

Kuskokwim River Inseason Subsistence Salmon

Catch Monitoring, 2001-2003



BY

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and

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01-132:	\$8,438 (ADF&G)	\$37,688 (ONC)	
	\$8,438 (ADF&G)	\$38,482 (ONC)	
	\$8,438 (ADF&G)	\$38,482 (ONC)	
01-225:	\$5,300 (ADF&G)	\$58,919 (KNA)	\$2,500 (K-FRO)
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ABSTRACT

Through a collaborative effort, inseason subsistence salmon surveys addressing qualitative assessment of run timing and abundance were conducted at selected fish camps and in communities of fishers in the lower, middle and upper mainstem Kuskokwim River during summers 2001-2003. Collaborators included Orutsararmiut Native Council (ONC), Kuskokwim Native Association (KNA), McGrath Native Village Council (MNVC) and the Alaska Department of Fish and Game (ADF&G). Information collected from these surveys was provided weekly to fishery managers. The Kuskokwim River fishery is cooperatively managed by ADF&G, United States Fish and Wildlife Service, and the Kuskokwim River Salmon Management Working Group.

Fishery managers are dependent on information from inseason run assessment projects to evaluate salmon run strength in order to achieve management objectives. One of the primary indicators of inseason salmon run strength is information collected from the test fishing project conducted just upstream of Bethel. Information collected from this project provides a general description of the relative strength of the run by species. This index of salmon abundance is affected by the variability of run timing between years and anomalies created by environmental factors. The inseason subsistence catch monitoring project provided additional information to evaluate salmon run strength by obtaining the relative success of some subsistence fishers in achieving their harvest goals. Additionally, this project provided an avenue for local user input into the evaluation of salmon run abundance and corresponding management strategies. Historically, fishery managers collected information ad hoc from a few subsistence fishers. However, the inseason subsistence monitoring program initiated in 2001 increased the quality and consistency of information obtained from subsistence fishers. This project increased the number and frequency of fishing family interviews increasing the credibility of the salmon catch information. Comparisons of inseason subsistence catch information now can be made between weeks within a year and between years. Inseason subsistence catch information has been used in combination with other information to determine appropriate inseason management decisions.

KEY WORDS: Bethel, Chinook chum, coho, sockeye, salmon, Kuskokwim River, MNVK, Orutsararmiut Native Council, Kuskokwim Native Association, subsistence, Kuskokwim River Salmon Management Working Group

INTRODUCTION

The Kuskokwim River drains an area of approximately 50,000 square miles, 11 percent of the total area of Alaska (Brown 1983). Each year salmon return to the river and support subsistence, commercial and sport fisheries. The average total utilization of Kuskokwim River salmon from 1994-2003 was 0.8 million fish (Tables 1 through 4). The recent 10-year (1994-2003) average subsistence harvest from the river includes 78,485 Chinook salmon, 59,769 chum salmon, 37,652 sockeye salmon and 31,546 coho salmon. By comparison, the average annual commercial harvest consists of 8,775 Chinook, 126,690 chum, 28,019 sockeye, and 332,023 coho salmon (Ward et al. 2003)

Alaska Statute 10.05.258., *Subsistence use and allocation of fish and game*, establishes the subsistence use priority for reasonable harvest opportunity consistent with sustained yield when resources are not large enough to provide for all consumptive uses. Consistent with this law Kuskokwim Area commercial fishing regulations since 1985 have limited gill net mesh size to six inch maximum and in 1987 the directed Chinook salmon commercial fishery was discontinued. These actions were taken to assure sufficient salmon for escapement and subsistence use can be annually achieved.

The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 mandates that rural subsistence users have a priority over other users to take wildlife on Federal public lands where recognized customary and traditional use patterns exist. On October 1, 1999, the Secretaries of Interior and Agriculture published regulations to expand Federal Management of subsistence fisheries to Alaskan river and lakes and limited marine waters within and adjacent to Federal public lands. Federal subsistence fishing regulations are adopted by the Federal Subsistence Board (FSB).

The Kuskokwim River salmon fisheries are managed according to the Kuskokwim River Salmon Management Rebuilding Plan (5 AAC 07.365) adopted by the Alaska Board of Fisheries (BOF) in January of 2001 and amended in January 2004. This management plan provides guidelines for the rebuilding and management of the Kuskokwim River salmon fishery that will result in the sustained yield of salmon stocks large enough to meet escapement goals and provide fishers with a reasonable opportunity to harvest for subsistence use and to provide for fisheries other than subsistence. The management plan provides direction for establishing a subsistence fishing schedule allowing salmon net and fish wheel fisheries to be open for four consecutive days per week in June and July as announced by emergency order. The schedule is implemented in a step wise progression up the river consistent with salmon run timing and may be altered based on run strength to achieve escapement goals. Once escapement goals are assured for Chinook and chum salmon subsistence fishing is allowed seven days per week. The goal of the windowed subsistence fishing schedule is to provide opportunity for the subsistence harvest of Chinook and

chum salmon, to spread the subsistence harvest out across the run and move fish through the lower river to spread subsistence fishing opportunity out to fishers in the upper river.

The Kuskokwim River Salmon Management Working Group (Working Group) was formed in 1988 by the BOF in response to requests from stakeholders in the Kuskokwim River drainage who wanted to take a more active role in the management of salmon fishery resources. Since then the Working Group has become increasingly active in the pre-season, in-season, and post-season management of the Kuskokwim River drainage subsistence, commercial, and sport salmon fisheries. In 2001, the Working Group modified its charter in order to more effectively address the needs of the Federal Subsistence Management Program by including members of the Coordinating Fisheries Committee of the Yukon-Kuskokwim Delta and Western Interior Regional Advisory Councils. The Working Group now serves as a public forum for Federal and State fisheries managers to meet with local users of the salmon resource to review run assessment information and reach a consensus on how to proceed with management of Kuskokwim River salmon fisheries. The Working Group typically first meets in March or April each calendar year; has intensive and frequent meetings during June, July, and August; and has a wrap-up session in September or October. Working Group meetings provide the forum for area fishers, user representatives, community representatives, Regional Advisory Council representatives, Fish and Game Advisory Committee members, and State and Federal managers to come together to discuss issues relevant to sustained yield fishery management and providing for the subsistence use priority.

For the past two decades, a system has been in place to monitor salmon run timing and run strength through comparison of current year information to historic information, through evaluation of test fish project catch rates and commercial harvest catch rates, and as fish begin reaching clear water tributary streams, weir passage, sonar passage and evaluation of the numbers of salmon on spawning grounds through aerial surveys. Evaluation of in-season subsistence harvest information, collected in an ad hoc manner, has always been a component of this process. The in-season subsistence fishery monitoring program covered in this report was the first attempt on the Kuskokwim River to obtain more consistent qualitative in-season subsistence harvest information so as to strengthen the role of subsistence harvest information to achieve management priorities; to meet escapement goals and provide fishers with a reasonable opportunity to harvest amounts necessary for subsistence and, if fish remain surplus to escapement and subsistence harvest needs, to provide for commercial and sport fisheries.

This report summarizes results from in-season subsistence harvest interviews conducted from 2001 through 2003 with subsistence fishers along the Kuskokwim River. Interviews were conducted by the Orutsararmiut Native Council (ONC) in the Bethel area (FIS 01-225), by the Kuskokwim Native Association (KNA) in the middle river (FIS 01-123) and by the McGrath Native Village Council (MNVC) in the upper river (FIS 01-023). This report represents the final report for projects FIS 01-023, FIS 01-132, and FIS 01-225 funded by the United States Fish and Wildlife Service (USFWS) Office of Subsistence Management (OSM).

OBJECTIVES

Objectives for the salmon subsistence catch monitoring projects (FIS 01-023, 01-132, 01-225) include:

1. Determine the adequacy and quality of fish harvested by conducting weekly interviews of subsistence salmon fishers in the Bethel area (approximately Oscarville to Kwethluk River), the middle Kuskokwim River, and in the upper Kuskokwim River.
2. Provide oral and written summaries of interview findings to Alaska Department of Fish and Game (ADF&G), USFWS, local Federal Regional Advisory Council (RAC) members, State Fish and Game Advisory Committees, and the Working Group weekly on the Monday following the interview week, so the information would be available to assist in inseason fishery management decisions.
3. Estimate the age, sex, and size composition of the Chinook salmon harvested throughout all the Kuskokwim River subsistence fisheries.
4. Build local capacity by providing opportunities for the MNVC Fishery Technician to learn about the Takotna River weir by participating in weir operations for about two weeks each year (FIS 01-023 only).
5. Build local capacity by providing opportunities for selected McGrath community members to visit the Takotna River weir site and receive an orientation about weir operations, the history of the project and reasons for its development (FIS 01-023 only).

Results from objectives three through five are not included in this report. Objective 3 is addressed in Dubois et al. (2002) and Molyneaux et al. (2004a and 2004b). Objectives 4 and 5 are addressed in Gilk and Molyneaux (2004), Clark and Molyneaux (2003), and Schwanke and Molyneaux (2002).

METHODS

In consultation with ADF&G staff, ONC, KNA and MNVC hired fishery technicians to: 1) conduct weekly interviews with subsistence fishers along the main stem Kuskokwim River and

2) collect biological data from subsistence caught Chinook salmon to characterize the age, sex, and length (ASL) composition of the subsistence harvest by gear type. ONC technicians conducted inseason subsistence interviews and collected Chinook salmon biological data in the Lower Kuskokwim River area between Oscarville and the mouth of the Kwethluk River (FIS 01-132). KNA technicians conducted inseason subsistence interviews and collected Chinook salmon biological data in the Middle Kuskokwim River area from Lower Kalskag to Chuathbaluk (FIS 01-225). MNVC technicians conducted inseason subsistence interviews and collected Chinook salmon biological data in the Upper Kuskokwim River area from Georgetown to Nikolai with effort focused on McGrath and Nikolai residents (FIS 01-023) (Figure 1).

INTERVIEWS

The interview format was developed in conjunction with staff from ADF&G, USFWS, and local village native councils. A draft copy of the interview format was provided to RAC and Working Group members for comment. ADF&G staff took the lead in coordinating and finalizing the interview format and protocols (Appendix A). Questions on the form included: family name, date household began fishing, fish camp location, fishing area, season harvest goals by species, qualitative assessment of weekly fishing success, progress toward achieving harvest goals, gear types, general comments about fishing conditions, and the date the family completed salmon fishing for each species. The questions were designed to provide information from individual subsistence interviewed fishing families throughout the drainage to index their relative fishing success, to determine relative harvest timing by area, to determine if fishers were selectively harvesting specific salmon species through the use of specific mesh sizes or harvest methods, and to determine if there were factors other than fish abundance that may have affected the relative success of achieving their harvest goals. No goals were established regarding the number of interviewed fishing families to be interviewed.

ADF&G staff trained technicians on interview techniques, and methods for information management. Interviews were conducted by telephone, by two-way radio and in person with fishers in fish-camps along the mainstem of the Kuskokwim River or in their communities of residence. Technicians used skiffs and air taxi services to access fishers in remote locations. Weekly interviews were conducted over the course of the season to track changes in fishing methods, fisher observations and fisher perceptions about the salmon runs and harvests.

In a format provided by ADF&G staff, technicians edited and summarized weekly subsistence salmon harvest information, which was provided to salmon fishery managers (Appendix B). Collection and distribution of this information provides an avenue for local user input into the determination of salmon run abundance and corresponding management strategies and has the potential to increase the precision of the Kuskokwim River fishery management system.

Completed inseason subsistence survey summaries (Appendix B) were generally received by ADF&G and the USFWS staff the Monday following the interview week and were distributed to

Working Group members and meeting participants prior to meetings. On occasion survey technicians attended Working Group meetings and provided oral summaries of the interviews.

OUTLOOK AND MANAGEMENT STRATEGIES

Preseason information provided to fishers regarding the fishery outlook and management strategies affect how they plan their time and schedule their activities. Poor salmon returns to western Alaska during 1997 through the 2000 seasons, implementation of the subsistence-fishing schedule, and commercial fishing activities influenced subsistence fishers participation in the fishery during the years of this study.

2001 Season

The 2001 Kuskokwim River Chinook and chum salmon runs were expected to be too small to allow a commercial fishery in June and July and subsistence-fishing restriction would likely be necessary to achieve salmon escapement goals. ADF&G and USFWS instituted an aggressive campaign to inform the public of the Kuskokwim River Salmon Rebuilding Management Plan and the need to conserve Chinook and chum salmon. The Working Group met frequently with ADF&G and USFWS staff to help implement the rebuilding plan. A joint appeal for subsistence and sport fishers to conserve Chinook and chum salmon was issued by ADF&G, USFWS, Association of Village Council Presidents, KNA, Working Group, Kwethluk Indian Reorganization Act Tribal Council, MNVC, and ONC. During the preseason Working Group meetings the subsistence fishing schedule was a focus of discussion. After extensive public comment, a schedule was established that allowed subsistence fishing for salmon on Wednesday through Saturday and closed subsistence salmon fishing, except with hook and line, from Sunday through Tuesday. It was also anticipated that a commercial fishery would be established in August directed at coho salmon, with the harvest expected to be below average.

As the season progressed, a decision was made to further conserve chum salmon by reducing subsistence fishing to two days per week in the lower Kuskokwim River and to three days per week in the middle Kuskokwim River beginning July 10. Subsistence fishing was increased back to four days per week on July 22 when pulses of chum salmon passed the Tuluksak weir and Aniak River sonar. Additionally, the George River was closed to all subsistence and sport fishing from July 14 through August 7.

Lower Kuskokwim River (Bethel Area)

The subsistence-fishing schedule was in effect during June and July. From June 3 through July 3 and July 25 through July 31 subsistence fishing with gillnets having mesh size greater than four-inch and fish wheels was prohibited three days per week from Sundays through Tuesday. From July 13 to July 24 subsistence fishing with gillnets greater than four inch mesh and fish wheels was prohibited five days per week Fridays through Tuesdays.

In August there was a commercial fishery in the lower Kuskokwim River directed at coho salmon. The total commercial harvest was 90 Chinook salmon, 1,272 chum salmon, 84 sockeye salmon, and 192,998 coho salmon (Tables 1-4). Subsistence fishing was closed 16 hours prior to during and six hours after commercial fishing periods.

Middle Kuskokwim River

The subsistence-fishing schedule was in effect during June and July. From June 10 through July 3 and from July 25 through July 31 subsistence fishing with gillnets having mesh size greater than four-inch and fish wheels was prohibited three days per week from Sundays through Tuesdays. From July 13 to July 24 subsistence fishing with gillnets greater than four inch mesh and fish wheels was prohibited five days per week; Fridays through Tuesdays. There was no commercial fishery in the middle Kuskokwim Area. Subsistence fishing was allowed seven days per week beginning August 1 through the remainder of the year.

Upper Kuskokwim River

The subsistence-fishing schedule was in effect from June 17 through July 31. During this time subsistence fishing with gillnets having mesh size greater than four-inch and fish wheels was prohibited three days per week from Sundays through Tuesdays. There was no commercial fishery in the upper Kuskokwim Area. Subsistence fishing was allowed seven days per week beginning August 1 through the remainder of the year.

2002 Season

The 2002 Kuskokwim River Chinook and chum salmon runs were expected to be too small to allow a commercial fishery in June and July and too small to allow subsistence fishing more than four days per week. As the season progressed, the Working Group met frequently with ADF&G and USFWS staff to evaluate the information from salmon assessment projects and to implement the rebuilding plans. In June 2002, the FSB adopted a special regulatory action that tied the time allowed for sport fishing to the time allowed for subsistence net fishing in waters applicable to federal regulations in the Kuskokwim River drainage. Upon a request for reconsideration by the State of Alaska, the FSB rescinded its decision. The regulation was rescinded, because under ANILCA, sport fishing on federal waters is managed by ADF&G unless there are overriding conservation or subsistence concerns. If there is not enough fish for other uses, then only fishing by rural subsistence users is allowed. The FSB made a decision that there was no overriding conservation or subsistence fishing concerns.

Lower Kuskokwim River (Bethel Area)

The subsistence-fishing schedule was in effect from June 2 through June 25 with gillnets having mesh size greater than four-inch and fish wheels prohibited three days per week from Sundays through Tuesdays. Subsistence fishing was allowed seven days per week beginning June 26, with the exception of subsistence fishing closures associated with commercial fishing periods. There were six commercial fishing periods in August directed at coho salmon. The total commercial harvest was 72 Chinook salmon, 1,900 chum salmon, 84 sockeye salmon, and 83,463 coho salmon (Tables 1-4). Subsistence fishing was prohibited 16 hours prior to, during and six hours after commercial fishing periods.

Middle Kuskokwim River

The subsistence-fishing schedule was in effect June 9 through June 25 with gillnets having mesh size greater than four-inch and fish wheels prohibited three days per week from Sundays through Tuesdays. There were no commercial fishing periods in the middle Kuskokwim River. Subsistence fishing was allowed seven days per week beginning June 26 through the remainder of the year.

Upper Kuskokwim River

The subsistence-fishing schedule was in effect from June 16 through June 25. Subsistence fishing with gillnets having mesh size greater than four-inch and fish wheels was prohibited three days per week from Sundays through Tuesdays. There were no commercial fishing periods in the upper Kuskokwim River. Subsistence fishing was allowed seven days per week beginning June 26 through the remainder of the year.

2003 Season

The department expected the 2003 Chinook, chum, and sockeye salmon runs to be similar to the 2002 salmon runs or slightly stronger. In 2002 Chinook and chum salmon run sizes provided for adequate escapements and subsistence harvests throughout most of the drainage.

The department anticipated that a modest commercial fishery would be allowed for coho salmon in 2003. An average to below average coho run and commercial harvest were expected given the trend since 1997 and the tendency of weaker odd year runs. The 2003 coho commercial fishery was expected to be similar to the 2002 fishery which was characterized by a below average harvest, and limited processor capacity.

Lower Kuskokwim River (Bethel Area)

The subsistence-fishing schedule was in effect from June 1 through July 1. During this time subsistence fishing with gillnets having mesh size greater than four-inch and fish wheels was prohibited three days per week from Sundays through Tuesdays. Subsistence fishing was allowed seven days per week beginning July 2, with the exception of subsistence fishing closures associated with commercial fishing periods. There were a total of 21 commercial fishing periods from July 30 to September 3 directed at coho salmon. The total commercial harvest was 158 Chinook salmon, 2,764 chum salmon, 282 sockeye salmon, and 284,064 coho salmon (Tables 1-4). Subsistence fishing was prohibited 16 hours prior to, during and six hours after the first two commercial fishing periods and six hours prior to, during and three hours after the remaining commercial fishing periods.

Middle Kuskokwim River

The subsistence-fishing schedule was in effect from June 8 through July 1. During this time subsistence fishing with gillnets having mesh size greater than four-inch and fish wheels was prohibited three days per week from Sundays through Tuesdays. There were no commercial fishing periods in the middle Kuskokwim River. Subsistence fishing was allowed seven days per week beginning July 2 through the remainder of the year.

Upper Kuskokwim River

The subsistence-fishing schedule was in effect from June 15 through July 1. During this time subsistence fishing with gillnets having mesh size greater than four-inch and fish wheels was prohibited three days per week from Sundays through Tuesdays. There were no commercial fishing periods in the upper Kuskokwim River. Subsistence fishing was allowed seven days per week beginning July 2 through the remainder of the year.

RESULTS

Inseason subsistence interviews were conducted during the 2001-2003 salmon fishing seasons in the lower Kuskokwim River (Bethel Area) between Oscarville and the mouth of the Kwethluk River by ONC technicians (FIS 01-132), in the middle Kuskokwim River from Lower Kalskag upstream to Chuathbaluk by KNA technicians (FIS 01-225) and upper Kuskokwim Area from Georgetown to Nikolai by MNVC technicians (FIS 01-023) in consultation with ADF&G staff (Figure 1). In each of the three project years, technicians conducted weekly interviews of subsistence salmon fishers along the Kuskokwim River, summarized the information and reported the information to ADF&G, USFWS and the Working Group for broader distribution to RAC members and other residents of the Kuskokwim River drainage (Tables 5-10, Appendices B-D). Information primarily used to manage the Kuskokwim River fisheries includes subsistence harvest reports; test fish project summaries, and as salmon begin reaching clear water tributaries, reports of salmon abundance from weir, sonar and aerial survey programs as salmon approached the spawning grounds. Information provided through inseason subsistence catch monitoring studies significantly increased the quality and consistency of information obtained from subsistence fishers from all prior years. The large number of interviews and frequency of interviews of interviewed fishing families conducted increased the reliability of the salmon catch information. On the basis of this information, comparisons of inseason subsistence catch information can be made among weeks within a year and among years.

In combination with other information, inseason subsistence catch information was used to help determine inseason management actions. Additionally, the project provided an avenue for local user input into the determination of salmon run abundance and corresponding management strategies. The weekly reporting process resulted in discussions of survey results by area, which allowed fishers living and fishing outside of a specific area to understand the fishing limitations of fishers in other areas. Specifically, information from the middle and upper Kuskokwim Areas clearly described to lower river fishers the necessity of the subsistence fishing schedule early in the season to spread the Chinook salmon harvest across the run to provide for subsistence harvest uses for middle and upper river fishers.

2001 INSEASON SUBSISTENCE SALMON HARVEST INFORMATION

Inseason subsistence catch information collected through June 23 in the lower river characterized Chinook, chum and sockeye salmon harvests as good and information collected through June 30 in the middle river characterized Chinook and chum salmon fishing as normal and sockeye salmon fishing as good. All reports from the upper river through July 14 indicated Chinook salmon fishing was as at least normal and the limited reports regarding chum and sockeye salmon catches indicated at least normal catches by this time (Table 5). The Bethel test fish index and escapement counts through July 9 indicated chum salmon abundance to be poor. In response to all the indicators of a poor run and in consideration that many fishers had achieved their chum and Chinook salmon harvest goals subsistence fishing was reduced to two days per week in the lower Kuskokwim River and to three days per week in the middle Kuskokwim Area (Burkey et al. 2002). Information collected from inseason subsistence interviews through July 24 characterized subsistence chum salmon harvests as being good or normal. An increase of chum salmon passage past the Tuluksak River weir and past the Aniak River sonar indicated an increase in chum salmon abundance. In response to all the indicators of increased chum salmon abundance the subsistence fishing schedule was modified in the lower and middle Kuskokwim River to allow four days per week subsistence fishing through July. Only some salmon escapement goals were met. Postseason subsistence harvest surveys determined that amounts necessary for subsistence as defined by the BOF was achieved for all species (ADF&G, Division of Subsistence 2003a).

Lower Kuskokwim River (Bethel Area)

ONC staff conducted inseason subsistence interviews from June 6, 2001 to August 25, 2001 and conducted a total of 466 interviews through the course of the summer (Tables 5 and 6 and Appendix B-01). Each week, between 16 to 44 interviewed fishing families were interviewed regarding their subsistence fishing activities.

In 2001, the most intense fishing activity occurred during June. By the end of June, Chinook salmon fishing was described as good by 52% of the interviewed fishing families, normal by 31% of the interviewed fishing families and poor by 17% of the interviewed fishing families. Chum salmon fishing was described as good by only 6% of the interviewed fishing families while 48% and 45% of the interviewed fishing families reported fishing as normal and poor, respectively. In June, sockeye salmon fishing was described as good by over half the interviewed fishing families with the majority of other interviewed fishing families reporting fishing for sockeye salmon as normal. All interviewed fishing families that reported fishing gear type in June reported using gillnets. Drift gear was used by 84% of reporting fishers. Gillnet mesh size greater than six inch; used to target large Chinook salmon dominated the fishery being used by 71% of the interviewed fishing families.

Participation in the subsistence fishery by interviewed fishing families declined in July as harvest goals had been achieved. Weekly fishing participation ranged from zero to nine interviewed fishing families in July. Approximately equal number of families reported chum fishing being

good or normal. There was one report of chum salmon fishing being poor. Drift gill nets were the dominant fishing gear used in July with the majority of fishers using six-inch or smaller mesh size. Fishing participation by interviewed families increased again during the week ending August 4, then participation decreased through the remainder of the month. All August participating fishers reported coho fishing as good or normal (83%). Drift gill nets and gill net with mesh size six inch or less was the dominant gear type. Rod and reel gear was used once each of the weeks ending August 11 and August 18.

Middle Kuskokwim River

KNA staff conducted inseason subsistence interviews from June 6, 2001 to July 21, 2001; in total, 51 interviews were conducted (Tables 5 and 6 and Appendix C-01). Each week, between 2 to 14 fishing families were interviewed regarding their subsistence fishing activities.

In 2001, the most intense fishing activity occurred during June. By the end of June, Chinook salmon fishing was described as good by 20%, normal by 68%, and poor by 12% of the interviewed fishing families. Chum salmon fishing was described as good by 14% of the interviewed fishing families while 52% and 33% of the interviewed fishing families reported fishing as normal and poor, respectively. In June sockeye salmon fishing was described as good by 60% of the interviewed fishing families. The majority of other interviewed families reporting fishing for sockeye salmon reported fishing as normal. All interviewed fishing families that reported fishing gear type in June reported using gillnets. Drift gill net gear was used by 69% of reporting fishers. Gillnet mesh size of greater than 6 inch was used by 74% of the interviewed fishing families.

Only five fishing families were interviewed during July 2001. Only three families commented on Chinook salmon fishing, and all three reported fishing to be normal. Three of the five fishers that commented on chum salmon fishing reported fishing to be poor while one family each reported fishing to be normal or good. Sockeye salmon fishing was reported to be normal by two of the three interviewed fishing families with the third family reporting sockeye salmon fishing as poor. No reports were received regarding coho salmon fishing. All five interviewed families reported using gillnets in July. Drift and set gillnets with mesh sizes greater and less than six-inch mesh size was used.

Upper Kuskokwim River

MNVC staff conducted inseason subsistence interviews from June 20, 2001 to July 14, 2001; a total of 17 interviews were conducted (Tables 5 and 6 and Appendix D-01). Each week, 1 to 7 fishing families were interviewed regarding their subsistence fishing activities.

The most intense fishing activity occurred in July as this is the time in which salmon abundance is greatest in this portion of the drainage. Chinook salmon fishing was described as good by 35% of the interviewed fishing families and normal by 65% of the interviewed fishing families. No

interviewed fishing families reported Chinook salmon fishing as poor. Chum and sockeye salmon fishing was described as normal and good, respectively, based on two reports for each species. There were no reports regarding coho salmon. Set gillnets were the dominant fishing gear followed by rod and reel and drift gillnets. Approximately 70% of the gill nets had mesh size of six inches or less.

2002 INSEASON SUBSISTENCE SALMON HARVEST INFORMATION

Inseason subsistence catch monitoring information was evaluated with other run assessment information during the 2002 season. The June reports from the majority of interviewed fishing families drainage wide indicated that salmon catch rates were at least normal (Table 7). The information corroborated other run assessment evaluation tools. Seven day per week subsistence fishing was allowed beginning June 26, based partially on findings from the inseason subsistence catch monitoring program. Salmon escapement goals were achieved. Postseason subsistence harvest surveys determined that amounts necessary for subsistence as defined by the BOF was achieved for all species except sockeye salmon (ADF&G, Division of Subsistence 2003b).

Lower Kuskokwim River (Bethel Area)

In 2002, ONC staff conducted inseason subsistence interviews from June 12 to August 10; a total of 313 interviews were conducted (Tables 7 and 8 and Appendix B-02). Each week 27 to 40 interviewed fishing families were interviewed regarding their subsistence fishing activities.

The most intense fishing activity occurred during June during the time period of highest Chinook salmon abundance. By the end of June, Chinook salmon fishing was described as good by 77% of the interviewed fishing families, normal by 19% of the interviewed fishing families and poor by 4% of the interviewed fishing families. Chum salmon fishing was described as good by 57% of the interviewed fishing families while 27% and 16% of the interviewed fishing families reported fishing as normal and poor, respectively. In June, half the interviewed fishing families described sockeye salmon fishing as poor with the majority of other families reporting fishing for sockeye salmon as normal. All interviewed fishing families that reported fishing gear type in June reported using gillnets. Drift gill net gear was used by 86% of reporting fishers and set gear was used by 14%. Gillnet mesh size greater than six inches, used to target large Chinook salmon, dominated the fishery being used by 78% of the interviewed fishing families.

Participation by interviewed fishing families in the subsistence fishery declined in July during which time weekly fishing participation ranged from 5 to 31 families as the majority of Chinook salmon had passed the area and fishers had achieved their harvest goals for chum salmon. Chum salmon was described as good by 21% of the fishers and normal by 77% of the fishers. There was one report of chum salmon fishing being poor. Drift gill nets were the only fishing gear type reported to be used in July with the majority of fishers using mesh size of six inch or less to target chum and sockeye salmon. Fishing participation by interviewed families was low during August interviews. During August, all participating fishers reported coho fishing as good or normal. Drift gill nets and rod and reel were the reported gear types. Mesh size was not reported since it was

understood that gillnets less than six inch mesh were utilized to harvest coho salmon, the most abundant salmon species present during that time period.

Middle Kuskokwim River

In 2002, KNA staff conducted inseason subsistence interviews from June 5, 2002 to July 13, 2002 and conducted 56 interviews (Tables 7 and 8 and Appendix C-02). Between 3 to 17 fishing families of the regularly interviewed families were interviewed on a weekly basis regarding their subsistence fishing activities.

The most intense fishing activity was reported during June, the time period of greatest Chinook salmon abundance. By the end of June, Chinook salmon fishing was described as good by 19% of the interviewed fishing families, normal by 46% of the interviewed fishing families and poor by 34% of the interviewed fishing families. Chum salmon fishing was described as normal by 38% of the interviewed fishing families while equal numbers (31% each) reported fishing as good or poor. In June sockeye salmon fishing was described as normal by 71% of the interviewed fishing families and poor by 29% of the interviewed fishing families. All interviewed fishing families that reported fishing gear type in June reported using gillnets with drift gear used by 61% of reporting fishers and set gear by 39%. Gillnet mesh size greater than six inches, utilized to target Chinook salmon, dominated the fishery being used by 73% of the interviewed fishing families.

Only eight fishing families were interviewed during July as most of the interviewed fishers had achieved their harvest goals. Chinook salmon fishing was reported to be good by one fishing family while equal numbers of interviewed fishing families reported Chinook salmon fishing to be normal or poor. Only one fishing family commented on chum salmon fishing and reported fishing as good. No reports were received regarding sockeye or coho salmon fishing. All eight interviewed families reported using gillnets in July. Drift and set gillnets were used and 67% of the fishers reported using mesh size greater than six inches to target the harvest of large Chinook salmon and to keep from catching more chum salmon than they wanted to handle.

Upper Kuskokwim River

In 2002, MNVC staff conducted inseason subsistence interviews from June 12, 2002 to July 27 and the week ending August 17. A total of 48 interviews were conducted (Tables 7 and 8 and Appendix D-02). Each week, two to 10 fishing families were interviewed regarding their subsistence fishing activities.

Three interviewed fishing families reported participating in subsistence fishing through June 22, 2002. Two families reported Chinook salmon fishing as good and one family reported Chinook salmon fishing as poor. The greatest number of interviews occurred in July, as this is the time period of greatest salmon abundance in this area. Chinook salmon fishing was described as good by 14% of the interviewed fishing families, normal by 43% of the interviewed fishing families and poor by 43% of the interviewed fishing families. Chum salmon fishing was

described as good based on one report and sockeye salmon fishing was described as poor based on two reports. There were no reports regarding coho salmon. A total of 10 fishing families were interviewed in August. No comments were made regarding Chinook or sockeye salmon as most of these salmon had passed through this area in July. Only two reports were received regarding chum salmon, both describing fishing as poor. All 10 interviewed fishing families reported on coho salmon fishing with 50% describing fishing as good, 40% describing fishing as normal and 10% describing fishing as poor. Gillnets were the dominate gear type used by fishers in June and rod and reel gear was the dominant gear type used in July and August.

2003 INSEASON SUBSISTENCE SALMON HARVEST INFORMATION

During the 2003 season inseason subsistence interview information was evaluated with other run assessment information. By the week ending June 28 just over half of inseason subsistence reports indicated chum salmon fishing being poor while the majority of middle and upper river subsistence reports indicated chum salmon fishing to be at least average (Table 9). During a July 2 Working Group meeting a decision was reached to go to seven day per week subsistence fishing beginning July 5. In the discussion of the poor rating of the chum salmon harvest in the lower river subsistence fishery, it was pointed out that the majority of lower river fishers were fishing gill nets with mesh greater than six inch mesh size while middle and upper river fishers were using an increased amount of six inch or smaller mesh size. Fishery managers agreed to go off the schedule if a preliminary lower river subsistence report showed an increase in the lower river chum salmon catch. A preliminary report was provided July 2 indicating an increase in chum salmon catches and seven day per week subsistence fishing was implemented effective July 5. Salmon escapement goals were met. Preliminary information from post season subsistence surveys indicate that amounts necessary for subsistence as described by the BOF will be met for all species.

Lower Kuskokwim River (Bethel Area)

ONC staff conducted inseason subsistence interviews from June 4, 2003 to August 16, 2003 and conducted 433 interviews (Tables 9 and 10 and Appendix B-03). Each week 18 to 50 interviewed fishing families were interviewed regarding their subsistence fishing activities.

The most intense fishing activity occurred during June, as this is the time period of greatest Chinook salmon abundance. By the end of June, Chinook salmon fishing was described as good by 89% of the interviewed fishing families, normal by 10% of the interviewed fishing families and poor by 1% of the interviewed fishing families. Chum salmon fishing was described as good by 14% of the interviewed fishing families while 39% and 47% of the interviewed fishing families reported fishing as normal and poor, respectively. In June, just over half the interviewed fishing families described sockeye salmon fishing as good with 43% of the interviewed fishing families reporting sockeye salmon fishing as normal, and 5% reporting sockeye salmon fishing as poor. All interviewed fishing families that reported fishing gear type in June reported using gillnets with the exception of a report of the use of rod and reel by one fishing family. The use of drift gear was used by 92% of interviewed fishing families with set gear use by 8%. Gillnets

with mesh size greater than six inches, utilized to target Chinook salmon, dominated the fishery being used by 93% of the interviewed fishing families.

Participation in the subsistence fishery by interviewed fishing families declined in July, with the passage of the majority of Chinook salmon, during which time weekly fishing participation ranged from 5 to 21 families. Chinook salmon fishing was described as good by 34% of interviewed fishing families, normal by 62% of interviewed fishing families and poor by 4% of interviewed fishing families. Chum salmon fishing was described as good by 64% of the interviewed fishing families and normal by 36% of the interviewed fishing families. There were no reports of chum salmon fishing being poor. Sockeye salmon fishing was described to be good by 40% of interviewed fishing families, normal by 55% of interviewed fishing families and poor by 5% of the interviewed fishing families. Gill nets were the only fishing gear type reported to be used in July with 87% of the interviewed fishing families reporting the use of drift gear. Approximately 87% of the interviewed fishing families reported using gillnets with six-inch or less mesh size indicating fishers were targeting chum and sockeye salmon. Fishing participation by interviewed families was low during August interviews as fish were abundant and easy to catch. Coho salmon fishing was reported to be good by 90% of interviewed fishing families with 10% of the interviewed fishing families reporting coho salmon fishing as normal. Gillnets were used by 56% of the interviewed fishing families and rod and reel gear was used by 43% of the interviewed fishing families. All reports on mesh size used were of less than six inch mesh size.

Middle Kuskokwim River

KNA staff conducted inseason subsistence interviews from June 11, 2003 to August 9, 2003 and conducted 127 interviews (Tables 9 and 10 and Appendix C-03). Each week 7 to 27 interviewed fishing families were interviewed regarding their subsistence fishing activities.

The most intense fishing activity was documented during June, as this is the time period of greatest Chinook salmon abundance. By the end of June, Chinook salmon fishing was described as good by 8% of the interviewed fishing families, normal by 53% of the interviewed fishing families and poor by 39% of the interviewed fishing families. Chum salmon fishing was described as normal by 64% of the interviewed fishing families and poor by 34% of the interviewed fishing families. In June sockeye salmon fishing was described as normal by 70% of the interviewed fishing families and poor by 30% of the interviewed fishing families. All interviewed fishing families that reported fishing gear type in June reported using gillnets. Drift gill net gear was used by 78% of interviewed fishing families. Gillnet mesh size greater than six inches, utilized to target large Chinook salmon, dominated the fishery being used by 59% of the interviewed fishing families.

In July 19 interviewed fishing families commented on Chinook salmon fishing, 22 interviewed fishing families commented on chum salmon fishing and 24 interviewed fishing families commented on sockeye salmon fishing. Chinook salmon fishing was reported to be normal by 90% of the interviewed fishing families and good by 10% of the interviewed fishing families. Chum salmon fishing was reported to be good by 54% of the interviewed fishing families, normal by 41% of the interviewed fishing families and poor by 5% of the interviewed fishing

families. Sockeye salmon fishing was reported to be good by 29% of the interviewed fishing families, normal by 58% of the interviewed fishing families and poor by 13% of the interviewed fishing families. Gillnets were the only reported gear type used in July with 83% of the interviewed fishing families using drift gear. Approximately 62% of the interviewed fishing families reported using mesh size of six-inches or less to target chum and sockeye salmon.

In August interviews were conducted only during the week ending August 9. One interviewed fishing family reported chum salmon fishing as normal and one interviewed fishing family reported chum salmon fishing as poor. Four interviewed fishing families reported coho salmon fishing as normal. Two interviewed fishing families reporting using drift gill nets and five interviewed fishing families reported using rod and reel. Mesh size was not reported since it was understood to be six inch or less mesh size, since no Chinook salmon were available for harvest.

Upper Kuskokwim River

MNVC staff conducted inseason subsistence interviews from June 18, 2003 to August 9, 2003. A total of 64 interviews were conducted (Tables 9 and 10 and Appendix D-03). Each week 3 to 12 of the regularly interviewed fishing families were interviewed regarding their subsistence fishing activities.

Fourteen interviewed fishing families reported participating in June and commented on Chinook salmon fishing. Chinook salmon fishing was reported to be good by 36% of the families, normal by 7% of the families and poor by 57% of the interviewed families. Three reports were received from interviewed fishing family in June regarding chum and sockeye salmon fishing, which described chum salmon fishing as normal or poor, and sockeye salmon fishing as good. A total of 23 interviewed fishing families commented on Chinook salmon fishing in July, the time period of highest salmon abundance in the area, with 30% reporting fishing as good, 48% reporting fishing as normal and 22% reporting fishing as poor. Gillnets were the only gear type reported by fishers in June with set gill nets being the dominant gear type. Gillnet mesh size greater than six inches, utilized to target large Chinook salmon, dominated the fishery being used by 61% of the interviewed fishing families.

Only three reports were received from interviewed fishing families regarding chum salmon and sockeye salmon fishing in July. One interviewed fishing family reported chum salmon fishing as normal while two interviewed fishing families reported fishing as poor. All three families reported sockeye salmon fishing as good. In August three interviewed fishing families commented on chum salmon fishing and three interviewed fishing families commented on coho salmon fishing. Chum salmon fishing was reported to be normal by one family and poor by two families. Coho salmon fishing was reported to be good by two families and poor by one family. In July and August no fishers reported using drift gillnets. Approximately 65% of the fishers used set gill nets and 35% used rod and reels. Gillnets with mesh size six-inches or less, to target chum, sockeye and coho salmon, accounted for approximately 73% of the gill net gear.

DISCUSSION

The Kuskokwim River salmon fishery is one of the largest and most important in the state and North America (ADF&G, Division of Subsistence 2003b). State and Federal lawmakers have long recognized the use and dependence of residents of the area on this resource and have established subsistence use as the highest priority among resource users. In order to maintain the resource for this priority use, regulations and policies have been established to provide for sustained yield management. In response to the guidelines established in the Sustainable Salmon Fisheries Policy, the BOF classified the Kuskokwim River Chinook and chum salmon stocks yield concerns in September 2000. This determination was based on the inability, despite the use of specific management measures, to maintain expected yields, or harvestable surpluses, above the stock's escapement needs since 1998 and the anticipated low harvest level in 2001 (Burkey et al. 2000). In response to the yield concern classification, the Kuskokwim River Salmon Rebuilding Management Plan (5 AAC 07.365) was adopted by the BOF in January 2001 and amended in January 2004 (Bergstrom and Whitmore 2004). The FSB supported this action through Special Action during the 2001 season and through an Interim Memorandum of Agreement since that time. This management plan, support by State and Federal regulatory agencies and area fishers, provides guidelines for the rebuilding and management of the Kuskokwim River salmon fishery that will result in the sustained yield of salmon stocks large enough to meet escapement goals and provide fishers with a reasonable opportunity to harvest amounts necessary for subsistence and to provide for fisheries other than subsistence.

Since 2000, Kuskokwim River salmon runs have been improving. Escapement goals were achieved for Chinook, chum and coho salmon during 2002 and 2003; however, during the 2001 season Chinook salmon aerial survey goals were achieved in only three of four streams surveyed and the chum salmon goal was not achieved in the Kogruklu River. However, this was a vast improvement over 1998-2000 returns. No escapement goals have been established for sockeye salmon.

Consistent with state statute, the BOF has made a finding of levels of Kuskokwim Salmon that are customary and traditionally taken or used for subsistence (5AAC 01.286). For the Kuskokwim River drainage the BOF found the following amounts of fish are reasonably necessary for subsistence uses: 1) Chinook salmon 64,500-83,000 fish, 2) chum salmon, 39,500-75,500 fish, 3) sockeye salmon 27,500-39,500 fish, and 4) coho salmon 7,500-35,000 fish. Post fishing season, ADF&G Subsistence Division conducts household surveys to estimate subsistence salmon harvest levels (ADF&G 2003a and 2003b). Post season Kuskokwim River household surveys indicate amounts of salmon necessary for subsistence was achieved during 2001-2003 for all species each year, except the amount necessary for sockeye salmon was not achieved during 2002 (Figures 2-5).

The Kuskokwim River is a corridor to for salmon to access tributary spawning streams. Amounts necessary for subsistence are established on a drainage wide basis. Fishers in the lower

river have the opportunity to catch fish traveling throughout the entire drainage while fishers in the middle and upper river only have access to fish that travel to tributary streams adjacent or above the areas in which they fish. Therefore, during some years fishers in the upper and middle portion of the river may have less opportunity for subsistence harvest than those in the lower river. Amounts necessary for subsistence may be achieved during some years by an increased harvest in the lower, or lower and middle rivers, while fishers in the middle or upper river may have less opportunity to achieve their harvest goals. Additionally, environmental factors such as high water can influence success of achieving amounts necessary for subsistence.

Management of the Kuskokwim River subsistence salmon fishery is especially difficult in light of the limited information that is available through the course of the salmon runs. Incorporating information, such as from the inseason subsistence-monitoring program, into a management process is difficult. However, once a series of information is collected and that information can be compared to salmon escapements and harvest levels for a series of years the information can be useful in implementing fishery management actions to achieve escapement goals, to provide for the subsistence priority, and if harvestable surpluses of salmon are available, to provide harvest opportunity for other uses. The earlier in the season the information is available, the more reliance fishery managers may place on that information because early in the run information is limited from the test fish program and not available from escapement monitoring programs.

During the 2001 season it is possible that more subsistence fishing opportunity could have been provided while still meeting fishery management objectives if managers had been more confident about the information collected through this project. However, the anticipation of a poor run in 2001 based on the poor return in 2000 and the late chum salmon run timing lead the fishery managers to manage the fisheries conservatively. Confounding implementation of the inseason subsistence-monitoring program and managing the fishery was the fact that the 2001 season was the first year of implementation of the subsistence-fishing schedule, and a joint appeal was issued pre-season to the public for them to conserve Chinook and chum salmon. In spite of the anticipation of poor runs and the public appeal for conservative use, the majority of families interviewed during inseason subsistence surveys in the entire drainage indicated that Chinook, chum and sockeye salmon fishing was at least normal. Although salmon escapement goals were not uniformly achieved throughout the drainage there was a vast improvement over 1998-2000 escapement levels. Implementation of additional days closed to subsistence fishing beyond that established by the schedule pre-season may not have been necessary. However, even with that additional restriction amounts necessary for subsistence was achieved for all species.

Salmon run outlooks for the 2002 and 2003 seasons were improved over the 2001 season. The subsistence fishing schedule remained under some criticism by area fishers, however, the benefits of the schedule of spreading the harvest out across the run and allowing fish to pass up river for harvest by middle and upper river fishers and to allow fish to escape to the spawning grounds was being recognized. Inseason subsistence harvest survey information was evaluated with other run assessment information and found to reflect similar salmon abundance information and used in justification of fishery management actions.

In addition to providing qualitative information regarding fish availability and subsistence fishing effort, the inseason subsistence monitoring program provided feedback from subsistence fishers regarding the subsistence fishing schedule, and subsistence fishing closures around commercial fishing periods. This forum provided an excellent opportunity to discuss subsistence fishing issues with fishers and allowed a good exchange of information toward developing a fishery management plan acceptable to the greatest number of subsistence fishers. Lower river fishers generally recognize the need for the subsistence fishing schedule to spread their harvest across the run to allow fish to pass up river for use by other fishers and to meet spawning escapement goals. Middle and upper river fishers are in strong support of the subsistence-fishing schedule as they see the benefit of fish passing through the lower river fishery to become available to them. Many lower river subsistence users also participate in the commercial fishery and feel that their opportunity to commercial fish allows them income to afford to participate in subsistence activities. Middle and upper river fishers do not have the same opportunity to commercial fish and do not support the incidental harvest of Chinook salmon that occurs when a commercial fishery is prosecuted in the lower fishery. Lower river fishers are dissatisfied with the current price paid for Kuskokwim salmon by processors and many subsistence fishers express their opinion that a better use of the salmon would be to let them pass up river for use by up river subsistence fishers and to reach the spawning grounds. Discussions are beginning to take place regarding the pros and cons of sport fishing. The traditional belief that using fish as sport is unethical is being debated by those that see sport fishing as ethical recreation and a sound economic use of the resource.

METHODOLOGICAL CONSIDERATIONS/ISSUES

The inseason subsistence-monitoring program suffered from a turnover in ADF&G staff. Each of the three seasons during which this project was in operation saw a different Commercial Fisheries Division Area Management Biologist. Additionally, the Subsistence Resource Specialist involved with the inception of this program retired at the beginning of the third year of the project. Although weekly summaries were routinely provided to ADF&G, the actual data collection forms were not provided except for a portion of the forms from the 2002 season from the middle and upper river programs. Information that may have been collected but was not routinely provided on weekly summaries included the number of interviewed fishers that did not fish, harvest goals, dates fishing was completed by species, whether harvest goals were achieved, gear type and mesh size. If the actual data sheets had been submitted to ADF&G, that information may have been retrieved and made useful toward inseason management decisions.

CONCLUSIONS

Historically, fishery managers collected information ad hoc from subsistence fishers. However, the inseason subsistence-monitoring project initiated in 2001 increased both the quality and consistency of information obtained from subsistence fishers. This project increased the number and frequency of fishing family interviews, which in turn provided a broader representation of subsistence salmon catch information that more accurately reflected the status of the fishery. Comparisons of inseason subsistence catch information now can be made between weeks within a year and between years although interpretation may be subjective until interviews are uniformly conducted of a representative portion of the fishers. Inseason subsistence catch information was used in combination with other information to assist with inseason management decisions. Incorporating new information into a management process is difficult, however, once a series of information is collected and that information can be compared to salmon escapements and harvest levels for a series of years the information can be useful for implementing fishery management actions to achieve escapement goals, provide amounts necessary for subsistence and determining if harvestable surpluses of salmon are available to provide harvest opportunity for other fisheries. Timely evaluation of inseason subsistence harvest information, allowing an avenue for local user input into the determination of salmon run abundance and corresponding management strategies, has the potential to increase the precision of the Kuskokwim River fishery management system.

RECOMMENDATIONS

We recommend this program be continued in the lower Kuskokwim River to provide information to assist in fishery management decisions. Information from the lower river is of more value for inseason management decisions than information from middle and upper portions of the river, because the information becomes available earlier in the run; during a time run strength information is limited or not available from test fish and escapement monitoring programs. We recommend that the project objectives be modified to index assessment of salmon run timing and relative abundance rather than to determine the adequacy and quality of fish harvested. It is not possible to determine the adequacy and quality of fish harvested through an inseason monitoring program. The program should be implemented beginning the last week of May, just as the fishery is getting started. The program should continue through mid July as Chinook salmon run strength declines. Interview information survey forms should be completely filled out during each interview. Technicians conducting the inseason subsistence surveys should insure each fisher has a subsistence catch calendar in their possession and that the fisher fills out the calendar on at least a weekly basis. This information will provide better estimates of the post-season subsistence harvest surveys and provide valuable information on assessment of harvest timing.

We also recommend that the project objectives be modified as follows:

Objectives:

1. Index salmon run timing and relative abundance in May, June, and July through weekly interviews with Bethel Area subsistence salmon fishers.
2. Index fishing activity and gear usage through weekly interviews with Bethel Area subsistence salmon fishers in May, June, and July.
3. Provide local input into the management process fro the salmon subsistence fishery in May, June, and July through the presentation of weekly summaries of interviews with Bethel area subsistence salmon fishers at Kuskokwim River Salmon Management Working Group meetings.
4. Provide cross training to ONC technicians in other ADF&G and USFWS projects for up to two weeks.

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Table 1.—Historical utilization of Chinook salmon in the Kuskokwim River.

Year	Commercial Harvest ^a		Subsistence Harvest ^b		Test-Fish Harvest	Sport Fish Harvest	Total Utilization	10-Year Average
	Annual	10-yr Ave	Annual	10-yr Ave				
1960	5,969		18,887				24,856	
1961	18,918		28,934				47,852	
1962	15,341		13,582				28,923	
1963	12,016		34,482				46,498	
1964	17,149		29,017				46,166	
1965	21,989		24,697				46,686	
1966	25,545		49,325		285		75,155	
1967	29,986		59,913		766		90,665	
1968	34,278		32,942		608		67,828	
1969	43,997	22,519	40,617	33,240	833		85,447	56,008
1970	39,290	25,851	69,612	38,312	857		109,759	64,498
1971	40,274	27,987	43,242	39,743	756		84,272	68,140
1972	39,454	30,398	40,396	42,424	756		80,606	73,308
1973	32,838	32,480	39,093	42,885	577		72,508	75,909
1974	18,664	32,632	27,139	42,698	1,236		47,039	75,997
1975	22,135	32,646	48,448	45,073	704		71,287	78,457
1976	30,735	33,165	58,606	46,001	1,206		90,547	79,996
1977	35,830	33,750	56,580	45,668	1,264	33	93,707	80,300
1978	45,641	34,886	36,270	46,000	1,445	116	83,472	81,864
1979	38,966	34,383	56,283	47,567	979	74	96,302	82,950
1980	35,881	34,042	59,892	46,595	1,033	162	96,968	81,671
1981	47,663	34,781	61,329	48,404	1,218	189	110,399	84,284
1982	48,234	35,659	58,018	50,166	542	207	107,001	86,923
1983	33,174	35,692	47,412	50,998	1,139	420	82,145	87,887
1984	31,742	37,000	56,930	53,977	231	273	89,176	92,100
1985	37,889	38,576	43,874	53,519	79	85	81,927	93,164
1986	19,414	37,443	51,019	52,761	130	49	70,612	91,171
1987	36,179	37,478	67,325	53,835	384	355	104,243	92,225
1988	55,716	38,486	70,943 ^c	57,303	576	528	127,763	96,654
1989	43,217	38,911	81,176	59,792	543	1,218	126,154	99,639
1990	53,504	40,673	85,979	62,401	512	394	140,389	103,981
1991	37,778	39,685	85,554	64,823	117	401	123,850	105,326
1992	46,872	39,549	64,795	65,501	1,380	367	113,414	105,967
1993	8,735	37,105	87,512	69,511	2,483	587	99,317	107,685
1994	16,211	35,552	93,242	73,142	1,937	1,139	112,529	110,020
1995	30,846	34,847	96,436	78,398	1,421	541	129,244	114,752
1996	7,419	33,648	78,063	81,103	247	1,432	87,161	116,406
1997	10,441	31,074	81,577	82,528	332	1,227	93,577	115,340
1998	17,359	27,238	81,265	83,560	210	1,434	100,268	112,590
1999	4,705	23,387	73,194	82,762	98	252	78,249	107,800
2000	444	18,081	64,893	80,653	64	105	65,506	100,312
2001	90	14,312	73,610	79,459	86	290	74,076	95,334
2002	72	9,632	74,778	80,457	288	300	75,438	91,537
2003	158	8,775	67,788	78,485	0	401	68,347	88,440
10-Yr. Ave. (93-02)	8,771		80,457		651	731	91,537	

^a Districts 1 and 2; also includes harvests in District 3 from 1960 to 1965.

^b Estimated subsistence harvest expanded from villages surveyed.

^c Beginning in 1988, estimates are based on a new formula so data since 1988 is not comparable with previous years.

Table 2.—Historical utilization of chum salmon in the Kuskokwim River.

Year	Commercial Harvest ^a		Subsistence Harvest ^b		Test-Fish Harvest	Sport Fish Harvest	Total Utilization	Running 10-Year Average
	Annual	10-yr Ave	Annual	10-yr Ave				
1960	0		301,753 ^c				301,753	
1961	0		179,529 ^c				179,529	
1962	0		161,849 ^c				161,849	
1963	0		137,649 ^c				137,649	
1964	0		190,191 ^c				190,191	
1965	0		250,878 ^c				250,878	
1966	0		175,735 ^c		502 ^d		176,237	
1967	148		208,445 ^c		338		208,931	
1968	187		275,008 ^c		562		275,757	
1969	7,165	750	204,105 ^c	#REF!	384		211,654	209,443
1970	1,664	916	246,810 ^c	203,020	1,139 ^d		249,613	204,229
1971	68,914	7,808	116,391 ^c	196,706	254		185,559	204,832
1972	78,619	15,670	120,316 ^c	192,553	486		199,421	208,589
1973	148,746	30,544	179,259 ^c	196,714	675		328,680	227,692
1974	171,887	47,733	277,170 ^c	205,412	2,021		451,078	253,781
1975	184,171	66,150	176,389 ^c	197,963	1,062		361,622	264,855
1976	177,864	83,937	223,792 ^c	202,769	2,101		403,757	287,607
1977	248,721	108,794	198,355 ^c	201,760	576	125	447,777	311,492
1978	248,656	133,641	118,809 ^c	186,140	2,153	555	370,173	320,933
1979	261,874	159,112	161,239 ^c	181,853	412	259	423,784	342,146
1980	483,751	207,320	165,172 ^c	173,689	2,058	324	651,305	382,316
1981	418,677	242,297	157,306 ^c	177,781	1,793	598	578,374	421,597
1982	278,306	262,265	190,011 ^c	184,750	504	1125	469,946	448,650
1983	276,698	275,061	146,876 ^c	181,512	1,069	922	425,565	458,338
1984	423,718	300,244	142,542 ^c	168,049	1,186	520	567,966	470,027
1985	199,478	301,774	94,750	159,885	616	150	294,994	463,364
1986	309,213	314,909	141,931 ^c	151,699	1,693	245	453,082	468,297
1987	574,336	347,471	70,709	138,935	2,302	566	647,913	488,310
1988	1,381,674	460,773	151,967 ^e	142,250	4,379	764	1,538,784	605,171
1989	749,182	509,503	139,687	140,095	2,082	2023	892,974	652,090
1990	461,624	507,291	126,508	136,229	2,107	533	590,772	646,037
1991	431,802	508,603	93,075	129,806	931	378	526,186	640,818
1992	344,603	515,233	96,491	120,454	15,330	608	457,032	639,527
1993	43,337	491,897	59,396	111,706	8,451	359	111,543	608,125
1994	271,115	476,636	72,025	104,654	11,998	1280	356,418	586,970
1995	605,918	517,280	67,862	101,965	17,473	226	691,479	626,618
1996	207,877	507,147	88,965	96,669	2,864	280	299,986	611,309
1997	17,026	451,416	39,970	93,595	790	86	57,872	552,305
1998	207,809	334,029	63,537	84,752	1,140	291	272,777	425,704
1999	23,006	261,412	43,601	75,143	562	180	67,349	343,141
2000	11,570	216,406	51,696 ^f	67,662	1,038	26	64,330	290,497
2001	1,272	173,353	49,874	63,342	1,743	112	53,001	243,179
2002	1,900	139,083	76,842	61,377	2,666	53	81,461	205,622
2003	2,764	135,026	43,320	59,769	0	53	46,137	199,081
10-Yr. Ave.								
(93-02)	126,690		61,377		4,430	289	205,622	

^a Districts 1 and 2 only; no chum harvests were reported in District 3.

^b Estimated subsistence harvest expanded from villages surveyed.

^c Includes small numbers of small chinook, sockeye and coho salmon.

^d Includes small numbers of sockeye.

^e Beginning in 1988, estimates are based on a new formula so data since 1988 is not comparable with previous years.

^f 2000 subsistence harvest data not available

Table 3.—Historical utilization of sockeye salmon in the Kuskokwim River.

Year	Commercial Harvest		Subsistence Harvest		Test Fish Harvest	Sport Fish Harvest	Total Utilization	10-Year Average
	Annual	10-yr Ave	Annual	10-yr Ave				
1960								
1961								
1962								
1963								
1964								
1965								
1966								
1967								
1968								
1969	322	322					322	
1970	117	220					117	
1971	2,606	1,015					2,606	
1972	102	787					102	
1973	369	703					369	
1974	136	609					136	
1975	23	525					23	
1976	2,971	831					2,971	
1977	9,379	1,781					9,379	
1978	733	1,676					733	
1979	1,054	1,749					1,054	
1980	360	1,773					360	
1981	48,375	6,350					48,375	
1982	33,154	9,655					33,154	
1983	68,855	16,504				41	68,896	16,508
1984	48,575	21,348					48,575	21,352
1985	106,647	32,010				72	106,719	32,022
1986	95,433	41,257				196	95,629	41,287
1987	136,602	53,979				217	136,819	54,031
1988	92,025	63,108				291	92,316	63,190
1989	42,747	67,277	35,224			33	78,004	70,885
1990	84,870	75,728	36,276			61	121,207	82,969
1991	108,946	81,785	52,984			38	161,968	94,329
1992	92,218	87,692	32,066			131	124,415	103,455
1993	27,008	83,507	49,347			348	76,703	104,236
1994	49,365	83,586	37,159			359	86,883	108,066
1995	92,500	82,171	27,791			95	120,386	109,433
1996	33,878	76,016	34,213			315	68,406	106,711
1997	21,989	64,555	40,097			423	62,509	99,280
1998	60,906	61,443	35,425	38,058		178	96,509	99,699
1999	16,976	58,866	46,677	39,204		54	63,707	98,269
2000	4,130	50,792	41,783	39,754		46	45,959	90,745
2001	84	39,905	50,065	39,462	510	231	50,890	79,637
2002	84	30,692	28,858	39,142	228	26	29,196	70,115
2003	282	28,019	34,452		0	140	34,874	
10-Yr. Ave. (93-02)	30,692		39,142		369	208	70,410	

Table 4.—Historical utilization of coho salmon in the Kuskokwim River.

Table . Historical utilization of coho salmon in the Kuskokwim River.

Year	Commercial Harvest		Subsistence Harvest		Test Fish Harvest	Sport Fish Harvest	Total Utilization	10-Year Average
	Annual	10-Yr Ave.	Annual	10-Yr Ave.				
1980	222,012	222,012						
1981	211,251	216,632						
1982	447,117	293,460						
1983	196,287	269,167				1,375	197,662	
1984	623,447	340,023				1,442	624,889	
1985	335,606	339,287				136	335,742	
1986	659,988	385,101				1,222	661,210	
1987	399,467	386,897				1,767	401,234	
1988	524,296	402,163				927	525,223	
1989	479,856	409,933	52,918			2,459	535,233	
1990	410,332	428,765	44,791			581	455,704	
1991	500,935	457,733	50,331			1,003	552,269	
1992	666,170	479,638	40,168			1,692	708,030	
1993	610,739	521,084	31,737			980	643,456	
1994	724,689	531,208	33,050			1,925	759,664	
1995	471,461	544,793	36,277			1,497	509,235	
1996	937,299	572,524	32,741			3,423	973,463	
1997	130,803	545,658	29,032		33,699	2,408	195,942	585,822
1998	210,481	514,277	24,864	37,591		2,419	237,764	557,076
1999	23,593	468,650	25,003	34,799	213	1,998	50,807	508,633
2000	261,379	453,755	33,786	33,699	2,828	1,689	299,682	493,031
2001	192,998	422,961	29,504	31,616	1,723	1,204	225,429	460,347
2002	83,463	364,691	35,964	31,196	2,484	2,030	123,941	401,938
2003	284,064	332,023	35,240	31,546	570	3,244	323,118	369,904
2004	433,809	302,935		31,379	2,259 ^a		436,068	337,545
10-Yr. Ave. (94-03)	332,023		31,546		6,919	2,184	369,904	

^a Includes Test Fishery donations.

Table 5.—Kuskokwim River inseason subsistence survey report summaries of salmon fishing, 2001.

Lower Kuskokwim (Bethel area) summary of information collected by ONC technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho			
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	
Jun 09	16	16	0	6	6	4										
Jun 16	39	39	0	18	15	6	1	19	15	13	24	1				
Jun 23	35	35	0	27	7	1	0	15	20	24	11	0	0	0	0	0
Jun 30	40	25	15	8	7	8	5	12	8	19	6	0	0	0	0	0
Jul 07	44	7	37	0	1	5	5	1	1	0	5	2	0	0	0	0
Jul 14	44	6	38	0	0	4	4	2	0	0	0	4	0	0	0	0
Jul 21	44	0	44	0	0	0	0	0	0	0	0	0	0	0	0	0
Jul 28	44	9	35	0	0	0	1	7	0	0	0	0	0	7	1	
Aug 04	42	20	22				0	1	17				18	2	0	
Aug 11	37	2	35				0	0	0				2	1	0	
Aug 18	37	3	34				0	0	3				1	2	0	
Aug 25	44	3	34				0	0	3				3	0	0	
Total	466	165	294	59	36	28	16	57	67	56	46	7	24	12	1	
Average	39	14	25	7	5	4	1	5	6	8	7	1	2	1	0	

Middle Kuskokwim River summary of information collected by KNA technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho			
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	
Jun 09	4			1	2	1	1	0	0	0	0	0	0	0	0	0
Jun 16	14			4	11	1	2	7	3	0	7	1	0	0	0	0
Jun 23	14			4	11	1	2	7	3	8	7	1	0	0	0	0
Jun 30	14			1	10	3	0	5	6	10	2	0	0	0	0	0
Jul 07	3	3	0	0	3	0	0	0	3	0	2	1	0	0	0	0
Jul 21	2			0	0	0	1	1	0	0	0	0	0	0	0	0
Total	33	3	0	5	24	4	3	13	12	18	11	2	0	0	0	0
Average	8			1	6	1	1	3	3	5	22	4	0	0	0	0

Upper Kuskokwim River summary of information collected by MNVC technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho			
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	
Jun 23	3	3	0		3											
Jun 30	1	1	0		1											
Jul 07	6			3	3					2						
Jul 14	7			3	4			2								
Total	17			6	11			2		2						
Average	4			3	3			2		2						

Table 6.–Kuskokwim River inseason subsistence survey fishing gear summary, 2001.

Lower Kuskokwim (Bethel area) summary of information collected by ONC technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets < 6"	Gillnets < 6"
Jun 09	16	-	-	-	-	-
Jun 16	39	-	-	-	-	-
Jun 23	35	28	8	-	31	6
Jun 30	40	23	2	-	14	13
Jul 07	44	7	-	-	1	6
Jul 14	44	5	1	-	-	6
Jul 21	44	0	0	-	-	-
Jul 28	44	7	2	-	-	9
Aug 04	42	20	0	-	-	20
Aug 11	37	2	0	1	-	2
Aug 18	37	2	0	1	-	-
Aug 25	44	3	0	-	-	-
Total	466	97	13	2	46	62

Middle Kuskokwim River summary of information collected by KNA technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets > 6"	Gillnets < 6"
Jun 09	4	-	-	-	-	-
Jun 16	14	11	4	-	12	4
Jun 23	14	11	4	-	12	4
Jun 30	14	9	6	-	10	4
Jul 07	3	2	1	-	2	1
Jul 21	2	2	1	-	1	1
Total	51	35	16	-	37	14

Upper Kuskokwim River summary of information collected by MNVC technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets > 6"	Gillnets < 6"
Jun 23	3	-	3	-	1	2
Jun 30	1	-	1	-	-	-
Jul 07	6	1	5	1	1	4
Jul 14	7	1	2	3	1	1
Total	17	2	11	4	3	7

Table 7.–Kuskokwim River inseason subsistence survey summaries of salmon fishing, 2002.

Lower Kuskokwim (Bethel area) summary of information collected by ONC technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho		
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor
Jun 15	27	23	4	21	2	0	3	8	7	3	11	3	0	0	0
Jun 22	33	25	8	17	5	3	12	9	3	2	10	10	0	0	0
Jun 29	34	22	12	16	6	0	21	0	0	0	3	16			
Jul 06	34	5	29	0	2	3	3	2	0	0	0	5			
Jul 13	36	10	26	0	3	5	8	0	0	0	0	8	0	0	0
Jul 20	40	9	31	0	9	0	1	7	1	0	0	9	0	0	0
Jul 27	35	31	4	0	31	0	0	31	0	0	31	0	9	22	0
Aug 03	37	13	24	0	0	0	0	10	2	0	0	0	9	4	0
Aug 10	37														
Total	313	138	138	54	58	11	48	67	13	5	55	51	18	26	0
Average	35	17	17	7	7	1	6	8	2	1	7	6	3	4	0

Middle Kuskokwim River summary of information collected by KNA technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho		
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor
Jun 08	3	2	1	0	1	1	1	0	0	0	0	0	0	0	0
Jun 15	16	11	5	0	4	7	0	0	11	0	0	0	0	0	0
Jun 22	15	15	0	4	10	1	3	9	0	0	10	1	0	0	0
Jun 29	17	15	2	4	5	6	8	4	0	0	5	5	1	0	0
Jul 06	3	2	1	0	1	1	1	0	0	0	0	0	0	0	0
Jul 13	5	3	2	1	1	1	0	0	0	0	0	0	0	0	0
Total	56	46	10	9	21	16	12	13	11	0	15	6	1	0	0
Average	11	9	2	2	4	3	2	3	2	0	3	1	0	0	0

Upper Kuskokwim River summary of information collected by MNVC technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho		
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor
Jun 15	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0
Jun 22	2			1	0	1	0	0	0	0	0	0	0	0	0
Jun 29	6			2	1	3	0	0	0	0	0	0	0	0	0
Jul 06	9			1	4	3	0	0	0	0	0	1	0	0	0
Jul 13	9			2	4	3	1	0	0	0	0	1	0	0	0
Jul 20	5	5		0	4	1	0	0	0	0	0	0	0	0	0
Jul 27	5	4	1	0	1	4	0	0	0	0	0	0	0	0	0
Aug 17	10			0	0	0	0	0	2	0	0	0	5	4	1
Total	48	11	1	7	14	15	1	0	2	0	0	2	5	4	1
Average	6	4	1	1	2	2	0	0	0	0	0	0	1	1	0

Table 8.—Kuskokwim River inseason subsistence survey fishing gear summary, 2002.

Lower Kuskokwim summary of information collected by ONC technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets > 6"	Gillnets < 6"
Jun 15	27	23	7	-	23	-
Jun 22	33	24	2	-	23	3
Jun 29	34	21	2	-	14	8
Jul 06	34	5	-	-	2	3
Jul 13	36	8	-	-	-	8
Jul 20	40	9	-	-	-	9
Jul 27	35	31	-	-	-	31
Aug 03	37	12	-	1	-	-
Aug 10	37	0	-	-	-	-
Total	313	133	11	1	62	62

Middle Kuskokwim River summary of information collected by KNA technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets > 6"	Gillnets < 6"
Jun 06						
Jun 15	16	7	4	-	11	-
Jun 22	15	10	7	-	15	-
Jun 29	17	11	7	-	6	12
Jul 06	3	2	1	-	2	1
Jul 13	5	2	1	-	2	1
Jul 20						
Jul 27						
Aug 03						
Aug 10						
Total	56	32	20	-	36	14

Upper Kuskokwim River summary of information collected by MNVC technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets > 6"	Gillnets < 6"
Jun 06						
Jun 15	2	-	2	-	1	1
Jun 22	2	-	2	-	1	1
Jun 29	6	3	3	3	-	3
Jul 06	9	2	1	8	-	2
Jul 13	9	2	0	7	-	2
Jul 20	5	0	0	5	-	-
Jul 27	5	-	0	4	-	-
Aug 10						
Aug 17	10	-	1	9	-	-
Total	48	7	9	36	2	9

Table 9.—Kuskokwim River inseason subsistence survey report summaries of salmon fishing, 2003.

Lower Kuskokwim (Bethel area) summary of information collected by ONC technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho		
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor
Jun 07	18	9	9	7	2	0							0	0	0
Jun 14	33	24	9	22	2	0	0	2	0	0	3	0			
Jun 21	48	32	14	30	2	1	1	0	0	7	18	3			
Jun 28	50	34	16	30	4	0	3	9	13	27	7	0			
Jul 05	45	21	24	16	5	0	8	13	0	16	5	0			
Jul 12	46	14	32	0	12	2	13	1	0	0	12	2			
Jul 19	48	5	43	0	5	0	5	0	0	0	5	0	2	3	0
Jul 26	48	7	41	0	7	0	4	3	0	0	7	0	6	1	0
Aug 09	49	11	38	0	0	0	0	0	0	0	0	0	10	1	0
Aug 16	48	10	38	0	0	0	0	0	0	0	0	0	9	1	0
Total	433	167	264	105	39	3	34	28	13	50	57	5	27	6	0
Average	43	17	26	11	4	0	4	3	1	6	6	1	5	1	0

Middle Kuskokwim River summary of information collected by KNA technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho		
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor
Jun 14	19			0	11	7	0	10	6	0	4	6	0	0	0
Jun 21	27			3	15	9	1	13	10	0	18	8	0	0	0
Jun 28	17			3	9	4	0	13	3	0	15	2	0	0	0
Jul 05	17			0	8	0	3	4	0	2	4	2	0	0	0
Jul 12	27			2	5	0	8	0	1	5	4	1	0	0	0
Jul 19	7			0	4	0	1	5	0	0	6	0	0	0	0
Aug 09	13			0	0	0	0	1	1	0	0	0	0	4	0
Total	127			8	52	20	13	46	21	7	51	19	0	4	0
Average	18			1	7	3	2	7	3	1	7	3	0	1	0

Upper Kuskokwim River summary of information collected by MNVC technicians.

Week Ending	Number of Families			Chinook			Chum			Sockeye			Coho		
	Contacted	Fished	Not Fished	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor	Good	Norm	Poor
Jun 21	3			2	0	1	0	1	0	1	0	0	0	0	0
Jun 28	11			3	1	7	0	0	2	1	0	0			
Jul 05	9			1	6	2	0	0	0	0	0	0	0	0	0
Jul 12	11			3	5	0	1	2	0	3	0	0	0	0	0
Jul 19	9	3	6	1	0	2	0	0	0	0	0	0	0	0	0
Jul 26	12	3	9	2	0	1	0	0	0	0	0	0	0	0	0
Aug 09	9	3	6	0	0	0	0	1	2	0	0	0	0	2	1
Total	64	9	21	12	12	13	1	4	4	5	0	0	0	2	1
Average	9	3	7	2	2	2	0	1	1	1	0	0	0	0	0

Table 10.—Kuskokwim River inseason subsistence survey fishing gear summary, 2003.

Lower Kuskokwim summary of information collected by ONC technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets > 6"	Gillnets < 6"
Jun 07	18	8	1	-	9	0
Jun 14	33	23	4	-	24	0
Jun 21	48	32	1	1	31	3
Jun 28	50	34	2	-	32	4
Jul 05	45	21	-	-	5	16
Jul 12	46	11	3	-	3	11
Jul 19	48	3	2	-	-	5
Jul 26	48	6	1	-	-	7
Aug 09	49	7	0	6	-	7
Aug 16	48	3	3	4	-	6
Total	433	148	17	11	104	59

Middle Kuskokwim River summary of information collected by KNA technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets > 6"	Gillnets < 6"
Jun 07						
Jun 14	19	16	7	-	6	13
Jun 21	27	25	4	-	14	18
Jun 28	17	15	5	-	8	9
Jul 05	17	8	1	-	5	3
Jul 12	27	7	2	-	2	5
Jul 19	7	6	1	-	1	5
Jul 26						
Aug 09	13	2	-	5	-	-
Total	127	79	20	5	36	53

Upper Kuskokwim River summary of information collected by MNVC technicians.

Week Ending	Families Surveyed	Using Driftnet	Using Setnet	Using Rod & Reel	Gillnets > 6"	Gillnets < 6"
Jun 07						
Jun 14	0	-	-	-	-	0
Jun 21	3	1	2	-	-	2
Jun 28	11	1	10	-	5	6
Jul 05	9	0	7	2	3	4
Jul 12	11	0	5	3	-	5
Jul 19	9	0	2	1	-	2
Jul 26	12	0	1	2	1	0
Aug 09	9	0	2	1	-	2
Total	64	2	29	9	9	21

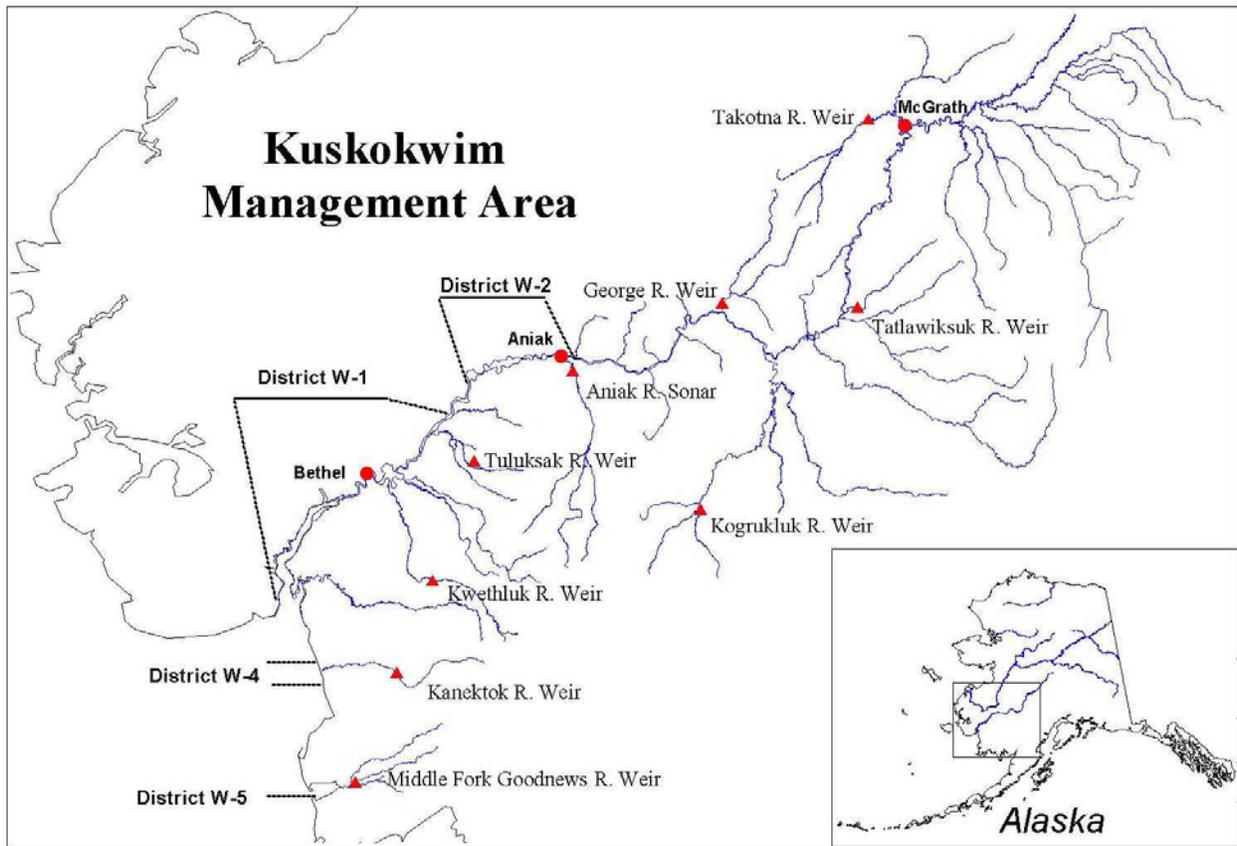


Figure 1.—Map of Kuskokwim River Management Area.

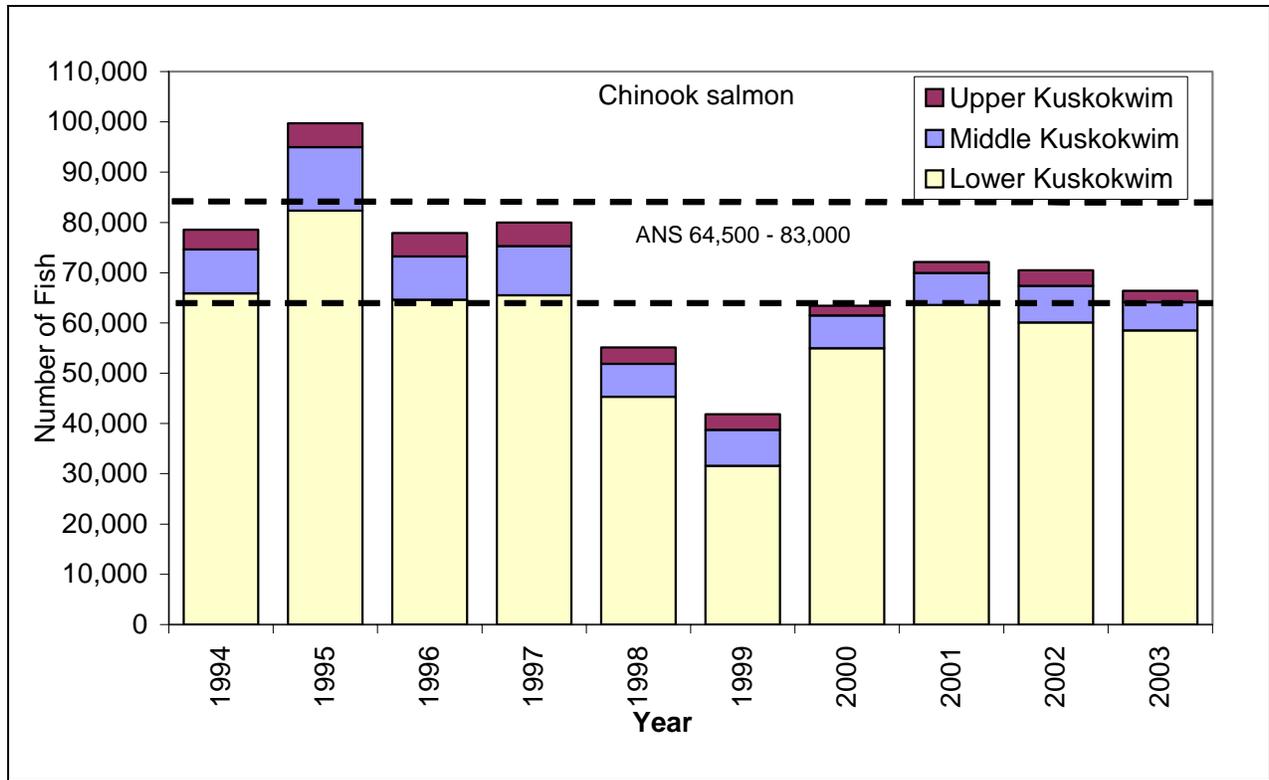


Figure 2.—Subsistence Chinook salmon harvest as reported by post season harvest surveys, Kuskokwim River, 1994-2003.

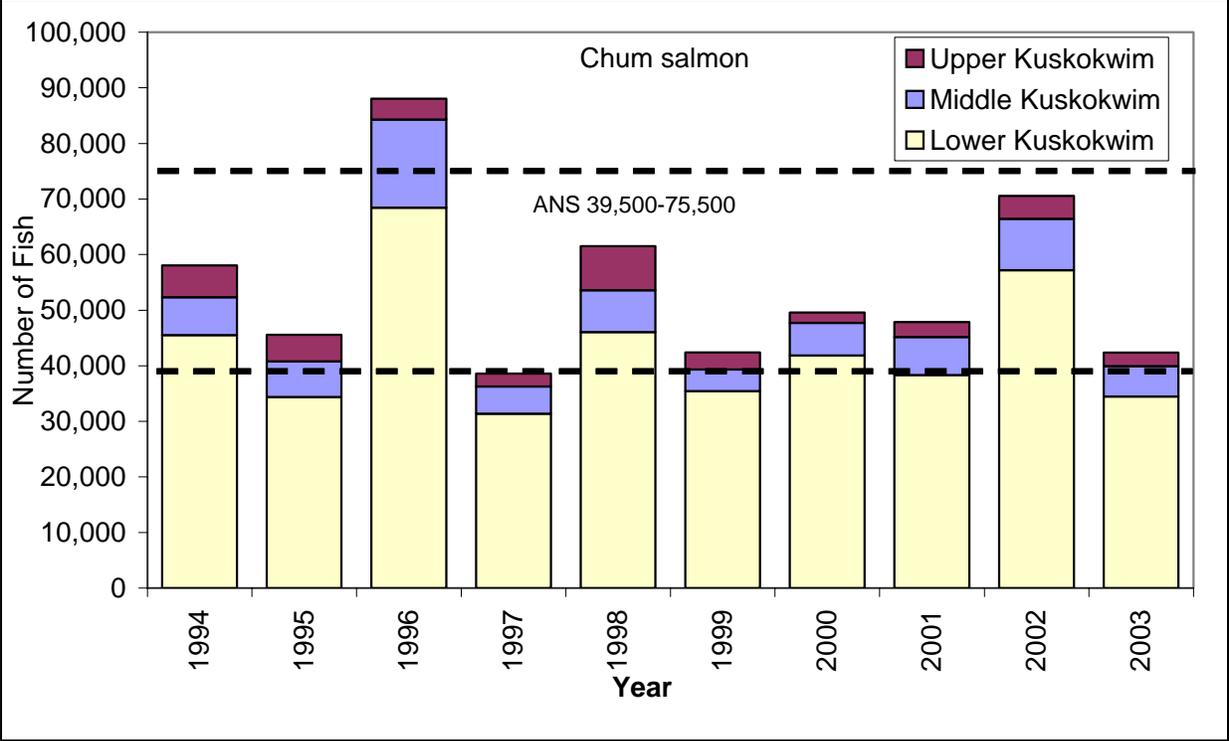


Figure 3. Subsistence chum salmon harvest as reported by post season harvest surveys, Kuskokwim River, 1994-2003.

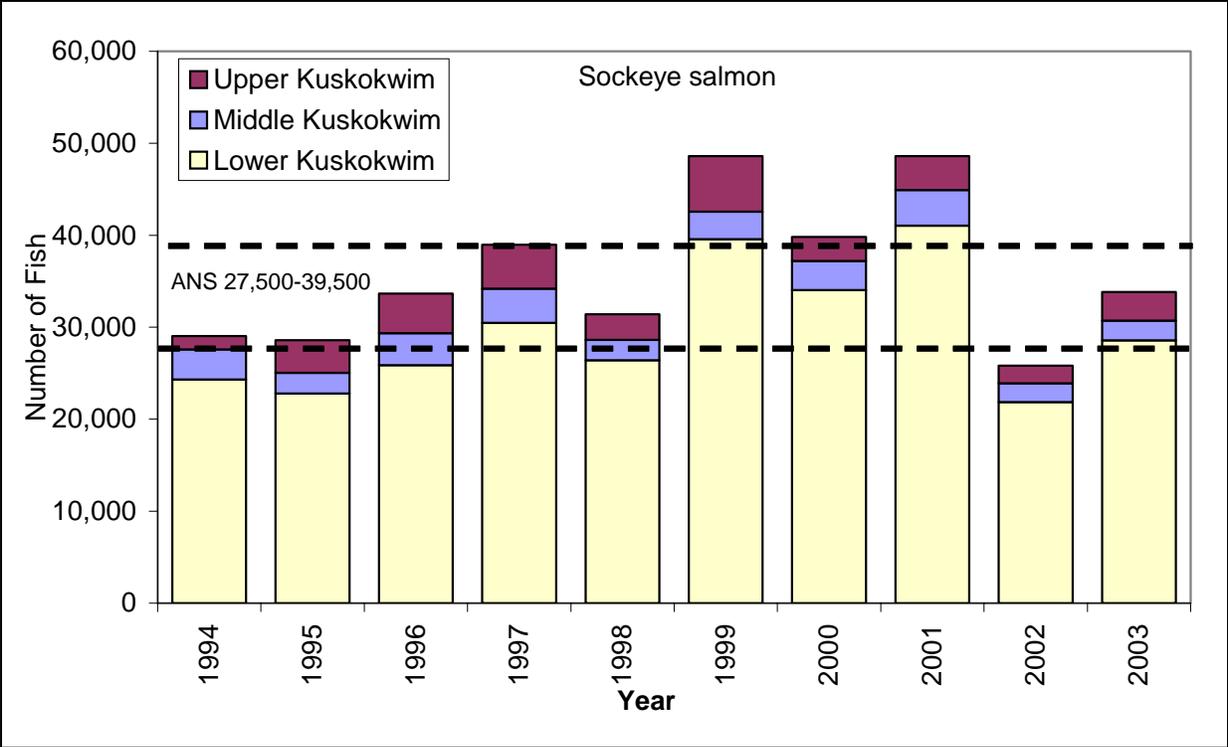


Figure 4.—Subsistence sockeye salmon harvest as reported by post season harvest surveys, Kuskokwim River, 1994-2003.

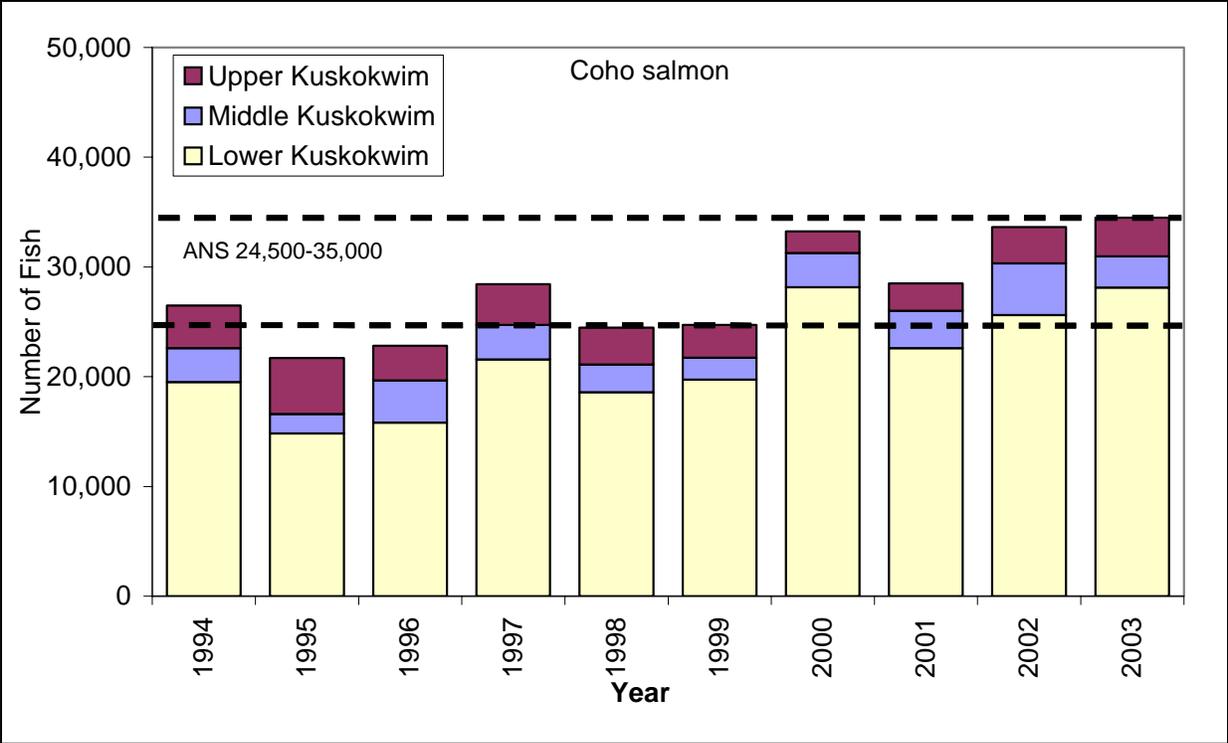


Figure 5.—Subsistence coho salmon harvest as reported by post season harvest surveys, Kuskokwim River, 1994-2003.

Appendix A.—Example of Subsistence Salmon Fishing Survey Form, Kuskokwim River.

SUBSISTENCE SALMON FISHING MONITORING: KUSKOKWIM RIVER DRAINAGE, 2001

Family Name: Lastname Firstname _____ Fishcamp Location _____

Date family started salmon fishing this year _____ Gillnet Fishing Areas _____

1. Does your family plan to reduce their King salmon harvest this year ? _____ 3. What are your family's salmon harvest goals this year ? (number of salmon)
 2. If Yes, how much ? 10%, 15%, 25%, 30%, _____ King _____ Chum _____ Sockeye _____ Coho _____
 (Circle percentage or write in percentage on blank provided) Chinook " Red " " Silver "

Interview Date	Staff ID	Fishing Gear used this week				How was Subsistence salmon fishing for your family ?									Percent Completed		Why was fishing poor ?			
		Drift Net	Set Net	Rod Reel	Fish Wheel	King Salmon			Chum Salmon			Sockeye Salmon			King %	Chum & Sockeye %	No Fish ? Size of Kings?	Water levels ?	Do fish look healthy ? Other comments?	
						Very Good	OK	Poor (why ?)	Very Good	OK	Poor (why ?)	Very Good	OK	Poor (why ?)						
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				

START AUGUST HERE

Interview Date	Staff ID	Fishing Gear used this week				How was Subsistence salmon fishing for your family ?									Percent Completed		Why was fishing poor ?			
		Drift Net	Set Net	Rod Reel	Fish Wheel	Coho Salmon			Chum Salmon			Coho %	Chum %	No Fish ?	Water levels ?	Do fish look healthy ? Other comments?				
						Very Good	OK	Poor (why ?)	Very Good	OK	Poor (why ?)									
16																				
17																				
18																				
19																				
20																				

Date family stopped subsistence fishing for: King Salmon _____, Chum Salmon _____, Sockeye Salmon _____, Coho Salmon _____

NOTES

Appendix B01.01.—Lower Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, Orutsamiut Native Council, June 11, 2001.

Fishing ending the week of June 09, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
16	-	-	-	-	-

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
6	6	4	0	0	0	0	0	0	0	0	0

Summary:

High water was reported as a factor for poor salmon catch rates. Some families have reported that they have met their king salmon harvest goals and have stopped fishing for kings, however many families were still working to harvest salmon.

Appendix B01.02–Lower Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, Orutsararmiut Native Council, June 18, 2001.

Fishing ending the week of June 16, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
39	-	-	-	-	-

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
18	15	6	1	19	15	13	24	1	0	0	0

Summary:

Some families have reported that they have met their king salmon harvest goals and have stopped fishing for kings, however many families were still working to harvest salmon.

Fishing ending the week of June 23, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
35	28	8	-	31	6

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
27	7	1	0	15	20	24	11	0	0	0	0

Chinook:

One long time Bethel resident reported that he hadn't seen so many kings at this time of year in a long time. One fish reported the king run was very strong this week. Several families reported that they were done fishing for king salmon.

Chum:

One fisher reported that there were more chum salmon this week compared to last week.

Sockeye:

Several fishers reported catching sockeye salmon in their king gear and that sockeye were very large this year.

Summary:

In general, fishers report very good success fishing for kings and sockeye salmon during this survey period, and normal to poor fishing for chum salmon.

Fishing ending the week of June 30, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
40	23	2	-	14	13

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
8	7	8	5	12	8	19	6	0	0	0	0

Chinook:

Fishermen had few comments to add. A couple of fishermen reported that the Kings are stronger this week and a couple said that the run this week were starting to slow down.

Chum:

One long time fisherman reported that this week's run of chums were a lot larger than the previous weeks, catching chums in his 8" king gear. Six fishermen reported that there are more chums than sockeyes.

Sockeye:

Four fishermen reported that there are more sockeyes than chum. Several fishermen reported catching sockeye salmon in the king gear and that sockeye were very large this year. Fishermen also reported that they were catching more sockeye this week than last week.

Summary:

In general, fishermen report very good to normal fishing for kings and very good for sockeye salmon during this survey period, and also higher numbers of chums this week.

Fishing ending the week of July 07, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
44	7	0	-	1	6

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	1	5	5	1	1	0	5	2	0	0	0

Chinook:

32 families reported that they were finished with kings. Fishermen had fewer comments this week pertaining to king catch due to switching over to their chum gear and the slowing down of the run for this year.

Chum:

4 families reported that they were finished with chums. One fisherman reported that this week's chums were in higher numbers than reds. One long time fisher reported going out for a quick drift (set & pull) and ended up catching 71 chums, 1 red and no kings.

Sockeye:

Fishermen had fewer comments this week pertaining to reds due to the slowing down of the run for this year.

Summary:

In general, fishers report poor for kings due to the switch over of king gear and the slowing down of the run for this year. For reds overall fishermen reported that the run is slowing down. For chums overall, fishermen reported that fishing is going pretty steady and the run is still strong. Two long fishers reported that a couple of cohos were caught in this weeks opening and being very early for silvers to be running.

Fishing ending the week of July 14, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
44	5	1	-	0	6

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	4	4	2	0	0	0	4	0	0	0

Chinook:

No families reported still fishing for kings. All 44 families on the survey list reported being finished with kings. There were 4 fishermen that incidentally caught kings and reported that their king catches were poor due to the end of the run.

Chum:

12 families reported that they were finished with chums. For the fishermen that did fish this week, they reported that there are a lot of chums out there. A few fishermen that did not fish reported that there are a lot of chums out there.

Sockeye:

No families reported still fishing for sockeye. All 44 families on the survey list reported being finished with sockeye. There were 4 fishermen that incidentally caught sockeye and reported that their sockeye catches were poor due to the end of the run.

Summary:

In general, fishers reported high numbers of chums. As for kings and sockeye overall, the runs have passed. Overall most families did not fish due to the wet weather and are holding off till the weather improves for proper fish drying weather. In other comments it's not worth fishing 2 days a week, fishermen can catch more in August if the fishing schedules goes back to 4 days a week.

Fishing ending the week of July 21, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
44	0	0	0	0	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	0	0	0	0	0	0	0

Chinook:

No families reported still fishing for kings. All 44 families on the survey list reported being finished with kings.

Chum:

No families reported still fishing for chums. All 44 families on the survey list reported being finished with chums.

Sockeye:

No families reported still fishing for sockeye. All 44 families on the survey list reported being finished with sockeye.

Summary:

In general fishermen did not fish due to the wet weather and are holding off till the weather improves for proper fish drying weather. Some fishermen reported not being able to fish due to the mid week openings and not being able to fish on the weekends. A couple fishermen reported having 2 days to fish is not worth fishing, so they are holding off till the openings are extended to longer fishing periods.

Appendix B01.08.—Lower Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, Orutsararmiut Native Council, July 30, 2001.

Fishing ending the week of July 28, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
44	7	2	0	0	9

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	1	7	0	0	0	0	0	7	1

Chinook:

All 44 families on the survey list reported being finished with kings.

Chum:

No additional comments.

Sockeye:

All 44 families on the survey list reported being finished with sockeye.

Coho:

There were a few comments from fishermen that the run of coho is picking up slowly everyday.

Summary:

In general, most of the families were taking a break from the fish to start on their berry picking season until the coho run reaches it's peak.

Fishing ending the week of August 4, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
42	20	0	-	0	20

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	1	17	0	0	0	18	2	0

Chinook:

All families surveyed reported being finished with kings.

Chum:

All families surveyed reported being finished with chums.

Sockeye:

All families surveyed reported being finished with sockeye.

Coho:

No further comments.

Summary:

Many families were still not actively working on Coho harvest efforts due to berry picking activities. A few comments from fishermen said that the run of Coho is picking up slowly. Most observations of those fishing however, stated that the run appeared to be very good compared to last year, as reflected by catches doing so well even with the high water over the past week. Several families reported that they have already fulfilled their Coho subsistence needs for the season.

Fishing ending the week of August 11, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
37	2	0	1	0	2

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	0	0	0	0	2	1	0

Chinook:

All families surveyed reported being finished with kings.

Chum:

No families reported fishing for chums this week.

Sockeye:

All families surveyed reported being finished with sockeye.

Coho:

No further comments.

Summary:

Many families were still not actively working on Coho harvest efforts due to berry picking activities. Several families reported not fishing this week due to the commercial openings. A few comments from fishermen said that the run for this year's Coho is so thick that they haven't seen the fish so thick in a long time.

Appendix B01.11.—Lower Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, Orutsararmiut Native Council, August 20, 2001.

Fishing ending the week of August 18, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
37	2	0	1	n/a	n/a

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	3	0	0	0	1	2	0

Chinook:

No further comments.

Chum:

No further comments.

Sockeye:

No further comments.

Coho:

No further comments.

Summary:

Many families reported being finish with all salmon subsistence activities. There are only a few families that are still waiting to fish for Coho and haven't been able to coordinate personal schedules for fishing with bad weather or commercial openings.

Fishing ending the week of August 25, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
44	3	0	0	n/a	n/a

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	3	0	0	0	3	0	0

Chinook:

No further comments.

Chum:

No further comments.

Sockeye:

No further comments.

Coho:

No further comments.

Summary:

Of the 44 families surveyed this week, all reported achieving their harvest goals for Coho salmon. 40 reported achieving their harvest goals for all salmon. 4 families reported that they did not meet their subsistence harvest goals for chum salmon; one of who said this was primarily due to the 2 days per week schedule enacted in July. Most said it was good fishing all summer even with short/cut down amount of fishing days allowed. A couple people suggested that Fish & Game, Fish & Wildlife, and Salmon Working Group members should go on KYUK talk show to recap this year's fishing season and provide projections/outlook for next summer's anticipated subsistence fishing schedule.

Fishing ending the week of June 15, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
27	23	7	0	23	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
21	2	0	3	8	7	3	11	3	0	0	0

Chinook:

Thirteen fishers reported that this year's return on kings is early and strong with fish being larger than average.

Chum:

Out of the 23 families reported fishing this week none of them reported targeting chums yet and were only fishing with their king gear.

Sockeye:

No additional comments.

Summary:

In general, fishers report overall there are lots of fish so far this year. Only 1 fisher reported catching a fish with abnormalities (white spots in the flesh) compared to this time last year when such observations were commonly reported.

Fishing ending the week of June 22, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
33	24	2	0	23	3

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
17	5	3	12	9	3	2	10	10	0	0	0

Chinook:

One fisherman reported the kings slower this week but large in size. One fisherman reported a lower average of kings but started fishing late. One fisherman fished with a short and shallow net and was very surprised to catch kings with it and noted there were a lot of kings out there.

Chum:

Four fishermen reported the chums are strong and more abundant this year than the past couple seasons even while fishing with king gear.

Sockeye:

Seven fishermen reported still using king gear and could have caught more reds with a smaller mesh size. Five fishers reported still waiting for reds. Two fishers stated the reds as slow for this time of year compared to a normal year.

Summary:

In general, fishers continue to report runs are healthy this year. During this report period however, several families noted it is fortunate the run is strong, since participation in search and rescue efforts, funeral activities and cultural prohibitions related to two recent drownings, the time restriction on subsistence harvest has created further substantial hardship and disruption to pursuing their subsistence needs. It was also noted that it is getting late in the month and flies are becoming an increasingly significant problem.

Fishing ending the week of June 29, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
34	21	2	0	14	8

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
16	6	0	21	0	0	0	3	16	0	0	0

Chinook:

Five fishers reported that the second run of kings is in. Most families are in their final week of fishing for kings.

Chum:

Five fishers reported the chums are larger in size and more abundant this year than the past couple seasons even while fishing with king gear. One long time fisher indicated that the chums are nearing the end of their run looking redder in color and having elongated noses.

Sockeye:

Seven fishers reported still using king gear and could have caught more reds with a smaller mesh size. Eight fishers reported still waiting for reds. A few fishers stated the reds and chums are reversed from last year, catching two-thirds more chums than reds, when compared to last year, catching one-third chums to two-third reds.

Summary:

In general, families are slowing down in subsistence activities due to the end of the month of June; putting weather, flies and the slowing of the runs into perspective.

Fishing ending the week of July 06, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
34	5	0	0	2	3

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	2	3	3	2	0	0	0	5	0	0	0

Chinook:

Nineteen fishers stated that this week the run for kings has slowed down and is nearing the end of the run for this year. Ten fishers concluded that the run for kings this year was unusually early with larger fish.

Chum:

Seventeen fishers concluded the run of chums this year was more abundant than the past couple seasons even while fishing with king gear.

Sockeye:

Nineteen fishers concluded that the run of reds overall was slow for this year.

Summary:

In general, most everybody is finished with their subsistence fishing for kings, chums and reds and are focused on taking care of their smoke houses and storing their finished dry fish away for the winter.

Fishing ending the week of July 13, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
36	8	0	0	0	8

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	3	5	8	0	0	0	0	8	0	0	0

Chinook:

Overall fishers concluded that the run for kings this year was unusually early but strong with larger fish.

Chum:

Overall fishers concluded the run of chums this year was more abundant than the past couple seasons with larger fish.

Sockeye:

Overall fishers concluded that the run of reds was slow for this year.

Summary:

In general, most everybody is finished with their subsistence fishing for kings, chums and reds and are focused on taking care of their smoke houses and storing their finished dry fish away for the winter.

Fishing ending the week of July 20, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
40	9	0	0	0	9

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	9	0	1	7	1	0	0	9	0	0	0

Chinook:

All families surveyed reported being finish with kings for the season.

Chum:

All families surveyed reported being finish with chums for the season.

Sockeye:

All families surveyed reported being finish with sockeyes for the season.

Summary:

In general, most everybody is finished with their subsistence fishing for kings, chums and reds and are focused on berry picking and taking care of their smoke houses and storing their finished dry fish away for the winter, and are waiting for the cohos to start coming strong before any further effort on salmon fishing.

Fishing ending the week of July 27, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
35	31	0	0	0	31

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	31	0	0	31	0	0	31	0	9	22	0

Chinook:

All families surveyed reported being finish with kings for the season. All families reported their catches as normal for this time compared to a normal year.

Chum:

All families surveyed reported being finish with chums for the season. All families reported their catches as normal for this time compared to a normal year.

Sockeye:

All families surveyed reported being finish with sockeyes for the season. All families reported their catches as normal for this time compared to a normal year.

Coho:

Twenty-three families said they had gotten all they wanted already and were done for the season. Two stated they had gone out yet, and 2 stated no intention of fishing for coho.

Summary:

Subsistence fishing for kings, chums, and reds is over for the season. Four fishers mentioned that like kings and chums, coho appear to be early and larger than normal for this time of the season.

Fishing ending the week of August 3, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
37	12	0	1	n/a	n/a

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	10	2	0	0	0	9	4	0

Chinook:

All families surveyed reported being finish with kings for the season.

Chum:

All families surveyed reported being finish with chums for the season.

Sockeye:

All families surveyed reported being finish with sockeyes for the season.

Coho:

No additional comments.

Summary:

Subsistence fishing for kings, chums, and reds is over for the season. Six fishers mentioned that like kings and chums, coho appear to be early and larger than normal for this time of the season.

Appendix B02.09.—Lower Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, Orutsarmiut Native Council, August 12, 2002.

Fishing ending the week of August 10, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
37	0	0	0	0	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	0	0	0	0	0	0	0

Summary:

No surveys were conducted during this period to produce the standardized reporting format. Per the section of this contract calling for assistance, involvement and cross-training of ONC technicians in other Kuskokwim area salmon management projects, Byron Dull was assigned to the Kogruluk weir last week, where staffing was also short-handed because of illness. He is scheduled to return to Bethel the evening of August 15, weather (or forest-fire smoke/visibility) permitting.

Moses Anvil was initially scheduled to return from routine medical testing in Anchorage on August 7, but was informed by Doctor after arrival, for precautionary reasons, to plan on remaining there until approximately August 20 pending test results.

Informal personal communications with 20+ fishers over the past week reflected most everyone having (had) no difficulty meeting their subsistence needs. One exception was an individual who stated that he only got 2 fish near Bethel on Saturday following the August 9 opening. He expressed strong concern that the commercial fishing schedule was too aggressive. Another fisher who was out the same day and general location (downriver near Bethel) stated more the norm of setting only a portion of his net and having to pull in quickly to avoid catching to many/more than he wanted.

Fishing ending the week of June 07, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
18	8	1	0	9	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
7	2	0	0	0	0	0	0	0	0	0	0

Chinook:

No additional comments.

Chum:

Of the nine families fishing, all stated that it was far to early to make any determination of how the chum run was developing. One family reported catching 1 chum salmon.

Sockeye:

Of the 9 families fishing, all stated that it was far to early to make any determination of how the sockeye run was developing. One family reported catching 1 sockeye salmon.

Summary:

Many people have not actively started fishing yet and were unavailable for interviews, but most who have report that the king run appears to be good so far this year. All stated the expectation that fish will be running strong and hard next week. Staff focused efforts this week on distributing ASL sample kits and initial or refreshment training for individuals to gather the information.

Fishing ending the week of June 14, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
33	23	4	0	24	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
22	2	0	0	2	0	0	3	0	0	0	0

Chinook:

Eighteen fishers reported the king run as stronger compared to last week. Seven fishers reported the fish larger in size compared to last week.

Chum:

Overall, everyone is fishing with king gear and not fishing for chums yet, it is still early in the season to fish for chum.

Sockeye:

Overall, everyone is fishing with king gear and not fishing for sockeye yet, it is still early in the season to fish for sockeye.

Summary:

Most fishers who were interviewed report that the king run appears to be good so far this year and all are happy with their catches. For chums and sockeye, it's too early in the season to determine how the runs are going to be. All fishers are fishing with king gear and are not catching a significant amount of chums and sockeye due to the sizes of their mesh.

Fishing ending the week of June 21, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
48	32	1	1	31	3

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
30	2	1	1	0	0	7	18	3	0	0	0

Chinook:

Fifteen fishers reported the king run this week are larger in size compared to last week. Nine fishers reported the king run is still running strong and plentiful. Two fishers reported the run is slowing down and fishing for kings is getting slow. One family fished for kings with rod and reel but did not get any bites and did not have a comment for this week.

Chum:

Overall, everyone is fishing with king gear and not fishing for chums yet and had no comments for this week. One fisher reported that there are a lot of chums swimming by out there.

Sockeye:

Overall, everyone is fishing with king gear and not fishing for sockeye yet – what was reported was “by catch” in their king gear compared to a normal year.

Summary:

Most fishers who were interviewed report that the king run appears to be good so far this year and all are happy with their catches – also most that reported are finishing up with their harvests for kings this year. Most fishers are fishing with king gear and are not catching a significant amount of chums and sockeye due to the sizes of their mesh – but report that chums and reds appear to be plentiful.

Fishing ending the week of June 28, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
50	34	2	0	32	4

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
30	4	0	3	9	13	27	7	0	0	0	0

Chinook:

Fourteen families reported being finished with their king harvests for the summer. Overall, fishers reported the run is slowing down but larger kings are coming in now.

Chum:

Overall, most everyone is fishing with king gear and not really fishing for chums yet. Some fishers say chums are better than average compared to last week and more are starting to come.

Sockeye:

Overall, most everyone is fishing with king gear and not really fishing for sockeye yet. Sockeye are running strong and very abundant for this weeks opening.

Summary:

Most fishers who were interviewed report that the king run appears to be very good so far this year and all are happy with their catches – also most that reported are finishing up with their harvests for kings this year. Most fishers are fishing with king gear and are not catching a significant amount of chums and sockeye due to the sizes of their mesh – but report that chums and reds appear to be plentiful. Since the 27th - the first day of the stormy weather chums and reds have picked up in their run and are expected to increase in their run in the next two weeks.

Fishing ending the week of July 05, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
45	21	0	0	5	16

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
16	5	0	8	13	0	16	5	0	0	0	0

Chinook:

Thirty-six families reported being finished with their king harvests for the summer. Overall, fishers reported the run is slowing down but larger kings are coming in now and are still bright in color compared to this time of year.

Chum:

Twenty-five families reported being finished with their chum harvest for this year. Overall through last week's stormy weather, the chums have picked up in their numbers and look like they are returning earlier than last year in good numbers.

Sockeye:

Thirty-six families reported being finished with their sockeye harvests for the summer. Overall fishers reported the run is slowing down and is coming close to the end on the sockeye's passing.

Summary:

Most fishers who were interviewed report that the king run appears to be very good so far this year and all are happy with their catches – also most that reported are finishing up with their harvests for kings and reds for this year. Since the 27th - the first day of the stormy weather chums and reds have picked up in their run and are expected to increase in their run in the next week. Due to the stormy weather – as of July 7th three families that were re-contacted had spoilage of their chum slabs (which were donated to dog mushers), and will be returning back to fish this next week.

Fishing ending the week of July 12, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
46	11	3	0	3	11

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	12	2	13	1	0	0	12	2	0	0	0

Chinook:

All families on our survey list reported being finished with their king harvests for the summer. Overall, fishers reported the run is slowing down and the late run is coming in more red in color showing signs of the runs completion.

Chum:

Most families on our survey list reported being finished with their chum harvest for this year. Overall, fishers report that the chum run for this week has picked up even more than last week. Also reported was the chum run having come a week or two ahead compared to the previous years.

Sockeye:

Thirty-six families reported being finished with their sockeye harvests for the summer. Overall, fishers reported the run is slowing down and is coming close to the end on the sockeye's passing.

Coho:

Seven fishers reported catching cohos starting last week – which seems early for this time of year compared to the previous years.

Summary:

Most of the families contacted are finished up with their salmon harvests for this year. With their fish put away for the winter, efforts will be placed on the preparation for the berry picking season and waiting for the peak run of cohos towards the last week of July and the early part of August.

Fishing ending the week of July 19, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
48	3	2	0	0	5

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	5	0	5	0	0	0	5	0	2	3	0

Chinook:

All families on our survey list reported being finished with their king harvests for the summer. Overall, fishers reported the king run is over for the summer and all goals were satisfied.

Chum:

Most families on our survey list reported being finished with their chum harvest for this year. Overall, fishers report that the chum run was early with a good return of fish.

Sockeye:

All families on our survey list reported being finished with their sockeye harvests for the summer. Overall, fishers reported the run is over for the summer and all goals were satisfied.

Coho:

Out of the 48 families surveyed during this week, 46 are planning on harvesting cohos when the run picks up in the next 2 weeks. Out of all the fishers that fished – plus that were surveyed this week reported that the cohos are earlier in return in comparison to the previous years.

Summary:

All of the families contacted are finished up with their king, sockeye and chum harvests for this year. With their fish put away for the winter, efforts will be placed on the preparation for the berry picking season and waiting for the peak run of cohos towards the last week of July and the early part of August.

Fishing ending the week of July 26, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
48	6	1	0	0	7

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	7	0	4	3	0	0	7	0	6	1	0

Chinook:

All families on our survey list reported being finished with their king harvests for the summer. All families reported their catches as normal for this time compared to a normal year.

Chum:

Most families on our survey list reported being finished with their chum harvest for this year. Overall, fishers report that the chum run was early with a good return of fish. The run is expected to finish off in the next week.

Sockeye:

All families on our survey list reported being finished with their sockeye harvests for the summer. All families reported their catches as normal for this time compared to a normal year.

Coho:

Out of the 48 families surveyed during this week, 40 are planning on harvesting cohos when the run picks up in the next week or when there are less incidental catches of chums. Out of all the fishers that fished – plus that were surveyed this week reported that the cohos are earlier in return in comparison to the previous years and are running very good.

Summary:

All of the families contacted are finished up with their king, sockeye and chum harvests for this year. With their fish put away for the winter, efforts will be placed on the preparation for the berry picking season and waiting for the peak run of cohos towards the last week of July and the early part of August.

Fishing ending the week of August 09, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
49	7	0	6	0	7

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	0	0	0	0	10	1	0

Chinook:

All families on our survey list reported being finished with their king harvests for the summer. All families reported their catches as normal for this time compared to a normal year.

Chum:

Most families on our survey list reported being finished with their chum harvest for this year. All families reported their catches as normal for this time compared to a normal year.

Sockeye:

All families on our survey list reported being finished with their sockeye harvests for the summer. All families reported their catches as normal for this time compared to a normal year.

Coho:

Out of the 49 families surveyed during this week, 5 are still planning on harvesting cohos. Out of all the fishers that fished – plus that were surveyed this week reported that the cohos are earlier in return in comparison to the previous years and are running very good. One rod and reeler reported that the day he went out he got a catch every other cast and also included that there are a lot of coho in the water.

Summary:

All of the families contacted are finished up with their king, sockeye and chum harvests for this year. With their fish put away for the winter, efforts will be placed on the preparation for the berry picking and finishing up with cohos through the remainder of August.

Fishing ending the week of August 16, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
48	3	3	4	0	6

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	0	0	0	0	9	1	0

Chinook:

All families on our survey list reported being finished with their king harvests for the summer. All families reported their catches as normal for this time compared to a normal year.

Chum:

Most families on our survey list reported being finished with their chum harvest for this year. All families reported their catches as normal for this time compared to a normal year.

Sockeye:

All families on our survey list reported being finished with their sockeye harvests for the summer. All families reported their catches as normal for this time compared to a normal year.

Coho:

Out of the 48 families surveyed during this week, 6 are still planning on harvesting cohos. Forty-two families on our list are done with their coho harvests. Out of all the fishers that fished – plus that were surveyed this week reported that the cohos are earlier in return in comparison to the previous years and are running very good. The fishers that fished with drift and setnets this past week said that fishing was surprisingly very good. The fishers that fished with a rod and reel said that fishing was also very good and there were a lot of fish in the water.

Summary:

All of the families contacted are finished up with their king, sockeye and chum harvests for this year. With their fish put away for the winter, efforts will be placed on the preparation for the berry picking and finishing up with cohos through the remainder of August.

Fishing ending the week of June 9, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Gillnets more than 6' mesh	Gillnets less than 6' mesh
4	-	-	-	-

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
1	2	1	1	0	0	0	0	0	0	0	0

Summary:

No additional comments.

Fishing ending the week of June 16, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Gillnets more than 6' mesh	Gillnets less than 6' mesh
14	11	4	12	4

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
4	11	1	2	7	3	8	7	1	0	0	0

Summary:

In general, fishers reported normal fishing for kings and chum salmon, and normal to very good for sockeye salmon. Several fishers reported that the sockeye run was very strong this week. Several families have reported being done fishing Chinook for the year. High water has been a large factor in fishing. Many fishers reported that they would have finished faster had the water dropped some. Many fishers claim that the fish look very healthy, although there have been a couple who claim that the fish have more splotches on them than they have in previous years.

Fishing ending the week of June 23, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Gillnets more than 6' mesh	Gillnets less than 6' mesh
14	11	4	12	4

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
4	11	1	2	7	3	8	7	1	0	0	0

Summary:

In general, fishers reported normal fishing for kings and chum salmon, and normal to very good for sockeye salmon. Several families have reported being done fishing Chinook for the year. High water has been a large factor in fishing. Many fishers reported that they would have finished faster had the water dropped some. Many fishers claim that the fish look very healthy, although there have been a couple who claim that the fish have more splotches on them than they have in previous years.

Fishing ending the week of June 30, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Gillnets more than 6' mesh	Gillnets less than 6' mesh
14	9	6	10	4

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
1	10	3	0	5	6	10	2	0	0	0	0

Comments:

- Kings 30% better than last year.
- Kings could have been stronger.
- Kings slow run, in five drifts only two kings no other fish.
- Kings slow run.
- Chum using King net that's why they think the run is poor.
- Lots of Reds, really easy fishing for Reds.
- Water abnormally high, Reds really strong run, Kings less than the week before.
- For chums big mesh net or a very slow run that's why they think it's poor.
- Chums, more than last year.
- Chums, not to many out there.
- Kings, it has slacked down but it should get thicker. Chums poor cause using king net.

Summary:

In general, fishers reported normal fishing for kings and chum salmon, and normal to very good for sockeye salmon. Several fishers reported that the sockeye run was very strong this week. Several families have reported being done fishing Chinook for the year. Many fishes report that the king run is dropping off and that the chum run is weaker than normal. A majority of fishers claim that the sockeye run is much stronger than it has been in previous years.

Fishing ending the week of August 9, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
9	0	2	1	0	2

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	1	2	0	0	0	0	0	0

Chinook:

No king salmon has been reported being caught in the McGrath area.

Chum:

1 family with a set net at the mouth of the Takotna River reported the chum run to be normal. One family with a set net on the Nixon River and one rod and reel fisher at the Takotna and Nixon River Fork reported the chum run to be poor.

Sockeye:

No additional comments.

Coho:

Two families with set nets, one at the mouth of the Takotna and one on the Nixon River reported the coho salmon run to be normal and one rod and reel fisher at the Takotna and Nixon River Fork reports the coho salmon run to be poor.

Summary:

The water in the Kuskokwim and Takotna Rivers is relatively high and very turbid but it is starting to drop steady (3-4” a day). The family with the only net set at the mouth of the Takotna has been catching lots of white fish, pikes and suckers along with cohos and chums daily. During the extremely high water two weeks ago many subsistence fishers’ set nets were torn apart by drifting debris.

Fishing ending the week of July 21, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Gillnets more than 6" mesh	Gillnets less than 6" mesh
2	2	1	1	1

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	1	1	0	0	0	0	0	0	0

Chinook:

There was only one Chinook reported as caught, and both families surveyed claim that they believe the king salmon run as being over.

Chum:

No additional comments.

Sockeye:

Both families claim to be finished fishing for sockeye and that the run is for the most part, completed.

Summary:

In general, fishing for king, sockeye and chums on the Middle Kuskokwim River has dropped off. 24 families reported that they're finished fishing for kings, chums and sockeye. Of those 24, 22 reported their harvest goals for kings as being met. Both families cited deaths in the family as the reason for not meeting their subsistence harvest needs. Of the 24, 22 reported their harvest goals for chums as being met. Again, deaths in the family were cited. All 24 families reported having their subsistence harvest needs for sockeye met. Of those 24, 20 are planning to continue fishing again once the coho run picks up this fall.

End of Season Fishermen Comments:

A majority of fishermen report that in general, fishing for kings has been normal this year as compared to past years. Many fishermen claim the chum run was poor, but of those who reported it as poor, many cited the size of the gillnet mesh as the cause. Nearly all fishermen claim they were pleasantly surprised by the strength of the sockeye run. Overall, many of the fishermen claim that the kings, chums and sockeye were healthy looking, and of normal size.

Fishing ending the week of June 15, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
16	7	4	0	11	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	4	7	0	0	11	0	0	0	0	0	0

Chinook:

Seven families said fishing was poor because they weren’t catching very many with driftnets because of high water and the run hasn’t peaked. 2 families said that the kings looked smaller than normal.

Chum:

No further comments

Sockeye:

No further comments

Summary:

All of the 11 families say it is still high water. 5 families that were surveyed are waiting till run gets stronger, and then they will start fishing. One of the families surveyed consists of 5 families using one fishcamp. One family said a few kings looked like they had sores or scares on them, but most looked healthy. Most families surveyed said they are fishing for 50-100 kings. Two families said that it harder to fish because they are getting older, net getting to heavy to set and pullout. Anticipate more families to go out within the next 2 weeks.

Fishing ending the week of June 22, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
15	10	7	0	15	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
4	10	1	3	9	0	0	10	1	0	0	0

Chinook:

No further comments.

Chum:

Twelve families reported that there are a lot of chums this year compared to last year.

Sockeye:

Four families indicated that the sockeye run is still building and that they are waiting till next week to fish.

Summary:

Fishers reported that most of the king salmon are looking good, however, some families report that a few kings have sores on them. 4 families are done harvesting king salmon. Several other families are waiting for sockeye run to increase. The water level is dropping steady and the weather has been good for drying fish. Most families reported better fishing this week since the water levels dropped.

Fishing ending the week of June 29, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
17	11	7	0	6	12

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
4	5	6	8	4	0	0	5	5	0	0	0

Chinook:

No further comments

Chum:

No further comments

Sockeye:

No further comments

Summary:

Four households reported that they were done fishing until the Coho arrives. There were comments that the fish were late for this time of year. The fishing picked up after the water dropped.

Fishing ending the week of July 06, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
3	2	1	0	2	1

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	1	1	0	1	0	0	0	0	0	0	0

Chinook:

No further comments

Chum:

No further comments

Sockeye:

No further comments

Summary:

3 families were surveyed, one of the families did not fish. The other 2 families are waiting for the coho run.

Fishing ending the week of July 13, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
5	2	1	0	2	1

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
1	1	1	0	0	0	0	0	0	0	0	0

Chinook:

No further comments

Chum:

No further comments

Sockeye:

No further comments

Summary:

One family reported that there were too many flies to put up fish. One family reported that they were done fishing until the Coho run.

Appendix C03.01.–Middle Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, Kuskokwim Native Association, June 16, 2003.

Fishing ending the week of June 14, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
19	16	7	0	6	13

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	11	7	0	10	6	0	4	6	0	0	0

Chinook:

One family has reported that they have already caught what they thought was needed for the season.

Chum:

Fishers said that chums are late this year. Some fishers commented that high water has made it more difficult to catch fish.

Sockeye:

No further comments

Summary:

Those that were surveyed seven have started before or during the first week in June. About ten have started during the second week in June. Some have indicated starting at the middle of the second week in June. Up-river: one indicated that the fish just started to hit and had to stop fishing because of the closure. Few have commented that the closure was a good idea. Although some commented that it should be open but leave the closure schedule as is for the lower Kuskokwim area.

Fishing ending the week of June 21, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
27	25	4	0	14	18

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
3	15	9	1	13	10	0	18	8	0	0	0

Chinook:

No further comments.

Chum:

There are a few families not fishing for chums this year.

Sockeye:

No further comments.

Summary:

People are finding it hard to catch fish when schedule is open because there are more people fishing the same areas in the Aniak area. A few have indicated that the salmon run is a little late this year. A couple of people have said that last year there was more fish for this time of the year.

One family reported fishing only for kings this season. One person from the Kalskag area has reported seeing some type of boil on the side of one fish. One person also from the Kalskag area reported seeing white spots on the inside of a fish that looked like pus. One in the Aniak area reported that some of the fish felt soft.

I also may have not received all the surveys from the Kalskag technician.

Fishing ending the week of June 28, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
17	15	5	0	8	9

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
3	9	4	0	13	3	0	15	2	0	0	0

Chinook:

No further comments.

Chum:

No further comments.

Sockeye:

No further comments

Summary:

About half of the people surveyed in the Aniak area reported that they are done fishing for the season. Three in Kalskag area reported that they will be done fishing during the next open schedule. One family reported that they are done but would fish for a few more fish just to salt. One family reported not fishing this last week but will continue fishing during the next open schedule. Two families reported that they are just about to finish fishing for the season. One family who reported being done did not reach their harvest goal this year.

Fishing ending the week of July 05, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
17	8	1	0	5	3

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	8	0	3	4	0	2	4	2	0	0	0

Chinook:

No further comments.

Chum:

No further comments.

Sockeye:

No further comments.

Summary:

The reports from the Kalskag technician were faxed to the Aniak office but I did not receive them all. Four families surveyed reported that they were done fishing for the season. Six families reported that they did not fish during last week. One reported that their outboard motor broke down. One reported that they did not fish because of the rainy weather. One family reported not fishing this last week but will fish more during the rest of the season. One family reported that the chum salmon are thick this last week. Another family reported seeing lots of ripples of fish swimming up river close to the riverbank.

Fishing ending the week of July 12, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
27	7	2	0	2	5

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
2	5	0	8	0	1	5	4	1	0	0	0

Chinook:

No further comments.

Chum:

No further comments.

Sockeye:

No further comments

Summary:

Fourteen families reported being done fishing for the season and one who reported being done will fish later when the silvers are running their course up the river. Nine families report not fishing this last week. A few surveyed said that they are waiting for the silvers to arrive to begin fishing again.

Appendix C03.06.–Middle Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, Kuskokwim Native Association, August 5, 2003.

Fishing ending the week of July 19, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
7	6	1	0	1	5

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	4	0	1	5	0	0	6	0	0	0	0

Chinook:

No further comments.

Chum:

No further comments.

Sockeye:

No further comments

Summary:

This is all the information given to me to date. I was up river at the George River weir during the week July 19th until the 24th. On July 24th I then went to Tatlawiksuk River weir and returned to Aniak on the 31st of July. I was cross-training during the duration of the two weeks at the two sites.

Fishing ending the week of August 09, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
13	2	0	5	n/a	n/a

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	1	1	0	6	0	0	4	0

Chinook:

No further comments.

Chum:

No further comments.

Sockeye:

No further comments.

Coho:

No further comments.

Summary:

Most families reported being done fishing for the season. There are only two families that are still fishing for coho. There are a few fishing with a rod and reel for the silvers during the annual fishing derby here in Aniak.

Fishing ending the week of June 23, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Gillnets more than 6” mesh	Gillnets less than 6” mesh
3	0	3	1	2

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	3	0	0	0	0	0	0	0	0	0	0

Summary:

The subsistence fishers here have only been catching kings in their nets and very few of them. All of them reported that the king salmon look healthy and of good size. Two fishermen reported that there is less fish compared to last year and one reported that there was more fish than last year. All of their nets are set at the mouth of the Takotna River. These three families are still fishing for king salmon and are hoping to get more.

In general, there are very few people subsistence fishing in the McGrath area. However, the fish are here and families have been catching them. For the time being, most of the regular subsistence fishers are tied up with other commitments. There are two big construction companies in McGrath at the moment and they will be here until late August. In addition, the Division of Forestry (DNR) is firing up for the summer fire season. Most of the fishers are working twelve-hour days and they really do not have time to do any fishing right now. Maybe in the middle of July we might see more families fishing.

Fishing ending the week of June 30, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Gillnets more than 6' mesh	Gillnets less than 6' mesh
1	0	1	-	-

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	1	0	0	0	0	0	0	0	0	0	0

Summary:

The family reported that their subsistence catches for king salmon was average compared to a normal year. They reported that the king salmon looked healthy and was in good condition and of average size.

In general, everyone has been too busy to do any subsistence fishing this season. But, since the holiday weekend is coming up, I know that a lot of families are going down river to go king salmon fishing. I have sent three families that are going down river with scaling kits and I will contact them to do the surveys when they return.

Appendix D01.03.–Upper Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, McGrath Native Village Council, July 10, 2001.

Fishing ending the week of July 07, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
6	1	5	1	1	4

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
3	3	0	0	0	0	2	0	0	0	0	0

Chinook:

Everyone seemed to be pleased with the quality of the king salmon that they were catching. They reported that there were more fish compared to last year and that the fish were of good shape and size.

Comments:

- My catch compared to last was a lot better. There seemed to be more fish and they were healthier.
- The fish were a little bit bigger than normal but there are some small ones.
- Bigger and better fish than last year. They also look healthy they had some bruises but they weren't all beat up.
- More fish than last year the sizes are good and the fish look healthy.
- Lot of fish, good size.

Summary:

In general, fishing has picked up on the Upper Kuskokwim and the fishers are very pleased with what they are catching. Like I reported before, everyone agrees that compared to a normal year there are more fish and that they are in good shape. It looks like fishing is going to slow down around here until the coho salmon start running.

Fishing ending the week of July 14, 2001.

Families Surveyed	Using Driftnets	Using Setnets	Rod and Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
7	1	2	3	1	1

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
3	4	0	0	2	0	0	0	0	0	0	0

Chinook:

The subsistence fishers here in the McGrath area were all satisfied with the quality of the kings they caught. Since the king salmon run is slowing down, so is the amount of people fishing. The fishers reported that the fish that they caught were in good condition and were a lot bigger than last year. One family reported that they were pulling their set net because the king salmon that they were catching were showing apparent signs of bruising and puss spots. Other than that one family, everyone else was happy with the quality and the amount of kings that they caught.

Chum:

Two families reported catching chum salmon. Both families reported that they were not intending to catch the chums, so they released them back into the river. They reported that the chums looked healthy and in good condition.

Sockeye:

No additional comments.

Coho:

No additional comments.

Fishing ending the week of June 15, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
2	0	2	0	1	1

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
1	0	0	0	0	0	0	0	0	0	0	0

Chinook:

One family indicated that their subsistence catches for king salmon was very good compared to a normal year. One family stated they have not tried fishing this early before and had no comparison to make, but he stated he was catching king salmon.

Chum:

None of the families surveyed reported they tried to harvest chum salmon.

Sockeye:

None of the families surveyed reported they tried to harvest sockeye salmon.

Summary:

Based on comments from people in McGrath, fishing this year has been good due to very low water levels. So far, there are only a couple people fishing.

Fishing ending the week of June 22, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
2	0	2	0	1	1

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
1	0	1	0	0	0	0	0	0	0	0	0

Chinook:

No additional comments.

Chum:

No additional comments.

Sockeye:

No additional comments.

Summary:

One family stated the fishing was very good this year and he has already reached his harvest goal for kings, 1 family stated it was poor and he needs to find a new eddy to set his net at because he wasn't doing too well at the mouth of the Takotna. There are very few people fishing in McGrath at this time, most likely due to the heavy fire season this year with people working long hours at the Department of Natural Resources. It is also due to the fishing schedule, it is a hassle for the fishers to take out and put their net back in every week. I would recommend canceling that fishing schedule for upriver people since they catch so few fish with their set nets. One of the people whom I interviewed last week is out of town right now. I have been notified of a family fishing downriver at their fish camp and I am going to contact one of their family members to get the location of the fish camp and make a trip down there. So far we haven't been able to get any fish scale samples, because nobody wants to "waste" their time on them. We have placed public service announcements on the radio and the community Internet message board notifying people of what we are doing.

Fishing ending the week of June 29, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
6	3	3	3	0	3

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
2	1	3	0	0	0	0	0	0	0	0	0

Summary:

One of the people who stated their catch rates as poor went down to the Tatlawitsik. One family located up the Takotna River rated their catch as poor and one family up the Nixon River rated their catch as poor and that it was the worst they've ever seen up that way and they just stopped fishing. The 2 families that rated their catches as very good at this time were located at Blackwater and Salmon River. I also went up to Salmon River this weekend and rated the catch rates as normal, although it is still kind of early. Based upon what I thought and having talked to other people up that way, the fish should really be running strong up the Salmon River this weekend. The family at Blackwater stated the fish were in good health this year, much better than a couple years ago when they weren't that well.

Fishing ending the week of July 06, 2002

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
9	2	1	8	0	2

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
1	4	3	0	0	0	0	0	1	0	0	0

Summary:

The one good rating was at the mouth of the Takotna River. One fisher went down to Stony River, as he does every year about this time, and rated the chum salmon catches as very good and the king salmon as poor and stated everything was normal except there was no king salmon. The rest of the king salmon fishers were surveyed at Salmon River. The fishing at Salmon River was stated as poor and normal with no good ratings. A few people commented on high water levels. There are some fish at Salmon River, although few are biting lures right now, some small schools are visible up there, they are coming in little spurts, but they will not bite a hook. I fished for countless hours on my latest trip up there and caught none.

Fishing ending the week of July 13, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
9	2	0	7	0	2

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
2	4	3	1	0	0	0	0	1	0	0	0

Summary:

Takotna River – Poor king season of the fishers I interviewed, chums are better than normal.

Salmon River – Talking with Nikolai, they say the run peaked last week but there is still a lot of fish there. The kings I was catching on Sunday there were too much for my gear even – big, healthy fish.

Fishing ending the week of July 20, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
5	0	0	5	0	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	4	1	0	0	0	0	0	0	0	0	0

Chinook:

Salmon River – 4 families indicated that their subsistence catches for king salmon was normal compared to a normal year. One family rated their catch as ok at this time.

Chum:

No additional comments.

Sockeye:

No additional comments.

Summary:

Salmon River – Talking with Nikolai, they say the run has slowed significantly in the past weeks. While at Salmon River, I collected 17 scale samples from 9 males and 8 females.

Fishing ending the week of July 27, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
5	n/a	n/a	4	n/a	n/a

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	1	4	0	0	0	0	0	0	0	0	0

Chinook:

Salmon River – All the families quit fishing on Friday because it was too slow. “The run is over.”

Chum:

No additional comments.

Sockeye:

No additional comments.

Summary:

No additional comments.

Appendix D02.08.–Upper Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, McGrath Native Village Council, August 19, 2002.

Fishing ending the week of August 17, 2002.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
10	0	1	9	-	-

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	2	0	0	0	5	4	1

Summary:

There were lots of coho and they were easy to catch. Water level is dropping. There is a lot of salmon and they are big.

Fishing ending the week of June 14, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
0	0	0	0	0	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	0	0	0	0	0	0	0	0

Chinook:

Chum:

Sockeye:

Summary:

I just returned from Anchorage today and I am going to Takotna tonight. Clinton Goods and I are going up the Takotna River to set live traps to acquire juvenile data. We should start putting the weir together on Friday if the water drops enough. By next Monday I plan to have started surveying locals; hopefully the salmon will have started to run. Details will be in next week's summary.

One net observed in the mouth of the Takotna River. No one has reported catching any king salmon yet. The public has not been contacted yet. The MNVC staff will post flyers tomorrow.

Fishing ending the week of June 21, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
3	1	2	0	0	2

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
2	0	1	0	1	0	1	0	0	0	0	0

Chinook:

One family reported the king run is early and is very good. They have been catching at least 5 kings a day since the second week of June at their fish camp at Black Water Slough. Up the Takotna and Nixon River the homesteaders said they have not seen any kings this year. They have caught a lot of white fish, suckers and pike. At Crooked Creek the run was reported to be very strong 7 kings were caught drift netting by a McGrath family that went there to subsistence fish.

Chum:

At Crooked Creek, the chum run was reported to be normal, 9 were caught and all 9 were put back in the water.

Sockeye:

At Crooked Creek, sockeye salmon were reported to have a very good, strong run 10 were caught drift netting with an undetermined mesh size.

Summary:

At Black Water, Phillip Esai reported to have caught 4 kings on June 11. While at Black Water we helped Phillip check his set net and pulled 14 beautiful kings. 13 out of the 14 were males.

The McGrath family that went to Crooked Creek to subsistence fish caught a total of 7 kings, 10 sockeye, 9 chums and 2 sheefish in 3 drifts.

Fishing ending the week of June 28, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
11	1	10	0	5	6

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
3	1	7	0	0	2	1	0	0	0	0	0

Chinook:

No additional comments.

Chum:

Nine of the families reported that it is too early to determine the status of the chum run. One family reported to have been catching about 1 chum every other day at the mouth of the Takotna River. One family reported two chum caught and released after seven drifts at Crooked Creek.

Sockeye:

Ten families reported there are no sockeye salmon this far up the Kuskokwim River. One family reported the sockeye run is very good at Crooked Creek.

Summary:

The water is a little high still in the McGrath area. A few fishers stated maybe the salmon are running under their set nets.

Appendix D03.04.–Upper Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, McGrath Native Village Council, July 07, 2003.

Fishing ending the week of July 05, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
9	0	7	2	3	4

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
1	6	2	0	0	0	0	0	0	0	0	0

Chinook:

No additional comments.

Chum:

No chum has been reported being caught in the McGrath area.

Sockeye:

No sockeye has been reported being caught in the McGrath area.

Summary:

Water dropped on the 4th people were catching salmon at the mouth of the Takotna. The water raised up now fishers report lots of sticks floating down.

Fishing ending the week of July 12, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6' mesh	Gillnets less than 6' mesh
11	0	5	3	0	5

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
3	5	0	1	2	0	3	0	0	0	0	0

Chinook:

One family with a set net reported the run to be very good. One rod and reel fisher reported the king run at the Tatliwitsik River to be very well. Two rod and reel fishers reported the king run to be moderate to very well at Salmon River. 2 families at Grayling Creek reported the king run to be normal for this week. 2 fishers at Stony River with a set net reported the king run to be normal.

Chum:

One rod and reel fisher at the Tatliwitsik River reported the chum run to be very well. Two fishers using set net at Stony River reported the chum run to be normal.

Sockeye:

Two families reported the sockeye run to be very well. Both families traveled downriver to Stony River. Both families reported the salmon to be in very good shape.

Summary:

The water on the Upper Kuskokwim is still very high and raising. There are lots of sticks floating down. Many fishers are out of town or are to busy to check nets. Many people commented on resetting their nets for the coho run in August.

Appendix D03.06.–Upper Kuskokwim River Inseason Subsistence Salmon Harvest Weekly Report, McGrath Native Village Council, July 20, 2003.

Fishing ending the week of July 19, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
9	0	2	1	0	2

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
1	0	2	0	0	0	0	0	0	0	0	0

Chinook:

One family using rod and reel at Salmon River reported the king run to be very good. One family with a set net at the mouth of the Takotna reported the king run to be poor. One family with a set net on the South Fork of the Kuskokwim in Nikolai reported the king run to be poor, catching only white fish.

Chum:

No chum has been reported being caught in the McGrath area.

Sockeye:

No sockeye has been reported being caught in the McGrath area.

Summary:

The water is dropping steadily on the Kuskokwim and lower Takotna. The king run in the McGrath area has seemed to slow down drastically. There is only one salmon net set in the McGrath area. Near spawning areas the run is reported to be very thick.

Fishing ending the week of July 26, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6" mesh	Gillnets less than 6" mesh
12	0	1	2	1	0

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
2	0	1	0	0	0	0	0	0	0	0	0

Chinook:

One family with a set net with 6" mesh or larger at the mouth of the Takotna River reported the king run to be poor. This family reported to have pulled their net last Friday and are done for kings this year. Two families using rod and reel at Salmon River reported the king run to be very good.

Chum:

No chum has been reported being caught in the McGrath area.

Sockeye:

No sockeye has been reported being caught in the McGrath area. Three families from McGrath traveled down the Kuskokwim River late last week to fish for sockeyes but have not returned yet.

Summary:

There are no nets set in the McGrath area. Most people are finished for the king and chum season, some fishers said they might reset their nets for cohos. The one family that had a net set last week reported to have been catching one or two kings a day early last week when they pulled their net. At the king salmon spawning area, Salmon River, the run is reported to be very strong still. "The river is packed from one bank to the other with king salmon, if some one says the run is bad, they are lying," was a quote from a rod and reel fisher at Salmon River.

Fishing ending the week of August 9, 2003.

Families Surveyed	Using Driftnets	Using Setnets	Rod And Reel	Gillnets more than 6” mesh	Gillnets less than 6” mesh
9	0	2	1	0	2

Compared with this time in a normal year, how are catch rates for salmon this week?

Chinook			Chum			Sockeye			Coho		
Very Good	Normal	Poor									
0	0	0	0	1	2	0	0	0	0	0	0

Chinook:

No king salmon has been reported being caught in the McGrath area.

Chum:

1 family with a set net at the mouth of the Takotna River reported the chum run to be normal. One family with a set net on the Nixon River and one rod and reel fisher at the Takotna and Nixon River Fork reported the chum run to be poor.

Sockeye:

No additional comments.

Coho:

Two families with set nets, one at the mouth of the Takotna and one on the Nixon River reported the coho salmon run to be normal and one rod and reel fisher at the Takotna and Nixon River Fork reports the coho salmon run to be poor.

Summary:

The water in the Kuskokwim and Takotna Rivers is relatively high and very turbid but it is starting to drop steady (3-4” a day). The family with the only net set at the mouth of the Takotna has been catching lots of white fish, pikes and suckers along with cohos and chums daily. During the extremely high water two weeks ago many subsistence fishers’ set nets were torn apart by drifting debris.