

Yukon River Inseason Salmon Teleconferences, 2010

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## ABSTRACT

Teleconference calls are a practical and useful method for discussing the complexities of salmon management and for gaining immediate real-time information from fishers along the expanse of the Yukon River. As such, the Yukon River Drainage Fisheries Association (YRDFA) hosted weekly inseason teleconference calls during the 2010 Yukon River salmon fishery season, from early June through the end of August. The teleconference calls, held every Tuesday at 1 p.m. Alaska time (2 p.m. Yukon time), were a means to exchange information on run timing, abundance, and escapement data; discuss management strategies; facilitate open dialogue between users and management entities; and enable salmon resource stakeholders drainage-wide to communicate. To ensure consistent participation and reporting regarding subsistence harvests and perceived abundance, inseason harvest interviewers were hired in 10 communities along the Yukon River to collect and report subsistence harvest information each week. In addition to reports of local observations, the calls provided information to fishers regarding research and escapement monitoring tools operated by management entities, and facilitated information sharing and capacity building amongst all interested parties. Calls were typically 1-2 hours in length. Summaries of each call were written and distributed to teleconference participants within three days. In total, 14 teleconferences were held in the 2010 fishing season.

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## INTRODUCTION

Decreases in the Chinook salmon run size have occurred since an extremely poor run in 2001. In response to this decrease, the State of Alaska Yukon River management determination lists Chinook salmon as a stock of “yield concern” (Hayes et. al. 2006), which is defined as “a concern arising from a chronic inability, despite the use of specific management measures, to maintain expected yields, or harvestable surpluses, above a stock’s escapement needs. A yield concern is less severe than a management concern, which is less severe than a conservation concern” (5 AAC 39.222(f) (42)) (ADF&G 2004). Summer chum salmon have not been designated a level of concern due to their recent history of adequate run sizes (Clark et. al. 2006).

Since its inception in 1994, the inseason management teleconference program has provided a practical and useful method for fishers, processors, managers, and other stakeholders in Yukon River salmon fisheries to discuss the complexities of salmon management and gain immediate real-time information across the more than 2,000 mile expanse of the Yukon River. Facilitated by the Yukon River Drainage Fisheries Association (YRDFA), these teleconferences have enabled local users to provide valuable insight to fisheries managers on inseason salmon subsistence needs, river conditions, and abundance and quality of salmon available.

Beginning in 2002, inseason harvest interviewers have been hired each year in select communities along the Yukon River to ensure consistent participation and reporting each week regarding subsistence harvests and perceived abundance. These inseason interviews were implemented to assist in meeting the mandate set forth in the Alaska Native Interest Lands Conservation Act (ANILCA) and the State of Alaska Statute 16.05.258 *Subsistence use and allocation of fish and game*, both of which require a priority for subsistence over other consumptive uses. Postseason subsistence harvest surveys have been conducted annually on the Yukon River by the ADF&G since 1961 to help estimate subsistence salmon harvest levels and total salmon use, evaluate subsistence fishing success, and detect and quantify shifts in harvest patterns and amounts (Busher et al. 2009). However, this information is only collected postseason and therefore unavailable for inseason management. Inseason interviews provide managers insight on subsistence harvest progression within multiple villages located on the Yukon River for use in inseason management decision-making. In addition to subsistence reports, the teleconference calls provide a forum for information sharing where managers can disseminate incoming salmon run information to local fishermen specific to subsistence fishing time, status of escapement goals, and location of salmon pulses.

## OBJECTIVES

As an open forum for exchange between fishers, state and federal managers, and other stakeholders in Yukon River salmon fisheries, this program helps keep rural residents informed, while building their capacity to collect information and participate in management decision making. Additionally, the program provides managers with real-time subsistence harvest data for

use in inseason management decision making. Objectives for the Inseason Salmon Teleconferences include:

1. Facilitate communication between Yukon River salmon fishery users and federal, state and Canadian agency staff during the salmon fishing season.
2. Promote local involvement in Yukon River fisheries management through capacity building and participation.
3. Collect and summarize weekly inseason subsistence salmon harvest information for Chinook salmon in 10 communities and document local salmon run timing and perceived abundance in the Yukon River drainage through the summer fishing season.

## METHODS

### Pre-Season

To organize and carry out weekly teleconference calls during the 2010 summer and fall fishing season, YRDFA first looked back at the 2009 teleconferences, which were the best attended on record, to see what worked and what did not. Also, YRDFA consulted managers from ADF&G and USFWS. All parties agreed that during busy calls segmenting the public comment period into a few key topics helped to focus discussions and decreased repeat questions. As such, it was decided that on the busier calls the public comment period would be divided as follows: (1) run assessment (sonar, test fish, what people think of the run), (2) management actions, and (3) miscellaneous.

Agenda items included village identification and subsistence reports, management updates and strategies, and public comments. Calls were slated to be held every Tuesday at 1 p.m. Alaska time (2 p.m. Yukon time) and to last as close to one hour as possible. However, given the projected below average Chinook salmon returns, call times would be extended as needed to provide the public with ample time for questions and input.

Prior to the first teleconference of the season, YRDFA launched a promotional campaign through a variety of media. Detailed flyers and reminder business cards were mailed to more than 2,000 Yukon River fisheries stakeholders (Appendix A). These cards were also distributed by YRDFA staff and others during meetings and visits to villages in the Yukon River drainage throughout the fishing season. Through the flyers and business cards, all fishers and rural residents were encouraged to answer the following questions while giving a subsistence report:

- Are your catches up or down relative to last year?
- How far along are local fishers in their subsistence harvests? (Are they 25% done? 50% done? 100%?)
- What is your assessment of run strength?
- What is the quality of the fish?
- What are the current river conditions? (Water level, clarity, amount of debris)
- Each year, please note when the first king salmon is caught in your community.

Also, waterproof flyers with the 2010 subsistence fishing schedule for the Alaskan portion of the drainage on one side and a teleconference promotion on the other side were mailed to each of the 1,483 subsistence households in the Alaskan portion of the drainage (Appendix B). These flyers accompanied subsistence harvest calendars annually distributed by ADF&G.

Additional promotional efforts included:

- 200 decks of promotional playing cards were printed and handed out by YR DFA staff at meetings and during travel on the river (Appendix C);
- An email was sent to YR DFA's email distribution list;
- Teleconferences were highlighted in the June and July editions of the YR DFA E-News (Appendix D);
- Two half-page advertisements were run in the *Delta Discovery* (last week of May and first week of June);
- One half-page advertisement was run in the *Tundra Drums* (last week of May); and
- One full-page advertisement was run in *Yukon Fisheries News* (in May).

In addition, YR DFA hired inseason harvest interviewers in 10 communities to provide more detailed information on subsistence harvests. The communities selected to participate in the study were chosen because of their proximity to the federal conservation system as well as the presence of a dedicated interviewer. Interview collection and summary techniques were based on methods developed in 2003 (Gerken and Holder 2005).

Individuals were selected as interviewers based on their in-depth knowledge about their community and local fishing activities. Interviewers were employed by YR DFA. YR DFA and USFWS personnel trained and consulted with interviewers at the onset of the fishing season on an individual basis.

### **Inseason**

From June 1 to August 31, 2010, teleconference calls were facilitated by YR DFA's executive director or communications director every Tuesday at 1 p.m. Alaska time (2 p.m. Yukon time). Each call lasted between 35 and 150 minutes, depending on the level of participation and amount of discussion. A two page summary of each call was written and sent to teleconference participants within three days after each call (Appendix E). The summaries were also posted on the YR DFA website, along with summaries of every in-season teleconference held since 2003.

Each week from mid-June through early August, YR DFA called every tribal council office in villages that did not participate in the teleconference the previous week. The purpose was to remind them of the opportunity and to attain a stronger riverwide presence on the calls.

For the inseason interviewers, household lists from ADF&G postseason subsistence surveys were used to identify potential interview contacts. Information from ADF&G postseason surveys categorized households into unique strata dependent upon their degree of harvest during the last five fishing seasons. These harvest strata were: Unknown, Do Not Fish, Light (1-100 salmon), Medium (101-500 salmon), or Heavy (> 500 salmon) harvester (Busher et al. 2009). Households identified for this project were categorized in the medium and heavy harvest strata.

The assumption guiding this selection was that households in the medium and heavy harvest strata fished longer and more frequently and would provide greater consistency in weekly subsistence fishing input. Before the fishing season, interviewers contacted subsistence fishing households either in person or by telephone to explain the project, determine if members of the household were willing to participate in the project, and gain their consent to be interviewed.

Interviews<sup>1</sup> were conducted weekly from June through August with a minimum sample of five subsistence fishing households per village. Timing of interviews depended on when salmon were present. Interviews were conducted near the end of the week, typically on weekends. Interviewers collected information on: 1) fishing gear used; 2) relative comparison to the 2009 season catch rate (“better”, “same”, “poor”) and amount of time fished (“more”, “equal”, “less”); 3) the harvest goal progress (expressed as a percentage in 25% increments) that households were making toward completing their subsistence harvest; and 4) general comments from fishers related to the salmon run (Appendix F).

Interviewers summarized the results and provided the information to the USFWS or YRDFA project leaders, who compiled the weekly subsistence information from all villages and distributed written weekly summaries to managers. Verbal summaries describing fishing conditions and subsistence harvest progress for each village were presented at the weekly YRDFA teleconferences. Household specific interview information was confidential and no information that could identify an individual household was released to the general public.

Data were analyzed in three ways. First, to evaluate inseason harvest progression a weekly average percentage was reported. This percentage represents the qualitative estimate of a village’s subsistence harvest goal progression throughout the fishing season. Second, to estimate harvest goal completion, a final percentage was reported. This percentage represented the qualitative estimate of a village’s harvest goal success. Third, the 2010 harvest trend was compared to the historical Chinook salmon run-timing quartiles. This comparison was important for monitoring subsistence fishing practices and evaluating and predicting subsistence salmon harvest goal progression and success during the fishing season.

The weekly average percentage for each village was calculated using household responses to the question “where are you at in your harvest (%)?” during an interview week. In order to maintain consistency between villages, the weekly average percentage was constrained by two criteria. First, once a household reported it began fishing, indicated by a reported harvest percentage > 0%, the household was included in all remaining weekly average percentages regardless of an interview occurring. It was assumed that a household continued to fish and that the reported percentage would not decrease. For example, if a household reported 50% on week one and was not interviewed again until week four, the weekly harvest percentages for week two and week three was considered 50%. Second, once a household reported a 100% completion, it was considered to have met its harvest goal and was no longer interviewed for that species, but was included in following weekly averages as 100%. The weekly average percentage tracked harvest progression by village during the fishing season, interviews ended when the majority of fishing households reported 100% and those households not reporting 100% reported no longer fishing

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<sup>1</sup> For the purposes of this study, an interview is defined as a meeting between an interviewer and a representative of a subsistence fishing household where information was obtained and documented by the interviewer.

for a specific salmon species. The weekly average percentage was reported inseason in a weekly harvest summary datasheet (Appendix G).

## **Post-Season**

### ***Teleconferences***

To assess the success of the 2009 inseason salmon teleconferences, YRDFA gathered data from a number of sources. Specifically, GCI—the phone company hosting the call—provided a breakdown of the number of phone lines and line minutes for each teleconference. ADF&G provided preliminary information from inseason assessment projects. YRDFA staff provided detailed notes from each teleconference, which yielded information on which communities actively participating each week. With this data, YRDFA analyzed participation relative to: past years, salmon run timing, location of communities, and whether communities had inseason harvest interviews. In addition, YRDFA consolidated the 2010 weekly teleconference summaries into a single PDF and posted it on the organization’s website.

### ***Inseason Harvest Interviews***

Related to the inseason harvest interviews, estimating the level of subsistence harvest goal success a village, as a whole, attained after the fishing season was expressed as a final percentage in the village summaries. The final percentage was the weighted average from all interviewed households during the 2010 fishing season. A household was included in the weighted average if it reported a harvest percentage greater than 0%. This percentage was weighted by the number of interviews per household. For example, a household interviewed twice had a lower weight in the final percentage than a household with ten interviews. Maintaining a consistent weekly household interview list was not always possible and some households were interviewed at a higher frequency than others. A household which fished and was consistently interviewed throughout the fishing season was thought to represent subsistence harvest progression more accurately than a household that was interviewed infrequently.

The timing of the quarter point, midpoint, and three-quarter point of a particular salmon run are generally unknown until the run is completed, therefore comparisons of run-timing inseason typically involve historical averages. The historical run-timing (1989-2009) of these quartile points in the lower river for Chinook salmon, indicated by ADF&G lower Yukon River test fishery were June 15, June 20, and June 26. Historical summer chum salmon quartile points (1986-1991, 1993-1995, and 1997-2009) in the lower river were based on ADF&G Pilot Station sonar project and occur on June 22, June 28, and July 3. In the following discussions of individual village subsistence harvest progression, the historical run-timing was compared to the weekly average percentages. If subsistence harvest progression tracked exactly with historical run-timing, then managers would expect a village to have harvested 25% of their subsistence goals by the quarter point, 50% by the midpoint, and 75% by three-quarter point.

Salmon run-timing occurring for a village was estimated using the length of the run in relation to ADF&G lower Yukon River test fishery for Chinook salmon and ADF&G Pilot Station sonar

project for summer and fall chum salmon. Dates for each village were estimated using a daily swimming rate of 36 miles/day for Chinook salmon, 18 miles/day for summer chum salmon (T. Spencer, pers. comm.). Radio-telemetry used to identify Chinook salmon movement patterns on the Yukon River indicated that radio-tagged fish traveled an average of 31 miles/day in 2003, but that their speed varied dependent upon their location within the drainage (Eiler et. al. 2006).

Interviewers were invited to attend the 2011 YRDFA Annual Meeting, held in Mountain Village February 14-17. If an interviewer was unable to attend, a key interviewee from the same village was invited. By bringing these individuals to this riverwide fisheries meeting, YRDFA hoped to broaden their knowledge base to assist them in disseminating information to fishing households, facilitate in-person interaction between interviewers and managers, and to give the interviewers the opportunity to share their insights with other meeting attendees.

## **RESULTS**

### **Teleconferences**

During the 2010 salmon fishing season, YRDFA organized and carried out a total of 14 in-season management teleconference calls. This year participation in terms of number of phone lines in use during each teleconference increased by 6 percent relative to 2009, making it the busiest season on record according to this metric (Figure 1). Judged by the same criteria, participation has increased by 108 percent since 2006. Participation was highest from mid-June to mid-July, with phone line use peaking on June 22, 2010 at 133 lines. A similar participation trend can be seen in past years (Figure 2). The level of teleconference participation during the first half of the season tracked closely with the number of fish coming through the lower river, likely due to interest in initial abundance of Chinook salmon (Figure 3).

The number of communities actively participating in each teleconference tracked well with the number of phone lines in use during each teleconference (Figure 4). However, while the average number of communities participating in each teleconference was well above the 8 year average, it was slightly below the averages in 2008 and 2009 (Figure 5).

Active participation—direct verbal input from a caller—varied by community. It was strong in a number of communities, notably including the 10 communities with in-season harvest interviewers and the lower river (Figures 6 and 7). Overall, the general trend of increased active participation from U.S. communities and static active participation from Canadian communities continued (Figure 8). While overall active participation from U.S. communities peaked earlier in the season, Canadian participation peaked later, when the Chinook salmon were crossing the border into Canada (Figure 9).

Summaries for each teleconference provided highlights on run assessment, subsistence updates, management decisions and strategies, and key points from participants. These summaries, each approximately two pages in length, were shared with teleconference participants and other interested parties through email and on YRDFA's website within three days of each call.

Anecdotally, there was a good deal of interaction between agency staff and fishers. One shining example was during the fall season. People from Tanana were suffering from very poor fishing conditions paired with a regulated fishing schedule. To ease their burden they requested to be allowed to fish unrestricted for fall chum, which would give them the flexibility to fish during better, less dangerous conditions. The topic was discussed at length, and managers first analyzed the potential effects on escapement and riverwide equity, then granted the request.

### **Inseason Harvest Interviews**

A total of 151 households were contacted with a combined total of 490 interviews conducted in the villages of Emmonak, Marshall, Holy Cross, Nulato, Galena, Huslia, Allakaket, Ft. Yukon, Circle, and Eagle during the 2010 Chinook and summer chum salmon fishing season. Subsistence harvest information for summer chum salmon was collected in Emmonak, Marshall, Huslia, and Allakaket. Interviews were conducted between June 13 and August 15, 2010. Data were summarized and presented verbally on 14 YRDFA teleconferences occurring in 2010 (Table 1).

### ***2010 Catch Rates and Fishing Time***

Information regarding catch rates and fishing time was used to evaluate if subsistence fishermen were changing their fishing practices as compared to 2009. Information was collected between June 13 and August 15, 2010 for Chinook salmon. A total of 179 responses comparing the amount of time fished and 179 responses comparing the catch rates between 2010 and 2009 were collected during the Chinook salmon fishing season. The majority of these households indicated that they spent more time fishing than in 2009, but were split close to evenly on catch rates; about an equal number of respondents indicated that catch rates were poor compared to 2009 as indicated that they were better (Tables 2 and 3).

Interviews pertaining to summer chum salmon harvests were conducted with households in Emmonak, Holy Cross, Marshall, Huslia, and Allakaket between June 20 and August 15, 2010. A total of 44 responses were provided by households during the summer chum salmon fishing season regarding catch rates and the amount of time fished as compared to the 2009 fishing season. Households indicated that catch rates were the same and that the amount of time fished was slightly less as compared to the 2009 fishing season (Table 4).

### ***Village Results***

The weekly average percentages (estimate of village harvest progression) for Chinook salmon were likely lower than corresponding actual percentages because many households could not be interviewed weekly (Table 5 and 6). In these instances, the percentage from the prior interview was used to estimate the current weekly average percentage. A household that was not interviewed likely had a larger harvest percentage than the week before, if they fished, and therefore the weekly average percentage represents the minimum for any interview week. This method was used because the number of interviews per week in a village differed and the households interviewed weekly differed in subsequent weeks. The final percentage (estimate of village harvest completion) was based on information collected throughout the fishing season and does not assume a harvest percentage in weeks where an interview for a household was not

conducted (Table 5 and 6). Using a weighted average to depict the final percentage minimizes the influence of households that were interviewed infrequently. The estimated final percentage for Chinook salmon ranged from 5% to 100%. The final percentage for summer chum salmon ranged from 16% to 69% (Table 7).

*Emmonak:*

Interviews occurred between June 13 and July 18, 2010. One to eight households were interviewed weekly. The historical quartiles for Chinook salmon run-timing in Emmonak were June 15, June 20, and June 26. The weekly average percentage for Chinook salmon on the three historical dates was 7%, 7% and 13%. The final percentage for Chinook salmon harvest from all interviewed households was 61% occurring on July 18, 2010.

The historical quartiles for summer chum salmon run-timing in Emmonak were June 16, June 22, and June 27. The weekly average percentages for summer chum salmon on these three dates were 24%, 43%, and 43%, respectively. The final percentage for summer chum salmon from all interviewed households was 45% occurring on July 18, 2010.

*Marshall:*

Interviews occurred between June 20 and July 25, 2010. Eight to twenty-one households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were June 19, June 24, and June 30. The weekly average percentages for Chinook salmon on these three dates were 0%, 60%, and 62%, respectively. The final percentage for Chinook salmon harvest from all interviewed households was 72% occurring on July 25, 2010.

The historical quartiles for summer chum salmon run-timing in Marshall were June 24, June 30, and July 5. The weekly average percentages for summer chum salmon on those dates were 51%, 57%, and 60%, respectively. The final percentage for summer chum salmon from all interviewed households was 69% occurring on July 25, 2010.

*Holy Cross:*

Interviews occurred between June 27 and July 25, 2010. Seven to twelve households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were June 22, June 27, and July 3. The weekly average percentage for Chinook salmon on the three dates was 41%, 41% and 62%, respectively. The final percentage for Chinook salmon harvest from all interviewed households was 82% occurring on July 25, 2010.

The historical quartiles for summer chum salmon run-timing in Holy Cross were June 30, July 6, and July 11. The weekly average percentages for summer chum salmon on those dates were 14%, 54%, and 54%, respectively. The final percentage for summer chum salmon from all interviewed households was 42% occurring on July 11, 2010.

*Nulato:*

Interviews occurred between June 20 and July 25, 2010. Four to twelve households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were June 28, July 3, and July 9. Interviews were not performed during the week of the historical three-quarter point. The weekly average percentages for the first two dates were 36% and 36%, respectively. The final percentage for Chinook salmon harvest from all interviewed households was 51% occurring on July 25, 2010.

*Galena:*

Interviews occurred between June 27 and July 25, 2010. Nine to twenty-three households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were June 29, July 4, and July 10. The weekly average percentage for Chinook salmon on those dates was 28%, 28% and 58%. The final percentage for Chinook salmon harvest from all interviewed households was 73% occurring on July 25, 2010.

*Huslia:*

Interviews occurred between July 4 and August 1, 2010. One to eight households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were July 4, July 9, and July 15. The weekly average percentages for Chinook salmon on those dates were 5%, 30%, and 33%, respectively. The final percentage for Chinook salmon harvest from all interviewed households was 36% occurring on July 25, 2010.

The historical quartiles for summer chum salmon run-timing in Huslia were July 25, July 31, and August 5. The weekly average percentages for summer chum salmon on those dates were 30%, 23%, and 23%, respectively. The final percentage for summer chum salmon from all interviewed households was 35% occurring on August 1, 2010.

*Allakaket:*

Interviews occurred between July 4 and August 15, 2010. Six to thirteen households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were July 11, July 16, and July 22. Interviews were not conducted during the week of the historical midpoint. The weekly average percentages for the other two dates were 0% and 5%, respectively. The final percentage for Chinook salmon harvest from all interviewed households was 5% occurring on July 25, 2010.

The historical quartiles for summer chum salmon run-timing in Allakaket were July 25, July 31, and August 5. Interviews were not conducted during the week of the historical midpoint. The weekly average percentages for the other two dates were 10% and 16%, respectively. The final percentage for summer chum salmon from all interviewed households was 16% occurring on August 8, 2010.

*Ft. Yukon:*

Interviews occurred between June 27 and July 25, 2010. Six to ten households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were July 12, July 17, and July 23. Interviews were not conducted during the week of the historical quarter point or midpoint. The weekly average percentage on the three-quarter point date was 44%. The final percentage for Chinook salmon harvest from all interviewed households was 36% occurring on July 25, 2010.

*Circle:*

Interviews occurred between July 11 and August 15, 2010. Two to ten households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were July 14, July 19, and July 25. The weekly average percentage for those dates was 5%, 9%, and 9%, respectively. The final percentage for Chinook salmon harvest from all interviewed households was 15% occurring on August 1, 2010.

*Eagle:*

Interviews occurred between July 11 and August 15, 2010. One to seven households were interviewed weekly. The historical quartiles for Chinook salmon run-timing were July 18, July 23, and July 29. The weekly average percentages for the three dates were 14%, 51%, and 88%, respectively. The final percentage for Chinook salmon harvest from all interviewed households was 100% occurring on August 1, 2010.

***Gear Type***

Fishery managers have the ability to regulate fishing gear if there is a concern for species conservation. Regulations regarding the allowable fishing gear differ between lower river and upper river fishing districts. The primary difference is the use of drift gillnets in the lower river. Subdistrict 4A has a limited drift gillnet fishery availability regulated by date, see 5AAC 01.220(e) (2) (ADF&G 2004). Subdistricts 4B and 4C fishers with a permit can use a drift gillnet in Federal waters regulated by date, see Subpart D of 36 CFR part 242 and 50 CFR part 100.27i3xvC (Federal Register 2007). Sixty-three fishers were interviewed for gear type in Yukon River Districts 1, 2, and 3, and Subdistricts 4A, 4B, and 4C. In these areas the use of a drift gillnet was predominant ( $n = 48$ ). In the Koyukuk River District and Subdistrict 5D, forty-one fishers were interviewed for gear type. The predominant gear types used were set gillnet ( $n = 21$ ) and fishwheel ( $n = 20$ ).

***2011 YRDFA Annual Meeting***

Several interviewers and key interviewees were brought to the YRDFA Annual Meeting in Mountain Village. They witnessed a number of presentations and participated in many formal and informal fisheries-related discussions.

## **DISCUSSION AND RECOMMENDATIONS**

### **Teleconferences**

More people are dialing in to find out the latest in-season news and interact with fisheries managers. This is probably due to a number of factors, including:

- Increased promotion of the program;
- Targeted phone calls to villages not regularly participating; and
- Poor Chinook salmon returns in recent years, heightening interest in information and interaction with managers.

Aggressive promotional efforts should continue, as should the targeted phone calls.

Dividing the public comment period into categories on the busier calls again met with success. It reduced the number of repetitive questions and gave that portion of the call some structure. YR DFA will continue to work on improving the teleconference agenda with USFWS and ADF&G.

Lastly, given that communities with inseason harvest interviewers showed much greater participation rates on the teleconferences, it would be beneficial to analyze the utility and viability of expanding that program. Having more communities actively sharing information on the teleconferences benefits all stakeholders, and such opportunities need to be pursued.

### **Inseason Harvest Interviewers**

Yukon River subsistence fishers are a diverse group utilizing a variety of different gear types, fishing locations, and techniques to harvest salmon. The active nature of these fishers is one reason that inseason subsistence information is difficult to collect. Many households relocate to fish camps during summer months and as a result have limited access to teleconferences and management information. As a result, interviewers conduct weekly interviews face to face in local villages at fishers' houses or fish camps, village boat launches, and, to a lesser extent, over the telephone and VHF. This dynamic interview process is important for managers because the information includes input from a variety of subsistence fishers on a range of topics, but the interviews are also valuable for fishers because they often receive updated management information, i.e., News Release or Fishery Updates, and river-wide fishing news from interviewers.

Inseason harvest interviews assist managers in evaluating whether fishers met their subsistence harvest goals inseason. Based on the information collected during the 2010 Chinook and summer chum salmon fishing season, it appeared that most interviewed households did not meet their subsistence harvest goals for Chinook salmon and summer chum salmon. Information collected during interviews indicated that most households fished more time than in the 2009 fishing season but saw varying catch rates. Lower river villages reported having better catch rates than 2009 while the upper Yukon and Koyukuk Rivers villages reported poorer catch rates than in 2009. Villages had a season ending harvest percentage ranging from 5% in Allakaket to 100% in Eagle.

## **CONCLUSIONS**

The inseason management teleconferences have proved a valuable resource for members of the public, Yukon River fishers and community members, tribes, managers, fish processors, and others. Teleconference calls are an effective and rapid means to extend real-time knowledge about the salmon fishery across hundreds of miles. This project is a model for managers and local users on how to communicate and share information about the condition of salmon runs and management strategies. Teleconferences provide fishers with a simple, viable means of informing and influencing management. Hearing inseason subsistence reports and learning what percentage of the local subsistence harvest goals has been met allows managers to anticipate fishing activity and provides pieces of information to better understand and manage the salmon run. Inseason harvest interviewers provide consistent, detailed information from a broad range of villages throughout the river, allowing for a better understanding of both fishers' actions and the salmon run than would otherwise be available. Further, this sharing of information allows subsistence fishers along the river to better anticipate, plan for, and harvest their subsistence catch.

## **ACKNOWLEDGEMENTS**

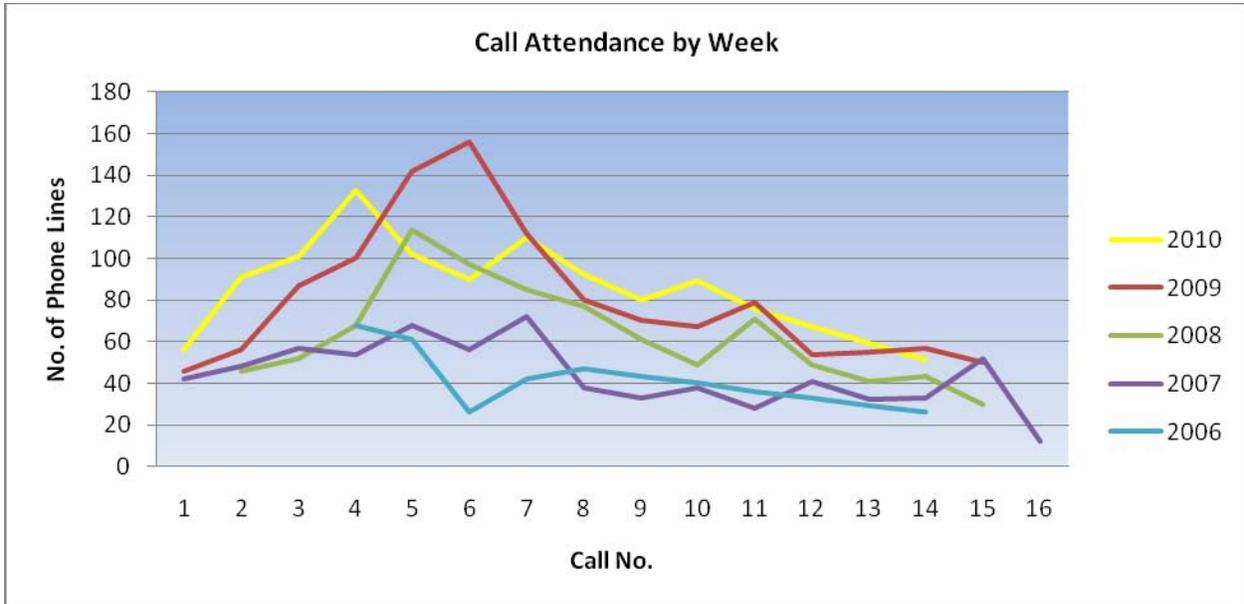
The U.S. Fish and Wildlife Service, Office of Subsistence Management, provided funding support for this project through the Fisheries Resource Monitoring Program, under FWS Agreement No. 701818J698, Reference Number 08-253. Additional funding for the inseason management teleconference calls came from the Yukon River Panel.

In addition to our funders, YRDFA would like to offer special thanks to everyone who participated in the 2010 weekly teleconferences, whether this was their first season or they've been calling for years. A strong, regular presence from all stakeholders—fishers, tribes, managers, processors, inseason harvest interviewers, and others—maximizes the effectiveness and utility of the calls and goes a long way in building understanding of the run in real time throughout the drainage.

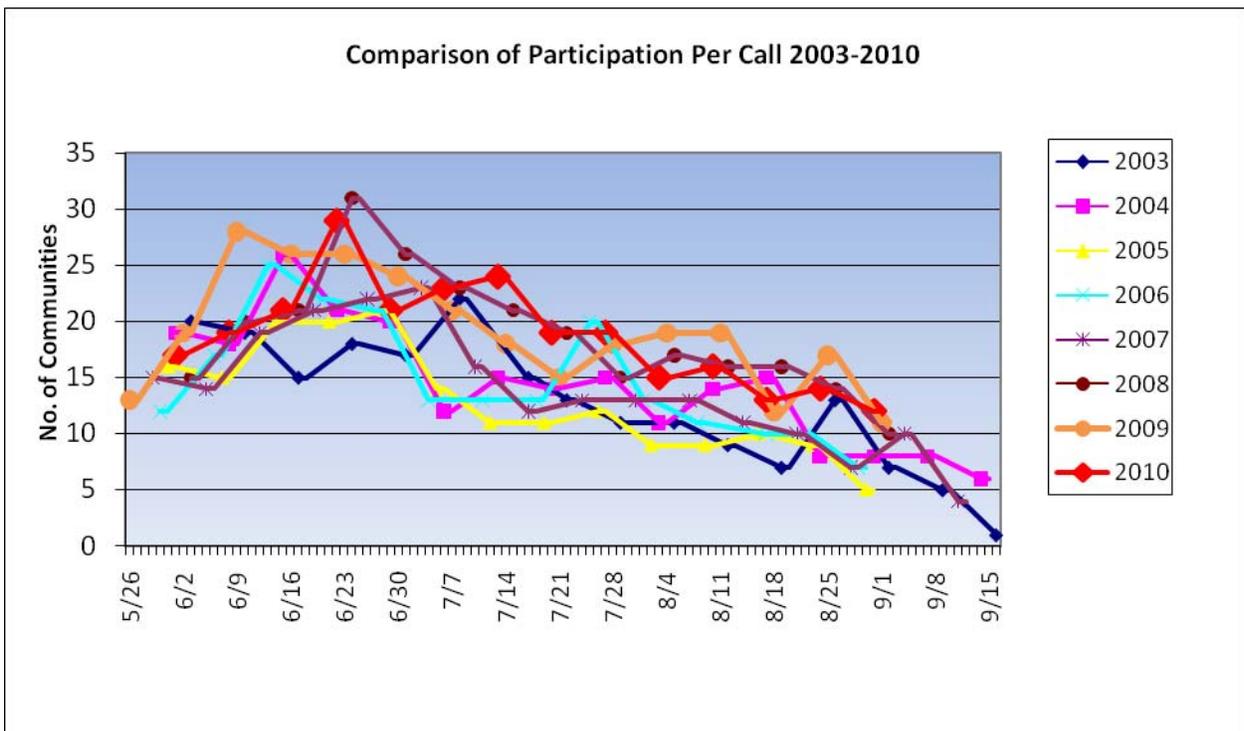
We gratefully thank all of the subsistence fishers who were willing to share their harvest information with interviewers throughout the season. Our appreciation goes to the interview personnel: Emmonak Tribal Council local hire Michael Jimmy, Ohogamiut Tribal Council local hire Norma Evan, village of Holy Cross local hire Rita Paul, Nulato Tribal Council local hire Robyn George, Huslia Tribal Council local hire Sharon Yatlin, village of Allakaket local hire Catherine Henzie, village of Galena local hire Sandy Scotton, Council of Athabaskan Tribal Governments local hire Janis Carroll, village of Circle local hire Albert Carroll Jr., and village of Eagle local hire Dana Helmer.

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**Figure 1. Call attendance by week as measured by the number of phone lines used on each call each week, 2006-2010.**



**Figure 2. Comparison of weekly participation as measured by the number of communities on each call each week, 2003-2010.**

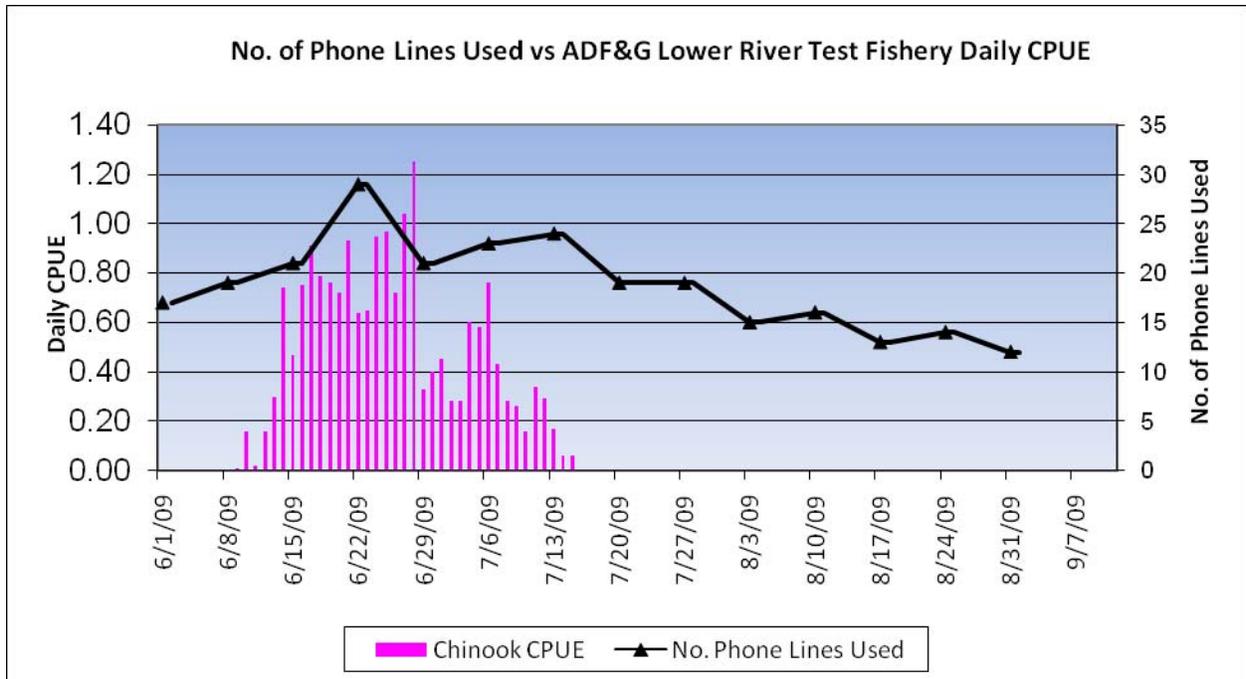


Figure 3. Number of phone lines used vs. Lower River Test Fishery daily CPUE for Chinook salmon, 2010.

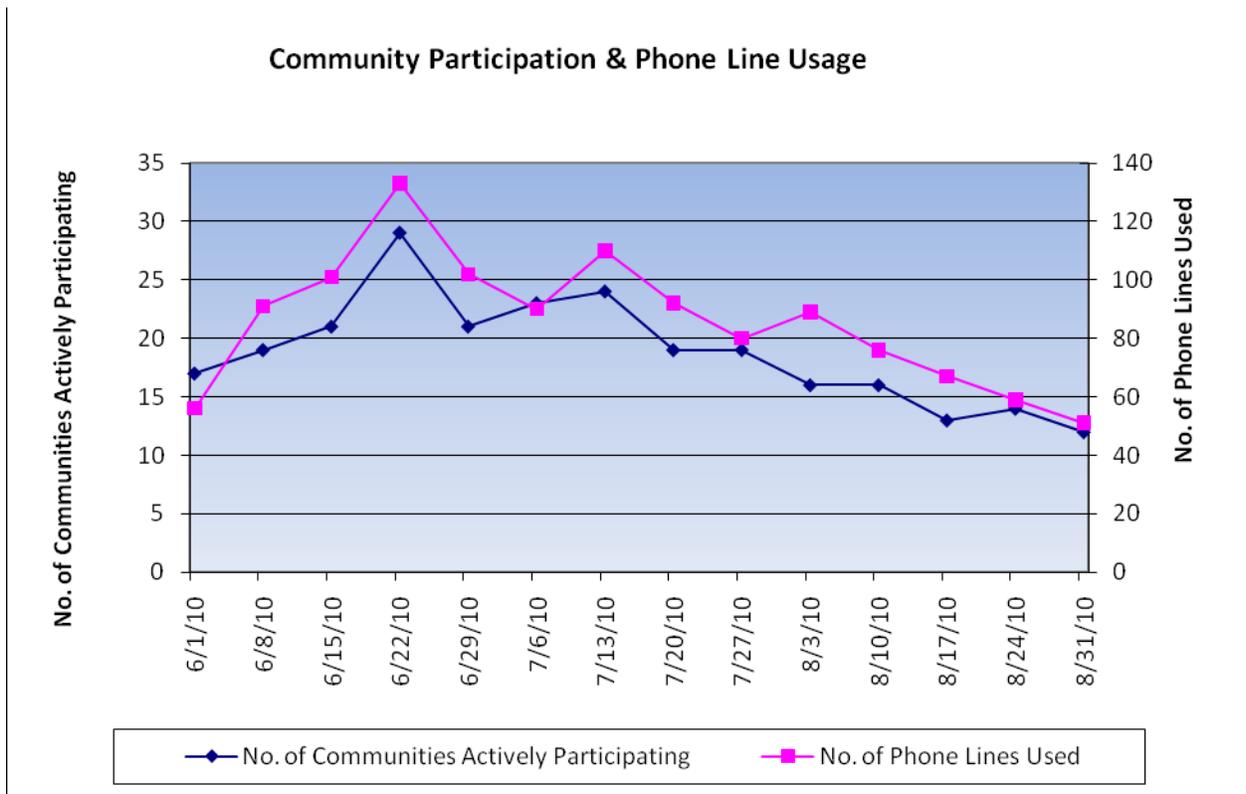


Figure 4. Community participation & phone line usage, 2010.

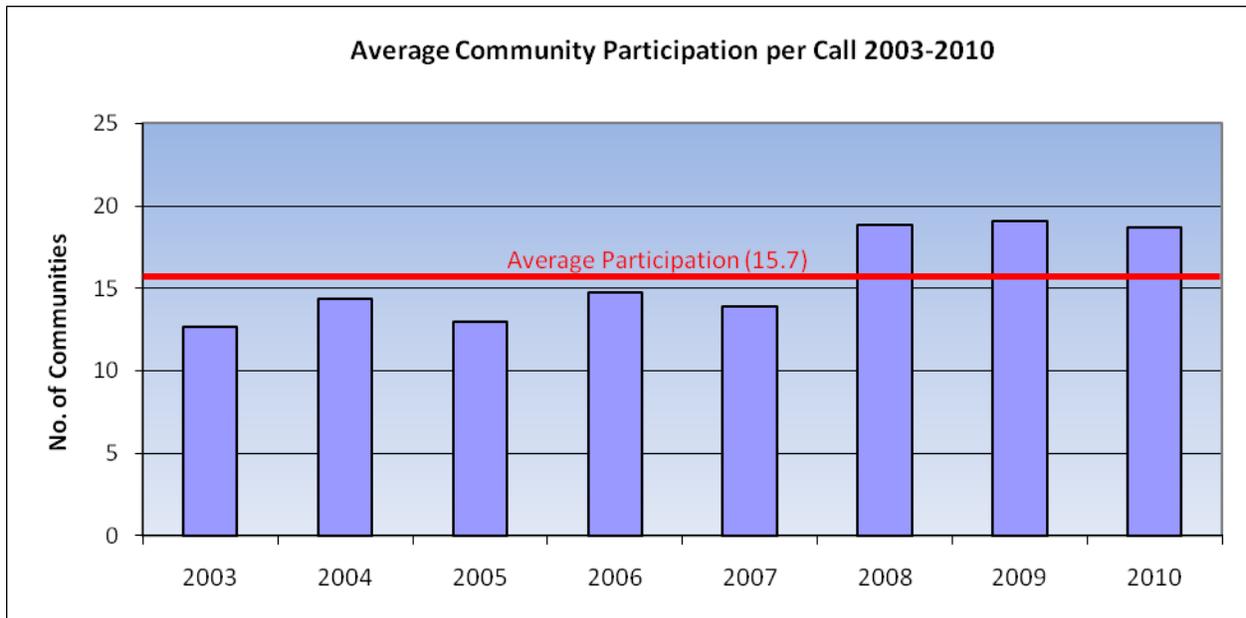


Figure 5. Average number of communities participating in each call, 2003-2010.

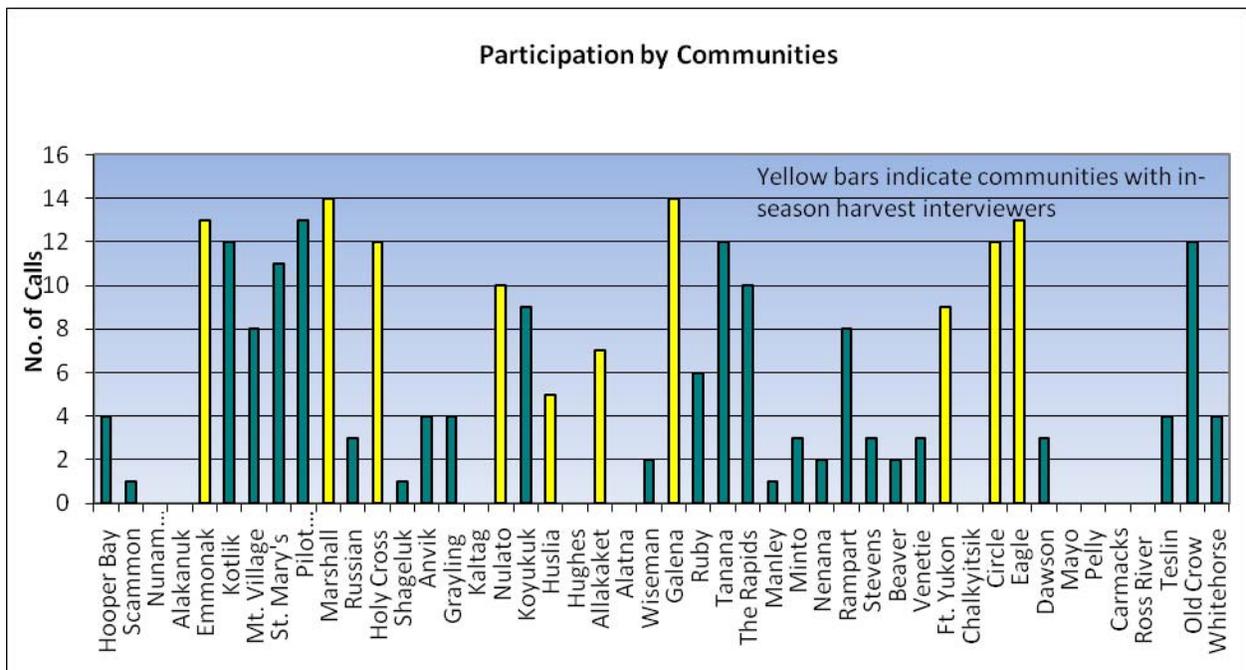
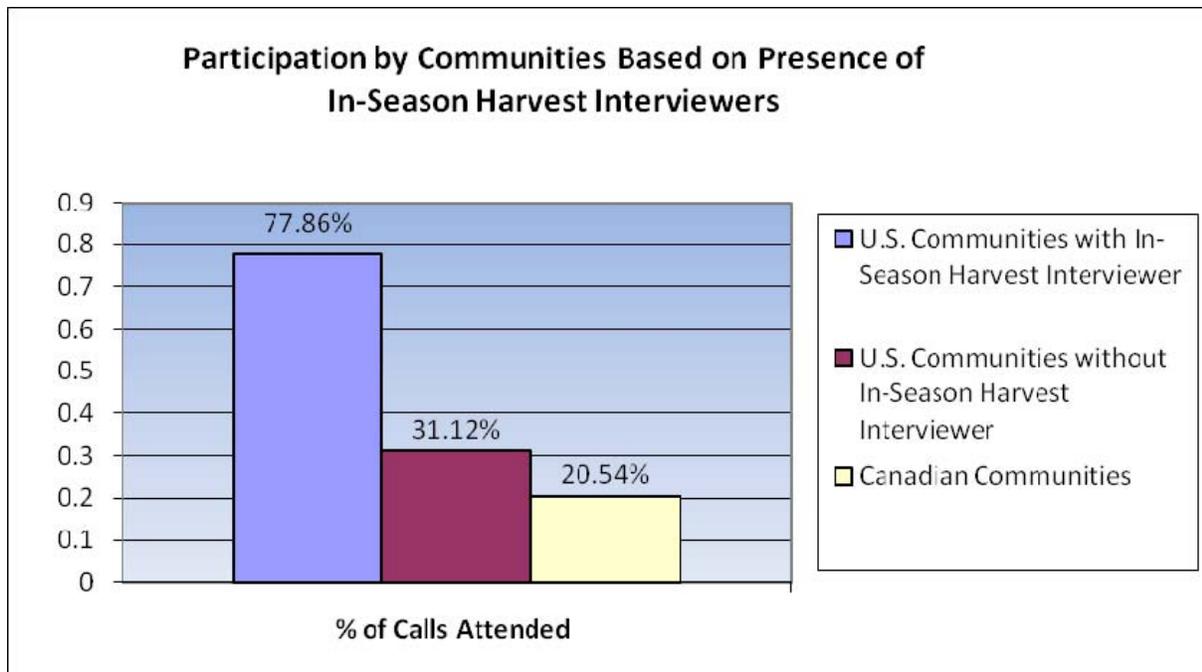
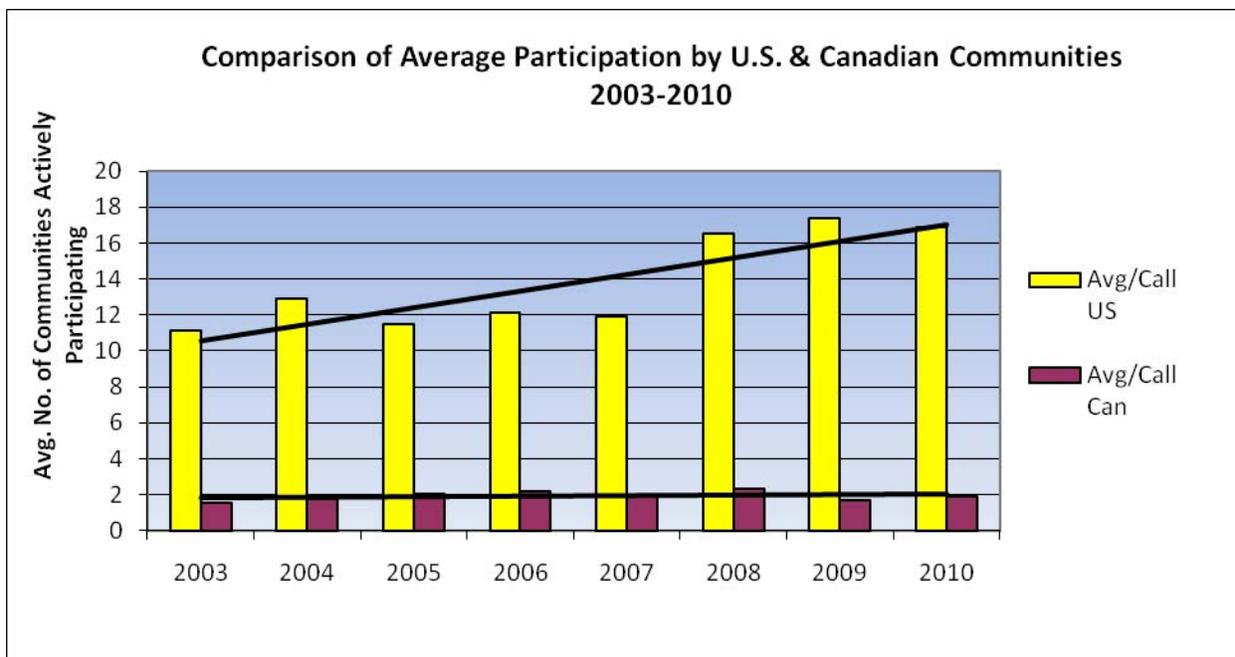


Figure 6. Active participation by communities, 2010.



**Figure 7.** Participation by communities based on presence of inseason harvest interviewers as measured by the percentage of calls in which each community actively participated, 2010.



**Figure 8.** Comparison of average annual participation by U.S. & Canadian communities as measured by the average number of communities actively participating in each call each season, 2003-2010.

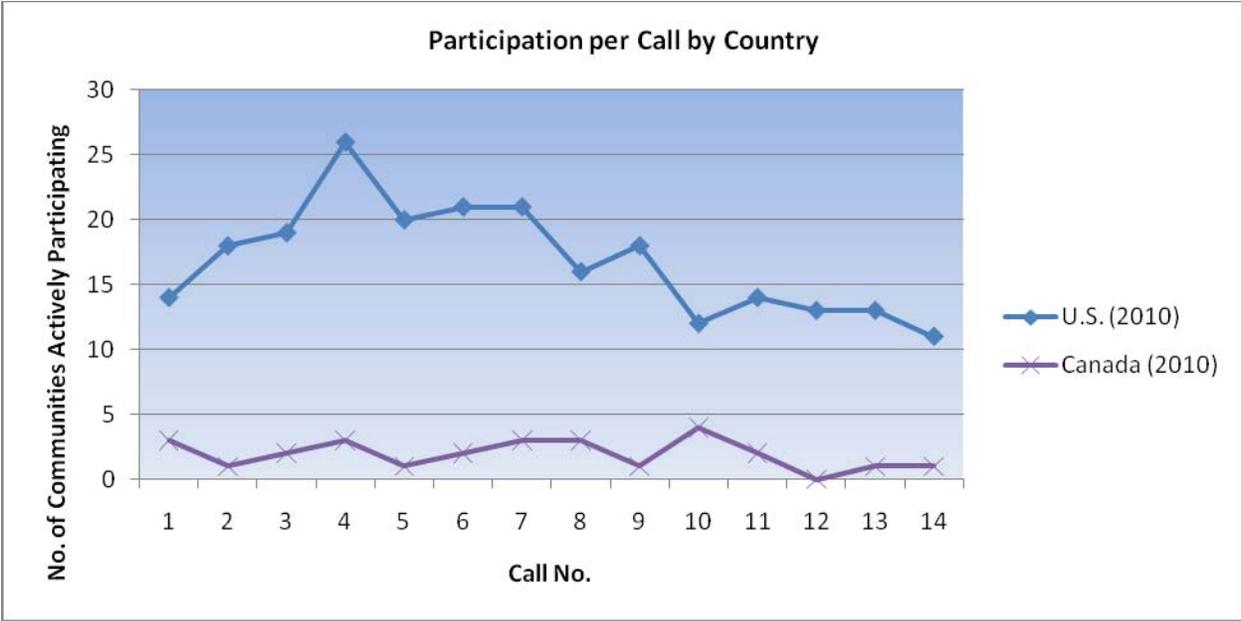


Figure 9. Participation per call by country as measured by the number of communities actively participating in each call, 2010.

**Table 1. YRDEFA teleconferences attendance by local hires during the 2010 salmon fishing season in the Yukon and Koyukuk River villages.**

Week Ending	Emmonak	Marshall	Holy Cross	Nulato	Galena	Huslia	Allakaket	Ft. Yukon	Circle	Eagle
1-Jun	x	x	x							x
8-Jun	x	x	x	x	x			x	x	x
15-Jun	x	x	x				x			x
22-Jun	x	x	x	x	x	x	x	x	x	x
29-Jun	x	x	x	x	x	x		x	x	x
6-Jul	x	x	x	x	x	x	x	x	x	x
13-Jul	x	x	x	x	x		x	x	x	x
20-Jul	x	x	x	x	x	x	x			x
27-Jul	x	x	x	x	x	x	x	x	x	x
3-Aug		x	x		x		x	x	x	x
10-Aug		x		x	x			x	x	x
17-Aug	x	x	x							x
24-Aug	x	x	x	x	x				x	x
31-Aug	x	x		x	x			x		x
Total	12	14		x		5	7	x	11	14

12                      10                      14

**Table 2. Results of household responses to the 2010 inseason subsistence interview questions for Chinook salmon in lower and middle Yukon River villages.**

Interview date	Compared with this time "LAST" year, how were your catch rates for salmon this week?			Compared with this time "LAST" year, is the amount of time you have fished?		
	Poor	Same	Better	Less	Equal	More
<b>Emmonak</b>						
13-Jun	1			1		
20-Jun	6			6		
27-Jun	2			2		
<b>Marshall</b>						
13-Jun						
20-Jun		5	1	2	3	1
27-Jun		2	15	1	1	15
4-Jul			3			3
11-Jul			1			1
18-Jul			3			3
<b>Holy Cross</b>						
13-Jun						
20-Jun						
27-Jun	1	2	4	1	4	2
4-Jul	2	3	6	3	3	5
11-Jul			2		2	
<b>Nulato</b>						
13-Jun						
20-Jun	3			1	1	1
27-Jun						
4-Jul	2	2		1	2	1
<b>Galena</b>						
13-Jun						
20-Jun						
27-Jun	4		5			9
4-Jul	3	6	8		10	7
11-Jul	3	4	9	2	3	11
18-Jul			7		1	6
<b>Total</b>	<b>27</b>	<b>24</b>	<b>64</b>	<b>20</b>	<b>30</b>	<b>65</b>

**Table 3. Results of household responses to the 2010 inseason subsistence interview questions for Chinook salmon in Koyukuk River and upper Yukon River villages.**

Interview date	Compared with this time "LAST" year, how were your catch rates for salmon this week?			Compared with this time "LAST" year, is the amount of time you have fished?		
	Poor	Same	Better	Less	Equal	More
<b>Huslia</b>						
4-Jul	2			2		
11-Jul	1			1		
18-Jul		1	1	2		
25-Jul	1			1		
<b>Allakaket</b>						
4-Jul	4			4		
11-Jul	2			2		
18-Jul						
25-Jul	3			3		
<b>Ft. Yukon</b>						
4-Jul	4	2	1	3	2	2
11-Jul	8	2	0	8	2	0
<b>Circle</b>						
11-Jul	8	1	0		9	
18-Jul					3	
25-Jul	3				2	
1-Aug	2					
<b>Eagle</b>						
11-Jul	3			3		
18-Jul	4		1	1	1	3
25-Jul	1	1	4	1	2	3
1-Aug		1	3	2	1	1
<b>Total</b>	<b>46</b>	<b>8</b>	<b>10</b>	<b>33</b>	<b>22</b>	<b>9</b>

**Table 4. Results of household responses to the 2010 inseason subsistence interview questions for summer chum salmon in Yukon and Koyukuk River villages.**

Interview date	Compared with this time "LAST" year, how were your catch rates for salmon this week?			Compared with this time "LAST" year, is the amount of time you have fished?		
	Poor	Same	Better	Less	Equal	More
	<b>Emmonak</b>					
20-Jun	5			5		
27-Jun	2			2		
	<b>Marshall</b>					
27-Jun		10	8	2	12	4
4-Jul						
11-Jul		1			1	
	<b>Huslia</b>					
4-Jul	1			1		
11-Jul	1			1		
18-Jul	1	1		2		
25-Jul	1			1		
1-Aug		2		2		
	<b>Allakaket</b>					
11-Jul	2			2		
18-Jul						
25-Jul		3			3	
1-Aug						
8-Aug	2	2		3	1	
15-Aug		2			2	
<b>Total</b>	<b>15</b>	<b>21</b>	<b>8</b>	<b>21</b>	<b>19</b>	<b>4</b>

**Table 5. The 2009 weekly average percentages for Chinook salmon subsistence harvest from interviewed households in lower and middle Yukon River villages.**

Week Ending	Emmonak		Marshall		Holy Cross		Nulato		Galena	
	<i>n</i> <sup>a</sup>	Weekly average								
6-Jun										
13-Jun	1	0%								
20-Jun	8	7% <sup>1</sup>	21	0% <sup>1</sup>			12	0%		
27-Jun	7	13% <sup>3</sup>	19	60% <sup>2</sup>	7	41% <sup>1</sup>			9	13%
4-Jul	6	13%	8	62% <sup>3</sup>	12	63% <sup>3</sup>	4	36% <sup>2</sup>	17	28% <sup>1</sup>
11-Jul	7	65%	13	68%	7	82%			19	58% <sup>3</sup>
18-Jul	0	81%	13	73%	11	82%			13	67%
25-Jul			11	73%	11	82%	4	56%	23	67%
1-Aug										
8-Aug										
15-Aug										
22-Aug										
Total # of interviews	45				57		21		83	
Total # of weeks	6	98			5		3			
Final percentage <sup>b</sup>	12	61%	24	72%	15	82%	12	51%	24	73%

<sup>1</sup> Pulse 1

<sup>2</sup> Pulse 2

<sup>3</sup> Pulse 3

<sup>a</sup> Number of households calculated in the average.

<sup>b</sup> Estimate of subsistence Chinook salmon harvest completion.

**Table 6. The 2010 weekly average percentages for Chinook salmon subsistence harvest from interviewed households in Koyukuk River and upper Yukon River villages.**

Week Ending	Huslia		Allakaket		Ft. Yukon		Circle		Eagle	
	<i>n</i> <sup>a</sup>	Weekly average	<i>n</i> <sup>a</sup>	Weekly average	<i>n</i> <sup>a</sup>	Weekly average	<i>n</i> <sup>a</sup>	Weekly average	<i>n</i> <sup>a</sup>	Weekly average
6-Jun										
13-Jun										
20-Jun										
27-Jun					7	0%				
4-Jul	2	5% <sup>1</sup>	4	0%	10	0%				
11-Jul	1	30% <sup>2</sup>	4	0% <sup>1</sup>	9	14% <sup>1</sup>	9	5% <sup>1</sup>	3	0%
18-Jul	3	33% <sup>3</sup>	0	0% <sup>3</sup>			8	5% <sup>2</sup>	6	14% <sup>1</sup>
25-Jul	4	34%	3	5%	6	44% <sup>3</sup>	7	9% <sup>3</sup>	7	51% <sup>2</sup>
1-Aug	4	34%					2	13%	4	88% <sup>3</sup>
8-Aug			3	5%			10	13%	5	88%
15-Aug			3	5%			10	13%	1	88%
22-Aug										
Total # of interviews	24				32		47		29	
Total # interview weeks	5	54			4				6	
Final percentage <sup>b</sup>	10	36%	19	5%	16	36%	10	15%	9	100%

<sup>1</sup> Pulse 1

<sup>2</sup> Pulse 2

<sup>3</sup> Pulse 3

<sup>a</sup> Number of households calculated in the average.

<sup>b</sup> Estimate of subsistence Chinook salmon harvest completion.

**Table 7. The 2010 weekly average percentages for summer chum salmon subsistence harvest from interviewed households in Yukon River villages.**

Week Ending	Emmonak		Marshall		Holy Cross		Huslia		Allakaket	
	<i>n</i> <sup>a</sup>	Weekly average	<i>n</i> <sup>a</sup>	Weekly average	<i>n</i> <sup>a</sup>	Weekly average	<i>n</i> <sup>a</sup>	Weekly average	<i>n</i> <sup>a</sup>	Weekly average
6-Jun										
13-Jun	0	0%								
20-Jun	6	24% <sup>1</sup>	6	0% <sup>1</sup>						
27-Jun	4	43% <sup>3</sup>	17	51% <sup>2</sup>	5	8% <sup>1</sup>				
4-Jul	6	43%	8	57% <sup>3</sup>	4	14% <sup>3</sup>	2	10%	0	0%
11-Jul	6	43%	13	60%	8	54%	1	23%	4	6%
18-Jul	0	62%	11	70%	8	54%	2	30%	0	8%
25-Jul			10	70%	8	54%	2	30%	3	10%
1-Aug							3	23%		
8-Aug									5	16%
15-Aug									4	16%
22-Aug										
Total # of interviews	33		81		33		10		25	
Total # interview weeks	6		6		5		5		5	
Final percentage <sup>b</sup>	11	45%	24	69%	9	42%	5	35%	13	16%

<sup>1</sup> Pulse 1

<sup>2</sup> Pulse 2

<sup>3</sup> Pulse 3

<sup>a</sup> Number of households calculated in the average.

<sup>b</sup> Estimate of subsistence summer chum salmon harvest completion.

APPENDIX A: Pre-season Flyer & Reminder Card

# Yukon River Fisheries Inseason Management Teleconferences

*Tracking the run, one week at a time*

1:00 pm Alaska Time | 2:00 pm Yukon Time  
each Tuesday  
Starting on June 1, 2010

**1-800-315-6338**

Participant Code YUKON# (98566#)

**Purpose**

- Provide a forum for fishers, managers, processors, and others to communicate about current run conditions, including timing, abundance, and escapement during the fishing season
- Learn about and discuss fishing conditions and management strategies

**Agenda**

- Subsistence Reports
- Management Update and Strategy
- Local Input, Questions, and Closing Comments

**Protocols**

- State your name and village before speaking
- Be brief to give everyone a chance to speak
- Listen to others, be polite, and be respectful

**Subsistence Questions**

- Are your catches up or down relative to last year?
- How far along are local fishers in their subsistence harvests? (are they 25% done? 50% done? 100%?)
- What is your assessment of run strength?
- What is the quality of the fish?
- What are the current river conditions? (water level, clarity, amount of debris)
- Each year, please note when the first king salmon is caught in your community

*Get involved!*

**Discuss fishing conditions & management strategies  
Learn from fishers, processors, & managers  
Make your voice heard!**



Sponsored by  
the Office of Subsistence Management and  
the Yukon River Panel

## Front

Yukon River Drainage Fisheries Association

**Yukon River In-Season Management Teleconferences**

**1:00 pm Alaska Time**  
**2:00 pm Yukon Time**  
**each Tuesday**

**Starting on June 1, 2010**

Tracking the run,  
one week at a time

**1-800-315-6338**

**PARTICIPANT CODE**  
**yukon#**  
**(98566#)**

## Back

**SUBSISTENCE USERS—**  
**Please answer these questions**  
**on each teleconference:**

Are your catches up or down relative to last year?

How far along are local fishers in their subsistence harvests? (25% done? 50% done? 100% done?)

What is your assessment of run strength?

What is the quality of the fish?

What are the current river conditions? (water level, clarity, amount of debris)

Each year, please mention when the first king salmon is caught in your community.

**APPENDIX B: Waterproof Flyer**

# Yukon River Fisheries In-Season Management Teleconferences

1:00 pm Alaska Time | 2:00 pm Yukon Time  
each Tuesday  
Starting on June 1, 2010

## 1-800-315-6338

Participant Code YUKON# (98566#)

*Get involved!*  
**Discuss fishing conditions & management strategies**  
**Learn from fishers, processors, & managers**  
**Make your voice heard!**



Facilitated by YRDFA  
[www.yukonsalmon.org](http://www.yukonsalmon.org)

Sponsored by  
the Office of Subsistence Management and  
the Yukon River Panel

## Subsistence Fishing Schedule | 2010




*For additional information:*

**ADF&G:**  
Steve Hayes in Anchorage  
907-267-2383  
Dayna Norris in Fairbanks  
907-459-7240; or Emmonak  
907-949-1320

**Subsistence Fishing Schedule:**  
1-866-479-7387 (toll free  
outside of Fairbanks);  
In Fairbanks call 459-7387  
or visit <http://csfish.adfg.state.ak.us/newsrelease/select.php?dist=YUS>

**USFWS:**  
Fred Bue in Fairbanks  
907-455-1849 or  
1-800-267-3997; or in  
Emmonak 907-949-1798

**Inseason Teleconferences:**  
see back of this sheet for  
details

A subsistence salmon fishing schedule will be in place early in the season until the salmon run size is projected to be of sufficient strength to warrant relaxing or additional conservation measures appear necessary. The schedule is intended to reduce harvest impacts during years of low salmon runs on any particular run component and to spread subsistence harvest opportunity among users.

**This schedule is subject to change depending on run strength.**

Area	Reduced Regulatory Subsistence Fishing Periods	Approximate Schedule to Begin	Days of the Week
Coastal District	7 days/week	All Season	M/T/W/TH/F/SA/SU – 24 hours
District Y-1	Two 36-hour periods/week	June 7	Mon. 8 pm to Wed. 8 am /Thu. 8 pm to Sat. 8 am
District Y-2	Two 36-hour periods/week	June 9	Wed. 8 pm to Fri. 8 am / Sun. 8 pm to Tue. 8 am
District Y-3	Two 36-hour periods/week	June 13	Wed. 8 pm to Fri. 8 am / Sun. 8 pm to Tue. 8 am
Subdistrict Y-4-A	Two 48-hour periods/week	June 16	Sun. 6 pm to Tue. 6 pm / Wed. 6 pm to Fri. 6 pm
Subdistricts Y-4-B, C	Two 48-hour periods/week	June 23	Sun. 6 pm to Tue. 6 pm / Wed. 6 pm to Fri. 6 pm
Koyukuk & Innoko Rivers	7 days/week	All Season	M/T/W/TH/F/SA/SU – 24 hours
Subdistricts Y-5-A, B, C	Two 48-hour periods/week	June 29	Tue. 6 pm to Thu. 6 pm /Fri. 6 pm to Sun. 6 pm
Subdistrict Y-5-D	7 days/week	All Season	M/T/W/TH/F/SA/SU – 24 hours
District Y-6	Two 42-hour periods/week	All Season	Mon. 6 pm to Wed. Noon /Fri. 6 pm to Sun. Noon
Old Minto Area	5 days/week	All Season	Friday 6 pm to Wednesday 6 pm

All subsistence salmon fishing with gillnets and fish wheels must be stopped during subsistence salmon fishing closures. In **Districts Y-1, 2, and 3**, from **June 1 to July 15** a person may not possess Chinook salmon taken for subsistence uses unless **both tips (lobes) of the tail fin** have been removed.

**APPENDIX C: Promotional Playing Cards**

The image shows a promotional playing card with a light tan background and rounded corners. On the left side, there is a vertical blue bar. The top portion of this bar contains the text 'PARTICIPANT CODE' in white, with 'yukon#' in a large, stylized white font and '(98566#)' in a smaller white font below it. The bottom portion of the blue bar contains the phone number '1-800-315-6338' in white. The main body of the card features the following text: 'Yukon River Drainage Fisheries Association' at the top in a small blue font; 'Yukon River Fisheries In-Season Management Teleconferences' in a larger blue font; '1:00 pm Alaska Time' and '2:00 pm Yukon Time each Tuesday' in a bold yellow font; 'June through August' in a bold blue font; and 'Tracking the run, one week at a time' in a blue font. A faint illustration of a salmon is visible in the background. At the bottom of the card, there is a blue silhouette illustration of a boat, a fishing vessel, and a signpost.

Yukon River Drainage Fisheries Association

**Yukon River Fisheries  
In-Season Management  
Teleconferences**

**1:00 pm Alaska Time  
2:00 pm Yukon Time  
each Tuesday**

**June through August**

Tracking the run,  
one week at a time

1-800-315-6338

PARTICIPANT CODE  
yukon#  
(98566#)

## APPENDIX D: YRDFA E-News Articles

### June Edition

#### Inseason Management Teleconferences Begin

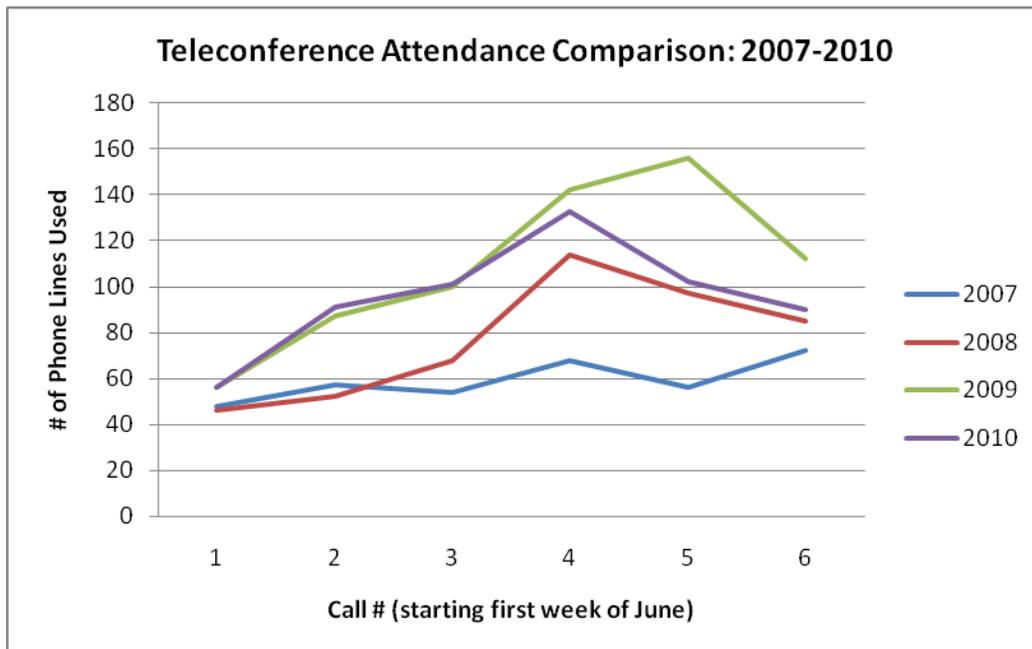
On Tuesday, June 1 YRDFA hosted the first inseason management teleconference of 2010. Fishers from nearly 20 communities along the Yukon River talked about river conditions and subsistence activities, and management agencies from both sides of the border shared outlooks and plans. We learned that subsistence fishing efforts are low throughout the river, water levels are unusually low throughout most of the drainage, there is very little drift, and no salmon have been caught yet. [Click here for a summary of the teleconference.](#) These teleconferences will be held every Tuesday through early September; [click here for more details.](#) If you would like to receive weekly summaries of the teleconferences, email [lauren@yukonsalmon.org](mailto:lauren@yukonsalmon.org).

### July Edition

#### Teleconference Attendance Well Above Average

*By Jason Hale, Communications Director*

Every Tuesday since the beginning of June, quite a few people have called in to the Yukon River Inseason Management Teleconferences to discuss this year's salmon runs. YRDFA has hosted these teleconferences for 17 years, and the last few years have seen a notable rise in participation. Last year, amidst concerns of low returns and unprecedented fishing restrictions, record numbers of people called in. So far this season participation has not quite measured up to last year, but it's on track to be the second busiest season on record.



Through the first week of July, 12 percent more phone lines have been in use this year relative to the four year average, though 12 percent fewer phone lines have been in use relative to last year. The busiest teleconference, which always occurs toward the end of June, boasted 133 phone lines in use this year. While this is down from last year's record number—156 lines in use on one call—it is still higher than participation on any one call in any year on record besides last year.

If this year follows the normal trend, there will be another spike in participation toward the end of July, shortly after the fall chum begin entering the river. Then there will be a slow decline as fishers meet their needs and turn to other subsistence activities.

For more details on this year's Inseason Management Teleconferences, or to read summaries from the teleconferences held to date, visit <http://yukonsalmon.org/whatwedo/projects%20-%20info.htm>.

**APPENDIX E: Weekly Teleconference Summaries**

(see attachment or visit <http://www.yukonsalmon.org/Teleconferences/2010summaries.pdf>)

APPENDIX F: Interview Data Collection Form

Interview Data Collection Form

Interview Date: \_\_\_\_\_  
 Year: \_\_\_\_\_  
 Interviewer Name: \_\_\_\_\_

Remind fishers to use their subsistence harvest calendar:

Fishing Date	Household Name	Gear		Did Not Fish (Enter Code)	How many days did you fish this week?	Compared to "LAST" year is the amount of time fished?		Compared to "LAST" year how were your catch rates?		Where are you at in your harvest (%)?		Summary
		king	chum			King	Chum	King	Chum	King	Chum	
		DN	king			Less	Less	Poor	Poor	0 10	0 10	# of fish's interviewed? king
		SN	chum			Equal	Equal	Same	Same	25 50	25 50	
		FW	OTHER			More	More	Better	Better	75 100	75 100	chum
		DN	king			Less	Less	Poor	Poor	0 10	0 10	
		SN	chum			Equal	Equal	Same	Same	25 50	25 50	# of fish's using? DN
		FW	OTHER			More	More	Better	Better	75 100	75 100	
		DN	king			Less	Less	Poor	Poor	0 10	0 10	# reporting time as? King Chum
		SN	chum			Equal	Equal	Same	Same	25 50	25 50	
		FW	OTHER			More	More	Better	Better	75 100	75 100	Less
		DN	king			Less	Less	Poor	Poor	0 10	0 10	
		SN	chum			Equal	Equal	Same	Same	25 50	25 50	Equal
		FW	OTHER			More	More	Better	Better	75 100	75 100	
		DN	king			Less	Less	Poor	Poor	0 10	0 10	More
		SN	chum			Equal	Equal	Same	Same	25 50	25 50	
		FW	OTHER			More	More	Better	Better	75 100	75 100	# reporting catch as? King Chum
		DN	king			Less	Less	Poor	Poor	0 10	0 10	
		SN	chum			Equal	Equal	Same	Same	25 50	25 50	Poor
		FW	OTHER			More	More	Better	Better	75 100	75 100	
		DN	king			Less	Less	Poor	Poor	0 10	0 10	Equal
		SN	chum			Equal	Equal	Same	Same	25 50	25 50	
		FW	OTHER			More	More	Better	Better	75 100	75 100	Same
		DN	king			Less	Less	Poor	Poor	0 10	0 10	
		SN	chum			Equal	Equal	Same	Same	25 50	25 50	Same
		FW	OTHER			More	More	Better	Better	75 100	75 100	

DN = drift gillnet SN = set gillnet FW = fishnet  
 Did not fish over/see = 1, Leave not been fishing 2, Mechanical 3, Out of town 4, Bad weather 5, Work interference 6, Other (specify reason)  
 Provide comments on reverse side

**Comments:** size of fish, healthy, water levels, timing, more/less effort, abundance, fishing more places than usual, etc...

HOUSEHOLD NAME:

## APPENDIX G. The 2010 inseason salmon interview project inseason salmon weekly harvest summary sheet.

Preliminary Data

### Inseason Salmon Harvest Interview Summary

Interview Week		Weekly Date:					
Village	Interview Date(s)	# of Interviews	Gear Type	Harvest % <sup>a</sup>	Catch Rate <sup>b</sup>	Time Fished <sup>c</sup>	Fishing Days <sup>d</sup>
Emmonak			Drift gillnet	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				
Marshall			Drift gillnet	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				
Holy Cross			Drift gillnet	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				
Nulato			Drift gillnet	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				
Huslia			Drift gillnet	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				
Allakaket			Drift gillnet	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				
Galena			Fishwheel	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Drift gillnet	76 - 100	POOR	LESS	
			Combination				
Beaver			Fishwheel	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				
Ft. Yukon			Fishwheel	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				
Eagle			Fishwheel	0 - 25	BETTER	MORE	
			Set gillnet	26 - 75	SAME	EQUAL	
			Combination	76 - 100	POOR	LESS	
			Other				

a Where are you at in your harvest?

b Compared to "LAST" year how were you catch rates?

c Compared to "LAST" year is the amount of time fished?

d Average number of fishing days of all interview participants?

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