gal | 0.0 | 0% | 0% |
| Herring Spawn on Kelp | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | gal | 0.0 | 0% | 0% |
| Smelt | 23.3 | 8.3 | 8.3 | 15.0 | 3.3 | 204 | 2.8 | 1.4 | 63 | gal | 0.9 | 54% | 53% |
| Eulachon (hooligan, candlefish) | 23.3 | 8.3 | 8.3 | 15.0 | 3.3 | 204 | 2.8 | 1.4 | 63 | gal | 0.9 | 54% | 53% |
| Cod | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 | 79 | 1.1 | 0.5 | 25 | ea. | 0.3 | 87% | 88% |
| Pacific Cod (gray) | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 | 79 | 1.1 | 0.5 | 25 | ea. | 0.3 | 87% | 88% |
| Pacific Tom Cod | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Walleye Pollock (whiting) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Flounder | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Starry Flounder | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Greenling | 3.3 | 3.3 | 3.3 | 0.0 | 3.3 | 72 | 1.0 | 0.5 | 18 | ea. | 0.2 | 61% | 62% |
| Lingcod | 3.3 | 3.3 | 3.3 | 0.0 | 3.3 | 72 | 1.0 | 0.5 | 18 | ea. | 0.2 | 61% | 62% |
| Unknown Greenling | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Halibut | 36.7 | 20.0 | 18.3 | 23.3 | 8.3 | 1,585 | 21.4 | 10.5 | 1,585 | lbs | 21.4 | 29% | 31% |
| Rockfish | 8.3 | 8.3 | 8.3 | 0.0 | 1.7 | 58 | 0.8 | 0.4 | 33 | ea. | 0.5 | 44% | 43% |
| Black Rockfish | 6.7 | 6.7 | 6.7 | 0.0 | 1.7 | 44 | 0.6 | 0.3 | 30 | ea. | 0.4 | 48% | 50% |
| Red Rockfish | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 | 10 | 0.1 | 0.1 | 2 | ea. | 0.0 | 87% | 87% |
| Unknown Rockfish | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 | 4 | 0.0 | 0.0 | 1 | ea. | 0.0 | 87% | 87% |
| Sablefish (black cod) | 1.7 | 1.7 | 1.7 | 0.0 | 0.0 | 31 | 0.4 | 0.2 | 10 | ea. | 0.1 | 87% | 88% |
| Shark | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Unknown Shark | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Burbot | 3.3 | 0.0 | 0.0 | 3.3 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Char | 30.0 | 28.3 | 28.3 | 3.3 | 0.0 | 250 | 3.4 | 1.7 | 179 | ea. | 2.4 | 28% | 27% |
| Dolly Varden | 30.0 | 28.3 | 28.3 | 3.3 | 0.0 | 243 | 3.3 | 1.6 | 174 | ea. | 2.4 | 29% | 28% |
| Lake Trout | 5.0 | 3.3 | 3.3 | 1.7 | 0.0 | 7 | 0.1 | 0.0 | 5 | ea. | 0.1 | 68% | 67% |
| Grayling | 3.3 | 3.3 | 3.3 | 0.0 | 0.0 | 16 | 0.2 | 0.1 | 22 | ea. | 0.3 | 64% | 63% |
| Pike | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Unknown Pike | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Trout | 13.3 | 10.0 | 10.0 | 5.0 | 1.7 | 69 | 0.9 | 0.5 | 49 | ea. | 0.7 | 40% | 41% |
| Rainbow Trout | 13.3 | 10.0 | 10.0 | 5.0 | 1.7 | 69 | 0.9 | 0.5 | 49 | ea. | 0.7 | 40% | 41% |
| Steelhead | 1.7 | 0.0 | 0.0 | 1.7 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Whitefish | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |
| Unknown Whitefish | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0% | 0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-9. Estimated Harvest and Use of Fish, Nikolaevsk, 2002/03.

| Resource Name | Percentage of Households | | | | | Pounds Harvested | | | Amount Harvested | | | 95% Conf Limit (+/-) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Use | Att | Harv | Recv | Give | Total | Mean HH | Percapita | Total | | Mean HH | Harvest | Percapita |
| Fish | 96.6 | 80.8 | 75.5 | 63.2 | 39.2 | 23,253 | 298.1 | 73.7 | 23,253 | lbs | 298.1 | 21.3% | 21.1% |
| Salmon | 89.9 | 76.9 | 71.6 | 38.2 | 32.0 | 13,998 | 179.5 | 44.4 | 2,640 | ea. | 33.8 | 25.6% | 23.0% |
| Chum Salmon | 15.0 | 5.8 | 5.8 | 9.2 | 0.0 | 1,024 | 13.1 | 3.2 | 190 | ea. | 2.4 | 95.5% | 94.7% |
| Coho Salmon | 73.5 | 55.1 | 55.1 | 23.7 | 18.9 | 4,906 | 62.9 | 15.5 | 943 | ea. | 12.1 | 24.0% | 23.7% |
| Chinook Salmon | 66.3 | 53.2 | 47.9 | 23.7 | 13.1 | 3,298 | 42.3 | 10.5 | 213 | ea. | 2.7 | 31.7% | 31.4% |
| Pink Salmon | 15.0 | 7.8 | 7.8 | 7.2 | 3.9 | 444 | 5.7 | 1.4 | 185 | ea. | 2.4 | 97.1% | 96.3% |
| Sockeye Salmon | 54.3 | 41.7 | 36.4 | 19.8 | 17.5 | 4,326 | 55.5 | 13.7 | 1,109 | ea. | 14.2 | 26.0% | 24.6% |
| Non-Salmon Fish | 91.3 | 66.3 | 66.3 | 52.6 | 33.4 | 9,255 | 118.7 | 29.3 | 9,255 | lbs | 118.7 | 29.1% | 30.2% |
| Herring | 1.9 | 0.0 | 0.0 | 1.9 | 0.0 | 0 | 0.0 | 0.0 | 0 | gal | 0.0 | 0.0% | 0.0% |
| Herring Roe | 1.9 | 0.0 | 0.0 | 1.9 | 0.0 | 0 | 0.0 | 0.0 | 0 | gal | 0.0 | 0.0% | 0.0% |
| Herring Sac Roe | 1.9 | 0.0 | 0.0 | 1.9 | 0.0 | 0 | 0.0 | 0.0 | 0 | gal | 0.0 | 0.0% | 0.0% |
| Herring Spawn on Kelp | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | gal | 0.0 | 0.0% | 0.0% |
| Smelt | 38.4 | 24.8 | 22.8 | 17.5 | 9.7 | 573 | 7.3 | 1.8 | 176 | gal | 2.3 | 46.5% | 45.9% |
| Eulachon (hooligan, candlefish) | 38.4 | 24.8 | 22.8 | 17.5 | 9.7 | 573 | 7.3 | 1.8 | 176 | gal | 2.3 | 46.5% | 45.9% |
| Cod | 13.6 | 9.7 | 9.7 | 3.9 | 5.8 | 325 | 4.2 | 1.0 | 102 | ea. | 1.3 | 75.9% | 77.8% |
| Pacific Cod (gray) | 13.6 | 9.7 | 9.7 | 3.9 | 5.8 | 325 | 4.2 | 1.0 | 102 | ea. | 1.3 | 75.9% | 77.8% |
| Pacific Tom Cod | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |
| Walleye Pollock (whiting) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |
| Flounder | 1.9 | 1.9 | 1.9 | 0.0 | 0.0 | 18 | 0.2 | 0.1 | 6 | ea. | 0.1 | 117.9% | 119.8% |
| Starry Flounder | 1.9 | 1.9 | 1.9 | 0.0 | 0.0 | 18 | 0.2 | 0.1 | 6 | ea. | 0.1 | 117.9% | 119.8% |
| Greenling | 11.1 | 9.2 | 9.2 | 1.9 | 1.9 | 69 | 0.9 | 0.2 | 19 | ea. | 0.2 | 62.6% | 65.7% |
| Lingcod | 7.8 | 5.8 | 5.8 | 1.9 | 1.9 | 67 | 0.9 | 0.2 | 17 | ea. | 0.2 | 68.0% | 68.0% |
| Unknown Greenling | 3.4 | 3.4 | 3.4 | 0.0 | 0.0 | 3 | 0.0 | 0.0 | 3 | ea. | 0.0 | 158.7% | 163.8% |
| Halibut | 78.3 | 44.0 | 44.0 | 42.9 | 19.8 | 5,221 | 66.9 | 16.5 | 5,221 | lbs | 66.9 | 36.0% | 38.4% |
| Rockfish | 33.9 | 22.3 | 22.3 | 11.7 | 9.7 | 1,913 | 24.5 | 6.1 | 599 | ea. | 7.7 | 45.2% | 41.1% |
| Black Rockfish | 16.4 | 12.5 | 12.5 | 3.9 | 0.0 | 290 | 3.7 | 0.9 | 194 | ea. | 2.5 | 90.4% | 88.9% |
| Red Rockfish | 26.7 | 18.9 | 18.9 | 7.8 | 9.7 | 1,623 | 20.8 | 5.1 | 406 | ea. | 5.2 | 44.1% | 43.0% |
| Unknown Rockfish | 1.9 | 0.0 | 0.0 | 1.9 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |
| Sablefish (black cod) | 19.5 | 7.8 | 7.8 | 11.7 | 3.9 | 437 | 5.6 | 1.4 | 141 | ea. | 1.8 | 71.4% | 71.3% |
| Shark | 3.4 | 0.0 | 0.0 | 3.4 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |
| Unknown Shark | 3.4 | 0.0 | 0.0 | 3.4 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |
| Burbot | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |
| Char | 19.8 | 21.7 | 19.8 | 1.9 | 1.9 | 273 | 3.5 | 0.9 | 195 | ea. | 2.5 | 70.9% | 69.9% |
| Dolly Varden | 12.0 | 12.0 | 12.0 | 1.9 | 1.9 | 178 | 2.3 | 0.6 | 127 | ea. | 1.6 | 103.8% | 102.3% |
| Lake Trout | 9.7 | 9.7 | 7.8 | 1.9 | 0.0 | 96 | 1.2 | 0.3 | 68 | ea. | 0.9 | 66.4% | 64.1% |
| Grayling | 3.9 | 3.9 | 3.9 | 0.0 | 0.0 | 7 | 0.1 | 0.0 | 11 | ea. | 0.1 | 89.6% | 89.2% |
| Pike | 3.9 | 1.9 | 1.9 | 1.9 | 0.0 | 46 | 0.6 | 0.1 | 15 | ea. | 0.2 | 117.9% | 116.3% |
| Unknown Pike | 3.9 | 1.9 | 1.9 | 1.9 | 0.0 | 46 | 0.6 | 0.1 | 15 | ea. | 0.2 | 117.9% | 116.3% |
| Trout | 20.9 | 20.9 | 20.9 | 1.9 | 5.8 | 372 | 4.8 | 1.2 | 265 | ea. | 3.4 | 41.2% | 42.9% |
| Rainbow Trout | 20.9 | 20.9 | 20.9 | 1.9 | 5.8 | 372 | 4.8 | 1.2 | 265 | ea. | 3.4 | 41.2% | 42.9% |
| Steelhead | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |
| Whitefish | 1.9 | 0.0 | 0.0 | 1.9 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |
| Unknown Whitefish | 1.9 | 0.0 | 0.0 | 1.9 | 0.0 | 0 | 0.0 | 0.0 | 0 | ea. | 0.0 | 0.0% | 0.0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-10. Estimated Harvest and Use of Fish, Ninilchik, 2002/03.

| Resource Name | Percentage of Households | | | | | Pounds Harvested | | | Amount Harvested | | 95% Conf Limit (+/-) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Use | Att | Harv | Recv | Give | Total | Mean HH | Percapita | Total | Mean HH | Harvest | Percapita |
| Fish | 96.0 | 75.0 | 73.0 | 76.0 | 58.0 | 132,562 | 229.7 | 81.8 | 132,562 lbs | 229.7 | 27% | 24% |
| Salmon | 92.0 | 72.0 | 69.0 | 58.0 | 46.0 | 75,958 | 131.6 | 46.8 | 16,589 ea. | 28.8 | 31% | 24% |
| Chum Salmon | 7.0 | 6.0 | 6.0 | 1.0 | 1.0 | 3,677 | 6.4 | 2.3 | 681 ea. | 1.2 | 154% | 153% |
| Coho Salmon | 55.0 | 44.0 | 41.0 | 25.0 | 18.0 | 18,062 | 31.3 | 11.1 | 3,474 ea. | 6.0 | 32% | 32% |
| Chinook Salmon | 59.0 | 50.0 | 38.0 | 32.0 | 19.0 | 13,594 | 23.6 | 8.4 | 877 ea. | 1.5 | 34% | 31% |
| Pink Salmon | 20.0 | 12.0 | 12.0 | 10.0 | 6.0 | 7,118 | 12.3 | 4.4 | 2,966 ea. | 5.1 | 111% | 110% |
| Sockeye Salmon | 80.0 | 56.0 | 54.0 | 38.0 | 35.0 | 33,507 | 58.1 | 20.7 | 8,592 ea. | 14.9 | 27% | 24% |
| Non-Salmon Fish | 87.0 | 64.0 | 60.0 | 58.0 | 43.0 | 56,604 | 98.1 | 34.9 | 56,604 lbs | 98.1 | 36% | 32% |
| Herring | 2.0 | 1.0 | 1.0 | 1.0 | 0.0 | 519 | 0.9 | 0.3 | 87 gal | 0.2 | 180% | 175% |
| Herring Roe | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | 0% | 0% |
| Herring Sac Roe | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | 0% | 0% |
| Herring Spawn on Kelp | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | 0% | 0% |
| Smelt | 17.0 | 5.0 | 5.0 | 12.0 | 2.0 | 769 | 1.3 | 0.5 | 237 gal | 0.4 | 97% | 98% |
| Eulachon (hooligan, candlefish) | 17.0 | 5.0 | 5.0 | 12.0 | 2.0 | 769 | 1.3 | 0.5 | 237 gal | 0.4 | 97% | 98% |
| Cod | 11.0 | 10.0 | 9.0 | 3.0 | 2.0 | 2,561 | 4.4 | 1.6 | 854 ea. | 1.5 | 79% | 82% |
| Pacific Cod (gray) | 10.0 | 9.0 | 8.0 | 3.0 | 2.0 | 2,530 | 4.4 | 1.6 | 790 ea. | 1.4 | 84% | 83% |
| Pacific Tom Cod | 3.0 | 4.0 | 3.0 | 0.0 | 0.0 | 32 | 0.1 | 0.0 | 63 ea. | 0.1 | 114% | 115% |
| Walleye Pollock (whiting) | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | 0% | 0% |
| Flounder | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 692 | 1.2 | 0.4 | 231 ea. | 0.4 | 180% | 181% |
| Starry Flounder | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 692 | 1.2 | 0.4 | 231 ea. | 0.4 | 180% | 181% |
| Greenling | 8.0 | 8.0 | 7.0 | 4.0 | 0.0 | 842 | 1.5 | 0.5 | 237 ea. | 0.4 | 113% | 120% |
| Lingcod | 6.0 | 5.0 | 5.0 | 2.0 | 0.0 | 808 | 1.4 | 0.5 | 202 ea. | 0.4 | 130% | 125% |
| Unknown Greenling | 2.0 | 3.0 | 2.0 | 2.0 | 0.0 | 35 | 0.1 | 0.0 | 35 ea. | 0.1 | 153% | 152% |
| Halibut | 84.0 | 56.0 | 53.0 | 50.0 | 42.0 | 46,766 | 81.1 | 28.8 | 46,766 lbs | 81.1 | 37% | 33% |
| Rockfish | 12.0 | 8.0 | 8.0 | 4.0 | 2.0 | 1,944 | 3.4 | 1.2 | 998 ea. | 1.7 | 109% | 94% |
| Black Rockfish | 8.0 | 7.0 | 7.0 | 1.0 | 2.0 | 1,229 | 2.1 | 0.8 | 819 ea. | 1.4 | 129% | 129% |
| Red Rockfish | 6.0 | 3.0 | 3.0 | 3.0 | 1.0 | 715 | 1.2 | 0.4 | 179 ea. | 0.3 | 136% | 130% |
| Unknown Rockfish | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | 0% | 0% |
| Sablefish (black cod) | 2.0 | 1.0 | 1.0 | 1.0 | 0.0 | 89 | 0.2 | 0.1 | 29 ea. | 0.1 | 180% | 182% |
| Shark | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 52 | 0.1 | 0.0 | 6 ea. | 0.0 | 180% | 175% |
| Unknown Shark | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 52 | 0.1 | 0.0 | 6 ea. | 0.0 | 180% | 175% |
| Burbot | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | 0% | 0% |
| Char | 16.0 | 19.0 | 15.0 | 3.0 | 5.0 | 1,341 | 2.3 | 0.8 | 958 ea. | 1.7 | 51% | 52% |
| Dolly Varden | 13.0 | 15.0 | 12.0 | 2.0 | 4.0 | 897 | 1.6 | 0.6 | 640 ea. | 1.1 | 56% | 57% |
| Lake Trout | 7.0 | 9.0 | 6.0 | 2.0 | 3.0 | 444 | 0.8 | 0.3 | 317 ea. | 0.6 | 94% | 95% |
| Grayling | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | 0% | 0% |
| Pike | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 17 | 0.0 | 0.0 | 6 ea. | 0.0 | 180% | 181% |
| Unknown Pike | 1.0 | 1.0 | 1.0 | 0.0 | 0.0 | 17 | 0.0 | 0.0 | 6 ea. | 0.0 | 180% | 181% |
| Trout | 9.0 | 8.0 | 6.0 | 4.0 | 2.0 | 1,010 | 1.8 | 0.6 | 721 ea. | 1.3 | 88% | 88% |
| Rainbow Trout | 8.0 | 8.0 | 6.0 | 3.0 | 2.0 | 1,010 | 1.8 | 0.6 | 721 ea. | 1.3 | 88% | 88% |
| Steelhead | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | 0% | 0% |
| Whitefish | 2.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | 0% | 0% |
| Unknown Whitefish | 2.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | 0% | 0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-11. Estimated Harvest and Use of Fish, Seldovia, 2002/03.

| Resource Name | Percentage of Households | | | | | Pounds Harvested | | | Amount Harvested | | | 95% Conf Limit (+/-) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Use | Att | Harv | Recv | Give | Total | Mean HH | Percapita | Total | Mean HH | | Harvest | Percapita |
| Fish | 100.0 | 86.0 | 84.0 | 92.0 | 70.0 | 61,601 | 364.5 | 161.3 | 61,601 lbs | 364.5 | | 52% | 51% |
| Salmon | 96.0 | 72.0 | 66.0 | 74.0 | 54.0 | 34,727 | 205.5 | 90.9 | 5,097 ea. | 30.2 | | 65% | 66% |
| Chum Salmon | 20.0 | 14.0 | 14.0 | 12.0 | 8.0 | 3,450 | 20.4 | 9.0 | 639 ea. | 3.8 | | 100% | 98% |
| Coho Salmon | 58.0 | 38.0 | 38.0 | 34.0 | 28.0 | 5,308 | 31.4 | 13.9 | 1,021 ea. | 6.0 | | 52% | 52% |
| Chinook Salmon | 90.0 | 60.0 | 50.0 | 62.0 | 42.0 | 18,860 | 111.6 | 49.4 | 1,217 ea. | 7.2 | | 73% | 73% |
| Pink Salmon | 28.0 | 20.0 | 20.0 | 10.0 | 12.0 | 2,482 | 14.7 | 6.5 | 1,034 ea. | 6.1 | | 87% | 84% |
| Sockeye Salmon | 58.0 | 26.0 | 24.0 | 40.0 | 24.0 | 4,627 | 27.4 | 12.1 | 1,186 ea. | 7.0 | | 68% | 67% |
| Non-Salmon Fish | 96.0 | 74.0 | 72.0 | 80.0 | 46.0 | 26,873 | 159.0 | 70.4 | 26,873 lbs | 159.0 | | 58% | 56% |
| Herring | 14.0 | 8.0 | 8.0 | 6.0 | 4.0 | 2,282 | 13.5 | 6.0 | 380 gal | 2.3 | | 106% | 105% |
| Herring Roe | 12.0 | 4.0 | 4.0 | 10.0 | 4.0 | 95 | 0.6 | 0.2 | 14 gal | 0.1 | | 118% | 118% |
| Herring Sac Roe | 8.0 | 4.0 | 4.0 | 6.0 | 2.0 | 71 | 0.4 | 0.2 | 10 gal | 0.1 | | 125% | 126% |
| Herring Spawn on Kelp | 8.0 | 2.0 | 2.0 | 6.0 | 2.0 | 24 | 0.1 | 0.1 | 3 gal | 0.0 | | 169% | 166% |
| Smelt | 12.0 | 0.0 | 0.0 | 12.0 | 6.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | | 0% | 0% |
| Eulachon (hooligan, candlefish) | 12.0 | 0.0 | 0.0 | 12.0 | 6.0 | 0 | 0.0 | 0.0 | 0 gal | 0.0 | | 0% | 0% |
| Cod | 34.0 | 16.0 | 16.0 | 22.0 | 8.0 | 4,824 | 28.5 | 12.6 | 1,507 ea. | 8.9 | | 134% | 131% |
| Pacific Cod (gray) | 34.0 | 16.0 | 16.0 | 22.0 | 8.0 | 4,824 | 28.5 | 12.6 | 1,507 ea. | 8.9 | | 134% | 131% |
| Pacific Tom Cod | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Walleye Pollock (whiting) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Flounder | 4.0 | 4.0 | 4.0 | 0.0 | 2.0 | 132 | 0.8 | 0.3 | 44 ea. | 0.3 | | 156% | 157% |
| Starry Flounder | 4.0 | 4.0 | 4.0 | 0.0 | 2.0 | 132 | 0.8 | 0.3 | 44 ea. | 0.3 | | 156% | 157% |
| Greenling | 28.0 | 24.0 | 24.0 | 6.0 | 6.0 | 534 | 3.2 | 1.4 | 270 ea. | 1.6 | | 74% | 69% |
| Lingcod | 20.0 | 16.0 | 16.0 | 6.0 | 4.0 | 352 | 2.1 | 0.9 | 88 ea. | 0.5 | | 85% | 87% |
| Unknown Greenling | 14.0 | 14.0 | 14.0 | 0.0 | 2.0 | 183 | 1.1 | 0.5 | 183 ea. | 1.1 | | 97% | 94% |
| Halibut | 90.0 | 58.0 | 56.0 | 68.0 | 44.0 | 16,153 | 95.6 | 42.3 | 16,153 lbs | 95.6 | | 42% | 41% |
| Rockfish | 32.0 | 28.0 | 26.0 | 16.0 | 10.0 | 1,452 | 8.6 | 3.8 | 838 ea. | 5.0 | | 74% | 72% |
| Black Rockfish | 24.0 | 22.0 | 20.0 | 10.0 | 8.0 | 1,141 | 6.8 | 3.0 | 761 ea. | 4.5 | | 75% | 75% |
| Red Rockfish | 20.0 | 16.0 | 16.0 | 10.0 | 4.0 | 311 | 1.8 | 0.8 | 78 ea. | 0.5 | | 92% | 89% |
| Unknown Rockfish | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Sablefish (black cod) | 18.0 | 6.0 | 6.0 | 12.0 | 4.0 | 231 | 1.4 | 0.6 | 74 ea. | 0.4 | | 110% | 113% |
| Shark | 10.0 | 2.0 | 2.0 | 8.0 | 2.0 | 61 | 0.4 | 0.2 | 7 ea. | 0.0 | | 169% | 165% |
| Unknown Shark | 10.0 | 2.0 | 2.0 | 8.0 | 2.0 | 61 | 0.4 | 0.2 | 7 ea. | 0.0 | | 169% | 165% |
| Burbot | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Char | 26.0 | 28.0 | 26.0 | 4.0 | 2.0 | 606 | 3.6 | 1.6 | 433 ea. | 2.6 | | 56% | 55% |
| Dolly Varden | 26.0 | 28.0 | 26.0 | 4.0 | 2.0 | 606 | 3.6 | 1.6 | 433 ea. | 2.6 | | 56% | 55% |
| Lake Trout | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Grayling | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 | 237 | 1.4 | 0.6 | 338 ea. | 2.0 | | 169% | 170% |
| Pike | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 | 203 | 1.2 | 0.5 | 68 ea. | 0.4 | | 169% | 170% |
| Unknown Pike | 2.0 | 2.0 | 2.0 | 0.0 | 0.0 | 203 | 1.2 | 0.5 | 68 ea. | 0.4 | | 169% | 170% |
| Trout | 10.0 | 10.0 | 8.0 | 2.0 | 2.0 | 66 | 0.4 | 0.2 | 47 ea. | 0.3 | | 86% | 86% |
| Rainbow Trout | 8.0 | 8.0 | 6.0 | 2.0 | 0.0 | 43 | 0.3 | 0.1 | 30 ea. | 0.2 | | 99% | 102% |
| Steelhead | 2.0 | 2.0 | 2.0 | 0.0 | 2.0 | 24 | 0.1 | 0.1 | 17 ea. | 0.1 | | 169% | 165% |
| Whitefish | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |
| Unknown Whitefish | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 ea. | 0.0 | | 0% | 0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-12. Top 10 Fish Resources in the Study Communities in 2002/2003

| | Cooper Landing | | | Hope | | | Nikolaevsk | | | Ninilchik | | | Seldovia | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Resource | Pounds per Person | Percent of Total Fish Harvest | Resource | Pounds per Person | Percent of Total Fish Harvest | Resource | Pounds per Person | Percent of Total Fish Harvest | Resource | Pounds per Person | Percent of Total Fish Harvest | Resource | Pounds per Person | Percent of Total Fish Harvest |
| 1 | Sockeye Salmon | 28.0 | 45.4% | Coho Salmon | 17.8 | 28.5% | Halibut | 16.5 | 22.4% | Halibut | 28.8 | 35.2% | Chinook Salmon | 49.4 | 30.6% |
| 2 | Coho Salmon | 12.2 | 19.8% | Sockeye Salmon | 14.8 | 23.7% | Coho Salmon | 15.5 | 21.0% | Sockeye Salmon | 20.7 | 25.3% | Halibut | 42.3 | 26.2% |
| 3 | Halibut | 10.5 | 17.0% | Halibut | 10.5 | 16.8% | Sockeye Salmon | 13.7 | 18.6% | Coho Salmon | 11.1 | 13.6% | Coho Salmon | 13.9 | 8.6% |
| 4 | Chinook Salmon | 4.2 | 6.8% | Pink Salmon | 6.5 | 10.4% | Chinook Salmon | 10.5 | 14.2% | Chinook Salmon | 8.4 | 10.3% | Pacific Cod | 12.6 | 7.8% |
| 5 | Lake Trout | 2.2 | 3.6% | Chinook Salmon | 4.2 | 6.7% | Red Rockfish | 5.1 | 6.9% | Pink Salmon | 4.4 | 5.4% | Sockeye Salmon | 12.1 | 7.5% |
| 6 | Dolly Varden | 1.4 | 2.3% | Chum Salmon | 3.4 | 5.4% | Chum Salmon | 3.2 | 4.3% | Chum Salmon | 2.3 | 2.8% | Chum Salmon | 9.0 | 5.6% |
| 7 | Rainbow Trout | 1.2 | 1.9% | Dolly Varden | 1.6 | 2.6% | Eulachon | 1.8 | 2.4% | Pacific Cod | 1.6 | 2.0% | Pink Salmon | 6.5 | 4.0% |
| 8 | Black Rockfish | 0.7 | 1.1% | Eulachon | 1.4 | 2.2% | Pink Salmon | 1.4 | 1.9% | Black Rockfish | 0.8 | 1.0% | Herring | 6.0 | 3.7% |
| 9 | Eulachon | 0.6 | 1.0% | | | 0.0% | Sablefish | 1.4 | 1.9% | Rainbow Trout | 0.6 | 0.7% | Black Rockfish | 3.0 | 1.9% |
| 10 | | | 0.0% | | | 0.0% | Rainbow Trout | 1.2 | 1.6% | Dolly Varden | 0.6 | 0.7% | Dolly Varden | 1.6 | 1.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-13. Community Harvests and Per Capita Harvests of Fish by Percentile, 2002/03

| | Percentage of Community Fish Harvest | | | | Per Capita Harvest of Fish (lbs) | | | |
|---|---|---|---|---|---|---|---|---|
| Community | Lowest Quarter | Second Quarter | Third Quarter | Top Quarter | Lowest Quarter | Second Quarter | Third Quarter | Top Quarter |
| Hope | 0.0% | 1.8% | 16.4% | 81.8% | 0.0 | 6.4 | 32.0 | 172.8 |
| Cooper Landing | 0.0% | 5.9% | 22.4% | 71.7% | 0.0 | 14.5 | 57.7 | 153.6 |
| Nikolaevsk | 0.4% | 11.1% | 23.8% | 64.7% | 1.2 | 34.6 | 79.2 | 160.2 |
| Ninilchik | 0.0% | 8.0% | 23.8% | 68.3% | 0.0 | 25.5 | 75.8 | 182.3 |
| Seldovia | 0.2% | 4.4% | 12.8% | 82.6% | 2.1 | 21.7 | 89.6 | 501.7 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey, 2003

Table IV-14. Fish Harvests by Alaska Native and Old Believer Subpopulations

| | Alaska Native/Old Believer Households* | | | Other Households | | | | |
|---|---|---|---|---|---|---|---|---|
| | Estimated Number of | | Per Capita | Estimated Number of | | Per Capita | | |
| | Households | People | Harvest (lbs) | Households | People | Harvest (lbs) | F | Sig. |
| Nikolaevsk | 44 | 211 | 92.4 | 34 | 105 | 36.1 | 3.079 | 0.087 |
| Ninilchik | 133 | 392 | 98.4 | 444 | 1229 | 76.4 | 0.092 | 0.763 |
| Seldovia | 51 | 125 | 168.6 | 118 | 257 | 157.7 | 0.047 | 0.830 |

* In Nikolaevsk, the comparison is between Old Believer and other households. In Ninilchik and Seldovia, the contrast is between Ninilchik and Seldovia households.

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-15. Lengths of Residency in the Study Communities and Levels of Fish Harvests

| Community | Per Capita Harvests of Fish, lbs. | | | F | Sig. |
|---|---|---|---|---|---|
| | 1 to 10 Years | 11 to 20 years | More than 20 Years | | |
| Cooper Landing | 74.8 | 28.2 | 69.1 | 1.535 | 0.221 |
| Hope | 58.8 | 46.9 | 78.4 | 0.491 | 0.615 |
| Nikolaevsk (random) | 47.3 | 30.6 | 0.0 | 0.670 | 0.533 |
| Nikolaevsk (Old Believers) | 38.4 | 111.2 | 94.4 | 0.574 | 0.570 |
| Ninilchik | 87.4 | 74.3 | 81.3 | 1.308 | 0.275 |
| Seldovia | 60.4 | 96.1 | 256.9 | 1.862 | 0.167 |

Source: Alaska Department of Fish and Game Division of Subsistence Household Survey 2003

Table IV-16. Estimated Amounts of Fish Harvested, Received, Given Away, and Used, Cooper Landing, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 18,669 | 137.3 | 61.7 | 6,626 | 48.7 | 21.9 | 4,425 | 32.5 | 14.6 | 20,870 | 153.5 | 69.0 |
| Salmon | ea. | 2,968 | 21.8 | 9.8 | 815 | 6.0 | 2.7 | 746 | 5.5 | 2.5 | 3,037 | 22.3 | 10.0 |
| Chum Salmon | ea. | 0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 |
| Coho Salmon | ea. | 709 | 5.2 | 2.3 | 185 | 1.4 | 0.6 | 151 | 1.1 | 0.5 | 743 | 5.5 | 2.5 |
| Chinook Salmon | ea. | 82 | 0.6 | 0.3 | 48 | 0.4 | 0.2 | 26 | 0.2 | 0.1 | 104 | 0.8 | 0.3 |
| Pink Salmon | ea. | 7 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 7 | 0.0 | 0.0 |
| Sockeye Salmon | ea. | 2,171 | 16.0 | 7.2 | 580 | 4.3 | 1.9 | 569 | 4.2 | 1.9 | 2,182 | 16.0 | 7.2 |
| Non- Salmon Fish | lbs. | 5,231 | 38.5 | 17.3 | 2,647 | 19.5 | 8.8 | 1,016 | 7.5 | 3.4 | 6,863 | 50.5 | 22.7 |
| Herring Sac Roe | gal. | 0 | 0.0 | 0.0 | 20 | 0.1 | 0.1 | 0 | 0.0 | 0.0 | 20 | 0.1 | 0.1 |
| Eulachon (hooligan, candlefish) | gal. | 53 | 0.4 | 0.2 | 36 | 0.3 | 0.1 | 42 | 0.3 | 0.1 | 47 | 0.3 | 0.2 |
| Pacific Cod (gray) | ea. | 3 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 3 | 0.0 | 0.0 |
| Lingcod | ea. | 4 | 0.0 | 0.0 | 49 | 0.4 | 0.2 | 0 | 0.0 | 0.0 | 53 | 0.4 | 0.2 |
| Halibut | lbs. | 3,182 | 23.4 | 10.5 | 1,851 | 13.6 | 6.1 | 763 | 5.6 | 2.5 | 4,270 | 31.4 | 14.1 |
| Black Rockfish | ea. | 147 | 1.1 | 0.5 | 7 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 153 | 1.1 | 0.5 |
| Red Rockfish | ea. | 12 | 0.1 | 0.0 | 8 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 20 | 0.1 | 0.1 |
| Sablefish (black cod) | ea. | 0 | 0.0 | 0.0 | 13 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 13 | 0.1 | 0.0 |
| Dolly Varden | ea. | 305 | 2.2 | 1.0 | 92 | 0.7 | 0.3 | 38 | 0.3 | 0.1 | 359 | 2.6 | 1.2 |
| Lake Trout | ea. | 486 | 3.6 | 1.6 | 45 | 0.3 | 0.1 | 3 | 0.0 | 0.0 | 528 | 3.9 | 1.7 |
| Grayling | ea. | 54 | 0.4 | 0.2 | 3 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 57 | 0.4 | 0.2 |
| Unknown Pike | ea. | 4 | 0.0 | 0.0 | 5 | 0.0 | 0.0 | 5 | 0.0 | 0.0 | 4 | 0.0 | 0.0 |
| Rainbow Trout | ea. | 268 | 2.0 | 0.9 | 16 | 0.1 | 0.1 | 24 | 0.2 | 0.1 | 260 | 1.9 | 0.9 |
| Steelhead | ea. | 5 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 7 | 0.0 | 0.0 |
| Unknown Whitefish | ea. | 26 | 0.2 | 0.1 | 16 | 0.1 | 0.1 | 5 | 0.0 | 0.0 | 37 | 0.3 | 0.1 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-17. Estimated Amounts of Fish Harvested, Received, Given Away, and Used, Hope, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 9,387 | 126.8 | 62.4 | 2,277 | 30.8 | 15.1 | 1,714 | 23.2 | 11.4 | 9,950 | 134.5 | 66.1 |
| Salmon | ea. | 1,628 | 22.0 | 10.8 | 300 | 4.1 | 2.0 | 290 | 3.9 | 1.9 | 1,638 | 22.1 | 10.9 |
| Chum Salmon | ea. | 95 | 1.3 | 0.6 | 0 | 0.0 | 0.0 | 25 | 0.3 | 0.2 | 70 | 1.0 | 0.5 |
| Coho Salmon | ea. | 516 | 7.0 | 3.4 | 115 | 1.6 | 0.8 | 100 | 1.4 | 0.7 | 530 | 7.2 | 3.5 |
| Chinook Salmon | ea. | 41 | 0.6 | 0.3 | 46 | 0.6 | 0.3 | 22 | 0.3 | 0.1 | 64 | 0.9 | 0.4 |
| Pink Salmon | ea. | 407 | 5.5 | 2.7 | 5 | 0.1 | 0.0 | 59 | 0.8 | 0.4 | 353 | 4.8 | 2.3 |
| Sockeye Salmon | ea. | 570 | 7.7 | 3.8 | 134 | 1.8 | 0.9 | 84 | 1.1 | 0.6 | 620 | 8.4 | 4.1 |
| Non- Salmon Fish | lbs. | 2,363 | 31.9 | 15.7 | 437 | 5.9 | 2.9 | 248 | 3.4 | 1.6 | 2,552 | 34.5 | 17.0 |
| Eulachon (hooligan, candlefish) | gal. | 63 | 0.9 | 0.4 | 31 | 0.4 | 0.2 | 7 | 0.1 | 0.0 | 86 | 1.2 | 0.6 |
| Pacific Cod (gray) | ea. | 25 | 0.3 | 0.2 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 25 | 0.3 | 0.2 |
| Lingcod | ea. | 18 | 0.2 | 0.1 | 0 | 0.0 | 0.0 | 6 | 0.1 | 0.0 | 12 | 0.2 | 0.1 |
| Halibut | lbs. | 1,585 | 21.4 | 10.5 | 278 | 3.8 | 1.8 | 191 | 2.6 | 1.3 | 1,671 | 22.6 | 11.1 |
| Black Rockfish | ea. | 30 | 0.4 | 0.2 | 0 | 0.0 | 0.0 | 4 | 0.1 | 0.0 | 26 | 0.4 | 0.2 |
| Red Rockfish | ea. | 2 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 2 | 0.0 | 0.0 |
| Unknown Rockfish | ea. | 1 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 |
| Sablefish (black cod) | ea. | 10 | 0.1 | 0.1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 10 | 0.1 | 0.1 |
| Burbot | ea. | 0 | 0.0 | 0.0 | 4 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 4 | 0.1 | 0.0 |
| Dolly Varden | ea. | 174 | 2.4 | 1.2 | 9 | 0.1 | 0.1 | 0 | 0.0 | 0.0 | 183 | 2.5 | 1.2 |
| Lake Trout | ea. | 5 | 0.1 | 0.0 | 5 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 10 | 0.1 | 0.1 |
| Grayling | ea. | 22 | 0.3 | 0.1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 22 | 0.3 | 0.1 |
| Rainbow Trout | ea. | 49 | 0.7 | 0.3 | 19 | 0.3 | 0.1 | 4 | 0.1 | 0.0 | 64 | 0.9 | 0.4 |
| Steelhead | ea. | 0 | 0.0 | 0.0 | 5 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 5 | 0.1 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-18. Estimated Amounts of Fish Harvested, Received, Given Away, and Used, Nikolaevsk, 2002/2003

| | | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resource | Units | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 23,253 | 298.1 | 73.7 | 5,118 | 65.6 | 16.2 | 4,258 | 54.6 | 13.5 | 24,113 | 309.1 | 76.4 |
| Salmon | ea. | 2,640 | 33.8 | 8.4 | 535 | 6.9 | 1.7 | 415 | 5.3 | 1.3 | 2,761 | 35.4 | 8.7 |
| Chum Salmon | ea. | 190 | 2.4 | 0.6 | 161 | 2.1 | 0.5 | 0 | 0.0 | 0.0 | 350 | 4.5 | 1.1 |
| Coho Salmon | ea. | 943 | 12.1 | 3.0 | 187 | 2.4 | 0.6 | 236 | 3.0 | 0.7 | 894 | 11.5 | 2.8 |
| Chinook Salmon | ea. | 213 | 2.7 | 0.7 | 71 | 0.9 | 0.2 | 31 | 0.4 | 0.1 | 252 | 3.2 | 0.8 |
| Pink Salmon | ea. | 185 | 2.4 | 0.6 | 28 | 0.4 | 0.1 | 14 | 0.2 | 0.0 | 199 | 2.6 | 0.6 |
| Sockeye Salmon | ea. | 1,109 | 14.2 | 3.5 | 88 | 1.1 | 0.3 | 134 | 1.7 | 0.4 | 1,064 | 13.6 | 3.4 |
| Non- Salmon Fish | lbs. | 9,255 | 118.7 | 29.3 | 1,765 | 22.6 | 5.6 | 1,989 | 25.5 | 6.3 | 9,031 | 115.8 | 28.6 |
| Herring | gal. | 0 | 0.0 | 0.0 | 8 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 8 | 0.1 | 0.0 |
| Herring Sac Roe | gal. | 0 | 0.0 | 0.0 | 3 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 3 | 0.0 | 0.0 |
| Eulachon (hooligan, candlefish) | gal. | 176 | 2.3 | 0.6 | 55 | 0.7 | 0.2 | 32 | 0.4 | 0.1 | 199 | 2.6 | 0.6 |
| Pacific Cod (gray) | ea. | 102 | 1.3 | 0.3 | 8 | 0.1 | 0.0 | 44 | 0.6 | 0.1 | 65 | 0.8 | 0.2 |
| Starry Flounder | ea. | 6 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 6 | 0.1 | 0.0 |
| Lingcod | ea. | 17 | 0.2 | 0.1 | 3 | 0.0 | 0.0 | 2 | 0.0 | 0.0 | 18 | 0.2 | 0.1 |
| Unknown Greenling | ea. | 3 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 3 | 0.0 | 0.0 |
| Halibut | lbs. | 5,221 | 66.9 | 16.5 | 1,069 | 13.7 | 3.4 | 1,345 | 17.2 | 4.3 | 4,945 | 63.4 | 15.7 |
| Black Rockfish | ea. | 194 | 2.5 | 0.6 | 12 | 0.2 | 0.0 | 0 | 0.0 | 0.0 | 206 | 2.6 | 0.7 |
| Red Rockfish | ea. | 406 | 5.2 | 1.3 | 17 | 0.2 | 0.1 | 46 | 0.6 | 0.1 | 377 | 4.8 | 1.2 |
| Unknown Rockfish | ea. | 0 | 0.0 | 0.0 | 5 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 5 | 0.1 | 0.0 |
| Sablefish (black cod) | ea. | 141 | 1.8 | 0.4 | 24 | 0.3 | 0.1 | 39 | 0.5 | 0.1 | 126 | 1.6 | 0.4 |
| Unknown Shark | ea. | 0 | 0.0 | 0.0 | 3 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 3 | 0.0 | 0.0 |
| Dolly Varden | ea. | 127 | 1.6 | 0.4 | 30 | 0.4 | 0.1 | 15 | 0.2 | 0.0 | 142 | 1.8 | 0.5 |
| Lake Trout | ea. | 68 | 0.9 | 0.2 | 8 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 76 | 1.0 | 0.2 |
| Grayling | ea. | 11 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 11 | 0.1 | 0.0 |
| Unknown Pike | ea. | 15 | 0.2 | 0.0 | 30 | 0.4 | 0.1 | 0 | 0.0 | 0.0 | 46 | 0.6 | 0.1 |
| Rainbow Trout | ea. | 265 | 3.4 | 0.8 | 15 | 0.2 | 0.0 | 49 | 0.6 | 0.2 | 232 | 3.0 | 0.7 |
| Steelhead | ea. | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Unknown Whitefish | ea. | 0 | 0.0 | 0.0 | 30 | 0.4 | 0.1 | 0 | 0.0 | 0.0 | 30 | 0.4 | 0.1 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-19. Estimated Amounts of Fish Harvested, Received, Given Away, and Used, Ninilchik, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 132,562 | 229.7 | 81.8 | 39,235 | 68.0 | 24.2 | 37,204 | 64.5 | 22.9 | 134,592 | 233.3 | 83.0 |
| Salmon | ea. | 16,589 | 28.8 | 10.2 | 4,896 | 8.5 | 3.0 | 5,499 | 9.5 | 3.4 | 15,986 | 27.7 | 9.9 |
| Chum Salmon | ea. | 681 | 1.2 | 0.4 | 6 | 0.0 | 0.0 | 12 | 0.0 | 0.0 | 675 | 1.2 | 0.4 |
| Coho Salmon | ea. | 3,474 | 6.0 | 2.1 | 1,050 | 1.8 | 0.6 | 1,160 | 2.0 | 0.7 | 3,364 | 5.8 | 2.1 |
| Chinook Salmon | ea. | 877 | 1.5 | 0.5 | 539 | 0.9 | 0.3 | 208 | 0.4 | 0.1 | 1,209 | 2.1 | 0.7 |
| Pink Salmon | ea. | 2,966 | 5.1 | 1.8 | 819 | 1.4 | 0.5 | 2,141 | 3.7 | 1.3 | 1,644 | 2.9 | 1.0 |
| Sockeye Salmon | ea. | 8,592 | 14.9 | 5.3 | 2,481 | 4.3 | 1.5 | 1,979 | 3.4 | 1.2 | 9,094 | 15.8 | 5.6 |
| Non- Salmon Fish | lbs. | 56,604 | 98.1 | 34.9 | 13,738 | 23.8 | 8.5 | 15,035 | 26.1 | 9.3 | 55,307 | 95.9 | 34.1 |
| Herring | gal. | 87 | 0.2 | 0.1 | 6 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 92 | 0.2 | 0.1 |
| Herring Sac Roe | gal. | 0 | 0.0 | 0.0 | 12 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 12 | 0.0 | 0.0 |
| Eulachon (hooligan, candlefish) | gal. | 237 | 0.4 | 0.1 | 398 | 0.7 | 0.2 | 87 | 0.2 | 0.1 | 548 | 1.0 | 0.3 |
| Pacific Cod (gray) | ea. | 790 | 1.4 | 0.5 | 392 | 0.7 | 0.2 | 17 | 0.0 | 0.0 | 1,166 | 2.0 | 0.7 |
| Pacific Tom Cod | ea. | 63 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 63 | 0.1 | 0.0 |
| Walleye Pollock (whiting) | ea. | 0 | 0.0 | 0.0 | 6 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 6 | 0.0 | 0.0 |
| Starry Flounder | ea. | 231 | 0.4 | 0.1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 231 | 0.4 | 0.1 |
| Lingcod | ea. | 202 | 0.4 | 0.1 | 17 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 219 | 0.4 | 0.1 |
| Unknown Greenling | ea. | 35 | 0.1 | 0.0 | 29 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 63 | 0.1 | 0.0 |
| Halibut | lbs. | 46,766 | 81.1 | 28.8 | 9,907 | 17.2 | 6.1 | 13,588 | 23.6 | 8.4 | 43,085 | 74.7 | 26.6 |
| Black Rockfish | ea. | 819 | 1.4 | 0.5 | 6 | 0.0 | 0.0 | 369 | 0.6 | 0.2 | 456 | 0.8 | 0.3 |
| Red Rockfish | ea. | 179 | 0.3 | 0.1 | 52 | 0.1 | 0.0 | 6 | 0.0 | 0.0 | 225 | 0.4 | 0.1 |
| Sablefish (black cod) | ea. | 29 | 0.1 | 0.0 | 58 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 87 | 0.2 | 0.1 |
| Unknown Shark | ea. | 6 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 6 | 0.0 | 0.0 |
| Dolly Varden | ea. | 640 | 1.1 | 0.4 | 202 | 0.4 | 0.1 | 87 | 0.2 | 0.1 | 756 | 1.3 | 0.5 |
| Lake Trout | ea. | 317 | 0.6 | 0.2 | 75 | 0.1 | 0.0 | 46 | 0.1 | 0.0 | 346 | 0.6 | 0.2 |
| Unknown Pike | ea. | 6 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 6 | 0.0 | 0.0 |
| Rainbow Trout | ea. | 721 | 1.3 | 0.4 | 156 | 0.3 | 0.1 | 248 | 0.4 | 0.2 | 629 | 1.1 | 0.4 |
| Steelhead | ea. | 0 | 0.0 | 0.0 | 6 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 6 | 0.0 | 0.0 |
| Unknown Whitefish | ea. | 0 | 0.0 | 0.0 | 29 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 29 | 0.1 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-20. Estimated Amounts of Fish Harvested, Received, Given Away, and Used, Seldovia, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 61,601 | 364.5 | 161.3 | 18,137 | 107.3 | 47.5 | 21,977 | 130.0 | 57.5 | 57,761 | 341.8 | 151.2 |
| Salmon | ea. | 5,097 | 30.2 | 13.3 | 1,759 | 10.4 | 4.6 | 2,162 | 12.8 | 5.7 | 4,695 | 27.8 | 12.3 |
| Chum Salmon | ea. | 639 | 3.8 | 1.7 | 169 | 1.0 | 0.4 | 223 | 1.3 | 0.6 | 585 | 3.5 | 1.5 |
| Coho Salmon | ea. | 1,021 | 6.0 | 2.7 | 450 | 2.7 | 1.2 | 429 | 2.5 | 1.1 | 1,041 | 6.2 | 2.7 |
| Chinook Salmon | ea. | 1,217 | 7.2 | 3.2 | 360 | 2.1 | 0.9 | 373 | 2.2 | 1.0 | 1,203 | 7.1 | 3.2 |
| Pink Salmon | ea. | 1,034 | 6.1 | 2.7 | 203 | 1.2 | 0.5 | 581 | 3.4 | 1.5 | 656 | 3.9 | 1.7 |
| Sockeye Salmon | ea. | 1,186 | 7.0 | 3.1 | 578 | 3.4 | 1.5 | 554 | 3.3 | 1.5 | 1,210 | 7.2 | 3.2 |
| Non- Salmon Fish | lbs. | 26,873 | 159.0 | 70.4 | 6,566 | 38.9 | 17.2 | 9,194 | 54.4 | 24.1 | 24,246 | 143.5 | 63.5 |
| Herring | gal. | 380 | 2.3 | 1.0 | 30 | 0.2 | 0.1 | 142 | 0.8 | 0.4 | 269 | 1.6 | 0.7 |
| Herring Sac Roe | gal. | 10 | 0.1 | 0.0 | 41 | 0.2 | 0.1 | 17 | 0.1 | 0.0 | 34 | 0.2 | 0.1 |
| Herring Spawn on Kelp | gal. | 3 | 0.0 | 0.0 | 18 | 0.1 | 0.0 | 3 | 0.0 | 0.0 | 18 | 0.1 | 0.0 |
| Eulachon (hooligan, candlefish) | gal. | 0 | 0.0 | 0.0 | 139 | 0.8 | 0.4 | 9 | 0.1 | 0.0 | 129 | 0.8 | 0.3 |
| Pacific Cod (gray) | ea. | 1,507 | 8.9 | 3.9 | 203 | 1.2 | 0.5 | 730 | 4.3 | 1.9 | 980 | 5.8 | 2.6 |
| Starry Flounder | ea. | 44 | 0.3 | 0.1 | 0 | 0.0 | 0.0 | 2 | 0.0 | 0.0 | 42 | 0.3 | 0.1 |
| Lingcod | ea. | 88 | 0.5 | 0.2 | 20 | 0.1 | 0.1 | 8 | 0.1 | 0.0 | 100 | 0.6 | 0.3 |
| Unknown Greenling | ea. | 183 | 1.1 | 0.5 | 0 | 0.0 | 0.0 | 17 | 0.1 | 0.0 | 166 | 1.0 | 0.4 |
| Halibut | lbs. | 16,153 | 95.6 | 42.3 | 4,171 | 24.7 | 10.9 | 5,327 | 31.5 | 13.9 | 14,997 | 88.7 | 39.3 |
| Black Rockfish | ea. | 761 | 4.5 | 2.0 | 68 | 0.4 | 0.2 | 176 | 1.0 | 0.5 | 652 | 3.9 | 1.7 |
| Red Rockfish | ea. | 78 | 0.5 | 0.2 | 44 | 0.3 | 0.1 | 14 | 0.1 | 0.0 | 108 | 0.6 | 0.3 |
| Sablefish (black cod) | ea. | 74 | 0.4 | 0.2 | 57 | 0.3 | 0.2 | 27 | 0.2 | 0.1 | 105 | 0.6 | 0.3 |
| Unknown Shark | ea. | 7 | 0.0 | 0.0 | 14 | 0.1 | 0.0 | 3 | 0.0 | 0.0 | 17 | 0.1 | 0.0 |
| Dolly Varden | ea. | 433 | 2.6 | 1.1 | 10 | 0.1 | 0.0 | 7 | 0.0 | 0.0 | 436 | 2.6 | 1.1 |
| Lake Trout | ea. | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Grayling | ea. | 338 | 2.0 | 0.9 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 338 | 2.0 | 0.9 |
| Unknown Pike | ea. | 68 | 0.4 | 0.2 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 68 | 0.4 | 0.2 |
| Rainbow Trout | ea. | 30 | 0.2 | 0.1 | 24 | 0.1 | 0.1 | 0 | 0.0 | 0.0 | 54 | 0.3 | 0.1 |
| Steelhead | ea. | 17 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 7 | 0.0 | 0.0 | 10 | 0.1 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-21. Estimated Pounds of Fish Harvested, Received, Given Away, and Used, Cooper Landing, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 18,669 | 137.3 | 61.7 | 6,626 | 48.7 | 21.9 | 4,425 | 32.5 | 14.6 | 20,870 | 153.5 | 69.0 |
| Salmon | lbs. | 13,438 | 98.8 | 44.4 | 3,979 | 29.3 | 13.2 | 3,408 | 25.1 | 11.3 | 14,008 | 103.0 | 46.3 |
| Chum Salmon | lbs. | 0 | 0.0 | 0.0 | 7 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 7 | 0.1 | 0.0 |
| Coho Salmon | lbs. | 3,687 | 27.1 | 12.2 | 961 | 7.1 | 3.2 | 783 | 5.8 | 2.6 | 3,866 | 28.4 | 12.8 |
| Chinook Salmon | lbs. | 1,269 | 9.3 | 4.2 | 747 | 5.5 | 2.5 | 406 | 3.0 | 1.3 | 1,610 | 11.8 | 5.3 |
| Pink Salmon | lbs. | 16 | 0.1 | 0.1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 16 | 0.1 | 0.1 |
| Sockeye Salmon | lbs. | 8,466 | 62.2 | 28.0 | 2,263 | 16.6 | 7.5 | 2,219 | 16.3 | 7.3 | 8,510 | 62.6 | 28.1 |
| Non- Salmon Fish | lbs. | 5,231 | 38.5 | 17.3 | 2,647 | 19.5 | 8.8 | 1,016 | 7.5 | 3.4 | 6,863 | 50.5 | 22.7 |
| Herring Sac Roe | lbs. | 0 | 0.0 | 0.0 | 139 | 1.0 | 0.5 | 0 | 0.0 | 0.0 | 139 | 1.0 | 0.5 |
| Eulachon (hooligan, candlefish) | lbs. | 172 | 1.3 | 0.6 | 118 | 0.9 | 0.4 | 137 | 1.0 | 0.5 | 152 | 1.1 | 0.5 |
| Pacific Cod (gray) | lbs. | 8 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 8 | 0.1 | 0.0 |
| Lingcod | lbs. | 16 | 0.1 | 0.1 | 195 | 1.4 | 0.6 | 0 | 0.0 | 0.0 | 211 | 1.6 | 0.7 |
| Halibut | lbs. | 3,182 | 23.4 | 10.5 | 1,851 | 13.6 | 6.1 | 763 | 5.6 | 2.5 | 4,270 | 31.4 | 14.1 |
| Black Rockfish | lbs. | 220 | 1.6 | 0.7 | 10 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 230 | 1.7 | 0.8 |
| Red Rockfish | lbs. | 48 | 0.3 | 0.2 | 32 | 0.2 | 0.1 | 0 | 0.0 | 0.0 | 79 | 0.6 | 0.3 |
| Sablefish (black cod) | lbs. | 0 | 0.0 | 0.0 | 41 | 0.3 | 0.1 | 0 | 0.0 | 0.0 | 41 | 0.3 | 0.1 |
| Dolly Varden | lbs. | 427 | 3.1 | 1.4 | 129 | 1.0 | 0.4 | 54 | 0.4 | 0.2 | 503 | 3.7 | 1.7 |
| Lake Trout | lbs. | 680 | 5.0 | 2.2 | 63 | 0.5 | 0.2 | 4 | 0.0 | 0.0 | 739 | 5.4 | 2.4 |
| Grayling | lbs. | 38 | 0.3 | 0.1 | 2 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 40 | 0.3 | 0.1 |
| Unknown Pike | lbs. | 12 | 0.1 | 0.0 | 16 | 0.1 | 0.1 | 16 | 0.1 | 0.1 | 12 | 0.1 | 0.0 |
| Rainbow Trout | lbs. | 375 | 2.8 | 1.2 | 22 | 0.2 | 0.1 | 33 | 0.2 | 0.1 | 364 | 2.7 | 1.2 |
| Steelhead | lbs. | 7 | 0.1 | 0.0 | 2 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 9 | 0.1 | 0.0 |
| Unknown Whitefish | lbs. | 46 | 0.3 | 0.2 | 28 | 0.2 | 0.1 | 9 | 0.1 | 0.0 | 65 | 0.5 | 0.2 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-22. Estimated Pounds of Fish Harvested, Received, Given Away, and Used, Hope, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 9,387 | 126.8 | 62.4 | 2,277 | 30.8 | 15.1 | 1,714 | 23.2 | 11.4 | 9,950 | 134.5 | 66.1 |
| Salmon | lbs. | 7,023 | 94.9 | 46.7 | 1,840 | 24.9 | 12.2 | 1,466 | 19.8 | 9.7 | 7,397 | 100.0 | 49.2 |
| Chum Salmon | lbs. | 513 | 6.9 | 3.4 | 0 | 0.0 | 0.0 | 133 | 1.8 | 0.9 | 380 | 5.1 | 2.5 |
| Coho Salmon | lbs. | 2,681 | 36.2 | 17.8 | 596 | 8.1 | 4.0 | 519 | 7.0 | 3.5 | 2,758 | 37.3 | 18.3 |
| Chinook Salmon | lbs. | 631 | 8.5 | 4.2 | 707 | 9.6 | 4.7 | 344 | 4.7 | 2.3 | 994 | 13.4 | 6.6 |
| Pink Salmon | lbs. | 977 | 13.2 | 6.5 | 12 | 0.2 | 0.1 | 142 | 1.9 | 0.9 | 847 | 11.4 | 5.6 |
| Sockeye Salmon | lbs. | 2,222 | 30.0 | 14.8 | 524 | 7.1 | 3.5 | 327 | 4.4 | 2.2 | 2,419 | 32.7 | 16.1 |
| Non- Salmon Fish | lbs. | 2,363 | 31.9 | 15.7 | 437 | 5.9 | 2.9 | 248 | 3.4 | 1.6 | 2,552 | 34.5 | 17.0 |
| Eulachon (hooligan, candlefish) | lbs. | 204 | 2.8 | 1.4 | 99 | 1.3 | 0.7 | 24 | 0.3 | 0.2 | 280 | 3.8 | 1.9 |
| Pacific Cod (gray) | lbs. | 79 | 1.1 | 0.5 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 79 | 1.1 | 0.5 |
| Lingcod | lbs. | 72 | 1.0 | 0.5 | 0 | 0.0 | 0.0 | 22 | 0.3 | 0.1 | 49 | 0.7 | 0.3 |
| Halibut | lbs. | 1,585 | 21.4 | 10.5 | 278 | 3.8 | 1.8 | 191 | 2.6 | 1.3 | 1,671 | 22.6 | 11.1 |
| Black Rockfish | lbs. | 44 | 0.6 | 0.3 | 0 | 0.0 | 0.0 | 6 | 0.1 | 0.0 | 39 | 0.5 | 0.3 |
| Red Rockfish | lbs. | 10 | 0.1 | 0.1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 10 | 0.1 | 0.1 |
| Unknown Rockfish | lbs. | 4 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 4 | 0.0 | 0.0 |
| Sablefish (black cod) | lbs. | 31 | 0.4 | 0.2 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 31 | 0.4 | 0.2 |
| Burbot | lbs. | 0 | 0.0 | 0.0 | 9 | 0.1 | 0.1 | 0 | 0.0 | 0.0 | 9 | 0.1 | 0.1 |
| Dolly Varden | lbs. | 243 | 3.3 | 1.6 | 12 | 0.2 | 0.1 | 0 | 0.0 | 0.0 | 256 | 3.5 | 1.7 |
| Lake Trout | lbs. | 7 | 0.1 | 0.0 | 7 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 14 | 0.2 | 0.1 |
| Grayling | lbs. | 16 | 0.2 | 0.1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 16 | 0.2 | 0.1 |
| Rainbow Trout | lbs. | 69 | 0.9 | 0.5 | 26 | 0.4 | 0.2 | 5 | 0.1 | 0.0 | 90 | 1.2 | 0.6 |
| Steelhead | lbs. | 0 | 0.0 | 0.0 | 7 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 7 | 0.1 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV- 23. Estimated Pounds of Fish Harvested, Received, Given Away, and Used, Nikolaevsk, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 23,253 | 298.1 | 73.7 | 5,118 | 65.6 | 16.2 | 4,258 | 54.6 | 13.5 | 24,113 | 309.1 | 76.4 |
| Salmon | lbs. | 13,998 | 179.5 | 44.4 | 3,352 | 43.0 | 10.6 | 2,269 | 29.1 | 7.2 | 15,081 | 193.4 | 47.8 |
| Chum Salmon | lbs. | 1,024 | 13.1 | 3.2 | 868 | 11.1 | 2.8 | 0 | 0.0 | 0.0 | 1,892 | 24.3 | 6.0 |
| Coho Salmon | lbs. | 4,906 | 62.9 | 15.5 | 973 | 12.5 | 3.1 | 1,228 | 15.7 | 3.9 | 4,651 | 59.6 | 14.7 |
| Chinook Salmon | lbs. | 3,298 | 42.3 | 10.5 | 1,099 | 14.1 | 3.5 | 487 | 6.2 | 1.5 | 3,910 | 50.1 | 12.4 |
| Pink Salmon | lbs. | 444 | 5.7 | 1.4 | 67 | 0.9 | 0.2 | 33 | 0.4 | 0.1 | 479 | 6.1 | 1.5 |
| Sockeye Salmon | lbs. | 4,326 | 55.5 | 13.7 | 345 | 4.4 | 1.1 | 521 | 6.7 | 1.7 | 4,150 | 53.2 | 13.2 |
| Non- Salmon Fish | lbs. | 9,255 | 118.7 | 29.3 | 1,765 | 22.6 | 5.6 | 1,989 | 25.5 | 6.3 | 9,031 | 115.8 | 28.6 |
| Herring | lbs. | 0 | 0.0 | 0.0 | 46 | 0.6 | 0.1 | 0 | 0.0 | 0.0 | 46 | 0.6 | 0.1 |
| Herring Sac Roe | lbs. | 0 | 0.0 | 0.0 | 21 | 0.3 | 0.1 | 0 | 0.0 | 0.0 | 21 | 0.3 | 0.1 |
| Eulachon (hooligan, candlefish) | lbs. | 573 | 7.3 | 1.8 | 178 | 2.3 | 0.6 | 104 | 1.3 | 0.3 | 647 | 8.3 | 2.1 |
| Pacific Cod (gray) | lbs. | 325 | 4.2 | 1.0 | 24 | 0.3 | 0.1 | 141 | 1.8 | 0.4 | 209 | 2.7 | 0.7 |
| Starry Flounder | lbs. | 18 | 0.2 | 0.1 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 18 | 0.2 | 0.1 |
| Lingcod | lbs. | 67 | 0.9 | 0.2 | 12 | 0.2 | 0.0 | 6 | 0.1 | 0.0 | 73 | 0.9 | 0.2 |
| Unknown Greenling | lbs. | 3 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 3 | 0.0 | 0.0 |
| Halibut | lbs. | 5,221 | 66.9 | 16.5 | 1,069 | 13.7 | 3.4 | 1,345 | 17.2 | 4.3 | 4,945 | 63.4 | 15.7 |
| Black Rockfish | lbs. | 290 | 3.7 | 0.9 | 18 | 0.2 | 0.1 | 0 | 0.0 | 0.0 | 309 | 4.0 | 1.0 |
| Red Rockfish | lbs. | 1,623 | 20.8 | 5.1 | 67 | 0.9 | 0.2 | 182 | 2.3 | 0.6 | 1,508 | 19.3 | 4.8 |
| Unknown Rockfish | lbs. | 0 | 0.0 | 0.0 | 13 | 0.2 | 0.0 | 0 | 0.0 | 0.0 | 13 | 0.2 | 0.0 |
| Sablefish (black cod) | lbs. | 437 | 5.6 | 1.4 | 75 | 1.0 | 0.2 | 122 | 1.6 | 0.4 | 390 | 5.0 | 1.2 |
| Unknown Shark | lbs. | 0 | 0.0 | 0.0 | 24 | 0.3 | 0.1 | 0 | 0.0 | 0.0 | 24 | 0.3 | 0.1 |
| Dolly Varden | lbs. | 178 | 2.3 | 0.6 | 42 | 0.5 | 0.1 | 21 | 0.3 | 0.1 | 199 | 2.5 | 0.6 |
| Lake Trout | lbs. | 96 | 1.2 | 0.3 | 11 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 106 | 1.4 | 0.3 |
| Grayling | lbs. | 7 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 7 | 0.1 | 0.0 |
| Unknown Pike | lbs. | 46 | 0.6 | 0.1 | 91 | 1.2 | 0.3 | 0 | 0.0 | 0.0 | 137 | 1.8 | 0.4 |
| Rainbow Trout | lbs. | 372 | 4.8 | 1.2 | 21 | 0.3 | 0.1 | 68 | 0.9 | 0.2 | 325 | 4.2 | 1.0 |
| Steelhead | lbs. | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Unknown Whitefish | lbs. | 0 | 0.0 | 0.0 | 53 | 0.7 | 0.2 | 0 | 0.0 | 0.0 | 53 | 0.7 | 0.2 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-24. Estimated Pounds of Fish Harvested, Received, Given Away, and Used, Ninilchik, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 132,562 | 229.7 | 81.8 | 39,235 | 68.0 | 24.2 | 37,204 | 64.5 | 22.9 | 134,592 | 233.3 | 83.0 |
| Salmon | lbs. | 75,958 | 131.6 | 46.8 | 25,497 | 44.2 | 15.7 | 22,169 | 38.4 | 13.7 | 79,286 | 137.4 | 48.9 |
| Chum Salmon | lbs. | 3,677 | 6.4 | 2.3 | 31 | 0.1 | 0.0 | 62 | 0.1 | 0.0 | 3,645 | 6.3 | 2.2 |
| Coho Salmon | lbs. | 18,062 | 31.3 | 11.1 | 5,461 | 9.5 | 3.4 | 6,031 | 10.5 | 3.7 | 17,492 | 30.3 | 10.8 |
| Chinook Salmon | lbs. | 13,594 | 23.6 | 8.4 | 8,362 | 14.5 | 5.2 | 3,220 | 5.6 | 2.0 | 18,737 | 32.5 | 11.6 |
| Pink Salmon | lbs. | 7,118 | 12.3 | 4.4 | 1,966 | 3.4 | 1.2 | 5,138 | 8.9 | 3.2 | 3,947 | 6.8 | 2.4 |
| Sockeye Salmon | lbs. | 33,507 | 58.1 | 20.7 | 9,676 | 16.8 | 6.0 | 7,719 | 13.4 | 4.8 | 35,465 | 61.5 | 21.9 |
| Non- Salmon Fish | lbs. | 56,604 | 98.1 | 34.9 | 13,738 | 23.8 | 8.5 | 15,035 | 26.1 | 9.3 | 55,307 | 95.9 | 34.1 |
| Herring | lbs. | 519 | 0.9 | 0.3 | 35 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 554 | 1.0 | 0.3 |
| Herring Sac Roe | lbs. | 0 | 0.0 | 0.0 | 81 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 81 | 0.1 | 0.0 |
| Eulachon (hooligan, candlefish) | lbs. | 769 | 1.3 | 0.5 | 1,294 | 2.2 | 0.8 | 281 | 0.5 | 0.2 | 1,781 | 3.1 | 1.1 |
| Pacific Cod (gray) | lbs. | 2,530 | 4.4 | 1.6 | 1,256 | 2.2 | 0.8 | 55 | 0.1 | 0.0 | 3,730 | 6.5 | 2.3 |
| Pacific Tom Cod | lbs. | 32 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 32 | 0.1 | 0.0 |
| Walleye Pollock (whiting) | lbs. | 0 | 0.0 | 0.0 | 8 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 8 | 0.0 | 0.0 |
| Starry Flounder | lbs. | 692 | 1.2 | 0.4 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 692 | 1.2 | 0.4 |
| Lingcod | lbs. | 808 | 1.4 | 0.5 | 69 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 877 | 1.5 | 0.5 |
| Unknown Greenling | lbs. | 35 | 0.1 | 0.0 | 29 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 63 | 0.1 | 0.0 |
| Halibut | lbs. | 46,766 | 81.1 | 28.8 | 9,907 | 17.2 | 6.1 | 13,588 | 23.6 | 8.4 | 43,085 | 74.7 | 26.6 |
| Black Rockfish | lbs. | 1,229 | 2.1 | 0.8 | 9 | 0.0 | 0.0 | 554 | 1.0 | 0.3 | 684 | 1.2 | 0.4 |
| Red Rockfish | lbs. | 715 | 1.2 | 0.4 | 208 | 0.4 | 0.1 | 23 | 0.0 | 0.0 | 900 | 1.6 | 0.6 |
| Sablefish (black cod) | lbs. | 89 | 0.2 | 0.1 | 179 | 0.3 | 0.1 | 0 | 0.0 | 0.0 | 268 | 0.5 | 0.2 |
| Unknown Shark | lbs. | 52 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 52 | 0.1 | 0.0 |
| Dolly Varden | lbs. | 897 | 1.6 | 0.6 | 283 | 0.5 | 0.2 | 121 | 0.2 | 0.1 | 1,058 | 1.8 | 0.7 |
| Lake Trout | lbs. | 444 | 0.8 | 0.3 | 105 | 0.2 | 0.1 | 65 | 0.1 | 0.0 | 485 | 0.8 | 0.3 |
| Unknown Pike | lbs. | 17 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 17 | 0.0 | 0.0 |
| Rainbow Trout | lbs. | 1,010 | 1.8 | 0.6 | 218 | 0.4 | 0.1 | 347 | 0.6 | 0.2 | 881 | 1.5 | 0.5 |
| Steelhead | lbs. | 0 | 0.0 | 0.0 | 8 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 8 | 0.0 | 0.0 |
| Unknown Whitefish | lbs. | 0 | 0.0 | 0.0 | 50 | 0.1 | 0.0 | 0 | 0.0 | 0.0 | 50 | 0.1 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-25. Estimated Pounds of Fish Harvested, Received, Given Away, and Used, Seldovia, 2002/2003

| Resource | Units | Harvested | | | Received | | | Given Away | | | Used | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita | Total | Per HH | Per Capita |
| Fish | lbs. | 61,601 | 364.5 | 161.3 | 18,137 | 107.3 | 47.5 | 21,977 | 130.0 | 57.5 | 57,761 | 341.8 | 151.2 |
| Salmon | lbs. | 34,727 | 205.5 | 90.9 | 11,571 | 68.5 | 30.3 | 12,783 | 75.6 | 33.5 | 33,515 | 198.3 | 87.7 |
| Chum Salmon | lbs. | 3,450 | 20.4 | 9.0 | 913 | 5.4 | 2.4 | 1,205 | 7.1 | 3.2 | 3,158 | 18.7 | 8.3 |
| Coho Salmon | lbs. | 5,308 | 31.4 | 13.9 | 2,338 | 13.8 | 6.1 | 2,232 | 13.2 | 5.8 | 5,413 | 32.0 | 14.2 |
| Chinook Salmon | lbs. | 18,860 | 111.6 | 49.4 | 5,580 | 33.0 | 14.6 | 5,789 | 34.3 | 15.2 | 18,651 | 110.4 | 48.8 |
| Pink Salmon | lbs. | 2,482 | 14.7 | 6.5 | 487 | 2.9 | 1.3 | 1,395 | 8.3 | 3.7 | 1,574 | 9.3 | 4.1 |
| Sockeye Salmon | lbs. | 4,627 | 27.4 | 12.1 | 2,254 | 13.3 | 5.9 | 2,162 | 12.8 | 5.7 | 4,719 | 27.9 | 12.4 |
| Non- Salmon Fish | lbs. | 26,873 | 159.0 | 70.4 | 6,566 | 38.9 | 17.2 | 9,194 | 54.4 | 24.1 | 24,246 | 143.5 | 63.5 |
| Herring | lbs. | 2,282 | 13.5 | 6.0 | 183 | 1.1 | 0.5 | 852 | 5.0 | 2.2 | 1,612 | 9.5 | 4.2 |
| Herring Sac Roe | lbs. | 71 | 0.4 | 0.2 | 284 | 1.7 | 0.7 | 118 | 0.7 | 0.3 | 237 | 1.4 | 0.6 |
| Herring Spawn on Kelp | lbs. | 24 | 0.1 | 0.1 | 124 | 0.7 | 0.3 | 24 | 0.1 | 0.1 | 124 | 0.7 | 0.3 |
| Eulachon (hooligan, candlefish) | lbs. | 0 | 0.0 | 0.0 | 450 | 2.7 | 1.2 | 30 | 0.2 | 0.1 | 420 | 2.5 | 1.1 |
| Pacific Cod (gray) | lbs. | 4,824 | 28.5 | 12.6 | 649 | 3.8 | 1.7 | 2,336 | 13.8 | 6.1 | 3,137 | 18.6 | 8.2 |
| Starry Flounder | lbs. | 132 | 0.8 | 0.3 | 0 | 0.0 | 0.0 | 5 | 0.0 | 0.0 | 127 | 0.8 | 0.3 |
| Lingcod | lbs. | 352 | 2.1 | 0.9 | 81 | 0.5 | 0.2 | 34 | 0.2 | 0.1 | 399 | 2.4 | 1.0 |
| Unknown Greenling | lbs. | 183 | 1.1 | 0.5 | 0 | 0.0 | 0.0 | 17 | 0.1 | 0.0 | 166 | 1.0 | 0.4 |
| Halibut | lbs. | 16,153 | 95.6 | 42.3 | 4,171 | 24.7 | 10.9 | 5,327 | 31.5 | 13.9 | 14,997 | 88.7 | 39.3 |
| Black Rockfish | lbs. | 1,141 | 6.8 | 3.0 | 101 | 0.6 | 0.3 | 264 | 1.6 | 0.7 | 979 | 5.8 | 2.6 |
| Red Rockfish | lbs. | 311 | 1.8 | 0.8 | 176 | 1.0 | 0.5 | 54 | 0.3 | 0.1 | 433 | 2.6 | 1.1 |
| Sablefish (black cod) | lbs. | 231 | 1.4 | 0.6 | 178 | 1.1 | 0.5 | 84 | 0.5 | 0.2 | 325 | 1.9 | 0.9 |
| Unknown Shark | lbs. | 61 | 0.4 | 0.2 | 122 | 0.7 | 0.3 | 30 | 0.2 | 0.1 | 152 | 0.9 | 0.4 |
| Dolly Varden | lbs. | 606 | 3.6 | 1.6 | 14 | 0.1 | 0.0 | 9 | 0.1 | 0.0 | 610 | 3.6 | 1.6 |
| Lake Trout | lbs. | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 |
| Grayling | lbs. | 237 | 1.4 | 0.6 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 237 | 1.4 | 0.6 |
| Unknown Pike | lbs. | 203 | 1.2 | 0.5 | 0 | 0.0 | 0.0 | 0 | 0.0 | 0.0 | 203 | 1.2 | 0.5 |
| Rainbow Trout | lbs. | 43 | 0.3 | 0.1 | 33 | 0.2 | 0.1 | 0 | 0.0 | 0.0 | 76 | 0.4 | 0.2 |
| Steelhead | lbs. | 24 | 0.1 | 0.1 | 0 | 0.0 | 0.0 | 9 | 0.1 | 0.0 | 14 | 0.1 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-26. Percentage of Households Obtaining Fish for Home Use from Commercial Fisheries

| | Cooper Landing | | Hope | | Nikolaevsk | | Ninilchik | | Seldovia | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource | Estimated number of households | Est. % of households | Estimated number of households | Est. % of households | Estimated number of households | Est. % of households | Estimated number of households | Est. % of households | Esimated number of households | Est. % of households |
| Any Resource | 0 | 0.0% | 0 | 0.0% | 28 | 36.4% | 40 | 7.0% | 24 | 14.0% |
| Chum Salmon | 0 | 0.0% | 0 | 0.0% | 3 | 3.9% | 29 | 5.0% | 7 | 4.0% |
| Coho Salmon | 0 | 0.0% | 0 | 0.0% | 17 | 21.4% | 23 | 4.0% | 14 | 8.0% |
| Chinook Salmon | 0 | 0.0% | 0 | 0.0% | 8 | 9.7% | 23 | 4.0% | 10 | 6.0% |
| Pink Salmon | 0 | 0.0% | 0 | 0.0% | 5 | 5.8% | 17 | 3.0% | 7 | 4.0% |
| Sockeye Salmon | 0 | 0.0% | 0 | 0.0% | 12 | 15.6% | 35 | 6.0% | 14 | 8.0% |
| Herring | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 7 | 4.0% |
| Pacific Cod (gray) | 0 | 0.0% | 0 | 0.0% | 6 | 7.8% | 12 | 2.0% | 14 | 8.0% |
| Flounder | 0 | 0.0% | 0 | 0.0% | 2 | 1.9% | 0 | 0.0% | 7 | 4.0% |
| Walleye Pollock | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Lingcod | 0 | 0.0% | 0 | 0.0% | 5 | 5.8% | 6 | 1.0% | 10 | 6.0% |
| Greenling | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 10 | 6.0% |
| Halibut | 0 | 0.0% | 0 | 0.0% | 18 | 23.3% | 6 | 1.0% | 7 | 4.0% |
| Black Rockfish | 0 | 0.0% | 0 | 0.0% | 7 | 9.2% | 0 | 0.0% | 10 | 6.0% |
| Red Rockfish | 0 | 0.0% | 0 | 0.0% | 12 | 15.6% | 6 | 1.0% | 10 | 6.0% |
| Sablefish | 0 | 0.0% | 0 | 0.0% | 6 | 7.8% | 0 | 0.0% | 7 | 4.0% |
| Shark | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 3 | 2.0% |
| Dolly Varden | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 10 | 6.0% |
| Steelhead | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 3 | 2.0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-27. Estimated Amount of Resources Removed From Commercial and Guided Harvest, Cooper Landing, 2002/2003.

| | Commercial | | | | Guided | | | |
|---|---|---|---|---|---|---|---|---|
| | Removed from Catch | | Percent of | | Removed from Catch | | Percent of | |
| Resource | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) |
| Fish | 0 | 0 | 0.0% | 0.0% | 263 | 263 | 1.4% | 1.4% |
| Salmon | 0 | 0 | 0.0% | 0.0% | 26 | 120 | 0.9% | 0.6% |
| Chum Salmon | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Coho Salmon | 0 | 0 | 0.0% | 0.0% | 13 | 69 | 1.9% | 0.4% |
| Chinook Salmon | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Pink Salmon | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Sockeye Salmon | 0 | 0 | 0.0% | 0.0% | 13 | 51 | 0.6% | 0.3% |
| Non-Salmon Fish | 0 | 0 | 0.0% | 0.0% | 143 | 143 | 2.7% | 0.8% |
| Herring Roe | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Herring Sac Roe | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Smelt | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Eulachon (hooligan, candlefish) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Cod | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Pacific Cod (gray) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Greenling | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Lingcod | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Halibut | 0 | 0 | 0.0% | 0.0% | 132 | 132 | 4.1% | 0.7% |
| Rockfish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Black Rockfish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Red Rockfish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Sablefish (black cod) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Char | 0 | 0 | 0.0% | 0.0% | 8 | 11 | 1.0% | 0.1% |
| Dolly Varden | 0 | 0 | 0.0% | 0.0% | 8 | 11 | 2.6% | 0.1% |
| Lake Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Grayling | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Pike | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Pike | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Rainbow Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Steelhead | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Whitefish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Whitefish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-28. Estimated Amount of Resources Removed From Commercial and Guided Harvest, Hope, 2002/2003.

| | Commercial | | | | Guided | | | |
|---|---|---|---|---|---|---|---|---|
| | Removed from Catch | | Percent of | | Removed from Catch | | Percent of | |
| Resource | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) |
| Fish | 0 | 0 | 0.0% | 0.0% | 109 | 109 | 1.2% | 1.2% |
| Salmon | 0 | 0 | 0.0% | 0.0% | 25 | 109 | 1.6% | 1.2% |
| Chum Salmon | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Coho Salmon | 0 | 0 | 0.0% | 0.0% | 10 | 51 | 1.9% | 0.5% |
| Chinook Salmon | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Pink Salmon | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Sockeye Salmon | 0 | 0 | 0.0% | 0.0% | 15 | 58 | 2.6% | 0.6% |
| Non-Salmon Fish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Smelt | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Eulachon (hooligan, candlefish) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Cod | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Pacific Cod (gray) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Greenling | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Lingcod | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Halibut | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Rockfish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Black Rockfish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Red Rockfish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Rockfish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Sablefish (black cod) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Burbot | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Char | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Dolly Varden | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Lake Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Grayling | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Rainbow Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Steelhead | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-29. Estimated Amount of Resources Removed From Commercial and Guided Harvest, Nikolaevsk, 2002/2003.

| | Commercial | | | | Guided | | | |
|---|---|---|---|---|---|---|---|---|
| | Removed from Catch | | Percent of | | Removed from Catch | | Percent of | |
| Resource | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) |
| Fish | 11,689 | 11,689 | 50.3% | 50.3% | 423 | 423 | 1.8% | 1.8% |
| Salmon | 1,338 | 6,161 | 44.0% | 26.5% | 16 | 82 | 0.6% | 0.4% |
| Chum Salmon | 182 | 983 | 96.0% | 4.2% | 0 | 0 | 0.0% | 0.0% |
| Coho Salmon | 584 | 3,038 | 61.9% | 13.1% | 16 | 82 | 1.7% | 0.4% |
| Chinook Salmon | 15 | 235 | 7.1% | 1.0% | 0 | 0 | 0.0% | 0.0% |
| Pink Salmon | 178 | 426 | 95.9% | 1.8% | 0 | 0 | 0.0% | 0.0% |
| Sockeye Salmon | 379 | 1,479 | 34.2% | 6.4% | 0 | 0 | 0.0% | 0.0% |
| Non-Salmon Fish | 5,528 | 5,528 | 59.7% | 23.8% | 341 | 341 | 3.7% | 1.5% |
| Herring | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Herring Roe | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Herring Sac Roe | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Smelt | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Eulachon (hooligan, candlefish) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Cod | 97 | 311 | 95.5% | 1.3% | 0 | 0 | 0.0% | 0.0% |
| Pacific Cod (gray) | 97 | 311 | 95.5% | 1.3% | 0 | 0 | 0.0% | 0.0% |
| Flounder | 6 | 18 | 100.0% | 0.1% | 0 | 0 | 0.0% | 0.0% |
| Starry Flounder | 6 | 18 | 100.0% | 0.1% | 0 | 0 | 0.0% | 0.0% |
| Greenling | 17 | 67 | 96.2% | 0.3% | 0 | 0 | 0.0% | 0.0% |
| Lingcod | 17 | 67 | 100.0% | 0.3% | 0 | 0 | 0.0% | 0.0% |
| Unknown Greenling | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Halibut | 2,822 | 2,822 | 54.1% | 12.1% | 301 | 301 | 5.8% | 1.3% |
| Rockfish | 581 | 1,873 | 97.9% | 8.1% | 18 | 41 | 2.1% | 0.2% |
| Black Rockfish | 180 | 271 | 93.2% | 1.2% | 13 | 20 | 6.8% | 0.1% |
| Red Rockfish | 401 | 1,602 | 98.7% | 6.9% | 5 | 21 | 1.3% | 0.1% |
| Unknown Rockfish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Sablefish (black cod) | 141 | 437 | 100.0% | 1.9% | 0 | 0 | 0.0% | 0.0% |
| Shark | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Shark | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Char | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Dolly Varden | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Lake Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Grayling | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Pike | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Pike | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Rainbow Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Steelhead | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Whitefish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Whitefish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-30. Estimated Amount of Resources Removed From Commercial and Guided Harvest, Ninilchik, 2002/2003.

| | Commercial | | | | Guided | | | |
|---|---|---|---|---|---|---|---|---|
| | Removed from Catch | | Percent of | | Removed from Catch | | Percent of | |
| Resource | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) |
| Fish | 19,427 | 19,427 | 14.7% | 14.7% | 5,453 | 5,453 | 4.1% | 4.1% |
| Salmon | 4,085 | 15,374 | 20.2% | 11.6% | 271 | 1,482 | 2.0% | 1.1% |
| Chum Salmon | 658 | 3,552 | 96.6% | 2.7% | 0 | 0 | 0.0% | 0.0% |
| Coho Salmon | 427 | 2,220 | 12.3% | 1.7% | 81 | 420 | 2.3% | 0.3% |
| Chinook Salmon | 121 | 1,878 | 13.8% | 1.4% | 46 | 715 | 5.3% | 0.5% |
| Pink Salmon | 2,337 | 5,608 | 78.8% | 4.2% | 144 | 346 | 4.9% | 0.3% |
| Sockeye Salmon | 542 | 2,115 | 6.3% | 1.6% | 0 | 0 | 0.0% | 0.0% |
| Non-Salmon Fish | 4,053 | 4,053 | 7.2% | 3.1% | 3,971 | 3,971 | 7.0% | 3.0% |
| Herring | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Herring Roe | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Herring Sac Roe | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Smelt | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Eulachon (hooligan, candlefish) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Cod | 300 | 960 | 37.5% | 0.7% | 312 | 997 | 38.9% | 0.8% |
| Pacific Cod (gray) | 300 | 960 | 38.0% | 0.7% | 312 | 997 | 39.4% | 0.8% |
| Pacific Tom Cod | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Walleye Pollock (whiting) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Flounder | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Starry Flounder | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Greenling | 6 | 23 | 2.7% | 0.0% | 98 | 306 | 36.3% | 0.2% |
| Lingcod | 6 | 23 | 2.9% | 0.0% | 69 | 277 | 34.3% | 0.2% |
| Unknown Greenling | 0 | 0 | 0.0% | 0.0% | 29 | 29 | 83.3% | 0.0% |
| Halibut | 2,885 | 2,885 | 6.2% | 2.2% | 2,395 | 2,395 | 5.1% | 1.8% |
| Rockfish | 46 | 185 | 9.5% | 0.1% | 87 | 274 | 14.1% | 0.2% |
| Black Rockfish | 0 | 0 | 0.0% | 0.0% | 29 | 43 | 3.5% | 0.0% |
| Red Rockfish | 46 | 185 | 25.8% | 0.1% | 58 | 231 | 32.3% | 0.2% |
| Sablefish (black cod) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Shark | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Shark | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Char | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Dolly Varden | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Lake Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Pike | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Pike | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Rainbow Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Steelhead | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Whitefish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Whitefish | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-31. Estimated Amount of Resources Removed From Commercial and Guided Harvest, Seldovia, 2002/2003.

| | Commercial | | | | Guided | | | |
|---|---|---|---|---|---|---|---|---|
| | Removed from Catch | | Percent of | | Removed from Catch | | Percent of | |
| Resource | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) | Amount | Pounds | Species Harvest (lbs) | Community Harvest (lbs) |
| Fish | 15,708 | 15,708 | 25.5% | 25.5% | 2,421 | 2,421 | 3.9% | 3.9% |
| Salmon | 1,450 | 6,707 | 19.3% | 10.9% | 44 | 611 | 1.8% | 1.0% |
| Chum Salmon | 155 | 840 | 24.3% | 1.4% | 0 | 0 | 0.0% | 0.0% |
| Coho Salmon | 453 | 2,355 | 44.4% | 3.8% | 7 | 35 | 0.7% | 0.1% |
| Chinook Salmon | 71 | 1,100 | 5.8% | 1.8% | 37 | 576 | 3.1% | 0.9% |
| Pink Salmon | 395 | 949 | 38.2% | 1.5% | 0 | 0 | 0.0% | 0.0% |
| Sockeye Salmon | 375 | 1,463 | 31.6% | 2.4% | 0 | 0 | 0.0% | 0.0% |
| Non-Salmon Fish | 9,001 | 9,001 | 33.5% | 14.6% | 1,810 | 1,810 | 6.7% | 2.9% |
| Herring | 210 | 1,257 | 55.1% | 2.0% | 0 | 0 | 0.0% | 0.0% |
| Herring Roe | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Herring Sac Roe | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Herring Spawn on Kelp | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Smelt | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Eulachon (hooligan, candlefish) | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Cod | 1,413 | 4,521 | 93.7% | 7.3% | 0 | 0 | 0.0% | 0.0% |
| Pacific Cod (gray) | 1,413 | 4,521 | 93.7% | 7.3% | 0 | 0 | 0.0% | 0.0% |
| Flounder | 41 | 122 | 92.3% | 0.2% | 0 | 0 | 0.0% | 0.0% |
| Starry Flounder | 41 | 122 | 92.3% | 0.2% | 0 | 0 | 0.0% | 0.0% |
| Greenling | 162 | 254 | 47.5% | 0.4% | 41 | 162 | 30.4% | 0.3% |
| Lingcod | 30 | 122 | 34.6% | 0.2% | 41 | 162 | 46.2% | 0.3% |
| Unknown Greenling | 132 | 132 | 72.2% | 0.2% | 0 | 0 | 0.0% | 0.0% |
| Halibut | 2,042 | 2,042 | 12.6% | 3.3% | 1,470 | 1,470 | 9.1% | 2.4% |
| Rockfish | 250 | 493 | 34.0% | 0.8% | 118 | 177 | 12.2% | 0.3% |
| Black Rockfish | 203 | 304 | 26.7% | 0.5% | 118 | 177 | 15.6% | 0.3% |
| Red Rockfish | 47 | 189 | 60.9% | 0.3% | 0 | 0 | 0.0% | 0.0% |
| Sablefish (black cod) | 34 | 105 | 45.5% | 0.2% | 0 | 0 | 0.0% | 0.0% |
| Shark | 7 | 61 | 100.0% | 0.1% | 0 | 0 | 0.0% | 0.0% |
| Unknown Shark | 7 | 61 | 100.0% | 0.1% | 0 | 0 | 0.0% | 0.0% |
| Char | 88 | 123 | 20.3% | 0.2% | 0 | 0 | 0.0% | 0.0% |
| Dolly Varden | 88 | 123 | 20.3% | 0.2% | 0 | 0 | 0.0% | 0.0% |
| Lake Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Grayling | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Pike | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Unknown Pike | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Trout | 17 | 24 | 35.7% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Rainbow Trout | 0 | 0 | 0.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |
| Steelhead | 17 | 24 | 100.0% | 0.0% | 0 | 0 | 0.0% | 0.0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-32. Percentage of Households Obtaining Fish for Home Use from Commercial Sport Fish Guiding Operations

| | Cooper Landing | | Hope | | Nikolaevsk | | Ninilchik | | Seldovia | |
|---|---|---|---|---|---|---|---|---|---|---|
| Resource | Estimated number of households | Est. % of households | Estimated number of households | Est. % of households | Estimated number of households | Est. % of households | Estimated number of households | Est. % of households | Esimated number of households | Est. % of households |
| Any Resource | 11 | 7.8% | 2 | 3.3% | 3 | 3.4% | 52 | 9.0% | 14 | 8.0% |
| Chum Salmon | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Coho Salmon | 4 | 2.9% | 2 | 3.3% | 3 | 3.4% | 17 | 3.0% | 3 | 2.0% |
| Chinook Salmon | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 12 | 2.0% | 7 | 4.0% |
| Pink Salmon | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 17 | 3.0% | 0 | 0.0% |
| Sockeye Salmon | 8 | 5.8% | 1 | 1.7% | 0 | 0.0% | 6 | 1.0% | 0 | 0.0% |
| Pacific Cod (gray) | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 23 | 4.0% | 0 | 0.0% |
| Walleye Pollock | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 6 | 1.0% | 0 | 0.0% |
| Lingcod | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 6 | 1.0% | 3 | 2.0% |
| Greenling | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 12 | 2.0% | 0 | 0.0% |
| Halibut | 4 | 2.9% | 0 | 0.0% | 3 | 3.4% | 40 | 7.0% | 10 | 6.0% |
| Black Rockfish | 0 | 0.0% | 0 | 0.0% | 3 | 3.4% | 6 | 1.0% | 3 | 2.0% |
| Red Rockfish | 0 | 0.0% | 0 | 0.0% | 3 | 3.4% | 6 | 1.0% | 0 | 0.0% |
| Sablefish | 1 | 1.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Dolly Varden | 3 | 1.9% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-33. Means of Acquiring Halibut, Study Communities, 2002/03

| | Percentage of Total Households | | | | | | Percentage of Total Halibut Harvest | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Non-commercial | | | | | Non-commercial | | | |
| | % of Households Harvesting, Any Method | Attempted to Fish Only with Charter | Attempted to Fish Only without Charter | Attempted to Fish Both With and Without Charter | Removed from Commercial Catch | Removed from Guided Catch | From Charter | From Other | Removed from Commercial Catch | Removed from Guided Catch |
| Cooper Landing | 29.13% | 20.39% | 14.56% | 0.00% | 0.00% | 0.97% | 56.64% | 39.21% | 0.00% | 4.15% |
| Hope | 18.33% | 13.33% | 6.67% | 0.00% | 0.00% | 0.00% | 77.82% | 22.18% | 0.00% | 0.00% |
| Nikolaevsk | 44.00% | 3.35% | 38.70% | 1.95% | 23.34% | 3.35% | 3.04% | 37.15% | 54.05% | 5.76% |
| Ninilchik | 53.00% | 3.00% | 52.00% | 1.00% | 1.00% | 5.00% | 3.82% | 84.89% | 6.17% | 5.12% |
| Seldovia | 56.00% | 4.00% | 54.00% | 0.00% | 4.00% | 4.00% | 3.87% | 74.39% | 12.64% | 9.10% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-34. Estimated Salmon Harvests by Gear Type, Cooper Landing, 2002/2003

| | | Removed from Commercial Catch | | Removed from Guided Catch | | Gill Net | | Dip Net | | Fishwheel | | Other Methods | | Subsistence Gear Any Method | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Species | Unit | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Salmon | ea. | 0 | 0.0 | 26 | 0.2 | 0 | 0.0 | 206 | 1.5 | 58 | 0.4 | 87 | 0.6 | 351 | 2.6 | 2,591 | 19.0 | 2,968 | 21.8 |
| | lbs. | 0 | 0.0 | 120 | 0.9 | 0 | 0.0 | 819 | 6.0 | 288 | 2.1 | 355 | 2.6 | 1,462 | 10.7 | 11,856 | 87.2 | 13,438 | 98.8 |
| Chum Salmon | ea. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| | lbs. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Coho Salmon | ea. | 0 | 0.0 | 13 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 696 | 5.1 | 709 | 5.2 |
| | lbs. | 0 | 0.0 | 69 | 0.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3,618 | 26.6 | 3,687 | 27.1 |
| Chinook Salmon | ea. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1 | 0.0 | 5 | 0.0 | 1 | 0.0 | 8 | 0.1 | 74 | 0.5 | 82 | 0.6 |
| | lbs. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 20 | 0.2 | 82 | 0.6 | 20 | 0.2 | 123 | 0.9 | 1,146 | 8.4 | 1,269 | 9.3 |
| Pink Salmon | ea. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.0 | 7 | 0.0 |
| | lbs. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 0.1 | 16 | 0.1 |
| Sockeye Salmon | ea. | 0 | 0.0 | 13 | 0.1 | 0 | 0.0 | 205 | 1.5 | 53 | 0.4 | 86 | 0.6 | 343 | 2.5 | 1,814 | 13.3 | 2,171 | 16.0 |
| | lbs. | 0 | 0.0 | 51 | 0.4 | 0 | 0.0 | 798 | 5.9 | 206 | 1.5 | 335 | 2.5 | 1,339 | 9.8 | 7,075 | 52.0 | 8,466 | 62.2 |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2003

Table IV-35. Estimated Salmon Harvests by Gear Type, Hope, 2002/2003

| Species | Unit | Removed from Commercial Catch | | Removed from Guided Catch | | Gill Net | | Dip Net | | Fishwheel | | Other Methods | | Subsistence Gear Any Method | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Salmon | ea. | 0 | 0.0 | 25 | 0.3 | 23 | 0.3 | 204 | 2.8 | 0 | 0.0 | 0 | 0.0 | 227 | 3.1 | 1,376 | 18.6 | 1,628 | 22.0 |
| | lbs. | 0 | 0.0 | 109 | 1.5 | 107 | 1.5 | 822 | 11.1 | 0 | 0.0 | 0 | 0.0 | 930 | 12.6 | 5,985 | 80.9 | 7,023 | 94.9 |
| Chum Salmon | ea. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 95 | 1.3 | 95 | 1.3 |
| | lbs. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 513 | 6.9 | 513 | 6.9 |
| Coho Salmon | ea. | 0 | 0.0 | 10 | 0.1 | 12 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 12 | 0.2 | 493 | 6.7 | 516 | 7.0 |
| | lbs. | 0 | 0.0 | 51 | 0.7 | 64 | 0.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 64 | 0.9 | 2,565 | 34.7 | 2,681 | 36.2 |
| Chinook Salmon | ea. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.0 | 38 | 0.5 | 41 | 0.6 |
| | lbs. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 38 | 0.5 | 0 | 0.0 | 0 | 0.0 | 38 | 0.5 | 593 | 8.0 | 631 | 8.5 |
| Pink Salmon | ea. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 407 | 5.5 | 407 | 5.5 |
| | lbs. | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 977 | 13.2 | 977 | 13.2 |
| Sockeye Salmon | ea. | 0 | 0.0 | 15 | 0.2 | 11 | 0.2 | 201 | 2.7 | 0 | 0.0 | 0 | 0.0 | 212 | 2.9 | 343 | 4.6 | 570 | 7.7 |
| | lbs. | 0 | 0.0 | 58 | 0.8 | 43 | 0.6 | 784 | 10.6 | 0 | 0.0 | 0 | 0.0 | 827 | 11.2 | 1,337 | 18.1 | 2,222 | 30.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2003

Table IV-36. Estimated Salmon Harvests by Gear Type, Nikolaevsk, 2002/2003

| | | Removed from Commercial Catch | | Removed from Guided Catch | | Gill Net | | Dip Net | | Fishwheel | | Other Methods | | Subsistence Gear Any Method | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Species | Unit | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Salmon | ea. | 1,338 | 30.4 | 16 | 0.4 | 79 | 1.8 | 619 | 14.1 | 0 | 0.0 | 0 | 0.0 | 698 | 15.9 | 588 | 13.4 | 2,640 | 60.0 |
| | lbs. | 6,161 | 140.0 | 82 | 1.9 | 382 | 8.7 | 2,414 | 54.9 | 0 | 0.0 | 0 | 0.0 | 2,797 | 63.6 | 4,959 | 112.7 | 13,998 | 318.1 |
| Chum Salmon | ea. | 182 | 4.1 | 0 | 0.0 | 8 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.2 | 0 | 0.0 | 190 | 4.3 |
| | lbs. | 983 | 22.3 | 0 | 0.0 | 41 | 0.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 41 | 0.9 | 0 | 0.0 | 1,024 | 23.3 |
| Coho Salmon | ea. | 584 | 13.3 | 16 | 0.4 | 30 | 0.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 30 | 0.7 | 313 | 7.1 | 943 | 21.4 |
| | lbs. | 3,038 | 69.0 | 82 | 1.9 | 158 | 3.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 158 | 3.6 | 1,629 | 37.0 | 4,906 | 111.5 |
| Chinook Salmon | ea. | 15 | 0.3 | 0 | 0.0 | 3 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.1 | 195 | 4.4 | 213 | 4.8 |
| | lbs. | 235 | 5.3 | 0 | 0.0 | 47 | 1.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 47 | 1.1 | 3,016 | 68.5 | 3,298 | 75.0 |
| Pink Salmon | ea. | 178 | 4.0 | 0 | 0.0 | 8 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.2 | 0 | 0.0 | 185 | 4.2 |
| | lbs. | 426 | 9.7 | 0 | 0.0 | 18 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 18 | 0.4 | 0 | 0.0 | 444 | 10.1 |
| Sockeye Salmon | ea. | 379 | 8.6 | 0 | 0.0 | 30 | 0.7 | 619 | 14.1 | 0 | 0.0 | 0 | 0.0 | 649 | 14.8 | 80 | 1.8 | 1,109 | 25.2 |
| | lbs. | 1,479 | 33.6 | 0 | 0.0 | 118 | 2.7 | 2,414 | 54.9 | 0 | 0.0 | 0 | 0.0 | 2,533 | 57.6 | 314 | 7.1 | 4,326 | 98.3 |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2003

Table IV-37. Estimated Salmon Harvests by Gear Type, Ninilchik, 2002/2003

| Species | Unit | Removed from Commercial Catch | | Removed from Guided Catch | | Gill Net | | Dip Net | | Fishwheel | | Other Methods | | Subsistence Gear Any Method | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Salmon | ea. | 4,085 | 7.1 | 271 | 0.5 | 3,041 | 5.3 | 2,920 | 5.1 | 0 | 0.0 | 0 | 0.0 | 5,960 | 10.3 | 6,272 | 10.9 | 16,589 | 28.8 |
| | lbs. | 15,374 | 26.6 | 1,482 | 2.6 | 12,846 | 22.3 | 11,453 | 19.9 | 0 | 0.0 | 0 | 0.0 | 24,300 | 42.1 | 34,802 | 60.3 | 75,958 | 131.6 |
| Chum Salmon | ea. | 658 | 1.1 | 0 | 0.0 | 12 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 12 | 0.0 | 12 | 0.0 | 681 | 1.2 |
| | lbs. | 3,552 | 6.2 | 0 | 0.0 | 62 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 62 | 0.1 | 62 | 0.1 | 3,677 | 6.4 |
| Coho Salmon | ea. | 427 | 0.7 | 81 | 0.1 | 202 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 202 | 0.4 | 2,764 | 4.8 | 3,474 | 6.0 |
| | lbs. | 2,220 | 3.8 | 420 | 0.7 | 1,050 | 1.8 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1,050 | 1.8 | 14,372 | 24.9 | 18,062 | 31.3 |
| Chinook Salmon | ea. | 121 | 0.2 | 46 | 0.1 | 92 | 0.2 | 6 | 0.0 | 0 | 0.0 | 0 | 0.0 | 98 | 0.2 | 612 | 1.1 | 877 | 1.5 |
| | lbs. | 1,878 | 3.3 | 715 | 1.2 | 1,431 | 2.5 | 89 | 0.2 | 0 | 0.0 | 0 | 0.0 | 1,520 | 2.6 | 9,480 | 16.4 | 13,594 | 23.6 |
| Pink Salmon | ea. | 2,337 | 4.1 | 144 | 0.3 | 242 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 242 | 0.4 | 242 | 0.4 | 2,966 | 5.1 |
| | lbs. | 5,608 | 9.7 | 346 | 0.6 | 582 | 1.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 582 | 1.0 | 582 | 1.0 | 7,118 | 12.3 |
| Sockeye Salmon | ea. | 542 | 0.9 | 0 | 0.0 | 2,493 | 4.3 | 2,914 | 5.1 | 0 | 0.0 | 0 | 0.0 | 5,406 | 9.4 | 2,643 | 4.6 | 8,592 | 14.9 |
| | lbs. | 2,115 | 3.7 | 0 | 0.0 | 9,721 | 16.8 | 11,364 | 19.7 | 0 | 0.0 | 0 | 0.0 | 21,085 | 36.5 | 10,306 | 17.9 | 33,507 | 58.1 |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2003

Table IV-38. Estimated Salmon Harvests by Gear Type, Seldovia, 2002/2003

| | | Removed from Commercial Catch | | Removed from Guided Catch | | Gill Net | | Dip Net | | Fishwheel | | Other Methods | | Subsistence Gear Any Method | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Species | Unit | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Salmon | ea. | 1,450 | 8.6 | 44 | 0.3 | 882 | 5.2 | 220 | 1.3 | 0 | 0.0 | 7 | 0.0 | 1,109 | 6.6 | 2,494 | 14.8 | 5,097 | 30.2 |
| | lbs. | 6,707 | 39.7 | 611 | 3.6 | 8,028 | 47.5 | 857 | 5.1 | 0 | 0.0 | 105 | 0.6 | 8,989 | 53.2 | 18,419 | 109.0 | 34,727 | 205.5 |
| Chum Salmon | ea. | 155 | 0.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 483 | 2.9 | 639 | 3.8 |
| | lbs. | 840 | 5.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2,610 | 15.4 | 3,450 | 20.4 |
| Coho Salmon | ea. | 453 | 2.7 | 7 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 561 | 3.3 | 1,021 | 6.0 |
| | lbs. | 2,355 | 13.9 | 35 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2,918 | 17.3 | 5,308 | 31.4 |
| Chinook Salmon | ea. | 71 | 0.4 | 37 | 0.2 | 395 | 2.3 | 0 | 0.0 | 0 | 0.0 | 7 | 0.0 | 402 | 2.4 | 706 | 4.2 | 1,217 | 7.2 |
| | lbs. | 1,100 | 6.5 | 576 | 3.4 | 6,130 | 36.3 | 0 | 0.0 | 0 | 0.0 | 105 | 0.6 | 6,234 | 36.9 | 10,950 | 64.8 | 18,860 | 111.6 |
| Pink Salmon | ea. | 395 | 2.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 639 | 3.8 | 1,034 | 6.1 |
| | lbs. | 949 | 5.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1,533 | 9.1 | 2,482 | 14.7 |
| Sockeye Salmon | ea. | 375 | 2.2 | 0 | 0.0 | 487 | 2.9 | 220 | 1.3 | 0 | 0.0 | 0 | 0.0 | 706 | 4.2 | 105 | 0.6 | 1,186 | 7.0 |
| | lbs. | 1,463 | 8.7 | 0 | 0.0 | 1,898 | 11.2 | 857 | 5.1 | 0 | 0.0 | 0 | 0.0 | 2,755 | 16.3 | 409 | 2.4 | 4,627 | 27.4 |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Surveys, 2003

Table IV-39. Estimated Percentages of Salmon Harvest by Gear Type, Resource, and Total Salmon Harvest, Cooper Landing, 2002/2003

| | | Removed from Commercial Catch | | Removed from Guided Catch | | Subsistence Methods | | | | | | | | | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Gill Net | | Dipnet | | Fish Wheel | | Other | | Subsistence Gear Any Method | | | | | |
| Resource | Percent Base | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. |
| Salmon | geartype | 0.00% | 0.00% | 100.00% | 100.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | resource | 0.00% | 0.00% | 0.89% | 0.89% | 0.00% | 0.00% | 6.94% | 6.09% | 1.96% | 2.14% | 2.94% | 2.64% | 11.83% | 10.88% | 87.28% | 88.23% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.89% | 0.89% | 0.00% | 0.00% | 6.94% | 6.09% | 1.96% | 9.70% | 2.94% | 2.64% | 11.83% | 10.88% | 87.28% | 88.23% | 100.00% | 100.00% |
| Chum Salmon | geartype | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | resource | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| | total | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Coho Salmon | geartype | 0.00% | 0.00% | 50.00% | 57.14% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 26.86% | 30.52% | 23.89% | 27.44% |
| | resource | 0.00% | 0.00% | 1.86% | 1.86% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 98.14% | 98.14% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.44% | 0.51% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 23.44% | 26.93% | 23.89% | 27.44% |
| Chinook Salmon | geartype | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.64% | 2.50% | 9.09% | 28.44% | 1.52% | 5.76% | 2.26% | 8.40% | 2.85% | 9.67% | 2.76% | 9.44% |
| | resource | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.61% | 1.61% | 6.45% | 6.45% | 1.61% | 1.61% | 9.68% | 9.68% | 90.32% | 90.32% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.04% | 0.15% | 0.18% | 2.76% | 0.04% | 0.15% | 0.27% | 0.91% | 2.49% | 8.53% | 2.76% | 9.44% |
| Pink Salmon | geartype | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.25% | 0.13% | 0.22% | 0.12% |
| | resource | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.22% | 0.12% | 0.22% | 0.12% |
| Sockeye Salmon | geartype | 0.00% | 0.00% | 50.00% | 42.86% | 0.00% | 0.00% | 99.36% | 97.50% | 90.91% | 71.56% | 98.48% | 94.24% | 97.74% | 91.60% | 70.03% | 59.68% | 73.13% | 63.00% |
| | resource | 0.00% | 0.00% | 0.61% | 0.61% | 0.00% | 0.00% | 9.43% | 9.43% | 2.43% | 2.43% | 3.95% | 3.95% | 15.82% | 15.82% | 83.58% | 83.58% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.44% | 0.38% | 0.00% | 0.00% | 6.90% | 5.94% | 1.78% | 6.94% | 2.89% | 2.49% | 11.57% | 9.96% | 61.12% | 52.65% | 73.13% | 63.00% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-40. Estimated Percentages of Salmon Harvest by Gear Type, Resource, and Total Salmon Harvest, Hope, 2002/2003

| Resource | Percent Base | Removed from Commercial Catch | | Removed from Guided Catch | | Subsistence Methods | | | | | | | | | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Gill Net | | Dipnet | | Fish Wheel | | Other | | Subsistence Gear Any Method | | | | | |
| | | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. |
| Salmon | geartype | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | resource | 0.00% | 0.00% | 1.52% | 1.55% | 1.44% | 1.53% | 12.50% | 11.71% | 0.00% | 0.00% | 0.00% | 0.00% | 13.94% | 13.24% | 84.55% | 85.21% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 1.52% | 1.55% | 1.44% | 1.53% | 12.50% | 11.71% | 0.00% | 0.00% | 0.00% | 0.00% | 13.94% | 13.24% | 84.55% | 85.21% | 100.00% | 100.00% |
| Chum Salmon | geartype | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 6.90% | 8.57% | 5.83% | 7.30% |
| | resource | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 5.83% | 7.30% | 5.83% | 7.30% |
| Coho Salmon | geartype | 0.00% | 0.00% | 40.00% | 47.06% | 52.63% | 59.70% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 5.43% | 6.90% | 35.84% | 42.86% | 31.67% | 38.17% |
| | resource | 0.00% | 0.00% | 1.91% | 1.91% | 2.39% | 2.39% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 2.39% | 2.39% | 95.69% | 95.69% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.61% | 0.73% | 0.76% | 0.91% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.76% | 0.91% | 30.30% | 36.53% | 31.67% | 38.17% |
| Chinook Salmon | geartype | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.21% | 4.65% | 0.00% | 0.00% | 0.00% | 0.00% | 1.09% | 4.11% | 2.78% | 9.90% | 2.50% | 8.98% |
| | resource | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 6.06% | 6.06% | 0.00% | 0.00% | 0.00% | 0.00% | 6.06% | 6.06% | 93.94% | 93.94% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.15% | 0.54% | 0.00% | 0.00% | 0.00% | 0.00% | 0.15% | 0.54% | 2.35% | 8.44% | 2.50% | 8.98% |
| Pink Salmon | geartype | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 29.57% | 16.32% | 25.00% | 13.91% |
| | resource | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 25.00% | 13.91% | 25.00% | 13.91% |
| Sockeye Salmon | geartype | 0.00% | 0.00% | 60.00% | 52.94% | 47.37% | 40.30% | 98.79% | 95.35% | 0.00% | 0.00% | 0.00% | 0.00% | 93.48% | 88.99% | 24.91% | 22.34% | 35.00% | 31.64% |
| | resource | 0.00% | 0.00% | 2.60% | 2.60% | 1.95% | 1.95% | 35.28% | 35.28% | 0.00% | 0.00% | 0.00% | 0.00% | 37.23% | 37.23% | 60.17% | 60.17% | 100.00% | 100.00% |
| | total | 0.00% | 0.00% | 0.91% | 0.82% | 0.68% | 0.62% | 12.35% | 11.16% | 0.00% | 0.00% | 0.00% | 0.00% | 13.03% | 11.78% | 21.06% | 19.04% | 35.00% | 31.64% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-41. Estimated Percentages of Salmon Harvest by Gear Type, Resource, and Total Salmon Harvest, Nikolaevsk, 2002/2003

| | | Removed from Commercial Catch | | Removed from Guided Catch | | Subsistence Methods | | | | | | | | | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Gill Net | | Dipnet | | Fish Wheel | | Other | | Subsistence Gear Any Method | | | | | |
| Resource | Percent Base | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. |
| Salmon | geartype | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | resource | 50.69% | 44.01% | 0.59% | 0.58% | 2.99% | 2.73% | 23.45% | 17.25% | 0.00% | 0.00% | 0.00% | 0.00% | 26.44% | 19.98% | 22.28% | 35.42% | 100.00% | 100.00% |
| | total | 50.69% | 44.01% | 0.59% | 0.58% | 2.99% | 2.73% | 23.45% | 17.25% | 0.00% | 0.00% | 0.00% | 0.00% | 26.44% | 19.98% | 22.28% | 35.42% | 100.00% | 100.00% |
| Chum Salmon | geartype | 13.61% | 15.96% | 0.00% | 0.00% | 9.62% | 10.71% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.09% | 1.46% | 0.00% | 0.00% | 7.18% | 7.32% |
| | resource | 96.00% | 96.00% | 0.00% | 0.00% | 4.00% | 4.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.00% | 4.00% | 0.00% | 0.00% | 100.00% | 100.00% |
| | total | 6.90% | 7.02% | 0.00% | 0.00% | 0.29% | 0.29% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.29% | 0.29% | 0.00% | 0.00% | 7.18% | 7.32% |
| Coho Salmon | geartype | 43.65% | 49.30% | 100.00% | 100.00% | 38.46% | 41.27% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.35% | 5.64% | 53.25% | 32.85% | 35.74% | 35.05% |
| | resource | 61.91% | 61.91% | 1.66% | 1.66% | 3.22% | 3.22% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 3.22% | 3.22% | 33.21% | 33.21% | 100.00% | 100.00% |
| | total | 22.13% | 21.70% | 0.59% | 0.58% | 1.15% | 1.13% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.15% | 1.13% | 11.87% | 11.64% | 35.74% | 35.05% |
| Chinook Salmon | geartype | 1.13% | 3.82% | 0.00% | 0.00% | 3.85% | 12.30% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.43% | 1.68% | 33.07% | 60.82% | 8.06% | 23.56% |
| | resource | 7.13% | 7.13% | 0.00% | 0.00% | 1.43% | 1.43% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.43% | 1.43% | 91.44% | 91.44% | 100.00% | 100.00% |
| | total | 0.57% | 1.68% | 0.00% | 0.00% | 0.11% | 0.34% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.11% | 0.34% | 7.37% | 21.54% | 8.06% | 23.56% |
| Pink Salmon | geartype | 13.27% | 6.91% | 0.00% | 0.00% | 9.62% | 4.76% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.09% | 0.65% | 0.00% | 0.00% | 7.01% | 3.17% |
| | resource | 95.90% | 95.90% | 0.00% | 0.00% | 4.10% | 4.10% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.10% | 4.10% | 0.00% | 0.00% | 100.00% | 100.00% |
| | total | 6.72% | 3.04% | 0.00% | 0.00% | 0.29% | 0.13% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.29% | 0.13% | 0.00% | 0.00% | 7.01% | 3.17% |
| Sockeye Salmon | geartype | 28.34% | 24.01% | 0.00% | 0.00% | 38.46% | 30.95% | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% | 93.04% | 90.56% | 13.68% | 6.33% | 42.01% | 30.90% |
| | resource | 34.20% | 34.20% | 0.00% | 0.00% | 2.74% | 2.74% | 55.81% | 55.81% | 0.00% | 0.00% | 0.00% | 0.00% | 58.55% | 58.55% | 7.25% | 7.25% | 100.00% | 100.00% |
| | total | 14.37% | 10.57% | 0.00% | 0.00% | 1.15% | 0.85% | 23.45% | 17.25% | 0.00% | 0.00% | 0.00% | 0.00% | 24.60% | 18.09% | 3.05% | 2.24% | 42.01% | 30.90% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-42. Estimated Percentages of Salmon Harvest by Gear Type, Resource, and Total Salmon Harvest, Ninilchik, 2002/2003

| Resource | Percent Base | Removed from Commercial Catch | | Removed from Guided Catch | | Subsistence Methods | | | | | | | | | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Gill Net | | Dipnet | | Fish Wheel | | Other | | Subsistence Gear Any Method | | | | | |
| | | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. |
| Salmon | geartype | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | resource | 24.63% | 20.24% | 1.63% | 1.95% | 18.33% | 16.91% | 17.60% | 15.08% | 0.00% | 0.00% | 0.00% | 0.00% | 35.93% | 31.99% | 37.81% | 45.82% | 100.00% | 100.00% |
| | total | 24.63% | 20.24% | 1.63% | 1.95% | 18.33% | 16.91% | 17.60% | 15.08% | 0.00% | 0.00% | 0.00% | 0.00% | 35.93% | 31.99% | 37.81% | 45.82% | 100.00% | 100.00% |
| Chum Salmon | geartype | 16.10% | 23.10% | 0.00% | 0.00% | 0.38% | 0.49% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.19% | 0.26% | 0.18% | 0.18% | 4.10% | 4.84% |
| | resource | 96.61% | 96.61% | 0.00% | 0.00% | 1.69% | 1.69% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.69% | 1.69% | 1.69% | 1.69% | 100.00% | 100.00% |
| | total | 3.97% | 4.68% | 0.00% | 0.00% | 0.07% | 0.08% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.07% | 0.08% | 0.07% | 0.08% | 4.10% | 4.84% |
| Coho Salmon | geartype | 10.45% | 14.44% | 29.79% | 28.35% | 6.64% | 8.17% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 3.39% | 4.32% | 44.07% | 41.30% | 20.94% | 23.78% |
| | resource | 12.29% | 12.29% | 2.33% | 2.33% | 5.81% | 5.81% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 5.81% | 5.81% | 79.57% | 79.57% | 100.00% | 100.00% |
| | total | 2.57% | 2.92% | 0.49% | 0.55% | 1.22% | 1.38% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.22% | 1.38% | 16.66% | 18.92% | 20.94% | 23.78% |
| Chinook Salmon | geartype | 2.97% | 12.22% | 17.02% | 48.29% | 3.04% | 11.14% | 0.20% | 0.78% | 0.00% | 0.00% | 0.00% | 0.00% | 1.65% | 6.26% | 9.75% | 27.24% | 5.29% | 17.90% |
| | resource | 13.82% | 13.82% | 5.26% | 5.26% | 10.53% | 10.53% | 0.66% | 0.66% | 0.00% | 0.00% | 0.00% | 0.00% | 11.18% | 11.18% | 69.74% | 69.74% | 100.00% | 100.00% |
| | total | 0.73% | 2.47% | 0.28% | 0.94% | 0.56% | 1.88% | 0.03% | 0.12% | 0.00% | 0.00% | 0.00% | 0.00% | 0.59% | 2.00% | 3.69% | 12.48% | 5.29% | 17.90% |
| Pink Salmon | geartype | 57.20% | 36.48% | 53.19% | 23.36% | 7.97% | 4.53% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.07% | 2.39% | 3.86% | 1.67% | 17.88% | 9.37% |
| | resource | 78.79% | 78.79% | 4.86% | 4.86% | 8.17% | 8.17% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 8.17% | 8.17% | 8.17% | 8.17% | 100.00% | 100.00% |
| | total | 14.09% | 7.38% | 0.87% | 0.46% | 1.46% | 0.77% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.46% | 0.77% | 1.46% | 0.77% | 17.88% | 9.37% |
| Sockeye Salmon | geartype | 13.28% | 13.76% | 0.00% | 0.00% | 81.97% | 75.67% | 99.80% | 99.22% | 0.00% | 0.00% | 0.00% | 0.00% | 90.71% | 86.77% | 42.13% | 29.61% | 51.79% | 44.11% |
| | resource | 6.31% | 6.31% | 0.00% | 0.00% | 29.01% | 29.01% | 33.92% | 33.92% | 0.00% | 0.00% | 0.00% | 0.00% | 62.93% | 62.93% | 30.76% | 30.76% | 100.00% | 100.00% |
| | total | 3.27% | 2.78% | 0.00% | 0.00% | 15.03% | 12.80% | 17.57% | 14.96% | 0.00% | 0.00% | 0.00% | 0.00% | 32.59% | 27.76% | 15.93% | 13.57% | 51.79% | 44.11% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-43. Estimated Percentages of Salmon Harvest by Gear Type, Resource, and Total Salmon Harvest, Seldovia, 2002/2003

| Resource | Percent Base | Removed from Commercial Catch | | Removed from Guided Catch | | Subsistence Methods | | | | | | | | | | Rod and Reel | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Gill Net | | Dipnet | | Fish Wheel | | Other | | Subsistence Gear Any Method | | | | | |
| | | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. | No. | Lbs. |
| Salmon | geartype | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 0.00% | 0.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |
| | resource | 28.45% | 19.31% | 0.86% | 1.76% | 17.31% | 23.12% | 4.31% | 2.47% | 0.00% | 0.00% | 0.13% | 0.30% | 21.75% | 25.89% | 48.94% | 53.04% | 100.00% | 100.00% |
| | total | 28.45% | 19.31% | 0.86% | 1.76% | 17.31% | 23.12% | 4.31% | 2.47% | 0.00% | 0.00% | 0.13% | 0.30% | 21.75% | 25.89% | 48.94% | 53.04% | 100.00% | 100.00% |
| Chum Salmon | geartype | 10.72% | 12.52% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 19.38% | 14.17% | 12.53% | 9.93% |
| | resource | 24.34% | 24.34% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 75.66% | 75.66% | 100.00% | 100.00% |
| | total | 3.05% | 2.42% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 9.48% | 7.52% | 12.53% | 9.93% |
| Coho Salmon | geartype | 31.24% | 35.11% | 15.38% | 5.75% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 22.49% | 15.84% | 20.03% | 15.28% |
| | resource | 44.37% | 44.37% | 0.66% | 0.66% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 54.97% | 54.97% | 100.00% | 100.00% |
| | total | 8.89% | 6.78% | 0.13% | 0.10% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 11.01% | 8.40% | 20.03% | 15.28% |
| Chinook Salmon | geartype | 4.90% | 16.40% | 84.62% | 94.25% | 44.83% | 76.35% | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% | 100.00% | 36.28% | 69.35% | 28.32% | 59.45% | 23.87% | 54.31% |
| | resource | 5.83% | 5.83% | 3.06% | 3.06% | 32.50% | 32.50% | 0.00% | 0.00% | 0.00% | 0.00% | 0.56% | 0.56% | 33.06% | 33.06% | 58.06% | 58.06% | 100.00% | 100.00% |
| | total | 1.39% | 3.17% | 0.73% | 1.66% | 7.76% | 17.65% | 0.00% | 0.00% | 0.00% | 0.00% | 0.13% | 0.30% | 7.89% | 17.95% | 13.86% | 31.53% | 23.87% | 54.31% |
| Pink Salmon | geartype | 27.27% | 14.15% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 25.61% | 8.32% | 20.29% | 7.15% |
| | resource | 38.24% | 38.24% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 61.76% | 61.76% | 100.00% | 100.00% |
| | total | 7.76% | 2.73% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 12.53% | 4.41% | 20.29% | 7.15% |
| Sockeye Salmon | geartype | 25.87% | 21.82% | 0.00% | 0.00% | 55.17% | 23.65% | 100.00% | 100.00% | 0.00% | 0.00% | 0.00% | 0.00% | 63.72% | 30.65% | 4.20% | 2.22% | 23.28% | 13.32% |
| | resource | 31.62% | 31.62% | 0.00% | 0.00% | 41.03% | 41.03% | 18.52% | 18.52% | 0.00% | 0.00% | 0.00% | 0.00% | 59.54% | 59.54% | 8.83% | 8.83% | 100.00% | 100.00% |
| | total | 7.36% | 4.21% | 0.00% | 0.00% | 9.55% | 5.47% | 4.31% | 2.47% | 0.00% | 0.00% | 0.00% | 0.00% | 13.86% | 7.93% | 2.06% | 1.18% | 23.28% | 13.32% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-44. Percentage of Households Harvesting Salmon by Gear Type and Species, Kenai Peninsula Study Communities, 2002/2003

| RESOURCE | Removed from Commercial Catch | Removed from Guided Catch | Subsistence Methods | | | | Subsistence Gear Any Method | Rod and Reel | Any Method |
|---|---|---|---|---|---|---|---|---|---|
| | | | Gill Net | Dip Net | Fish wheel | Other | | | |
| **Cooper Landing** | | | | | | | | | |
| Salmon | 0.00% | 0.97% | 0.00% | 9.71% | 0.97% | 0.97% | 11.65% | 63.11% | 66.02% |
| Chum Salmon | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Coho Salmon | 0.00% | 0.97% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 44.66% | 44.66% |
| Chinook Salmon | 0.00% | 0.00% | 0.00% | 0.97% | 0.97% | 0.97% | 2.91% | 15.53% | 18.45% |
| Pink Salmon | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 2.91% | 2.91% |
| Sockeye Salmon | 0.00% | 0.97% | 0.00% | 9.71% | 0.97% | 0.97% | 11.65% | 58.25% | 62.14% |
| **Hope** | | | | | | | | | |
| Salmon | 0.00% | 1.67% | 1.67% | 10.00% | 0.00% | 0.00% | 11.67% | 55.00% | 56.67% |
| Chum Salmon | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 11.67% | 11.67% |
| Coho Salmon | 0.00% | 1.67% | 1.67% | 0.00% | 0.00% | 0.00% | 1.67% | 45.00% | 45.00% |
| Chinook Salmon | 0.00% | 0.00% | 0.00% | 1.67% | 0.00% | 0.00% | 1.67% | 10.00% | 11.67% |
| Pink Salmon | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 21.67% | 21.67% |
| Sockeye Salmon | 0.00% | 1.67% | 1.67% | 10.00% | 0.00% | 0.00% | 11.67% | 18.33% | 30.00% |
| **Nikolaevsk** | | | | | | | | | |
| Salmon | 23.34% | 3.35% | 1.95% | 21.40% | 0.00% | 0.00% | 23.34% | 57.95% | 71.56% |
| Chum Salmon | 3.89% | 0.00% | 1.95% | 0.00% | 0.00% | 0.00% | 1.95% | 0.00% | 5.84% |
| Coho Salmon | 21.40% | 3.35% | 1.95% | 0.00% | 0.00% | 0.00% | 1.95% | 33.73% | 55.13% |
| Chinook Salmon | 9.73% | 0.00% | 1.95% | 0.00% | 0.00% | 0.00% | 1.95% | 42.05% | 47.89% |
| Pink Salmon | 5.84% | 0.00% | 1.95% | 0.00% | 0.00% | 0.00% | 1.95% | 0.00% | 7.78% |
| Sockeye Salmon | 15.56% | 0.00% | 1.95% | 21.40% | 0.00% | 0.00% | 23.34% | 7.24% | 36.42% |
| **Ninilchik** | | | | | | | | | |
| Salmon | 7.00% | 5.00% | 12.00% | 19.00% | 0.00% | 0.00% | 30.00% | 51.00% | 69.00% |
| Chum Salmon | 4.00% | 0.00% | 1.00% | 0.00% | 0.00% | 0.00% | 1.00% | 1.00% | 6.00% |
| Coho Salmon | 4.00% | 3.00% | 3.00% | 0.00% | 0.00% | 0.00% | 3.00% | 35.00% | 41.00% |
| Chinook Salmon | 4.00% | 2.00% | 5.00% | 1.00% | 0.00% | 0.00% | 6.00% | 32.00% | 38.00% |
| Pink Salmon | 3.00% | 3.00% | 3.00% | 0.00% | 0.00% | 0.00% | 3.00% | 6.00% | 12.00% |
| Sockeye Salmon | 6.00% | 0.00% | 12.00% | 19.00% | 0.00% | 0.00% | 30.00% | 29.00% | 54.00% |
| **Seldovia** | | | | | | | | | |
| Salmon | 10.00% | 4.00% | 8.00% | 2.00% | 0.00% | 2.00% | 12.00% | 58.00% | 66.00% |
| Chum Salmon | 4.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 10.00% | 14.00% |
| Coho Salmon | 8.00% | 2.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 32.00% | 38.00% |
| Chinook Salmon | 6.00% | 4.00% | 6.00% | 0.00% | 0.00% | 2.00% | 8.00% | 46.00% | 50.00% |
| Pink Salmon | 4.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 16.00% | 20.00% |
| Sockeye Salmon | 8.00% | 0.00% | 6.00% | 2.00% | 0.00% | 0.00% | 8.00% | 10.00% | 24.00% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-45. Percentage of Households Harvesting Non-Salmon Fish by Gear Type and Species, Kenai Peninsula Study Communities, 2002/2003

| RESOURCE | Removed from Commercial Catch | Removed from Guided Catch | Subsistence Methods | | | | Subsistence Gear Any Method | Ice Fishing | Rod and Reel | Any Method |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Gill Net | Dip Net | Fish wheel | Other | | | | |
| **Cooper Landing** | | | | | | | | | | |
| Non-Salmon Fish | 0.0% | 2.9% | 0.0% | 2.9% | 0.0% | 0.0% | 2.9% | 2.9% | 55.3% | 56.3% |
| Herring Sac Roe | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Eulachon (hooligan, candlefish) | 0.0% | 0.0% | 0.0% | 1.9% | 0.0% | 0.0% | 1.9% | 0.0% | 0.0% | 1.9% |
| Pacific Cod (gray) | 0.0% | 0.0% | 0.0% | 1.0% | 0.0% | 0.0% | 1.0% | 0.0% | 0.0% | 1.0% |
| Lingcod | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.9% | 1.9% |
| Halibut | 0.0% | 1.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 28.2% | 29.1% |
| Black Rockfish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.9% | 2.9% |
| Red Rockfish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 3.9% | 3.9% |
| Sablefish (black cod) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Dolly Varden | 0.0% | 1.9% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 26.2% | 26.2% |
| Lake Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.9% | 14.6% | 15.5% |
| Grayling | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 6.8% | 6.8% |
| Unknown Pike | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% |
| Rainbow Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 20.4% | 20.4% |
| Steelhead | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.9% | 1.9% |
| Unknown Whitefish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 4.9% | 4.9% |
| **Hope** | | | | | | | | | | |
| Non-Salmon Fish | 0.0% | 0.0% | 1.7% | 6.7% | 0.0% | 1.7% | 8.3% | 5.0% | 36.7% | 40.0% |
| Eulachon (hooligan, candlefish) | 0.0% | 0.0% | 1.7% | 6.7% | 0.0% | 1.7% | 8.3% | 0.0% | 0.0% | 8.3% |
| Pacific Cod (gray) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.7% | 1.7% |
| Lingcod | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 3.3% | 3.3% |
| Halibut | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 18.3% | 18.3% |
| Black Rockfish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 6.7% | 6.7% |
| Red Rockfish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.7% | 1.7% |
| Unknown Rockfish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.7% | 1.7% |
| Sablefish (black cod) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.7% | 1.7% |
| Burbot | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Dolly Varden | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 3.3% | 26.7% | 28.3% |
| Lake Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.7% | 3.3% | 3.3% |
| Grayling | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 3.3% | 3.3% |
| Rainbow Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.7% | 8.3% | 10.0% |
| Steelhead | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| **Nikolaevsk** | | | | | | | | | | |
| Non-Salmon Fish | 30.6% | 3.4% | 9.2% | 13.6% | 0.0% | 12.5% | 26.2% | 7.8% | 40.1% | 66.3% |
| Herring | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Herring Sac Roe | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Eulachon (hooligan, candlefish) | 0.0% | 0.0% | 9.2% | 13.6% | 0.0% | 9.2% | 22.8% | 0.0% | 0.0% | 22.8% |
| Pacific Cod (gray) | 7.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.9% | 9.7% |
| Starry Flounder | 1.9% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.9% |
| Lingcod | 5.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 5.8% |
| Unknown Greenling | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 3.4% | 3.4% |
| Halibut | 23.3% | 3.4% | 0.0% | 0.0% | 0.0% | 3.4% | 3.4% | 0.0% | 21.2% | 44.0% |
| Black Rockfish | 9.2% | 3.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 12.5% |
| Red Rockfish | 15.6% | 3.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 18.9% |
| Unknown Rockfish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Sablefish (black cod) | 7.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 7.8% |
| Unknown Shark | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Dolly Varden | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 12.0% | 12.0% |
| Lake Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.9% | 7.8% | 7.8% |
| Grayling | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 3.9% | 3.9% |
| Unknown Pike | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.9% | 1.9% |
| Rainbow Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 5.8% | 17.0% | 20.9% |
| Steelhead | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Unknown Whitefish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| **Ninilchik** | | | | | | | | | | |
| Non-Salmon Fish | 3.0% | 6.0% | 2.0% | 3.0% | 0.0% | 2.0% | 5.0% | 2.0% | 58.0% | 60.0% |
| Herring | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% |
| Herring Sac Roe | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Eulachon (hooligan, candlefish) | 0.0% | 0.0% | 2.0% | 3.0% | 0.0% | 2.0% | 5.0% | 0.0% | 0.0% | 5.0% |
| Pacific Cod (gray) | 2.0% | 3.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 5.0% | 8.0% |
| Pacific Tom Cod | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 3.0% | 3.0% |
| Walleye Pollock (whiting) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Starry Flounder | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% |
| Lingcod | 1.0% | 1.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 4.0% | 5.0% |
| Unknown Greenling | 0.0% | 1.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 2.0% |
| Halibut | 1.0% | 5.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 52.0% | 53.0% |
| Black Rockfish | 0.0% | 1.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 6.0% | 7.0% |
| Red Rockfish | 1.0% | 1.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 3.0% |
| Sablefish (black cod) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% |
| Unknown Shark | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% |
| Dolly Varden | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 12.0% | 12.0% |
| Lake Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 5.0% | 6.0% |
| Unknown Pike | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% |
| Rainbow Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 6.0% | 6.0% |
| Steelhead | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Unknown Whitefish | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| **Seldovia** | | | | | | | | | | |
| Non-Salmon Fish | 12.0% | 4.0% | 2.0% | 0.0% | 0.0% | 4.0% | 8.0% | 0.0% | 62.0% | 72.0% |
| Herring | 4.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 0.0% | 2.0% | 8.0% |
| Herring Sac Roe | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 4.0% | 0.0% | 0.0% | 4.0% |
| Herring Spawn on Kelp | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 2.0% | 0.0% | 0.0% | 2.0% |
| Eulachon (hooligan, candlefish) | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Pacific Cod (gray) | 8.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 8.0% | 16.0% |
| Starry Flounder | 2.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 0.0% | 0.0% | 4.0% |
| Lingcod | 6.0% | 2.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 8.0% | 16.0% |
| Unknown Greenling | 6.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 8.0% | 14.0% |
| Halibut | 4.0% | 4.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 52.0% | 56.0% |
| Black Rockfish | 6.0% | 2.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 16.0% | 20.0% |
| Red Rockfish | 6.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 10.0% | 16.0% |
| Sablefish (black cod) | 4.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 6.0% |
| Unknown Shark | 2.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% |
| Dolly Varden | 6.0% | 0.0% | 2.0% | 0.0% | 0.0% | 2.0% | 2.0% | 0.0% | 18.0% | 26.0% |
| Lake Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| Grayling | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 2.0% |
| Unknown Pike | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 2.0% |
| Rainbow Trout | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 6.0% | 6.0% |
| Steelhead | 2.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% |

Table IV-46. Estimated Harvests of Fish Other Than Salmon by Gear Type, Cooper Landing, 2002/2003.

| | | Removed From Commercial Catch | | Removed From Guided Catch | | Set Net | | Gill Net | | Dip Net | | Rod and Reel | | Ice Fishing | | Other methods | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resource | Harvest Units | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Non-Salmon Fish | lbs | 0 | 0.0 | 143 | 1.1 | 0 | 0.0 | 0 | 0.0 | 180 | 1.3 | 4,795 | 35.3 | 113 | 0.8 | 0 | 0.0 | 5,231 | 38.5 |
| Herring Sac Roe | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Eulachon (hooligan, candlefish) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 172 | 1.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 172 | 1.3 |
| Pacific Cod (gray) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 8 | 0.1 |
| Lingcod | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 0.1 | 0 | 0.0 | 0 | 0.0 | 16 | 0.1 |
| Halibut | lbs | 0 | 0.0 | 132 | 1.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3,050 | 22.4 | 0 | 0.0 | 0 | 0.0 | 3,182 | 23.4 |
| Black Rockfish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 220 | 1.6 | 0 | 0.0 | 0 | 0.0 | 220 | 1.6 |
| Red Rockfish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 48 | 0.3 | 0 | 0.0 | 0 | 0.0 | 48 | 0.3 |
| Sablefish (black cod) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Dolly Varden | lbs | 0 | 0.0 | 11 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 412 | 3.0 | 4 | 0.0 | 0 | 0.0 | 427 | 3.1 |
| Lake Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 571 | 4.2 | 109 | 0.8 | 0 | 0.0 | 680 | 5.0 |
| Grayling | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 38 | 0.3 | 0 | 0.0 | 0 | 0.0 | 38 | 0.3 |
| Unknown Pike | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 12 | 0.1 | 0 | 0.0 | 0 | 0.0 | 12 | 0.1 |
| Rainbow Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 375 | 2.8 | 0 | 0.0 | 0 | 0.0 | 375 | 2.8 |
| Steelhead | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| Unknown Whitefish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 46 | 0.3 | 0 | 0.0 | 0 | 0.0 | 46 | 0.3 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-47. Estimated Harvests of Fish Other Than Salmon by Gear Type, Hope, 2002/2003.

| Resource | Harvest Units | Removed From Commercial Catch | | Removed From Guided Catch | | Set Net | | Gill Net | | Dip Net | | Rod and Reel | | Ice Fishing | | Other methods | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Non-Salmon Fish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 0.2 | 188 | 2.5 | 2,124 | 28.7 | 35 | 0.5 | 0 | 0.0 | 2,363 | 31.9 |
| Eulachon (hooligan, candlefish) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 0.2 | 188 | 2.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 204 | 2.8 |
| Pacific Cod (gray) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 79 | 1.1 | 0 | 0.0 | 0 | 0.0 | 79 | 1.1 |
| Lingcod | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 72 | 1.0 | 0 | 0.0 | 0 | 0.0 | 72 | 1.0 |
| Halibut | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1,585 | 21.4 | 0 | 0.0 | 0 | 0.0 | 1,585 | 21.4 |
| Black Rockfish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 44 | 0.6 | 0 | 0.0 | 0 | 0.0 | 44 | 0.6 |
| Red Rockfish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 |
| Unknown Rockfish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 | 0 | 0.0 | 0 | 0.0 | 4 | 0.0 |
| Sablefish (black cod) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 31 | 0.4 | 0 | 0.0 | 0 | 0.0 | 31 | 0.4 |
| Burbot | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Dolly Varden | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 212 | 2.9 | 31 | 0.4 | 0 | 0.0 | 243 | 3.3 |
| Lake Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 5 | 0.1 | 2 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| Grayling | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 16 | 0.2 | 0 | 0.0 | 0 | 0.0 | 16 | 0.2 |
| Rainbow Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 67 | 0.9 | 2 | 0.0 | 0 | 0.0 | 69 | 0.9 |
| Steelhead | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-48. Estimated Harvests of Fish Other Than Salmon by Gear Type, Nikolaevsk, 2002/2003.

| | | Removed From Commercial Catch | | Removed From Guided Catch | | Set Net | | Gill Net | | Dip Net | | Rod and Reel | | Ice Fishing | | Other methods | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resource | Harvest Units | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Non-Salmon Fish | lbs | 5,528 | 70.9 | 341 | 4.4 | 0 | 0.0 | 297 | 3.8 | 276 | 3.5 | 2,701 | 34.6 | 104 | 1.3 | 8 | 0.1 | 9,255 | 118.7 |
| Herring | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Herring Sac Roe | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Eulachon (hooligan, candlefish) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 297 | 3.8 | 276 | 3.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 573 | 7.3 |
| Pacific Cod (gray) | lbs | 311 | 4.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 15 | 0.2 | 0 | 0.0 | 0 | 0.0 | 325 | 4.2 |
| Starry Flounder | lbs | 18 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 18 | 0.2 |
| Lingcod | lbs | 67 | 0.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 67 | 0.9 |
| Unknown Greenling | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 | 0 | 0.0 | 0 | 0.0 | 3 | 0.0 |
| Halibut | lbs | 2,822 | 36.2 | 301 | 3.9 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2,090 | 26.8 | 0 | 0.0 | 8 | 0.1 | 5,221 | 66.9 |
| Black Rockfish | lbs | 271 | 3.5 | 20 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 290 | 3.7 |
| Red Rockfish | lbs | 1,602 | 20.5 | 21 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1,623 | 20.8 |
| Unknown Rockfish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Sablefish (black cod) | lbs | 437 | 5.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 437 | 5.6 |
| Unknown Shark | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Dolly Varden | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 178 | 2.3 | 0 | 0.0 | 0 | 0.0 | 178 | 2.3 |
| Lake Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 81 | 1.0 | 15 | 0.2 | 0 | 0.0 | 96 | 1.2 |
| Grayling | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 | 0 | 0.0 | 0 | 0.0 | 7 | 0.1 |
| Unknown Pike | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 46 | 0.6 | 0 | 0.0 | 0 | 0.0 | 46 | 0.6 |
| Rainbow Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 282 | 3.6 | 89 | 1.1 | 0 | 0.0 | 372 | 4.8 |
| Steelhead | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Unknown Whitefish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-49. Estimated Harvests of Fish Other Than Salmon by Gear Type, Ninilchik, 2002/2003.

| | | Removed From Commercial Catch | | Removed From Guided Catch | | Set Net | | Gill Net | | Dip Net | | Rod and Reel | | Ice Fishing | | Other methods | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Resource | Harvest Units | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Non-Salmon Fish | lbs | 4,053 | 7.0 | 3,971 | 6.9 | 0 | 0.0 | 375 | 0.7 | 394 | 0.7 | 47,609 | 82.5 | 202 | 0.4 | 0 | 0.0 | 56,604 | 98.1 |
| Herring | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 519 | 0.9 | 0 | 0.0 | 0 | 0.0 | 519 | 0.9 |
| Herring Sac Roe | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Eulachon (hooligan, candlefish) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 375 | 0.7 | 394 | 0.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 769 | 1.3 |
| Pacific Cod (gray) | lbs | 960 | 1.7 | 997 | 1.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 572 | 1.0 | 0 | 0.0 | 0 | 0.0 | 2,530 | 4.4 |
| Pacific Tom Cod | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 32 | 0.1 | 0 | 0.0 | 0 | 0.0 | 32 | 0.1 |
| Walleye Pollock (whiting) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Starry Flounder | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 692 | 1.2 | 0 | 0.0 | 0 | 0.0 | 692 | 1.2 |
| Lingcod | lbs | 23 | 0.0 | 277 | 0.5 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 508 | 0.9 | 0 | 0.0 | 0 | 0.0 | 808 | 1.4 |
| Unknown Greenling | lbs | 0 | 0.0 | 29 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 6 | 0.0 | 0 | 0.0 | 0 | 0.0 | 35 | 0.1 |
| Halibut | lbs | 2,885 | 5.0 | 2,395 | 4.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 41,486 | 71.9 | 0 | 0.0 | 0 | 0.0 | 46,766 | 81.1 |
| Black Rockfish | lbs | 0 | 0.0 | 43 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 1,186 | 2.1 | 0 | 0.0 | 0 | 0.0 | 1,229 | 2.1 |
| Red Rockfish | lbs | 185 | 0.3 | 231 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 300 | 0.5 | 0 | 0.0 | 0 | 0.0 | 715 | 1.2 |
| Sablefish (black cod) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 89 | 0.2 | 0 | 0.0 | 0 | 0.0 | 89 | 0.2 |
| Unknown Shark | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 52 | 0.1 | 0 | 0.0 | 0 | 0.0 | 52 | 0.1 |
| Dolly Varden | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 897 | 1.6 | 0 | 0.0 | 0 | 0.0 | 897 | 1.6 |
| Lake Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 283 | 0.5 | 162 | 0.3 | 0 | 0.0 | 444 | 0.8 |
| Unknown Pike | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 17 | 0.0 | 0 | 0.0 | 0 | 0.0 | 17 | 0.0 |
| Rainbow Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 969 | 1.7 | 40 | 0.1 | 0 | 0.0 | 1,010 | 1.8 |
| Steelhead | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Unknown Whitefish | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-50. Estimated Harvests of Fish Other Than Salmon by Gear Type, Seldovia, 2002/2003.

| | | Removed From Commercial Catch | | Removed From Guided Catch | | Set Net | | Gill Net | | Dip Net | | Rod and Reel | | Ice Fishing | | Other methods | | Any Method | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Harvest Units | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean | Total | HH Mean |
| Non-Salmon Fish | lbs | 9,001 | 53.3 | 1,810 | 10.7 | 1,071 | 6.3 | 118 | 0.7 | 0 | 0.0 | 14,825 | 87.7 | 0 | 0.0 | 47 | 0.3 | 26,873 | 159.0 |
| Herring | lbs | 1,257 | 7.4 | 0 | 0.0 | 1,014 | 6.0 | 0 | 0.0 | 0 | 0.0 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 2,282 | 13.5 |
| Herring Sac Roe | lbs | 0 | 0.0 | 0 | 0.0 | 47 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 24 | 0.1 | 71 | 0.4 |
| Herring Spawn on Kelp | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 24 | 0.1 | 24 | 0.1 |
| Eulachon (hooligan, candlefish) | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Pacific Cod (gray) | lbs | 4,521 | 26.8 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 303 | 1.8 | 0 | 0.0 | 0 | 0.0 | 4,824 | 28.5 |
| Starry Flounder | lbs | 122 | 0.7 | 0 | 0.0 | 10 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 132 | 0.8 |
| Lingcod | lbs | 122 | 0.7 | 162 | 1.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 68 | 0.4 | 0 | 0.0 | 0 | 0.0 | 352 | 2.1 |
| Unknown Greenling | lbs | 132 | 0.8 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 51 | 0.3 | 0 | 0.0 | 0 | 0.0 | 183 | 1.1 |
| Halibut | lbs | 2,042 | 12.1 | 1,470 | 8.7 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 12,641 | 74.8 | 0 | 0.0 | 0 | 0.0 | 16,153 | 95.6 |
| Black Rockfish | lbs | 304 | 1.8 | 177 | 1.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 659 | 3.9 | 0 | 0.0 | 0 | 0.0 | 1,141 | 6.8 |
| Red Rockfish | lbs | 189 | 1.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 122 | 0.7 | 0 | 0.0 | 0 | 0.0 | 311 | 1.8 |
| Sablefish (black cod) | lbs | 105 | 0.6 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 126 | 0.7 | 0 | 0.0 | 0 | 0.0 | 231 | 1.4 |
| Unknown Shark | lbs | 61 | 0.4 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 61 | 0.4 |
| Dolly Varden | lbs | 123 | 0.7 | 0 | 0.0 | 0 | 0.0 | 118 | 0.7 | 0 | 0.0 | 364 | 2.2 | 0 | 0.0 | 0 | 0.0 | 606 | 3.6 |
| Lake Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Grayling | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 237 | 1.4 | 0 | 0.0 | 0 | 0.0 | 237 | 1.4 |
| Unknown Pike | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 203 | 1.2 | 0 | 0.0 | 0 | 0.0 | 203 | 1.2 |
| Rainbow Trout | lbs | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 43 | 0.3 | 0 | 0.0 | 0 | 0.0 | 43 | 0.3 |
| Steelhead | lbs | 24 | 0.1 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 24 | 0.1 |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003.

Table IV-51. Locations Used to Harvest Fish, Cooper Landing, 2002/2003

| Area Fished | Percentage of Households | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chinook | Sockeye | Coho | Chum | Pink | Dolly Varden | Rainbow Trout | Steelhead | Lake Trout | Hooligan |
| Federal Public Lands & Waters: | | | | | | | | | | |
| Kenai Lake and Kenai Lake Streams | 0.00% | 0.00% | 0.97% | 0.00% | 0.97% | 15.53% | 7.77% | 0.00% | 14.56% | 0.00% |
| Kenai Mountain Streams | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.85% | 9.71% | 0.00% | 3.88% | 0.00% |
| Russian River | 0.00% | 39.81% | 13.59% | 0.00% | 0.97% | 2.91% | 3.88% | 0.00% | 0.97% | 0.00% |
| Swanson River | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.97% | 2.91% | 0.00% | 0.00% | 0.00% |
| Upper Kenai River, Skilak Canyon | 1.94% | 29.13% | 15.53% | 0.00% | 0.00% | 6.80% | 1.94% | 0.00% | 0.97% | 0.00% |
| Other Lands & Waters | | | | | | | | | | |
| Anchor River, Stariski Creek | 1.94% | 0.00% | 1.94% | 0.00% | 0.00% | 0.00% | 0.00% | 0.97% | 0.97% | 0.00% |
| Cook Inlet, Coho | 0.97% | 0.97% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, Kenai | 0.00% | 0.97% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, North | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.97% |
| Cook Inlet, West | 0.00% | 0.97% | 3.88% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Gulf of Alaska | 0.00% | 0.97% | 3.88% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Kachemak Bay | 0.97% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.97% | 0.00% |
| Kasilof River, Crooked Creek | 12.62% | 1.94% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.94% | 0.97% | 0.00% |
| Lower Kenai River | 7.77% | 15.53% | 9.71% | 0.00% | 0.00% | 0.97% | 1.94% | 0.97% | 0.97% | 0.97% |
| Ninilchik River, Deep Creek | 3.88% | 0.00% | 0.97% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.97% | 0.00% |
| Prince William Sound | 0.00% | 0.00% | 2.91% | 0.00% | 0.00% | 0.97% | 0.97% | 0.00% | 0.00% | 0.00% |
| Resurrection Bay | 0.97% | 0.00% | 6.80% | 0.00% | 0.97% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Alaska. | 0.97% | 3.88% | 1.94% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Missing | 7.77% | 0.97% | 0.97% | 0.97% | 0.00% | 1.94% | 0.97% | 0.00% | 0.00% | 0.00% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-52. Locations Used to Harvest Fish, Hope, 2002/03

| Area Fished | Percentage of Households | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chinook | Sockeye | Coho | Chum | Pink | Dolly Varden | Rainbow Trout | Steelhead | Lake Trout | Hooligan |
| Federal Public Lands & Waters: | | | | | | | | | | |
| Kenai Lake and Kenai Lake Streams | 0.00% | 1.67% | 0.00% | 0.00% | 0.00% | 3.33% | 1.67% | 0.00% | 0.00% | 0.00% |
| Kenai Mountain Streams | 3.33% | 0.00% | 35.00% | 11.67% | 20.00% | 16.67% | 3.33% | 0.00% | 1.67% | 1.67% |
| Russian River | 0.00% | 11.67% | 1.67% | 0.00% | 0.00% | 0.00% | 1.67% | 0.00% | 0.00% | 0.00% |
| Swanson River | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.67% | 1.67% | 0.00% | 0.00% | 0.00% |
| Upper Kenai River, Skilak Canyon | 0.00% | 6.67% | 5.00% | 0.00% | 0.00% | 3.33% | 0.00% | 0.00% | 1.67% | 0.00% |
| Other Lands and Waters: | | | | | | | | | | |
| Cook Inlet, Anchor Point | 1.67% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, Kenai | 0.00% | 1.67% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, North | 0.00% | 1.67% | 1.67% | 0.00% | 1.67% | 0.00% | 0.00% | 0.00% | 0.00% | 6.67% |
| Kasilof River, Crooked Creek | 5.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Lower Kenai River | 6.67% | 13.33% | 3.33% | 0.00% | 0.00% | 1.67% | 0.00% | 0.00% | 0.00% | 0.00% |
| Prince William Sound | 0.00% | 0.00% | 3.33% | 0.00% | 0.00% | 0.00% | 1.67% | 0.00% | 0.00% | 0.00% |
| Resurrection Bay | 6.67% | 0.00% | 5.00% | 0.00% | 0.00% | 1.67% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Alaska | 0.00% | 1.67% | 1.67% | 0.00% | 0.00% | 1.67% | 0.00% | 0.00% | 0.00% | 0.00% |
| Missing | 1.67% | 1.67% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-53. Locations Used to Harvest Fish, Nikolaevsk, 2002/2003

| Area Fished | Percentage of Households | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chinook | Sockeye | Coho | Chum | Pink | Dolly Varden | Rainbow Trout | Steelhead | Lake Trout | Hooligan |
| Federal Public Lands & Waters: | | | | | | | | | | |
| Russian River | 0.00% | 1.95% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Swanson River | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.95% | 0.00% | 0.00% | 0.00% |
| Other Lands and Waters: | | | | | | | | | | |
| Anchor River, Stariski Creek | 12.54% | 0.00% | 0.00% | 0.00% | 0.00% | 6.71% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, Anchor Point | 5.30% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Gulf of Alaska | 0.00% | 0.00% | 3.35% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.95% |
| Kachemak Bay | 26.70% | 5.84% | 35.68% | 1.95% | 1.95% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Kasilof River, Crooked Creek | 6.71% | 1.95% | 0.00% | 0.00% | 0.00% | 3.35% | 18.91% | 0.00% | 3.89% | 0.00% |
| Lower Kenai River | 0.00% | 24.75% | 3.35% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.95% | 20.86% |
| Other Alaska | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.95% | 0.00% | 0.00% | 0.00% |
| Missing | 3.89% | 5.30% | 0.00% | 0.00% | 0.00% | 1.95% | 0.00% | 0.00% | 5.84% | 1.95% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-54. Locations Used to Harvest Fish, Ninilchik, 2002/2003

| Area Fished | Percentage of Households | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chinook | Sockeye | Coho | Chum | Pink | Dolly Varden | Rainbow Trout | Steelhead | Lake Trout | Hooligan |
| Federal Public Lands and Waters: | | | | | | | | | | |
| Kenai Lake and Kenai Lake Streams | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.00% | 0.00% | 1.00% | 0.00% |
| Kenai Mountain Streams | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.00% | 0.00% | 0.00% | 0.00% |
| Russian River | 0.00% | 4.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Lands and Waters: | | | | | | | | | | |
| Anchor River, Stariski Creek | 4.00% | 0.00% | 5.00% | 0.00% | 1.00% | 1.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, Anchor Point | 4.00% | 0.00% | 1.00% | 0.00% | 1.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, Coho | 0.00% | 4.00% | 1.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, Deep Creek | 12.00% | 4.00% | 6.00% | 0.00% | 2.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Cook Inlet, Kenai | 3.00% | 5.00% | 0.00% | 0.00% | 1.00% | 0.00% | 0.00% | 0.00% | 0.00% | 1.00% |
| Cook Inlet, West | 1.00% | 1.00% | 1.00% | 0.00% | 1.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Gulf of Alaska | 0.00% | 0.00% | 4.00% | 0.00% | 1.00% | 1.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Kachemak Bay | 9.00% | 1.00% | 7.00% | 1.00% | 1.00% | 1.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Kasilof River, Crooked Creek | 4.00% | 8.00% | 0.00% | 0.00% | 0.00% | 1.00% | 4.00% | 0.00% | 4.00% | 0.00% |
| Lower Kenai River | 4.00% | 22.00% | 2.00% | 0.00% | 0.00% | 1.00% | 0.00% | 0.00% | 0.00% | 3.00% |
| Ninilchik River, Deep Creek | 19.00% | 8.00% | 20.00% | 1.00% | 2.00% | 8.00% | 1.00% | 0.00% | 1.00% | 0.00% |
| Resurrection Bay | 0.00% | 0.00% | 4.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Alaska | 1.00% | 2.00% | 2.00% | 0.00% | 1.00% | 0.00% | 0.00% | 0.00% | 2.00% | 0.00% |
| Missing | 7.00% | 1.00% | 2.00% | 0.00% | 0.00% | 3.00% | 2.00% | 0.00% | 2.00% | 1.00% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-55. Locations Used to Harvest Fish, Seldovia, 2002/2003

| Area Fished | Percentage of Households | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Chinook | Sockeye | Coho | Chum | Pink | Dolly Varden | Rainbow Trout | Steelhead | Lake Trout | Hooligan |
| Federal Public Lands and Waters: | | | | | | | | | | |
| None | | | | | | | | | | |
| Other Lands and Waters: | | | | | | | | | | |
| Lower Kenai River | 0.00% | 2.00% | 2.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Kasilof River, Crooked Creek | 2.00% | 4.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Kachemak Bay | 50.00% | 12.00% | 32.00% | 10.00% | 16.00% | 22.00% | 2.00% | 0.00% | 0.00% | 0.00% |
| Gulf of Alaska | 0.00% | 0.00% | 4.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Other Alaska | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 4.00% | 0.00% | 0.00% | 0.00% |
| Missing | 6.00% | 2.00% | 0.00% | 0.00% | 0.00% | 0.00% | 2.00% | 0.00% | 0.00% | 0.00% |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Table IV-56. Methods Used to Preserve Salmon in 2002/2003 and Ever Used, Study Communities

Part A: Methods Used in Study Year (2002/03)

| Percentage of Households Using: | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
|---|---|---|---|---|---|
| Salting | 2.9 | 1.7 | 27.2 | 10.0 | 26.0 |
| Drying | 4.9 | 1.7 | 9.7 | 5.0 | 22.0 |
| Smoking | 52.4 | 38.3 | 63.4 | 53.0 | 50.0 |
| Pickling | 7.8 | 1.7 | 9.7 | 17.0 | 30.0 |
| Kippering | 0.0 | 0.0 | 3.4 | 2.0 | 0.0 |
| Freezing | 71.8 | 56.7 | 86.6 | 79.0 | 90.0 |
| Canning/Jarring | 26.2 | 30.0 | 41.7 | 58.0 | 52.0 |
| Other | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 |
| Fresh Only | 1.0 | 1.7 | 0.0 | 11.0 | 6.0 |

Part B: Methods Ever Used

| Percentage of Households Using: | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
|---|---|---|---|---|---|
| Salting | 9.7 | 10.0 | 40.3 | 20.0 | 42.0 |
| Drying | 10.7 | 11.7 | 17.0 | 17.0 | 36.0 |
| Smoking | 78.6 | 80.0 | 81.3 | 80.0 | 80.0 |
| Pickling | 21.4 | 6.7 | 25.6 | 45.0 | 48.0 |
| Kippering | 0.0 | 0.0 | 6.9 | 2.0 | 0.0 |
| Freezing | 86.4 | 86.7 | 89.9 | 96.0 | 92.0 |
| Canning/Jarring | 56.3 | 66.7 | 72.6 | 80.0 | 66.0 |
| Other | 1.0 | 0.0 | 3.4 | 1.0 | 2.0 |
| Fresh Only | 1.9 | 1.7 | 0.0 | 15.0 | 6.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-57. Months Used and Preferred for Harvesting Chinook Salmon, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 0.0 | 0.0 | 0.0 | 1.0 | 2.0 | 1.0 | 0.0 | 0.0 | 1.0 | 4.0 |
| February | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 1.0 | 0.0 | 0.0 | 0.0 | 10.0 |
| March | 0.0 | 0.0 | 0.0 | 3.0 | 4.0 | 1.0 | 0.0 | 0.0 | 2.0 | 8.0 |
| April | 0.0 | 0.0 | 0.0 | 3.0 | 6.0 | 1.0 | 0.0 | 0.0 | 6.0 | 8.0 |
| May | 8.7 | 5.0 | 11.1 | 23.0 | 18.0 | 15.5 | 11.7 | 35.7 | 47.0 | 26.0 |
| June | 8.7 | 5.0 | 24.2 | 19.0 | 32.0 | 15.5 | 13.3 | 55.1 | 38.0 | 36.0 |
| July | 5.8 | 3.3 | 9.7 | 11.0 | 10.0 | 10.7 | 8.3 | 18.4 | 16.0 | 18.0 |
| August | 1.9 | 1.7 | 3.9 | 1.0 | 4.0 | 1.0 | 5.0 | 3.9 | 3.0 | 8.0 |
| September | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 |
| October | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 |
| November | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 | 1.7 | 0.0 | 1.0 | 6.0 |
| December | 0.0 | 0.0 | 0.0 | 1.0 | 4.0 | 0.0 | 1.7 | 0.0 | 1.0 | 6.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-58. Months Used and Preferred for Harvesting Sockeye Salmon, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| February | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| March | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| April | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| May | 1.0 | 0.0 | 0.0 | 1.0 | 4.0 | 1.0 | 0.0 | 0.0 | 4.0 | 4.0 |
| June | 41.7 | 10.0 | 9.2 | 12.0 | 6.0 | 46.6 | 18.3 | 21.7 | 24.0 | 8.0 |
| July | 57.3 | 28.3 | 22.8 | 43.0 | 6.0 | 63.1 | 38.3 | 48.4 | 59.0 | 12.0 |
| August | 11.7 | 1.7 | 0.0 | 1.0 | 2.0 | 13.6 | 8.3 | 3.4 | 2.0 | 4.0 |
| September | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| October | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| November | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| December | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-59. Months Used and Preferred for Harvesting Pink Salmon, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| February | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| March | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| April | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| May | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| June | 0.0 | 3.3 | 0.0 | 0.0 | 4.0 | 0.0 | 5.0 | 1.9 | 0.0 | 4.0 |
| July | 0.0 | 16.7 | 0.0 | 5.0 | 10.0 | 1.0 | 28.3 | 1.9 | 14.0 | 12.0 |
| August | 2.9 | 8.3 | 0.0 | 5.0 | 6.0 | 3.9 | 15.0 | 3.4 | 13.0 | 8.0 |
| September | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 0.0 |
| October | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| November | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| December | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-60. Months Used and Preferred for Harvesting Chum Salmon, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| February | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| March | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 |
| April | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| May | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| June | 0.0 | 1.7 | 0.0 | 0.0 | 0.0 | 1.0 | 8.3 | 0.0 | 2.0 | 2.0 |
| July | 0.0 | 10.0 | 0.0 | 0.0 | 6.0 | 1.0 | 13.3 | 1.9 | 4.0 | 8.0 |
| August | 0.0 | 6.7 | 0.0 | 0.0 | 6.0 | 0.0 | 11.7 | 5.3 | 2.0 | 6.0 |
| September | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.0 | 0.0 |
| October | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| November | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| December | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-61. Months Used and Preferred for Harvesting Coho Salmon, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9 | 0.0 | 0.0 | 1.0 | 0.0 |
| February | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| March | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| April | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 |
| May | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 2.9 | 0.0 | 0.0 | 1.0 | 0.0 |
| June | 1.0 | 1.7 | 0.0 | 1.0 | 4.0 | 4.9 | 1.7 | 0.0 | 2.0 | 4.0 |
| July | 5.8 | 16.7 | 5.3 | 5.0 | 12.0 | 9.7 | 20.0 | 18.4 | 8.0 | 14.0 |
| August | 36.9 | 40.0 | 25.1 | 33.0 | 18.0 | 46.6 | 43.3 | 46.8 | 58.0 | 28.0 |
| September | 19.4 | 8.3 | 10.6 | 14.0 | 6.0 | 24.3 | 10.0 | 16.4 | 22.0 | 8.0 |
| October | 5.8 | 0.0 | 0.0 | 1.0 | 2.0 | 11.7 | 0.0 | 0.0 | 2.0 | 0.0 |
| November | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 7.8 | 0.0 | 0.0 | 1.0 | 0.0 |
| December | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.8 | 0.0 | 0.0 | 1.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-62. Months Used and Preferred for Harvesting Eulachon, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| February | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| March | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 |
| April | 0.0 | 5.0 | 1.9 | 2.0 | 0.0 | 2.9 | 5.0 | 7.2 | 6.0 | 2.0 |
| May | 1.0 | 3.3 | 17.5 | 5.0 | 0.0 | 6.8 | 13.3 | 32.5 | 21.0 | 2.0 |
| June | 1.0 | 1.7 | 0.0 | 0.0 | 0.0 | 1.0 | 3.3 | 0.0 | 4.0 | 0.0 |
| July | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 0.0 | 0.0 |
| August | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| September | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| October | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| November | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| December | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-63. Months Used and Preferred for Harvesting Dolly Varden, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 2.9 | 1.7 | 0.0 | 0.0 | 0.0 | 3.9 | 3.3 | 0.0 | 0.0 | 0.0 |
| February | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 1.7 | 0.0 | 0.0 | 0.0 |
| March | 2.9 | 0.0 | 0.0 | 1.0 | 0.0 | 3.9 | 3.3 | 0.0 | 1.0 | 0.0 |
| April | 1.9 | 0.0 | 0.0 | 1.0 | 2.0 | 5.8 | 5.0 | 0.0 | 1.0 | 4.0 |
| May | 2.9 | 6.7 | 0.0 | 0.0 | 4.0 | 6.8 | 8.3 | 0.0 | 1.0 | 6.0 |
| June | 9.7 | 11.7 | 1.9 | 2.0 | 4.0 | 13.6 | 13.3 | 9.2 | 7.0 | 2.0 |
| July | 18.4 | 15.0 | 5.3 | 5.0 | 8.0 | 22.3 | 23.3 | 19.8 | 17.0 | 12.0 |
| August | 17.5 | 5.0 | 10.1 | 6.0 | 12.0 | 26.2 | 8.3 | 21.2 | 16.0 | 18.0 |
| September | 10.7 | 5.0 | 3.4 | 4.0 | 0.0 | 16.5 | 6.7 | 5.3 | 13.0 | 0.0 |
| October | 3.9 | 1.7 | 0.0 | 2.0 | 2.0 | 5.8 | 3.3 | 0.0 | 3.0 | 2.0 |
| November | 1.9 | 0.0 | 0.0 | 1.0 | 0.0 | 2.9 | 1.7 | 0.0 | 1.0 | 0.0 |
| December | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 1.7 | 0.0 | 0.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-64. Months Used and Preferred for Harvesting Lake Trout, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 3.9 | 1.7 | 1.9 | 0.0 | 0.0 | 8.7 | 3.3 | 3.9 | 5.0 | 0.0 |
| February | 2.9 | 1.7 | 1.9 | 0.0 | 0.0 | 7.8 | 3.3 | 3.9 | 4.0 | 0.0 |
| March | 3.9 | 0.0 | 1.9 | 0.0 | 0.0 | 6.8 | 1.7 | 1.9 | 2.0 | 0.0 |
| April | 3.9 | 0.0 | 0.0 | 0.0 | 0.0 | 8.7 | 0.0 | 0.0 | 1.0 | 0.0 |
| May | 2.9 | 1.7 | 0.0 | 0.0 | 0.0 | 5.8 | 8.3 | 0.0 | 3.0 | 0.0 |
| June | 4.9 | 1.7 | 1.9 | 0.0 | 0.0 | 6.8 | 6.7 | 7.2 | 7.0 | 0.0 |
| July | 8.7 | 0.0 | 3.9 | 1.0 | 0.0 | 10.7 | 1.7 | 9.2 | 9.0 | 0.0 |
| August | 5.8 | 0.0 | 1.9 | 3.0 | 0.0 | 8.7 | 3.3 | 7.2 | 8.0 | 0.0 |
| September | 3.9 | 0.0 | 1.9 | 3.0 | 0.0 | 5.8 | 1.7 | 1.9 | 6.0 | 0.0 |
| October | 2.9 | 0.0 | 1.9 | 1.0 | 0.0 | 5.8 | 0.0 | 1.9 | 2.0 | 0.0 |
| November | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 0.0 | 0.0 | 2.0 | 0.0 |
| December | 1.9 | 0.0 | 0.0 | 1.0 | 0.0 | 4.9 | 0.0 | 0.0 | 3.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-65. Months Used and Preferred for Harvesting Rainbow Trout, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 2.9 | 1.7 | 5.8 | 2.0 | 0.0 | 3.9 | 5.0 | 11.1 | 4.0 | 0.0 |
| February | 3.9 | 0.0 | 1.9 | 0.0 | 0.0 | 4.9 | 3.3 | 7.2 | 2.0 | 0.0 |
| March | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 3.9 | 1.7 | 0.0 | 0.0 | 0.0 |
| April | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9 | 1.7 | 0.0 | 1.0 | 0.0 |
| May | 3.9 | 1.7 | 1.9 | 0.0 | 0.0 | 5.8 | 8.3 | 1.9 | 2.0 | 0.0 |
| June | 7.8 | 6.7 | 5.8 | 2.0 | 0.0 | 13.6 | 8.3 | 9.2 | 7.0 | 0.0 |
| July | 14.6 | 6.7 | 7.8 | 3.0 | 0.0 | 21.4 | 8.3 | 13.1 | 18.0 | 2.0 |
| August | 13.6 | 5.0 | 5.3 | 3.0 | 4.0 | 21.4 | 8.3 | 10.6 | 14.0 | 6.0 |
| September | 5.8 | 0.0 | 3.9 | 4.0 | 2.0 | 11.7 | 3.3 | 3.9 | 8.0 | 2.0 |
| October | 3.9 | 0.0 | 1.9 | 3.0 | 0.0 | 6.8 | 1.7 | 1.9 | 4.0 | 0.0 |
| November | 2.9 | 0.0 | 1.9 | 1.0 | 0.0 | 3.9 | 1.7 | 0.0 | 3.0 | 0.0 |
| December | 1.9 | 0.0 | 3.9 | 2.0 | 0.0 | 2.9 | 3.3 | 1.9 | 5.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-66. Months Used and Preferred for Harvesting Steelhead, Study Communities

| | Percentages of Households Fishing in 2002/2003 | | | | | Percentage of Households Preferring to Fish in the Month | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
| January | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| February | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| March | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| April | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| May | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 3.3 | 0.0 | 1.0 | 0.0 |
| June | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 1.7 | 0.0 | 2.0 | 0.0 |
| July | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 | 3.4 | 1.0 | 0.0 |
| August | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 5.0 | 6.7 | 6.0 | 0.0 |
| September | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.9 | 0.0 | 6.7 | 15.0 | 0.0 |
| October | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.0 | 5.3 | 11.0 | 0.0 |
| November | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.9 | 3.0 | 0.0 |
| December | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-67. Assessment of Fish Harvests and Uses in 2002/2003: Cooper Landing

| Resource | Percentage of HHs for Which 2002/03 Harvest/Use Was | | | |
|---|---|---|---|---|
| | More | Less | The Same | Never Used |
| Chum Salmon | 0.0% | 7.8% | 1.9% | 90.3% |
| Coho Salmon | 9.7% | 23.3% | 40.8% | 26.2% |
| Chinook Salmon | 4.9% | 23.3% | 38.8% | 33.0% |
| Pink Salmon | 0.0% | 9.7% | 11.7% | 78.6% |
| Sockeye Salmon | 5.8% | 30.1% | 48.5% | 15.5% |
| Eulachon (hooligan, candlefish) | 7.8% | 11.7% | 8.7% | 71.8% |
| Dolly Varden | 1.9% | 19.4% | 31.1% | 47.6% |
| Lake Trout | 1.0% | 20.4% | 23.3% | 55.3% |
| Rainbow Trout | 1.0% | 18.4% | 27.2% | 53.4% |
| Steelhead | 0.0% | 12.6% | 5.8% | 81.6% |
| Unknown Non-Salmon | 5.8% | 28.2% | 57.3% | 0.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey, 2003

Table IV-68. Assessment of Fish Harvests and Uses in 2002/2003: Hope

| Resource | Percentage of HHs for Which 2002/03 Harvest/Use Was | | | |
|---|---|---|---|---|
| | More | Less | The Same | Never Used |
| Chum Salmon | 5.0% | 1.7% | 30.0% | 60.0% |
| Coho Salmon | 3.3% | 28.3% | 50.0% | 15.0% |
| Chinook Salmon | 1.7% | 15.0% | 53.3% | 23.3% |
| Pink Salmon | 5.0% | 6.7% | 43.3% | 40.0% |
| Sockeye Salmon | 3.3% | 15.0% | 55.0% | 21.7% |
| Eulachon (hooligan, candlefish) | 8.3% | 6.7% | 26.7% | 53.3% |
| Dolly Varden | 1.7% | 10.0% | 50.0% | 33.3% |
| Lake Trout | 1.7% | 10.0% | 35.0% | 48.3% |
| Rainbow Trout | 0.0% | 10.0% | 43.3% | 43.3% |
| Steelhead | 0.0% | 3.3% | 18.3% | 73.3% |
| Unknown Non-Salmon | 3.3% | 15.0% | 33.3% | 0.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey, 2003

Table IV-69. Assessment of Fish Harvests and Uses in 2002/2003: Nikolaevsk

| Resource | Percentage of HHs for Which 2002/03 Harvest/Use Was | | | |
|---|---|---|---|---|
| | More | Less | The Same | Never Used |
| Chum Salmon | 0.0% | 5.3% | 13.1% | 81.6% |
| Coho Salmon | 6.7% | 24.2% | 49.3% | 19.8% |
| Chinook Salmon | 5.8% | 27.6% | 54.6% | 12.0% |
| Pink Salmon | 1.9% | 5.3% | 17.8% | 74.9% |
| Sockeye Salmon | 5.3% | 30.4% | 44.5% | 19.8% |
| Eulachon (hooligan, candlefish) | 3.9% | 7.2% | 41.7% | 47.1% |
| Dolly Varden | 1.9% | 7.8% | 28.4% | 61.8% |
| Lake Trout | 1.9% | 1.9% | 22.3% | 73.8% |
| Rainbow Trout | 1.9% | 0.0% | 34.8% | 59.9% |
| Steelhead | 0.0% | 0.0% | 15.9% | 84.1% |
| Unknown Non-Salmon | 3.9% | 14.5% | 63.2% | 0.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey, 2003

Table IV-70. Assessment of Fish Harvests and Uses in 2002/2003: Ninilchik

| Resource | Percentage of HHs for Which 2002/03 Harvest/Use Was | | | |
|---|---|---|---|---|
| | More | Less | The Same | Never Used |
| Chum Salmon | 1.0% | 4.0% | 15.0% | 79.0% |
| Coho Salmon | 10.0% | 21.0% | 50.0% | 19.0% |
| Chinook Salmon | 4.0% | 26.0% | 62.0% | 8.0% |
| Pink Salmon | 3.0% | 9.0% | 27.0% | 61.0% |
| Sockeye Salmon | 8.0% | 22.0% | 59.0% | 11.0% |
| Eulachon (hooligan, candlefish) | 7.0% | 7.0% | 22.0% | 62.0% |
| Dolly Varden | 3.0% | 13.0% | 36.0% | 48.0% |
| Lake Trout | 4.0% | 9.0% | 22.0% | 63.0% |
| Rainbow Trout | 2.0% | 14.0% | 32.0% | 52.0% |
| Steelhead | 0.0% | 9.0% | 26.0% | 64.0% |
| Unknown Non-Salmon | 7.0% | 14.0% | 71.0% | 0.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey, 2003

Table IV-71. Assessment of Fish Harvests and Uses in 2002/2003: Seldovia

| Resource | Percentage of HHs for Which 2002/03 Harvest/Use Was | | | |
|---|---|---|---|---|
| | More | Less | The Same | Never Used |
| Chum Salmon | 2.0% | 12.0% | 12.0% | 74.0% |
| Coho Salmon | 8.0% | 24.0% | 38.0% | 26.0% |
| Chinook Salmon | 8.0% | 28.0% | 58.0% | 6.0% |
| Pink Salmon | 6.0% | 10.0% | 14.0% | 70.0% |
| Sockeye Salmon | 6.0% | 20.0% | 44.0% | 26.0% |
| Eulachon (hooligan, candlefish) | 2.0% | 10.0% | 10.0% | 78.0% |
| Dolly Varden | 2.0% | 18.0% | 20.0% | 60.0% |
| Lake Trout | 0.0% | 2.0% | 6.0% | 92.0% |
| Rainbow Trout | 4.0% | 8.0% | 12.0% | 76.0% |
| Steelhead | 0.0% | 0.0% | 8.0% | 92.0% |
| Unknown Non-Salmon | 10.0% | 6.0% | 48.0% | 0.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey, 2003

Table IV-72. Reasons Given by Households for Harvesting or Using Less Salmon in 2002/2003 than in Other Recent Years, Study Communities

| | Percent Reporting Less | Reason: Percentage of Households with Less Harvest/Use | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | No Time | Other Personal Reasons | Resource Status | Crowding | Regulations | Other | No Reason Given |
| *A. Cooper Landing* | | | | | | | | |
| Chinook | 23.3% | 20.8% | 16.7% | 4.2% | 16.7% | | 8.3% | 33.3% |
| Chum | 7.8% | 12.5% | 37.5% | 25.0% | | | | 25.0% |
| Coho | 23.3% | 37.5% | 29.2% | | | | 4.2% | 29.2% |
| Pink | 9.7% | 30.0% | 40.0% | | | | 10.0% | 20.0% |
| Sockeye | 30.1% | 41.9% | 29.0% | | 6.5% | 6.5% | 6.5% | 9.7% |
| *B. Hope* | | | | | | | | |
| Chinook | 15.0% | 22.2% | 33.3% | | | | 11.1% | 33.3% |
| Chum | 1.7% | | | | | | 100.0% | |
| Coho | 28.3% | 23.5% | 17.6% | 29.4% | | | | 29.4% |
| Pink | 6.7% | 25.0% | | | | | 25.0% | 50.0% |
| Sockeye | 15.0% | 33.3% | 33.3% | | | 11.1% | | 22.2% |
| *C. Nikolaevsk* | | | | | | | | |
| Chinook | 27.6% | 14.1% | 14.1% | | | | | 71.8% |
| Chum | 5.3% | | 36.7% | | | | | 63.3% |
| Coho | 24.2% | 16.1% | 38.0% | | | | | 46.0% |
| Pink | 5.3% | | 100.0% | | | | | |
| Sockeye | 30.4% | | 43.0% | | | | 11.0% | 46.0% |
| *D. Ninilchik* | | | | | | | | |
| Chinook | 26.0% | 19.2% | 46.2% | 11.5% | 11.5% | 3.8% | | 7.7% |
| Chum | 4.0% | 25.0% | 75.0% | | | | | |
| Coho | 21.0% | 28.6% | 47.6% | | | 4.8% | 9.5% | 9.5% |
| Pink | 9.0% | | 55.6% | 11.1% | | | 11.1% | 22.2% |
| Sockeye | 22.0% | 13.6% | 54.5% | | 4.5% | 4.5% | 9.1% | 13.6% |
| *E. Seldovia* | | | | | | | | |
| Chinook | 28.0% | 42.9% | 28.6% | 7.1% | | | 14.3% | 7.1% |
| Chum | 12.0% | 16.7% | 66.7% | | | | 16.7% | |
| Coho | 24.0% | 16.7% | 41.7% | | | | 33.3% | 8.3% |
| Pink | 10.0% | 40.0% | 20.0% | 40.0% | | | | |
| Sockeye | 20.0% | 50.0% | 30.0% | 10.0% | | | 10.0% | |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-73. Reasons Given by Households for Harvesting or Using Less Non-Salmon Fish in 2002/2003 than in Other Recent Years, Study Communities

| | Percent Reporting Less | Reason: Percentage of Households with Less Harvest/Use | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | No Time | Other Personal Reasons | Resource Status | Crowding | Regulations | Other | No Reason Given |
| *A. Cooper Landing* | | | | | | | | |
| Dolly Varden | 19.4% | 50.0% | 25.0% | 10.0% | 10.0% | | | 5.0% |
| Eulachon | 11.7% | 8.3% | 41.7% | | | | 33.3% | 16.7% |
| Lake Trout | 20.4% | 19.0% | 19.0% | 4.8% | | | 33.3% | 23.8% |
| Rainbow Trout | 18.4% | 26.3% | 31.6% | 10.5% | | 15.8% | | 15.8% |
| Steelhead | 12.6% | 30.8% | 30.8% | | 7.7% | | | 30.8% |
| *B. Hope* | | | | | | | | |
| Dolly Varden | 10.0% | 16.7% | 33.3% | 16.7% | | | 16.7% | 16.7% |
| Eulachon | 6.7% | | 50.0% | | | | | 50.0% |
| Lake Trout | 10.0% | | 50.0% | | | | | 50.0% |
| Rainbow Trout | 10.0% | 33.3% | 33.3% | | | | | 33.3% |
| Steelhead | 3.3% | | 50.0% | | | | | 50.0% |
| *C. Nikolaevsk* | | | | | | | | |
| Dolly Varden | 7.8% | 24.9% | 24.9% | | | | | 50.1% |
| Eulachon | 7.2% | | 27.0% | | | | 27.0% | 46.0% |
| Lake Trout | 1.9% | | | | | | | 100.0% |
| Rainbow Trout | 0.0% | | | | | | | |
| Steelhead | 0.0% | | | | | | | |
| *D. Ninilchik* | | | | | | | | |
| Dolly Varden | 13.0% | 7.7% | 61.5% | 7.7% | | | | 23.1% |
| Eulachon | 7.0% | | 57.1% | 14.3% | | | 14.3% | 14.3% |
| Lake Trout | 9.0% | 11.1% | 44.4% | 22.2% | | | | 22.2% |
| Rainbow Trout | 14.0% | 14.3% | 57.1% | | | | | 28.6% |
| Steelhead | 9.0% | | 22.2% | | | 33.3% | 22.2% | 22.2% |
| *E. Seldovia* | | | | | | | | |
| Dolly Varden | 18.0% | | 66.7% | 22.2% | | | 11.1% | |
| Eulachon | 10.0% | | | | | | | 100.0% |
| Lake Trout | 2.0% | | | | | | | |
| Rainbow Trout | 8.0% | | 50.0% | 25.0% | | | 25.0% | |
| Steelhead | 0.0% | | | | | | | |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-74. Number of Fish Required for Household's Annual Consumption

| | Cooper Landing | | | | Hope | | | | Nikolaevsk | | | | Ninilchik | | | | Seldovia | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RESOURCE | HH Mean* | Minimum** | Maximum** | Estimated Total | HH Mean | Minimum | Maximum | Estimated Total | HH Mean | Minimum | Maximum | Estimated Total | HH Mean | Minimum | Maximum | Estimated Total | HH Mean | Minimum | Maximum | Estimated Total |
| Chum Salmon | 0.5 | 2 | 30 | 62 | 1.9 | 1.0 | 30.0 | 142 | 1 | 5 | 15 | 56 | 1.2 | 1 | 50 | 681 | 4.2 | 1 | 100 | 713 |
| Coho Salmon | 7.1 | 1 | 100 | 967 | 11.6 | 1.0 | 60.0 | 856 | 13 | 2 | 50 | 977 | 12.6 | 1 | 200 | 7,288 | 12.9 | 1 | 100 | 2,180 |
| Chinook Salmon | 2.0 | 0 | 12 | 270 | 3.9 | 1.0 | 30.0 | 286 | 5 | 1 | 25 | 363 | 7.7 | 1 | 250 | 4,443 | 11.6 | 1 | 60 | 1,954 |
| Pink Salmon | 0.4 | 2 | 12 | 58 | 6.8 | 1.0 | 150.0 | 506 | 1 | 5 | 20 | 66 | 2.3 | 1 | 50 | 1,327 | 7.3 | 1 | 100 | 1,240 |
| Sockeye Salmon | 19.3 | 1 | 100 | 2,618 | 19.3 | 1.0 | 150.0 | 1,427 | 17 | 2 | 100 | 1,334 | 20.5 | 1 | 100 | 11,823 | 17.1 | 1 | 100 | 2,897 |
| Burbot | 1.1 | 6 | 50 | 153 | 0.2 | 1.0 | 6.0 | 12 | | | | | 0.2 | 6 | 10 | 92 | 0.0 | 0 | 0 | 0 |
| Dolly Varden | 5.6 | 2 | 36 | 761 | 5.9 | 1.0 | 30.0 | 439 | 3 | 2 | 30 | 220 | 4.3 | 1 | 50 | 2,464 | 5.1 | 1 | 30 | 859 |
| Lake Trout | 6.7 | 1 | 150 | 907 | 4.2 | 1.0 | 30.0 | 307 | 2 | 10 | 25 | 155 | 3.2 | 2 | 50 | 1,818 | 1.5 | 1 | 15 | 257 |
| Grayling | 1.3 | 1 | 24 | 180 | 0.3 | 1.0 | 10.0 | 22 | 0 | 5 | 5 | 8 | 0.4 | 5 | 30 | 202 | 0.2 | 10 | 10 | 34 |
| Pike | | | | | 0.2 | 12.0 | 12.0 | 15 | | | | | | | | | | | | |
| Rainbow Trout | 4.7 | 1 | 48 | 640 | 7.0 | 1.0 | 25.0 | 517 | 6 | 1 | 40 | 465 | 6.5 | 2 | 60 | 3,762 | 2.5 | 1 | 24 | 416 |
| Steelhead | 1.6 | 1 | 72 | 212 | 2.5 | 1.0 | 20.0 | 187 | 1 | 1 | 10 | 81 | 1.8 | 2 | 25 | 1,033 | 0.7 | 1 | 12 | 115 |
| Unknown Whitefish | 0.2 | 6 | 12 | 24 | | | | | | | | | | | | | | | | |

* Mean requirement for all households in community

** Minimum/maximum value for those households identifying a requirement.

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-75. Comparison of Mean Household Harvests and Uses of Fish in 2000/2003 with Mean Estimates of Amount Households Could Use in a Typical Year, Study Communities

Part A: Salmon

| Average Number of Salmon per Household | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | | | Hope | | | Nikolaevsk | | | Ninilchik | | | Seldovia | | |
| | | In Study Year | | | In Study Year | | | In Study Year | | | In Study Year | | | In Study Year | |
| | Could Use | Harvest | Used | Could Use | Harvest | Used | Could Use | Harvest | Used | Could Use | Harvest | Used | Could Use | Harvest | Used |
| Chum | 0.5 | 0.0 | 0.0 | 1.9 | 1.3 | 1.0 | 0.7 | 2.4 | 4.5 | 1.2 | 1.2 | 1.2 | 4.2 | 3.8 | 3.9 |
| Coho | 7.1 | 5.2 | 5.4 | 11.6 | 7.0 | 7.2 | 12.5 | 12.1 | 13.5 | 12.6 | 6.0 | 5.8 | 12.9 | 6.0 | 7.0 |
| Chinook | 2.0 | 0.6 | 0.8 | 3.9 | 0.6 | 0.9 | 4.7 | 2.7 | 3.2 | 7.7 | 1.5 | 2.1 | 11.6 | 7.2 | 7.3 |
| Pink | 0.4 | 0.0 | 0.0 | 6.8 | 5.5 | 4.8 | 0.8 | 2.4 | 2.6 | 2.3 | 5.1 | 2.9 | 7.3 | 6.1 | 5.9 |
| Sockeye | 19.3 | 16.0 | 15.9 | 19.3 | 7.7 | 8.4 | 17.1 | 14.2 | 14.5 | 20.5 | 14.9 | 15.8 | 17.1 | 7.0 | 7.6 |
| Total Salmon | 29.3 | 21.8 | 22.1 | 43.5 | 22.1 | 22.3 | 35.8 | 33.8 | 38.3 | 44.3 | 28.7 | 27.8 | 53.1 | 30.1 | 31.7 |

Part B: Other Fish

| Average Number of Fish per Household | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cooper Landing | | | Hope | | | Nikolaevsk | | | Ninilchik | | | Seldovia | | |
| | | In Study Year | | | In Study Year | | | In Study Year | | | In Study Year | | | In Study Year | |
| | Could Use | Harvest | Used | Could Use | Harvest | Used | Could Use | Harvest | Used | Could Use | Harvest | Used | Could Use | Harvest | Used |
| Rainbow | 4.7 | 2.0 | 1.9 | 7.0 | 0.7 | 0.9 | 6.0 | 3.4 | 3.0 | 6.5 | 1.3 | 1.1 | 2.5 | 0.2 | 0.3 |
| Steelhead | 1.6 | <0.1 | <0.1 | 2.5 | 0.0 | <0.1 | 1.0 | 0.0 | 0.0 | 1.8 | 0.0 | <0.1 | 0.7 | 0.1 | 0.1 |
| Dollies | 5.6 | 2.2 | 2.6 | 5.9 | 2.4 | 2.5 | 2.8 | 1.6 | 1.8 | 4.3 | 1.1 | 1.3 | 5.1 | 2.6 | 2.6 |
| Lake Trout | 6.7 | 3.6 | 3.9 | 4.2 | 0.1 | 0.1 | 2.0 | 0.9 | 1.0 | 0.4 | 0.6 | 0.6 | 1.5 | 0.0 | 0.0 |
| Total Fish | 18.6 | 7.8 | 8.4 | 19.6 | 3.2 | 3.5 | 11.8 | 5.9 | 5.8 | 13.0 | 3.0 | 3.0 | 9.8 | 2.9 | 3.0 |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey 2003

Table IV-76. Percentage of Households Ever Involved in Selected Fisheries, Study Communities

| Activity | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
|---|---|---|---|---|---|
| Cook Inlet Dip Net PU | 37.9% | 30.0% | 64.0% | 63.0% | 22.0% |
| Cook Inlet Noncommercial Set Net | 8.7% | 11.7% | 15.0% | 32.0% | 22.0% |
| Chitina Dip Net Fishery | 8.7% | 10.0% | 3.4% | 10.0% | 12.0% |
| Glennallen Fishwheel Fishery | 1.9% | 1.7% | 0.0% | 1.0% | 0.0% |
| Fished at Tuxedni Bay | 2.9% | 0.0% | 0.0% | 0.0% | 16.0% |
| Commercial Fishing | 21.4% | 21.7% | 66.3% | 50.0% | 52.0% |
| Other Subsistence/PU Fishery | 9.7% | 20.0% | 15.0% | 15.0% | 18.0% |
| Sport Fishing rod & reel open water | 92.2% | 90.0% | 75.8% | 90.0% | 86.0% |
| Ice Fishing | 47.6% | 31.7% | 34.3% | 38.0% | 24.0% |
| Snagging | 33.0% | 30.0% | 76.0% | 32.0% | 36.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey 2003

Table IV-77. Should Federal Subsistence Fishing Regulations For Cook Inlet Match State Sport Fishing Regulations?

| | Agree with statement: Federal subsistence regulations should be the same as | | | | | | |
|---|---|---|---|---|---|---|---|
| | Percentage of Households: | | | | | | |
| | Agree | Neutral | Disagree | Don't know | Missing | Refused | Total |
| Cooper Landing | 73.8% | 3.9% | 13.6% | 6.8% | 1.0% | 1.0% | 100.0% |
| Hope | 55.0% | 6.7% | 18.3% | 20.0% | 0.0% | 0.0% | 100.0% |
| Nikolaevsk | 42.1% | 7.2% | 12.5% | 36.2% | 1.9% | 0.0% | 100.0% |
| Ninilchik | 59.0% | 6.0% | 20.0% | 15.0% | 0.0% | 0.0% | 100.0% |
| Seldovia | 32.0% | 10.0% | 24.0% | 32.0% | 2.0% | 0.0% | 100.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-78. Evaluation of State Personal Use Fisheries Seasonal Limits

| | What is your opinion of the current ceasonal limit for state personal use | | | | | |
|---|---|---|---|---|---|---|
| | Percentage of Households: | | | | | |
| | Too low | About right | Too high | Don't Know | Missing | Total |
| Cooper Landing | 5.8% | 54.4% | 28.2% | 11.7% | 0.0% | 100.0% |
| Hope | 10.0% | 76.7% | 8.3% | 3.3% | 1.7% | 100.0% |
| Nikolaevsk | 5.8% | 56.5% | 29.0% | 8.7% | 0.0% | 100.0% |
| Ninilchik | 11.0% | 66.0% | 21.0% | 2.0% | 0.0% | 100.0% |
| Seldovia | 10.0% | 64.0% | 12.0% | 14.0% | 0.0% | 100.0% |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-79. Number of Responses to Questions about Potential Sites of Federal Subsistence Fisheries

| | Number of Households | | | | | |
|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Total |
| Listed Federal Site | 34 | 35 | 11 | 32 | 13 | 125 |
| Listed Only Non-Federal Site | 4 | 2 | 1 | 5 | 3 | 15 |
| Listed Only Non-Cook Inlet Site[1] | 3 | 1 | 0 | 5 | 1 | 10 |
| Provided No Scenario Site | 62 | 22 | 30 | 58 | 33 | 205 |
| Total Households | 103 | 60 | 42 | 100 | 50 | 355 |

[1] The intent of the question was to elicit sites in the Cook Inlet Management Area. Some respondents only offered other locations, such as Chitina, Lake Clark, or the Yukon River.

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-80. Responses to the Statement "Federal Subsistence Fishing Regulations Should be the Same as State Sport Fishing Regulations" by Those Who Provided a Federal Subsistence Fishery Scenario

| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Total |
|---|---|---|---|---|---|---|
| Provided a Federal Fishery Scenario | | | | | | |
| Number of Interviewed Households | 34 | 35 | 11 | 32 | 13 | 125 |
| Percent of Interviewed Households | 33.0% | 58.3% | 26.2% | 32.0% | 26.0% | 35.2% |
| Agree with statement: Federal subsistence fishing regulations should be the same as state sport fishing regulations | | | | | | |
| Agree | 70.6% | 51.4% | 54.5% | 56.3% | 46.2% | 57.6% |
| Disagree | 17.6% | 22.9% | 9.1% | 28.1% | 30.8% | 22.4% |
| Neutral | 5.9% | 5.7% | 9.1% | 6.3% | 23.1% | 8.0% |
| Don't know | 2.9% | 20.0% | 27.3% | 9.4% | 0.0% | 11.2% |
| Refused | 2.9% | 0.0% | 0.0% | 0.0% | 0.0% | 0.8% |
| Missing | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

Source: Alaska Department of Fish and Game Division of Subsistence Household Survey 2003

Table IV-81. Cooper Landing: Potential Sites for Federal Subsistence Fisheries

| | Number of Households |
|---|---|
| Kenai River-UPPER | 13 |
| Russian River | 9 |
| Kenai River | 8 |
| Kenai Lake | 4 |
| Quartz Creek | 4 |
| Cooper Landing | 3 |
| Hidden Creek | 2 |
| Kenai Peninsula | 2 |
| Kenai River-LOWER (middle?) | 2 |
| Upper Russian Lake | 2 |
| Cooper Creek | 1 |
| Cooper Lake | 1 |
| Cooper Landing WINTER fisheries | 1 |
| Hidden Lake | 1 |
| Kenai Lake Streams | 1 |
| Kenai National Wildlife Refuge | 1 |
| Moose Pass | 1 |
| Seward (general area) | 1 |
| Skilak Lake | 1 |
| Upper Jean Lake | 1 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-82. Hope: Potential Sites for Federal Subsistence Fisheries

| | Number of Households |
|---|---|
| Six Mile | 23 |
| Resurrection Creek | 19 |
| Kenai River | 6 |
| Russian River | 4 |
| Kenai Peninsula | 2 |
| Seward | 2 |
| Skilak Lake | 2 |
| Twenty Mile River | 2 |
| Carter Lake | 1 |
| Chickaloon (Flats??) | 1 |
| Cooper Landing | 1 |
| Crescent Lake | 1 |
| Glacier Creek | 1 |
| Hope | 1 |
| Hope Community Set Net | 1 |
| Kenai Lake | 1 |
| Kenai Mountain Streams | 1 |
| Kenai River-LOWER (middle?) | 1 |
| Kenai River-UPPER | 1 |
| Palmer Creek | 1 |
| Summit Lake UPPER and LOWER | 1 |
| Turnagain Arm | 1 |
| Tuxedni Bay | 1 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-83. Nikolaevsk: Potential Sites for Federal Subsistence Fisheries

| | Number of Households |
|---|---|
| Kenai River | 4 |
| Russian River | 3 |
| Whittier | 3 |
| Kenai River-UPPER | 2 |
| Funny River | 1 |
| Kenai National Wildlife Refuge | 1 |
| Skilak Lake | 1 |
| Tustumena Lake | 1 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-84. Ninilchik: Potential Sites for Federal Subsistence Fisheries

| | Number of Households |
|---|---|
| Kenai National Wildlife Refuge | 8 |
| Tustumena Lake | 5 |
| Kenai Fjords National Park | 4 |
| Kenai River-UPPER | 4 |
| Lake Clark National Park | 4 |
| Skilak Lake | 3 |
| Chugach National Forest | 2 |
| Kenai Lake | 2 |
| Kenai River-LOWER (middle?) | 2 |
| Swanson Lakes | 2 |
| Funny River | 1 |
| Johnson Lake | 1 |
| Russian River | 1 |
| Tuxedni Bay | 1 |
| Whittier | 1 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

Table IV-85. Seldovia: Potential Sites for Federal Subsistence Fisheries

| | Number of Households |
|---|---|
| Kenai Fjords National Park | 4 |
| Kenai National Wildlife Refuge | 4 |
| Swanson River | 2 |
| Chinitna Bay | 1 |
| Cook Inlet (across from Seldovia) | 1 |
| Cooper Landing | 1 |
| Kenai River | 1 |
| Seward | 1 |
| Swan Lake | 1 |
| Tuxedni Bay | 1 |

Source: Alaska Department of Fish and Game, Division of Subsistence Household Survey 2003

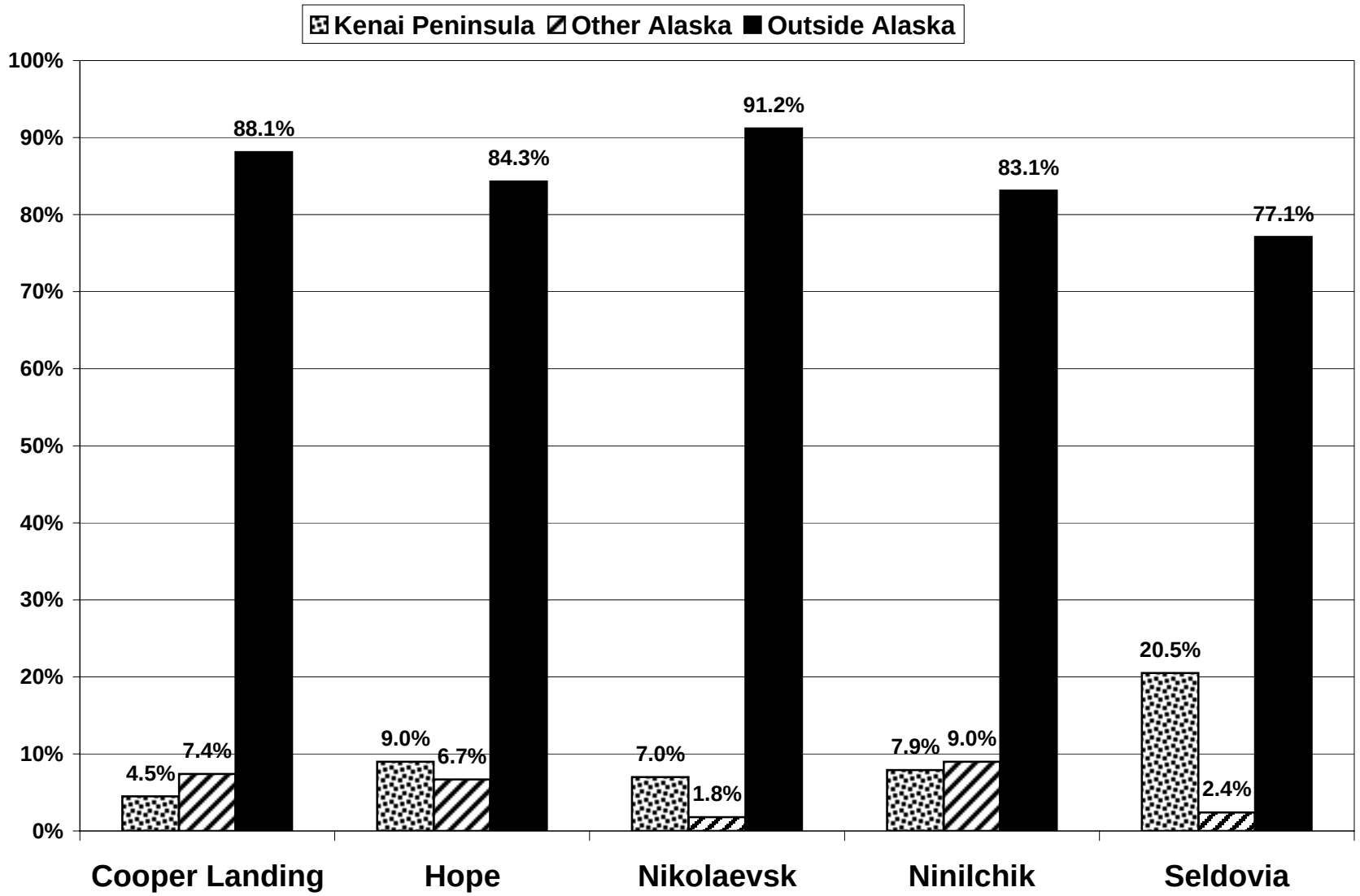
Table IV-86. Gear Suggested for Potential Federal Subsistence Fisheries

| | Number of Household/Site/Gear Combinations[1] | | | | | |
|---|---|---|---|---|---|---|
| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia | Total |
| Rod and Reel | 45 | 81 | 7 | 23 | 9 | 165 |
| Gill Net | 5 | 6 | 3 | 6 | 5 | 25 |
| Dip Net | 6 | 5 | 5 | 4 | 2 | 22 |
| Snaging | 1 | 0 | 1 | 2 | 0 | 4 |
| Fly Fishing | 1 | 0 | 0 | 1 | 0 | 2 |
| Ice Fishing | 0 | 0 | 0 | 1 | 0 | 1 |
| Households Providing One or More Potential Federal Sites | 34 of 103 | 35 of 60 | 11 of 42 | 32 of 100 | 13 of 50 | 125 of 355 |
| Households Providing One or More Potential Any Site | 41 of 103 | 38 of 60 | 12 of 42 | 42 of 100 | 17 of 50 | 150 of 355 |

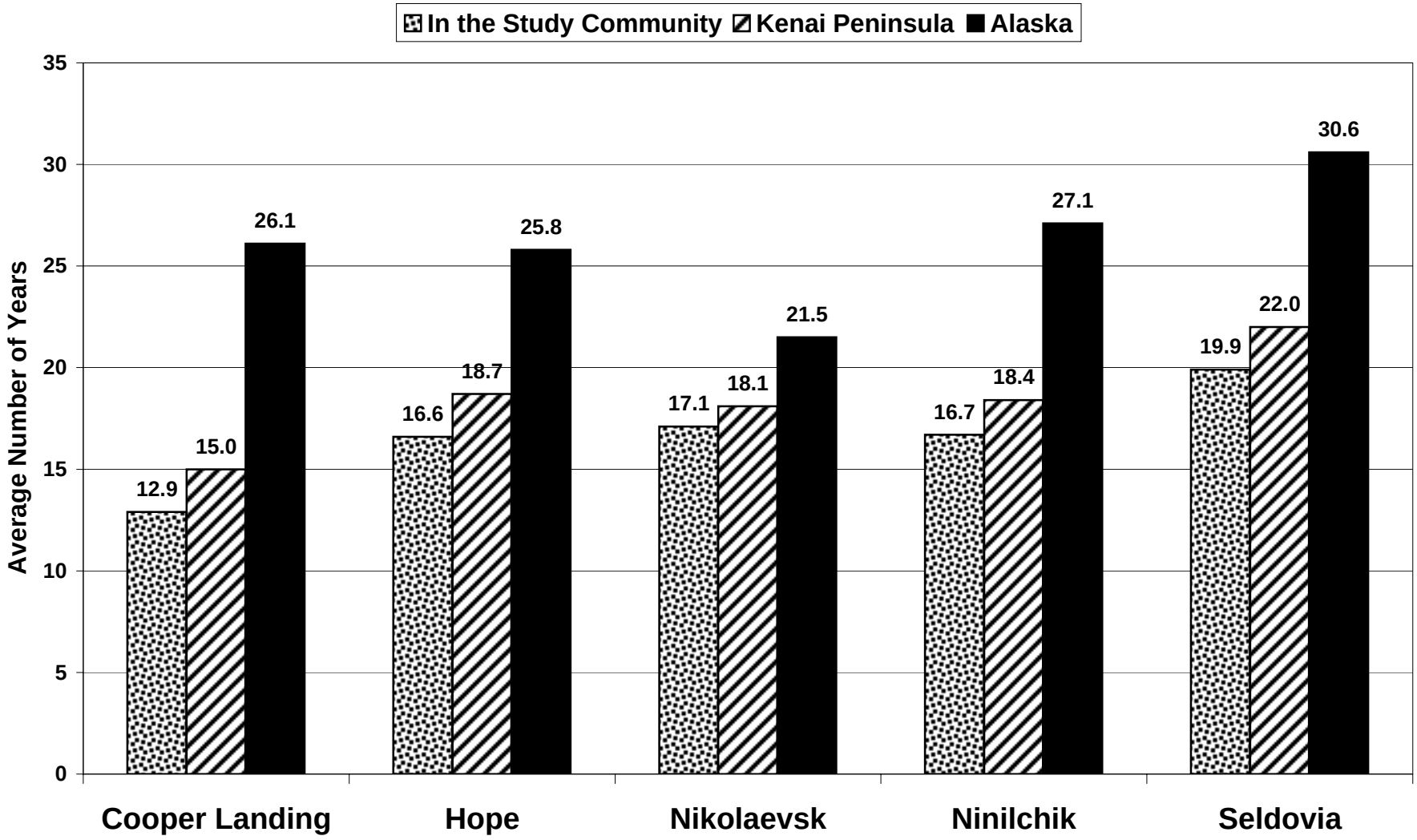
[1] Some households listed more than one gear type per site and more than one potential site.

Source: Alaska Department of Fish and Game, Division of Subsistence, Household Survey 2003

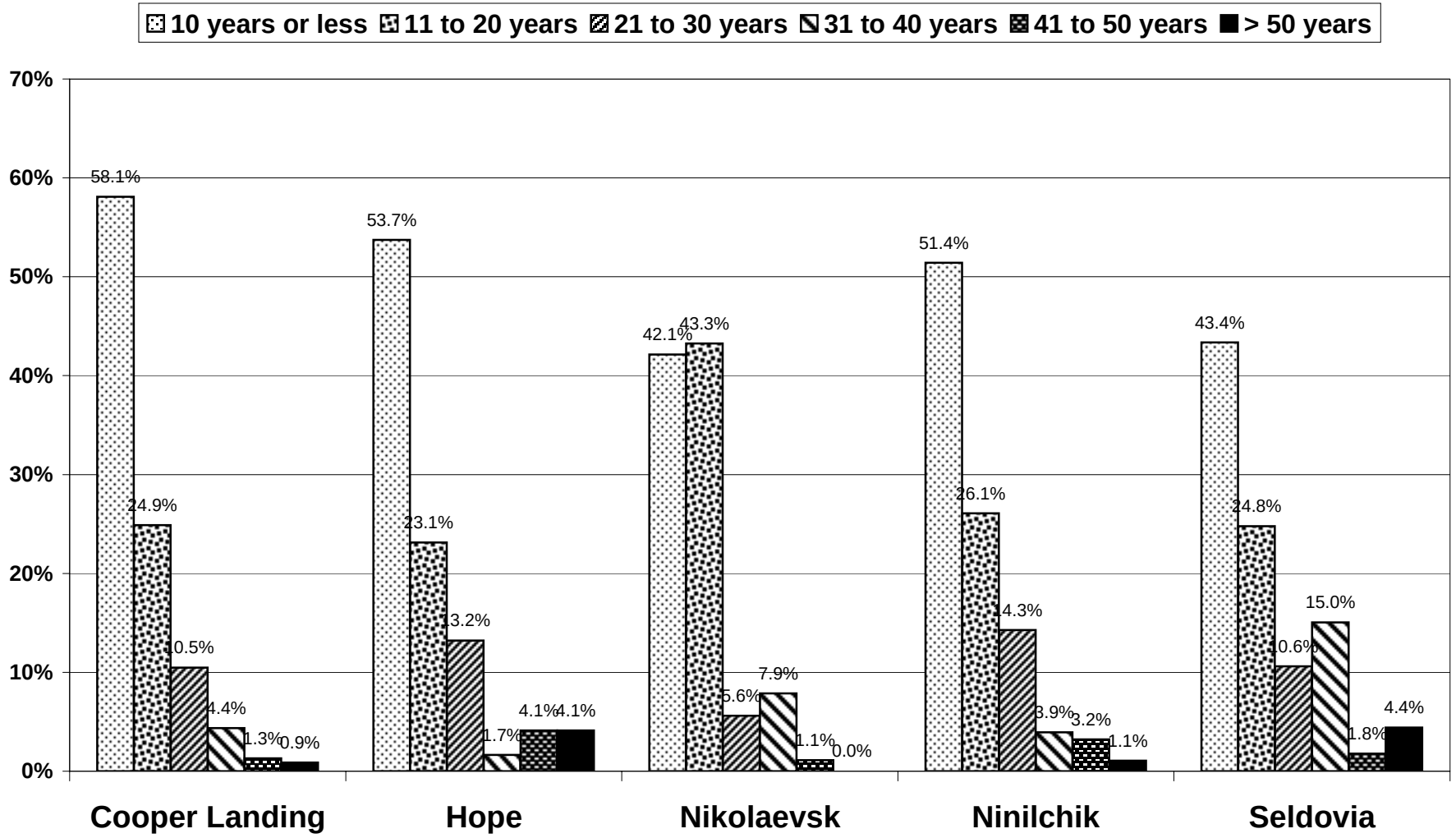
## Figure IV-1. Birthplace of Household Heads, Study Communities



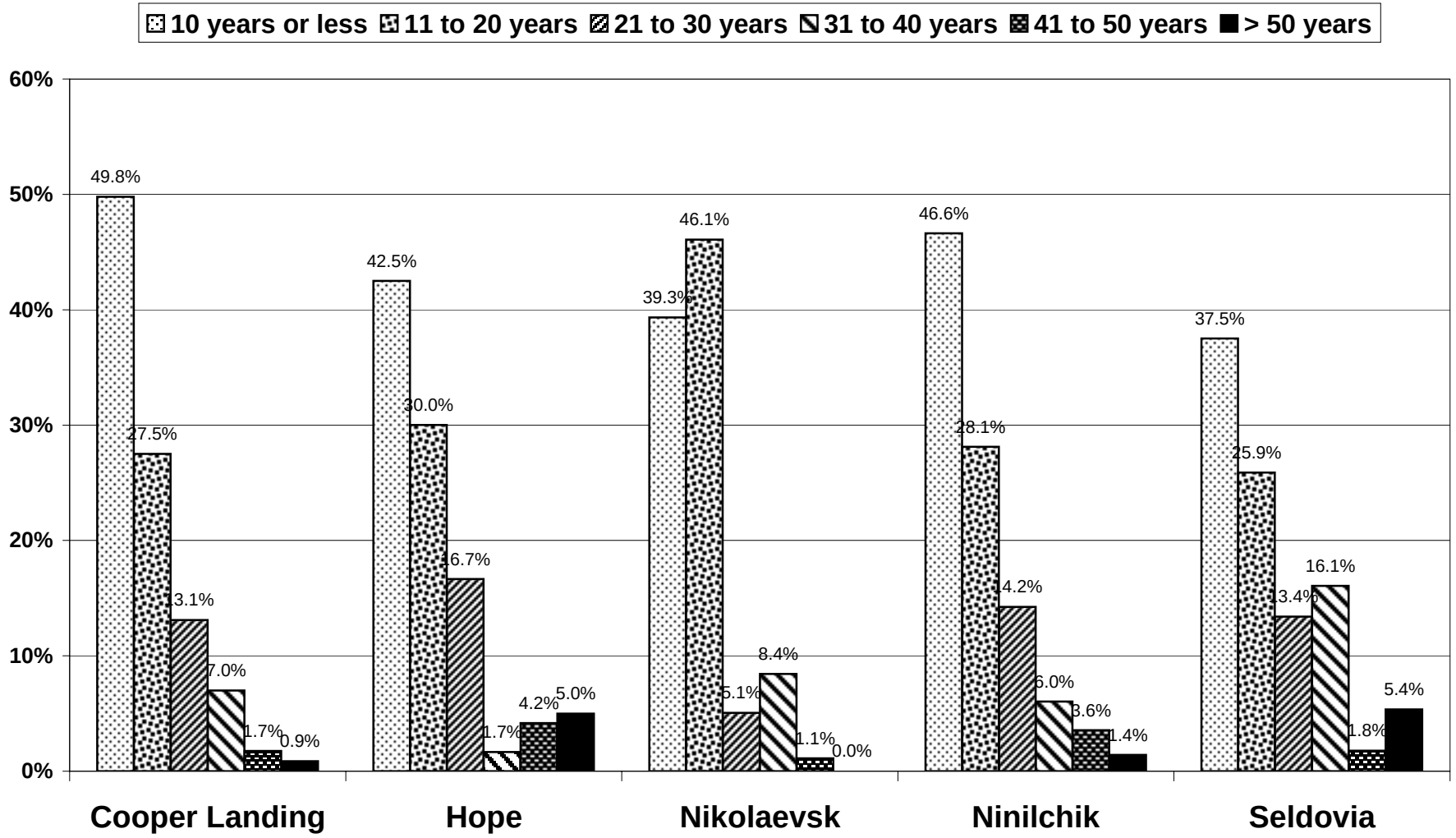
## Figure IV-2. Mean Length of Residency of Household Heads, Study Communities, 2003



## Figure IV-3. Length of Residency in the Study Communities, Household Heads, 2003



## Figure IV-4. Length of Residency on the Kenai Peninsula, Household Heads of the Study Communities, 2003



## Figure IV-5. Length of Residency in Alaska, Household Heads of the Study Communities, 2003

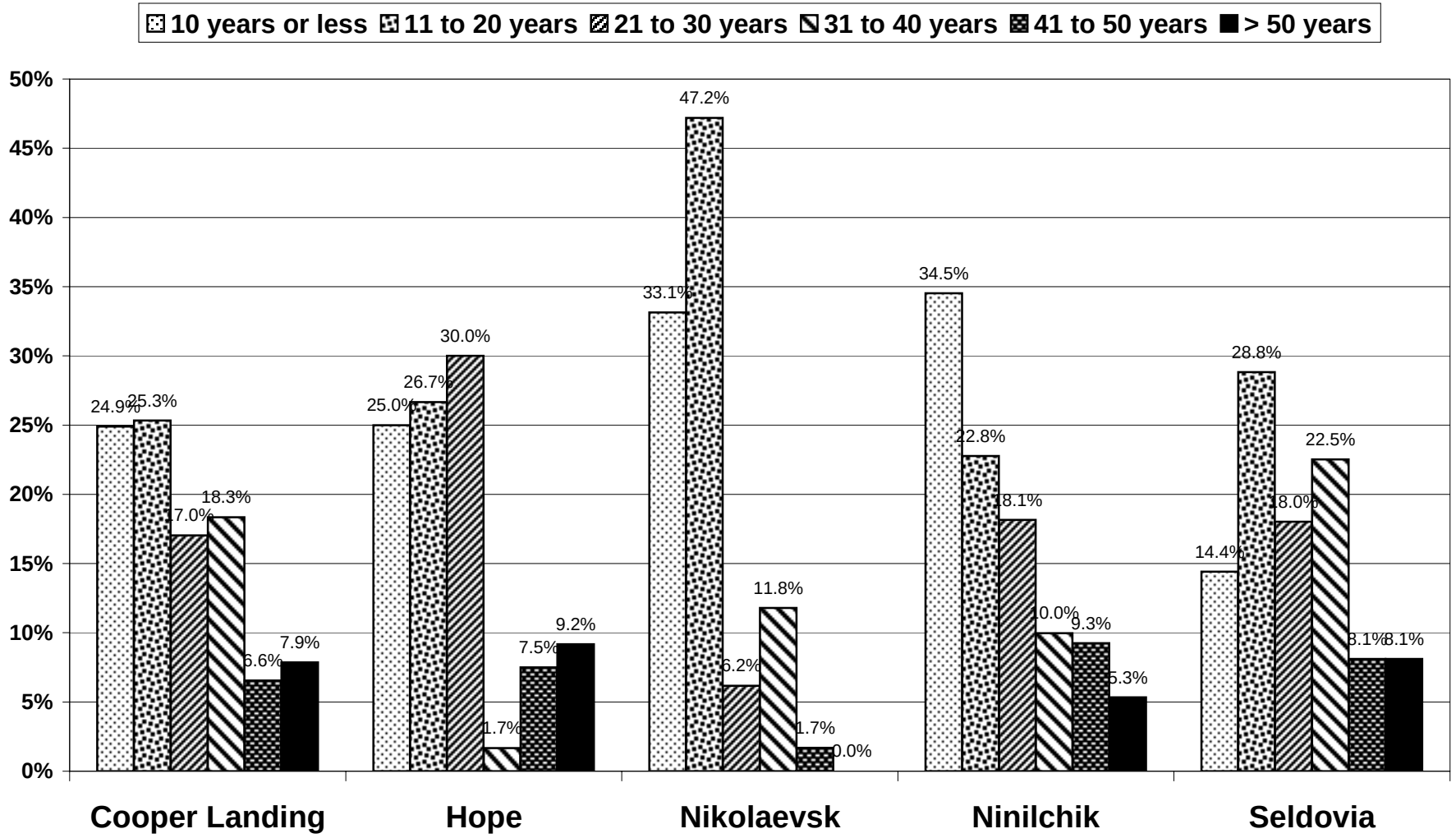
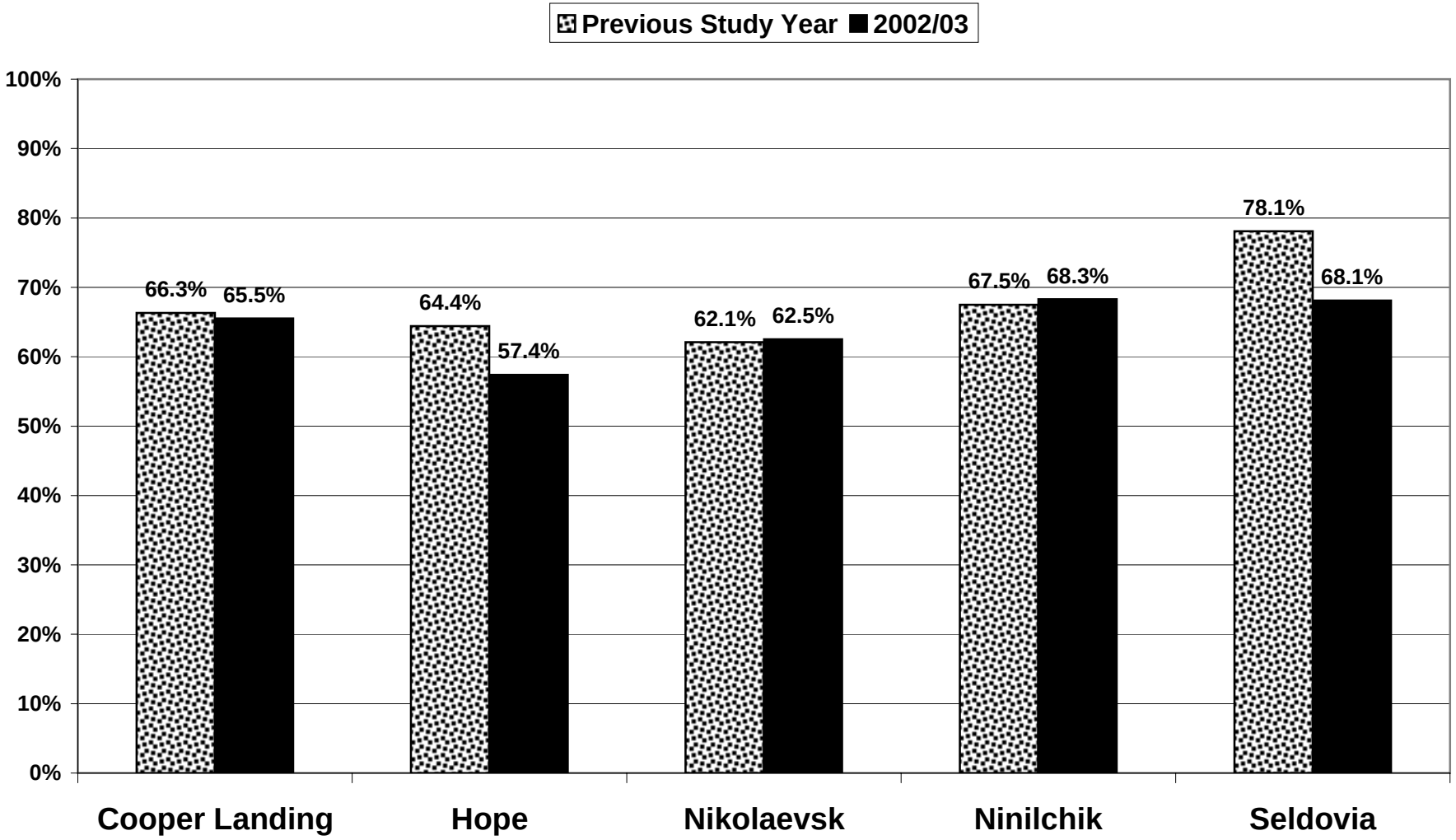
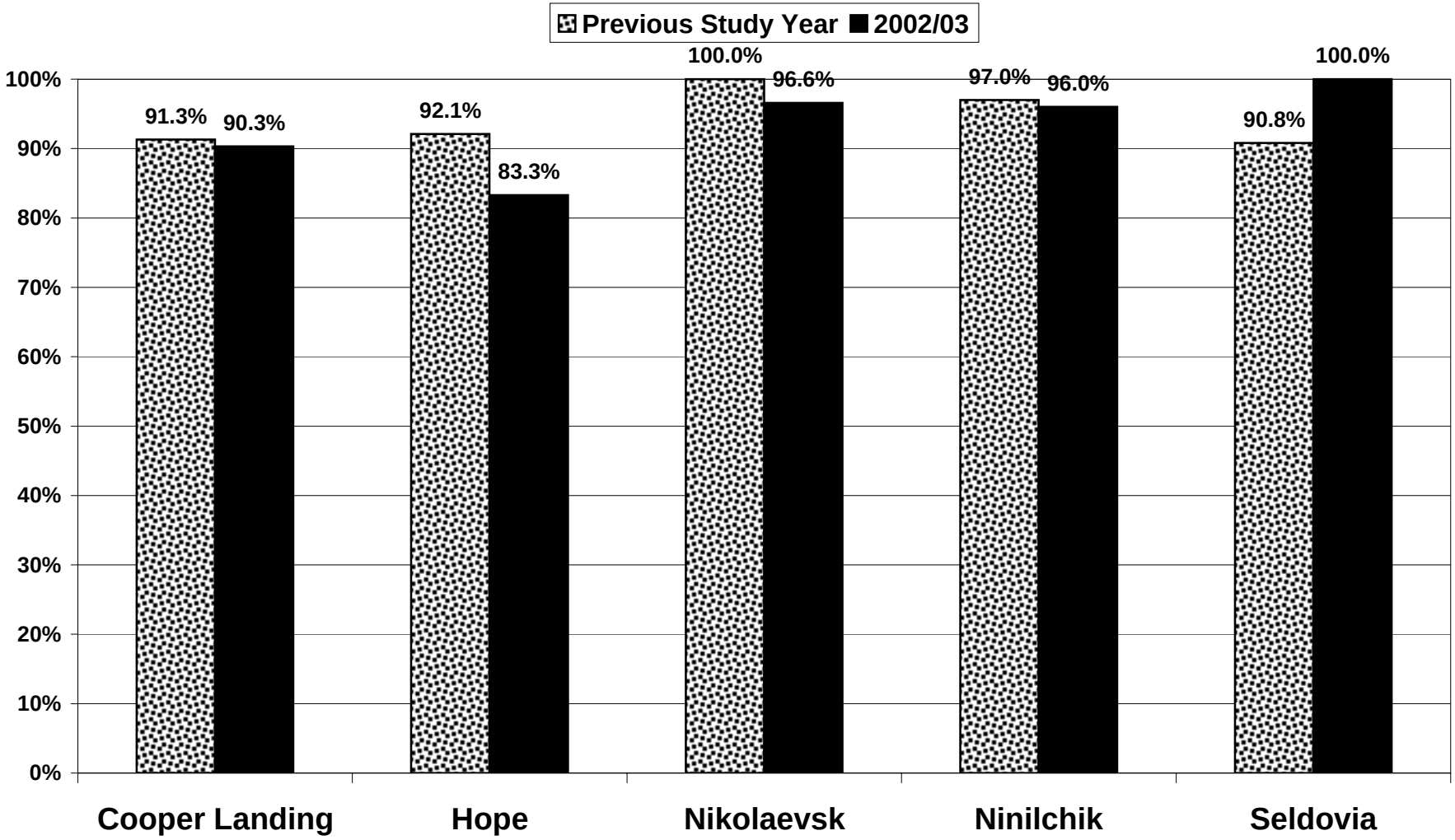


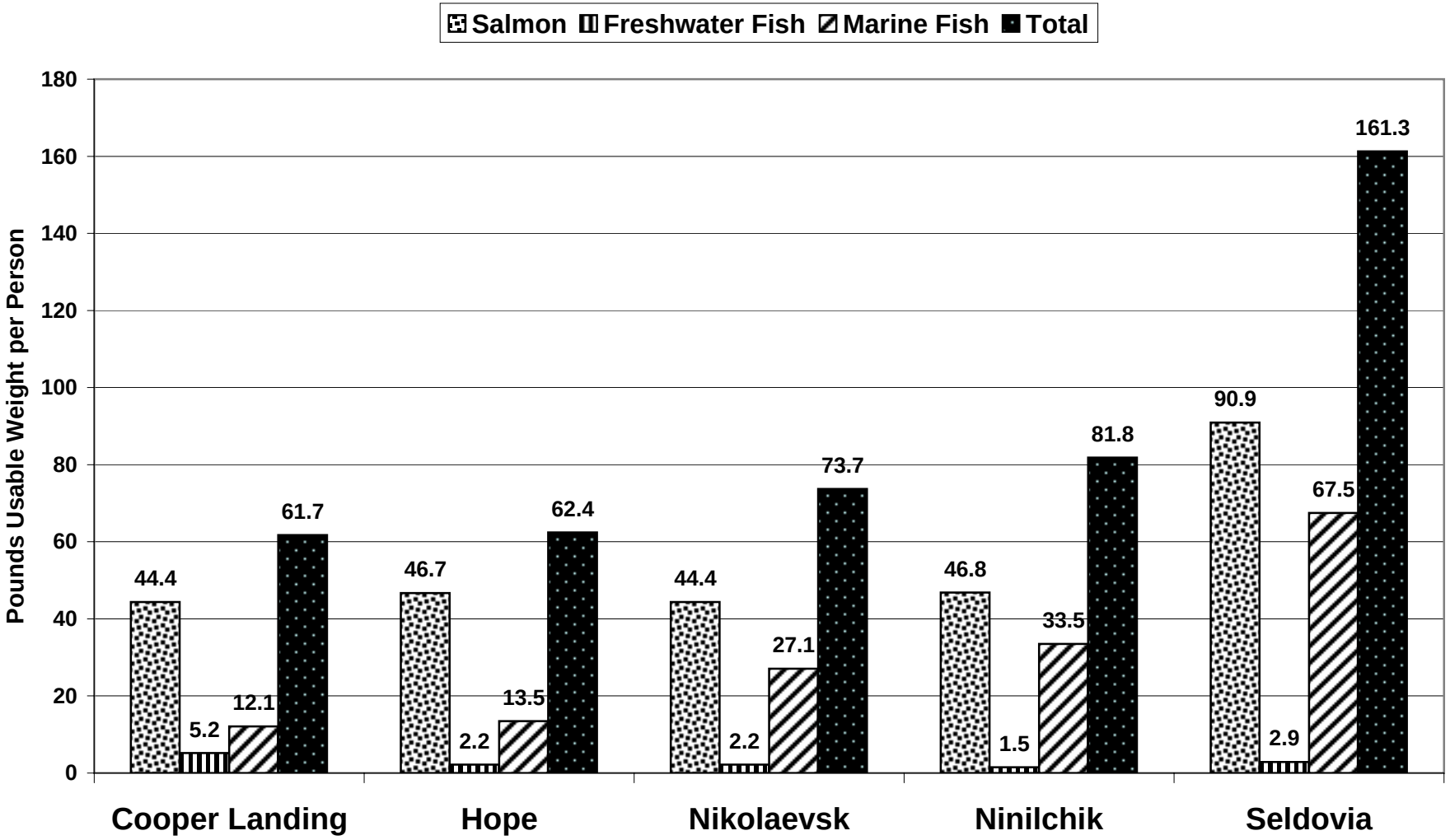
**Figure IV-6. Percentage of Population Engaged in Fishing, Study Communities, 2002/2003 and Previous Study Year**



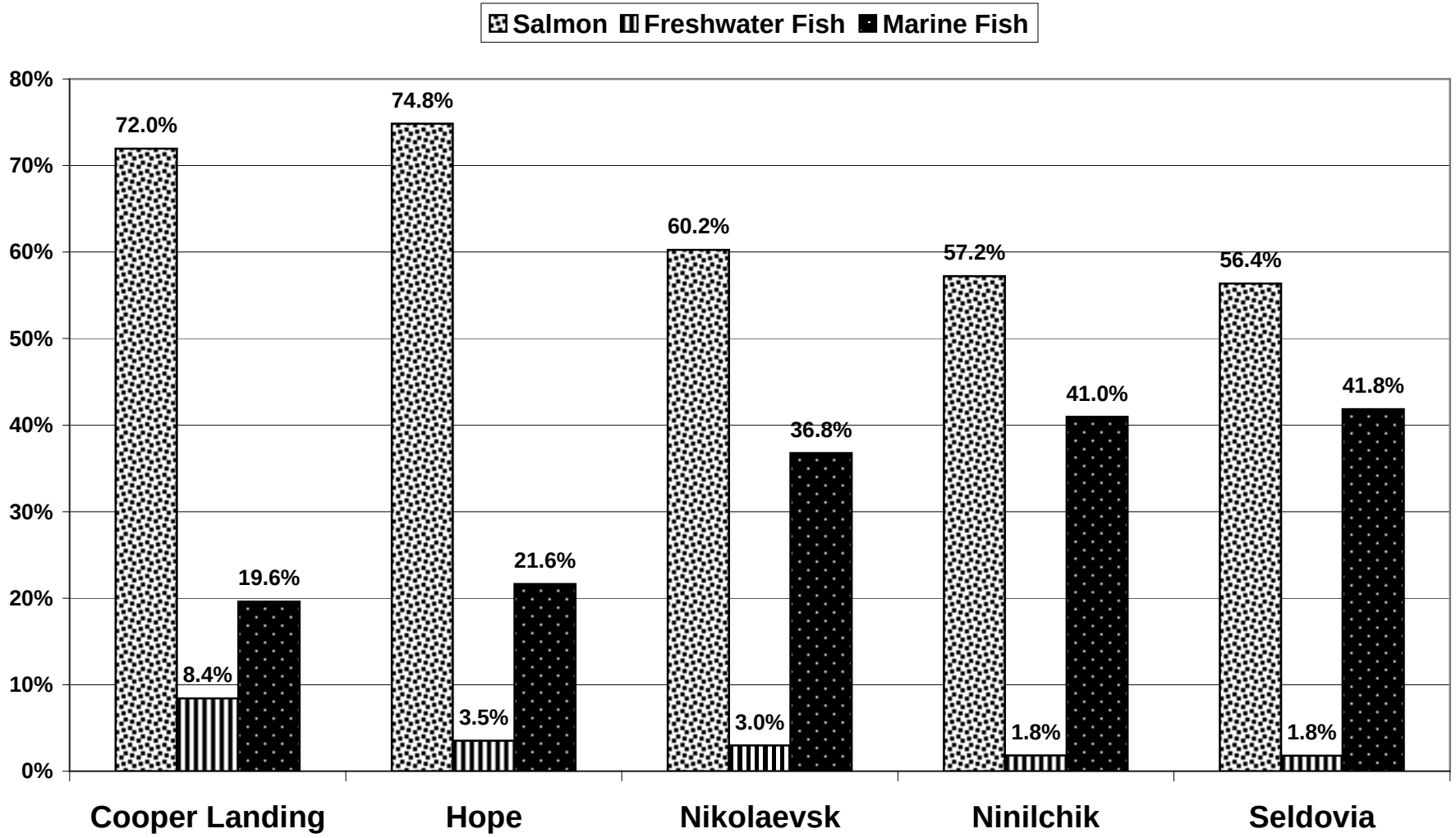
## Figure IV-7. Percentage of Households Using Fish, 2002/2003 and Previous Study Year



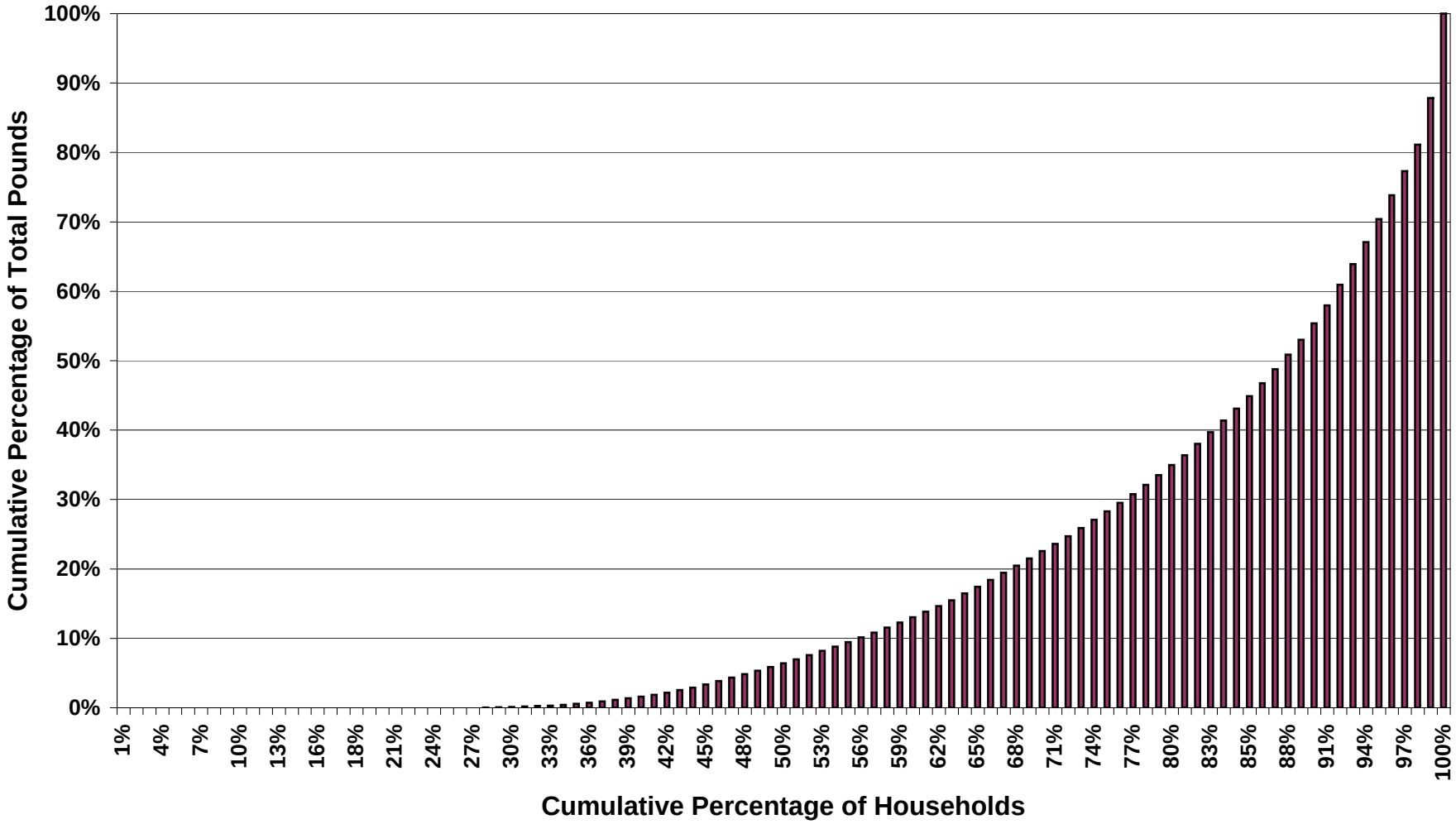
## Figure IV-8. Harvests of Salmon, Marine Fish, and Freshwater Fish, Study Commmunities, Pounds Usable Weight per Person, 2002/2003



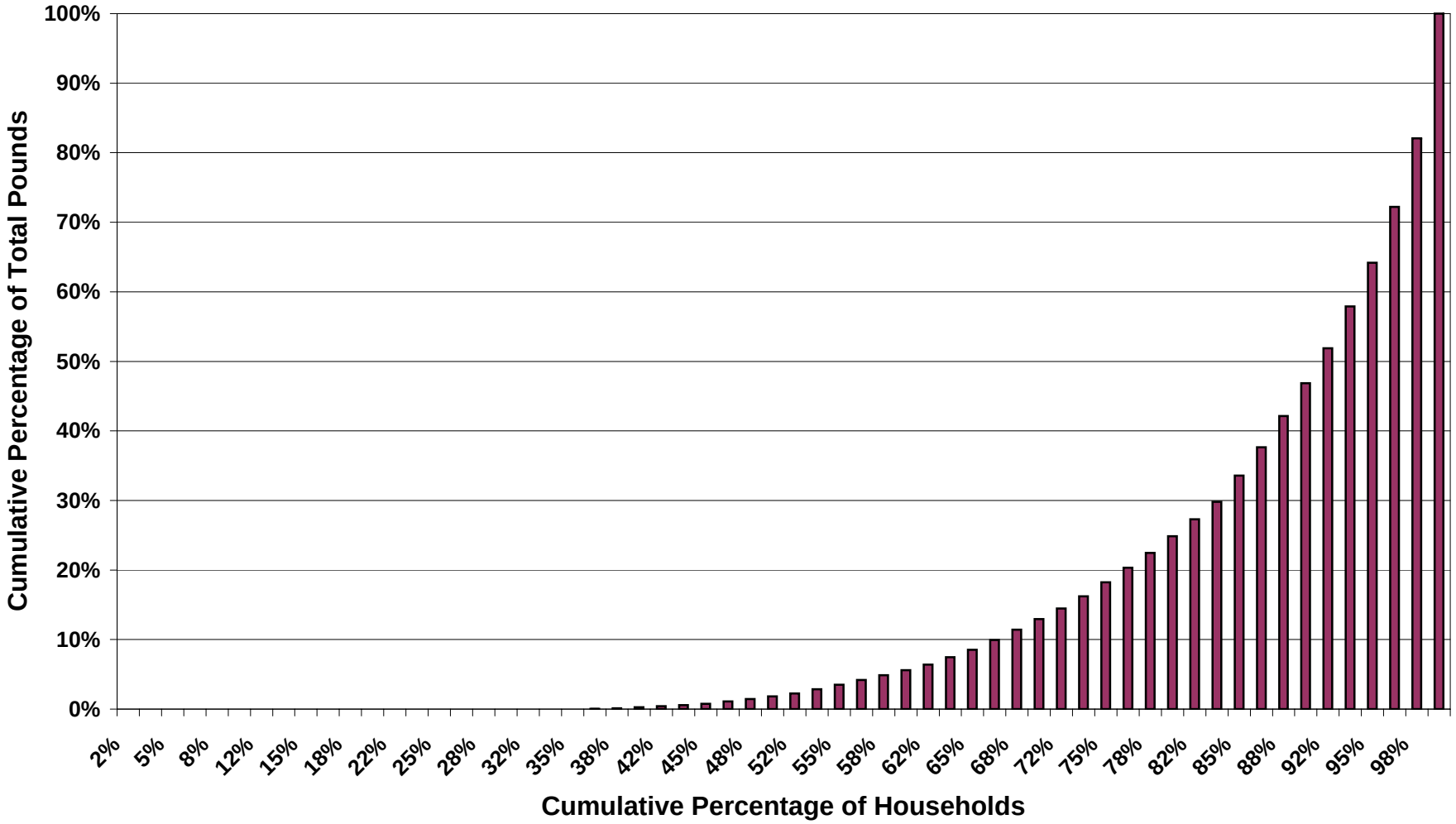
## Figure IV-9. Percentage of Fish Harvest by Category, Study Communities, 2002/2003



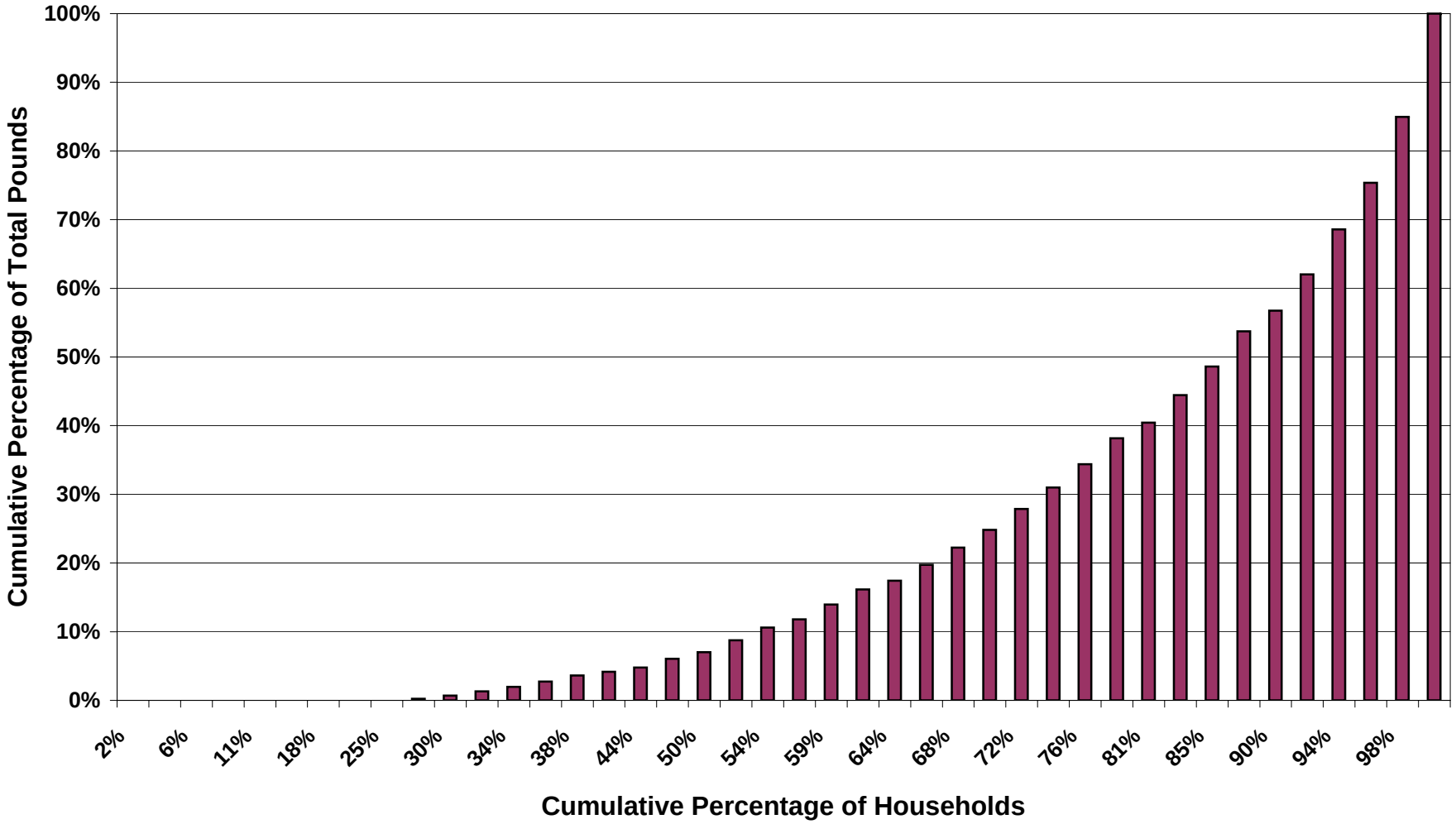
## Figure IV-10. Distribution of Harvests by Percentage of Households, Cooper Landing, 2002/2003



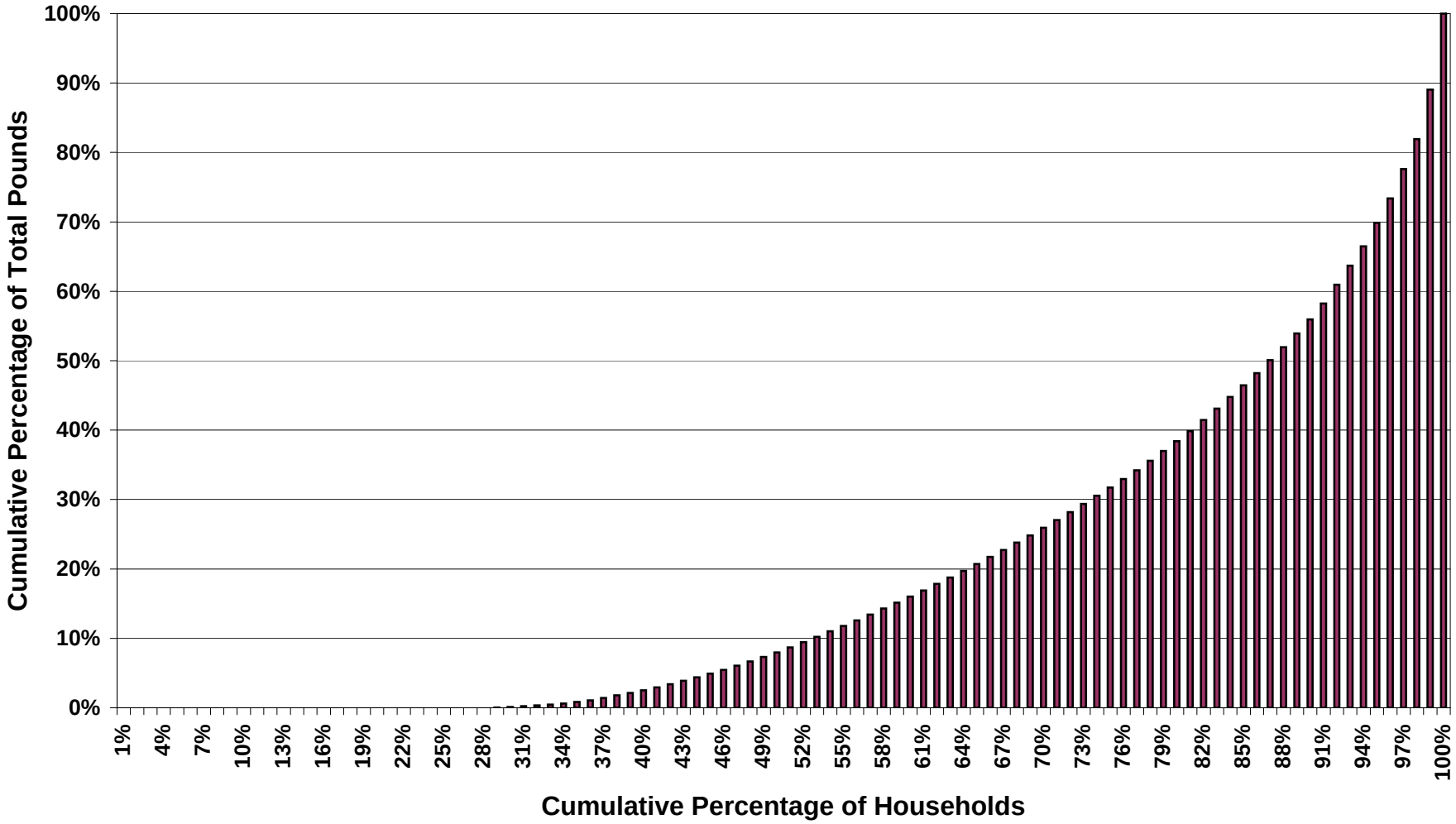
## Figure IV-11. Distribution of Harvests by Percentage of Households, Hope, 2002/2003



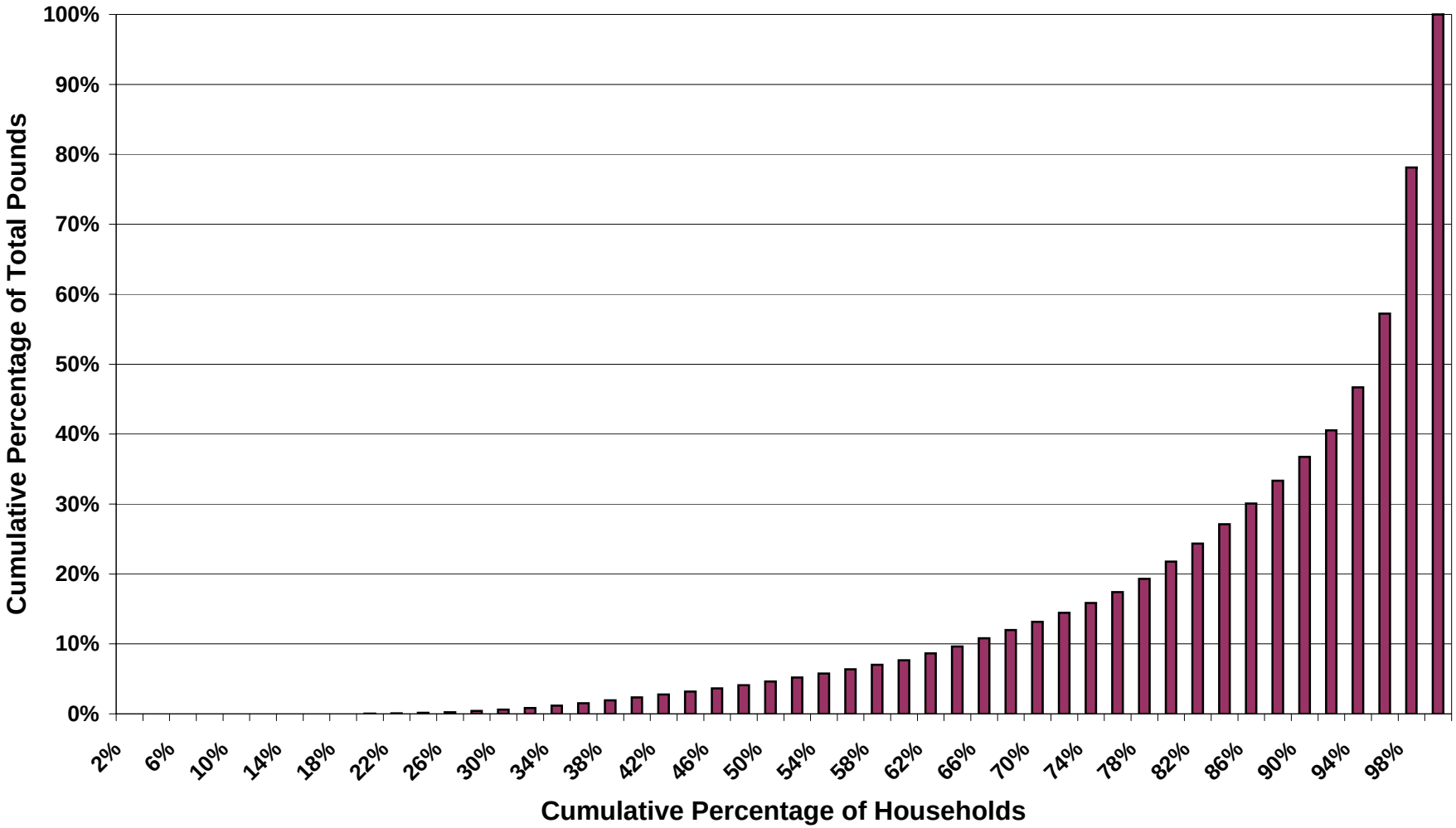
## Figure IV-12. Distribution of Harvests by Percentage of Households, Nikolaevsk, 2002/2003



## Figure IV-13. Distribution of Harvests by Percentage of Households, Ninilchik, 2002/2003



## Figure IV-14. Distribution of Harvests by Percentage of Households, Seldovia, 2002/2003



## Figure IV-15. Comparison of Estimates of Per Capita Harvest and Per Capita Use, Study Communities, 2002/2003

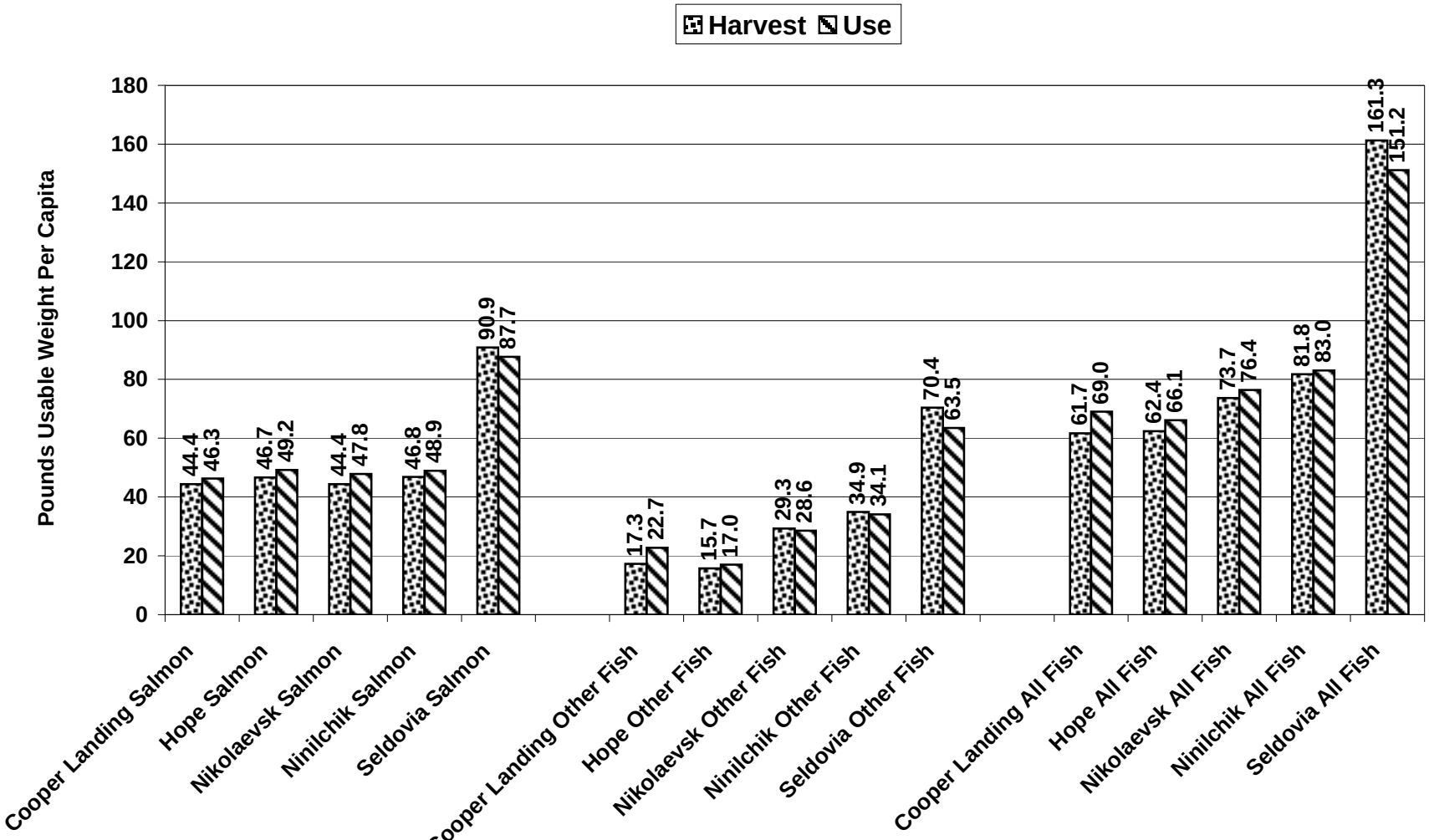


**Figure IV-16. Percentage of Total Fish Harvest for Home Use Removed from Commercial Fisheries, Study Communities in the 2002/2003 Study Year and the Most Recent Previous Study Year**

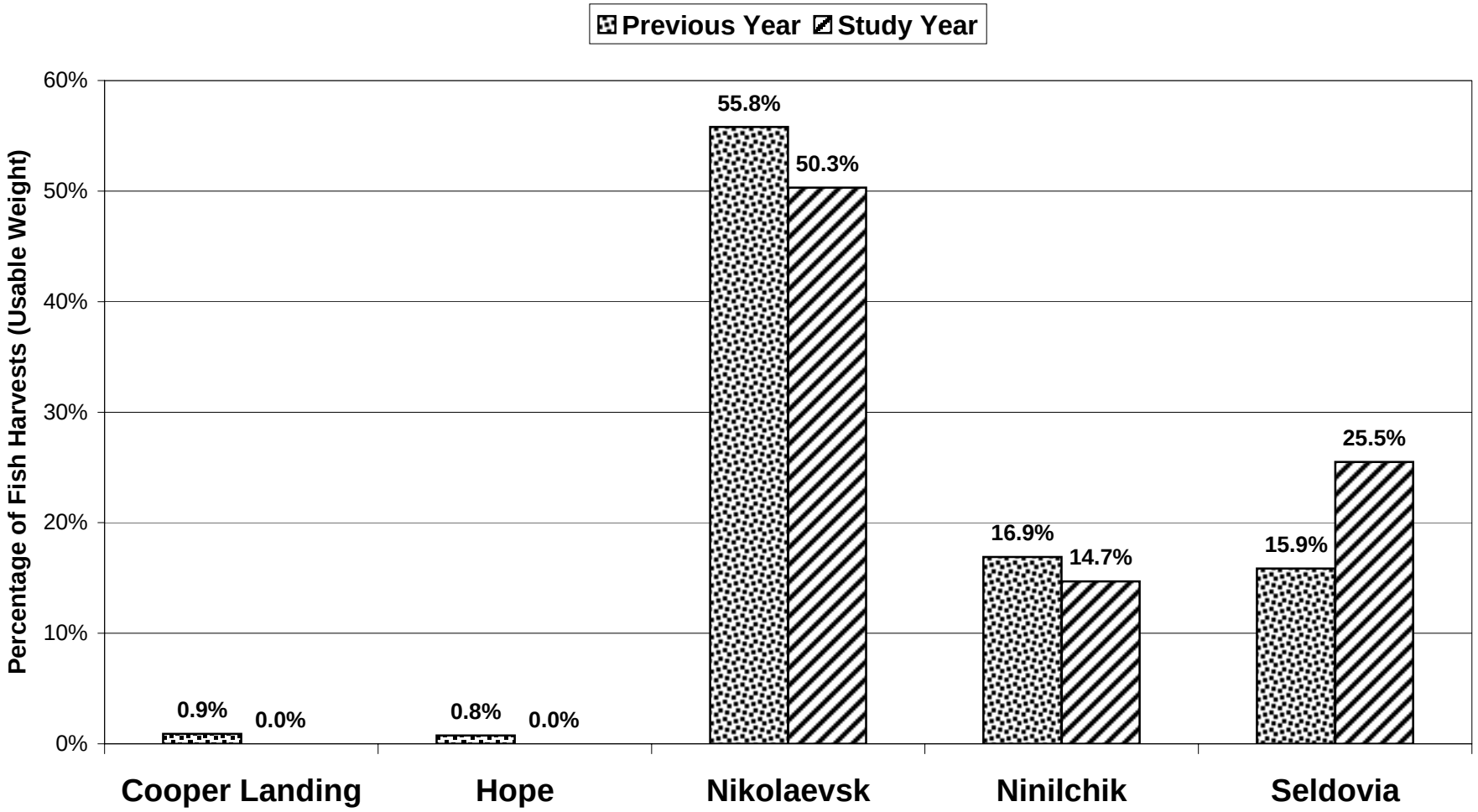
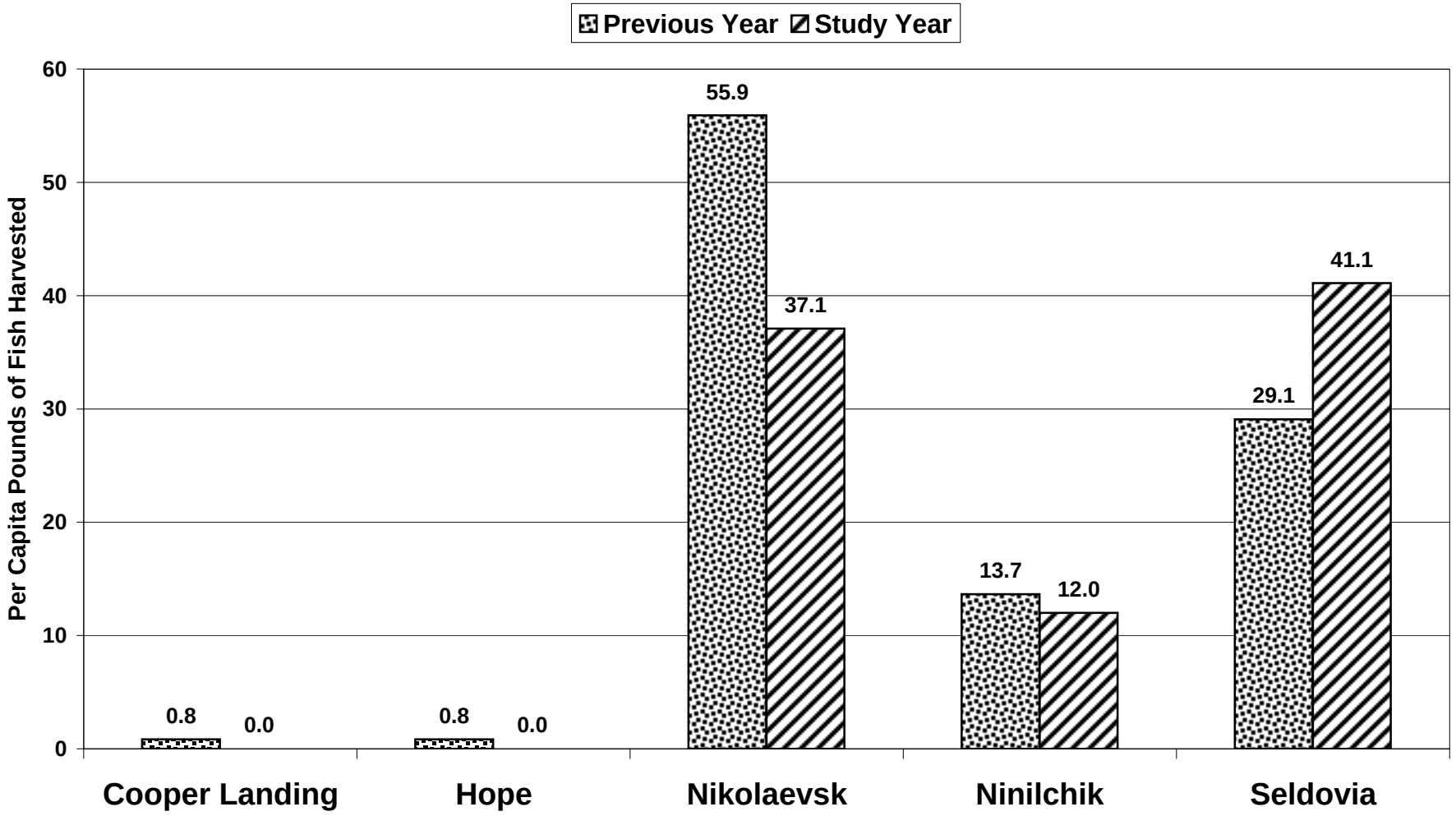
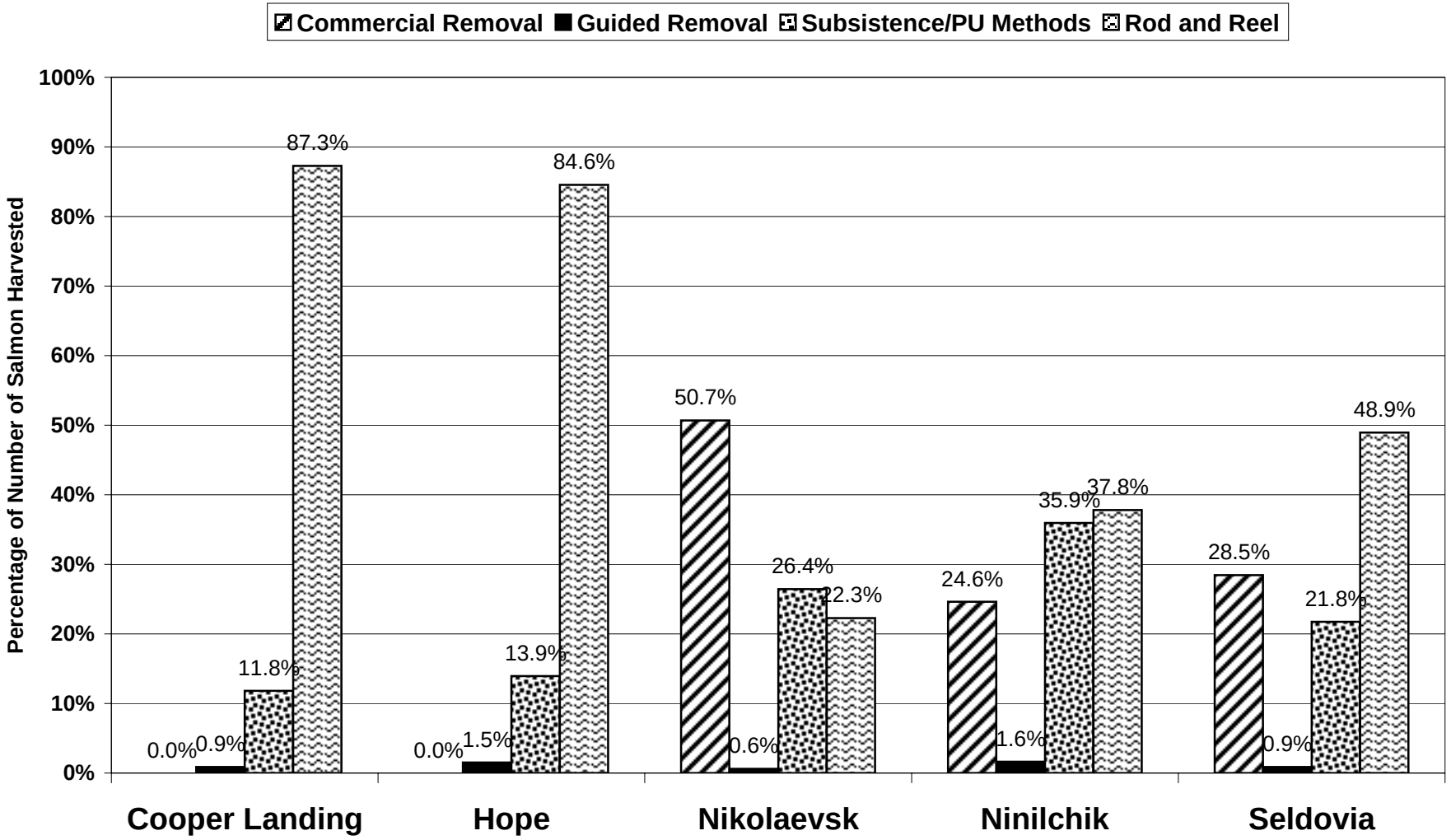


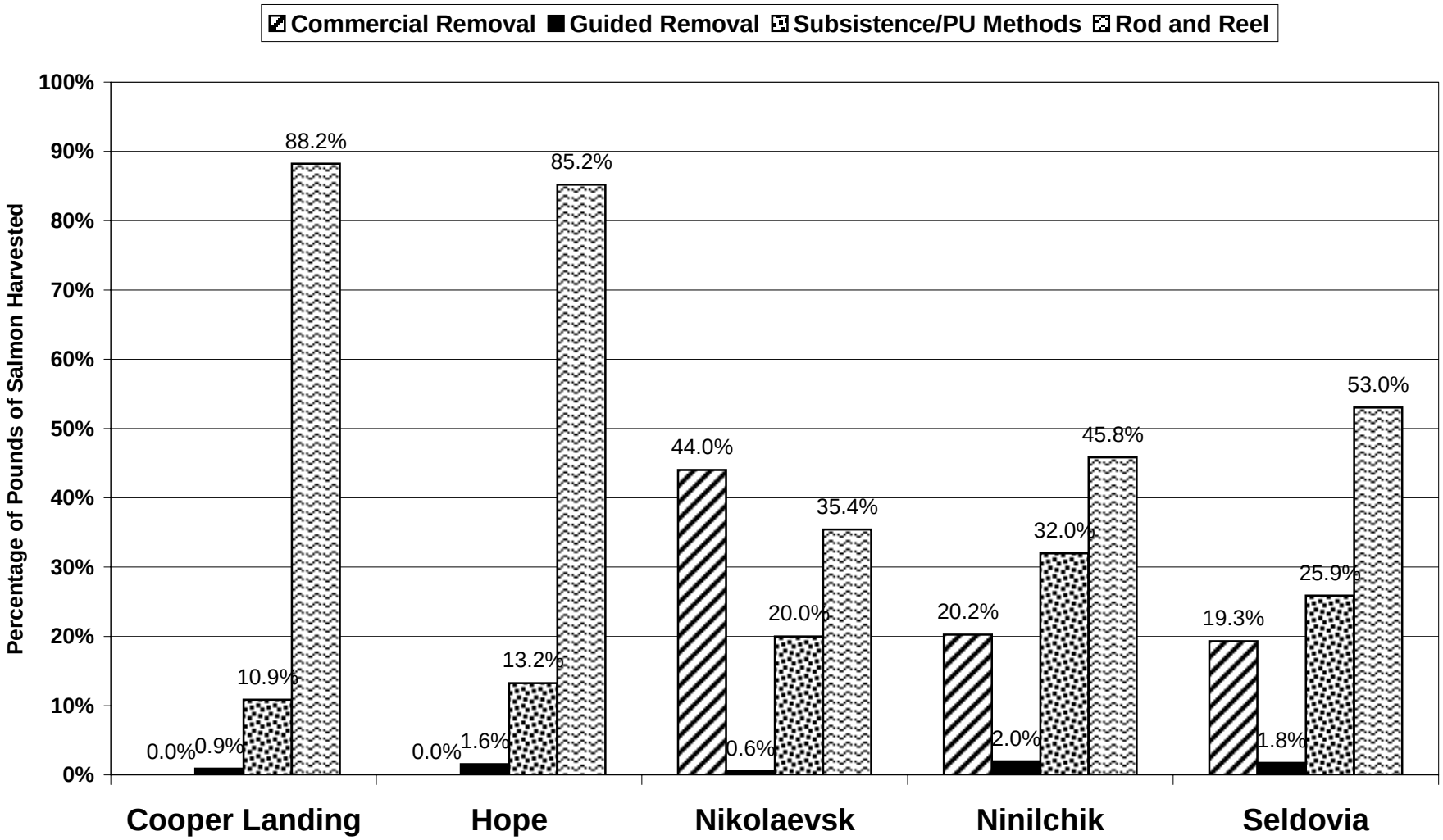
**Figure IV-17. Fish Harvests for Home Use Removed from Commercial Fisheries, Pounds Usable Weight per Person, Study Communities, 2002/2003 Study Year and Most Recent Previous Year**



## Figure IV-18. Percentage of Salmon Harvest by Gear Type (Number of Salmon), Study Communities, 2002/2003



## Figure IV-19. Percentage of Salmon Harvest by Gear Type (Pounds of Salmon), Study Communities, 2002/2003



## Figure IV-20. Percentage of Households Harvesting Salmon by Gear Type, Study Communities, 2002/2003

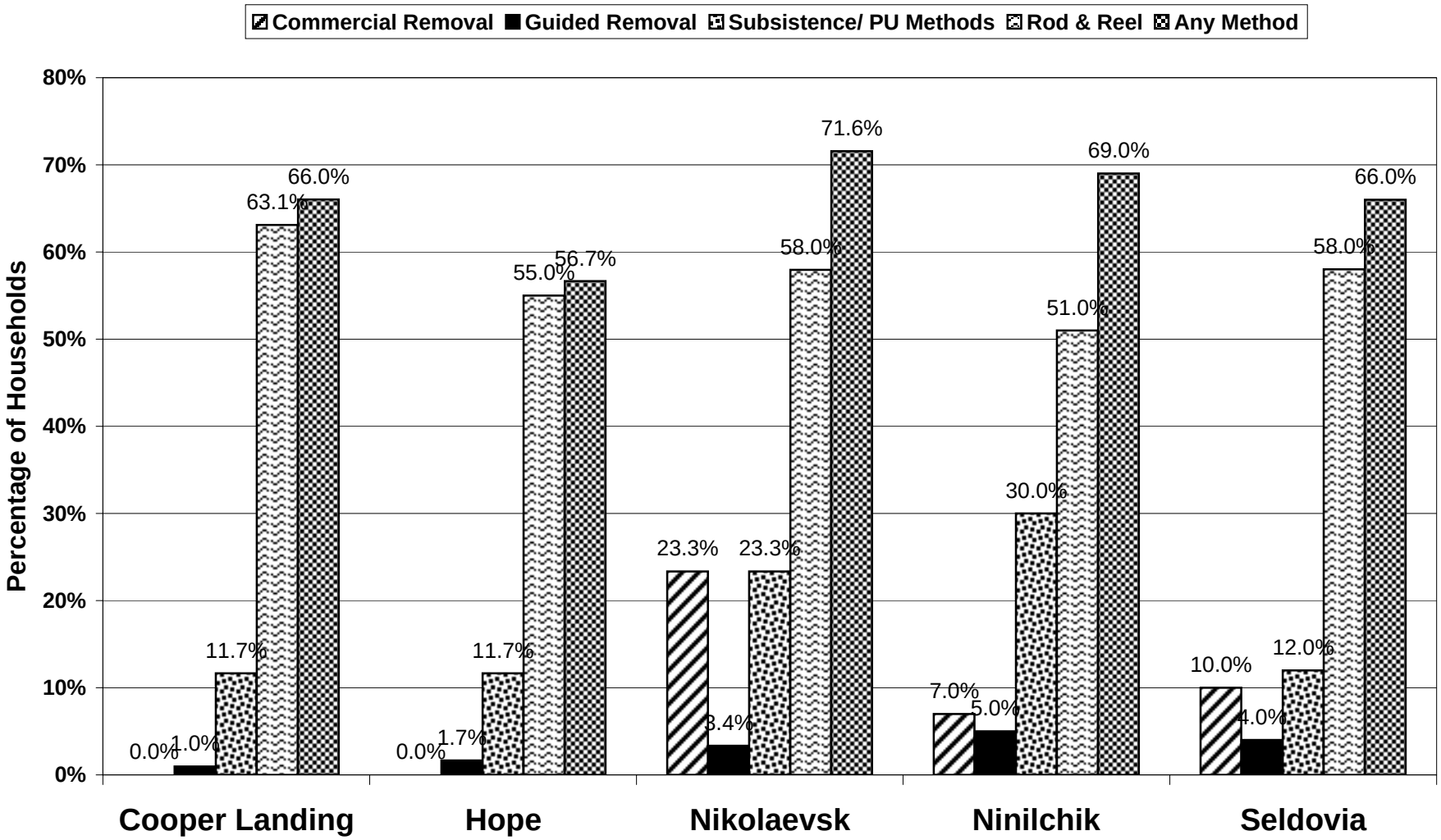
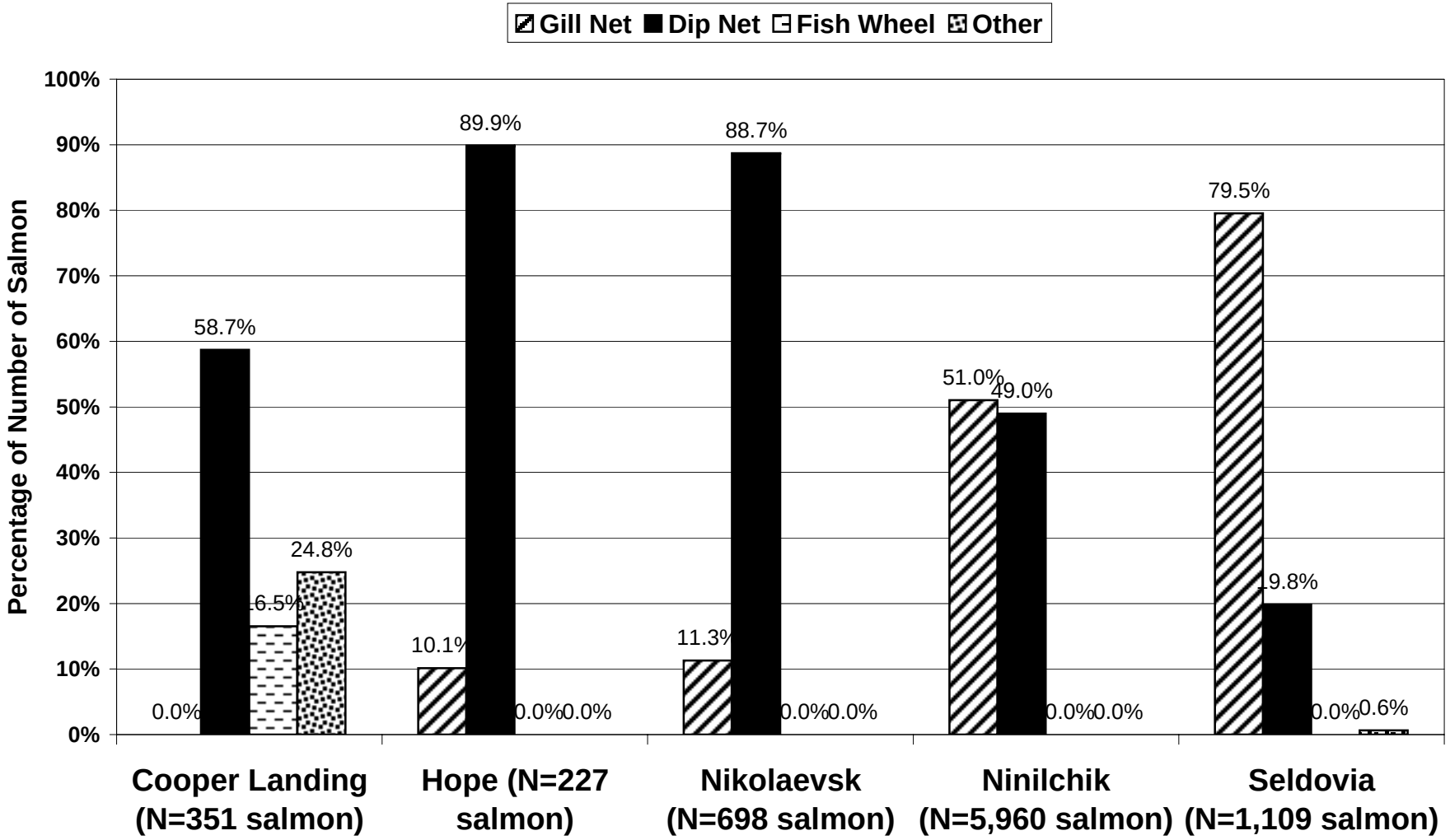
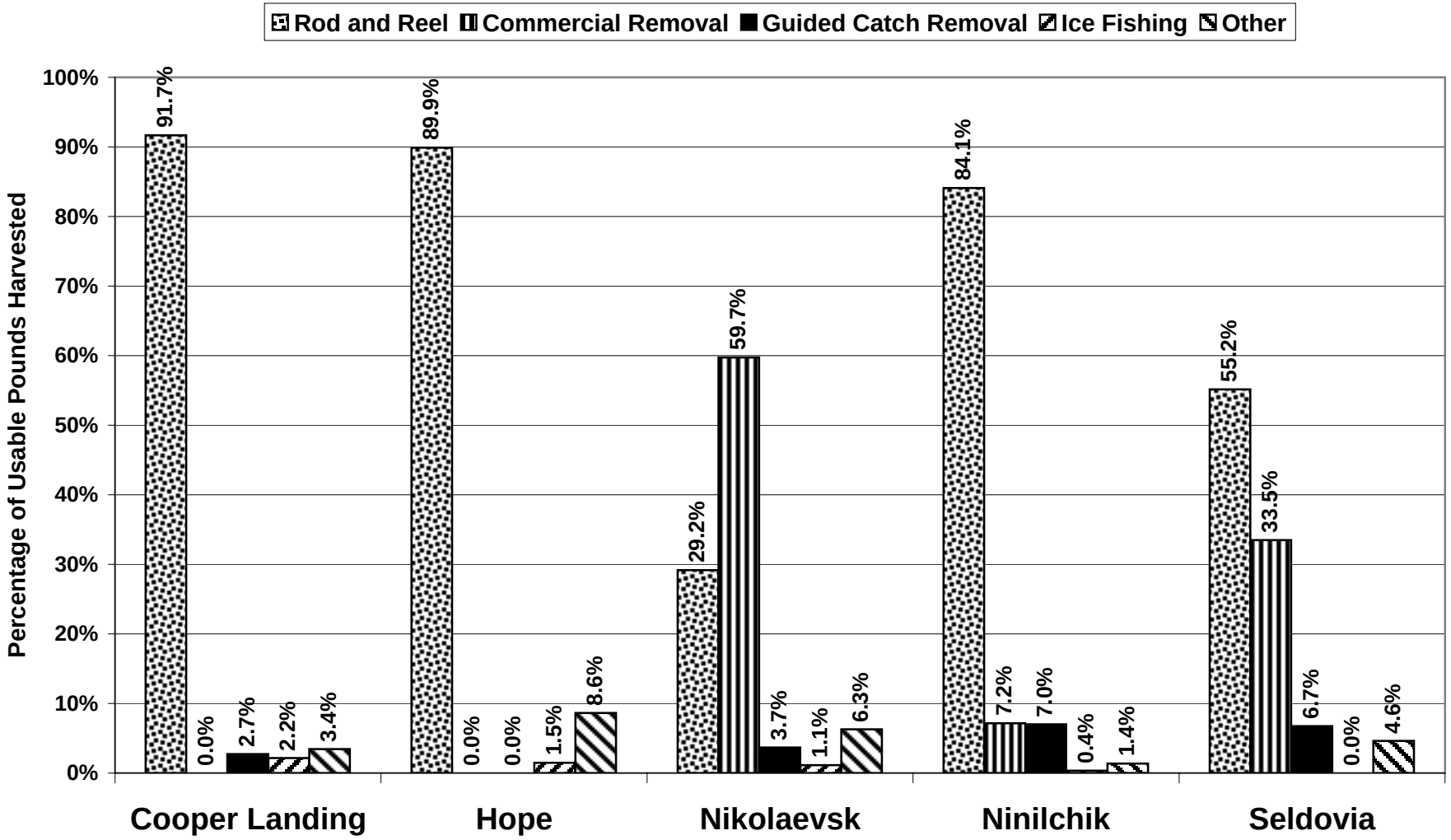


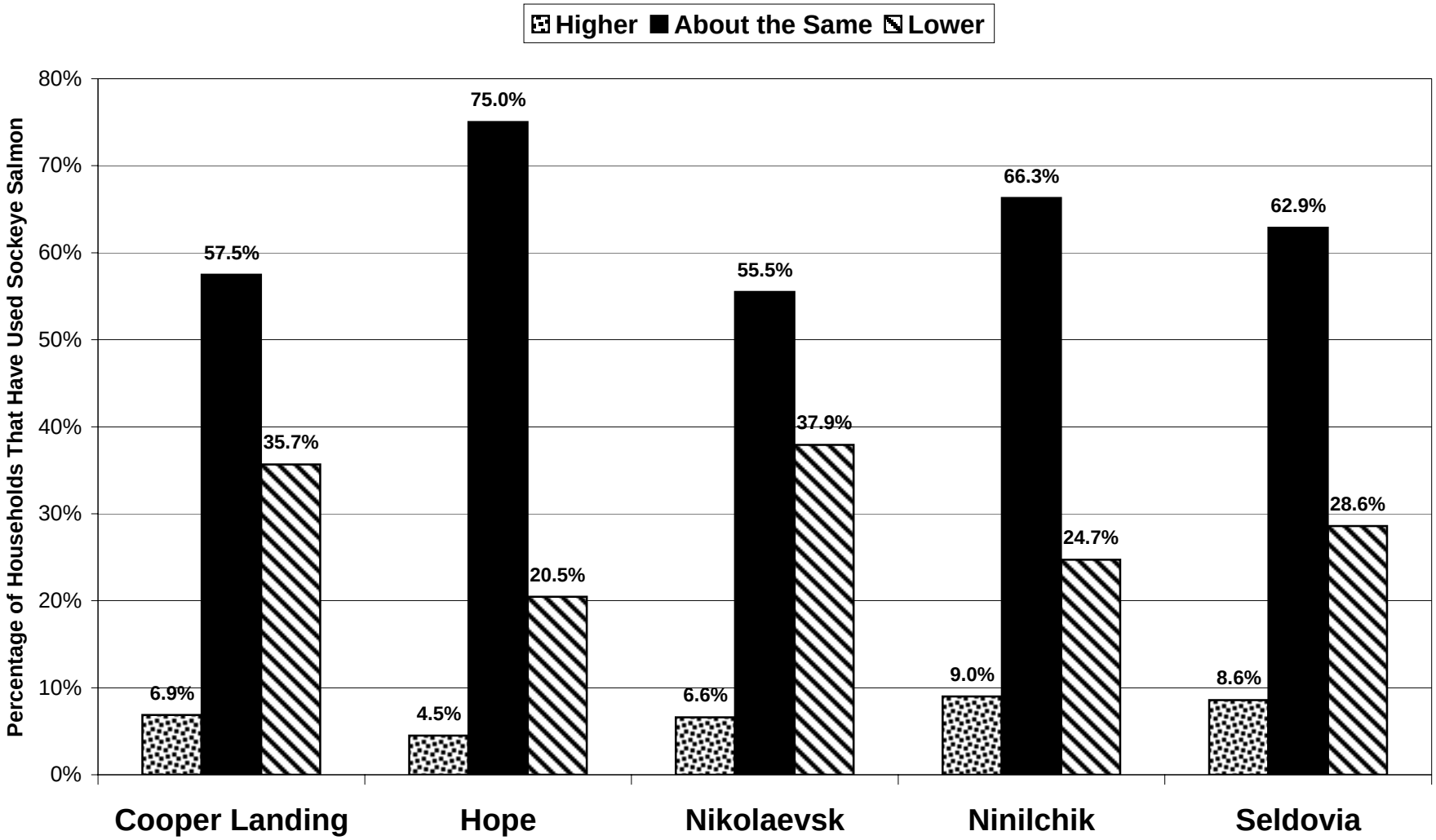
**Figure IV-21. Percentage of Subsistence/Personal Use Salmon Harvest by Gear Type, Study Communities, 2002/2003**



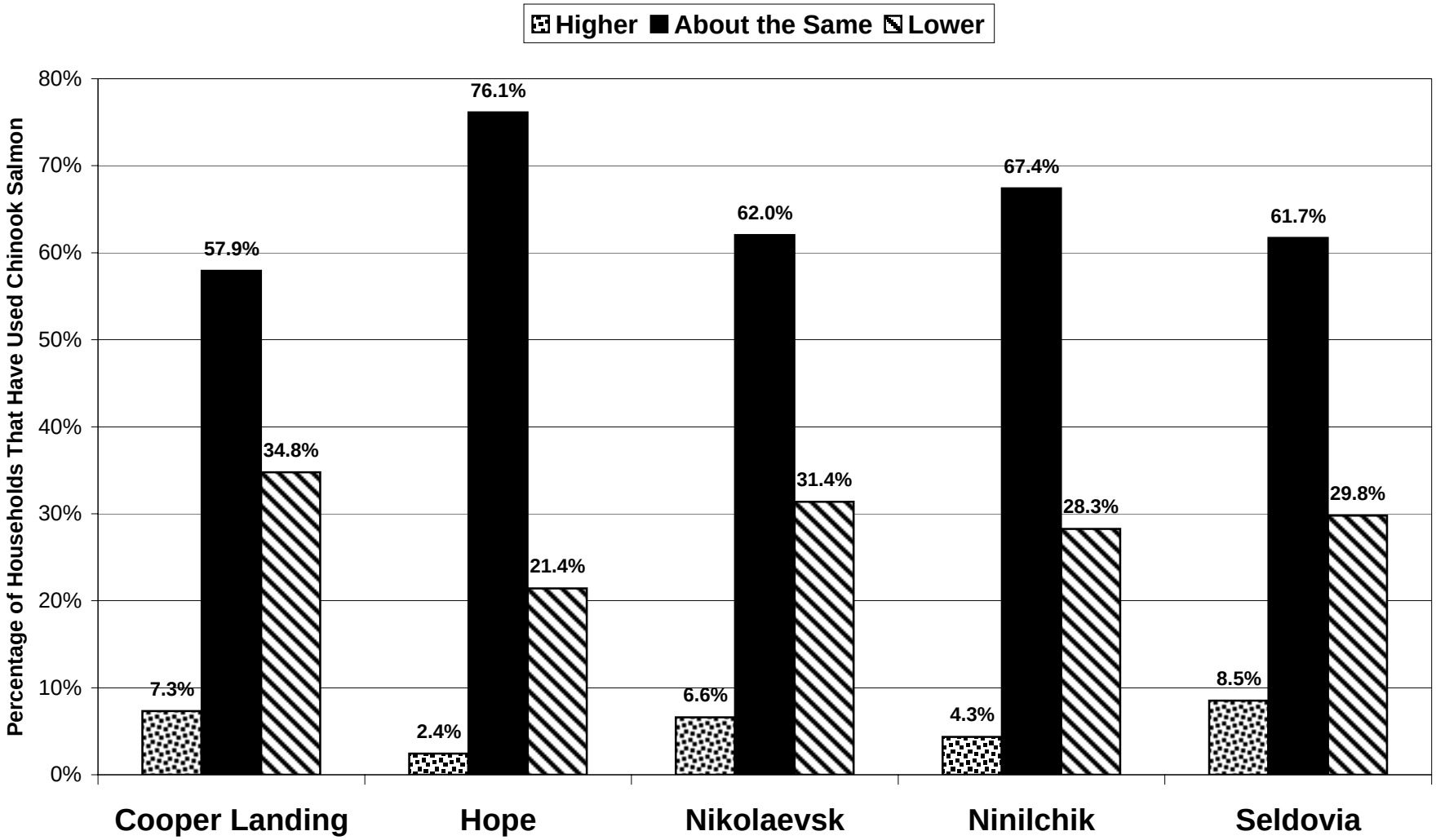
## Figure IV-22. Percentage of Non-Salmon Fish Harvest by Gear Type, Study Communities, 2002/2003



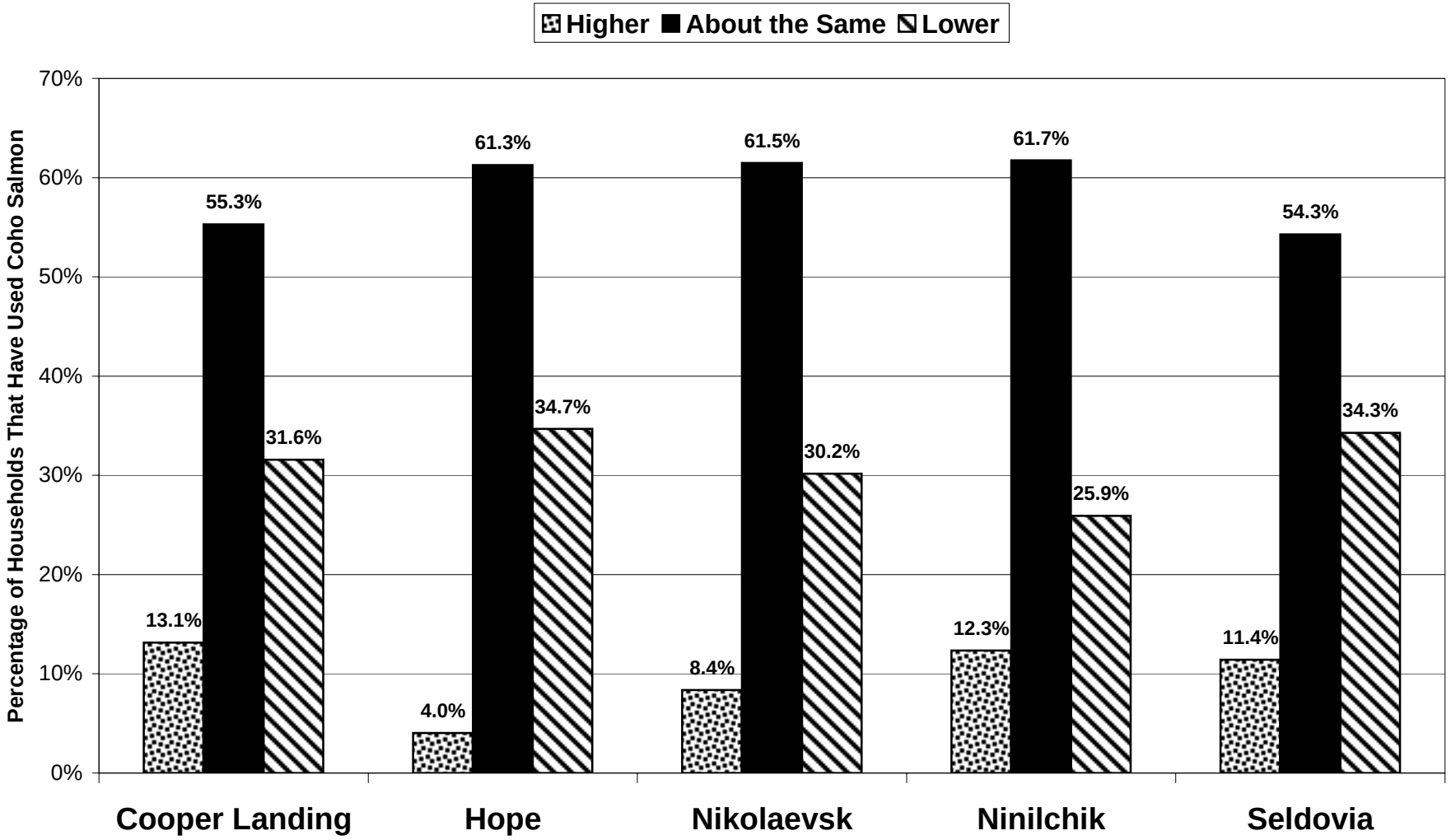
## Figure IV-23. Evaluation of Sockeye Salmon Harvests and Uses in the Study Year Compared to Other Recent Years, Study Communities



## Figure IV-24. Evaluation of Chinook Salmon Harvests and Uses in the Study Year Compared to Other Recent Years, Study Communities



## Figure IV-25. Evaluation of Coho Salmon Harvests and Uses in the Study Year Compared to Other Recent Years, Study Communities



## Figure IV-26. Evaluation of Dolly Varden Harvests and Uses in the Study Year Compared to Other Recent Years, Study Communities

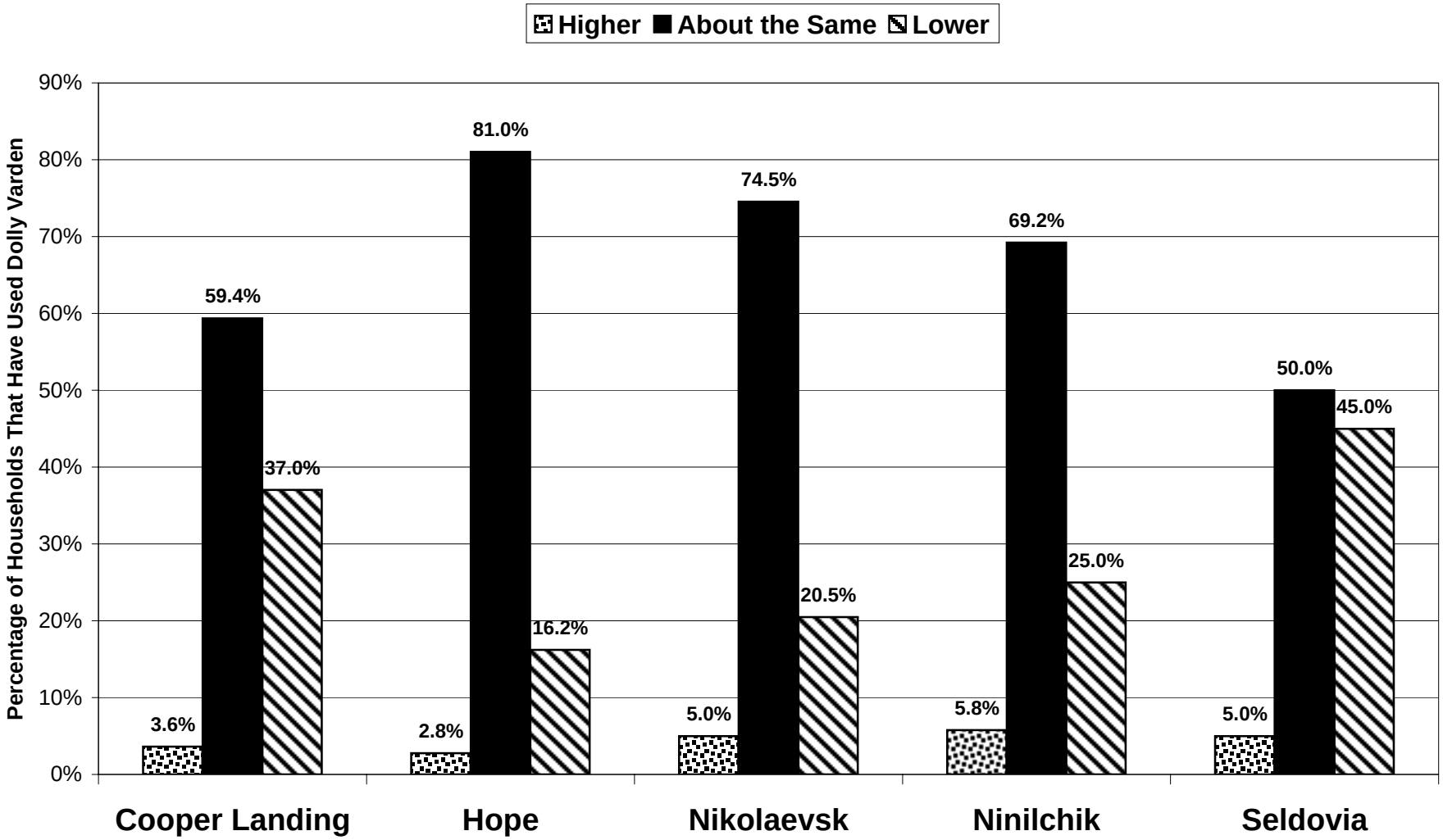
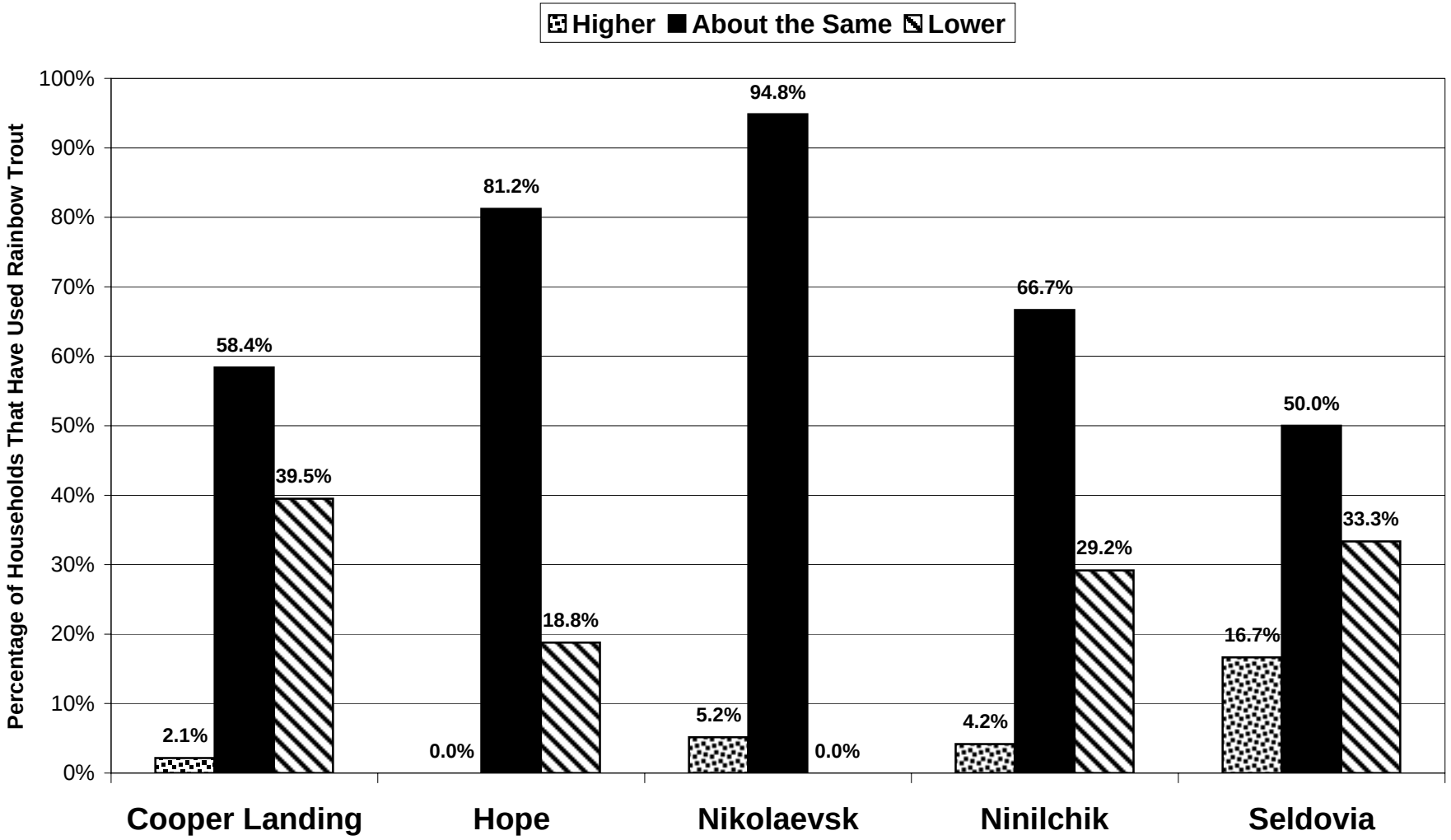


**Figure IV-27. Evaluation of Rainbow Trout Harvests and Uses in the Study Year Compared to Other Recent Years, Study Communities**



## Figure IV-28. Harvests of Salmon and Other Fish, Study Communities, 2002/2003 Study Year and Previous Study Years

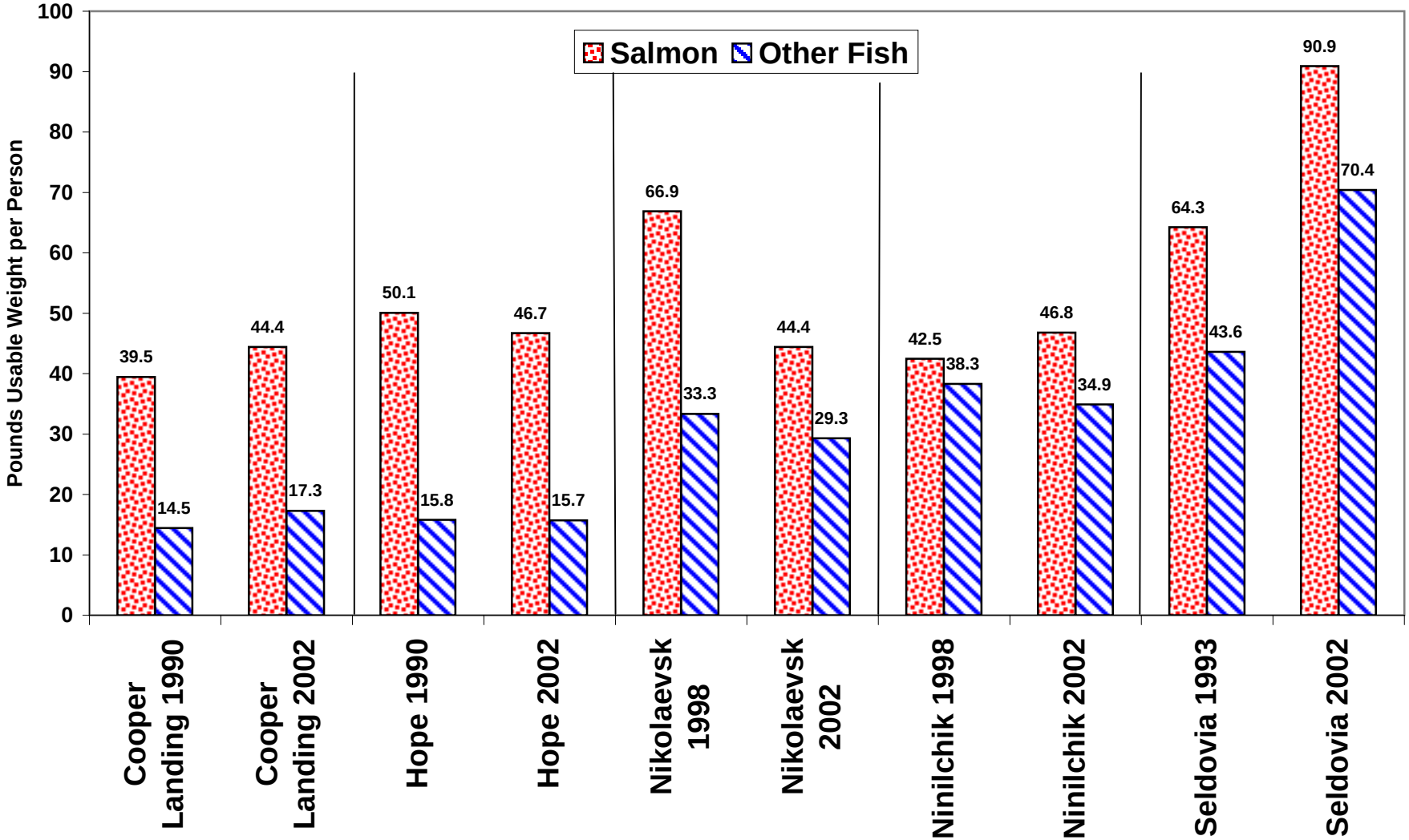
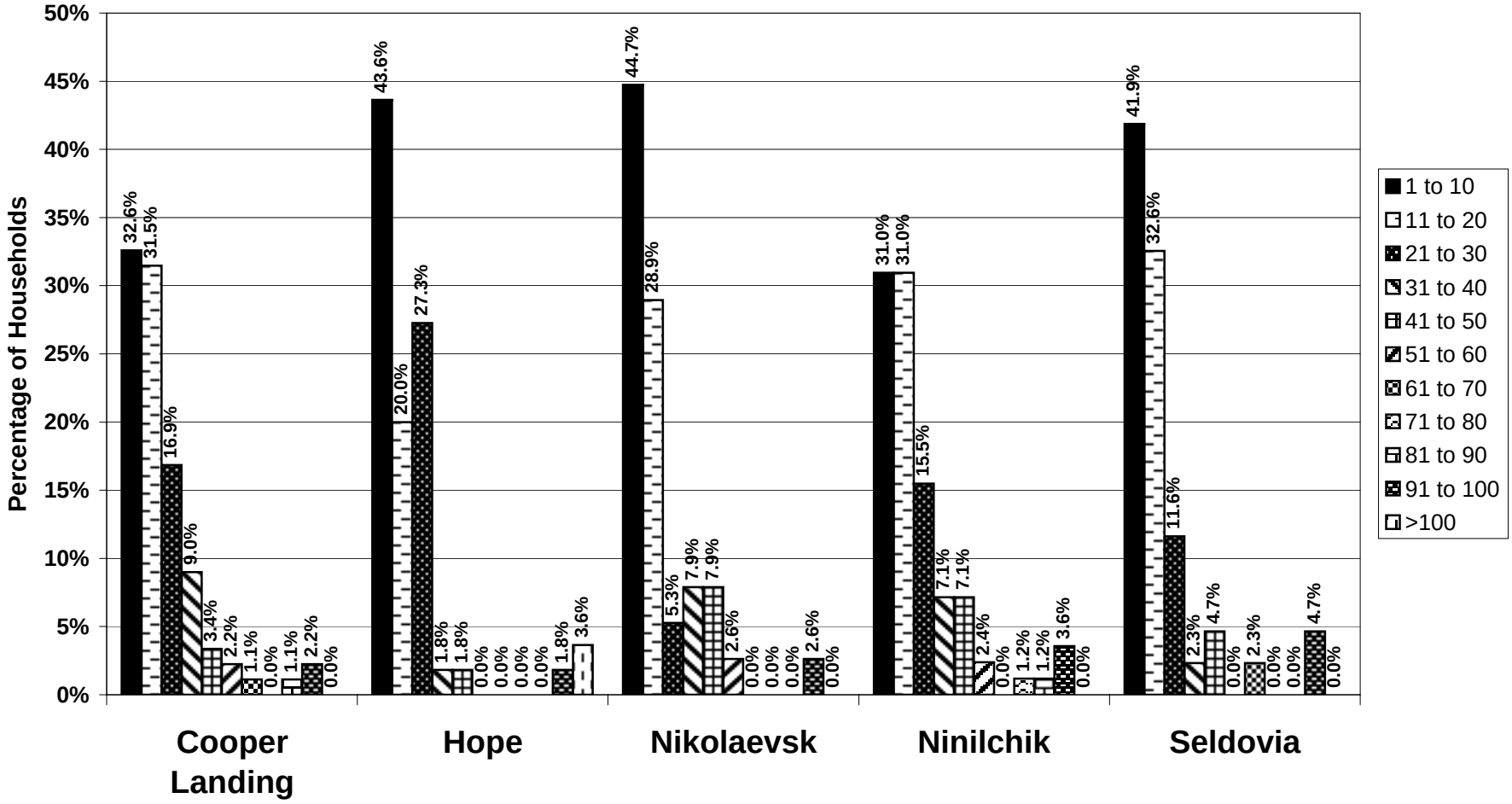
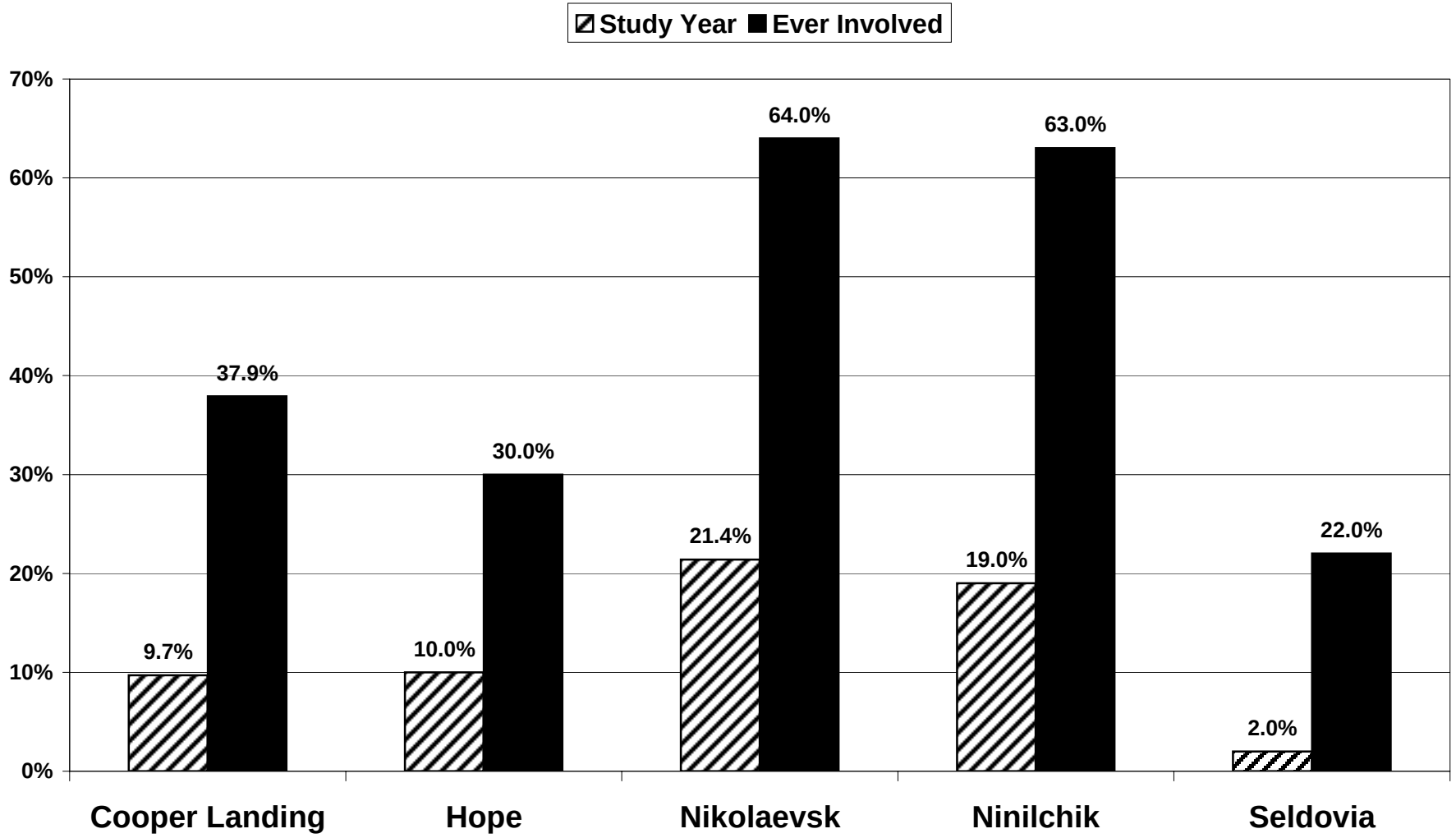


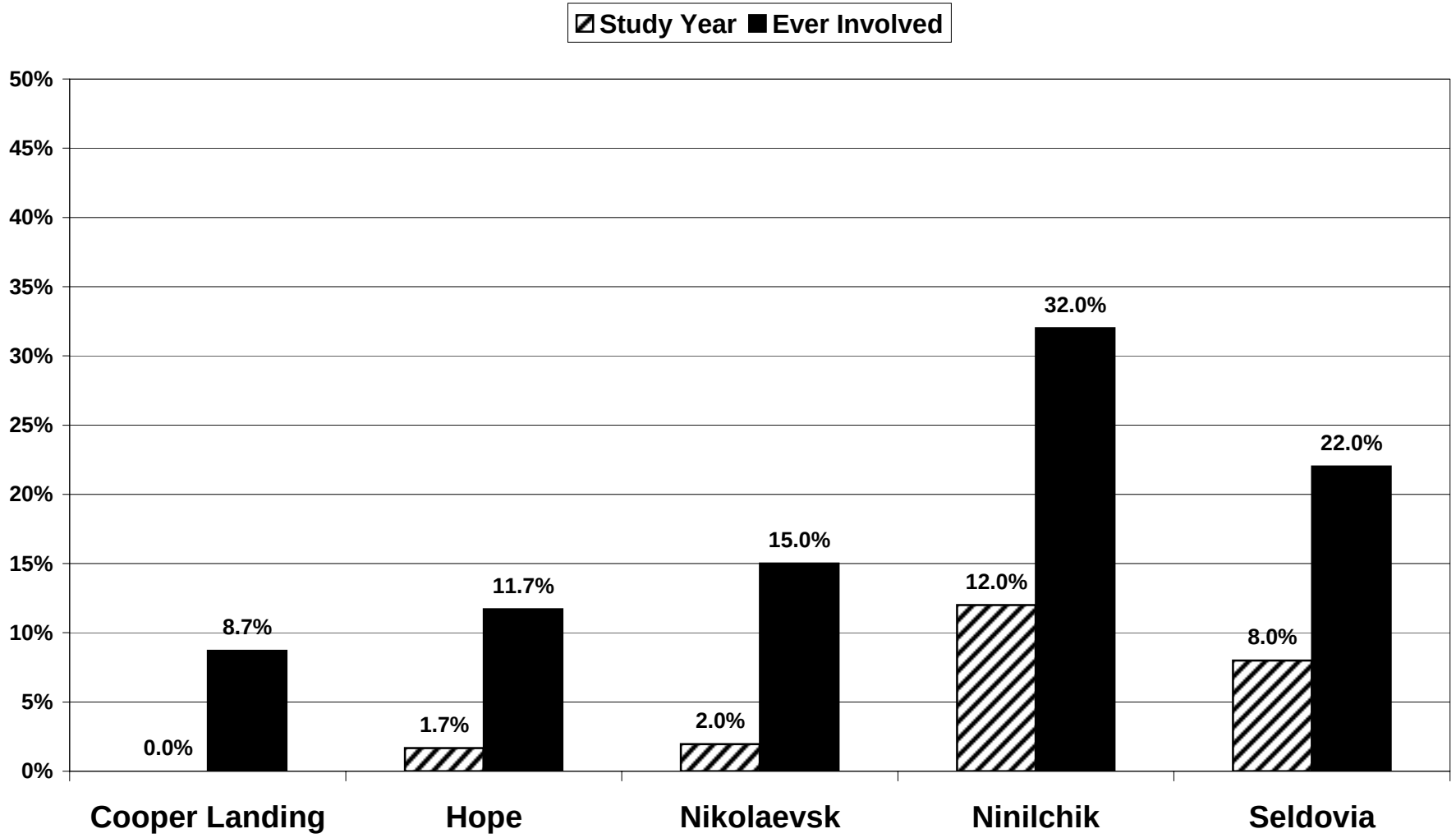
**Figure IV-29. Number of Sockeye Salmon Needed for Annual Household Consumption, Percentage of Households in Increments of 10 Fish**



## Figure IV-30. Percentage of Study Community Households Involved in Cook Inlet Personal Use Dip Net Fisheries



## Figure IV-31. Percentage of Study Community Households Involved in Cook Inlet Personal Use Setnet Fisheries



# CHAPTER FIVE: STAKEHOLDER MEETINGS

## BACKGROUND: MEETING PLANNING

### *Setting Up the Meetings*

In the investigation plan, stakeholder meetings were a component of Phase II of the Cook Inlet Customary and Traditional Subsistence Fisheries Assessment Project. The purpose of these meetings was to discuss the preliminary results of the household surveys administered to estimate community harvests and uses of fish and to elicit ideas about potential federal subsistence fisheries scenarios. These meetings were scheduled after preliminary data analysis of survey results, key respondent interviews, and the literature review were complete.

Stakeholder meetings occurred in late September and early October 2003 in Kenai-Soldotna, Cooper Landing, and Ninilchik. Representatives of key stakeholder groups were invited to these meetings including local residents, federal regional advisory council members, local fish and game advisory committee members, commercial fishing organizations, sport fishing organizations, sport fish guiding organizations, and visitor industry representatives. They were not widely publicized as "community meetings" to facilitate a focus on review and discussion of the draft study findings, although anyone expressing interest in the meeting was encouraged to attend. Table V-1 provides an overview of attendance at the three meetings.

Table V-1. Stakeholder Meetings Overview

| | | Participants | | |
|---|---|---|---|---|
| Location | Date | Public | Staff[1] | Total |
| Cooper Landing | 9/30/2003 | 3 | 5 | 8 |
| Kenai | 9/29/2003 | 12 | 5 | 17 |
| Ninilchik | 10/1/2003 | 3 | 3 | 6 |

[1] Staff from ADF&G and federal agencies.

Stakeholder meetings were not held in three of the surveyed communities: Hope, Nikolaevsk, and Seldovia. Division of Subsistence project personnel sent letters to key respondents and community leaders in Hope, and offered to hold a stakeholder meeting there, but there was no response to this offer. Staff also invited members of the community of Hope to the Cooper Landing meeting, but no representatives from Hope attended that meeting. Through letters to key respondents and community leaders, ADF&G also offered to hold a stakeholder meeting in Nikolaevsk but, again, there was no response to this offer. Members of the community of Nikolaevsk were also invited to the stakeholder meeting in Ninilchik, but none attended. One Nikolaevsk community leader had remarked during the early stage of fieldwork that meetings are not well attended in his community. ADF&G project staff sent a copy of the Power Point presentation used in the other stakeholder meetings to the president of the Seldovia Village Tribe

and offered to hold a stakeholder meeting in Seldovia. There was no response to this offer. Many people surveyed in Seldovia had expressed uncertainty about why they had been included in this research because their community is not adjacent to federally managed waters. This may be why there was little interest in a stakeholder meeting in Seldovia.

### *Stakeholder Meeting Format*

The stakeholder meetings were coordinated and facilitated by ADF&G Division of Subsistence staff. Pat Petrivelli of the USFWS Office of Subsistence Management attended all stakeholder meetings. The meetings lasted from one to two hours.

The agenda for each stakeholder meeting was the same; see Appendix E for a sample agenda. At the beginning of each meeting, staff emphasized that the purpose of the meeting was to discuss and get community feedback on preliminary draft findings from the household surveys conducted in Cooper Landing, Hope, Ninilchik, Nikolaevsk, and Seldovia.

A review of the project background followed. Staff reiterated why the project was undertaken, which aspects of data collection had been completed, the role of the federal subsistence program, federal customary and traditional criteria, and the contents of the survey form.

After this introduction, ADF&G staff presented a PowerPoint presentation of draft study findings from the survey, which was then discussed by the stakeholders in attendance. The results were discussed with regard to how study findings should inform discussion of the eight c&t factors and possible federal subsistence fishing regulations and fisheries.

## THE KENAI-SOLDOTNA STAKEHOLDER MEETING

Twenty-one people were invited to the Kenai-Soldotna stakeholder meeting held on September 29, 2003 at the Kenai River Center; twelve people attended. The Federal Subsistence Board (FSB) currently classifies the Kenai-Soldotna area "non-rural". However, stakeholder meetings were held in this area because federal subsistence fishery regulations on the federally managed areas of the Kenai Peninsula could affect Kenai-Soldotna stakeholders.

The primary issue voiced at this meeting was concern that the study focused only on "rural communities" and not long-term residents who know local traditions, many of whom are members of the Kenaitze Tribe and live in areas classified as non-rural by the FSB. There was high interest and concern over nonrural-rural determinations by the FSB. Several stakeholders were unhappy that the results of the study do not reflect uses of those long-term users or their families who have not had access to subsistence fisheries in the waters now part of the federal subsistence program in 50 years. To these stakeholders it seemed that this study had rendered long-term users "out" and short-timers living in the right "rural" place, "in". Thus there appeared the strong view that current FSB rural determinations have excluded many long-term users from any consideration for subsistence fisheries.[1]

[1] In 2003 and 2004, the Federal Subsistence Board was evaluating its methods for making rural/non-rural determinations. The Office of Subsistence Management funded a study to develop recommendations for a

One stakeholder at the Kenai/Soldotna meeting remarked that current state sport fishing seasons are not compatible with local cultural practices. This person said he used to dry salmon in May but has been forced to fish in June because of regulations. He said this is a problem because flies ruin drying fish later in the summer. Several people stressed that commercial salmon fishing, which takes place in marine waters and is managed by the state, has long been an important source of "subsistence food" in the area. They agreed that in many households there was always something to eat because fish for home use was taken from the commercial harvest first, before sale.

A long-term commercial fisher and life-long resident of the Kenai-Soldotna area said in the past, people only ate cohos and chinook salmon, while sockeyes were halibut bait. She added that, in the past, people fished for what they wanted; now people fish for what they are allocated by regulation. She said that the current relatively high harvest of sockeye salmon compared to other species as documented in the household surveys reflects regulations, not preference. She added that coho and Chinook salmon were the preferred species for subsistence use because they yield more meat for less effort at harvesting and processing.

Another commercial fisher added that "sport fishing equals play," but subsistence/personal use fishing "equals meat." One person said that the proposed federal subsistence fishery scenarios are viewed as a source of food for people in "federally" rural communities but wondered why providing a source of food was not considered an issue for people from nearby "non-rural" communities.

Even though her family lives in an area considered "non-rural", one participant said subsistence fisheries should be an opportunity to teach children how to fish, and not just designed to allow participants to catch a certain number of fish. She said that current regulations have led to many people fishing at night or undercover. This has led to various forms of illegal fishing. Because of this situation, she has not been able to pass her knowledge of fishing to her children. She said she does not like the fact that many families that have lived off of fish for generations in areas that are currently "non-rural" can no longer practice their fishing traditions. This especially bothers her because of the large numbers of freezer burned fish she sees donated to local mushers for dog food each spring, fish she believes are taken in the personal use dip net fishery by relative newcomers to the Kenai Peninsula and who not do have a strong tradition of eating relatively large amounts of salmon.

Members of the public at this meeting made comments about the survey and the possible interpretations of some of the questions. Several of these comments were in reference to the survey question, "How many salmon could your household use in a typical year for its own consumption? (not including fish given away, only fish you harvest and receive)." Some people thought income should be considered when looking at "needs" and c&t determinations.[2] One person pointed out that long-term users know more about what they need compared to newcomers. This person wanted length of residence to be compared with need estimates. She

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methodology for identifying rural and nonrural places in Alaska (Wolfe and Fischer 2003). Consideration of these revised methods was still underway when this report was completed.

[2] Note that information on household monetary income was not collected in the survey for this project.

felt that most long-term users would have lower need estimates than "idealistic" newcomers, who might overestimate how much fish they could actually use in a year.

Another meeting participant said that fishery limits set harvester expectations. He requested that new limits be set moderately so that people would not be dissatisfied by harvesting numbers lower than these limits. He also pointed out that the concurrence of "use" and "harvest" numbers in the survey results is not necessarily an indicator that needs are being met.

There were suggestions made in reference to the questions in the survey regarding people's opinions of current fishery regulations. One person said that some survey participants who say they are happy with regulations may be happy because they are not participating and do not care. She suggested a comparison of amount of use and whether or not a household liked or disliked current regulations.

## THE COOPER LANDING STAKEHOLDER MEETING

Twenty-six people were invited to the Cooper Landing stakeholder meeting held September 30, 2003 at the Cooper Landing Community Center; four attended. Participants generally thought that the survey results accurately reflected community harvests and opinions. They agreed that most Cooper Landing residents fish locally, and therefore their responses to the survey questions were geared toward fishing opportunities for their community rather than an overall rural area perspective.

During the surveys and during this meeting there were some Cooper Landing residents who initially said they would like a few "local resident only" fisheries. Examples of these local fisheries included a seniors-only morning fishery, a community fish wheel, and a higher daily limit for local residents. However, after they thought about the effects this might have on the local economic benefits of sport fishing they said it would be better to keep things as they are. They also stressed that they did not want regulations that allow local and non-local residents to fish side-by-side under different rules with different gear types, for fear that this will lead to conflicts. This viewpoint was also expressed in the household surveys conducted in Cooper Landing.

Several people said they would like to see the return of the winter rod and reel coho fishery at Quartz Creek, repeating a recommendation from the scoping meeting. They also thought that fall trout fishers should be allowed to keep the fall cohos they accidentally hook.

Regarding data analysis, two Cooper Landing meeting participants made the same request that Kenai-Soldotna meeting participants made: they would like to see length of residence compared with need estimates.

## THE NINILCHIK STAKEHOLDER MEETING

Eight people were invited to the Ninilchik stakeholder meeting, held October 1, 2003 at the Ninilchik Traditional Council Subsistence Building. Three members of the public attended.

The participants at this meeting said that in the past, people harvested chinook and coho salmon for food. Recent high harvests of sockeye salmon are the result of regulations and availability; most people (or at least more long-term local residents) are not used to eating sockeye salmon. The decrease in the availability of chinook and coho salmon, in their view, occurred as sport fishing and tourism increased. Changes in species availability are reflected in shifts in preservation methods. Sockeye are primarily canned. Chinook salmon and coho salmon are smoked for preserving for later use.

One person said that if the number of kings harvested per household showed only Alaska Native household harvests, the number would be closer to 15 per household. He said he would like to see all data sorted for Native and non-native households in Ninilchik (see Chapter Four).

In response to the survey question, "In Cook Inlet, the annual limit for state personal use fisheries is 25 for the household head and 10 for each additional household member. In your opinion is this limit: too high, too low, about right, don't know?" this group agreed that personal use limits would be considered too low if they applied specifically to the Ninilchik River or Deep Creek. One person said they would like to see a personal use/dip net fishery in federal waters.

The group agreed that the fact that the majority of people in Ninilchik "agree" that federal subsistence regulations should remain the same as state sport fishing regulations is local acknowledgement of the importance of regulations for species conservation.

## PRESENTATION AT FEDERAL REGIONAL ADVISORY COUNCIL MEETING

At the invitation of OSM staff, on October 8, 2004, ADF&G Division of Subsistence staff gave a presentation of the preliminary study data, similar to that presented at the stakeholder meetings, to the Southcentral Subsistence Regional Advisory Council at its meeting in Talkeetna. In addition to the PowerPoint presentation used at the stakeholder meetings, the comments from these meetings were added to the presentation for the SCRAC.

In general, RAC members appeared not to be surprised at the research results. After the presentation, RAC members raised several issues. Some of these were similar to those raised in the stakeholder meetings, but some were different. One member said that in his community, the regulatory seasons and the timing of fish runs do not necessarily coincide and this forces people to fish during "illegal" periods. He said that the condition of the fish during regulatory "open" times is not always consistent with what people want. He pointed out that in his experience, creating new subsistence regulations is more difficult than changing commercial fishing regulations or sport fishing regulations. He said that the current subsistence regulations should be modified to address the discrepancy between these regulations and the desirable harvest period, matching abundance and condition of the salmon with open periods.

As in some of the stakeholder meetings, the issue of rural residency and eligibility to participate in federal subsistence fisheries was again discussed at the RAC meeting. One RAC member mentioned that the study findings related to historical uses of fisheries, locations, and gear do not necessarily make sense from a historical perspective because of the recent (last 20 years or so) influx of many new residents to these "rural" areas. This RAC member stated that the "new"

rural residents do not have historical ties to the resources, and therefore the needs, concerns, and traditions of long-term residents may not be accurately reflected in the general findings and mean household results from the surveys.

## OVERVIEW OF STAKEHOLDER MEETING RESULTS

Information from the stakeholder meetings has been incorporated into this final report. There were no major objections to any of the data presented. The opinions shared at the meetings have been included as context.

There were several suggestions as to how the data should be analyzed. At all three meetings, stakeholders requested that length of residence be compared with need estimates. Another person suggested that the question about whether or not a person is happy with current regulations should be compared with data that show if the person even uses fishery resources or not. One community said they would like to see a Native and non-Native breakdown of harvest results. This contrast is discussed in Chapter Four.

There were a few specific comments about survey results that stakeholders felt were unrealistic. For example, there were preliminary survey results that appeared outlandishly high to researchers for chum and silver salmon in response to the question, "How many salmon could your household use in a typical year for its own consumption? (not including fish given away, only fish you harvest and receive)." These numbers were from two surveys in one community. In all stakeholder meetings, participants said these numbers were unrealistic and too high. Field notes were checked and it became obvious that field researchers questioned the validity of these surveys. Because the numbers were obviously exaggerated, these two surveys were removed from the sample and were removed from data analysis.

# CHAPTER SIX: DISCUSSION AND CONCLUSIONS[1]

This project documented contemporary noncommercial harvests and uses of fish by residents of five communities of the Kenai Peninsula of southcentral Alaska that are classified as rural by the Federal Subsistence Board. The study communities were Cooper Landing, Hope, Nikolaevsk, Ninilchik, and Seldovia. All but Seldovia are on the road system and all except Seldovia have experienced very rapid population growth over the last several decades. Most household heads have moved to these four communities on the road system from other areas of Alaska or from outside the state within the last 20 years.

A systematic household survey of 355 households found that most residents of the study communities fish. In four of the study communities, rod and reel fishing under sport fishing regulations provided most of the harvest in 2002/2003. The exception was Nikolaevsk, where removal of fish from households' commercial harvests was the primary source of fish for home use. As estimated in pounds usable weight per person, fish harvests were relatively low to moderate in the four communities on the road system in the 2002/2003 study year: 61.7 pounds per person at Cooper Landing, 62.4 pounds per person at Hope, 73.7 pounds per person at Nikolaevsk, and 81.8 pounds per person at Ninilchik. Fish harvests at Seldovia were higher: 161.3 pounds per person. These harvest estimates are consistent with estimates from previous household surveys conducted by the Division of Subsistence in these communities (Scott et al. 2001). This similarity of information across study years demonstrates the reliability of the project's findings.

By their own evaluations, the 2002/03 study year overall appears typical for these communities. For most fisheries resources, a majority of households reported that their uses were about the same as other recent years. About 20 to 30 percent of households that had used various resources in the recent past said that their uses were down. Almost all of these households explained that these lower harvests were the result of personal circumstances such as work-related time constraints, illness, or other priorities, rather than unavailability of resources or regulatory restrictions.

Although most households had experience with rod and reel fishing, most had not participated in personal use or subsistence dip net or set net fisheries (although more households in Seldovia than elsewhere had experience with subsistence nets). Most households agreed that current seasonal limits in state personal use fisheries are adequate. Most respondents also supported basing any future federal subsistence fishing regulations on state sport fishing rules. When asked to provide suggestions for the location and regulatory structure of potential federal subsistence fisheries, most interviewed households did not make any recommendations. Many supported the status quo, or were only interested in opportunities in state waters and especially marine waters, or expressed concern about the consequences of net fisheries in freshwater or expanded limits on resource conservation, or were simply opposed to federal management of subsistence fishing. Of those households that did make recommendations for federal subsistence fisheries, a large majority suggested rod and reel as the legal gear.

[1] Note that the standard outline for FIS final reports includes a "recommendations" section. As directed by OSM, the investigation plan for this project specifically states that c&t analysis is reserved for OSM staff. Therefore, no recommendations appear in this final report.

Further interpretation of these results requires understanding the demographic and economic history of the Kenai Peninsula, as well as the regulatory history the Cook Inlet Management Area's subsistence and personal use fisheries. Investigation of these topics was also a goal of this project. Research findings were provided in Chapter Two and will not be repeated here in detail, but several key points related to history, demography, and economy need to be stressed.

As is true of virtually everywhere in the state, Alaska Native people established a way of life on the Kenai Peninsula that focused on the harvest of fish and wildlife for subsistence use. The Dena'ina Athabascan traditional economy was one of the first in Alaska to suffer the effects of Euro-American settlement, including epidemic disease, expropriation of traditional territories, and severe reductions in fish and wildlife populations. By the 1950s, the remaining Dena'ina population, by then already a minority in its homeland, had consolidated at Kenai and continued to struggle to maintain access to traditional lands and resources, as discussed in Chapter Two.[2]

One goal of this project was to learn more about the effects of the 1952 closure of subsistence fishing in the freshwater systems of the Kenai Peninsula including those waters now part of the federal subsistence management program. This research documented continued use of these freshwater systems by Dena'ina people based out of Kenai into the 1950s. This use was likely much reduced from the past due to the steep decline in the Dena'ina population, the development of commercial fisheries, consolidation of the population at Kenai, competition with a developing recreational fishery, and an orientation towards marine fisheries in Cook Inlet itself. Nevertheless, some netting of fish, especially in the fall in association with other subsistence activities such as trapping and hunting, continued. Non-native homesteaders also used a variety of methods to harvest fish for home use up to the regulatory closure, including nets and rod and reel.

The 1952 pre-statehood federal regulatory closure of subsistence fishing in freshwater was coincident with the completion of the road between Anchorage and Kenai. The road brought more people and more enforcement of fishing regulations. Later in the decade, development of the Cook Inlet basin's oil and gas resources began, which prompted the Kenai Peninsula's sharp and persistent population growth. Between 1960 and 1970, the peninsula's population grew by 83 percent, followed by another 52 percent in the 1970s, another 61 percent in the 1980s, and another 22 percent in the 1990s (see Chapter Two). Accompanying this population growth and economic development was increasing regulation of subsistence fisheries in marine waters at the same time that the recreational fishing industry on the Kenai Peninsula expanded rapidly. Ultimately, the Alaska Board of Fisheries closed most of the remaining road-accessible subsistence fisheries, created the "personal use category" in response to litigation, and classified most of the Kenai Peninsula as a "nonsubsistence area" closed to subsistence hunting and fishing.

[2] It is worth noting that Wolfe and Walker (1987:66) found that the best predictor of levels of subsistence harvest and use in Alaska communities is the percentage of the population that is Alaska Native. The higher the percentage of Alaska Natives in a community's population, the higher the subsistence harvest. Wolfe and Walker (1987:56) also note that "Construction of roads and settlement entry into roaded areas produce changes associated with lower subsistence harvests, including increased competition for wild resources, increased habitat alteration, and changing community economic orientations away from mixed, subsistence-market adaptations."

To return to the question of the effect of the 1952 closure, given the later history of the road connected areas of the Kenai Peninsula, severe restrictions and closures to subsistence fisheries were almost certainly inevitable sooner or later. If the closure had not happened in the 1950s, it would have likely occurred in the 1960s or 1970s as the growing population of southcentral Alaska placed new demands on fisheries resources of Cook Inlet, and the population changed from one with a relatively large percentage of indigenous people, homesteaders, and commercial fishermen, to one dominated by relative newcomers with full time jobs, an interest in recreational fishing and hunting, and little to no knowledge about the traditional fisheries of the past.

Another goal of the project was to learn more about past, current, and potential future subsistence fishing on the west side of Cook Inlet, especially the federally-managed waters around Tuxedni Bay. This, too, is traditional Dena'ina Athabascan territory, and was later used by non-Native commercial fishers and a few homesteaders. State regulations have gradually eliminated subsistence and personal use fishing opportunities along most of west Cook Inlet, except around the Dena'ina community of Tyonek. Today, this area is quite remote and sparsely populated. Although a very few surveyed households had any experience fishing on the west side of Cook Inlet, even fewer expressed any interest in participating in potential subsistence fisheries there in the future, most likely because of the difficulty of access and their lack of any familiarity with the area.

Combining this historical review with the documentation of contemporary harvests and uses of fish through the household survey, this study documented a discontinuity within the road connected portions of the Kenai Peninsula between the traditional pattern of fishing established by the Dena'ina, and later utilized by early non-Native settlers, and the current pattern followed and largely endorsed by the large majority of the residents of areas considered by the Federal Subsistence Board as rural. The earlier pattern was disrupted by demographic and economic change and regulatory closures. The people who established these traditional fisheries, members of the Kenaitze Indian Tribe, now live in the city of Kenai, a nonrural place under federal regulations due primarily to its relatively large population size. This nonrural classification renders most Kenaitze ineligible to participate in the federal subsistence fishing program although they have not voluntarily abandoned their subsistence fishing traditions. On the other hand, areas classified as "rural" have relatively sparse populations, and most of the people who live there are relative newcomers with no knowledge of the Kenai Peninsula's traditional fisheries. This "disconnect" was a key theme at both the scoping meetings that began this project and the stakeholder meetings that were one of the final steps in completing the research. Clearly, providing fishing opportunities in support of the traditions of indigenous Alaska Native people living in "nonrural" and "nonsubsistence" areas is a difficult issue that may require innovative and creative solutions.[3]

Also based upon the stakeholder meetings and survey results, a related issue from the local perspective is that the federal program does not apply in most marine waters or the lower portions of rivers where many local residents, both rural and nonrural, support subsistence or personal use fishing opportunities. Further, the requirements of the state subsistence statute to

[3] For example, as noted in Chapter Two, under 5 AAC 93.200-235, ADF&G may issue educational fishery permits to tribes and other groups which may support some aspects of traditional fisheries in state nonsubsistence areas.

provide opportunities for customary and traditional subsistence uses of fish do not apply because most of the Kenai Peninsula is classified by the Alaska Joint Board of Fisheries and Game under the provisions of the same state law, as a nonsubsistence area due to the economic and demographic changes discussed in this report and well documented by other research (e.g. Wolfe and Ellanna 1983; Reed 1985; Fall et al. 2000).

In conclusion, it was not a purpose of this report to make recommendations regarding the rural/nonrural status of Kenai Peninsula communities, customary and traditional use findings, or federal subsistence fishing regulations. Rather, this report has provided information about history, demography, harvest and use levels, methods of harvests, locations of fishing, and residents' assessments of fishing opportunities that could inform future actions by advisory bodies and regulatory boards. It may be possible to address many of the issues and concerns raised during the scoping meetings, key respondent interviews, literature review, household surveys, and stakeholder discussions about potential future federal subsistence fisheries or state personal use fishing opportunities in the Cook Inlet Management Area using these study findings, supplemented by additional information and discussion gained through the public regulatory process. Specifically, assuming that portions of the road-connected areas of the Kenai Peninsula remain classified as rural and the positive customary and traditional use determinations are made, developing fishing regulations that provide opportunities consistent with the current levels of harvests and expectations of this rural population appears to be an achievable goal.

# ACKNOWLEDGEMENTS

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# APPENDIX A:

# SURVEY INSTRUMENT

# Cook Inlet Subsistence Fisheries Project

**Division of Subsistence, ADF&G; funded by Project FIS 03-045**

HHID _____
Community _____
ID # of person responding to survey: _____

Start time _____
Stop time _____

Interviewer _____
Date _____
Coder _____
Field supervisor _____

Household Information: who were members of this household between April 1, 2002 through March 31, 2003

| Person ID # | M/F | Relation to HH head | Age | Ethnicity | Residence of Parents When Born | Total Number of Years Living: | | | In the study year, did the person fish for: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | In Community | On Kenai Peninsula | In Alaska | Salmon | Non-Salmon Freshwater Fish | Non-Salmon Marine Fish |
| Head 1 | | | | | | | | | | | |
| 1 | | 1 | | | | | | | | | |
| Head 2 | | | | | | | | | | | |
| 2 | | 2 | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 4 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 7 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 8 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 9 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |
| 10 | | | | | | | | | | | |

## Participation in Commercial Fishing as a Source of Fish for Home Use and Sharing

Did anyone in this household participate in commercial fisheries in the study year (April 1 2002, thru March 31, 2003)?

Yes ☐ No ☐

If yes, were any fish removed from commercial catches for home use or sharing?

Yes ☐ No ☐

If yes, complete the following:
(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

| Species | Removed for Own HH Use | Gave Away: | | Units | Location of Harvest (Management area or district) |
|---|---|---|---|---|---|
| | Number | To Crew Number | To Others Number | | |
| CHINOOK SALMON | | | | IND | |
| 113000001 | | | | 1 | |
| SOCKEYE SALMON | | | | IND | |
| 115000001 | | | | 1 | |
| COHO SALMON | | | | IND | |
| 112000001 | | | | 1 | |
| CHUM SALMON | | | | IND | |
| 111000001 | | | | 1 | |
| PINK SALMON | | | | IND | |
| 114000001 | | | | 1 | |
| UNKNOWN SALMON | | | | IND | |
| 119000001 | | | | 1 | |
| HERRING | | | | GAL | |
| 120200001 | | | | 4 | |
| SPAWN ON KELP | | | | GAL | |
| 120306001 | | | | 4 | |
| HERRING SAC ROE | | | | GAL | |
| 120304001 | | | | 4 | |

## Participation in Commercial Fishing (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

| Species | Removed for Own HH Use | Gave Away: | | Units | Location of Harvest (Management area or district) |
|---|---|---|---|---|---|
| | Number | To Crew Number | To Others Number | | |
| HALIBUT | | | | LBS | |
| 121800001 | | | | 2 | |
| SABLEFISH (BLACK COD) | | | | IND | |
| 122800001 | | | | 1 | |
| PACIFIC COD (GRAY) | | | | IND | |
| 121004001 | | | | 1 | |
| BLACK ROCKFISH* | | | | IND | |
| 122602001 | | | | 1 | |
| RED ROCKFISH** | | | | IND | |
| 122604001 | | | | 1 | |
| UNKNOWN ROCKFISH | | | | IND | |
| 122699001 | | | | 1 | |
| LINGCOD | | | | IND | |
| 121606001 | | | | 1 | |
| STARRY FLOUNDER | | | | IND | |
| 121406001 | | | | 1 | |
| GREENLING | | | | IND | |
| 121699001 | | | | 1 | |
| SHARK | | | | IND | |
| 123299001 | | | | 1 | |
| WALLEYE POLLOCK (WHITING) | | | | IND | |
| 121012001 | | | | 1 | |

* BLACK ROCKFISH = DARK DUSKY, BLACK, LIGHT DUSKY, SILVERGRAY, WIDOW, BROWN BOMBER, YELLOWTAIL, "SEA BASS" OR "BLACK BASS".

** RED ROCKFISH = YELLOWEYE (RED SNAPPER), ROUGHEYE, PACIFIC OCEAN PERCH, DARK BLOTCHED, HARLEQUIN, NORTH, COPPER, QUILLBACK, ROSETHORN, REDSTRIPE, CANARY, SHORTRAKER, BLACKQUILL, RED BANDED, TIGER, AND "IDIOTFISH" OR "SHORTSPINE THORNYHEAD".

## Participation in Sport Fish Charter/Guiding as a Source of Fish for Home Use and Sharing

Were you or any members of your household employed in a sport fishing charter or guiding business in the study year (April 1 2002, thru March 31, 2003)?

Yes ☐ No ☐

If yes, were any fish retained for home use or sharing, or received, while engaged in this activity?

Yes ☐ No ☐

If yes, complete the following:
(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

| Species | Removed for Own HH Use | Gave Away: To Employees | Gave Away: To Others | Units | Received from Clients? Y/N | Received from Clients? Number | Location of Harvest (Management area or district) |
|---|---|---|---|---|---|---|---|
| | Number | Number | Number | | | | |
| CHINOOK SALMON | | | | IND | | | |
| 113002002 | | | | 1 | | | |
| SOCKEYE SALMON | | | | IND | | | |
| 115002002 | | | | 1 | | | |
| COHO SALMON | | | | IND | | | |
| 112002002 | | | | 1 | | | |
| CHUM SALMON | | | | IND | | | |
| 111002002 | | | | 1 | | | |
| PINK SALMON | | | | IND | | | |
| 114002002 | | | | 1 | | | |
| UNKNOWN SALMON | | | | IND | | | |
| 119002002 | | | | 1 | | | |
| HALIBUT | | | | LBS | | | |
| 121800202 | | | | 2 | | | |
| SABLEFISH (BLACK COD) | | | | IND | | | |
| 122800202 | | | | 1 | | | |
| PACIFIC COD (GRAY) | | | | IND | | | |
| 121004002 | | | | 1 | | | |
| BLACK ROCKFISH* | | | | IND | | | |
| 122602002 | | | | 1 | | | |
| RED ROCKFISH** | | | | IND | | | |
| 122604002 | | | | 1 | | | |
| UNKNOWN ROCKFISH | | | | IND | | | |
| 122699002 | | | | 1 | | | |

* BLACK ROCKFISH = DARK DUSKY, BLACK, LIGHT DUSKY, SILVERGRAY, WIDOW, BROWN BOMBER, YELLOWTA



** RED ROCKFISH = YELLOWEYE (RED SNAPPER), ROUGHEYE, PACIFIC OCEAN PERCH, DARK BLOTCHED, HARLEQUIN, NORTH, COPPER, QUILLBACK, ROSETHORN, REDSTRIPE, CANARY, SHORTRAKER, BLACKQUILL, RED BANDED, TIGER, AND "IDIOTFISH" OR "SHORTSPINE THORNYHEAD".

## Participation in Sport Fish Charter/Guiding (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

| Species | Removed for Own HH Use | Gave Away: To Employees | Gave Away: To Others | Units | Received from Clients? Y/N | Received from Clients? Number | Location of Harvest (Management area or district) |
|---|---|---|---|---|---|---|---|
| | Number | Number | Number | | | | |
| LINGCOD | | | | IND | | | |
| 121606002 | | | | 1 | | | |
| STARRY FLOUNDER | | | | IND | | | |
| 121406002 | | | | 1 | | | |
| GREENLING | | | | IND | | | |
| 121699002 | | | | 1 | | | |
| SHARK | | | | IND | | | |
| 123299002 | | | | 1 | | | |
| WALLEYE POLLOCK (WHITING) | | | | IND | | | |
| 121012002 | | | | 1 | | | |
| DOLLY VARDEN/ARCTIC CHAR | | | | IND | | | |
| 125006002 | | | | 1 | | | |
| RAINBOW TROUT | | | | IND | | | |
| 126204002 | | | | 1 | | | |
| STEELHEAD | | | | IND | | | |
| 126206002 | | | | 1 | | | |
| LAKE TROUT | | | | IND | | | |
| 125010002 | | | | 1 | | | |

## Non-Commercial Salmon

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

### Chinook Salmon: use and harvests from April 1, 2002 thru March 31, 2003

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| CHINOOK | | | | | | | | IND |
| 113000002 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R | Dip net | Gill Net | Fish Wheel | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
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| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of chinook salmon in the April 2002 thru March 2003 study year compare to other recent years?

More Less About the same Never used

If different, why?

In what months did you harvest chinook salmon in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting chinook salmon:

## Non-Commercial Salmon (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

### Sockeye Salmon: use and harvests from April 1, 2002 thru March 31, 2003

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| SOCKEYE | | | | | | | | IND |
| 115000002 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R | Dip net | Gill Net | Fish Wheel | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
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| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of sockeye salmon in the April 2002 thru March 2003 study year compare to other recent years?

More Less About the same Never used

If different, why?

In what months did you harvest sockeye salmon in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting sockeye salmon:

## Non-Commercial Salmon (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

### Coho Salmon: use and harvests from April 1, 2002 thru March 31, 2003

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| COHO | | | | | | | | IND |
| 112000002 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R | Dip net | Gill Net | Fish Wheel | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
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| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of coho salmon in the April 2002 thru March 2003 study year compare to other recent years?

More Less About the same Never used

If different, why?

In what months did you harvest coho salmon in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting coho salmon:

## Non-Commercial Salmon (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

### Chum Salmon: use and harvests from April 1, 2002 thru March 31, 2003

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| CHUM | | | | | | | | IND |
| 111000002 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R | Dip net | Gill Net | Fish Wheel | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of chum salmon in the April 2002 thru March 2003 study year compare to other recent years?

More Less About the same Never used

If different, why?

In what months did you harvest chum salmon in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting chum salmon:

## Non-Commercial Salmon (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

### Pink Salmon: use and harvests from April 1, 2002 thru March 31, 2003

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| PINK | | | | | | | | IND |
| 114000002 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R | Dip net | Gill Net | Fish Wheel | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of pink salmon in the April 2002 thru March 2003 study year compare to other recent years?

More Less About the same Never used

If different, why?

In what months did you harvest pink salmon in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting pink salmon:

**How do you preserve your salmon?**

| | Used in Study Year? | Ever Used this Method? | Comments |
|---|---|---|---|
| Freeze | | | |
| 1 | | | |
| Smoke | | | |
| 2 | | | |
| Dry | | | |
| 3 | | | |
| Can/jar | | | |
| 4 | | | |
| Salt | | | |
| 5 | | | |
| Pickling | | | |
| 6 | | | |
| Other: | | | |
| | | | |
| Other: | | | |
| | | | |
| Eat fresh only | | | |
| 7 | | | |

## Non-Commercial Other Fish (Group A)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

### Dolly Varden/arctic char: use and harvests from April 1, 2002 thru March 31, 2003

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| DOLLY VARDEN | | | | | | | | IND |
| 125006002 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R:open water | Ice Fishing | Gill Net | Other: | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of Dolly Varden in the April 2002 thru March 2003 study year compare to other recent years?

More | Less | About the same | Never used

If different, why?

In what months did you harvest Dolly Varden in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting Dolly Varden:

## Non-Commercial Other Fish (Group A) (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

**Rainbow trout: use and harvests from April 1, 2002 thru March 31, 2003** ***(Record steelhead on next page)***

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| RAINBOW TROUT | | | | | | | | IND |
| 126204002 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R:open water | Ice Fishing | Gill Net | Other: | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of rainbow trout in the April 2002 thru March 2003 study year compare to other recent years?

More Less About the same Never used

If different, why?

In what months did you harvest rainbow trout in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting rainbow trout:

## Non-Commercial Other Fish (Group A) (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

**Steelhead: use and harvests from April 1, 2002 thru March 31, 2003**

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| STEELHEAD | | | | | | | | IND |
| 126206002 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R:open water | Ice Fishing | Gill Net | Other: | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of steelhead in the April 2002 thru March 2003 study year compare to other recent years?

More Less About the same Never used

If different, why?

In what months did you harvest steelhead in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting steelhead:

## Non-Commercial Other Fish (Group A) (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

**Lake trout: use and harvests from April 1, 2002 thru March 31, 2003**

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| LAKE TROUT | | | | | | | | IND |
| 125010020 | | | | | | | | 1 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R:open water | Ice Fishing | Gill Net | Other: | Other: | Units |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |
| | | | | | | | | IND |
| | | | | | | | | 1 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of lake trout in the April 2002 thru March 2003 study year compare to other recent years?

More Less About the same Never used

If different, why?

In what months did you harvest lake trout in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting lake trout:

## Non-Commercial Other Fish (Group A) (continued)

(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

### Eulachon (hooligan): use and harvests from April 1, 2002 thru March 31, 2003

| | Used? | Fish for? | Harvest? | Receive? | | Gave away? | | |
|---|---|---|---|---|---|---|---|---|
| | Y/N | Y/N | Y/N | Y/N | Number | Y/N | Number | Units |
| HOOLIGAN | | | | | | | | GAL |
| 120404002 | | | | | | | | 4 |

If fished for:

| | Location | Fished? | Harvest in numbers by Gear Type | | | | | |
|---|---|---|---|---|---|---|---|---|
| map key | (name) | Y/N | R&R:open water | Ice Fishing | Gill Net | Other: | Other: | Units |
| | | | | | | | | GAL |
| | | | | | | | | 4 |
| | | | | | | | | GAL |
| | | | | | | | | 4 |
| | | | | | | | | GAL |
| | | | | | | | | 4 |
| | | | | | | | | GAL |
| | | | | | | | | 4 |
| | | | | | | | | GAL |
| | | | | | | | | 4 |
| | | | | | | | | GAL |
| | | | | | | | | 4 |
| | | | | | | | | GAL |
| | | | | | | | | 4 |
| | | | | | | | | GAL |
| | | | | | | | | 4 |

Total harvest:

Total used at home: [this equals harvest plus received minus gave away]

How did your harvest/use of eulachon (hooligan) in the April 2002 thru March 2003 study year compare to other recent years?

More | Less | About the same | Never used

If different, why?

In what months did you harvest eulachon (hooligan) in 2002-2003? A M J J A S O N D J F M

What is your preferred time frame for harvesting eulachon (hooligan):

## Non-Commercial Other Fish: Group B

Did members of this household use or attempt to harvest any of the following fish from April 1, 2002 thru March 31, 2003 Yes___ No___
(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

| Species | Used? Y/N | Fish for? Y/N | Harvest by Gear Type | | | | | | | Receive? | | Gave away? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | R&R | Dip Net | Handline | Set Net | Ice Fishing | Other Type | Units | Y/N | Number | Y/N | Number |
| HALIBUT* | | | | | | | | | LBS | | | | |
| 121800002 | | | | | | | | | 2 | | | | |
| SABLEFISH (BLACK COD) | | | | | | | | | IND | | | | |
| 122800002 | | | | | | | | | 1 | | | | |
| PACIFIC COD (GRAY) | | | | | | | | | IND | | | | |
| 121004002 | | | | | | | | | 1 | | | | |
| BLACK ROCKFISH** | | | | | | | | | IND | | | | |
| 122602002 | | | | | | | | | 1 | | | | |
| RED ROCKFISH*** | | | | | | | | | IND | | | | |
| 122604002 | | | | | | | | | 1 | | | | |
| UNKNOWN ROCKFISH | | | | | | | | | IND | | | | |
| 122699002 | | | | | | | | | 1 | | | | |
| LINGCOD | | | | | | | | | IND | | | | |
| 121606002 | | | | | | | | | 1 | | | | |
| STARRY FLOUNDER | | | | | | | | | IND | | | | |
| 121406002 | | | | | | | | | 1 | | | | |
| GREENLING | | | | | | | | | IND | | | | |
| 121699002 | | | | | | | | | 1 | | | | |
| SHARK | | | | | | | | | IND | | | | |
| 123299002 | | | | | | | | | 1 | | | | |
| WALLEYE POLLOCK (WHITING) | | | | | | | | | IND | | | | |
| 121012002 | | | | | | | | | 1 | | | | |

* IF FISHED FOR HALIBUT, DID YOU USE A CHARTER SERVICE? NO____(0) YES____(1) BOTH USED CHARTER AND OTHER MEANS _____(2)

LBS FROM CHARTER: _____ LBS FROM OTHER: _____

* BLACK ROCKFISH = DARK DUSKY, BLACK, LIGHT DUSKY, SILVERGRAY, WIDOW, BROWN BOMBER, YELLOWTAIL, "SEA BASS" OR "BLACK BASS".

** RED ROCKFISH = YELLOWEYE (RED SNAPPER), ROUGHEYE, PACIFIC OCEAN PERCH, DARK BLOTCHED, HARLEQUIN, NORTH, COPPER, QUILLBACK, ROSETHORN, REDSTRIPE, CANARY, SHORTRAKER, BLACKQUILL, RED BANDED, TIGER, AND "IDIOTFISH" OR "SHORTSPINE THORNYHEAD".

## Non-Commercial Other Fish: Group B (continued)

Did members of this household use or attempt to harvest any of the following fish from April 1, 2002 thru March 31, 2003 Yes___ No___
(UNITS SHOULD INDICATE INDIVIDUALS UNLESS NOTED OTHERWISE. POUNDS SHOULD BE EDIBLE WEIGHT)

| Species | Used? Y/N | Fish for? Y/N | Harvest by Gear Type | | | | | | | Receive? | | Gave away? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | R&R | Dip Net | Handline | Set Net | Ice Fishing | Other Type | Units | Y/N | Number | Y/N | Number |
| HERRING | | | | | | | | | GAL | | | | |
| 120200002 | | | | | | | | | 4 | | | | |
| SPAWN ON KELP | | | | | | | | | GAL | | | | |
| 120306002 | | | | | | | | | 4 | | | | |
| HERRING SAC ROE | | | | | | | | | GAL | | | | |
| 120304002 | | | | | | | | | 4 | | | | |
| GRAYLING | | | | | | | | | IND | | | | |
| 125200002 | | | | | | | | | 1 | | | | |
| PIKE | | | | | | | | | IND | | | | |
| 125499002 | | | | | | | | | 1 | | | | |
| WHITEFISH | | | | | | | | | IND | | | | |
| 126499002 | | | | | | | | | 1 | | | | |
| BURBOT | | | | | | | | | IND | | | | |
| 124800002 | | | | | | | | | 1 | | | | |
| OTHER | | | | | | | | | IND | | | | |
| | | | | | | | | | 1 | | | | |
| OTHER | | | | | | | | | IND | | | | |
| | | | | | | | | | 1 | | | | |

How did your harvest/use of these fish in the April 2002 thru March 2003 study year compare to other recent years?

More ☐ Less ☐ About the same ☐

If different, why?

## HOUSEHOLD'S PAST FISHING ACTIVITIES

Have members of this household ever participated in any of the following fisheries? Yes ___ No ___

| Fishery | Y/N | Person ID #'s | First Year | Last Year | Frequency of Participation (choose one) | | | Average harvest for home use | If have not participated, why not? [and other comments] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Infrequent (1 or 2 years only) | Intermittent (on and off over the years) | Frequently (just about every year) | | |
| Cook Inlet Dip Net PU | | | | | | | | | |
| 1 | | | | | | | | | |
| Cook Inlet Noncommercial Set Net | | | | | | | | | |
| 2 | | | | | | | | | |
| Chitina Dip Net Fishery | | | | | | | | | |
| 3 | | | | | | | | | |
| Glennallen Fishwheel Fishery | | | | | | | | | |
| 4 | | | | | | | | | |
| **Fished at Tuxedni Bay** Activity One: | | | | | | | | | |
| | | | | | | | | | |
| Activity Two: | | | | | | | | | |
| | | | | | | | | | |

## HOUSEHOLD'S PAST FISHING ACTIVITIES (continued)

| Fishery | Y/N | Person ID #'s | First Year | Last Year | Frequency of Participation (chose one) | | | Average harvest for home use | If have not participated, why not? [and other comments] |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Infrequent (1 or 2 years only) | Intermittent (on and off over the years) | Frequently (just about every year) | | |
| **Commercial Fishing** Location one: | | | | | | | | | |
| | | | | | | | | | |
| Location two: | | | | | | | | | |
| | | | | | | | | | |
| **Other Subsistence/PU Fishery:** Location one: | | | | | | | | | |
| | | | | | | | | | |
| Location two: | | | | | | | | | |
| | | | | | | | | | |
| **Sport fishing rod & reel open water** Location one: | | | | | | | | | |
| | | | | | | | | | |
| Location two: | | | | | | | | | |
| | | | | | | | | | |
| **Snagging** Location one: | | | | | | | | | |
| | | | | | | | | | |
| Location two: | | | | | | | | | |
| | | | | | | | | | |
| **Ice Fishing** Location one: | | | | | | | | | |
| | | | | | | | | | |
| Location two: | | | | | | | | | |
| | | | | | | | | | |

## Household's Fish Requirements

How many salmon could your household use in a typical year for its own consumption?
Do not include fish given away. Consider fish you harvest and those that you receive.

| Species | Number for your household's own consumption | Unit |
|---|---|---|
| CHINOOK | | IND |
| 113000000 | | 1 |
| SOCKEYE | | IND |
| 115000000 | | 1 |
| COHO | | IND |
| 112000000 | | 1 |
| CHUM | | IND |
| 111000000 | | 1 |
| PINK | | IND |
| 114000000 | | 1 |

Comments:

How many other freshwater fish could your household use in a typical year for its own consumption?

| | Number for your household's own consumption | Unit |
|---|---|---|
| RAINBOW TROUT | | IND |
| 126204000 | | 1 |
| STEELHEAD | | IND |
| 126206000 | | 1 |
| DOLLY VARDEN/ARCTIC CHAR | | IND |
| 125006000 | | 1 |
| LAKE TROUT | | IND |
| 125010000 | | 1 |
| Other FW fish: | | |
| | | |
| Other FW fish: | | |
| | | |

Comments:

## Evaluation of Present Opportunities and Potential Federal Subsistence Fishery Scenarios

**Evaluation of State Personal Use Fisheries**

The Federal Subsistence Board has no authority over the state personal use dip net and set fisheries that take place in the Kenai and Kasilof rivers, in Cook Inlet, and in Kachemak Bay. However, these fisheries provide fishing opportunity to all Alaska residents. We are interested in your evaluation of this opportunity.

In Cook Inlet, the annual limit for state personal use fisheries is 25 salmon for the household head and 10 for each additional household member.

In your opinion, is this limit:

| Too high | Too low | About right | Don't know |
|---|---|---|---|
| | | | |

If not "about right,", what would be an appropriate annual limit? _____

Presently, federal subsistence fishing rules for Cook Inlet federally-managed waters are the same as state sport fishing rules, except a free federal permit is required rather than a state sport fishing license, and these rules only apply to federally-managed waters.

Do you agree with the following statement?

Federal subsistence fishing regulations for Cook Inlet should be the same as state sport fishing regulations.

| Agree | Neutral | Disagree | Don't know |
|---|---|---|---|
| | | | |

If you disagree, why? _____

If Federal regulations allowed you to subsistence fish in Federal waters, where would you likely fish?

| **Scenario 1** | Coding |
|---|---|
| Location: | |
| Species: | |
| Gear: | |
| How many fish?: | |
| Other information: | |

| **Scenario 2** | Coding |
|---|---|
| Location: | |
| Species: | |
| Gear: | |
| How many fish?: | |
| Other information: | |

If Federal regulations allowed you to subsistence fish in Federal waters, where would you likely fish? (continued)

| **Scenario 3** | Coding |
|---|---|
| Location: | |
| Species: | |
| Gear: | |
| How many fish?: | |
| Other information: | |

| **Scenario 4** | Coding |
|---|---|
| Location: | |
| Species: | |
| Gear: | |
| How many fish?: | |
| Other information: | |

If Federal regulations allowed you to subsistence fish in Federal waters, where would you likely fish? (continued)

| **Scenario 5** | Coding |
|---|---|
| Location: | |
| Species: | |
| Gear: | |
| How many fish?: | |
| Other information: | |

| **Scenario 6** | Coding |
|---|---|
| Location: | |
| Species: | |
| Gear: | |
| How many fish?: | |
| Other information: | |

**DO YOU HAVE ANY OTHER QUESTIONS, COMMENTS, OR CONCERNS?**

***BE SURE TO FILL IN THE STOP TIME ON THE FIRST PAGE!!!!***

**INTERVIEW SUMMARY:**

# APPENDIX B: CONVERSION FACTORS

| Resource | Factor, Pounds Usable Weight per Unit | Unit | Note |
|---|---|---|---|
| Chum Salmon | 5.40 | fish | |
| Coho Salmon | 5.20 | fish | |
| Chinook Salmon | 15.50 | fish | |
| Pink Salmon | 2.40 | fish | |
| Sockeye Salmon | 3.90 | fish | |
| Herring | 6.00 | gallons | |
| Herring Roe | 7.00 | gallons | |
| Herring Sac Roe | 7.00 | gallons | |
| Herring Spawn on Kelp | 7.00 | gallons | |
| Smelt | 3.25 | gallons | |
| Eulachon (hooligan, candlefish) | 3.25 | gallons | |
| Cod | 3.20 | fish | |
| Pacific Cod (gray) | 3.20 | fish | |
| Pacific Tom Cod | 0.50 | fish | |
| Walleye Pollock (whiting) | | fish | none harvested |
| Flounder | 3.00 | fish | |
| Starry Flounder | 3.00 | fish | |
| Lingcod | 4.00 | fish | |
| Unknown Greenling | 1.00 | fish | |
| Halibut | 1.00 | lbs | data collected in usable pounds only |
| Black Rockfish | 1.50 | fish | |
| Red Rockfish | 4.00 | fish | |
| Unknown Rockfish | 2.88 | fish | calucated based on known values |
| Sablefish (black cod) | 3.10 | fish | |
| Shark | 9.00 | fish | |
| Unknown Shark | 9.00 | fish | |
| Burbot | | fish | none harvested |
| Char | 1.40 | fish | |
| Dolly Varden | 1.40 | fish | |
| Lake Trout | 1.40 | fish | |
| Grayling | 0.70 | fish | |
| Pike | 3.00 | fish | |
| Unknown Pike | 3.00 | fish | |
| Trout | 1.40 | fish | |
| Rainbow Trout | 1.40 | fish | |
| Steelhead | 1.40 | fish | |
| Whitefish | 1.75 | fish | |
| Unknown Whitefish | 1.75 | fish | |

# APPENDIX C:

# POPULATION PROFILE TABLES

Appendix Table C-1. Population Profile, Cooper Landing, 2003.

| AGE | MALE | | | FEMALE | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT |
| 0 - 4 | 3.96 | 2.4% | 2.4% | 5.3 | 3.8% | 3.8% | 9.2 | 3.1% | 3.1% |
| 5-9 | 2.64 | 1.6% | 4.0% | 6.6 | 4.8% | 8.6% | 9.2 | 3.1% | 6.1% |
| 10-14 | 7.92 | 4.8% | 8.9% | 11.9 | 8.6% | 17.1% | 19.8 | 6.6% | 12.7% |
| 15 - 19 | 13.20 | 8.1% | 16.9% | 2.6 | 1.9% | 19.0% | 15.8 | 5.2% | 17.9% |
| 20 - 24 | 5.28 | 3.2% | 20.2% | 4.0 | 2.9% | 21.9% | 9.2 | 3.1% | 21.0% |
| 25 - 29 | 7.92 | 4.8% | 25.0% | 6.6 | 4.8% | 26.7% | 14.5 | 4.8% | 25.8% |
| 30 - 34 | 3.96 | 2.4% | 27.4% | 2.6 | 1.9% | 28.6% | 6.6 | 2.2% | 27.9% |
| 35 - 39 | 7.92 | 4.8% | 32.3% | 10.6 | 7.6% | 36.2% | 18.5 | 6.1% | 34.1% |
| 40 - 44 | 17.17 | 10.5% | 42.7% | 9.2 | 6.7% | 42.9% | 26.4 | 8.7% | 42.8% |
| 45 - 49 | 14.52 | 8.9% | 51.6% | 10.6 | 7.6% | 50.5% | 25.1 | 8.3% | 51.1% |
| 50 - 54 | 11.88 | 7.3% | 58.9% | 14.5 | 10.5% | 61.0% | 26.4 | 8.7% | 59.8% |
| 55 - 59 | 13.20 | 8.1% | 66.9% | 15.8 | 11.4% | 72.4% | 29.0 | 9.6% | 69.4% |
| 60 - 64 | 15.84 | 9.7% | 76.6% | 7.9 | 5.7% | 78.1% | 23.8 | 7.9% | 77.3% |
| 65 - 69 | 3.96 | 2.4% | 79.0% | 5.3 | 3.8% | 81.9% | 9.2 | 3.1% | 80.3% |
| 70 - 74 | 17.17 | 10.5% | 89.5% | 11.9 | 8.6% | 90.5% | 29.0 | 9.6% | 90.0% |
| 75 - 79 | 9.24 | 5.6% | 95.2% | 7.9 | 5.7% | 96.2% | 17.2 | 5.7% | 95.6% |
| 80 - 84 | 0.00 | 0.0% | 95.2% | 4.0 | 2.9% | 99.0% | 4.0 | 1.3% | 96.9% |
| 85 - 89 | 6.60 | 4.0% | 99.2% | 0.0 | 0.0% | 99.0% | 6.6 | 2.2% | 99.1% |
| 90 - 94 | 1.32 | 0.8% | 100.0% | 0.0 | 0.0% | 99.0% | 1.3 | 0.4% | 99.6% |
| 95 - 99 | 0.00 | 0.0% | 100.0% | 1.3 | 1.0% | 100.0% | 1.3 | 0.4% | 100.0% |
| 100 - 104 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| Missing | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| TOTAL | 163.7 | 54.1% | | 138.6 | 45.9% | | 302.4 | 100.00% | |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Appendix Table C-2. Population Profile, Hope, 2003.

| AGE | MALE | | | FEMALE | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT |
| 0 - 4 | 1.2 | 1.5% | 1.5% | 4.9 | 7.3% | 7.3% | 6.2 | 4.1% | 4.1% |
| 5-9 | 3.7 | 4.5% | 6.0% | 0.0 | 0.0% | 7.3% | 3.7 | 2.5% | 6.6% |
| 10-14 | 3.7 | 4.5% | 10.4% | 7.4 | 10.9% | 18.2% | 11.1 | 7.4% | 13.9% |
| 15 - 19 | 2.5 | 3.0% | 13.4% | 3.7 | 5.5% | 23.6% | 6.2 | 4.1% | 18.0% |
| 20 - 24 | 3.7 | 4.5% | 17.9% | 4.9 | 7.3% | 30.9% | 8.6 | 5.7% | 23.8% |
| 25 - 29 | 4.9 | 6.0% | 23.9% | 6.2 | 9.1% | 40.0% | 11.1 | 7.4% | 31.1% |
| 30 - 34 | 6.2 | 7.5% | 31.3% | 1.2 | 1.8% | 41.8% | 7.4 | 4.9% | 36.1% |
| 35 - 39 | 3.7 | 4.5% | 35.8% | 4.9 | 7.3% | 49.1% | 8.6 | 5.7% | 41.8% |
| 40 - 44 | 1.2 | 1.5% | 37.3% | 1.2 | 1.8% | 50.9% | 2.5 | 1.6% | 43.4% |
| 45 - 49 | 14.8 | 17.9% | 55.2% | 12.3 | 18.2% | 69.1% | 27.1 | 18.0% | 61.5% |
| 50 - 54 | 8.6 | 10.4% | 65.7% | 7.4 | 10.9% | 80.0% | 16.0 | 10.7% | 72.1% |
| 55 - 59 | 12.3 | 14.9% | 80.6% | 6.2 | 9.1% | 89.1% | 18.5 | 12.3% | 84.4% |
| 60 - 64 | 2.5 | 3.0% | 83.6% | 3.7 | 5.5% | 94.5% | 6.2 | 4.1% | 88.5% |
| 65 - 69 | 3.7 | 4.5% | 88.1% | 1.2 | 1.8% | 96.4% | 4.9 | 3.3% | 91.8% |
| 70 - 74 | 4.9 | 6.0% | 94.0% | 0.0 | 0.0% | 96.4% | 4.9 | 3.3% | 95.1% |
| 75 - 79 | 2.5 | 3.0% | 97.0% | 1.2 | 1.8% | 98.2% | 3.7 | 2.5% | 97.5% |
| 80 - 84 | 2.5 | 3.0% | 100.0% | 1.2 | 1.8% | 100.0% | 3.7 | 2.5% | 100.0% |
| 85 - 89 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| 90 - 94 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| 95 - 99 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| 100 - 104 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| Missing | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| TOTAL | 82.6 | 54.9% | | 67.8 | 45.1% | | 150.5 | 100.00% | |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Appendix Table C-3. Population Profile, Nikolaevsk, 2003.

| AGE | MALE | | | FEMALE | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT |
| 0 - 4 | 9.1 | 5.4% | 5.4% | 13.7 | 9.3% | 9.3% | 22.8 | 7.2% | 7.2% |
| 5-9 | 15.9 | 9.4% | 14.7% | 13.2 | 9.1% | 18.4% | 29.1 | 9.2% | 16.4% |
| 10-14 | 29.1 | 17.2% | 31.9% | 23.4 | 16.0% | 34.4% | 52.5 | 16.6% | 33.1% |
| 15 - 19 | 31.3 | 18.5% | 50.4% | 14.8 | 10.1% | 44.5% | 46.0 | 14.6% | 47.7% |
| 20 - 24 | 11.7 | 6.9% | 57.3% | 4.6 | 3.1% | 47.7% | 16.3 | 5.2% | 52.8% |
| 25 - 29 | 7.2 | 4.2% | 61.5% | 5.6 | 3.9% | 51.5% | 12.8 | 4.1% | 56.9% |
| 30 - 34 | 4.1 | 2.4% | 64.0% | 11.7 | 8.0% | 59.5% | 15.9 | 5.0% | 61.9% |
| 35 - 39 | 9.1 | 5.4% | 69.3% | 8.7 | 5.9% | 65.5% | 17.8 | 5.6% | 67.6% |
| 40 - 44 | 13.9 | 8.2% | 77.5% | 13.9 | 9.5% | 75.0% | 27.8 | 8.8% | 76.4% |
| 45 - 49 | 15.9 | 9.4% | 86.9% | 7.2 | 4.9% | 79.9% | 23.0 | 7.3% | 83.7% |
| 50 - 54 | 4.1 | 2.4% | 89.3% | 8.3 | 5.7% | 85.6% | 12.4 | 3.9% | 87.6% |
| 55 - 59 | 5.2 | 3.1% | 92.4% | 6.7 | 4.6% | 90.2% | 12.0 | 3.8% | 91.4% |
| 60 - 64 | 0.0 | 0.0% | 92.4% | 5.6 | 3.9% | 94.1% | 5.6 | 1.8% | 93.2% |
| 65 - 69 | 7.2 | 4.2% | 96.7% | 3.0 | 2.1% | 96.1% | 10.2 | 3.2% | 96.4% |
| 70 - 74 | 2.6 | 1.5% | 98.2% | 2.6 | 1.8% | 97.9% | 5.2 | 1.7% | 98.1% |
| 75 - 79 | 1.5 | 0.9% | 99.1% | 0.0 | 0.0% | 97.9% | 1.5 | 0.5% | 98.6% |
| 80 - 84 | 0.0 | 0.0% | 99.1% | 1.5 | 1.0% | 99.0% | 1.5 | 0.5% | 99.0% |
| 85 - 89 | 0.0 | 0.0% | 99.1% | 1.5 | 1.0% | 100.0% | 1.5 | 0.5% | 99.5% |
| 90 - 94 | 0.0 | 0.0% | 99.1% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 99.5% |
| 95 - 99 | 0.0 | 0.0% | 99.1% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 99.5% |
| 100 - 104 | 0.0 | 0.0% | 99.1% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 99.5% |
| Missing | 1.5 | 0.9% | 100.0% | 0.0 | 0.0% | 100.0% | 1.5 | 0.5% | 100.0% |
| TOTAL | 169.4 | 53.7% | | 146.1 | 46.3% | | 315.5 | 100.00% | |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Appendix Table C-4. Population Profile, Ninilchik, 2003.

| AGE | MALE | | | FEMALE | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT |
| 0 - 4 | 34.6 | 4.3% | 4.3% | 69.2 | 8.6% | 8.6% | 103.9 | 6.4% | 6.4% |
| 5-9 | 69.2 | 8.5% | 12.8% | 63.5 | 7.9% | 16.4% | 132.7 | 8.2% | 14.6% |
| 10-14 | 80.8 | 9.9% | 22.7% | 69.2 | 8.6% | 25.0% | 150.0 | 9.3% | 23.8% |
| 15 - 19 | 51.9 | 6.4% | 29.1% | 57.7 | 7.1% | 32.1% | 109.6 | 6.8% | 30.6% |
| 20 - 24 | 11.5 | 1.4% | 30.5% | 23.1 | 2.9% | 35.0% | 34.6 | 2.1% | 32.7% |
| 25 - 29 | 40.4 | 5.0% | 35.5% | 28.9 | 3.6% | 38.6% | 69.2 | 4.3% | 37.0% |
| 30 - 34 | 17.3 | 2.1% | 37.6% | 51.9 | 6.4% | 45.0% | 69.2 | 4.3% | 41.3% |
| 35 - 39 | 63.5 | 7.8% | 45.4% | 57.7 | 7.1% | 52.1% | 121.2 | 7.5% | 48.8% |
| 40 - 44 | 34.6 | 4.3% | 49.6% | 57.7 | 7.1% | 59.3% | 92.3 | 5.7% | 54.4% |
| 45 - 49 | 98.1 | 12.1% | 61.7% | 126.9 | 15.7% | 75.0% | 225.0 | 13.9% | 68.3% |
| 50 - 54 | 75.0 | 9.2% | 70.9% | 40.4 | 5.0% | 80.0% | 115.4 | 7.1% | 75.4% |
| 55 - 59 | 69.2 | 8.5% | 79.4% | 40.4 | 5.0% | 85.0% | 109.6 | 6.8% | 82.2% |
| 60 - 64 | 46.2 | 5.7% | 85.1% | 34.6 | 4.3% | 89.3% | 80.8 | 5.0% | 87.2% |
| 65 - 69 | 63.5 | 7.8% | 92.9% | 40.4 | 5.0% | 94.3% | 103.9 | 6.4% | 93.6% |
| 70 - 74 | 23.1 | 2.8% | 95.7% | 34.6 | 4.3% | 98.6% | 57.7 | 3.6% | 97.2% |
| 75 - 79 | 23.1 | 2.8% | 98.6% | 11.5 | 1.4% | 100.0% | 34.6 | 2.1% | 99.3% |
| 80 - 84 | 11.5 | 1.4% | 100.0% | 0.0 | 0.0% | 100.0% | 11.5 | 0.7% | 100.0% |
| 85 - 89 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| 90 - 94 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| 95 - 99 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| 100 - 104 | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| Missing | 0.0 | 0.0% | 100.0% | 0.0 | 0.0% | 100.0% | .0 | 0.0% | 100.0% |
| TOTAL | 813.6 | 50.2% | | 807.8 | 49.8% | | 1,621.4 | 100.00% | |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

Appendix Table C-5. Population Profile, Seldovia, 2003.

| AGE | MALE | | | FEMALE | | | TOTAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT | NUMBER | PERCENT | CUM. PERCENT |
| 0 - 4 | 3.4 | 1.8% | 1.8% | 13.5 | 6.9% | 6.9% | 16.9 | 4.4% | 4.4% |
| 5-9 | 3.4 | 1.8% | 3.6% | 10.1 | 5.2% | 12.1% | 13.5 | 3.5% | 8.0% |
| 10-14 | 10.1 | 5.5% | 9.1% | 20.3 | 10.3% | 22.4% | 30.4 | 8.0% | 15.9% |
| 15 - 19 | 13.5 | 7.3% | 16.4% | 10.1 | 5.2% | 27.6% | 23.7 | 6.2% | 22.1% |
| 20 - 24 | 6.8 | 3.6% | 20.0% | 6.8 | 3.4% | 31.0% | 13.5 | 3.5% | 25.7% |
| 25 - 29 | 0.0 | 0.0% | 20.0% | 3.4 | 1.7% | 32.8% | 3.4 | 0.9% | 26.5% |
| 30 - 34 | 3.4 | 1.8% | 21.8% | 6.8 | 3.4% | 36.2% | 10.1 | 2.7% | 29.2% |
| 35 - 39 | 10.1 | 5.5% | 27.3% | 6.8 | 3.4% | 39.7% | 16.9 | 4.4% | 33.6% |
| 40 - 44 | 0.0 | 0.0% | 27.3% | 3.4 | 1.7% | 41.4% | 3.4 | 0.9% | 34.5% |
| 45 - 49 | 20.3 | 10.9% | 38.2% | 27.0 | 13.8% | 55.2% | 47.3 | 12.4% | 46.9% |
| 50 - 54 | 27.0 | 14.5% | 52.7% | 27.0 | 13.8% | 69.0% | 54.1 | 14.2% | 61.1% |
| 55 - 59 | 30.4 | 16.4% | 69.1% | 20.3 | 10.3% | 79.3% | 50.7 | 13.3% | 74.3% |
| 60 - 64 | 27.0 | 14.5% | 83.6% | 20.3 | 10.3% | 89.7% | 47.3 | 12.4% | 86.7% |
| 65 - 69 | 13.5 | 7.3% | 90.9% | 13.5 | 6.9% | 96.6% | 27.0 | 7.1% | 93.8% |
| 70 - 74 | 6.8 | 3.6% | 94.5% | 0.0 | 0.0% | 96.6% | 6.8 | 1.8% | 95.6% |
| 75 - 79 | 3.4 | 1.8% | 96.4% | 0.0 | 0.0% | 96.6% | 3.4 | 0.9% | 96.5% |
| 80 - 84 | 0.0 | 0.0% | 96.4% | 0.0 | 0.0% | 96.6% | .0 | 0.0% | 96.5% |
| 85 - 89 | 0.0 | 0.0% | 96.4% | 0.0 | 0.0% | 96.6% | .0 | 0.0% | 96.5% |
| 90 - 94 | 0.0 | 0.0% | 96.4% | 0.0 | 0.0% | 96.6% | .0 | 0.0% | 96.5% |
| 95 - 99 | 0.0 | 0.0% | 96.4% | 0.0 | 0.0% | 96.6% | .0 | 0.0% | 96.5% |
| 100 - 104 | 0.0 | 0.0% | 96.4% | 0.0 | 0.0% | 96.6% | .0 | 0.0% | 96.5% |
| Missing | 6.8 | 3.6% | 100.0% | 6.8 | 3.4% | 100.0% | 13.5 | 3.5% | 100.0% |
| TOTAL | 185.9 | 48.7% | | 196.0 | 51.3% | | 381.9 | 100.00% | |

SOURCE: Alaska Department of Fish and Game, Division of Subsistence, Household Survey, 2003

# APPENDIX D: STUDY FINDINGS OVERVIEW

**Cook Inlet Customary and Traditional Subsistence Fisheries Assessment**
**Project No. FIS 03-045**

**An Overview of Study Findings**

**Division of Subsistence,**
**Alaska Department of Fish and Game,**

**July 2004**

## Introduction

This report was prepared by the Division of Subsistence of the Alaska Department of Fish and Game under contract to the Office of Subsistence Management of the US Fish and Wildlife Service. It provides information about past, present, and potential future noncommercial harvests and uses of fish in waters of the Cook Inlet Management Area that are under the jurisdiction of the Federal Subsistence Board. This information was collected to help inform the Board's consideration of customary and traditional (c&t) use findings and subsistence fishery regulation development in the Cook Inlet Area. Phase One of the project consisted of a literature review, key respondent interviews, and four scoping meetings in Anchorage, Cooper Landing, Kenai, and Ninilchik. Phase Two consisted of a survey of 355 households in five study communities: Cooper Landing, Hope, Nikolaevsk, Ninilchik, and Seldovia. The study collected information about demography, fish harvests and uses in a 12-month study year in 2002/03, past participation in various fisheries, and potential federal subsistence fisheries scenarios. Three stakeholder meetings to review the study findings also took place, in Cooper Landing, Kenai, and Ninilchik.

## Past Subsistence Uses on Present-Day Federal Lands

The Dena'ina Athabascans (Kenaitze) and other local residents harvested fish for subsistence use in the study area for centuries. With the development of commercial fisheries beginning in 1878, population centers were established near the coast. After this development, because of the fish traps set by the canneries in the mouths of the rivers during the summer months, most subsistence harvest of salmon in the summer was associated with commercial fishing activities and occurred in marine or lower river waters not sited on present-day federal public lands. During this period, most subsistence harvest of fish on present-day federal public lands was fall and winter effort prosecuted with nets for coho salmon and resident species, usually conducted in conjunction with hunting and trapping. Since the 1950s, development of oil and gas and construction of roads has brought substantial economic development in the Kenai Peninsula and rapid population growth. Linked to these economic and demographic changes has been increased pressure on Cook Inlet fisheries resources. In 1952, pre-statehood federal authorities closed the lakes and rivers of the Kenai Peninsula to subsistence net fishing. This closure required subsistence fishermen to either adopt rod and reel as a gear type in the snag fishery until the early 1970s, or to rely on saltwater setnet fishing. Closure of the Kenai River to net fishing eliminated the Stepanka fishery that had been a long-standing source of salmon for the Kenaitze Indians. It also eliminated harvests of salmon with means other than rod and reel by Cooper Landing residents. Since the mid 1950s, almost all permitted subsistence and personal use fishing in the Cook Inlet Area has occurred in marine waters.

## Contemporary Fish Harvests and Uses on Federal Public Lands

The human population of the Kenai Peninsula has continued to expand rapidly, growing from about 9,000 people in 1960 (the year after statehood) to almost 50,000 people by 2000.

Table 1. Demographic Characteristics of the Study Communities, 2003

| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
|---|---|---|---|---|---|
| Number of Households | 136 | 74 | 78 | 577 | 169 |
| Estimated Population | 302 | 150 | 316 | 1,621 | 382 |
| Percent of Population Alaska Native | 5.7% | 4.9% | 1.0% | 17.8% | 28.3% |
| Average Length of Residency in Study Communities, Household Heads | 12.9 years | 16.6 years | 17.1 years | 16.7 years | 19.9 years |
| Percentage of Household Heads Living in Study Communities 10 Years or Less | 58.1% | 53.7% | 42.2% | 51.4% | 43.4% |
| Percent of Household Heads Born in Alaska | 11.9% | 15.7% | 8.8% | 16.9% | 22.9% |

According to the results of the systematic household survey, a majority of the residents in all the study communities were born in states other than Alaska or in other countries. A majority of household heads in Cooper Landing, Hope, and Ninilchik have lived in the study communities for 10 years or less (Table 1).

Although most households in the five study communities harvested and used fish in the 2002/03 study year, harvests were relatively low in the road-connected communities, and higher in Seldovia (Table 2). In four of the study communities, rod and reel fishing under sport fishing regulations provided most of the harvest. The exception was Nikolaevsk, where removal of fish from households' commercial harvests was the primary source of fish for home use. There were no significant statistical differences in fish harvest levels between the Alaska Native and non-Native populations of Ninilchik and Seldovia (the only two study communities with sizable Alaska Native populations), nor was there any significant relationship between length of residency and levels of harvest of fish resources in any study community. A majority of interviewed households had participated in recreational (rod and reel) fisheries, and most households in Nikolaevsk and Ninilchik had participated in Cook Inlet personal use dip net fisheries (these take place in state-managed waters). Most households in the other three study communities had never participated in the dip net fisheries, and in no study community did a majority of the households have any experience participating in Cook Inlet noncommercial setnet fisheries (Table 2). By their own evaluations, the 2002/03 study year overall appears typical for these communities. For most fisheries resources, a majority of households reported that their uses were about the same as other recent years. About 20 to 30 percent of households that had used various fish resources in the recent past said that their uses were down. Almost all of these households explained that these lower harvests were the result of personal circumstances such as work-related time constraints, illness, or other priorities, rather than unavailability of resources or regulatory restrictions.

Hope and Cooper Landing households (the only rural communities within the boundaries of present-day public lands) reported that fishing activities on federal public lands and waters were important, but use of federal public lands and waters for fishing by residents of Ninilchik, Nikolaevsk, and Seldovia was minimal in 2002/03. This is mostly due to the significant distance of these communities from federal lands.

Table 2. Harvests and Uses of Fish, Study Communities, 2002/2003

| | Cooper Landing | Hope | Nikloaevsk | Ninilchik | Seldovia |
|---|---|---|---|---|---|
| Percentage of Households Using Fish | 90.3% | 83.3% | 96.6% | 96.0% | 100.0% |
| Percentage of Households Harvesting Fish | 72.8% | 66.7% | 75.5% | 73.0% | 84.0% |
| Total Harvest of Fish, Pounds Usable Weight per Person | 61.7 lbs | 62.4 lbs | 73.7 lbs | 81.8 lbs | 161.3 lbs |
| Percent of Salmon Harvest with Rod and Reel | 88.2% | 85.2% | 35.4% | 45.8% | 53.0% |
| Percent of Salmon Harvest, Personal Use and Subsistence Methods | 10.9% | 13.2% | 20.0% | 32.0% | 25.9% |
| Percentage of Households, Ever Sport Fished | 92.2% | 90.0% | 75.8% | 90.0% | 86.0% |
| Percentage of Households, Ever Used Kenai Peninsula Dip Net Fisheries | 37.9% | 30.0% | 64.0% | 63.0% | 22.0% |
| Percentage of Households, Ever Used Kenai Peninsula Noncommerical Set Net Fisheries | 8.7% | 11.7% | 15.0% | 32.0% | 22.0% |

**Potential Future Subsistence Fisheries on Federal Public Lands**

When interviewed, most households recommended federal subsistence fisheries identical to state sport fisheries and most found state personal use fisheries adequate for their needs (Table 3). Most households declined to provide suggestions for the location of potential federal subsistence fisheries, because they are opposed to federal subsistence management, or are opposed to freshwater subsistence fisheries, or are concerned about the conservation implications of such fisheries. Some households said they would like expanded subsistence or personal use fishing opportunities in non-federal waters. Of those households offering scenarios for new federal subsistence fisheries, most recommended rod and reel as the only allowable gear type (Table 3).

In scoping and stakeholder meetings, participants noted that most long-term residents of Kenai Peninsula communities, such as the Kenaitze, whose families once used study area waters for subsistence fishing, now live in areas classified as non-rural by the Federal Subsistence Board and are therefore ineligible to participate in any potential federal subsistence fisheries. They were concerned that study findings based on interviews with current residents of communities classified as rural by the Federal Subsistence Board did not provide a complete picture of the Kenai Peninsula's fishing traditions. Some of the scoping and stakeholder meeting participants also expressed concerns with the creation and management of new subsistence fisheries by the Federal Subsistence Board. Cooper Landing residents said that any difference between subsistence and sport regulations in the upper Kenai River area would create tension between user groups, and that local support for a distinct set of federal subsistence regulations would be difficult to garner. Ninilchik meeting attendees stressed the importance of maintaining fishing opportunity even if current uses are not particularly high.

Table 3. Evaluations of Current and Potential Future Fishing Opportunities, Study Communities

| | Cooper Landing | Hope | Nikolaevsk | Ninilchik | Seldovia |
|---|---|---|---|---|---|
| Agreed that Current State Personal Use Fishery Limits are Adequate | 54.4% | 76.7% | 56.5% | 66.0% | 64.0% |
| Agreed that Federal Subsistence Fishing Regulations Should Match State Sport Fishing Regulations | 73.9% | 55.0% | 42.1% | 59.0% | 32.0% |
| Provided a Federal Fishery Scenario | 33.0% | 58.3% | 26.2% | 32.0% | 26.0% |
| Did Not Provide a Federal Fishery Scenario | 67.0% | 41.7% | 71.4% | 68.0% | 74.0% |

## Conclusions

A goal of the project was to assess the impacts of the 1952 closure of the freshwater systems of the Cook Inlet Area to subsistence fishing. Given the later history of the road connected areas of the Kenai Peninsula, severe restrictions and closures to subsistence fisheries were almost certainly inevitable even without the 1952 closure. If the closure had not happened in the 1950s, it would have likely occurred in the 1960s or 1970s as the growing population of southcentral Alaska placed new demands on fisheries resources of Cook Inlet, and the population changed from one with a relatively large percentage of indigenous people, homesteaders, and commercial fishermen, to one dominated by relative newcomers with full time jobs, an interest in recreational fishing and hunting, and little to no knowledge about the traditional fisheries of the past. Thus, combining a historical review with the documentation of contemporary harvests and uses of fish through the household survey, this study documented a discontinuity within the road connected portions of the Kenai Peninsula between the traditional pattern of fishing established by the Dena'ina, and later utilized by early non-Native settlers, and the current pattern followed and largely endorsed by the large majority of the residents of areas considered by the Federal Subsistence Board as rural.

In conclusion, the study provides information about history, demography, harvest and use levels, methods of harvests, locations of fishing, and residents' assessments of fishing opportunities that could inform future actions by advisory bodies and regulatory boards about potential federal subsistence fisheries or state personal use fishing opportunities in the Cook Inlet Management Area. Developing fishing regulations that provide opportunities consistent with the current levels of harvests and expectations of the population of the five rural study communities appears to be an achievable goal.

For more information, see the final report for the project: Fall, J.A., R.T. Stanek, B. Davis, L. Williams, and R.J. Walker 2004. Cook Inlet Customary and Traditional Subsistence Fisheries Assessment, Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 285. You may contact the Division of Subsistence at 333 Raspberry Road, Anchorage, Alaska, 99518; (voice) 907-267-2353; (fax) 907-267-2450. Selected study findings appear in the Community Profile Database, which is accessed through the division's web page at:www.state.ak.us/local/akpages/FISH.GAME/subsist/subhome.htm.

# APPENDIX E:

# SAMPLE STAKEHOLDER MEETING AGENDA

**COOK INLET CUSTOMARY AND TRADITIONAL SUBSISTENCE FISHERIES ASSESSMENT PROJECT**

**AGENDA FOR STAKEHOLDER MEETINGS**

Organized by: Division of Subsistence, Alaska Department of Fish and Game
Funded by: Project FIS 03-045

September 29, 2003: Soldotna: Kenai River Center, 7 to 9 p.m.
September 30, 2003: Cooper Landing: Community Center, 7 to 9 p.m.
October 1, 2003: Ninilchik: Ninilchik Traditional Council Subsistence Building, 7 to 9 p.m.

Purpose: review, discuss, and get feedback on preliminary draft findings from a household survey conducted in Cooper Landing, Hope, Ninilchik, Nikolaevsk, and Seldovia about present, past, and potential future subsistence/home use fishing activities.

- Background - why the project was undertaken and what's been done so far

1. Introductions

2. Project Background

   Federal subsistence program & c&t findings
   Purposes and objectives of this study

3. Household Survey

   Questions on survey form
   Field methods
   Sample achievement

- Findings – discuss and get feedback on draft study findings from the survey; consider how study findings inform discussion of the 8 c&t factors and possible federal subsistence fishing regulations/fisheries

4. Demography

5. Fishing activities in the 2002/03 study year

6. Past fishing activities

7. Scenarios for potential future fisheries

8. What's next?