**Fishery Management Report No. 12-36**

# Activities of the Kuskokwim River Salmon Management Working Group, 2011

**Annual Report for Study 10-353**
**USFWS Office of Subsistence Management**
**Fisheries Resource Monitoring Program**

**by**

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**and**

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

## Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

**Weights and measures (metric)**

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

**Weights and measures (English)**

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

**Time and temperature**

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

**Physics and chemistry**

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

**General**

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

**Mathematics, statistics**

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

*FISHERY MANAGEMENT REPORT NO. 12-36*

# ACTIVITIES OF THE KUSKOKWIM RIVER SALMON MANAGEMENT WORKING GROUP, 2011

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# ABSTRACT

The Kuskokwim River Salmon Management Working Group (Working Group) meetings provide the forum for area fishermen, user representatives, community representatives, Federal Subsistence Regional Advisory Council representatives, Alaska Department of Fish and Game (ADF&G) Advisory Committee members and state and federal managers to come together and discuss issues relevant to management of Kuskokwim River salmon populations. The Working Group met 9 times in 2011 to review run assessment information and to seek a consensus on how to proceed with management of Kuskokwim River salmon fisheries. A total of 13 informational packets were distributed to the Working Group and interested parties. The first meeting of 2011 was held in March in conjunction with the ADF&G Kuskokwim Area Interagency meeting, and inseason meetings occurred June through August. This report summarizes the proceedings of the 2011 Working Group season. Notable actions taken included: March 18, the Working Group heard, discussed, amended, and voted on preseason management measures designed to conserve Chinook salmon; May 3 and 17 the Working Group discussed and implemented plans for public outreach to encourage subsistence fishermen to limit their harvest of Chinook salmon; June 13, 20, and 27, the Working Group voted to accept ADF&G recommendations to implement additional restrictions on subsistence Chinook harvest in order to conserve salmon for escapement purposes.

Key words: subsistence fishing, commercial fishing, salmon fishery management, Bethel, Kuskokwim River, Chinook *Oncorhynchus tshawytscha*, chum *O. keta*, sockeye *O. nerka*, and coho salmon *O. kisutch*.

# INTRODUCTION

This report summarizes the 2011 season of the Kuskokwim River Salmon Management Working Group (Working Group), starting with background information about the Working Group, followed by a short synopsis of the season overall with each meeting briefly summarized, and followed by a discussion of the fishery, fishery decisions and the Working Group's involvement in the fishery management process.

The Working Group was formed in 1988 by the Alaska Board of Fisheries (BOF) in response to requests from stakeholders in the Kuskokwim Area (Figure 1) that sought a more active role in management of salmon fishery resources (Francisco et al. 1989). The Working Group has become the forum through which inseason management decisions are made regarding Kuskokwim River subsistence, commercial and sport salmon fisheries.

The Working Group is made up of 13 member organizations or constituencies. These members represent: Elders (Upriver, Downriver; 2 seats), Subsistence Fishermen (Lower River, Middle River, Upriver, and Headwaters; 4 seats), Processors (1 seat), Commercial Fishermen (1 seat), Sport Fishermen (1 seat), Member at Large (1 seat), Federal Subsistence Regional Advisory Committees (RAC; Yukon-Kuskokwim Delta, Western Interior; 2 seats), and the Alaska Department of Fish and Game (ADF&G; 1 seat). Each member organization designates one representative and one or more alternates in the event the representative is unable to attend a meeting.

Participation in the Working Group process requires a great deal of time from its members and agency staff. The Working Group typically meets in spring each calendar year in Anchorage, conducts intensive and frequent meetings during the summer fishing season in Bethel, and holds a wrap-up session in fall or early winter. Working Group members may also have the opportunity to participate in other Kuskokwim River fisheries regulatory meetings and processes. Active participation in meetings both in Bethel and outside the Kuskokwim River drainage allows for an exchange of information between stakeholders and managers. The relationship among Working Group members, research planners, project leaders, and policy makers continues to be fostered, and these interactions are critical to the aim of the Working Group. This

relationship ensures that participants remain up-to-date on new information and maintain their direct involvement in management of Kuskokwim River salmon fisheries.

Funding provided by the Office of Subsistence Management (OSM; project FIS 10-353, effective 2010-2013), was essential to the Working Group process during this time period. This funding provides for Working Group member travel to Working Group meetings and other conferences relevant to Kuskokwim River fisheries, such as the Kuskokwim Area interagency meetings. The funding also provides for meeting supplies and arrangements and ADF&G staff time to coordinate the Working Group process, prepare and distribute updated fishery status information packets, and to summarize the activities of the Working Group. State general funds provide additional salary for ADF&G staff that coordinates the Working Group.

# OBJECTIVES

The objectives of the Working Group process are

1. to provide local fishermen and other users with an avenue for direct involvement in the management of Kuskokwim River fisheries,
2. to work towards the development of a comprehensive management plan for all Kuskokwim River salmon stocks,
3. to provide a forum for all parties with an interest in Kuskokwim River fisheries to work together to reach a consensus on management of the fisheries, and
4. to continue to strengthen the Working Group process.

The objective of project FIS 10-353 is to strengthen the Working Group process by providing funding to support the following activities:

1. provide inseason run assessment information to all parties participating in cooperative management of the Kuskokwim River subsistence salmon fishery
2. provide a forum for RAC members, ADF&G, and other participants of the cooperative management process to discuss inseason run assessment information and fishery management decisions affecting subsistence fisheries
3. provide an opportunity for participation in the cooperative management process to forecast and plan (preseason) and to summarize (postseason) the fishing season
4. report the discussion and decisions made during the cooperative management process

# PROCESS

The Working Group process is governed by the bylaws of the Kuskokwim River Salmon Management Working Group as amended June 22, 2010 (Appendix A1). The bylaws describe the purpose, rules of conduct, representation, and selection of officers for the Working Group process. Inseason meetings are generally held in the conference room located in the ADF&G Bethel field office. Working Group members from villages surrounding Bethel (particularly upriver representatives) often participate in meetings by teleconference. Efforts are made to conduct at least one meeting per year where all members are able to attend in person. These meetings are generally held during the spring, before the fishing season, in Anchorage. OSM funds Working Group member travel for these meetings.

Working Group meetings are conducted according to Robert's Rules of Order (Robert III et al. 2000) following a standard agenda that provides for a full and complete discussion of Kuskokwim River area and related salmon fisheries. Reports are heard and discussed regarding test fishery and escapement monitoring projects, and subsistence and commercial harvests. Based on these reports, ADF&G makes recommendations to the Working Group concerning management of Kuskokwim River salmon fisheries. The Working Group makes motions on ADF&G recommendations to facilitate discussion and work towards agreement on management decisions. Working Group motions are passed by consensus. ADF&G has no voting status on motions concerning the setting of commercial openings, subsistence fishing restrictions, and subsistence fishing closures. Through this process, the Working Group has the ability to influence and affect management decisions, while the authority to implement management actions rests with ADF&G. The Working Group passes resolutions stating consensus positions, recommendations, and opinions, and communicates these resolutions to agencies, organizations, and the public. The Working Group also appoints representatives to attend meetings of the BOF, Federal Subsistence Board, RAC, and other public meetings dealing with relevant fisheries issues.

In support of Working Group meetings, ADF&G:

1. informs Working Group members and members of the public and other agencies about scheduled meetings through phone, mail, email, and fax;
2. assembles, copies, and distributes materials including meeting announcements, agendas, information packets (Appendix B1–B12), action statements, meeting summaries (Appendix C1–D9), news releases, and newspaper articles;
3. initiates Working Group meeting teleconferences;
4. organizes and provides logistics for member travel;
5. assists the Working Group by recommending potential members to fill vacancies;
6. drafts an annual report of Working Group meetings and actions; and
7. secures funding for the Working Group process.

# 2011 SEASON

## WORKING GROUP MEETINGS

The Working Group met 9 times during the 2011 calendar year. The first meeting was held in conjunction with the ADF&G Kuskokwim Area Interagency Meeting in Anchorage at the Rabbit Creek Rifle Range conference room. The remainder of meetings occurred at the ADF&G conference room in Bethel. A total of 13 information packets were distributed weekly to update members and other participants on run assessment data, commercial catch reports, and other requested research. Run assessment data early in the season consisted of Bethel test fishery (BTF) catch per unit effort (CPUE) indices of salmon abundance (for details of methods see Bue and Martz 2006), and weekly reports from the Lower Kuskokwim River inseason subsistence salmon catch monitoring project (Carroll and Patton 2010) As the season progressed and escapement data became available from weirs and aerial surveys, that information was also included in the packets. Meeting agendas were distributed with these packets the day prior to every inseason meeting. Detailed meeting summaries were distributed usually within one week

of each meeting. In 2011 all Working Group meeting materials became available online on the ADF&G website. In 2011, 5 meetings had a quorum and 4 meetings did not; the Working Group made a total of 19 motions, plus 2 "unofficial" motions made at the July 1 meeting which did not have a quorum and 15 motions passed (plus 2 "unofficial" motions) and 4 motions failed.

## MARCH 18, 2011

This meeting followed the March 16–17 interagency meeting in Anchorage. Twelve of the thirteen members were present and a quorum was established. Daniel Esai was elected as primary Headwaters Subsistence member and Nick Petruska was elected as his alternate. The Upriver Elder seat remained vacant but an inquiry had been made to a potential candidate. Lamont Albertson, Beverly Hoffman, and Greg Roczicka were re-confirmed as the three co-chairs. ADF&G employee Doug Molyneaux announced his retirement and members thanked him for many years of involvement with the Working Group.

The focus of the meeting was reviewing and voting on Chinook salmon conservation management options discussed at the interagency meeting. Because the Kwethluk River had not met Chinook salmon escapement goals from 2008 to 2010 and the Tuluksak River had not met escapement goals for Chinook salmon from 2007 to 2010, ADF&G was planning to take restrictive actions in those tributaries. With overall low returns of Chinook salmon projected for the Kuskokwim River, many different conservation options were discussed. During an open discussion with ADF&G and United States Fish and Wildlife Service (USFWS) research and management staff on March 17, members reviewed data and then helped ADF&G and USFWS plan management options. Much discussion and clarification occurred regarding the physical boundaries for each proposed area where fishing restrictions would be placed. The recommendation for the Tuluksak and Kwethluk rivers was to close subsistence fishing, including all gillnet mesh sizes and rod and reel Chinook-directed fishing. The same restrictions were recommended for Kuskokuak Slough and the Kwethluk, Kisaralik, and Kasigluk rivers due to their close proximity to the Kwethluk River that could result in an increase in subsistence fishing effort and harvest of Chinook salmon on those systems. The recommendation for the mainstem Kuskokwim River District 1 was to start the 2011 season with no subsistence fishing restrictions, but move to "windows" fishing schedules if inseason projections indicated that Kuskokwim River tributary Chinook salmon escapement goals would not be met.

Much discussion and review of data occurred for each motion on these management options. After revising the recommendations to allow subsistence harvest of non-Chinook salmon species with rod and reel and 4 inch or smaller mesh gillnets, the Working Group unanimously supported restrictions for Chinook salmon conservation on the Tuluksak River, Kwethluk, Kisaralik, and Kasigluk Rivers, and Kuskokuak Slough. The group unanimously supported the original agency recommendation for starting the season without restrictions in District 1 mainstem Kuskokwim River and then possibly moving to windows schedules if warranted.

The Working Group also passed a motion to restrict Chinook salmon harvest to federally qualified users only in 2011 within the Yukon Delta Wildlife Refuge. A request was made to the USFWS and ADF&G to research the mechanism for implementing a reporting system of all salmon species shipped out of the Kuskokwim area. The group also requested more information regarding the quality of escapement at weir projects.

Throughout the meeting many positive comments were made by Working Group members and ADF&G staff praised everyone for such tremendous efforts toward managing Kuskokwim River

Chinook salmon collaboratively. Members stressed the importance of early public outreach regarding the Chinook salmon conservation concern and 2011 subsistence fishing restrictions.

## MAY 3, 2011

Eight of thirteen members were present, but two members arrived after voting began so a quorum could not be established. The focus of the meeting was creating a plan for public outreach concerning Chinook salmon conservation for the Kuskokwim River. The group discussed having a talk show on Bethel local radio station KYUK with Chuck Brazil (ADF&G Commercial Fishery Area Manager) on May 19, James Charles facilitating a Yup'ik talk line, and Alissa Joseph distributing posters around Bethel. Beverly Hoffman was actively educating people about Chinook conservation by meeting with Orutsararmiut Native Council (ONC), Association of Village Council Presidents (AVCP), and calling the KYUK talk line. Mike Thalhauser (Kuskokwim Native Association [KNA]) also addressed Chinook conservation at community meetings in Kalskag, Chuathbaluk, and Tuluksak.

When talking to the public, members suggested reiterating that the Kuskokwim River is the least regulated subsistence fishery in Alaska. It was also clarified that conservation information has been sent to sport-fishing guides and that restrictive actions will be taken in the sport fishery. Members also discussed that they need to make it clear to their communities that the Working Group process is important.

## MAY 17, 2011

Five of the thirteen members were present so a quorum could not be established. Members continued to discuss Chinook salmon conservation outreach strategies, including "talking points" publicized by posters: that the projected 2011 Chinook outlook is low, there is a need for conservation of Chinook salmon, it's important to preserve the traditional way of life, and we need to think about long-term sustainability. ADF&G took action to limit the Tuluksak, Kwethluk, and Kisaralik rivers and Kuskokuak slough to 4 inch and smaller mesh gillnets, and also closed rod and reel subsistence fishing and sport fishing for Chinook salmon in these areas. It was discussed that Windows restrictions for the mainstem Kuskokwim might be necessary for Chinook salmon conservation in 2011, depending on the Bethel test fishery CPUE. As requested, ADF&G gave a mesh size report which indicated that the smaller (5 3/8-inch) mesh catches more fish and smaller fish than the larger (8 inch) mesh in the Bethel test fishery. ONC inseason feedback suggested that fishermen have noticed smaller Chinook salmon and may switch to smaller gear to supplement their harvest with chum salmon.

## JUNE 13, 2011

Ten of the thirteen members were present and a quorum was established. Lower river subsistence reports indicated that the first Chinook salmon were small and that larger ones were beginning to arrive in Tuntutuliak. Inseason surveys reported average to above average catches which were better than the last few years. Middle river reports indicated that Chinook salmon numbers were low and most families had not started fishing yet. No Chinook salmon had been caught in McGrath.

Members and agency staff were very concerned about the dramatic increase in fishing effort in the Bethel area, evident by heavy congestion of drift and set nets on the river, full fish racks very early in the season, some fishermen putting out all of their nets at once, and the "flat-lining" of the BTF CPUE graph after June 8. There was speculation during the meeting that some of the

extra fishing effort in the lower river may have been caused by some erroneous information that many people in fish camps heard from a "uniformed" wildlife officer. This officer had told them there could be potential closures the weekend of June 11–12, yet no specific closures had been discussed until the Monday June 13 meeting (see *Inseason subsistence catch monitoring report June 13, 2011*, Appendix C4). Middle river and upriver members were very anxious about sufficient numbers of salmon making it past Bethel, especially since it was speculated that this first pulse of salmon may be destined for headwater tributaries.

On June 13 BTF data indicated that the Chinook salmon run was 40% behind the values projected to be needed to achieve escapement goals. After much debate, Working Group members unanimously supported the first subsistence salmon fishing closure on the mainstem Kuskokwim River since 2006: Effective June 16 through June 19 subsistence salmon fishing was closed in District 1 of the Kuskokwim River drainage, from the mouth upstream to Bogus Creek. Subsistence fishing for non-salmon species in District 1 was allowed during the closure, the gillnet mesh not to exceed 4-inch and length not to exceed 60 feet. Even though the vote was unanimous, Working Group members planned to tell the public that supporting restrictions was difficult but had resulted from thorough discussion. Even though many were concerned about meeting their harvest needs, the group saw restrictions as a necessary compromise for Chinook salmon escapement.

## JUNE 20, 2011

Lower river subsistence reports and inseason surveys indicated that some people used 4-inch mesh nets to catch sockeye, chum, and small Chinook salmon during the previous subsistence closure.

Families in Tuntutuliak reported meeting their subsistence needs for Chinook salmon, and many other lower river communities were about half-way finished fishing for Chinook salmon. Some fishermen in the Bethel area saw Chinook conservation posters and planned on using smaller mesh to target sockeye salmon instead. Middle river subsistence report indicated an absence of Chinook salmon, with not more than 50 fish on all the racks in Aniak. Middle river members and families surveyed by KNA were very concerned about the below average fishing in Aniak, Kalskag, Chuathbaluk, and Stony River. One member reminded the group that in the upper Kuskokwim, families often do not meet their subsistence needs for Chinook salmon.

Even with the 4 day break in fishing from June 16 to 19, the BTF CPUE for Chinook was similar to 2008 and 2009 which had below average escapement, and 2010 which had poor escapement. The agency expected BTF abundance to increase during the closure, but it did not. Therefore, it was speculated that escapement goals would not be met on several river tributaries. However, sockeye and chum salmon were in good abundance, and all weir project installations were projected to be on schedule.

The Working Group voted on a motion to take no further actions restricting subsistence fishing, which failed. Members commented that action was necessary to meet Chinook salmon escapement not only this year, but for years to come. The motion supporting ADF&G's recommendation of a 5 day subsistence fishing closure from June 23 to June 28 failed by one vote. Regardless, ADF&G and USFWS adopted this motion because it would protect Chinook salmon while the majority of the run was passing. Processor, middle river, upriver, and both RAC members strongly supported the motion.

## JUNE 27, 2011

Ten of the thirteen members were present and a quorum was established. Gerald Simeon was voted to replace Calvin Simeon as primary Middle River Subsistence member. Lower river subsistence reports indicated that many people would meet their subsistence needs in the subsequent days in Akiachak and Tuluksak. At meetings on June 23 and 24, Akiak elders called for a protest fishery on June 25, to show their opposition to the 5 day subsistence fishing closure from June 23 to 28. Chuck Brazil (ADF&G) met with community members and convinced them not to fish illegally. ONC inseason surveys indicated that 90% of families in the Bethel area planned to fish the week of June 30 to finish harvest goals, and that weather had been decent for drying. KNA inseason surveys indicated that Kalskag, Aniak, Crooked Creek, and Sleetmute families reported below average fishing for Chinook, chum, and sockeye salmon. Many middle river fishermen supported the subsistence fishing closures in District 1.

On June 27, the Chinook run passage at BTF was estimated at 70%; sockeye passage was at 48%; and chum salmon passage was at 25%. Sockeye and chum salmon abundances were good, but according to the BTF CPUE Chinook salmon abundance was 37 points below the projected lower confidence interval indicating escapement goals may not be met. Weirs on the Tuluksak, George, Tatlawiksuk, and Kogrukluk rivers were operational. Aniak sonar was on schedule for installation and the Kwethluk weir would be installed as soon as water levels dropped (later than scheduled).

ADF&G and USFWS gave different recommendations. ADF&G recommended that effective June 29 until July 7, subsistence salmon fishing be *restricted to 6 inch* and smaller mesh gillnets in District 1 of the Kuskokwim River drainage. The rationale for this recommendation was that the higher density of chum and sockeye salmon in the river at this time would prevent too many Chinook salmon from being caught. The restriction encompassed the entire district in order to include the Tuluksak River, which had a Chinook conservation concern. USFWS recommended a subsistence fishing *closure* effective June 29 to July 1, *followed by* a subsistence fishing *restriction of 6 inch* or smaller mesh gillnets from July 2 to July 7. The boundary of the USFWS recommendation was not district-wide, but from the mouth of the Kuskokwim River up to Kuskokuak Slough. The federal agency was very concerned about escapement on tributaries in the conservation unit and believed that ADF&G's recommendation would not allow enough large female Chinook to reach spawning grounds.

After much discussion, the Working Group voted to support ADF&G's recommendation unanimously. Members thought that the two previous closures should have allowed many fish to escape upstream, and appreciated how cooperative communities had been with these management actions. They thought that a 6 inch mesh restriction was a reasonable alternative at this point in the season.

## JULY 1, 2011

The meeting began with eight of the thirteen members, but once voting began, only six members were present so a quorum could not be established. Members decided informally to make and vote on two motions anyway. Due to the length of the meeting, the agenda was not entirely addressed and was continued at the next meeting.

The focus of the meeting was a lengthy discussion regarding federal actions implemented on June 29, which closed subsistence fishing on the Kuskokwim River from the mouth upstream to

Kuskokuak Slough. These actions superseded the ADF&G 6 inch mesh restriction effective throughout District 1 from June 29 until July 7. Tom Doolittle and Dan Gillikin from USFWS gave presentations justifying federal actions, followed by two hours of discussion. In addition to disagreeing with the Federal special action and the lack of advance notice preceding it, members expressed confusion regarding the difference between state and federal management capabilities and jurisdiction boundaries. The Working Group asked USFWS to lift all federal actions, but after the meeting Tom Doolittle replied that the agency would not.

Lower river subsistence reports indicated that families in the lower river and Bethel area had generally met their needs for Chinook, chum, and sockeye salmon. In Aniak, people were about 90% finished fishing for Chinook. KNA inseason reports indicated that Chinook salmon numbers and size were increasing in Chuathbaluk, Kalskag, and Sleetmute. Sleetmute also reported good sockeye salmon abundance and quality. However, Stony River, Nikolai, and McGrath fishermen reported catching few fish.

By the 80% passage point of the run (at BTF), Chinook salmon CPUE remained well below the lower confidence interval for meeting escapement goals but was better than 2010. By July 5, salmon run assessment indicated that the majority of Chinook (90%), sockeye (80%), and chum salmon (50%) would have passed through Subdistrict 1-B of District 1. Escapement goals for sockeye and chum were projected to be met based on abundance indices at BTF and a harvestable surplus was available for these species. Processors were ready and had adequate capacity for a commercial period.

Working Group members unanimously supported the first commercial fishing recommendations of the 2011 season, which were a 4 hour opener in Subdistrict 1-B within District 1 on July 5; and a 3 hour opener in Subdistrict 1-A on July 7. Processors agreed not to purchase any Chinook salmon and fishermen were required to retain Chinook for subsistence use and to record the number caught on an ADF&G fish ticket. Processors offered to give ice to fishermen for transporting Chinook salmon home, and ONC and USFWS offered to help distribute Chinook salmon to elders in Napaskiak and Oscarville. USFWS agreed with the commercial fishing period and assured the group they were not planning another special action.

## JULY 20, 2011

Eight of thirteen members were present and a quorum was established. Tony Joaquin was elected alternate Processor member for Nick Souza (Coastal Villages Seafoods). Greg Roczicka read a letter from Peter Probasco (Assistant Regional Director, Office of Subsistence Management, USFWS) in response to an inquiry by the Working Group in June 2011, regarding implementing a reporting system of Chinook salmon shipped out of Bethel. Mr. Probasco stated that neither the Federal Subsistence Board nor the federal inseason fisheries manager had the authority to implement such a system, and he suggested other avenues that the Working Group could pursue.

Lower river subsistence reports indicated that cold, wet weather made drying fish difficult. KNA reported that most people were finished fishing for sockeye, Chinook, and chum salmon in the middle river and many were grateful for the 2011 subsistence fishing closures because they caught more Chinook salmon this year than the past few years. The headwaters report indicated that fishing was slow in McGrath and that fish caught in 2011 were smaller than normal.

BTF was no longer catching Chinook salmon and stopped using the 8 inch gillnets on July 10. The BTF chum salmon indices, by the 90% run passage point, indicated an abundance which

ranked in the top 4 from 1999 to 2011. The sockeye salmon run abundance continued to be good in the BTF. Overall, Chinook escapement at assessment projects were low, which was consistent with pre-season predictions of low Chinook salmon abundance, but it was too early to see what the effect of restrictive actions taken on the tributaries would be. Chum salmon escapements in the lower river tributaries were low, but were above average upriver. Sockeye salmon escapements were average to above average.

As requested by the Working Group, ADF&G gave presentations on BTF history and operation protocols, Chinook age class information, and Chinook bycatch in groundfish fisheries and interception in Area M fisheries. Much discussion followed after the presentations and members appreciated the information. Members also indicated that Chinook salmon bycatch in the pollock fishery continued to be a topic of discussion throughout the region, so the Processor offered to draft "talking points" to help distribute accurate information on the issue.

The commercial harvest for the July 18 opener in Subdistrict 1-B indicated that the 621 Chinook caught in the commercial harvest in 2011 was far below the 3,000 Chinook salmon caught in 2010. Sockeye catches were declining in the commercial harvest and the CPUE for chum salmon in the commercial harvest was average. Kuskokwim Seafoods reported below average weights for chum salmon (1/2 pound smaller than normal) and that the roe was immature and darker in color than normal.

## JULY 27, 2011

Five of thirteen members were present therefore a quorum was not established. A moment of silence was observed for Calvin Simeon, Middle River Subsistence member, who passed away on July 21, 2011.

Lower river, ONC, and middle river reports indicated that most people were finished drying and smoking fish, and were waiting for coho to arrive for canning and salting. In the upper river, some Chinook were still in the river, and people were fishing for chum while waiting for coho salmon.

ADF&G wanted to wait until after evaluating the July 27 commercial fishing opener before making a recommendation. Members mentioned that many of the fisheries issues discussed at Working Group meetings in 2011 would be addressed at the Yupiit Nation Meeting in Tuntutuliak on July 29 and 30.

Aerial surveys for Chinook salmon were in progress and indicated that escapement goals were met on the Pitka Fork of the Salmon River and on the Kisaralik River. The Gagaryah and Cheeneetnuk rivers, tributaries of the Stony River, did not meet aerial survey escapement goals.

Historically, 85–90% of Chinook passage has been counted at weir projects by July 27. By July 27, none of the 4 rivers that have Chinook salmon escapement goals had met them. However, the Kogrukluk River weir was close to achieving its escapement goal for Chinook salmon. All other weir projects showed low abundance of Chinook salmon. Kwethluk, Tuluksak, and Tatlawiksuk River weirs showed Chinook salmon escapements above those of 2010 and Kogrukluk, Takotna and George rivers showed escapements similar to 2010.

Chum salmon escapement goals at for the Kogrukluk and Aniak rivers were met on July 18 and July 23 respectively. Generally, chum salmon escapement appeared to be strong at tributary

escapement projects on the Aniak, George, Kogrukluk, Tatlawiksuk, and Takotna, but appeared weak at Kwethluk and Tuluksak River projects.

For sockeye salmon, the Kogrukluk River achieved its minimum escapement. Sockeye salmon escapement on the Kwethluk River was below average but above years of low abundance. Coho salmon were beginning to arrive at tributary escapement projects.

As of July 27 the cumulative commercial salmon harvest in District 1 was 672 Chinook salmon (retained for subsistence purposes); 13,092 sockeye salmon; 108,849 chum salmon; and 4,777 coho salmon. The CPUE from the July 25 opener in Subdistrict-1B was above average for chum and below average for coho salmon. The Chinook salmon sport fishing season on the Kuskokwim ended on July 25. It was discussed that the current ADF&G radiotelemetry project for pike and burbot could possibly be expanded in future years to investigate the impact of pike on salmon in the Aniak River.

## COMMERCIAL HARVEST

The 2011 commercial fishing season began on July 5 and ended on August 22 (Table 3). There were 19 commercial fishing periods in District 1. A total of 748 Chinook salmon were harvested in the commercial fishery, with 699 of these retained for personal use, and 49 of them sold to commercial buyers. Other salmon harvests in the commercial fishery included 13,482 sockeye salmon; 118,256 chum salmon and 74,108 coho salmon were commercially harvested. Chinook salmon catch rates were below average. Catch rates for chum salmon were above average and sockeye salmon were average. Coho salmon catch rates ranged from above average to below average. A total of 413 individual permit holders (making at least one recorded landing) participated in the District 1 commercial fishery. This level of fishing effort was 12% above the most recent 10-year average of 387 fishermen. Chum and sockeye salmon harvests were above the most recent 10-year average, while Chinook and coho salmon harvests were below the most recent 10-year average. The chum salmon harvest was the highest since 1998. Total exvessel value of the fishery in District 1 was $764,358; approximately 150% above the most recent 10-year average value. The average income per permit holder in 2011 was approximately $1,851 (Kuskokwim Area Season Summary News Release Appendix E1).

## RUN DYNAMICS

The data for this section came from the 2011 Kuskokwim Area Season Summary (Appendix E1, compiled postseason) as well as from personal communication with ADF&G research staff. (It is important to note that complete salmon run information was not available inseason, and therefore could not be used by the Working Group to aid in management decisions.)

Based on escapements at weirs and through aerial surveys in the Kuskokwim River, overall Chinook salmon abundance in 2011 was below average, chum salmon abundance was above average, and sockeye and coho salmon abundance were average.

Based on the BTF, Kuskokwim River Chinook and sockeye salmon run timing at Bethel was near average, while chum salmon were three days later than average, and coho salmon run timing was three days earlier than average. Run timing at the spawning grounds was characterized as late for Chinook, chum and coho salmon, while sockeye salmon timing ranged from early too late.

## RIVER CONDITIONS

Kuskokwim River water level data has been collected by U.S. Department of the Interior, U.S. Geological Survey (USGS) branch since 1953. The USGS collects discharge, gauge height and precipitation information at a site located at the community of Crooked Creek 212 miles (341 km) upstream of Bethel. In 2011 the USGS gauging station was inoperable until June 24 due to abnormal river breakup flooding at the site; therefore current year water level comparisons were not consistently available through June 23. Beginning June 24 the Kuskokwim River water level was tracking above the most recent 10 year average, and then dropped below average on June 30 through July 14. Beginning July 15 water level hovered around the 10 year average level through August 1 after which the level increased to near the most recent 10 year maximum levels and remained above average through August. Water temperature at BTF site tracked near average for the first 21 days in June after which water temperatures fell well below the 10-year historical average through the BTF project completion date of August 20 except for a 3 day period from July 27 through July 29 when temperatures were near average. Water clarity at the BTF site tracked near the historical level for most of June through August. Clarity dropped below average to near minimum depth measurements between June 6 and June 15 and then tracked above average to near maximum historical measurements from June 18 to June 26, after which clarity tracked closer to average through August 20.

# DISCUSSION

Conservation concerns over Kuskokwim River Chinook salmon dominated Working Group discussions in 2011. Members continually reviewed ADF&G run assessment data and low Chinook escapement projections, which lent to lengthy discussions about the challenge of providing reasonable subsistence harvest opportunity, while also assuring biologically adequate escapements of Chinook salmon to the spawning grounds. ADF&G listened to comments made by members at the meetings, and often revised recommendations in order to allow fishermen more preparation time before closures began and also allowed harvest of non-salmon species with 4-inch mesh gillnets during restricted times, or in restricted areas. One accomplishment of 2011 was that USFWS, ADF&G, Working Group members, and other Working Group participants shared and discussed research and run assessment data at length which resulted in members making informed decisions when voting on motions.

At the beginning of the season, subsistence fishing for salmon was restricted from June 1 to July 25 on the Tuluksak, Kisaralik, Kasigluk and Kwethluk rivers and Kuskokuak slough. Sport fishing for Chinook salmon, by regulation was also closed on these systems.

From June 8 to 11, an unprecedented amount of early subsistence fishing effort downriver from Bethel dramatically affected the BTF CPUE, despite pre-season public outreach regarding the need for conservation of Chinook salmon. Agency staff and the Working Group were surprised by the congestion of fishermen and nets on the river, and the number of people fishing or with fish drying so early in the season, and members unanimously supported a 4 day subsistence fishing closure on the mainstem Kuskokwim River, District 1, on June 16 to June 19. When the BTF CPUE did not improve much after the 4 day closure, ADF&G instituted an additional 5 day closure on June 23.

Later in the month members unanimously supported a 6 inch gillnet mesh restriction in the subsistence fishery from June 29 until July 6. However, USFWS did not agree that Chinook

salmon conservation concerns in refuge tributaries were sufficiently addressed with a gillnet restriction. The resulting special action closed all waters within federal jurisdiction to subsistence salmon fishing with nets greater than 4 inch mesh for an additional three days beginning on June 30 to July 2, and restricted the taking of fish to Federally-qualified subsistence users.

Members expressed dissatisfaction at the USFWS special action and many members felt that the conflicting actions taken by the ADF&G and USFWS were confusing and frustrating to fishermen who may not have gotten the information clearly, or timely enough to comply. Overall the subsistence fishery was closed in the mainstem for 12 days, and these closures were a hardship on subsistence fishermen. Although there were disagreements among USFWS, ADF&G and the Working Group about the exact length, timing or nature of these restrictions, it was felt by agency staff and the Working Group alike that in general, subsistence restrictions were necessary for meeting biological escapement goals for Chinook for the Kuskokwim River and its tributaries in 2011. Prior to 2011, the subsistence fishery had not been closed or restricted (except around commercial openings) since 2006.

In addition to the subsistence closures, ADF&G managed the Kuskokwim River commercial fishery conservatively in 2011 in an effort to increase Chinook salmon biological escapements. Commercial openings began later in the season to avoid the period of highest passage of Chinook salmon. The first commercial fishing opening in Subdistrict W1-B, unanimously supported by the Working Group, was on July 5, approximately 10 days later than the first commercial opening in 2010 and at a time when the Chinook salmon run was projected to be 90% of completion.

Despite closures and low Chinook salmon abundance in the middle and upper river, inseason subsistence harvest reports indicated that most people in the lower and middle river eventually met their needs for the year. Average to above average sockeye and chum abundance allowed many households the opportunity to supplement lower Chinook harvests with these species. Working Group members and families surveyed by KNA in the middle and upper river communities commented that they were grateful for subsistence fishing closures because they caught more Chinook salmon in 2011 than in the past few seasons, however both commercial and subsistence fishermen reported below average size for all salmon species caught.

In 2011 meeting attendance by most of the member seats was good. However, the Upriver Elder seat remained vacant for the second year, and attendance by Upriver Subsistence members has been poor since 2010, so these two seats may have been under-represented in the process. Overall in 2011, the Working Group process met its objectives and the process ensured that management agencies kept the public informed of fishery issues, gave timely fishery run status information, and maintained open dialogue with area fishermen. In addition to interactions with Working Group members, the process encouraged and supported participation of a number of tribal organizations and federal agencies including KNA, ONC, McGrath Native Village Council, Aniak Tribal Council, the Association of Village Council Presidents, Bering Sea Fishermen's Association, Coastal Villages Region Fund, the USFWS Yukon–Kuskokwim Delta National Wildlife Refuge, and the USFWS OSM. Additionally, issues discussed at 2011 Working Group meetings were addressed at the Yupiit Nation Meeting in Tuntutuliak. Participation in this process by such a broad spectrum of users and user representatives has fostered the development of an informed public, which had positive influence on the management of the Kuskokwim River salmon fishery.

# ACKNOWLEDGEMENTS

We wish to thank the Working Group members, ADF&G Kuskokwim Area and Regional fishery staff, USFWS Yukon–Kuskokwim Delta Refuge staff and OSM staff, RAC members, and those individuals and groups that have participated in this open and voluntary cooperative management process. Thank you to KYUK radio in Bethel for facilitating pre-season talk-shows with Working Group members and ADF&G staff, and for broadcasting clear and accurate summaries of inseason meetings. Thanks also to staff at OSM, Anthropology Division, and USFWS who reviewed this document and for providing funding to ADF&G for the Inseason Support for Cooperative Management of the Kuskokwim River Subsistence Fishery project (FIS 10-353) through the Fisheries Resource Monitoring program, under OSM Agreement Number 70181AJ032.

The co-author wishes to thank Alice Bailey for her hard work, beginning in 2011, as the ADF&G Fish and Wildlife Technician III coordinating the Working Group process.

The authors thank Shannon Royse, ADF&G Publication Specialist, for review and publication of this report, and Sergei Shiryayev, ADF&G Internet Specialist, for making the Working Group documents available to the public via the ADF&G website at: http://webdev.dfg.alaska.local/index.cfm?adfg=commercialbyareakuskokwim.salmon#/management

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# TABLES AND FIGURES

Table 1.–Kuskokwim River salmon management Working Group representation, 2011.

| SEAT | PRIMARY MEMBER | ALTERNATE |
|---|---|---|
| **Upriver Elder** | *Vacant* | *Vacant* |
| **Downriver Elder** | James Charles | Chuck Chaliak |
| **Commercial Fisher** | Charlie Brown | George Alexie<br>Sam Alexie<br>Douglas Kernak |
| **Lower River Subsistence** | Mike Williams | Greg Roczicka |
| **Middle River Subsistence** | Gerald Simeon | Angela Morgan<br>Wayne Morgan |
| **Upriver Subsistence** | Evelyn Thomas | Pete Mellick<br>Sophie Gregory |
| **Headwaters Subsistence** | Daniel Esai | Nick Petruska<br>Nick Alexia, Sr. |
| **Processor** | Nick Souza (CVS)<br>Stuart Currie (Kuskokwim Seafoods) | Tony Joaquin |
| **Member at Large** | Henry Lupie | Fritz Charles<br>George Alexie<br>Ron Simon |
| **Sport Fishing** | Lamont Albertson | Beverly Hoffman |
| **Western Interior RAC** | Ray Collins | Carl Morgan |
| **YK Delta RAC** | Bob Aloysius | Mary Gregory |
| **ADF&G** | Charles Brazil | Travis Elison |
| **Co-Chairs** | Lamont Albertson<br>Greg Roczicka<br>Beverly Hoffman | |

Table 2.–Summary of Kuskokwim River salmon management Working Group motions, 2011.

| Date | Motion | Yeas | Nays | Abstentions | Motion Passed |
|---|---|---|---|---|---|
| 3/18/11 | Daniel Esai will be Primary member for Headwater Subsistence and Nick Petruska will be the alternate. | 12 | 0 | 0 | Yes |
| 3/18/11 | Recommend ADF&G Option 2 for the Tuluksak River, which closes Chinook-directed sport fishing for the season and restricts the subsistence fishery to 4-inch gillnets. | 10 | 0 | 0 | Yes |
| 3/18/11 | Recommend ADF&G Option 2 for Kwethluk, Kisaralik, and Kasigluk Rivers, which closes Chinook-directed sport fishing for the season and restricts the subsistence fishery to 4-inch gillnets. | 11 | 0 | 0 | Yes |
| 3/18/11 | Recommend ADF&G Option 2 for all Kuskokuak Slough waters, which closes Chinook-directed sport fishing for the season and restricts the subsistence fishery to 4-inch gillnets. | 10 | 0 | 0 | Yes |
| 3/18/11 | Recommend ADF&G Option 1 for mainstem Kuskokwim (starting season with no mainstem restrictions, but moving to windows schedule if escapement projections warrant it). | 10 | 0 | 0 | Yes |
| 3/18/11 | Recommend that Chinook harvest in the Kuskokwim be limited to federally qualified users only in 2011. | 9 | 1 | 0 | Yes |
| 3/18/11 | SPECIAL ACTION REQUEST: Expedite state and federal agencies to get information on the implementation of a reporting system of salmon shipped out of the Kuskokwim area (all salmon species). | 10 | 0 | 0 | Yes |
| 3/18/11 | Retain current co-chairs: Lamont Albertson, Beverly Hoffman, and Greg Roczicka | 11 | 0 | 0 | Yes |
| 6/13/11 | To support ADF&G recommendation that effective 12:01 am Wednesday, June 16, 2011 to 11:59 pm Saturday, June 18, 2011, subsistence salmon fishing is closed in District 1 of the Kuskokwim River drainage. Subsistence fishing will be allowed with 4-inch mesh nets. | 3 | 6 | 0 | No |

-continued-

Table 2.–Page 2 of 3.

| Date | Motion | Yeas | Nays | Abstentions | Motion Passed |
|---|---|---|---|---|---|
| 6/13/11 | Amend ADF&G recommendation so that effective 12:01 am Thursday, June 16, 2011, to 11:59 pm Sunday, June 19, 2011, subsistence salmon fishing is closed in District 1 of the Kuskokwim River drainage. Subsistence fishing with 4-inch mesh nets is allowed. | 9 | 0 | 0 | Yes |
| 6/20/11 | To suspend the rules in order to hear public input in the discussion of the motions. | 10 | 0 | 0 | Yes |
| 6/20/11 | To support ADF&G Option 1: "to take no action or further closures". | 4 | 4 | 0 | No |
| 6/20/11 | Amending ADF&G Option 2, to have a 5-day subsistence fishing closure in District 1 beginning at 12:01 am Wednesday, June 22, until 11:59 pm Sunday, June 26. Subsistence fishing with 4-inch mesh nets would be allowed. | 0 | 8 | 0 | No |
| 6/20/11 | To support ADF&G Option 2, a 5-Day subsistence fishing closure beginning at 12:01 am Thursday, June 23, and ending at 11:59 pm Monday, June 28. Subsistence fishing with 4-inch mesh nets would be allowed. | 5 | 3 | 0 | No |
| 6/27/11 | To suspend the rules in order to hear public input in the discussion of the motions. | 10 | 0 | 0 | Yes |
| 6/27/11 | To support ADF&G recommendation that effective 12:01 am Wednesday, June 29, until 11:59 pm Thursday, July 7, 2011, subsistence salmon fishing is restricted in District 1. Subsistence fishing is allowed with gillnets not exceeding 6-inches in stretched mesh size. | 8 | 0 | 0 | Yes |
| 6/27/11 | To replace primary Middle River Subsistence Member Calvin Simeon with Gerald Simeon. | 10 | 0 | 0 | Yes |
| 7/1/11 | To support ADF&G recommendation for commercial openings in Subdistrict 1-B for 4 hours on July 5; and Subdistrict 1-A for 3 hours on July 7. Processors will not purchase any Chinook salmon.* | 6 | 0 | 0 | Yes* |
| 7/1/11 | Request that federal subsistence closures and restrictions be lifted immediately.* | 6 | 0 | 0 | Yes* |
| 7/20/11 | Tony Joaquin will be alternate Processor member for Nick Souza (Coastal Villages Seafoods). | 9 | 0 | 0 | Yes |

*Note*: The motions are abbreviated here, for complete wording please see meeting summaries.

* No quorum; unofficial.

Table 3.–Commercial salmon harvest, District W-1, Kuskokwim River, Kuskokwim Management Area, 2011.

| | | | | | | Chinook | | | Sockeye | | | Coho | | | Chum | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | Date | Subdistrict | Permits | Hrs | Deliveries | Catch | Lbs | CPUE | Catch | Lbs | CPUE | Catch | Lbs | CPUE | Catch | Lbs | CPUE |
| 1 | 5 Jul | 1B | 112 | 4 | 120 | 46 | 452 | 0.10 | 2,519 | 17,476 | 5.62 | 0 | 0 | 0.00 | 13,873 | 90,248 | 30.97 |
| 2 | 7 Jul | 1A | 62 | 3 | 64 | 2 | 19 | 0.01 | 2,348 | 15,742 | 12.62 | 0 | 0 | 0.00 | 8,130 | 52,620 | 43.71 |
| 3 | 9 Jul | 1A | 61 | 3 | 62 | 1 | 13 | 0.01 | 2,561 | 16,134 | 13.99 | 0 | 0 | 0.00 | 6,850 | 41,811 | 37.43 |
| 4 | 11 Jul | 1A | 75 | 3 | 76 | 0 | 0 | 0.00 | 2,157 | 14,394 | 9.59 | 0 | 0 | 0.00 | 11,406 | 69,240 | 50.69 |
| 5 | 13 Jul | 1B | 147 | 4 | 156 | 0 | 0 | 0.00 | 517 | 3,843 | 0.88 | 47 | 290 | 0.08 | 19,683 | 117,721 | 33.47 |
| 6 | 15 Jul | 1A | 86 | 3 | 87 | 0 | 0 | 0.00 | 1,999 | 12,511 | 7.75 | 58 | 359 | 0.22 | 12,432 | 72,185 | 48.19 |
| 7 | 18 Jul | 1B | 159 | 4 | 160 | 0 | 0 | 0.00 | 282 | 1,886 | 0.44 | 192 | 1,282 | 0.30 | 11,940 | 69,914 | 18.77 |
| 8 | 20 Jul | 1A | 83 | 4 | 83 | 0 | 0 | 0.00 | 647 | 4,077 | 1.95 | 273 | 1,751 | 0.82 | 9,465 | 55,527 | 28.51 |
| 9 | 22 Jul | 1B[a] | 155 | 4 | 157 | 0 | 0 | 0.00 | 209 | 1,438 | 0.34 | 1,525 | 9,968 | 2.46 | 8,501 | 50,412 | 13.71 |
| 10 | 25 Jul | 1A | 80 | 4 | 81 | 0 | 0 | 0.00 | 53 | 365 | 0.17 | 2,722 | 16,496 | 8.51 | 7,151 | 41,987 | 22.35 |
| 11 | 27 Jul | 1B[a] | 182 | 4 | 183 | 0 | 0 | 0.00 | 72 | 470 | 0.10 | 5,688 | 36,359 | 7.81 | 4,635 | 26,690 | 6.37 |
| 12 | 1 Aug | 1A | 79 | 3 | 80 | 0 | 0 | 0.00 | 15 | 106 | 0.06 | 7,353 | 47,736 | 31.03 | 1,631 | 9,197 | 6.88 |
| 13 | 3 Aug | 1B[a] | 215 | 4 | 216 | 0 | 0 | 0.00 | 42 | 260 | 0.05 | 12,563 | 83,865 | 14.61 | 1,628 | 9,668 | 1.89 |
| 14 | 8 Aug | 1A | 100 | 3 | 102 | 0 | 0 | 0.00 | 6 | 33 | 0.02 | 13,838 | 90,453 | 46.13 | 382 | 2,147 | 1.27 |
| 15 | 10 Aug | 1B[a] | 213 | 4 | 213 | 0 | 0 | 0.00 | 36 | 227 | 0.04 | 8,660 | 59,858 | 10.16 | 258 | 1,712 | 0.30 |
| 16 | 15 Aug | 1A | 106 | 4 | 106 | 0 | 0 | 0.00 | 3 | 25 | 0.01 | 5,316 | 36,007 | 12.54 | 135 | 815 | 0.32 |
| 17 | 17 Aug | 1B[a] | 116 | 4 | 116 | 0 | 0 | 0.00 | 11 | 66 | 0.02 | 4,557 | 31,526 | 9.82 | 42 | 273 | 0.09 |
| 18 | 19 Aug | 1A | 92 | 4 | 92 | 0 | 0 | 0.00 | 1 | 7 | 0.00 | 5,032 | 36,141 | 13.67 | 56 | 340 | 0.15 |
| 19 | 22 Aug | 1A | 100 | 4 | 100 | 0 | 0 | 0.00 | 4 | 33 | 0.01 | 6,284 | 44,831 | 15.71 | 58 | 373 | 0.15 |
| Totals | | | 413[b] | 70 | 2,254 | 49 | 484 | 0.00 | 13,482 | 89,093 | 0.47 | 74,108 | 496,922 | 2.56 | 118,256 | 712,880 | 4.09 |

[a] Does not include 2 hour extension for the Lower Section of W1-B.

[b] Number of individual permit holders participating for the season.

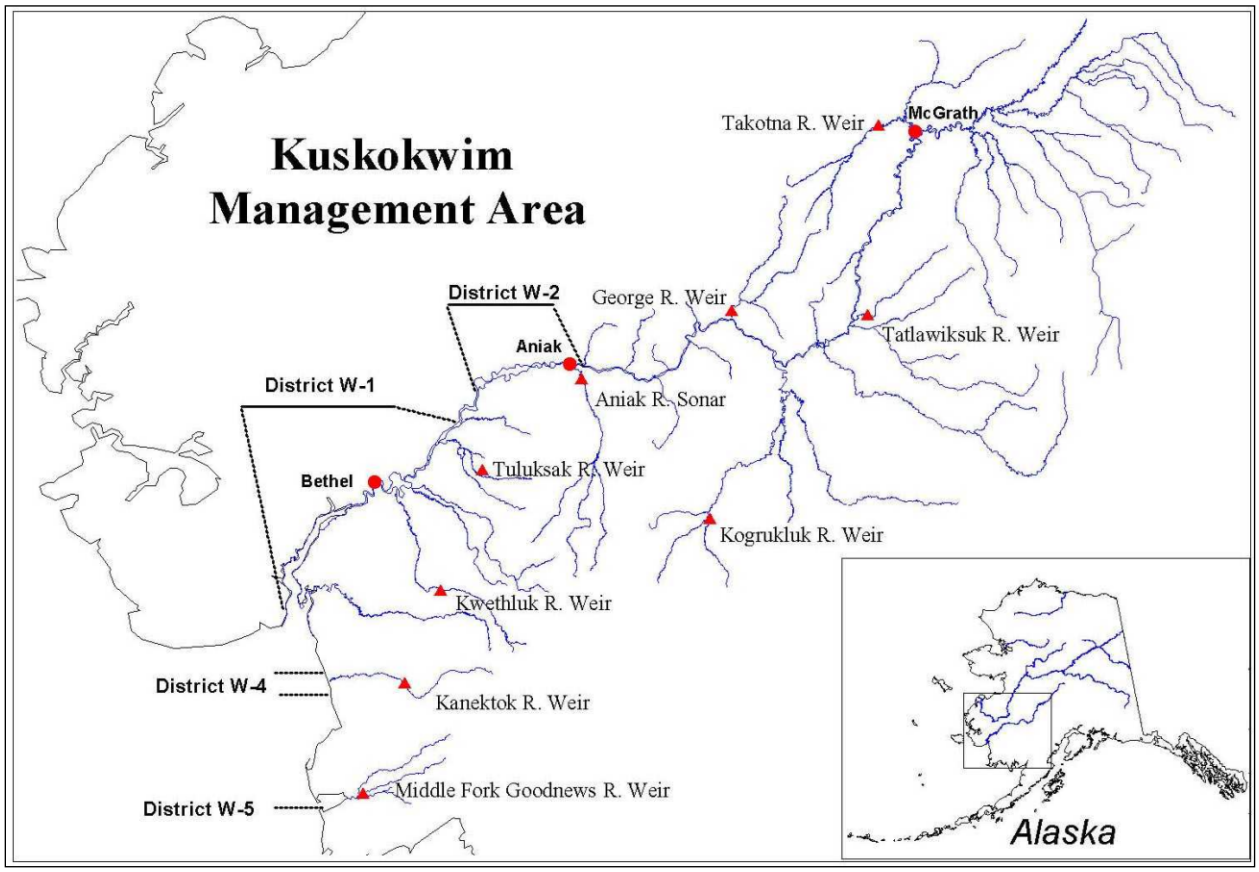


Figure 1.–Map of Kuskokwim management area including salmon escapement monitoring project locations.

# APPENDIX A: BYLAWS OF THE KUSKOKWIM RIVER SALMON MANAGEMENT WORKING GROUP

**PURPOSE**

To provide local fishers and other users with an avenue for direct involvement in the management of their fishery. The goal is for all parties to work together to reach a consensus on management of the fishery. Final emergency order authority continues to rest with the Alaska Department of Fish and Game.

**RULES OF CONDUCT**

Meetings will be conducted by Robert's Rules of Order. The sequence of meetings is as follows:

I. Call to order (by chair)
II. Roll Call (by chair)
III. Invocation
IV. Approval of Minutes
V. Approval of Agenda
VI. People to be heard
VII. Continuing Business

A. Reports
1. False Pass Fishery
2. Processor Report
3. Traditional Native Fishery Knowledge
4. Subsistence Reports
5. Test Fisheries
6. Commercial Catch
7. Escapement Projects
(sonar, towers, weirs)
8. Aerial Surveys

-continued-

9. Weather

B. Recommendation

C. Motion for Discussion and Action

VIII. Old Business

IX. New Business

X. Meeting Action Announcement

XI. Date, Time, and Place of next meeting

XII. Adjournment

(This sequence may be changed at the discretion of the Group)

Continuing Business reports may not exceed 3 minutes in length, excluding questions and answers.

Under the "People to be heard" agenda item the public would be provided an opportunity to discuss only topics or items which are **not** already listed as specific agenda items. A member of the public may also ask the Group to place an issue on the agenda.

Unlike other institutions or committees, the Working Group operates on a consensus basis. A simple majority vote of the members is not sufficient to pass a motion. For the purposes of the Group all motions must pass by a consensus of the members present at the meeting. If 7 (seven) or less of the members are present, then consensus is defined as a situation wherein either all voting members vote "yea" or all voting members vote "yea" except for one "nay" vote. If 8 (eight) or more of the members are present, then consensus is defined as a situation wherein either all voting members vote "yea" or all voting members vote "yea" except for two "nay" votes. Note that the Alaska Department of Fish and Game does not have voting status on motions concerning the setting of commercial openings.

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## ARTICLE I. OFFICE

The principal office of the Kuskokwim River Salmon Management Working Group (Working Group) shall be located in the City of Bethel, Alaska 99559.

The current address of the principal office is, P.O. Box 1467, Bethel, Alaska 99559. The physical address is 570 4th Avenue.

## ARTICLE II. MEMBERS

### Section 1. Members:

The Kuskokwim River Salmon Management Working Group shall have 13 member organizations or constituencies. These members represent: Elders (Upriver, Downriver) (2), Subsistence Fishermen (Lower River, Middle River, Upriver, and Headwaters) (4), Processors (1), Commercial Fishermen (1), Sport Fishers (1), Member at Large (1), Federal Subsistence Regional Advisory Committees (Yukon-Kuskokwim Delta, Western Interior) (2), and the Department of Fish and Game (1). Each member of the Working Group will designate a representative and an alternate in the event the representative is unable to attend a meeting. In the case where more than one person is nominated to represent a member organization or constituency, the Working Group will appoint one of the nominees to represent the member organization or constituency.

### Section 2. Annual Meeting:

An annual meeting of the Kuskokwim River Salmon Management Working Group may be held in Bethel during the month of March at the call of the Co-Chairs. The purpose of the meeting will be to conduct any unfinished administrative functions that the Working Group needs to complete for the following year.

### Section 3. Special Meetings:

Special meetings of the Kuskokwim River Salmon Management Working Group may be called by the Co-Chairs.

-continued-

**Section 4. Notice of Meetings:**

The Department of Fish and Game will be responsible for informing the Kuskokwim River Salmon Management Working Group members of the time, place and date of any meetings. Notification of meetings to the Working Group will be not less than 48 hours (when possible) or more than 30 days in advance.

**Section 5. Quorum:**

In order for a meeting of the Working Group to be held and for actions taken at a meeting to be legitimate, it is necessary for there to be a quorum at a meeting, that is at least 7 of the 13 member constituencies must be represented.

If a quorum of the full committee is not present, business may be conducted in executive session. The executive committee is composed of at least 5 representatives: one Co-Chair, any two representatives of the following member groups; Member at Large, Processors, Commercial Fisherman, and any two representatives of the following member groups; Lower, Middle, Upriver and Headwaters Subsistence, Federal RAC, Sport Fisher.

## ARTICLE III. REPRESENTATIVES

**Section 1. Working Group:**

The Kuskokwim River Salmon Management Working Group shall be comprised of 13 representatives from the areas described in Article II, Section 1.

**Section 2. General Powers:**

The Kuskokwim River Salmon Management Working Group shall make recommendations to the Department of Fish and Game for the purposes of managing the salmon fisheries on the Kuskokwim River after subsistence and commercial catch, test fishery, weir, tower and sonar reports, and other information are provided to the group.

**Section 3. Voting Rights:**

Each Working Group member shall be entitled to one vote. Alternates designated by the member shall also be entitled to one vote in the absence of that member. Members may abstain from voting on any motion.

-continued-

The Elder member shall designate any respected Elder to serve as their alternate.

Working Group members must hear all the Continuing Business reports to vote on a motion to set commercial openings

**Section 4. Resignation:**

Any member or representative may resign by submitting a letter of resignation to a Co-Chair of the Working Group. The resignation must give the Working Group at least 4 weeks notification so that a new member or representative may be appointed.

**Section 5. Vacancies:**

A vacancy on the Kuskokwim River Salmon Management Working Group because of death, resignation, removal, disqualification, forfeiture or otherwise, may be filled by the Working Group from nominations by member groups for the remainder of the term.

**Section 6. Forfeit, participation or removal:**

A. FORFEIT. The Working Group will give written notification, by certified mail, to any member organization, their representative and alternate whose seat has not been represented for 2 consecutive meetings that their membership in the Working Group will be forfeited if the seat is not represented by the following meeting. Whereas, a member's failure to be represented at a meeting is excused by the Working Group, as appropriate, such failure shall not be considered an absence within this section.

B. PARTICIPATION. No representative will be allowed to participate in a Working Group meeting who is deemed to be under the influence of alcohol and/or drugs.

C. REMOVAL. A representative may be removed from their seat on the Working Group for cause and must be provided the opportunity for a hearing before the Working Group. A representative may be removed for cause for any reason allowed, including but not limited to, conviction of a felony, gross misconduct, violation of their trust to the Working Group as a representative, or harassment of any kind to the other representatives of the Working Group.

-continued-

## ARTICLE IV. OFFICERS OF THE WORKING GROUP

**Section 1. Officers:**

The Kuskokwim River Salmon Management Working Group shall elect Co-Chairs for the

purpose of conducting meetings. The Co-Chairs will be elected annually at the first meeting occurring after March 1st. The Working Group shall elect or appoint other officers as deemed necessary. An officer of the Working Group may not hold more than one position. The Co-Chairs must be official representatives of the Working Group.

**Section 2. Terms of Office:**

Each representative of the Working Group shall be elected or appointed every 2 years. A representative shall hold their position until their successor has been duly elected or appointed and has been qualified

**Section 3. Co-Chair:**

A Co-Chair of the Kuskokwim River Salmon Management Working Group shall preside at all meetings of the Working Group.

**Section 4. Other Committees:**

The Co-Chairs shall have the authority to appoint representatives to serve on committees as deemed necessary. Any representative appointed to a committee may be removed in the best interest of the Kuskokwim River Salmon Management Working Group.

## ARTICLE V. DEFINITIONS

1. **Member.** The member organizations or constituencies of the Working Group as listed in Article II, Section 1.

2. **Alternate.** An individual designated to act in the place of a member or representative unable to attend a meeting.

3. **Representative.** Person designated by a Working Group member organization or constituency to represent that member organization or constituency at Working Group meetings.

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4. **District W-1.** The Lower Kuskokwim River consists of the Kuskokwim River from a line between Apokak Slough and Popokamiut, upstream to a line between ADF&G regulatory markers located about eight miles above the Tuluksak River.

5. **District W-2.** The middle Kuskokwim River consists of the Kuskokwim River from ADF&G regulatory markers located at the upstream entrance to the second slough on the west bank downstream from Kalskag to the regulatory markers at Chuathbaluk.

6. **Elder.** Any respected Elder that resides within the Kuskokwim Area.

7. **Headwaters Subsistence.** Representatives that are active subsistence users in the Kuskokwim River drainage from McGrath upstream to the headwaters of the Kuskokwim River.

8. **Upriver Subsistence.** Representatives that are active subsistence users in the Kuskokwim River drainage above Chuathbaluk.

9. **Middle River Subsistence.** Representatives that are active subsistence users in the Kuskokwim River drainage from Lower Kalskag to Chuathbaluk within District W-2.

10. **Lower River Subsistence.** Representatives that are active subsistence users in the Kuskokwim River drainage from Eek to Tuluksak within District W-1.

11. **Processor.** Representatives that own or operate commercial salmon buying and/or processing businesses within District W-1 and W-2.

12. **Member at Large.** Representatives that are Area residents selected by the Working Group for their knowledge of, appreciation for, and experience with Kuskokwim River fisheries.

13. **Federal Regional Advisory Council.** Representatives that are current members of the Yukon-Kuskokwim Delta and Western Interior Advisory Councils and reside in the Kuskokwim Area.

14. **Commercial Fishermen.** Kuskokwim commercial fishing permit holder or crew member, supported by commercial fishing permit holders who fish primarily within Districts W-1 and W-2.

15. **Sport Fisher.** Representatives that actively participate in sports fishing within the Kuskokwim River drainage.

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16. **Alaska Department of Fish and Game.** Representatives that are presently employed with ADF&G in Bethel. This position is an associate member and has no voting powers but has the authority to veto recommendations for commercial fishing periods from the Working Group. Final emergency order authority continues to rest with the ADF&G.

## ARTICLE VI. AMENDMENT TO BY-LAWS

These by-laws may be altered, amended or repealed and new by-laws may be adopted by consensus of the Kuskokwim River Salmon Management Working Group representatives present at any regular or special meeting, if at least thirty (30) days written notice is given by certified mail, phone call, or intention to alter, amend or appeal or to adopt new by-laws at such meeting.

# APPENDIX B: AGENDA AND INFORMATION PACKETS

Appendix B1.–Agenda and Information Packet, June 13, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Agenda

**Date: June 13, 2011** **Time: _____** **Meeting Place: BETHEL ADF&G**

**CALL TO ORDER:**_____
Chairperson Time

**ROLL CALL TO ESTABLISH QUORUM:** **QUORUM MET? Yes / No**

**Upriver Elder:**
**Downriver Elder:**
**Commercial Fisher:**
**Lower River Subsistence:**
**Middle River Subsistence:**
**Upper River Subsistence:**
**Headwaters Subsistence:**
**Processor:**
**Member at Large:**
**Sport Fisher:**
**Western Interior RAC:**
**Y-K Delta RAC:**
**ADF&G:**

**INTRODUCTIONS:**
**INVOCATION:**
**APPROVAL OF AGENDA:**
**PEOPLE TO BE HEARD:**

**CONTINUING BUSINESS:**

1. Subsistence Reports:
    a. Lower River:
    b. ONC Inseason Subsistence:
    c. Middle River:
    d. KNA Inseason Subsistence:
    e. Upper River:
    f. Headwaters:
2. Overview of Kuskokwim River salmon run assessment projects:
    a. Bethel Test fish
    b. Weirs/Sonar/Mark-Recapture/Aerial Surveys/Other:
3. Commercial Catch Report:
4. Processor Report:
5. Sport Fish Report:
6. Area M Report:
7. Weather Forecast:
8. Recommendation: **ADF&G discuss Chinook salmon management actions**
9. Motion for Discussion and Action:
10. Meeting Action Announcement:

**OLD BUSINESS:**

1) Show the Chinook Conservation posters and update on their distribution

**NEW BUSINESS:**

1) ADF&G discuss new BTF graphs used in infopacket

**COMMENTS FROM WORKING GROUP MEMBERS:**

**TIME, DATE AND PLACE OF NEXT MEETING:**
Time:_____ Date: _____ Place:_____

**ADJOURNMENT TIME:**_____

-continued-

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Information Packet

June 13, 2011

### Kuskokwim River In-season Subsistence Catch Monitoring Report
### Orutsararmiut Native Council

June 06, 2011

*__note:__ A verbal report will be given at the meeting for the week ending June 12th, 2011.

**Fishing for the week ending June 5, 2011.**

| Families Surveyed | Families Not Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both |
|---|---|---|---|---|---|---|---|
| 36 | 25 | 3 | 7 | 1 | 9 | 1 | 1 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 4 | 4 | 0 | N/A | N/A | N/A | 1 | 1 | 0 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 4 | 4 | 0 | N/A | N/A | N/A | 2 | 0 | 0 |

**Comments:** This week the ONC inseason subsistence fishery technicians distributed a total of 20 ASL sampling kits. Most kits were distributed to the people who had sampled for the subsistence Chinook ASL program in previous years and a few kits were provided to new families that expressed interest in sampling this year.

36 families were surveyed this week for the In-season Subsistence Monitoring Program. 11 (31%) of the families interviewed were fishing this week. 25 (69%) of the families did not fish this week. 3 (27%) families reported using driftnets. 7 (63%) families reported using set nets. 1 (9%) families reported using both. 9 (82%) of the fishing families use gill net using 8 inch mesh, referred to as King gear. 1 (9%) of the families reported 6 inch mesh or less. 1 (9%) families reported using both.

25 (69%) of the families interviewed had not yet started fishing and said that they were just starting to get ready for the fishing season. Many families are just beginning fishing after fixing and cleaning their fish camps after the winter. Interviewees not fishing yet were getting their equipment ready and waiting for the fish run to increase. ONC technician's observations of fish activity on the river from the upper mouth of church slough down to Oscarville a total of 32 set nets, 31 drifters, and 6 whitefish nets.

**Chinook:** Of the 11 families fishing this week. 4 (36%) families this week reported the Chinook catch is very good, 4 (36%) families reported the catch as normal, no families reported as poor. 25 (69%) families that have not started their Chinook harvest are just finishing up their repairs on camps. Many of the nets that used to catch king salmon this year are

-continued-

a lot larger mesh than previous years, due to the early run and high number of large kings that are coming into the river this year versus last year slow and small run.
Of the 11 (31%) families that reported fishing this week 4 (36%) families repo1ted the run as early,4 (36%) families reported the run timing as normal, no families repo1ted the run to be late this year

Detailed feedback from the fishers on the health, timing, and abundance of the Chinook run were generally positive. Most who were catching fish felt that the run seemed to be healthy thus far, with much larger Chinook being caught earlier than last year.
One fisher reported a catching a Chinook estimated to be over 45 lbs, and expressed surprise how large some of his first catches were this early in the run. Another fisherman noted that the Chinook are coming in strong along with very large size sheefish.

Overall those catching fish felt the Chinook are coming in strong, healthy, and more abundant than the past few years. Some expressed that their catches seemed better catches than average overall and a few families even reported that they haven't seen a Chinook run this early since they were much younger. Other fishers expressed that the catch rates for this time were normal when compared to their many years of fishing on the Kuskokwim but were better when compared to the last few years.

**Chum**: Still too early in the season to assess the run. N/A indicates the question was not asked specialty at this time, as it is too early to be relevant.

**Sockeye:** Of the fishermen interviewed only 2 had caught sockeye. These two families (18%) reported the run timing as early, viewing it as unusual to catch sockeye in their first efforts of fishing for Chinook. No families report the sockeye run timing as normal. No families reported the sockeye run to be late compared to previous years.

It is still too early for most fishers to comment on catch rates for the sockeye run, although one fisher (9%) interviewed felt his catch for this time-period was very good and 1 family (9%) reported their catches as normal. No families reported their sockeye catches as poor,

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## ONC Inseason Subsistence Surveys Current and Historic Catch Rate Information, 2011

**Summary of Subsistence Salmon Information Collected by ONC Technicians.**
Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week"? "ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

| | | Number of Families | | | Chinook salmon | | | Chum salmon | | | Sockeye salmon | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Week Ending | Inter-viewed | Fishing | Not Fishing | Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 2011 | Jun 05 | 36 | 11 | 25 | 36% | 36% | 0 | ND | ND | ND | 9% | 9% | 0 |
| 2010 | Jun 06 | 19 | 6 | 13 | 0 | 100% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 13 | 39 | 28 | 11 | 4% | 50% | 46% | 0 | 72% | 28% | ND | ND | ND |
| | Jun 20 | 26 | 23 | 3 | 9% | 65% | 26% | 0 | 100% | 0 | 0 | 96% | 4% |
| | Jun 27 | 37 | 37 | 0 | 3% | 73% | 24% | 3% | 92% | 5% | 5% | 81% | 14% |
| | Jul 04 | 38 | 36 | 2 | 8% | 69% | 22% | 14% | 78% | 8% | 3% | 69% | 28% |
| | Jul 11 | 20 | 11 | 9 | 0 | 91% | 0% | 27% | 64% | 0 | 18% | 55% | 18% |
| 2009 | Jun 07 | 20 | 6 | 14 | 0 | 67% | 33% | ND | ND | ND | ND | ND | ND |
| | Jun 14 | 43 | 38 | 5 | 29% | 50% | 21% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 21 | 44 | 44 | 0 | 41% | 36% | 23% | 0 | 100% | 0 | 0 | 86% | 14% |
| | Jun 28 | 36 | 31 | 5 | 39% | 55% | 6% | 3% | 77% | 9% | 6% | 71% | 23% |
| | Jul 05 | 36 | 5 | 31 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jul 12 | 36 | 2 | 34 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| 2008 | Jun 08 | 27 | 5 | 22 | 20% | 60% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 16 | 34 | 17 | 17 | 0 | 76% | 24% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 22 | 32 | 27 | 5 | 56% | 44% | 0 | 0 | 74% | 26% | 81% | 19% | 0 |
| | Jun 29 | 33 | 27 | 6 | 52% | 48% | 0 | 15% | 85% | 0 | 56% | 44% | 0 |
| | Jul 08 | 35 | 15 | 20 | 20% | 80% | 0 | 0 | 100% | 0 | 47% | 53% | 0 |
| | Jul 13 | 32 | 3 | 29 | 0 | 100% | 0 | 33% | 67% | 0 | 0 | 100% | 0 |
| 2007 | Jun 03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Jun 12 | 39 | 28 | 11 | 0 | 29% | 71% | ND | ND | ND | ND | ND | ND |
| | Jun 17 | 40 | 33 | 7 | 0 | 30% | 70% | ND | ND | ND | ND | ND | ND |
| | Jun 24 | 44 | 40 | 4 | 0 | 35% | 65% | ND | ND | ND | ND | ND | ND |
| | Jul 02 | 36 | 20 | 12 | 45% | 45% | 10% | 80% | 20% | 0 | 0 | 40 | 60% |
| | Jul 08 | 33 | 10 | 23 | 60% | 40% | 0 | 80% | 20% | 0 | 30% | 70% | 0 |
| | Jul 14 | 33 | 6 | 27 | 0 | 0 | 100 | 0 | 33% | 67% | 0 | 17% | 83% |
| 2006 | Jun 03 | 22 | 0 | 22 | 0 | 0 | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 10 | 32 | 19 | 13 | 32% | 68% | 0 | 0 | 0 | 0 | ND | ND | ND |
| | Jun 17 | 36 | 30 | 6 | 60% | 40% | 0 | 60% | 40% | 0 | 53% | 47% | 0 |
| | Jun 25 | 48 | 43 | 5 | 79% | 21% | 0 | 91% | 9% | 0 | 19% | 56% | 26% |
| | Jul 02 | 46 | 14 | 32 | 21% | 79% | 0 | 71% | 29% | 0 | 43% | 57% | 0 |
| | Jul 09 | 38 | 8 | 30 | 0 | 100% | 0 | 25% | 75% | 0 | 37% | 63% | 0 |
| | Jul 17 | 26 | 5 | 21 | 0 | 100% | 0 | 100 | 0 | 0 | 0 | 100% | 0 |

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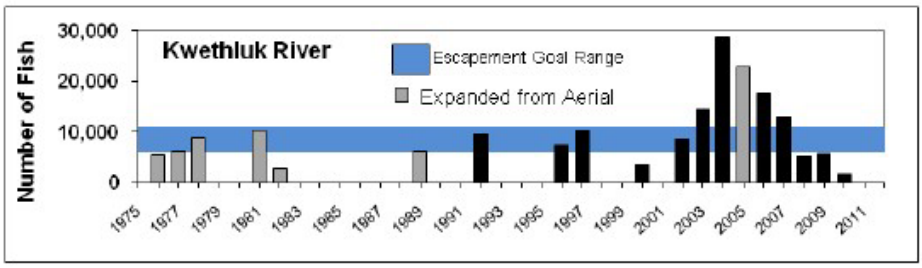
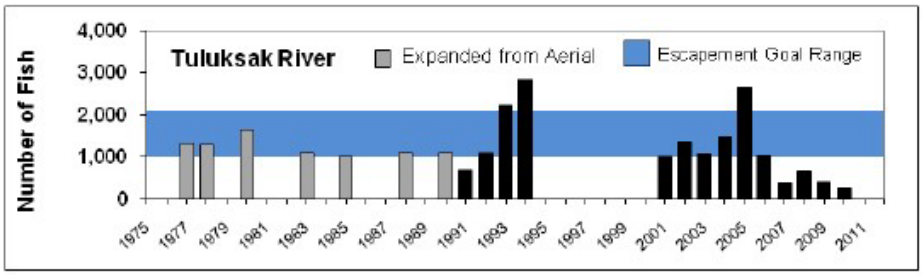
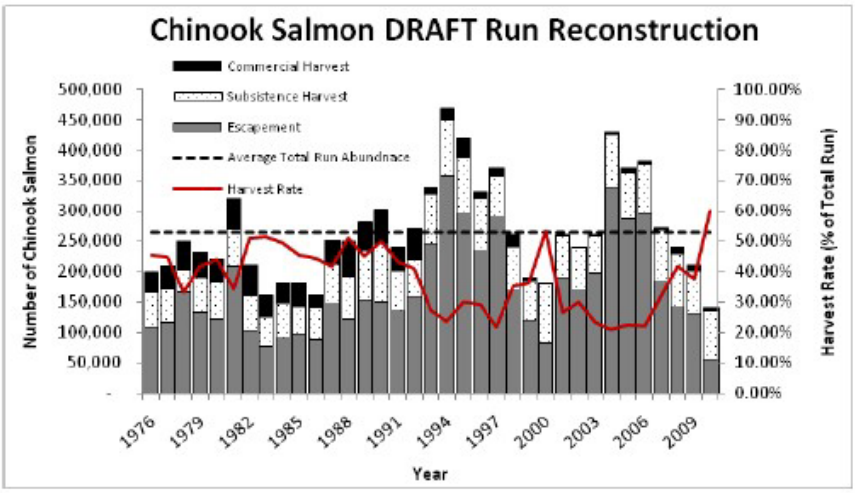
## ADF&G Overview of Kuskokwim River Salmon Run Assesmment

**Some background information:**

- Escapement at Kwethluk and Tuluksak were below the escapement goal for three and four years consecutively.
- Total 2010 Kuskokwim River Chinook salmon return was 142,796 with a spawning escapement of approximately 56, 000 that was the lowest on record

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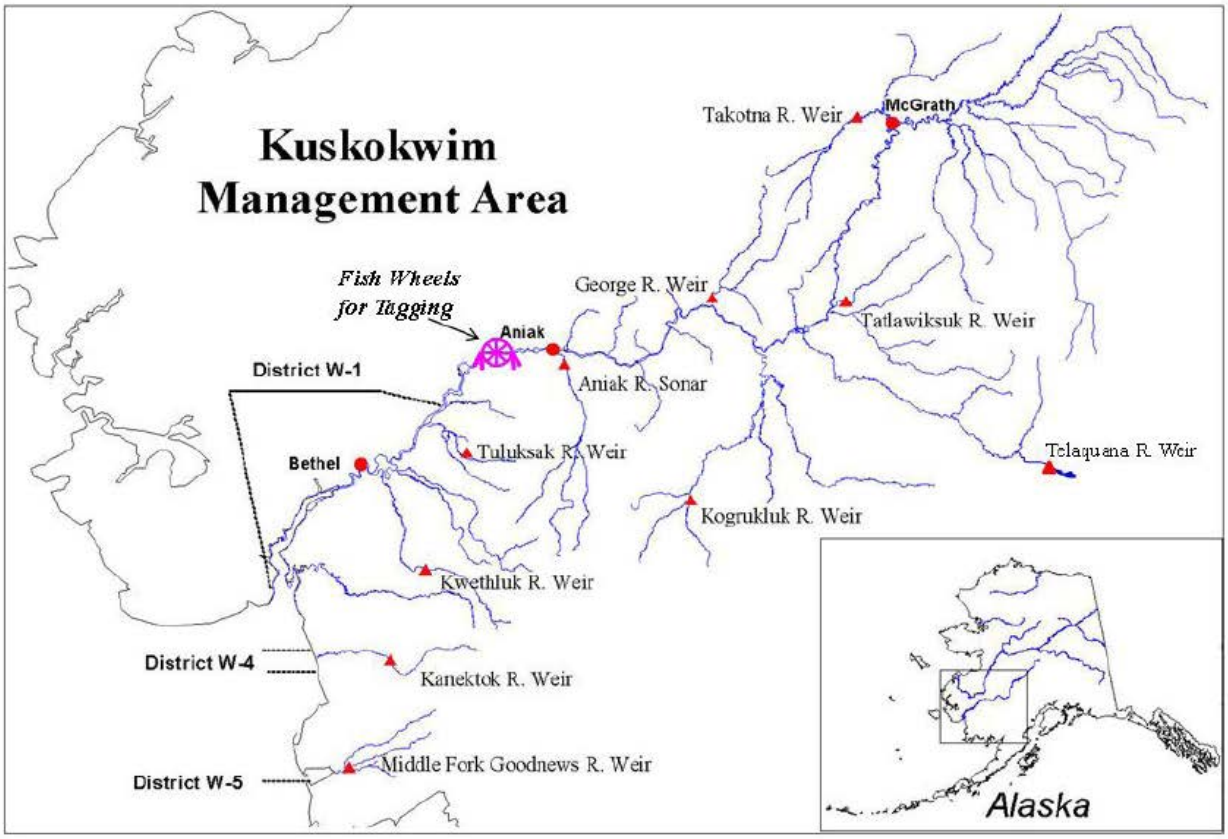
Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
Middle Fork Goodnews R. Weir
District W-5
Alaska

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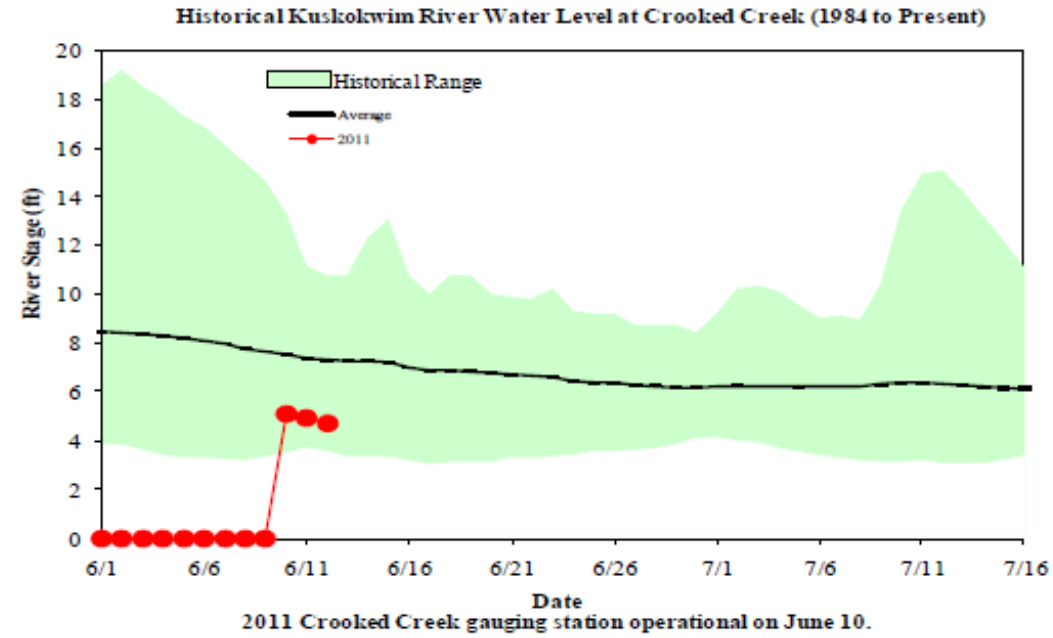
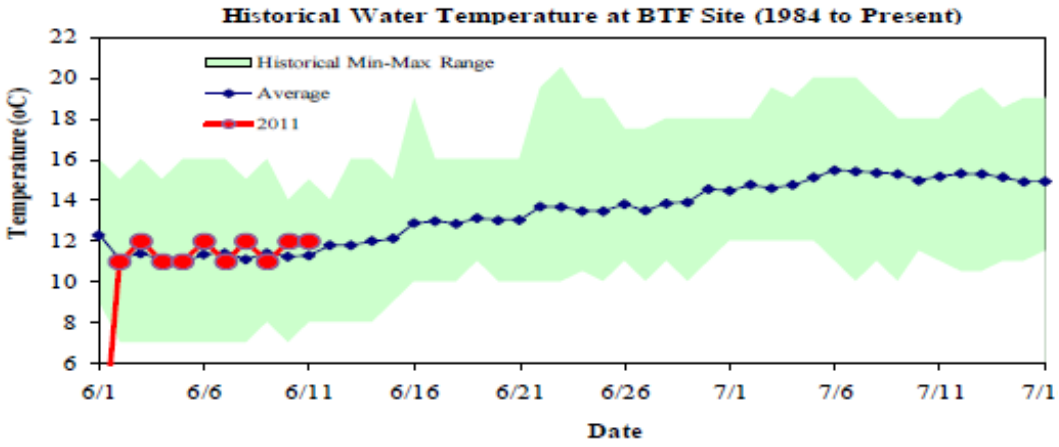
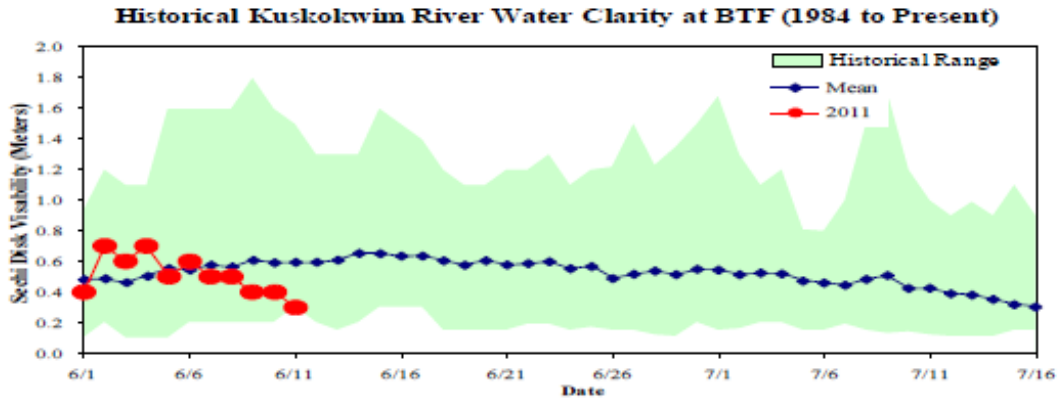



2011 Crooked Creek gauging station operational on June 10.

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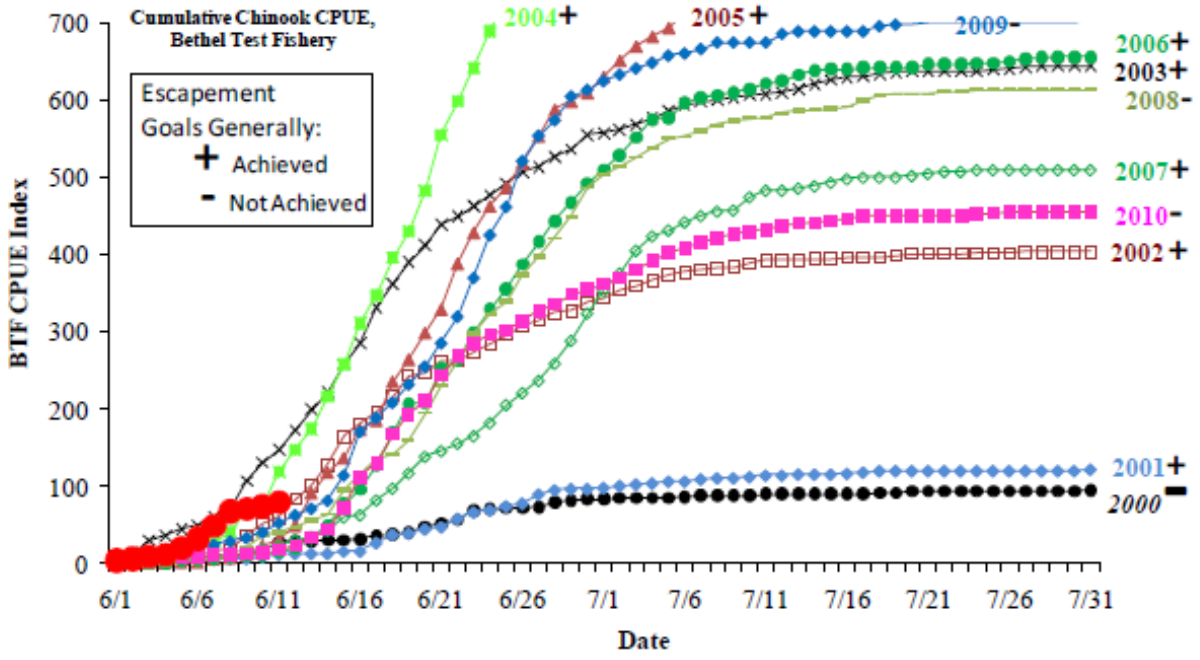
## Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery




### Chinook Salmon Cumulative CPUE Index

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/01 | 0 | 0 | 0 | 1 | 3 | | 0 | 0 | 0 | 0 | 0 | 3 |
| 6/02 | 0 | 0 | 1 | 13 | 5 | | 0 | 0 | 3 | 0 | 3 | 5 |
| 6/03 | 0 | 0 | 1 | 29 | 7 | 0 | 0 | 0 | 3 | 1 | 4 | 8 |
| 6/04 | 0 | 0 | 1 | 35 | 13 | 0 | 0 | 1 | 3 | 4 | 7 | 11 |
| 6/05 | 1 | 4 | 6 | 44 | 19 | 1 | 3 | 3 | 3 | 10 | 7 | 20 |
| 6/06 | 7 | 6 | 13 | 48 | 23 | 1 | 6 | 3 | 4 | 17 | 8 | 31 |
| 6/07 | 10 | 6 | 15 | 59 | 27 | 6 | 6 | 4 | 4 | 24 | 10 | 48 |
| 6/08 | 10 | 6 | 18 | 70 | 40 | 7 | 8 | 7 | 10 | 28 | 10 | 67 |
| 6/09 | 11 | 6 | 36 | 106 | 70 | 11 | 9 | 11 | 20 | 33 | 11 | 71 |
| 6/10 | 16 | 8 | 51 | 131 | 75 | 23 | 9 | 19 | 36 | 40 | 13 | 73 |
| 6/11 | 27 | 11 | 59 | 147 | 118 | 30 | 14 | 23 | 40 | 52 | 17 | 79 |
| 6/12 | 28 | 12 | 82 | 172 | 147 | 49 | 18 | 30 | 46 | 62 | 23 | |
| 6/13 | 28 | 12 | 101 | 199 | 174 | 91 | 33 | 33 | 56 | 71 | 34 | |
| 6/14 | 30 | 12 | 127 | 221 | 217 | 118 | 48 | 42 | 63 | 81 | 42 | |
| 6/15 | 30 | 15 | 165 | 258 | 258 | 137 | 77 | 60 | 96 | 114 | 73 | |
| 6/16 | 31 | 15 | 181 | 285 | 311 | 173 | 96 | 62 | 115 | 171 | 112 | |
| 6/17 | 35 | 26 | 196 | 332 | 347 | 186 | 126 | 82 | 135 | 189 | 130 | |
| 6/18 | 37 | 37 | 217 | 362 | 396 | 236 | 170 | 97 | 142 | 209 | 168 | |
| 6/19 | 40 | 38 | 243 | 390 | 430 | 265 | 207 | 117 | 160 | 232 | 193 | |
| 6/20 | 47 | 44 | 248 | 413 | 484 | 299 | 208 | 138 | 195 | 255 | 210 | |

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## Sockeye Salmon Cumulative CPUE Index, Bethel Test Fishery

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/01 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/02 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/03 | | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/04 | | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/05 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/06 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 3 |
| 6/07 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 4 |
| 6/08 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 4 |
| 6/09 | 3 | 9 | 3 | 5 | 8 | 11 | 0 | 0 | 0 | 4 | 0 | 4 |
| 6/10 | 6 | 11 | 8 | 24 | 11 | 22 | 0 | 0 | 0 | 4 | 0 | 7 |
| 6/11 | 20 | 11 | 18 | 38 | 22 | 46 | 0 | 0 | 0 | 7 | 0 | 10 |
| 6/12 | 31 | 17 | 35 | 46 | 27 | 63 | 3 | 3 | 0 | 10 | 3 | |
| 6/13 | 37 | 23 | 61 | 54 | 38 | 96 | 3 | 17 | 3 | 13 | 6 | |
| 6/14 | 45 | 23 | 67 | 67 | 49 | 149 | 3 | 23 | 6 | 13 | 6 | |
| 6/15 | 48 | 26 | 92 | 97 | 77 | 154 | 11 | 31 | 34 | 16 | 21 | |
| 6/16 | 51 | 38 | 138 | 176 | 130 | 181 | 24 | 36 | 45 | 31 | 46 | |
| 6/17 | 57 | 100 | 158 | 279 | 145 | 236 | 42 | 50 | 48 | 34 | 65 | |
| 6/18 | 71 | 123 | 174 | 335 | 189 | 336 | 81 | 60 | 62 | 61 | 84 | |
| 6/19 | 91 | 152 | 196 | 446 | 212 | 444 | 136 | 74 | 87 | 86 | 142 | |
| 6/20 | 108 | 166 | 240 | 518 | 270 | 634 | 160 | 98 | 102 | 113 | 149 | |

## Chum Salmon Cumulative CPUE Index, Bethel Test Fishery

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/01 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/02 | | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/03 | | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/04 | | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 4 | 3 |
| 6/05 | 3 | 3 | 0 | 0 | 11 | 0 | 3 | 0 | 0 | 3 | 6 | 3 |
| 6/06 | 9 | 3 | 8 | 0 | 11 | 0 | 9 | 0 | 0 | 4 | 6 | 3 |
| 6/07 | 9 | 3 | 8 | 0 | 11 | 0 | 9 | 3 | 0 | 4 | 6 | 3 |
| 6/08 | 12 | 3 | 11 | 0 | 14 | 0 | 12 | 3 | 6 | 6 | 6 | 6 |
| 6/09 | 15 | 3 | 41 | 0 | 22 | 0 | 12 | 3 | 9 | 9 | 6 | 11 |
| 6/10 | 18 | 3 | 50 | 6 | 22 | 0 | 15 | 8 | 9 | 9 | 9 | 17 |
| 6/11 | 18 | 3 | 103 | 8 | 25 | 13 | 35 | 11 | 12 | 9 | 9 | 22 |
| 6/12 | 18 | 3 | 146 | 11 | 34 | 25 | 41 | 11 | 18 | 12 | 15 | |
| 6/13 | 18 | 9 | 180 | 17 | 71 | 38 | 133 | 23 | 18 | 14 | 26 | |
| 6/14 | 18 | 9 | 202 | 30 | 110 | 49 | 210 | 34 | 20 | 20 | 31 | |
| 6/15 | 18 | 9 | 285 | 49 | 144 | 87 | 266 | 57 | 41 | 42 | 50 | |
| 6/16 | 18 | 11 | 299 | 77 | 179 | 95 | 350 | 74 | 66 | 69 | 86 | |
| 6/17 | 20 | 17 | 338 | 103 | 229 | 131 | 499 | 94 | 80 | 75 | 133 | |
| 6/18 | 29 | 53 | 552 | 108 | 310 | 188 | 747 | 110 | 94 | 91 | 386 | |
| 6/19 | 43 | 67 | 665 | 148 | 371 | 252 | 927 | 138 | 106 | 99 | 542 | |
| 6/20 | 86 | 73 | 801 | 198 | 450 | 537 | 1012 | 258 | 161 | 105 | 588 | |

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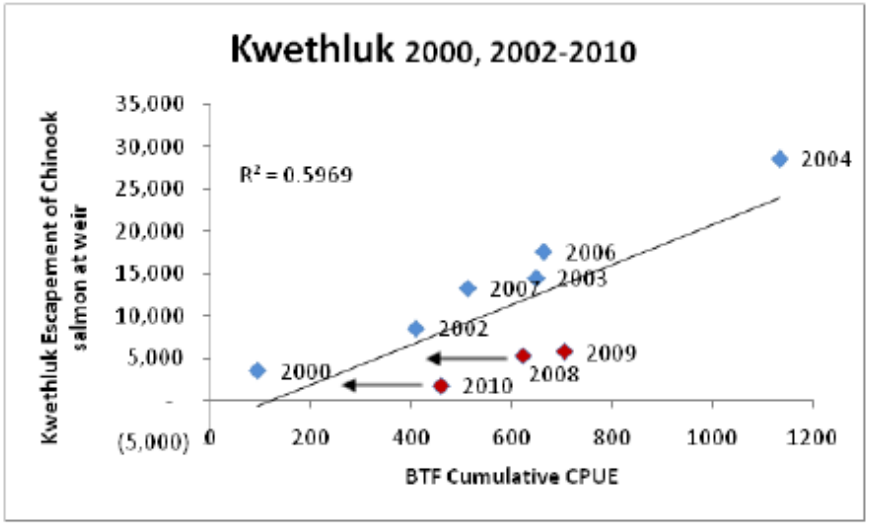
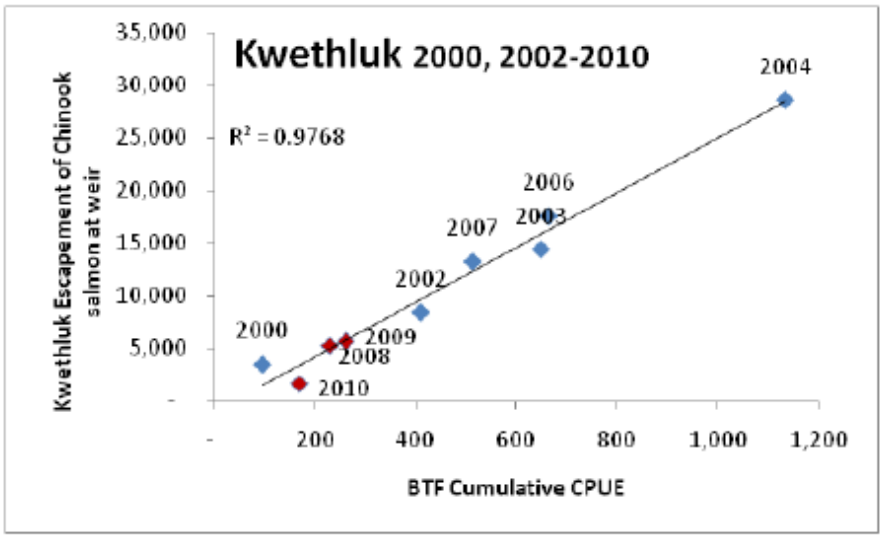
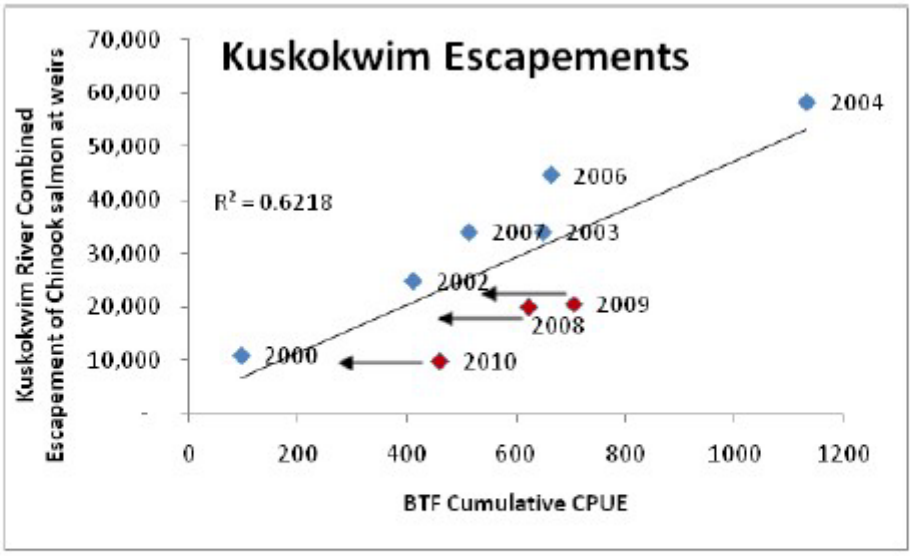



- 2008-2010 shows a shift in BTF catch efficiency, which we believe is due to changes in gillnet mesh and river morphology.
- To make 2008-2010 fit with the other years, a correction factor of 0.37 is applied to 2008-2010.
- We assume that the need for a correction factor will continue in 2011, however we will monitor both corrected and non-corrected values of BTF CPUE.

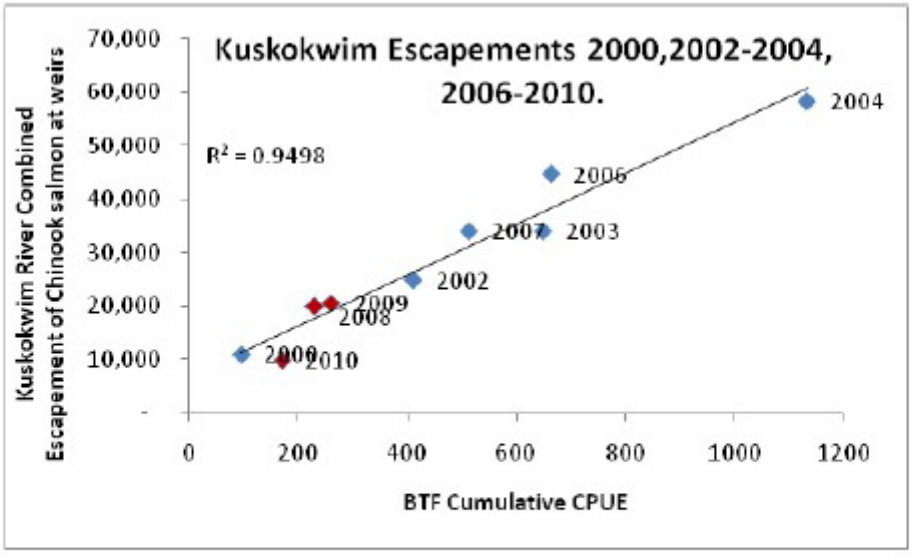



- There is a strong linear relationship between BTF CPUE and escapement at Kwethluk River weir.
- This means that we can use BTF to project the relative escapement at Kwethluk River weir.
- Does this same pattern hold true for the entire Kuskokwim River?

-continued-



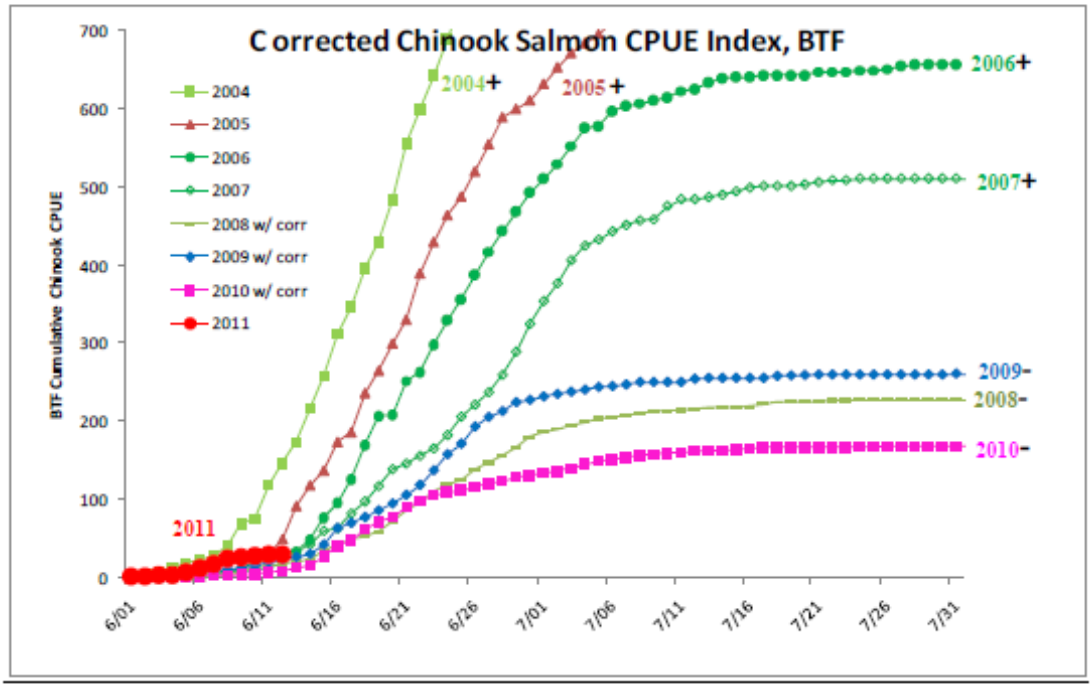

- Using only years where all weirs were operational (2000, 2002-2004, & 2006-2010) we see the same shift in BTF catch efficiency starting in 2008.




- Using the same correction factor of 0.37, 2008-2010 fit nicely within the strong linear relationship with BTF CPUE and Kuskokwim River monitored escapement.
- This means we can use BTF Cumulative CPUE to project relative Kuskokwim River escapement.

-continued-

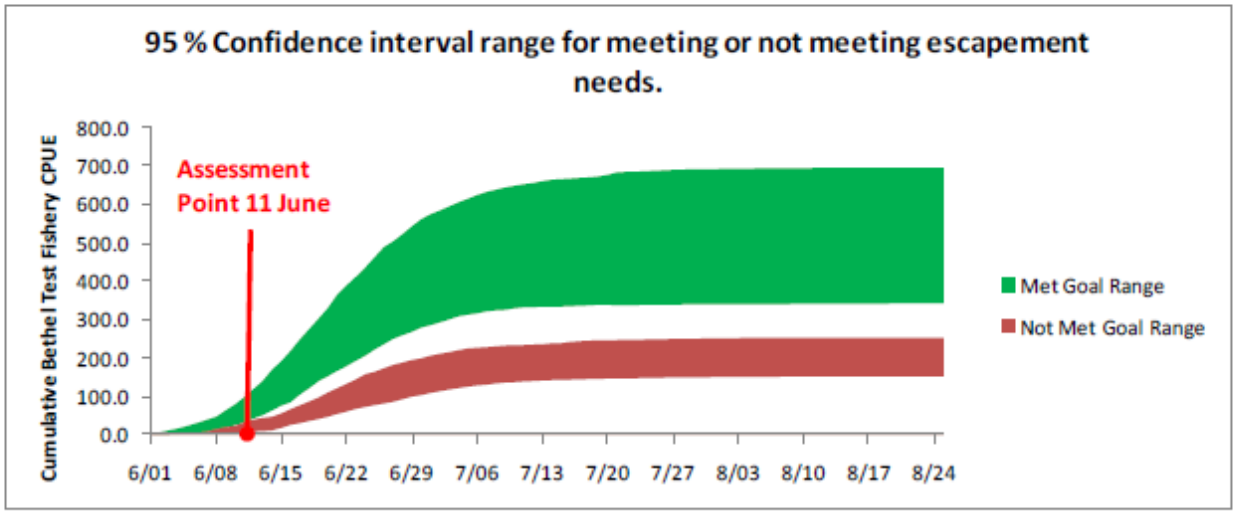
**Corrected Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Corrected Chinook Salmon CPUE Index, BTF**

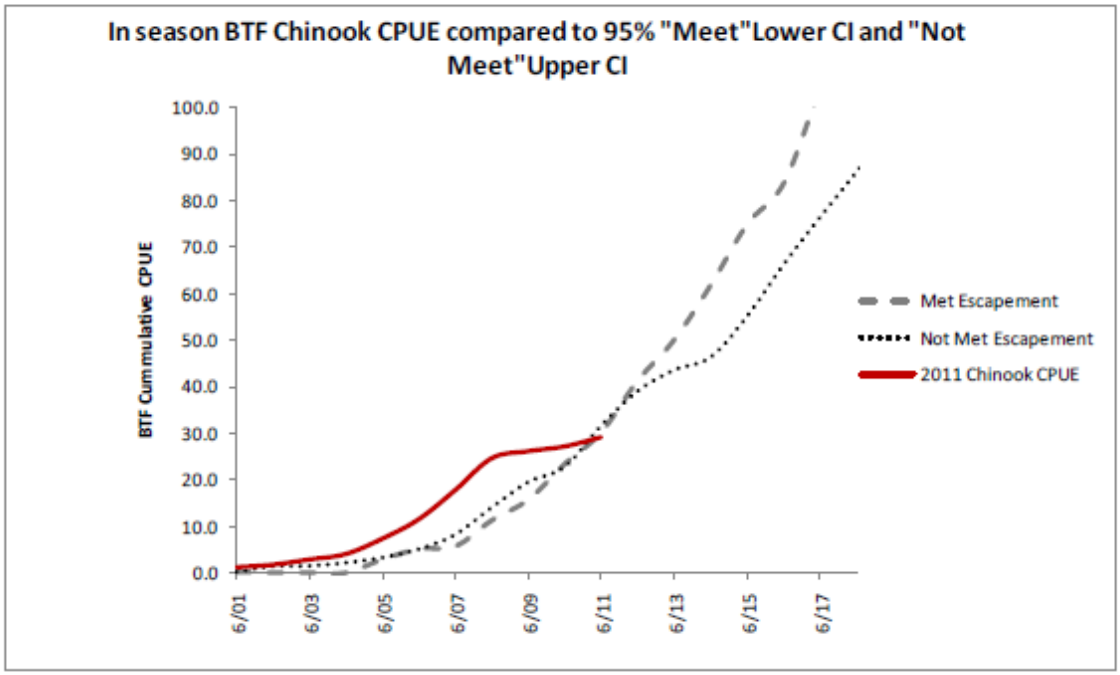
| | Uncorrected | | | | Corrected (*0.37) | | | |
|---|---|---|---|---|---|---|---|---|
| Date | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 6/01 | 3 | | 0 | 0 | 0 | 0 | 0 | 1 |
| 6/02 | 5 | | 0 | 0 | 1 | 0 | 1 | 2 |
| 6/03 | 7 | 0 | 0 | 0 | 1 | 1 | 1 | 3 |
| 6/04 | 13 | 0 | 0 | 1 | 1 | 2 | 2 | 4 |
| 6/05 | 19 | 1 | 3 | 3 | 1 | 4 | 2 | 7 |
| 6/06 | 23 | 1 | 6 | 3 | 2 | 6 | 3 | 12 |
| 6/07 | 27 | 6 | 6 | 4 | 2 | 9 | 3 | 18 |
| 6/08 | 40 | 7 | 8 | 7 | 4 | 11 | 3 | 25 |
| 6/09 | 70 | 11 | 9 | 11 | 7 | 12 | 4 | 26 |
| 6/10 | 75 | 23 | 9 | 19 | 13 | 15 | 4 | 27 |
| 6/11 | 118 | 30 | 14 | 23 | 15 | 19 | 6 | 29 |
| 6/12 | 147 | 49 | 18 | 30 | 17 | 23 | 8 | |
| 6/13 | 174 | 91 | 33 | 33 | 21 | 26 | 12 | |
| 6/14 | 217 | 118 | 48 | 42 | 23 | 30 | 15 | |
| 6/15 | 258 | 137 | 77 | 60 | 35 | 42 | 27 | |
| 6/16 | 311 | 173 | 96 | 62 | 42 | 63 | 41 | |
| 6/17 | 347 | 186 | 126 | 82 | 50 | 70 | 48 | |
| 6/18 | 396 | 236 | 170 | 97 | 52 | 77 | 62 | |
| 6/19 | 430 | 265 | 207 | 117 | 59 | 86 | 71 | |
| 6/20 | 484 | 299 | 208 | 138 | 72 | 95 | 77 | |

-continued-




- This figure shows that the difference between achieving escapement needs and not meeting them becomes more evident after June 11.
- The "Met Goal" *lower* confidence interval is the value for staying the course of current actions.
- The "Not Met Goal" *upper* confidence interval is the value that will indicate the need for further action.

**The new Bethel Test Fish graph that we will use this year**




- This figure only shows the lower CI line for meeting escapement (gray dashed), and the Upper CI line for not meeting escapement (black dotted), because they describe the trigger values.
- The solid line is 2011 BTF Chinook corrected CPUE.
- The value for further restrictions on June 11 = 31.4; June 12 = 38.9; June 13 = 43.4.
    - If inseason values are less than these values further restriction is warranted.

-continued-

# Salmon Conservation is KING

6049 © John Hyde ADF&G, Alaska Division of Tourism

2011 King salmon run is expected to be LOW

Think long term sustainability:

Harvest more abundant CHUM, RED, COHO

**Take Less KING SALMON**

**Conserving Kings Preserves our Traditional Way of Life**

Kuskokwim River Salmon Management Working Group

-continued-

# Salmon Conservation is KING

## 2011 King Salmon run is expected to be LOW

**Conservation** is what YOU can do...
All users of Salmon Resource think of Long-term Sustainability

- Harvest more abundant Chum, Red, and Silver salmon Take Less King Salmon
- Preserve the King Salmon for our Traditional Way of Life

Kuskokwim River Salmon Management Working Group

Appendix B2.–Agenda and Information Packet, June 20, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Agenda

Date: **Monday, June 20, 2011** Time: **10:00 am** Place: **Bethel**

Time Called to Order Chair Time Adjourned

**ROLL CALL TO ESTABLISH QUORUM:** **QUORUM MET? Yes / No**

**Upriver Elder:** **Processor:**
**Downriver Elder:** **Member at Large:**
**Commercial Fisher:** **Sport Fisher:**
**Lower River Subsistence:** **Western Interior RAC:**
**Middle River Subsistence:** **Y-K Delta RAC:**
**Upper River Subsistence:** **ADF&G:**
**Headwaters Subsistence:**

**INTRODUCTIONS:**
**INVOCATION:**
**APPROVAL OF AGENDA:**
**PEOPLE TO BE HEARD:**

**CONTINUING BUSINESS:**
1. Subsistence Reports:
    a. Lower River:
    b. ONC Inseason Subsistence:
    c. Middle River:
    d. KNA Inseason Subsistence:
    e. Upper River:
    f. Headwaters:
2. Overview of Kuskokwim River salmon run assessment projects:
    a. Bethel Test fish
    b. Weirs/Sonar/Mark-Recapture/Aerial Surveys/Other:
3. Commercial Catch Report:
4. Processor Report:
5. Sport Fish Report:
6. Weather Forecast:
7. Recommendation:
8. Motion for Discussion and Action:

**OLD BUSINESS:**
    1) Update on implementing a reporting system for salmon shipped out of Bethel.
    2)
**NEW BUSINESS:**
    1)
    2)

**COMMENTS FROM WORKING GROUP MEMBERS:**

**NEXT MEETING DATE:**_____
Time Place

-continued-

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Information Packet

**June 20, 2011**

**Kuskokwim River In-season Subsistence Catch Monitoring Report**
**Orutsararmiut Native Council**

*__Note:__ Salmon Fishing was closed in the survey area for a Chinook conservation closure Thursday, June 16, through Sunday, June 19. Thus, this survey report reflects subsistence fishing effort for the time-period of Monday, June 13, through Wednesday, June 15.

**Fishing reports from June 15 –June 18, 2011.**

| Families Surveyed | Families Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both |
|---|---|---|---|---|---|---|---|
| 57 | 56 | 37 | 3 | 16 | 24 | 12 | 19 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 14 | 21 | 20 | 8 | 29 | 11 | 8 | 32 | 10 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 10 | 27 | 16 | 10 | 30 | 7 | 7 | 35 | 6 |

**Comments:** 57 families were surveyed this week for the inseason subsistence monitoring program. 56 (98%) of the families were fishing this week. 1 (2%) of the family did not fish this week. 37 (66%) families reported using driftnets. 3 (5%) families reported using set nets. 16 (29%) families reported using both types of net. 24 (43%) of the families fishing used gill nets greater than 6-inch mesh. Most using greater than 6-inch mesh referred to using specifically 8-inch mesh (called "king gear"), but some indicated that they were using 7-inch gear. 12 (21%) of the families reported 6-inch mesh or less. 19 (34%) families reported using both large and small sizes of mesh.

The families interviewed this week were at various stages of fishing. The families that had begun fishing a day or two before the closure indicated that mid-June is when they normally start fishing. Other families indicated that they had started early or had increased their effort before the closure. These families met their subsistence Chinook harvest goals for the year or were satisfied with what they had. However, most families interviewed were mid-way through their salmon harvest goals and planned to resume fishing after the closure.

All families indicated that the weather had been good for drying fish and the flies had not yet come out. Several families who had just started fishing were concerned that the weather would become rainier later in June. They worried that fish caught after this week's closure may not dry properly and spoil if flies arrived to lay eggs. Their primary concern was the lack of flexibility to harvest fish when the weather was best for preserving them.

-continued-

Many families reported that they had switched to smaller mesh gear to target the more abundant smaller Chinook. They also reported catching fewer females than usual. Some noted that they were just beginning to catch a few bigger Chinook in the last couple days and a greater percentage of females, which may indicate the arrival of what they referred to as the "second pulse." Many families were switching back and forth between mesh sizes or had different sized set nets and drift nets.

A few families specifically stated that they saw the Chinook conservation posters initiated by the Kuskokwim Salmon Management Working Group. They said that they would make an effort to target more abundant sockeye using smaller mesh size throughout the entire season. Many families commented they understood the Chinook conservation measures being sought by the closure. Some interviewees commented that the population of Bethel was growing and they had never seen such a high level of congested drift and set net fishing on the Kuskokwim River in their lifetime as that of last week.

**Chinook:**

**Catch rate:** Of the 56 families fishing this week, 14 (25%) reported the Chinook catch as very good, 21 (38%) families reported the catch as normal, 20 (37%) families reported it as poor. Many fishers used 8-inch gear but others switched to smaller mesh (6-inch or 5.5 inch), in order to catch the smaller Chinook that were getting through the net. Many reported using both Chinook gear and 6-inch or less to increase their catch rate. Most noted they had better catch rates of Chinook with the smaller size mesh. A few fishers reported larger Chinook arriving a day or two before the closure. Many had fewer females in their catch than they normally would at this point in the run, but others think that females usually come in the "second pulse" instead.

**Run timing:** Of the 56 families that reported fishing this week, 10 (18%) reported the run as early, 27 (48%) reported the run timing as normal, 16 (29%) reported the run to be late this year. 3 (5%) families did not comment on run timing because they had just begun fishing and could not yet assess the flow of fish for this time period.

**Chum:**

**Catch Rate:** 8 (14%) families reported their catch rates as good. 29 (52%) families reported their catches as normal. 11 (20%) families reported their catches as poor. 8 (14%) families didn't report due to no chum catches yet or felt that catches were only a reflection of by-catch in 8-inch mesh.

**Run timing:** 10 (18%) families reported the run return as early. 30 (54%) families report the salmon run timing as normal. 7 (13%) families reported the run to be late compared to previous years. 9 (16%) families were unable to report due to no chum catches yet. Some people felt it was too early to comment on the timing or catch rate for chum, as they were not targeting them specifically.

**Sockeye:**

**Catch Rate:** 8 (14%) families reported their catch rates as good, 32 (57%) reported it as normal, 10 (18%) reported it as poor. 6 (11%) families didn't report due to not targeting sockeye yet. Some people reported sockeye catch rates as the normal rate of by-catch in their king gear.

**Run timing:** 7 (12%) families reported the run return as early, 35 (63%) reported timing as normal. 6 (11%) families reported the run to be late compared to previous years. 8 (14%) families were unable to report on run timing due to not specifically targeting sockeye yet.

-continued-

**ONC Inseason Subsistence Surveys Current and Historic Catch Rate Information, 2011**

**Summary of Subsistence Salmon Information Collected by ONC Technicians.**
Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week"? "ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

| | | Number of Families | | | Chinook salmon | | | Chum salmon | | | Sockeye salmon | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Week Ending | Inter-viewed | Fishing | Not Fishing | Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 2011 | Jun 05 | 36 | 11 | 25 | 36% | 36% | 0 | ND | ND | ND | 9% | 9% | 0 |
| | Jun 12 | 69 | 41 | 28 | 7% | 34% | 49% | 10% | 46% | 10% | 10% | 46% | 7% |
| | Jun 19 | 57 | 56 | 1 | 25% | 38% | 37% | 14% | 52% | 20% | 14% | 57% | 18% |
| 2010 | Jun 06 | 19 | 6 | 13 | 0 | 100% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 13 | 39 | 28 | 11 | 4% | 50% | 46% | 0 | 72% | 28% | ND | ND | ND |
| | Jun 20 | 26 | 23 | 3 | 9% | 65% | 26% | 0 | 100% | 0 | 0 | 96% | 4% |
| | Jun 27 | 37 | 37 | 0 | 3% | 73% | 24% | 3% | 92% | 5% | 5% | 81% | 14% |
| | Jul 04 | 38 | 36 | 2 | 8% | 69% | 22% | 14% | 78% | 8% | 3% | 69% | 28% |
| | Jul 11 | 20 | 11 | 9 | 0 | 91% | 0% | 27% | 64% | 0 | 18% | 55% | 18% |
| 2009 | Jun 07 | 20 | 6 | 14 | 0 | 67% | 33% | ND | ND | ND | ND | ND | ND |
| | Jun 14 | 43 | 38 | 5 | 29% | 50% | 21% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 21 | 44 | 44 | 0 | 41% | 36% | 23% | 0 | 100% | 0 | 0 | 86% | 14% |
| | Jun 28 | 36 | 31 | 5 | 39% | 55% | 6% | 3% | 77% | 9% | 6% | 71% | 23% |
| | Jul 05 | 36 | 5 | 31 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jul 12 | 36 | 2 | 34 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| 2008 | Jun 08 | 27 | 5 | 22 | 20% | 60% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 16 | 34 | 17 | 17 | 0 | 76% | 24% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 22 | 32 | 27 | 5 | 56% | 44% | 0 | 0 | 74% | 26% | 81% | 19% | 0 |
| | Jun 29 | 33 | 27 | 6 | 52% | 48% | 0 | 15% | 85% | 0 | 56% | 44% | 0 |
| | Jul 08 | 35 | 15 | 20 | 20% | 80% | 0 | 0 | 100% | 0 | 47% | 53% | 0 |
| | Jul 13 | 32 | 3 | 29 | 0 | 100% | 0 | 33% | 67% | 0 | 0 | 100% | 0 |
| 2007 | Jun 03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Jun 12 | 39 | 28 | 11 | 0 | 29% | 71% | ND | ND | ND | ND | ND | ND |
| | Jun 17 | 40 | 33 | 7 | 0 | 30% | 70% | ND | ND | ND | ND | ND | ND |
| | Jun 24 | 44 | 40 | 4 | 0 | 35% | 65% | ND | ND | ND | ND | ND | ND |
| | Jul 02 | 36 | 20 | 12 | 45% | 45% | 10% | 80% | 20% | 0 | 0 | 40 | 60% |
| | Jul 08 | 33 | 10 | 23 | 60% | 40% | 0 | 80% | 20% | 0 | 30% | 70% | 0 |
| | Jul 14 | 33 | 6 | 27 | 0 | 0 | 100 | 0 | 33% | 67% | 0 | 17% | 83% |
| 2006 | Jun 03 | 22 | 0 | 22 | 0 | 0 | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 10 | 32 | 19 | 13 | 32% | 68% | 0 | 0 | 0 | 0 | ND | ND | ND |
| | Jun 17 | 36 | 30 | 6 | 60% | 40% | 0 | 60% | 40% | 0 | 53% | 47% | 0 |
| | Jun 25 | 48 | 43 | 5 | 79% | 21% | 0 | 91% | 9% | 0 | 19% | 56% | 26% |
| | Jul 02 | 46 | 14 | 32 | 21% | 79% | 0 | 71% | 29% | 0 | 43% | 57% | 0 |
| | Jul 09 | 38 | 8 | 30 | 0 | 100% | 0 | 25% | 75% | 0 | 37% | 63% | 0 |
| | Jul 17 | 26 | 5 | 21 | 0 | 100% | 0 | 100 | 0 | 0 | 0 | 100% | 0 |

-continued-

## KNA Weekly Subsistence Fishing Report June 11-17, 2011

| Village | Name | Fishing Y/N | Gear Type | Mesh Size | Species Type: | How does the run compare to recent years? *NR= no response | Average # fish caught daily: |
|---|---|---|---|---|---|---|---|
| Kalskag | Family A | Yes | Drift Net | Dog Net | Sockeye | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Started fishing just recently, said that they caught 5 small kings, a couple chum, and a couple Shee fish. Fishing is way below average. Commented that the Commercial fishing should slow down near the mouth of the Kuskokwim. | | | | Chinook | Below Average | 5 week total |
| | | | | | Coho | Below Average | 0 |
| | | | | | Chum | Below Average | 2 week total |
| | Family B | Yes | Set Net | ? | Sockeye | NR | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Hasn't caught any fish in the set net so far. | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 0 |
| | Family C | Yes | Set Net | ? | Sockeye | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Caught 13 kings and 1 Shee fish. Hasn't been catching very much, below average. | | | | Chinook | Below Average | 13 week total |
| | | | | | Coho | Below Average | 0 |
| | | | | | Chum | Below Average | 0 |

-continued-

| Village | Name | Fishing Y/N | Gear Type | Mesh Size | Species Type: | How does the run compare to recent years? *NR= no response | Average # fish caught daily: |
|---|---|---|---|---|---|---|---|
| **Aniak** | Family D | Yes | Drift Net | 7" | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Made 3 drifts on Monday caught 0, Tuesday made 2 drifts caught 0, Wednesday made 3 drifts caught 2 jack Kings. Adequate weather. Said the fishing is terrible. Been fishing since 1981 never had so many drifts and catch nothing. Hopefully closer will give upriver more fish. | | | | **Chinook** | Below Average | 2 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |
| | Family E | Yes | Drift Net | 7" | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Drifted once yesterday caught 1 small king. | | | | **Chinook** | Below Average | 1 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |
| | Family F | Yes | Drift Net | 6" | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Saturday: 1 king, 1 Dog. Fishing is below average. | | | | **Chinook** | Below Average | 1 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 1 week total |
| **Chuathbaluk** | Family G | Yes | Drift Net | 7 1/4" | **Sockeye** | NR | 1 week total |
| | **Comments:** Interviewed: Thursday, 06-16-11 Fished on Monday and Wednesday caught a total of 3 small kings, 2 chums, and 1 red. Not sure if its average fishing. CHU usually starts getting fish about this time. | | | | **Chinook** | NR | 3 week total |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 2 week total |
| | Family H | Yes | Drift Net | ? | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Sunday: caught 6 small kings and 6 sheefish. Wednesday: No fish. Haven't fished since then. Said fishing is below average. The run never really hit yet. | | | | **Chinook** | Below Average | 6 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |

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| Village | Name | Fishing Y/N | Gear Type | Mesh Size | Species Type: | How does the run compare to recent years? *NR= no response | Average # fish caught daily: |
|---|---|---|---|---|---|---|---|
| Crooked Creek | Family I | Yes | Drift Net | 7" | Sockeye | Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Made one drift since last contacted. Good weather hopefully means good fishing. Thanks for closure downriver, upriver needs some fish too. | | | | Chinook | Average | 2 week total |
| | | | | | Coho | Average | 0 |
| | | | | | Chum | Average | 2 week total |
| | Family J | Yes | Drift Net | 5 3/4" | Sockeye | NR | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Fished on the 11th and on the 14th caught a total of 2 kings and 1 chum. Can't tell if it's normal or below fishing yet but seems like it. Said that they think commercial fishing cleaned out the river. | | | | Chinook | NR | 2 week total |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 1 week total |
| Sleetmute | Family K | Yes | Set Net | ? | Sockeye | NR | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 11th: caught 1 pike 12th: caught 1 lush and 2 pike. People have been catching kings up that way. Too early to tell if the fish run is normal or not. | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 0 |
| Stony River | Family L | Yes | Fish Wheel | | Sockeye | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Fish wheel has been going daily averaging 1-2 fish a day. 6 small white fish so far. No salmon yet, used to catch lots by now. Fishing is Below Average. Said the cup used to be full by now but the cup is 1/4 from empty. Not getting better. | | | | Chinook | Below Average | 0 |
| | | | | | Coho | Below Average | 0 |
| | | | | | Chum | Below Average | 0 |

**KNA Comments:** The following participant families have not started fishing yet:
Sleetmute (1 family contacted), Chuathbaluk (1 family contacted), Kalskag (1 family contacted).

The following participant families have not been able to contact:
Aniak (1 family), McGrath (1 family).

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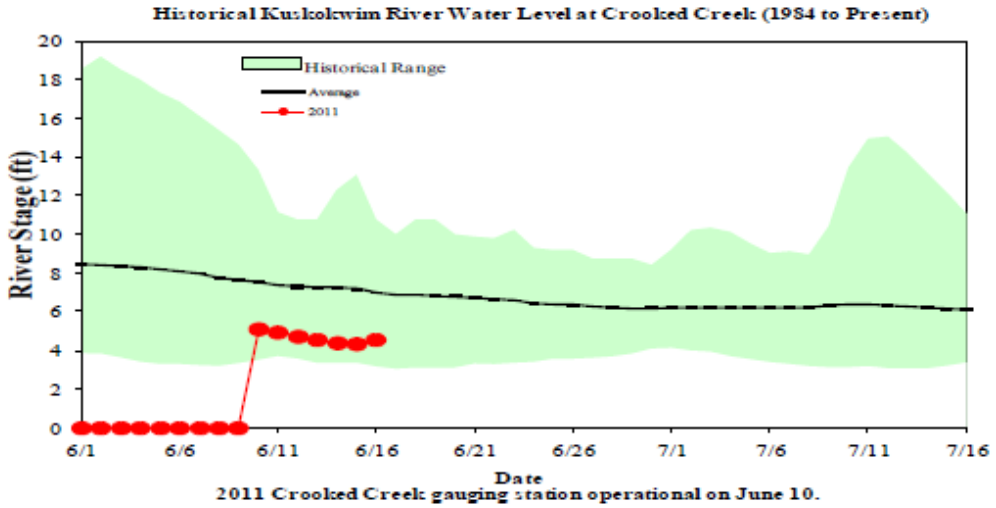
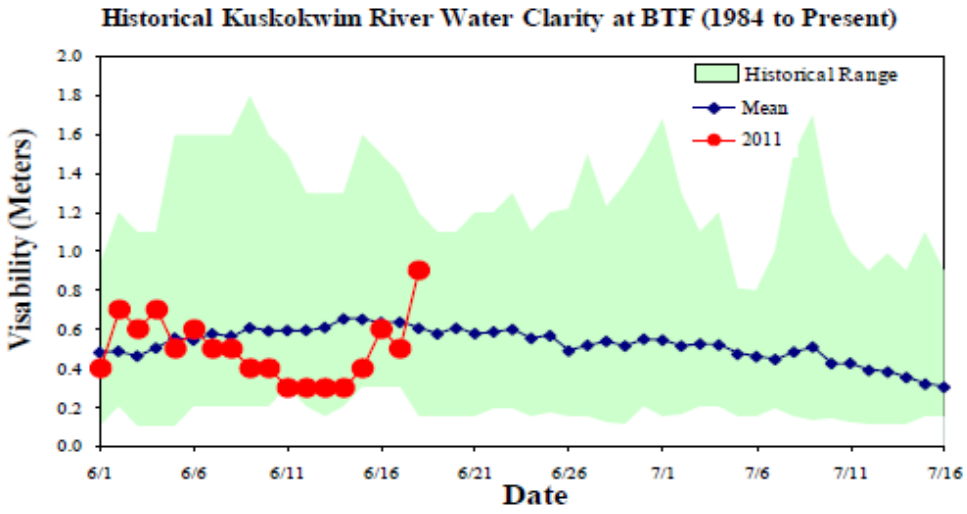
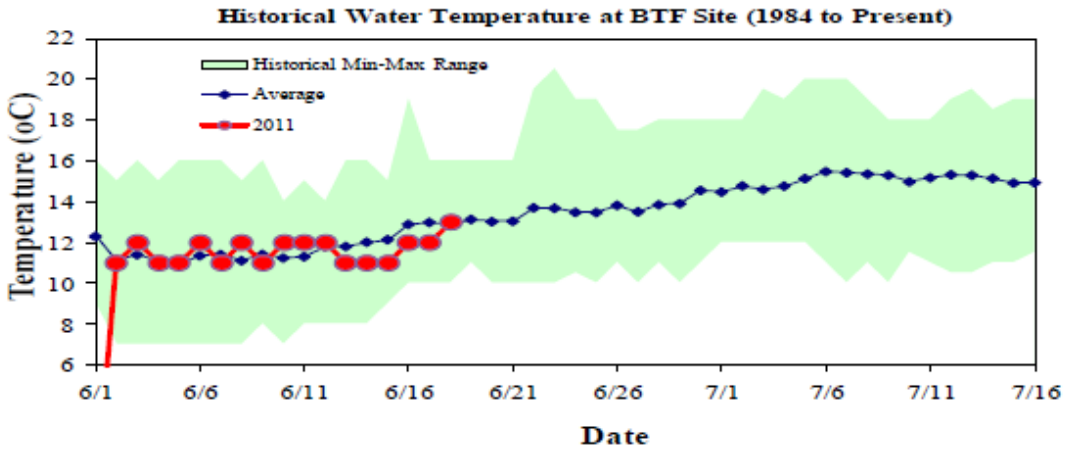
## Overview of Kuskokwim River Salmon Run Assessment Projects

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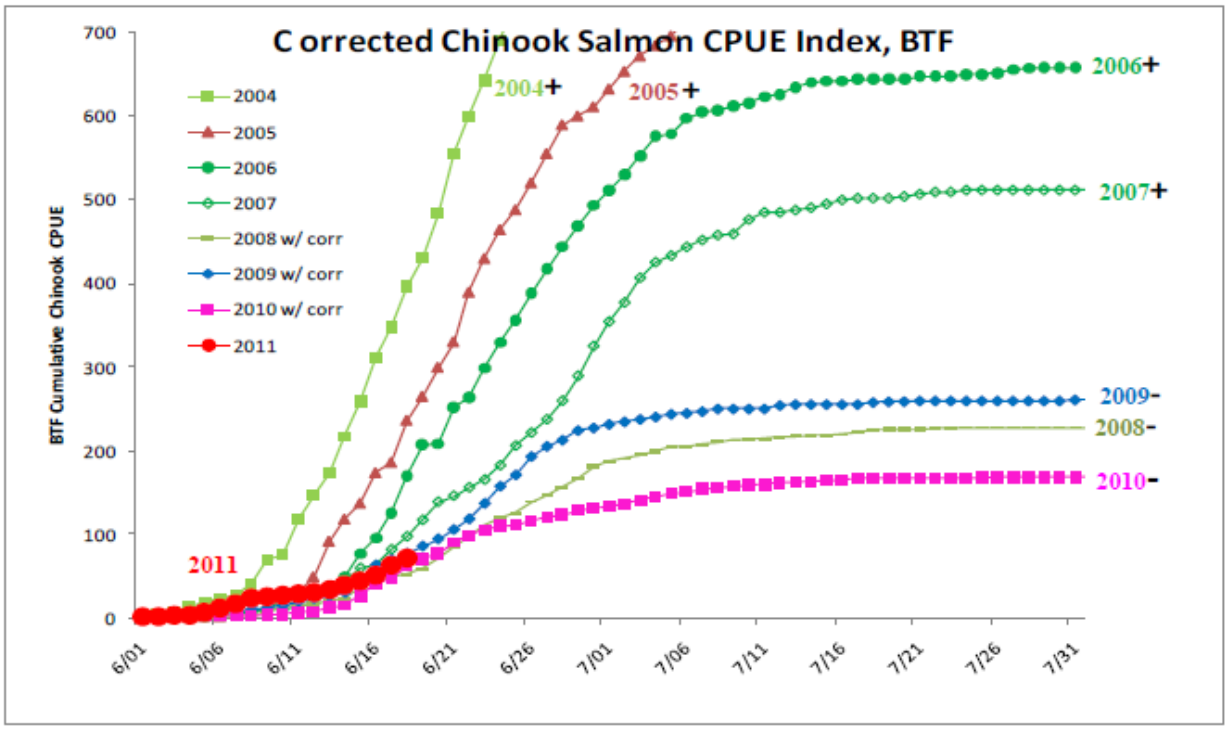
**Bethel Test Fishery**




**Corrected Chinook Salmon Cumulative CPUE Index, BTF**

| | Uncorrected | | | | Corrected (*0.37) | | | |
|---|---|---|---|---|---|---|---|---|
| Date | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 6/01 | 3 | | 0 | 0 | 0 | 0 | 0 | 1 |
| 6/02 | 5 | | 0 | 0 | 1 | 0 | 1 | 2 |
| 6/03 | 7 | 0 | 0 | 0 | 1 | 1 | 1 | 3 |
| 6/04 | 13 | 0 | 0 | 1 | 1 | 2 | 2 | 4 |
| 6/05 | 19 | 1 | 3 | 3 | 1 | 4 | 2 | 7 |
| 6/06 | 23 | 1 | 6 | 3 | 2 | 6 | 3 | 12 |
| 6/07 | 27 | 6 | 6 | 4 | 2 | 9 | 3 | 18 |
| 6/08 | 40 | 7 | 8 | 7 | 4 | 11 | 3 | 25 |
| 6/09 | 70 | 11 | 9 | 11 | 7 | 12 | 4 | 26 |
| 6/10 | 75 | 23 | 9 | 19 | 13 | 15 | 4 | 27 |
| 6/11 | 118 | 30 | 14 | 23 | 15 | 19 | 6 | 29 |
| 6/12 | 147 | 49 | 18 | 30 | 17 | 23 | 8 | 30 |
| 6/13 | 174 | 91 | 33 | 33 | 21 | 26 | 12 | 34 |
| 6/14 | 217 | 118 | 48 | 42 | 23 | 30 | 15 | 39 |
| 6/15 | 258 | 137 | 77 | 60 | 35 | 42 | 27 | 44 |
| 6/16 | 311 | 173 | 96 | 62 | 42 | 63 | 41 | 52 |
| 6/17 | 347 | 186 | 126 | 82 | 50 | 70 | 48 | 62 |
| 6/18 | 396 | 236 | 170 | 97 | 52 | 77 | 62 | 72 |
| 6/19 | 430 | 265 | 207 | 117 | 59 | 86 | 71 | |
| 6/20 | 484 | 299 | 208 | 138 | 72 | 95 | 77 | |
| 6/21 | 556 | 330 | 252 | 146 | 85 | 106 | 90 | |
| 6/22 | 600 | 389 | 263 | 156 | 97 | 118 | 99 | |
| 6/23 | 643 | 430 | 298 | 165 | 110 | 137 | 105 | |
| 6/24 | 691 | 464 | 329 | 182 | 119 | 158 | 109 | |
| 6/25 | 738 | 488 | 356 | 206 | 126 | 171 | 111 | |

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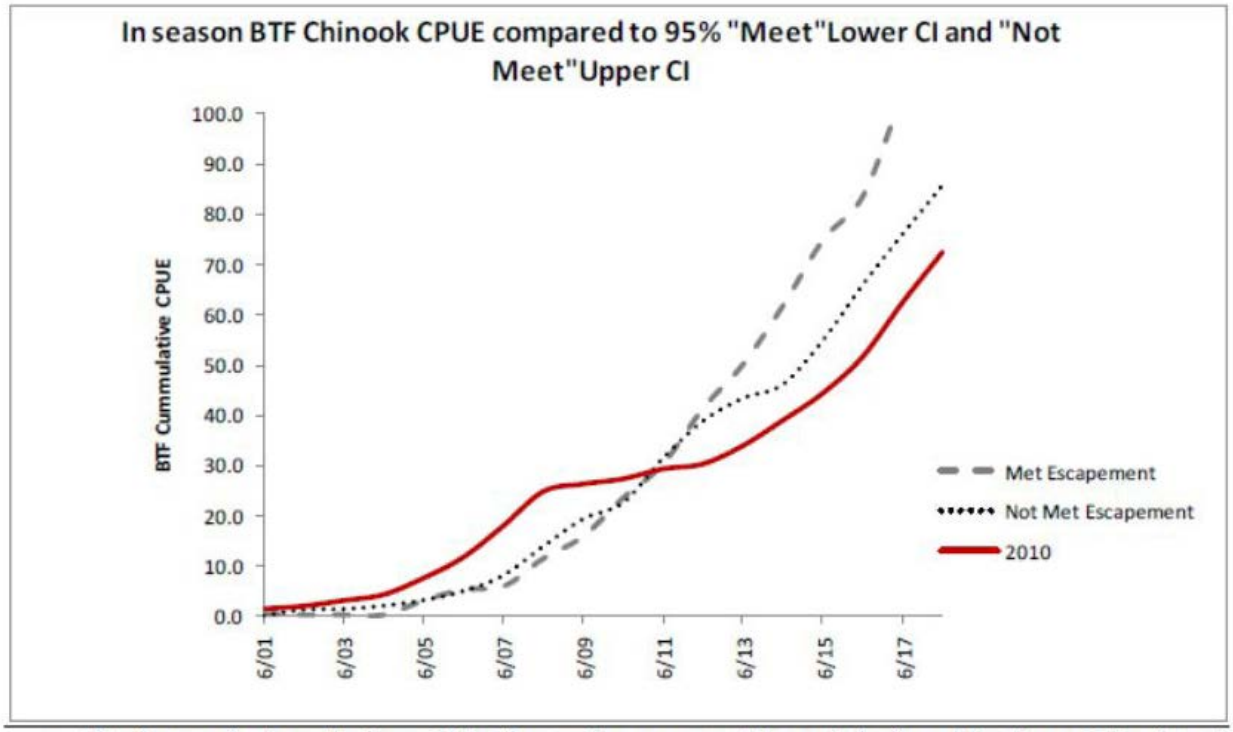


- This figure only shows the lower CI line for meeting escapement (gray dashed), and the Upper CI line for not meeting escapement (black dotted), because they describe the trigger values.
- The solid line is 2011 BTF Chinook corrected CPUE.
- The value for further restrictions on June 11 = 31.4; June 12 = 38.9; June 13 = 43.4.
    - If inseason values are less than these values further restriction is warranted.

-continued-

**Sockeye Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/01 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/02 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/03 | | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/04 | | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/05 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/06 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 3 |
| 6/07 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 4 |
| 6/08 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 4 |
| 6/09 | 3 | 9 | 3 | 5 | 8 | 11 | 0 | 0 | 0 | 4 | 0 | 4 |
| 6/10 | 6 | 11 | 8 | 24 | 11 | 22 | 0 | 0 | 0 | 4 | 0 | 7 |
| 6/11 | 20 | 11 | 18 | 38 | 22 | 46 | 0 | 0 | 0 | 7 | 0 | 10 |
| 6/12 | 31 | 17 | 35 | 46 | 27 | 63 | 3 | 3 | 0 | 10 | 3 | 13 |
| 6/13 | 37 | 23 | 61 | 54 | 38 | 96 | 3 | 17 | 3 | 13 | 6 | 15 |
| 6/14 | 45 | 23 | 67 | 67 | 49 | 149 | 3 | 23 | 6 | 13 | 6 | 24 |
| 6/15 | 48 | 26 | 92 | 97 | 77 | 154 | 11 | 31 | 34 | 16 | 21 | 33 |
| 6/16 | 51 | 38 | 138 | 176 | 130 | 181 | 24 | 36 | 45 | 31 | 46 | 62 |
| 6/17 | 57 | 100 | 158 | 279 | 145 | 236 | 42 | 50 | 48 | 34 | 65 | 102 |
| 6/18 | 71 | 123 | 174 | 335 | 189 | 336 | 81 | 60 | 62 | 61 | 84 | 126 |
| 6/19 | 91 | 152 | 196 | 446 | 212 | 444 | 136 | 74 | 87 | 86 | 142 | |
| 6/20 | 108 | 166 | 240 | 518 | 270 | 634 | 160 | 98 | 102 | 113 | 149 | |
| 6/21 | 146 | 219 | 272 | 585 | 364 | 866 | 219 | 147 | 128 | 146 | 251 | |
| 6/22 | 172 | 249 | 290 | 646 | 509 | 1,056 | 239 | 186 | 237 | 171 | 323 | |
| 6/23 | 395 | 465 | 325 | 670 | 628 | 1,239 | 350 | 197 | 320 | 251 | 347 | |
| 6/24 | 461 | 706 | 346 | 718 | 833 | 1,370 | 422 | 290 | 381 | 340 | 366 | |
| 6/25 | 499 | 754 | 353 | 771 | 966 | 1,489 | 454 | 338 | 455 | 429 | 375 | |

**Chum Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/01 | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/02 | | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/03 | | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/04 | | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 4 | 3 |
| 6/05 | 3 | 3 | 0 | 0 | 11 | 0 | 3 | 0 | 0 | 3 | 6 | 3 |
| 6/06 | 9 | 3 | 8 | 0 | 11 | 0 | 9 | 0 | 0 | 4 | 6 | 3 |
| 6/07 | 9 | 3 | 8 | 0 | 11 | 0 | 9 | 3 | 0 | 4 | 6 | 3 |
| 6/08 | 12 | 3 | 11 | 0 | 14 | 0 | 12 | 3 | 6 | 6 | 6 | 6 |
| 6/09 | 15 | 3 | 41 | 0 | 22 | 0 | 12 | 3 | 9 | 9 | 6 | 11 |
| 6/10 | 18 | 3 | 50 | 6 | 22 | 0 | 15 | 8 | 9 | 9 | 9 | 17 |
| 6/11 | 18 | 3 | 103 | 8 | 25 | 13 | 35 | 11 | 12 | 9 | 9 | 22 |
| 6/12 | 18 | 3 | 146 | 11 | 34 | 25 | 41 | 11 | 18 | 12 | 15 | 22 |
| 6/13 | 18 | 9 | 180 | 17 | 71 | 38 | 133 | 23 | 18 | 14 | 26 | 31 |
| 6/14 | 18 | 9 | 202 | 30 | 110 | 49 | 210 | 34 | 20 | 20 | 31 | 39 |
| 6/15 | 18 | 9 | 285 | 49 | 144 | 87 | 266 | 57 | 41 | 42 | 50 | 60 |
| 6/16 | 18 | 11 | 299 | 77 | 179 | 95 | 350 | 74 | 66 | 69 | 86 | 63 |
| 6/17 | 20 | 17 | 338 | 103 | 229 | 131 | 499 | 94 | 80 | 75 | 133 | 85 |
| 6/18 | 29 | 53 | 552 | 108 | 310 | 188 | 747 | 110 | 94 | 91 | 386 | 135 |
| 6/19 | 43 | 67 | 665 | 148 | 371 | 252 | 927 | 138 | 106 | 99 | 542 | |
| 6/20 | 86 | 73 | 801 | 198 | 450 | 537 | 1012 | 258 | 161 | 105 | 588 | |
| 6/21 | 124 | 73 | 836 | 226 | 547 | 844 | 1482 | 343 | 190 | 135 | 764 | |
| 6/22 | 155 | 78 | 903 | 235 | 659 | 1288 | 1595 | 407 | 264 | 149 | 954 | |
| 6/23 | 224 | 98 | 1047 | 270 | 959 | 1587 | 1916 | 506 | 337 | 301 | 1049 | |
| 6/24 | 250 | 183 | 1181 | 291 | 1260 | 1817 | 2188 | 632 | 437 | 397 | 1163 | |
| 6/25 | 324 | 346 | 1329 | 312 | 1583 | 1918 | 2412 | 840 | 598 | 532 | 1224 | |

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**Weirs/Sonar/Mark-Recapture/Aerial Surveys/Other**

Kuskokwim Salmon Assessment projects are on schedule and beginning operations:

- Kwethluk and Tuluksak River weirs will begin installation when river depths reach a manageable working level.
- George and Tatlawiksuk River weirs began operation on the 16th and 15th of June respectively. Small numbers of salmon have been observed passing the weirs.
- Kogrukluk and Takotna weir crews are onsite and proceeding with installation
- Aniak Sonar crews are onsite and proceeding with installation.
- Kalskag fishwheels:

**Kalskag Fish Wheels**
**Daily Catch Summary**

| Date | Chinook | Chum | Sockeye | Coho |
|---|---|---|---|---|
| 6/8/2011 | 4 | 1 | 0 | 0 |
| 6/9/2011 | 3 | 1 | 0 | 0 |
| 6/10/2011 | 1 | 0 | 1 | 0 |
| 6/11/2011 | 6 | 2 | 0 | 0 |
| 6/12/2011 | 11 | 3 | 1 | 0 |
| 6/13/2011 | 2 | 2 | 2 | 0 |
| 6/14/2011 | 4 | 1 | 0 | 0 |
| 6/15/2011 | No Fishing | | | |
| 6/16/2011 | 0 | 0 | 0 | 0 |
| 6/17/2011 | 0 | 0 | 0 | 0 |
| 6/18/2011 | 4 | 3 | 0 | 0 |
| 6/19/2011 | | | | |
| 6/20/2011 | | | | |

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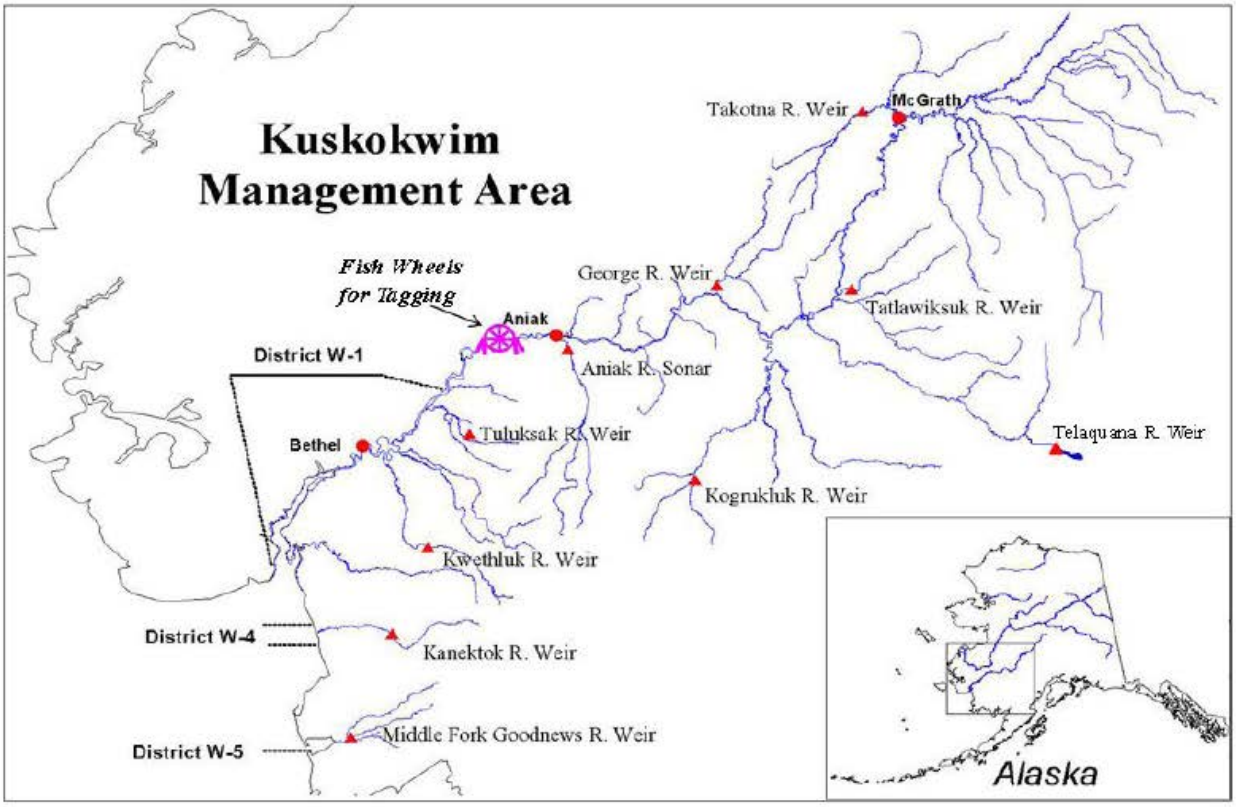
Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
District W-5
Middle Fork Goodnews R. Weir
Alaska

Appendix B3.–Agenda and Information Packet, June 27, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Agenda

Date: **Monday, June 27, 2011** Time: **10:00 am** Place: **Bethel**

Time Called to Order Chair Time Adjourned

**ROLL CALL TO ESTABLISH QUORUM:** **QUORUM MET? Yes / No**

**Upriver Elder:** **Processor:**
**Downriver Elder:** **Member at Large:**
**Commercial Fisher:** **Sport Fisher:**
**Lower River Subsistence:** **Western Interior RAC:**
**Middle River Subsistence:** **Y-K Delta RAC:**
**Upper River Subsistence:** **ADF&G:**
**Headwaters Subsistence:**

**INTRODUCTIONS:**
**INVOCATION:**
**APPROVAL OF AGENDA:**
**PEOPLE TO BE HEARD:**

**CONTINUING BUSINESS:**

1. Subsistence Reports:
    a. Lower River:
    b. ONC Inseason Subsistence:
    c. Middle River:
    d. KNA Inseason Subsistence:
    e. Upper River:
    f. Headwaters:
2. Overview of Kuskokwim River salmon run assessment projects:
    a. Bethel Test Fish
    b. Weirs/Sonar/Mark-Recapture/Aerial Surveys/Other:
3. Commercial Catch Report:
4. Processor Report:
5. Sport Fish Report:
6. Weather Forecast:
7. Recommendation:
8. Motion for Discussion and Action:

**OLD BUSINESS:**

**NEW BUSINESS:**

**COMMENTS FROM WORKING GROUP MEMBERS:**

**NEXT MEETING DATE:**_____ Time:_____ Place:_____

-continued-

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Information Packet

**June 27, 2011**

**Orutsararmiut Native Council**
**Kuskokwim River Inseason Subsistence Catch Monitoring Report**

Date June 25, 2011

**Fishing reports from June 20 –June 24, 2011.**

| Families Surveyed | Families Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both |
|---|---|---|---|---|---|---|---|
| 49 | 44 | 31 | 6 | 7 | 24 | 11 | 8 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 6 | 10 | 28 | 9 | 16 | 15 | 10 | 26 | 4 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 3 | 23 | 9 | 1 | 29 | 6 | 2 | 32 | 1 |

**Comments:** Salmon Fishing was closed in the survey area for a 5-day Chinook conservation closure beginning 12:01 am Thursday, June 23, through 12:01 Tuesday, June 28. Thus, this survey report reflects subsistence fishing effort for the time-period of Monday, June 20, through Wednesday, June 22. 49 families were surveyed this week for the in-season subsistence monitoring program. 44 (90%) of the families were fishing this week. 5 (10%) of the families did not fish this week. 31 (70%) families reported using drift nets. 6 (14%) families reported using set nets. 7 (16%) families reported using both. 24 (55%) of the families fishing used gill nets greater than 6-inch mesh. Most using the greater than 6-inch category referred to using specifically 8-inch mesh called "king gear," but some indicated they were using 7-inch gear. 11 (25%) of the families reported 6-inch mesh or less. 8 (18%) families reported using both.
1 family interviewed the fisher was not present and they were not sure what size mesh was used that week.

Some interviewed this week had just completed their harvest goals for Chinook. Others had some Chinook drying on the rack but planned to fish more to meet their harvest goals for the year if there was an opportunity. Some indicated they did not have as much Chinook as they normally put up for their families for the year but planned to target more Sockeye to make up for the difference. A couple of elders that indicated they had started fishing at their normal time in mid-June had net or boat repairs that kept them from fishing during this 3-day subsistence opening. They were concerned about being able to catch enough kings for their extended family after the 5-day closure, since they only had a handful of Chinook so far. A few elders also expressed they were concerned about the rush to fish that occurred before the closure, both out of concern that few fish would pass through to spawning grounds and the difficulty to fish in usual places because the river was so congested with boats.

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The majority of families interviewed was satisfied with caches so far and were well underway to meeting their salmon harvest goals for the season. Some families indicated that they were fishing a little less in order to conserve Chinook. Many planned to resume fishing for a few more kings and to target sockeye specifically after the closure to meet their family's salmon needs for the year. All families indicated the weather had still been decent for drying fish this week. Some families expressed concern that the weather would be rainy after the fishing closure which would make drying fish more prone to spoiling.

Some families were still reporting that they had switched to smaller mesh gear to target more abundant smaller Chinook and that they were catching fewer females than usual. A few fishers indicated that Chinook were getting smaller each year, even though many fishers caught larger and more female kings in the last day or two of the subsistence opening. A few families were already catching Chinook slightly blush with spawning colors.

**Chinook:**

**Catch rate:** Of the 44 families fishing this week, 6 (14%) families reported the Chinook catch as very good, 10 (22%) families reported the catch as normal, 28 (64%) families reported it as poor. Many fishers noted using 8-inch "king gear" but others noted they switched to smaller mesh gear (6-inch or 5.5-inch) to catch smaller kings and to prevent fish from hitting the net and getting through it. Some reported using both "king gear" and 6-inch or less to increase their catch rate because of the greater percentage of small kings. Most noted they had better catch rates of Chinook with the smaller size mesh this week but more fishers reported some larger Chinook showing up a day or two before the closure. Several fishers commented that the water levels were low and clear which may allow fish to see the nets or swim deeper. These fishers noted better catches at night with less visibility and an overall majority of catches near the bottom of the net just above the lead line.

**Run timing:** Of the 44 families that reported fishing this week, 3 (7%) families reported the run as early, 23 (52%) families reported the run timing as normal, and 9 (20%) families reported the run to be late this year. 9 (20%) families did not comment on run timing. Many noted their own fishing pattern was different this year due to the closures and so they felt they didn't have a good sense of what stage the run was at.

**Chum:**

**Catch Rate:** 9 (21%) families reported their catch rates as good. 16 (36%) families reported their catches as normal. 15 (35%) families reported their chum catches as poor. 4 (9%) families didn't report due to no chum catches yet or felt that catches were only a reflection of by-catch in 8-inch mesh.

**Run timing:** 1 (2%) family reported the run return as early. 29 (66%) families reported the salmon run timing as normal. 6 (14%) families reported the run to be late compared to previous years. 8 (18%) families were unable to report due to few chum catches yet.

**Sockeye:**

**Catch Rate:** 10 (23%) families reported their catch rates as good. 26 (59%) families reported their catches as normal. 4 (9%) families reported their sockeye catches as poor. 4 (9%) families didn't report due to not targeting sockeye yet. Some fishers indicated getting good catches of large robust sockeye this year and hoped to dry more sockeye to make up for smaller Chinook harvests.

**Run timing:** 2 (5%) families reported the run return as early. 32 (73%) families reported the salmon run timing as normal. 1 (2%) family reported the run to be late compared to previous years. 9 (20%) families were unable to report on run timing due to not specifically targeting sockeye yet.

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**ONC Inseason Subsistence Surveys – 2011 Current and Historical Catch Rate Information**

Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week?" "ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

| | | Number of Families | | | Chinook salmon | | | Chum salmon | | | Sockeye salmon | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Week Ending | Inter-viewed | Fishing | Not Fishing | Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 2011 | Jun 05 | 36 | 11 | 25 | 36% | 36% | 0 | ND | ND | ND | 9% | 9% | 0 |
| | Jun 12 | 69 | 41 | 28 | 7% | 34% | 49% | 10% | 46% | 10% | 10% | 46% | 7% |
| | Jun 19 | 57 | 56 | 1 | 25% | 38% | 37% | 14% | 52% | 20% | 14% | 57% | 18% |
| | Jun 26 | 49 | 44 | 5 | 14% | 22% | 64% | 21% | 36% | 34% | 23% | 59% | 9% |
| 2010 | Jun 06 | 19 | 6 | 13 | 0 | 100% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 13 | 39 | 28 | 11 | 4% | 50% | 46% | 0 | 72% | 28% | ND | ND | ND |
| | Jun 20 | 26 | 23 | 3 | 9% | 65% | 26% | 0 | 100% | 0 | 0 | 96% | 4% |
| | Jun 27 | 37 | 37 | 0 | 3% | 73% | 24% | 3% | 92% | 5% | 5% | 81% | 14% |
| | Jul 04 | 38 | 36 | 2 | 8% | 69% | 22% | 14% | 78% | 8% | 3% | 69% | 28% |
| | Jul 11 | 20 | 11 | 9 | 0 | 91% | 0% | 27% | 64% | 0 | 18% | 55% | 18% |
| 2009 | Jun 07 | 20 | 6 | 14 | 0 | 67% | 33% | ND | ND | ND | ND | ND | ND |
| | Jun 14 | 43 | 38 | 5 | 29% | 50% | 21% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 21 | 44 | 44 | 0 | 41% | 36% | 23% | 0 | 100% | 0 | 0 | 86% | 14% |
| | Jun 28 | 36 | 31 | 5 | 39% | 55% | 6% | 3% | 77% | 9% | 6% | 71% | 23% |
| | Jul 05 | 36 | 5 | 31 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jul 12 | 36 | 2 | 34 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| 2008 | Jun 08 | 27 | 5 | 22 | 20% | 60% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 16 | 34 | 17 | 17 | 0 | 76% | 24% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 22 | 32 | 27 | 5 | 56% | 44% | 0 | 0 | 74% | 26% | 81% | 19% | 0 |
| | Jun 29 | 33 | 27 | 6 | 52% | 48% | 0 | 15% | 85% | 0 | 56% | 44% | 0 |
| | Jul 08 | 35 | 15 | 20 | 20% | 80% | 0 | 0 | 100% | 0 | 47% | 53% | 0 |
| | Jul 13 | 32 | 3 | 29 | 0 | 100% | 0 | 33% | 67% | 0 | 0 | 100% | 0 |
| 2007 | Jun 03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Jun 12 | 39 | 28 | 11 | 0 | 29% | 71% | ND | ND | ND | ND | ND | ND |
| | Jun 17 | 40 | 33 | 7 | 0 | 30% | 70% | ND | ND | ND | ND | ND | ND |
| | Jun 24 | 44 | 40 | 4 | 0 | 35% | 65% | ND | ND | ND | ND | ND | ND |
| | Jul 02 | 36 | 20 | 12 | 45% | 45% | 10% | 80% | 20% | 0 | 0 | 40 | 60% |
| | Jul 08 | 33 | 10 | 23 | 60% | 40% | 0 | 80% | 20% | 0 | 30% | 70% | 0 |
| | Jul 14 | 33 | 6 | 27 | 0 | 0 | 100 | 0 | 33% | 67% | 0 | 17% | 83% |
| 2006 | Jun 03 | 22 | 0 | 22 | 0 | 0 | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 10 | 32 | 19 | 13 | 32% | 68% | 0 | 0 | 0 | 0 | ND | ND | ND |
| | Jun 17 | 36 | 30 | 6 | 60% | 40% | 0 | 60% | 40% | 0 | 53% | 47% | 0 |
| | Jun 25 | 48 | 43 | 5 | 79% | 21% | 0 | 91% | 9% | 0 | 19% | 56% | 26% |
| | Jul 02 | 46 | 14 | 32 | 21% | 79% | 0 | 71% | 29% | 0 | 43% | 57% | 0 |
| | Jul 09 | 38 | 8 | 30 | 0 | 100% | 0 | 25% | 75% | 0 | 37% | 63% | 0 |
| | Jul 17 | 26 | 5 | 21 | 0 | 100% | 0 | 100 | 0 | 0 | 0 | 100% | 0 |

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## KNA Weekly Subsistence Fishing Reports, June 18 to June 24, 2011

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Kalskag** | **FAMILY A** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Since last contacted, caught 6 reds, 13 kings, and 9 dogs. Said the fish numbers are going up. Would like to say thank you for whatever the working group is doing; it's working and much appreciated. | | | | | **Sockeye** | NR | 6 (week total) |
| | | | | | **Chinook** | NR | 13 (week total) |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 9 (week total) |
| **Kalskag** | **FAMILY B** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Since last contacted, caught 4 reds and 5 kings. Salmon run still below average. | | | | | **Sockeye** | Below Average | 4 (week total) |
| | | | | | **Chinook** | Below Average | 5 (week total) |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |
| **Aniak** | **FAMILY C** | Yes | Drift Net | 7", 5 ¼ " | | | |
| Comments:<br>Interviewed 06/24/11 Friday<br><br>Drifted using a 7" king net and a 5 ¼" red net. Caught 17 kings (1 female king so far), 41 chum, and 12 sockeye. Mentioned the fishing is still not good, there are hardly any big kings, they are all small. The closure downriver doesn't seem to be helping up here, we can barely see a change. | | | | | **Sockeye** | NR | 12 |
| | | | | | **Chinook** | NR | 17 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 41 |
| **Aniak** | **FAMILY D** | Yes | Drift Net | 6" | | | |
| Comments:<br>Interviewed: 06-24-11 Friday<br><br>Drifted 3 times and caught 3 sockeye, 1 Chinook and 19 chum. Mentioned there are usually more kings this time of year, Things seem to be below average. | | | | | **Sockeye** | Below Average | 3 (week total) |
| | | | | | **Chinook** | Below Average | 1 (week total) |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | Below Average | 19 (week total) |
| **Aniak** | **FAMILY E** | Yes | Drift Net | 6" | | | |
| Comments:<br>Interviewed 6/23/11 Thursday<br><br>Have been fishing on and off since last contacted. Caught 5 chum and 2 jack kings. The numbers are below average for the king salmon and the kings caught are all small. | | | | | **Sockeye** | Below Average | 0 |
| | | | | | **Chinook** | Below Average | 2 (week total) |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 5 (week total) |

-continued-

**KNA Weekly Subsistence Fishing Reports, June 18 to June 24, 2011 (Continued)**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Chuathbaluk** | **FAMILY G** | Yes | Drift Net | "dog" | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Just started drifting, only caught 2 kings so far. The closure was good to have again because there's hardly any fish upriver. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 2 (week total) |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Chuathbaluk** | **FAMILY H** | Yes | Drift Net | 7 ¼" | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Since last contacted, caught 27 kings, 50 dogs, and 20 reds. Fishing is picking up and doing better with the closure down river. | | | | | **Sockeye** | NR | 20 |
| | | | | | **Chinook** | NR | 27 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 50 |
| **Crooked Creek** | **FAMILY I** | Yes | Drift Net | 7" | | | |
| Comments:<br>Interviewed: 06-22-11 Wednesday<br><br>Monday: 2 drifts caught 1 dog.<br>Way below average. | | | | | **Sockeye** | Below Average | 0 |
| | | | | | **Chinook** | Below Average | 0 |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 1 (week total) |
| **Crooked Creek** | **FAMILY J** | Yes | Drift Net | 5 ¾" | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>In the past week have caught a total amount of 6 kings, 3 dogs, and 1 red. Fishing is still below average. | | | | | **Sockeye** | Below Average | 1 (week total) |
| | | | | | **Chinook** | Below Average | 6 (week total) |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 3 (week total) |
| **Sleetmute** | **FAMILY K** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Caught 8 kings and 1 red in this last week. Would say for sure the salmon size is below average. Below average fishing. | | | | | **Sockeye** | Below Average | 1 (week total) |
| | | | | | **Chinook** | Below Average | 8 (week total) |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |

-continued-

**KNA Weekly Subsistence Fishing Reports, June 18 to June 24, 2011 (Continued)**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Stony River** | **FAMILY L** | Yes | Fish Wheel | NR | | | |
| Comments:<br>Interviewed: 06-23-11<br><br>Caught 3 small female kings since last contacted. Still below average for fishing. Said KNA doing this report is a good idea because it lets people know how bad fishing is upriver. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 3 (week total) |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |

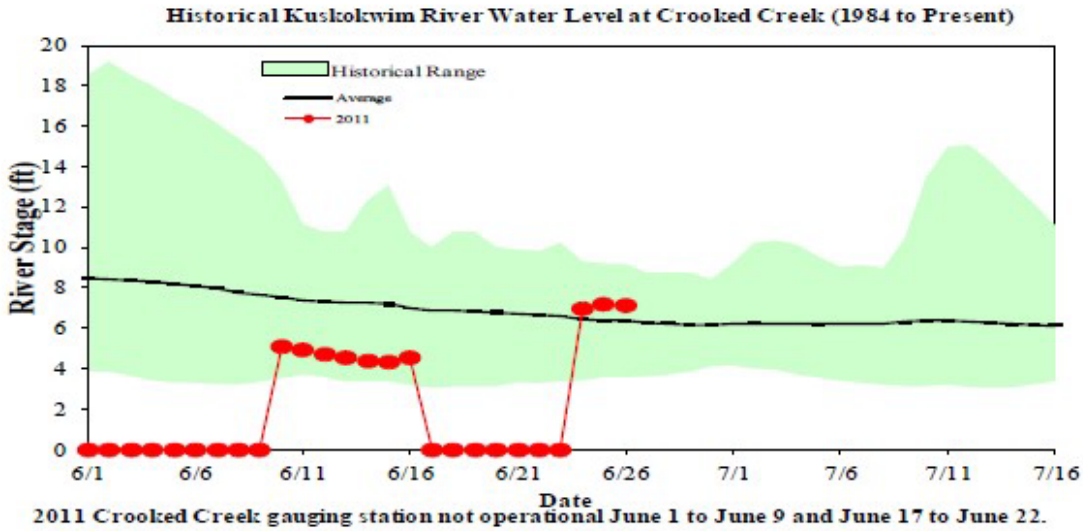
**KNA Comments:**

The following participant families have not been able to contact:
Aniak (1 family), McGrath (1 family)

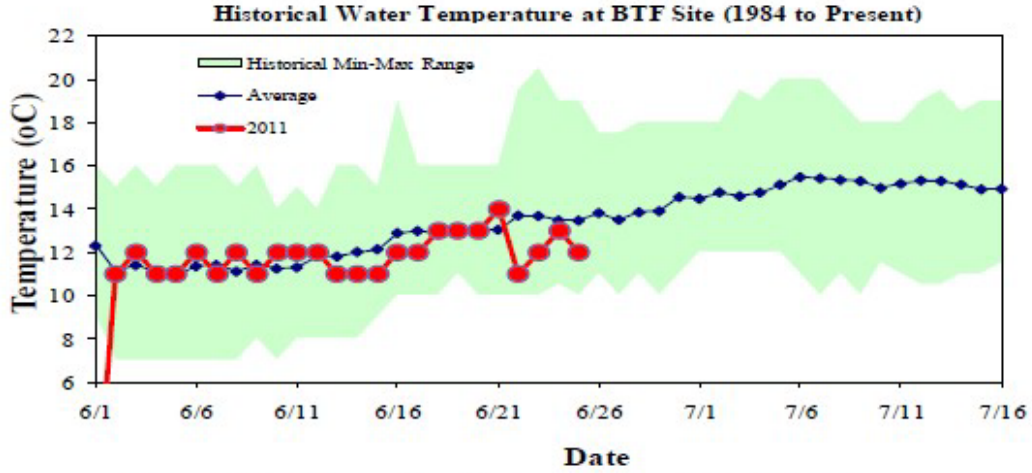
The following participant families have not started fishing yet:
Sleetmute (1 family contacted)

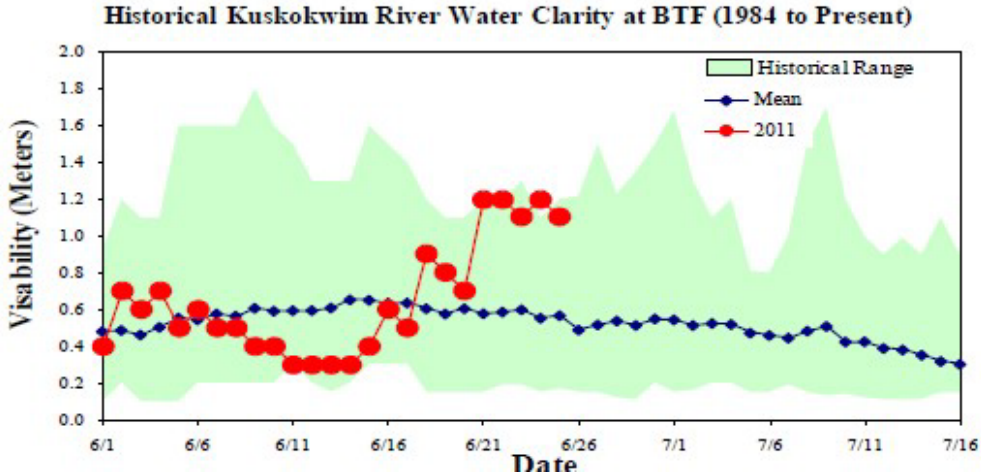
-continued-

## OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS




2011 Crooked Creek gauging station not operational June 1 to June 9 and June 17 to June 22.

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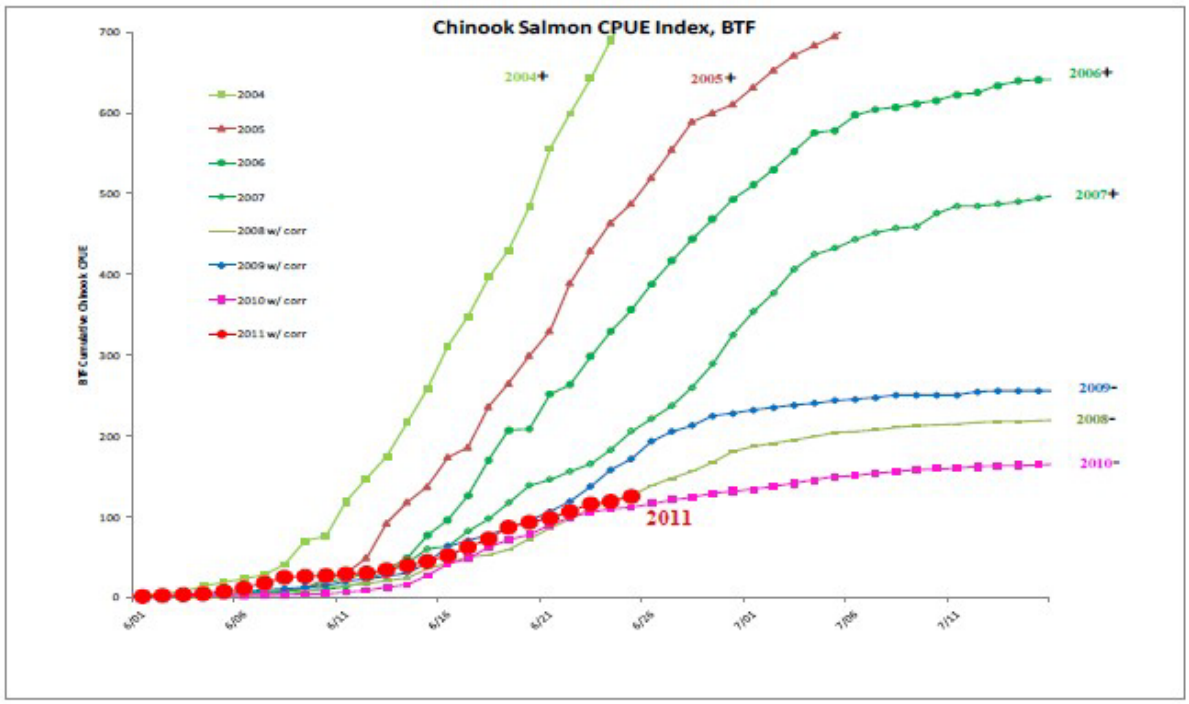
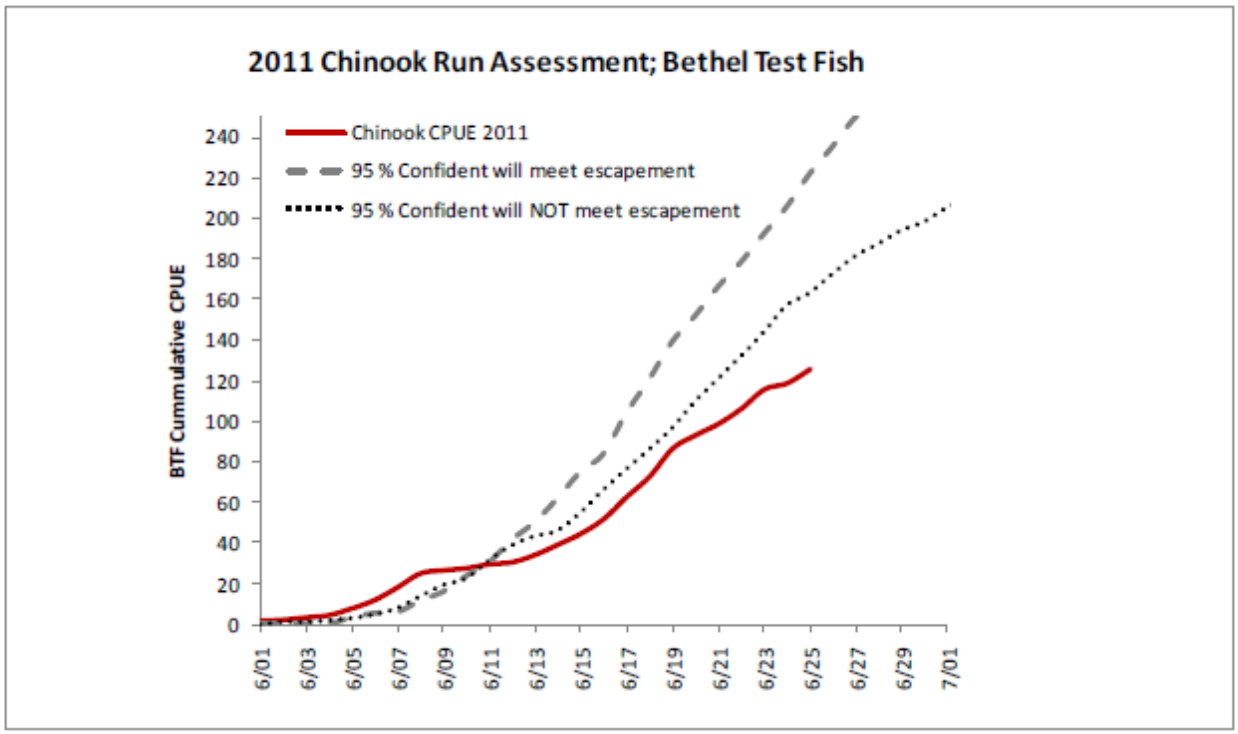
**Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery**




| Chinook Salmon Cumulative CPUE Index, BTF | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Date | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 6/11 | 118 | 30 | 14 | 23 | 15 | 19 | 6 | 29 |
| 6/12 | 147 | 49 | 18 | 30 | 17 | 23 | 8 | 30 |
| 6/13 | 174 | 91 | 33 | 33 | 21 | 26 | 12 | 34 |
| 6/14 | 217 | 118 | 48 | 42 | 23 | 30 | 15 | 39 |
| 6/15 | 258 | 137 | 77 | 60 | 35 | 42 | 27 | 44 |
| 6/16 | 311 | 173 | 96 | 62 | 42 | 63 | 41 | 52 |
| 6/17 | 347 | 186 | 126 | 82 | 50 | 70 | 48 | 62 |
| 6/18 | 396 | 236 | 170 | 97 | 52 | 77 | 62 | 72 |
| 6/19 | 430 | 265 | 207 | 117 | 59 | 86 | 71 | 86 |
| 6/20 | 484 | 299 | 208 | 138 | 72 | 95 | 77 | 93 |
| 6/21 | 556 | 330 | 252 | 146 | 85 | 106 | 90 | 98 |
| 6/22 | 600 | 389 | 263 | 156 | 97 | 118 | 99 | 106 |
| 6/23 | 643 | 430 | 298 | 165 | 110 | 137 | 105 | 115 |
| 6/24 | 691 | 464 | 329 | 182 | 119 | 158 | 109 | 118 |
| 6/25 | 738 | 488 | 356 | 206 | 126 | 171 | 111 | 125 |
| 6/26 | 785 | 520 | 388 | 221 | 139 | 193 | 116 | |
| 6/27 | 801 | 555 | 417 | 237 | 148 | 205 | 121 | |
| 6/28 | 848 | 589 | 444 | 259 | 156 | 213 | 124 | |
| 6/29 | 893 | 600 | 469 | 289 | 167 | 224 | 129 | |
| 6/30 | 928 | 611 | 493 | 325 | 181 | 227 | 131 | |
| 7/1 | 951 | 632 | 511 | 354 | 187 | 232 | 134 | |

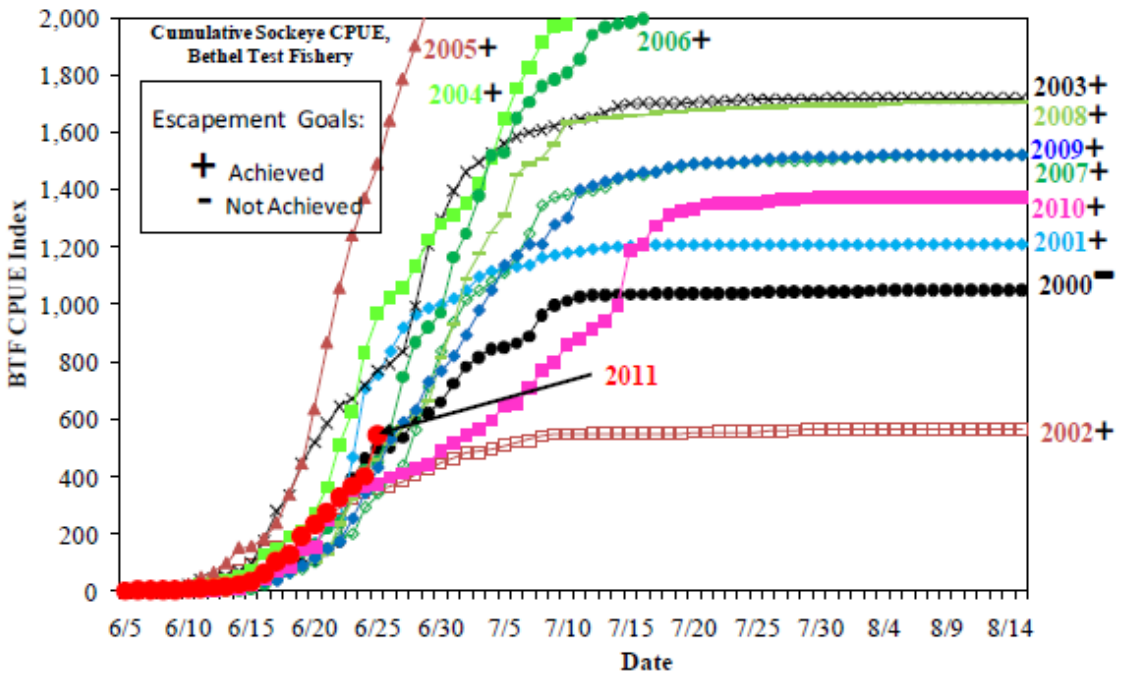
-continued-




- If BTF tracks *below* the *dotted* line, we are 95% confident that escapement goals will NOT be met for the Kwethluk and Tuluksak Rivers
- If BTF tracks *above* the *dashed* line, we are 95% confident that escapement goals will be met for the Kwethluk and Tuluksak Rivers.

-continued-

## Sockeye Salmon Cumulative CPUE Index, Bethel Test Fishery




### Sockeye Salmon Cumulative CPUE Index

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/05 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/06 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 3 |
| 6/07 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 4 |
| 6/08 | 0 | 9 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 4 |
| 6/09 | 3 | 9 | 3 | 5 | 8 | 11 | 0 | 0 | 0 | 4 | 0 | 4 |
| 6/10 | 6 | 11 | 8 | 24 | 11 | 22 | 0 | 0 | 0 | 4 | 0 | 7 |
| 6/11 | 20 | 11 | 18 | 38 | 22 | 46 | 0 | 0 | 0 | 7 | 0 | 10 |
| 6/12 | 31 | 17 | 35 | 46 | 27 | 63 | 3 | 3 | 0 | 10 | 3 | 13 |
| 6/13 | 37 | 23 | 61 | 54 | 38 | 96 | 3 | 17 | 3 | 13 | 6 | 15 |
| 6/14 | 45 | 23 | 67 | 67 | 49 | 149 | 3 | 23 | 6 | 13 | 6 | 24 |
| 6/15 | 48 | 26 | 92 | 97 | 77 | 154 | 11 | 31 | 34 | 16 | 21 | 33 |
| 6/16 | 51 | 38 | 138 | 176 | 130 | 181 | 24 | 36 | 45 | 31 | 46 | 62 |
| 6/17 | 57 | 100 | 158 | 279 | 145 | 236 | 42 | 50 | 48 | 34 | 65 | 102 |
| 6/18 | 71 | 123 | 174 | 335 | 189 | 336 | 81 | 60 | 62 | 61 | 84 | 126 |
| 6/19 | 91 | 152 | 196 | 446 | 212 | 444 | 136 | 74 | 87 | 86 | 142 | 191 |
| 6/20 | 108 | 166 | 240 | 518 | 270 | 634 | 160 | 98 | 102 | 113 | 149 | 231 |
| 6/21 | 146 | 219 | 272 | 585 | 364 | 866 | 219 | 147 | 128 | 146 | 251 | 274 |
| 6/22 | 172 | 249 | 290 | 646 | 509 | 1,056 | 239 | 186 | 237 | 171 | 323 | 326 |
| 6/23 | 395 | 465 | 325 | 670 | 628 | 1,239 | 350 | 197 | 320 | 251 | 347 | 365 |
| 6/24 | 461 | 706 | 346 | 718 | 833 | 1,370 | 422 | 290 | 381 | 340 | 366 | 400 |
| 6/25 | 499 | 754 | 353 | 771 | 966 | 1,489 | 454 | 338 | 455 | 429 | 375 | 543 |
| 6/26 | 505 | 836 | 368 | 793 | 1,027 | 1,640 | 556 | 393 | 518 | 528 | 394 | |
| 6/27 | 536 | 918 | 385 | 836 | 1,055 | 1,785 | 748 | 436 | 572 | 588 | 411 | |
| 6/28 | 605 | 963 | 407 | 994 | 1,133 | 1,901 | 869 | 560 | 619 | 629 | 428 | |
| 6/29 | 622 | 986 | 424 | 1,207 | 1,222 | 2,052 | 920 | 710 | 660 | 729 | 446 | |
| 6/30 | 660 | 998 | 446 | 1,296 | 1,283 | 2,204 | 971 | 833 | 813 | 766 | 491 | |
| 7/01 | 724 | 1,020 | 464 | 1,395 | 1,315 | 2,298 | 1,164 | 934 | 933 | 818 | 515 | |

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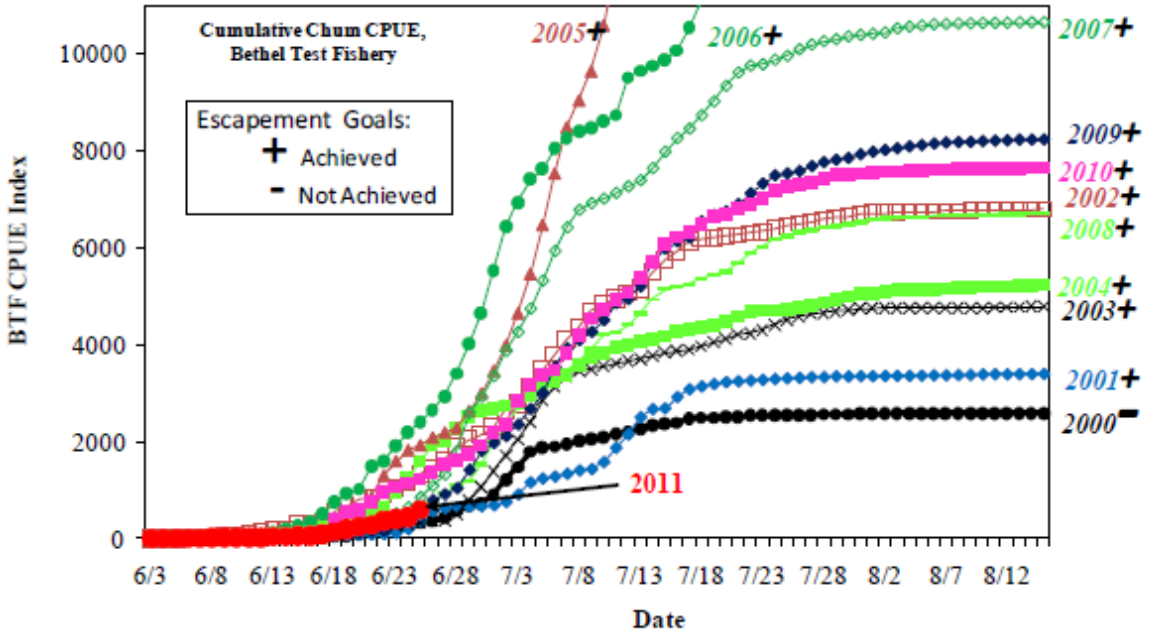
## Chum Salmon Cumulative CPUE Index, Bethel Test Fishery




### Chum Salmon Cumulative CPUE Index

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/03 | | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/04 | | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 4 | 3 |
| 6/05 | 3 | 3 | 0 | 0 | 11 | 0 | 3 | 0 | 0 | 3 | 6 | 3 |
| 6/06 | 9 | 3 | 8 | 0 | 11 | 0 | 9 | 0 | 0 | 4 | 6 | 3 |
| 6/07 | 9 | 3 | 8 | 0 | 11 | 0 | 9 | 3 | 0 | 4 | 6 | 3 |
| 6/08 | 12 | 3 | 11 | 0 | 14 | 0 | 12 | 3 | 6 | 6 | 6 | 6 |
| 6/09 | 15 | 3 | 41 | 0 | 22 | 0 | 12 | 3 | 9 | 9 | 6 | 11 |
| 6/10 | 18 | 3 | 50 | 6 | 22 | 0 | 15 | 8 | 9 | 9 | 9 | 17 |
| 6/11 | 18 | 3 | 103 | 8 | 25 | 13 | 35 | 11 | 12 | 9 | 9 | 22 |
| 6/12 | 18 | 3 | 146 | 11 | 34 | 25 | 41 | 11 | 18 | 12 | 15 | 22 |
| 6/13 | 18 | 9 | 180 | 17 | 71 | 38 | 133 | 23 | 18 | 14 | 26 | 31 |
| 6/14 | 18 | 9 | 202 | 30 | 110 | 49 | 210 | 34 | 20 | 20 | 31 | 39 |
| 6/15 | 18 | 9 | 285 | 49 | 144 | 87 | 266 | 57 | 41 | 42 | 50 | 60 |
| 6/16 | 18 | 11 | 299 | 77 | 179 | 95 | 350 | 74 | 66 | 69 | 86 | 63 |
| 6/17 | 20 | 17 | 338 | 103 | 229 | 131 | 499 | 94 | 80 | 75 | 133 | 85 |
| 6/18 | 29 | 53 | 552 | 108 | 310 | 188 | 747 | 110 | 94 | 91 | 386 | 135 |
| 6/19 | 43 | 67 | 665 | 148 | 371 | 252 | 927 | 138 | 106 | 99 | 542 | 199 |
| 6/20 | 86 | 73 | 801 | 198 | 450 | 537 | 1012 | 258 | 161 | 105 | 588 | 241 |
| 6/21 | 124 | 73 | 836 | 226 | 547 | 844 | 1482 | 343 | 190 | 135 | 764 | 276 |
| 6/22 | 155 | 78 | 903 | 235 | 659 | 1288 | 1595 | 407 | 264 | 149 | 954 | 371 |
| 6/23 | 224 | 98 | 1047 | 270 | 959 | 1587 | 1916 | 506 | 337 | 301 | 1049 | 414 |
| 6/24 | 250 | 183 | 1181 | 291 | 1260 | 1817 | 2188 | 632 | 437 | 397 | 1163 | 433 |
| 6/25 | 324 | 346 | 1329 | 312 | 1583 | 1918 | 2412 | 840 | 598 | 532 | 1224 | 597 |
| 6/26 | 363 | 557 | 1466 | 349 | 1926 | 2077 | 2646 | 1075 | 753 | 783 | 1340 | |
| 6/27 | 435 | 619 | 1622 | 375 | 2014 | 2183 | 2941 | 1308 | 921 | 904 | 1524 | |
| 6/28 | 574 | 637 | 1897 | 496 | 2271 | 2273 | 3402 | 1783 | 1099 | 1028 | 1613 | |
| 6/29 | 676 | 651 | 2048 | 791 | 2514 | 2631 | 4031 | 2589 | 1176 | 1407 | 1738 | |
| 6/30 | 727 | 654 | 2136 | 1059 | 2653 | 2989 | 4660 | 2917 | 1550 | 1800 | 1931 | |
| 7/01 | 908 | 676 | 2299 | 1387 | 2690 | 3455 | 5530 | 3341 | 2010 | 1959 | 2196 | |

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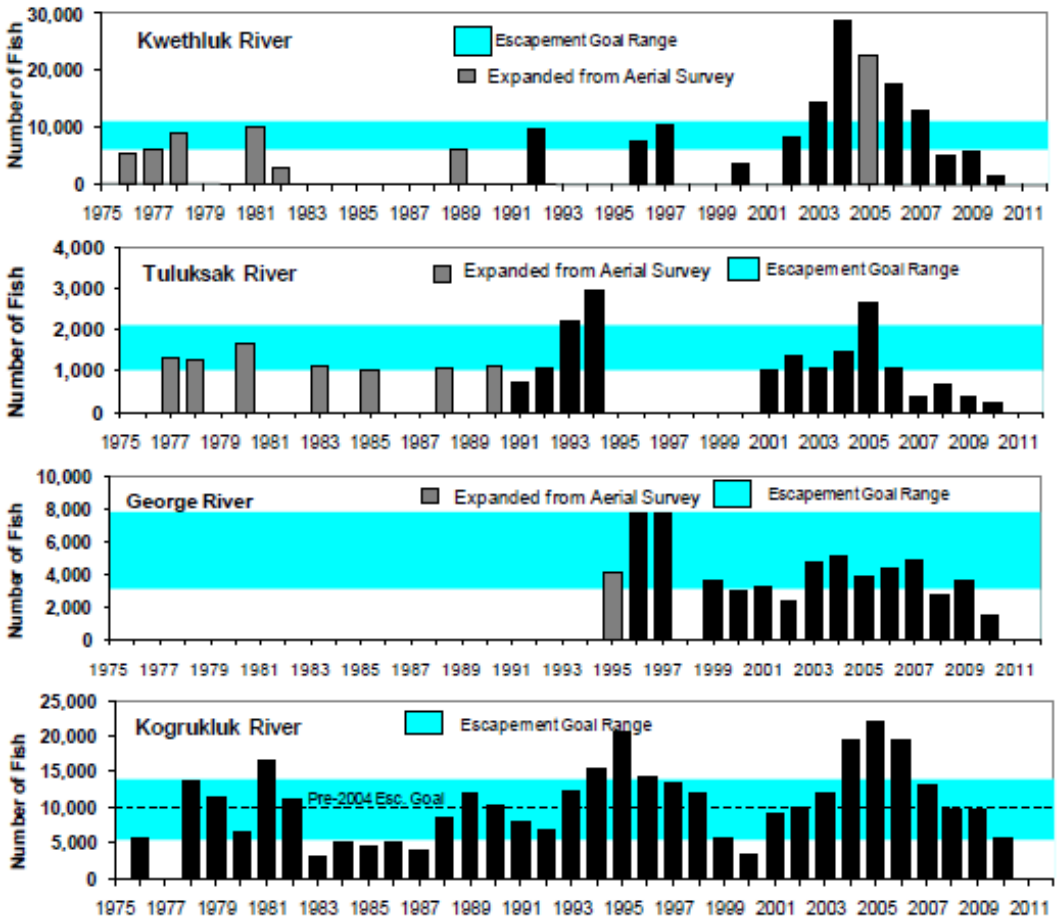
## ESCAPEMENT MONITORING

### Status of Salmon Assessment Projects as of June 26, 2011

- Tuluksak River Weir became operational on 25 June. No salmon seen passing the weir. One chum salmon observed above the weir site.
- Kwethluk River Weir installation will begin when water levels permit.
- Aniak River Sonar on Schedule to begin operations early this week.
- George, Kogrukluk and Tatlawiksuk River Weirs installed and counting. Count information detailed below.
- Takotna River Weir currently being installed. Expected to be fish tight by midweek.
- Telaquina River Weir crew staging for transport to the weir site early this week.

### CHINOOK SALMON -Weir Escapement Goal Ranges

| | |
|---|---|
| Kwethluk River | 6,000 – 11,000 |
| Tuluksak River | 1,000 – 2,100 |
| George River | 3,100 – 7,900 |
| Kogrukluk River | 5,300 – 14,000 |

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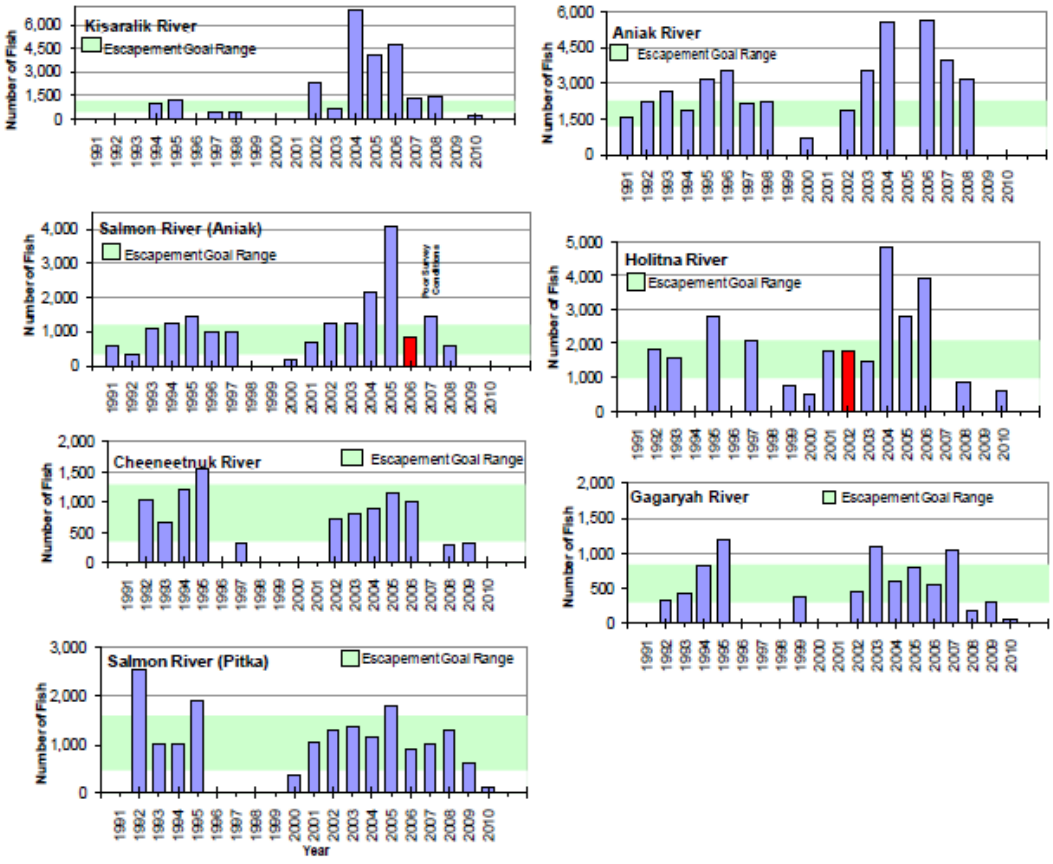
## ESCAPEMENT MONITORING *(Continued)*

### CHINOOK SALMON – Aerial Survey Escapement Goal Ranges

| | |
|---|---|
| Kisaralik River | 400 – 1,200 |
| Aniak River | 1,200 – 2,300 |
| Salmon River (Aniak R) | 330 – 1,200 |
| Holitna River | 970 – 2,100 |
| Cheeneetnuk R (Stony R) | 340 – 1,300 |
| Gagaryah River (Stony R) | 300 – 830 |
| Salmon River (Pitka Fork | 470 – 1,600 |

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## ESCAPEMENT MONITORING *(Continued)*

### CHINOOK SALMON – Weir Counts

**George River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal: 3,100 to 7,900**

| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| GEO Total | 3,548 | 2,960 | 3,309 | 2,444 | 4,693 | 5,207 | 3,845 | 4,357 | 4,883 | 2,698 | 3,663 | 1,500 | |
| 6/20 | 0 b | 0 | 0 b | 0 b | 22 b | 17 b | 45 | 7 | 1 | 2 | 5 | 0 | 0 |
| 6/21 | 0 b | 0 | 0 b | 3 e | 46 b | 26 b | 48 | 11 | 1 | 2 | 6 | 0 | 0 |
| 6/22 | 0 b | 2 | 2 b | 58 | 76 b | 34 b | 104 | 19 | 1 | 4 | 6 | 0 | 5 |
| 6/23 | 9 b | 12 | 13 b | 98 | 120 b | 38 b | 125 | 20 | 2 | 5 | 6 | 3 | 6 |
| 6/24 | 14 b | 23 | 25 b | 103 | 130 b | 40 b | 231 | 22 | 3 | 6 | 9 | 5 | 6 |
| 6/25 | 19 b | 28 | 31 e | 111 | 293 b | 47 b | 303 | 25 | 3 | 7 | 10 | 6 | 7 |
| 6/26 | 33 b | 29 | 46 | 141 | 499 b | 99 b | 363 | 26 | 3 | 9 | 16 | 10 | |
| 6/27 | 43 b | 149 | 62 | 165 | 636 b | 409 | 506 | 31 | 13 | 11 | 19 | 10 | |
| 6/28 | 76 b | 149 | 162 | 208 | 881 b | 639 | 620 | 72 | 13 | 15 e | 20 | 10 | |

**Tatlawiksuk River weir historical cumulative daily Chinook salmon escapement.**

= years of generally low Chinook salmon escapements in the Kuskokwim River. **Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| TAT Total | 1,490 | 810 | 2,010 | 2,237 | 1,683 | 2,833 | 2,920 | 1,700 | 2,061 | 1,071 | 1,071 | 567 | |
| 6/20 | 0 | 4 | 0 | 0 | 0 | 19 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6/21 | 0 | 4 | 1 | 1 | 0 | 21 | 9 | 0 | 0 | 0 | 2 | 0 | 1 |
| 6/22 | 0 | 5 | 3 | 20 | 6 | 22 | 16 | 0 | 0 | 0 | 2 | 1 | 1 |
| 6/23 | 4 | 5 | 4 | 87 | 6 | 22 | 19 | 0 | 0 | 0 | 2 | 1 | 1 |
| 6/24 | 6 | 15 | 7 | 90 | 11 | 33 | 25 | 0 | 0 | 0 | 2 | 1 | 1 |
| 6/25 | 8 | 15 | 12 | 92 | 24 | 107 | 30 | 1 | 2 | 0 | 2 | 1 | 3 |
| 6/26 | 14 | 35 | 83 | 100 | 43 | 348 | 57 | 4 | 10 | 2 | 5 | 2 | |
| 6/27 | 18 | 37 | 101 | 617 | 46 | 369 | 67 | 26 | 13 | 2 | 9 | 3 | |
| 6/28 | 32 | 42 | 139 | 638 | 198 | 453 | 72 | 29 | 36 | 2 | 11 | 4 | |

**Kogrukluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal: 5,300 to 14,000**

| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| KOG. Esc. | 5570 | 3,310 | 9,298 | 10,104 | 11,771 | 19,651 | 22,000 | 19,414 | 13,029 | 9,730 | 9,702 | 5,690 | |
| 6/20 | | | | | | | | | | | | | |
| 6/21 | | | 1 b | | 0 | 0 | | | | | | | 0 |
| 6/22 | | | 4 b | | 1 | 0 | 1 | | | | | | 0 |
| 6/23 | | | 11 b | | 1 | 9 | 2 | | | | | | 0 |
| 6/24 | | | 20 b | | 1 | 9 | 2 | | | | | | 0 |
| 6/25 | | | 36 b | | 8 | 56 | 60 | | | | 0 | | 0 |
| 6/26 | | | 64 b | 15 | 13 | 107 | 118 | | 0 d | | 0 | | |
| 6/27 | | | 108 b | 158 | 37 | 215 | 154 | | 1 | | 0 | 1 | |
| 6/28 | | | 137 b | 261 | 77 | 302 | 210 | 0 d | 2 | | 5 | 3 | |

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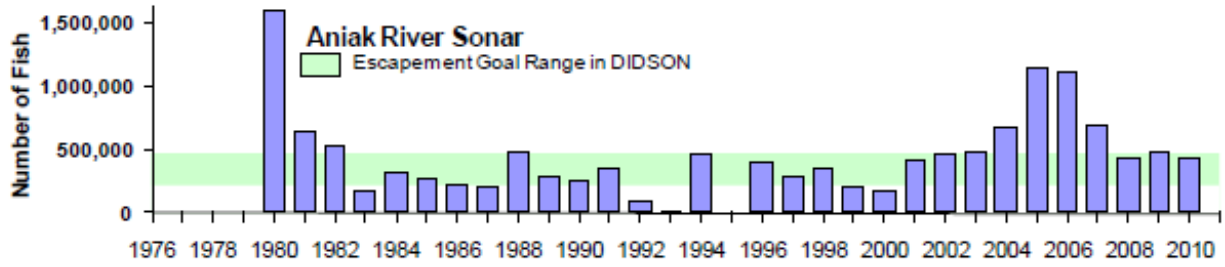
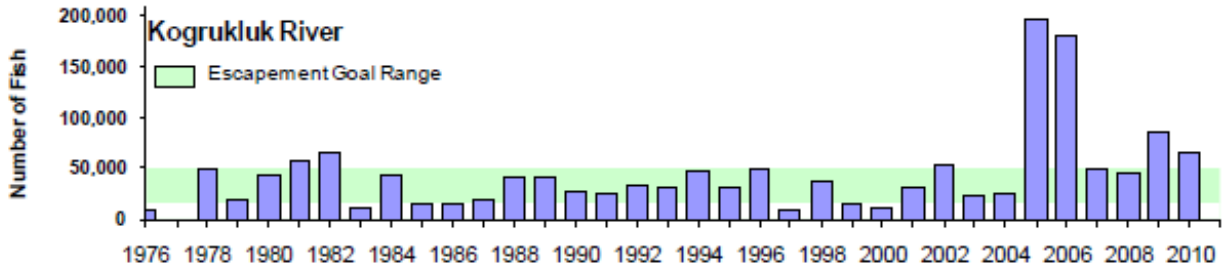
## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Escapement Goal Ranges

| | | |
|---|---|---|
| Aniak River | 220,000 – 480,000 | Sonar/Index |
| Kogrukluk River | 15,000 – 49,000 | Weir |

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## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Weir Counts

**George River weir historical cumulative daily chum salmon escapement.**

= years of generally low chum salmon escapements in the Kuskokwim River. **Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| GEO Total | 11,552 | 3,492 | 11,601 | 6,543 | 33,666 | 14,409 | 14,828 | 41,467 | 55,842 | 29,978 | 7,941 | 26,154 | |
| 6/20 | 0 b | 0 | 0 b | 5 b | 89 b | 298 b | 34 | 48 | 6 | 1 | 11 | 0 | 36 |
| 6/21 | 0 b | 5 | 17 b | 16 e | 137 b | 436 b | 42 | 97 | 6 | 1 | 22 | 6 | 67 |
| 6/22 | 0 b | 11 | 36 b | 123 | 150 b | 552 b | 60 | 255 | 7 | 19 | 23 | 7 | 109 |
| 6/23 | 0 b | 49 | 162 b | 181 | 161 b | 672 b | 75 | 451 | 26 | 31 | 24 | 15 | 126 |
| 6/24 | 21 b | 66 | 219 b | 204 | 173 b | 692 b | 134 | 631 | 47 | 53 | 28 | 88 | 156 |
| 6/25 | 29 b | 83 | 275 e | 328 | 184 b | 851 b | 169 | 897 | 53 | 104 | 34 | 125 | 175 |
| 6/26 | 50 b | 84 | 285 | 573 | 195 b | 1,353 b | 192 | 1,123 | 68 | 130 | 59 | 206 | |
| 6/27 | 79 b | 174 | 302 | 691 | 256 b | 2,236 | 257 | 1,390 | 244 | 266 | 60 | 237 | |
| 6/28 | 157 b | 174 | 341 | 928 | 353 b | 2,838 | 318 | 2,014 | 313 | 400 e | 68 | 274 | |

**Tatlawiksuk River weir historical cumulative daily chum salmon escapement.**

= years of generally low chum salmon escapements in the Kuskokwim River. **Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| TAT Total | 9,599 | 6,965 | 23,718 | 24,542 | n.a. | 21,245 | 55,720 | 32,301 | 83,246 | 30,896 | 19,975 | 36,701 | |
| 6/20 | 0 | 4 | 0 | 18 | 0 | 233 | 19 | 3 | 2 | 2 | 7 | 0 | 19 |
| 6/21 | 0 | 6 | 3 | 60 | 0 | 286 | 28 | 6 | 5 | 5 | 16 | 3 | 40 |
| 6/22 | 0 | 13 | 7 | 228 | 1 | 367 | 41 | 18 | 5 | 10 | 18 | 8 | 52 |
| 6/23 | 0 | 14 | 37 | 490 | 6 | 438 | 48 | 76 | 10 | 15 | 18 | 8 | 66 |
| 6/24 | 18 | 32 | 59 | 518 | 12 | 607 | 80 | 191 | 25 | 22 | 20 | 11 | 83 |
| 6/25 | 25 | 62 | 120 | 621 | 16 | 1,201 | 95 | 425 | 72 | 45 | 27 | 18 | 117 |
| 6/26 | 43 | 159 | 251 | 1,104 | 28 | 1,651 | 131 | 690 | 125 | 80 | 47 | 49 | |
| 6/27 | 68 | 166 | 320 | 1,496 | 48 | 1,826 | 174 | 1,131 | 226 | 129 | 78 | 77 | |
| 6/28 | 135 | 176 | 463 | 2,070 | 154 | 2,002 | 230 | 1,398 | 468 | 129 | 98 | 251 | |

**Kogrukluk River weir historical cumulative daily chum salmon escapement.**

= years below escapement goal. **Esc Goal: 15,000 to 49,000**

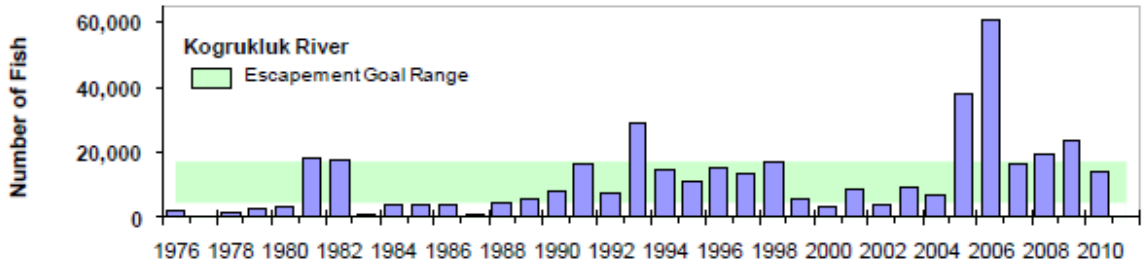
| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| KOG. Esc. | 13,820 | 11,491 | 30,570 | 51,570 | 23,413 | 24,201 | 197,723 | 180,594 | 49,505 | 44,978 | 84,940 | 63,583 | |
| 6/20 | | | | | | | | | | | | | |
| 6/21 | | | c | | 2 | 0 | | | | | | | 0 |
| 6/22 | | | c | | 4 | 15 | 1 | | | | | | 0 |
| 6/23 | | | c | | 14 | 69 | 3 | | | | | | 3 |
| 6/24 | | | c | | 16 | 99 | 4 | | | | | | 3 |
| 6/25 | | | c | | 18 | 196 | 19 | | | | 0 | | 5 |
| 6/26 | | | c | 247 | 25 | 289 | 35 | | 0 d | | 10 | | |
| 6/27 | | | c | 877 | 59 | 438 | 60 | | 22 | | 25 | 1 | |
| 6/28 | | | 6 b | 1,351 | 107 | 552 | 105 | 336 d | 37 | | 58 | 2 | |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

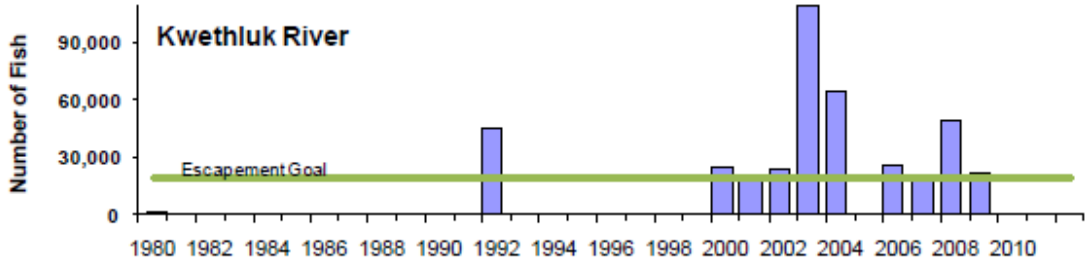
### SOCKEYE SALMON – Escapement Goal Range

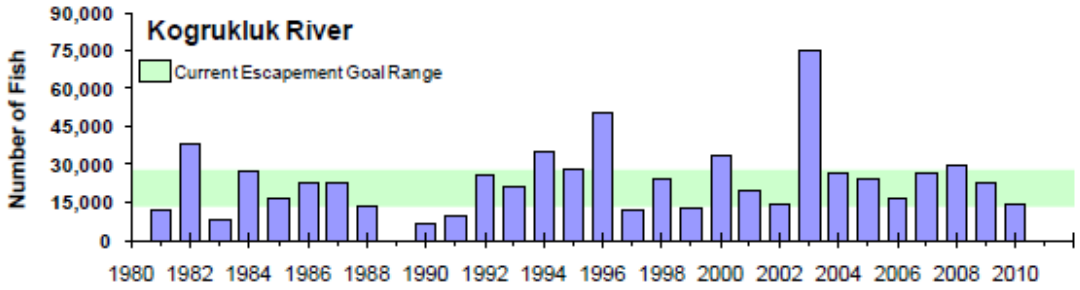
| | | |
|---|---|---|
| Kogrukluk River | 4,440 – 17,000 | Weir |




### COHO SALMON – Escapement Goals

| | | |
|---|---|---|
| Kwethluk River | 19,000 | Weir/Lower Bound |
| Kogrukluk River | 13,000 – 28,000 | Weir/Range |

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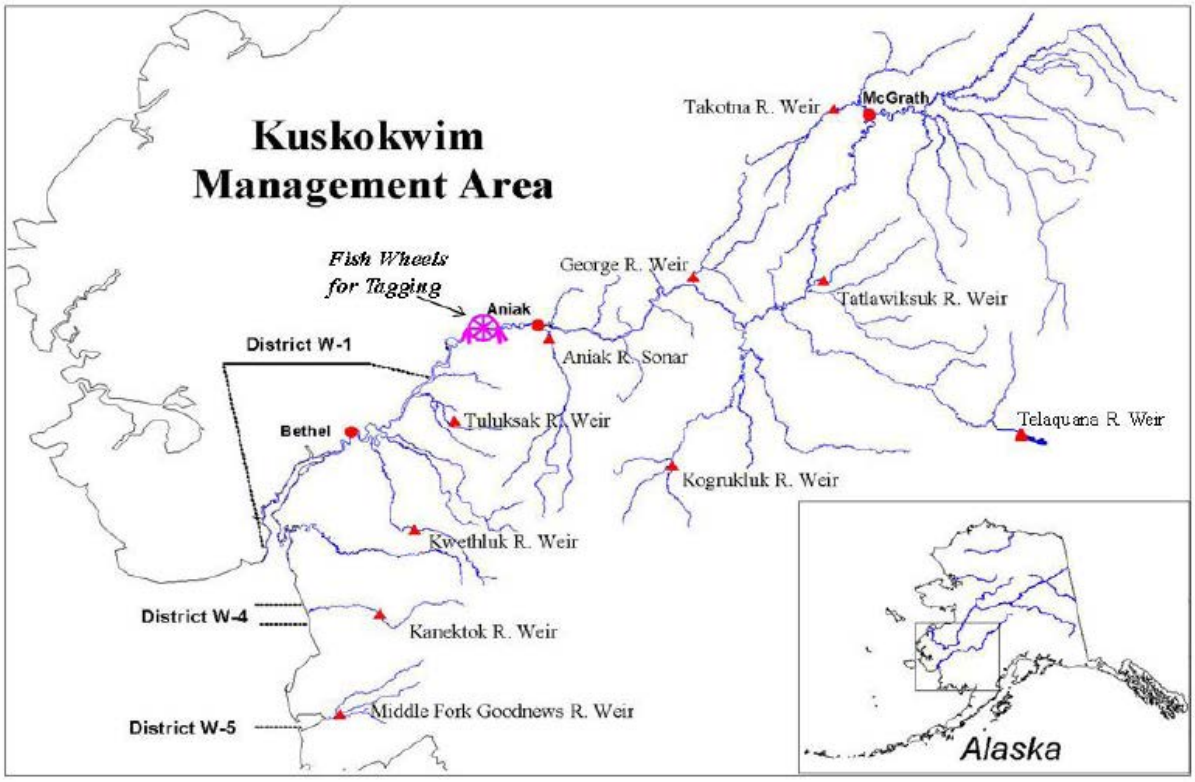

Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
District W-5
Middle Fork Goodnews R. Weir
Alaska

Appendix B4.–Agenda and Information Packet, July 1, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Agenda

Date: **July 1, 2011** Time: **10:00 am** Place: **Bethel**

Time Called to Order Chair Time Adjourned

**ROLL CALL TO ESTABLISH QUORUM:** **QUORUM MET? Yes / No**

**Upriver Elder:** **Processor:**
**Downriver Elder:** **Member at Large:**
**Commercial Fisher:** **Sport Fisher:**
**Lower River Subsistence:** **Western Interior RAC:**
**Middle River Subsistence:** **Y-K Delta RAC:**
**Upper River Subsistence:** **ADF&G:**
**Headwaters Subsistence:**

**INTRODUCTIONS:**
**INVOCATION:**
**APPROVAL OF AGENDA:**
**PEOPLE TO BE HEARD:**

1.) USFWS will give a 15-minute presentation regarding their recent Special Action.

**CONTINUING BUSINESS:**

1. Subsistence Reports:
   a. Lower River:
   b. ONC Inseason Subsistence:
   c. Middle River:
   d. KNA Inseason Subsistence:
   e. Upper River:
   f. Headwaters:
2. Overview of Kuskokwim River salmon run assessment projects:
   a. Bethel Test Fish
   b. Weirs/Sonar/Mark-Recapture/Aerial Surveys/Other:
3. Commercial Catch Report:
4. Processor Report:
5. Sport Fish Report:
6. Weather Forecast:
7. Recommendation:
8. Motion for Discussion and Action:

**OLD BUSINESS:**

1.) ADF&G will provide age composition data of Kuskokwim Chinook salmon runs from 2006-2010.
2.) ADF&G will provide updated information regarding Chinook bycatch in groundfish fisheries and Chinook salmon intercepted in Area M.

**NEW BUSINESS:**

1.) Nick Souza would like Tony Joaquin to be his alternate for Processor.

**COMMENTS FROM WORKING GROUP MEMBERS:**

**NEXT MEETING DATE:**_____ Time: _____ Place: _____

-continued-

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Information Packet

**July 1, 2011**

### KNA Weekly Subsistence Fishing Reports, June 25 to June 30, 2011

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Kalskag** | **FAMILY** | Yes | Drift Net | NR | | | |
| Comments: Interviewed on Tuesday 6-28-11<br><br>Since last contacted caught 15 kings, 10 Sockeyes, and 35 Chum. Fishing numbers and fish size have been increasing. They would still like to see more fish up this way. | | | | | **Sockeye** | NR | 10 (week total) |
| | | | | | **Chinook** | NR | 15 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 35 (week total) |
| **Aniak** | **FAMILY** | Yes | Drift Net | 7" | | | |
| Comments: Interviewed on Tuesday 6-28-11<br><br>Fishing for 3-4 days have been using the 7" mesh. Since last contacted caught 8 Kings, 11 Chums, and 4 Sockeye. Said the King size is picking up, getting bigger. They are getting the fish they need. | | | | | **Sockeye** | NR | 4 (week total) |
| | | | | | **Chinook** | NR | 8 (week total) |
| | | | | | **Coho** | NR | 11 (week total) |
| | | | | | **Chum** | NR | |
| **Aniak** | **FAMILY** | No | Drift Net | 7" | | | |
| Comments: Interviewed on Tuesday 6-28-11<br><br>Said they are done fishing as of Sunday. Have not caught any fish since last contacted. | | | | | **Sockeye** | NR | |
| | | | | | **Chinook** | NR | |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | |
| **Aniak** | **FAMILY** | Yes | Drift/Set | NR | | | |
| Comments: Interviewed on Wednesday 6-29-11<br><br>Since last contacted have not fished. No comments | | | | | **Sockeye** | NR | |
| | | | | | **Chinook** | NR | |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | |
| **Chuathbaluk** | **FAMILY** | Yes | Drift Net | 6" | | | |
| Comments: Interviewed on Tuesday 6-28-11<br><br>Since last contacted caught 55 kings, 80 chum, and 30 sockeye. Said fishing has been picking up, the closure down river helped upriver a lot. Mostly catching fish with a chum net. Said they would be done fishing for the year on Friday. | | | | | **Sockeye** | NR | 30 (week total) |
| | | | | | **Chinook** | NR | 55 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 80 (week total) |

-continued-

**KNA Weekly Subsistence Fishing Reports, June 18 to June 22, 2011**
*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Chuathbaluk** | **FAMILY** | Yes | Drift Net | NR | | | |
| Comments:<br>Interviewed on Wednesday 6-29-11<br><br>Since last contacted, caught a total amount of 9 kings, 15 chum, and 16 sockeye. Fishing has been pretty good, the numbers are starting to pick up. | | | | | **Sockeye** | NR | 16 (week total) |
| | | | | | **Chinook** | NR | 9 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 15 (week total) |
| **Chuathbaluk** | **FAMILY** | Yes | Drift Net | NR | | | |
| Comments:<br>Interviewed on Wednesday 6-29-11<br><br>Said fishing it getting better up this way, the run is starting to hit. Since last contacted have not fished. | | | | | **Sockeye** | NR | |
| | | | | | **Chinook** | NR | |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | |
| **Crooked Creek** | **FAMILY** | Yes | Drift Net | 7" | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>Since last contacted they made 3 drifts and caught a total amount of 8 chum and 5 sockeye. Said can't really tell if the numbers picked up, it's about the same. Wish there were more kings. | | | | | **Sockeye** | NR | 5 (week total) |
| | | | | | **Chinook** | NR | |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 8 (week total) |
| **Crooked Creek** | **FAMILY** | Yes | Drift Net | 5 ¾" | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>25th: caught 4 kings, 6 chum, and 2 sockeye.<br>26th: caught 6 kings, 15 chum, and 4 sockeye.<br>Said the king fishing is picking up. For sockeyes not sure (maybe, barely picking up). | | | | | **Sockeye** | NR | 6 (week total) |
| | | | | | **Chinook** | NR | 10 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 21 (week total) |
| **Sleetmute** | **FAMILY** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>Since last contacted they have caught 56 kings, 21 sockeye, 19 chum, 4 sheefish, 4 pike, and 1 broad whitefish.<br>Said it's not that they're not catching a lot, but the salmon size is small. Compared to last week the size is increasing. The sockeye run is good, its spectacular, and the quality is good. | | | | | **Sockeye** | NR | 21 (week total) |
| | | | | | **Chinook** | NR | 56 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 19 (week total) |

-continued-

**KNA Weekly Subsistence Fishing Reports, June 18 to June 22, 2011**
*NR = No Response

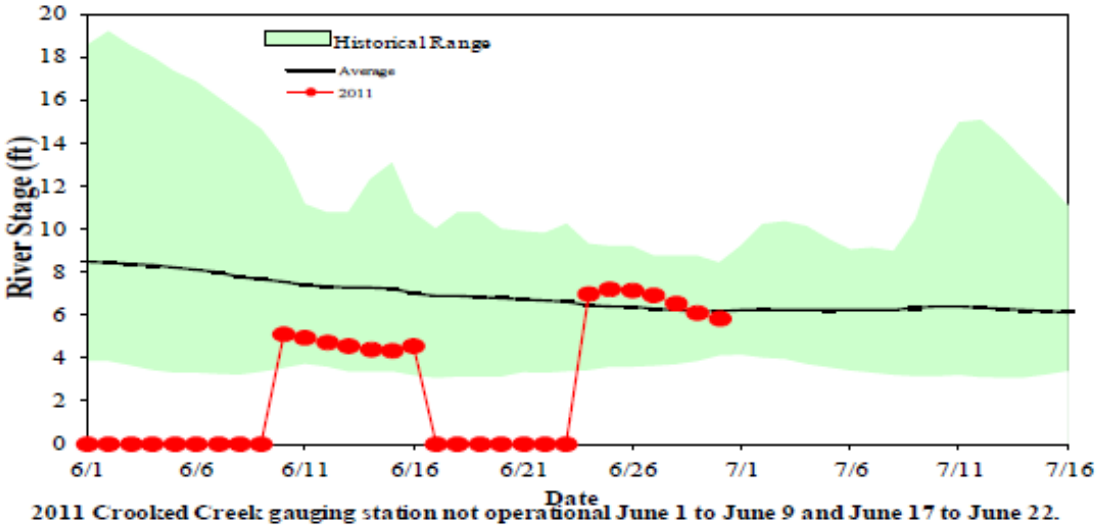
| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Stony River** | **FAMILY** | Yes | Fish Wheel | NR | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>They have only caught 1 small female king and 1 small female sockeye since last contacted on Thursday 6-23-11.<br>Other people they talked to about fishing have said they are not catching much either. | | | | | **Sockeye** | NR | 1 (week total) |
| | | | | | **Chinook** | NR | 1 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | |

**KNA Comments:**
The following participant families have not been able to contact:
Kalskag (2 families), McGrath (1 family)

-continued-

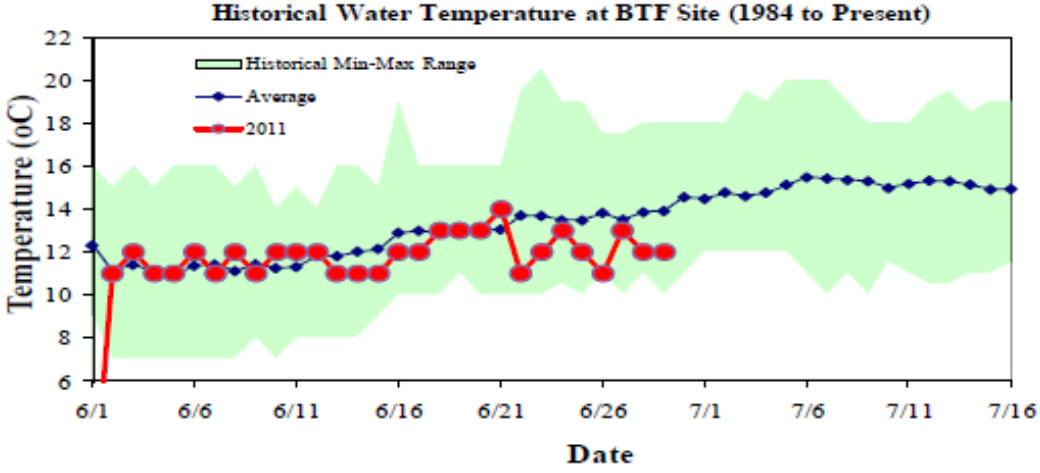
## OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS

Historical Kuskokwim River Water Level at Crooked Creek (1984 to Present)

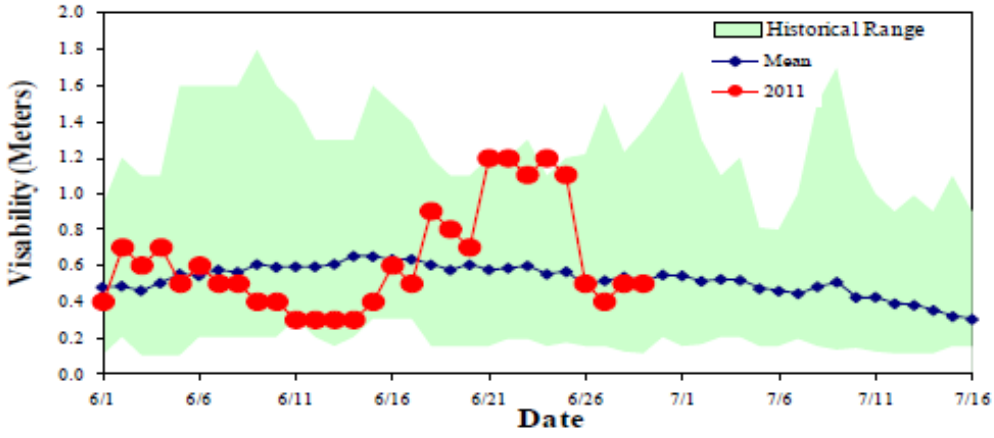



2011 Crooked Creek gauging station not operational June 1 to June 9 and June 17 to June 22.

Historical Water Temperature at BTF Site (1984 to Present)




Historical Kuskokwim River Water Clarity at BTF (1984 to Present)

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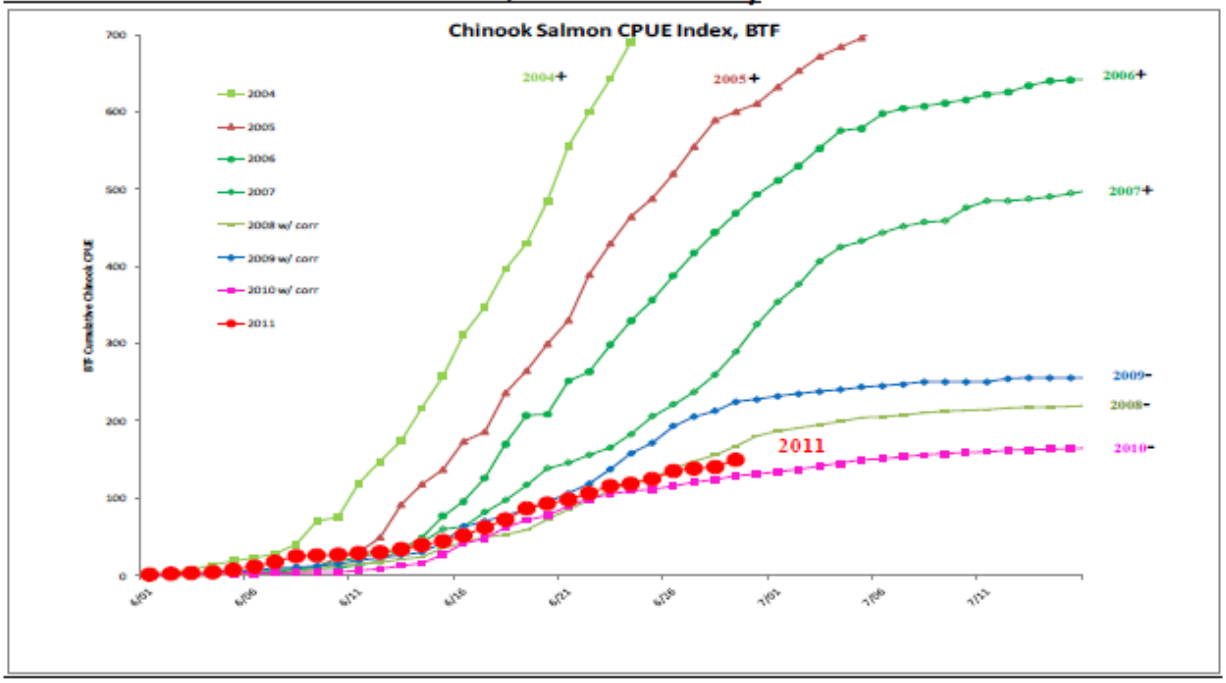
## Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery




**Chinook Salmon Cumulative CPUE Index, BTF**

| Date | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|
| 6/01 | 3 | | 0 | 0 | 0 | 0 | 0 | 1 |
| 6/02 | 5 | | 0 | 0 | 1 | 0 | 1 | 2 |
| 6/03 | 7 | 0 | 0 | 0 | 1 | 1 | 1 | 3 |
| 6/04 | 13 | 0 | 0 | 1 | 1 | 2 | 2 | 4 |
| 6/05 | 19 | 1 | 3 | 3 | 1 | 4 | 2 | 7 |
| 6/06 | 23 | 1 | 6 | 3 | 2 | 6 | 3 | 11 |
| 6/07 | 27 | 6 | 6 | 4 | 2 | 9 | 3 | 18 |
| 6/08 | 40 | 7 | 8 | 7 | 4 | 11 | 3 | 25 |
| 6/09 | 70 | 11 | 9 | 11 | 7 | 12 | 4 | 26 |
| 6/10 | 75 | 23 | 9 | 19 | 13 | 15 | 4 | 27 |
| 6/11 | 118 | 30 | 14 | 23 | 15 | 19 | 6 | 29 |
| 6/12 | 147 | 49 | 18 | 30 | 17 | 23 | 8 | 30 |
| 6/13 | 174 | 91 | 33 | 33 | 21 | 26 | 12 | 34 |
| 6/14 | 217 | 118 | 48 | 42 | 23 | 30 | 15 | 39 |
| 6/15 | 258 | 137 | 77 | 60 | 35 | 42 | 27 | 44 |
| 6/16 | 311 | 173 | 96 | 62 | 42 | 63 | 41 | 51 |
| 6/17 | 347 | 186 | 126 | 82 | 50 | 70 | 48 | 62 |
| 6/18 | 396 | 236 | 170 | 97 | 52 | 77 | 62 | 72 |
| 6/19 | 430 | 265 | 207 | 117 | 59 | 86 | 71 | 86 |
| 6/20 | 484 | 299 | 208 | 138 | 72 | 95 | 77 | 93 |
| 6/21 | 556 | 330 | 252 | 146 | 85 | 106 | 90 | 98 |
| 6/22 | 600 | 389 | 263 | 156 | 97 | 118 | 99 | 106 |
| 6/23 | 643 | 430 | 298 | 165 | 110 | 137 | 105 | 115 |
| 6/24 | 691 | 464 | 329 | 182 | 119 | 158 | 109 | 118 |
| 6/25 | 738 | 488 | 356 | 206 | 126 | 171 | 111 | 125 |
| 6/26 | 785 | 520 | 388 | 221 | 139 | 193 | 116 | 135 |
| 6/27 | 801 | 555 | 417 | 237 | 148 | 205 | 121 | 138 |
| 6/28 | 848 | 589 | 444 | 259 | 156 | 213 | 124 | 140 |
| 6/29 | 893 | 600 | 469 | 289 | 167 | 224 | 129 | 150 |
| 6/30 | 928 | 611 | 493 | 325 | 181 | 227 | 131 | |
| 7/01 | 951 | 632 | 511 | 354 | 187 | 232 | 134 | |
| 7/02 | 967 | 653 | 530 | 377 | 191 | 235 | 137 | |
| 7/03 | 979 | 672 | 553 | 406 | 195 | 238 | 141 | |
| 7/04 | 985 | 684 | 576 | 425 | 199 | 241 | 145 | |

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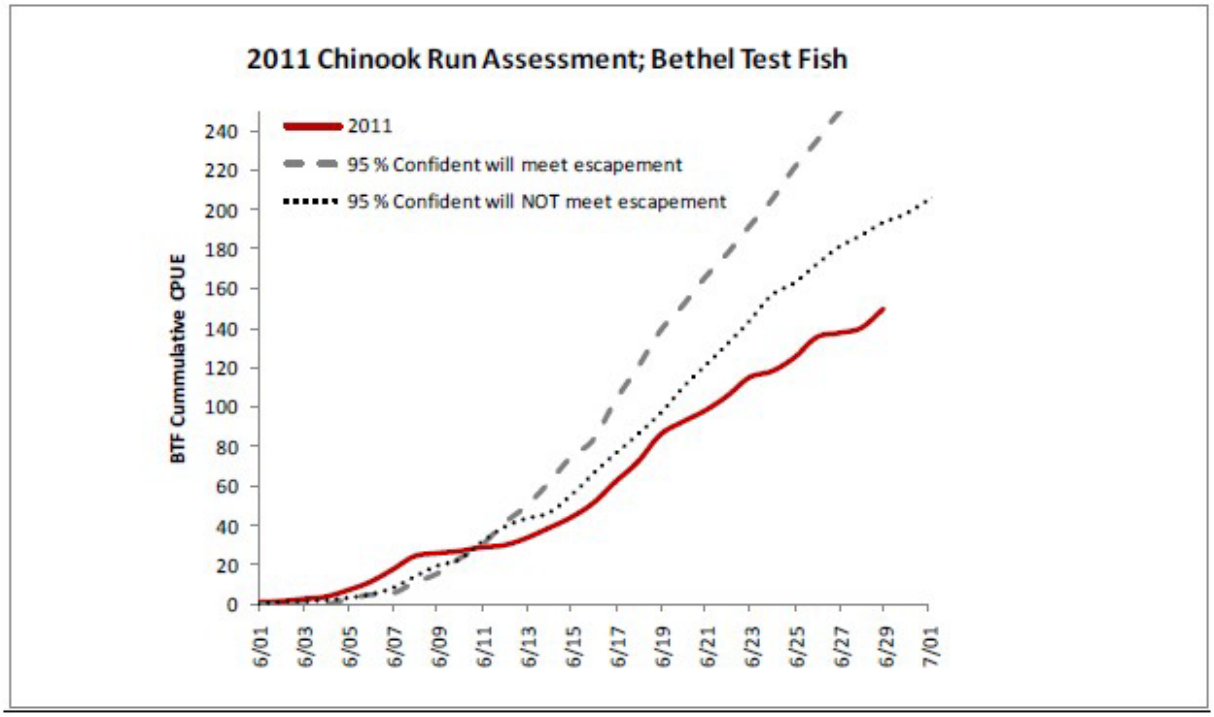
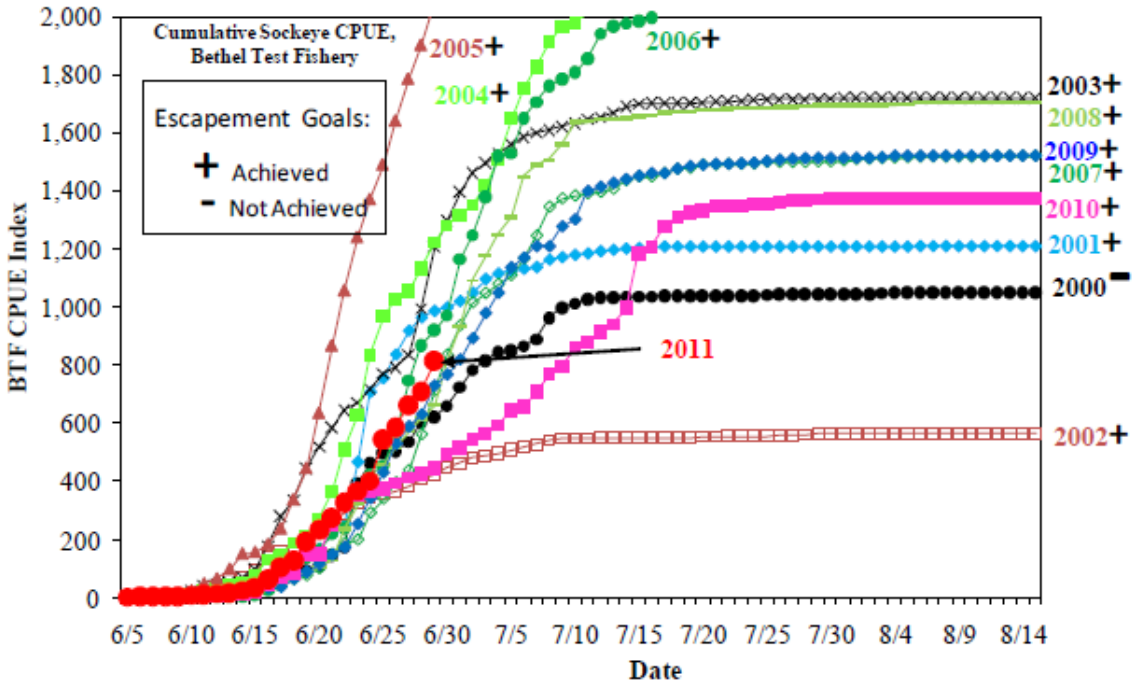



- If BTF tracks *below* the *dotted* line, we are 95% confident that escapement needs will NOT be met.
- If BTF tracks *above* the *dashed* line, we are 95% confident that escapement needs will be met.

-continued-

**Sockeye Salmon Cumulative CPUE Index, Bethel Test Fishery**

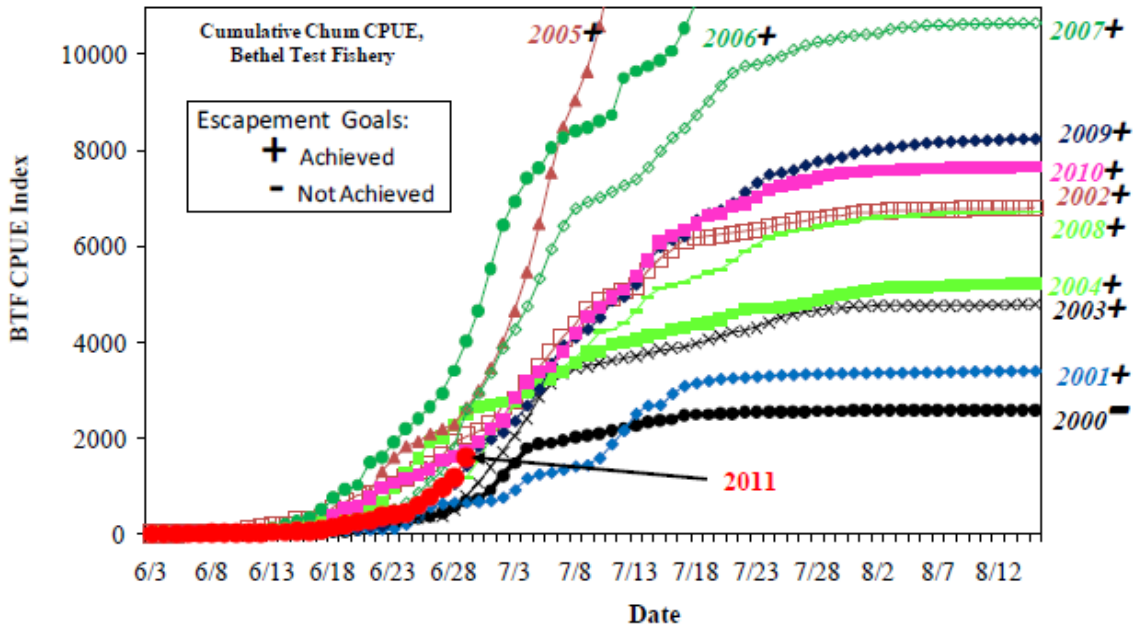



Sockeye Salmon Cumulative CPUE Index

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/10 | 6 | 11 | 8 | 24 | 11 | 22 | 0 | 0 | 0 | 4 | 0 | 7 |
| 6/11 | 20 | 11 | 18 | 38 | 22 | 46 | 0 | 0 | 0 | 7 | 0 | 10 |
| 6/12 | 31 | 17 | 35 | 46 | 27 | 63 | 3 | 3 | 0 | 10 | 3 | 13 |
| 6/13 | 37 | 23 | 61 | 54 | 38 | 96 | 3 | 17 | 3 | 13 | 6 | 15 |
| 6/14 | 45 | 23 | 67 | 67 | 49 | 149 | 3 | 23 | 6 | 13 | 6 | 24 |
| 6/15 | 48 | 26 | 92 | 97 | 77 | 154 | 11 | 31 | 34 | 16 | 21 | 33 |
| 6/16 | 51 | 38 | 138 | 176 | 130 | 181 | 24 | 36 | 45 | 31 | 46 | 62 |
| 6/17 | 57 | 100 | 158 | 279 | 145 | 236 | 42 | 50 | 48 | 34 | 65 | 102 |
| 6/18 | 71 | 123 | 174 | 335 | 189 | 336 | 81 | 60 | 62 | 61 | 84 | 126 |
| 6/19 | 91 | 152 | 196 | 446 | 212 | 444 | 136 | 74 | 87 | 86 | 142 | 191 |
| 6/20 | 108 | 166 | 240 | 518 | 270 | 634 | 160 | 98 | 102 | 113 | 149 | 231 |
| 6/21 | 146 | 219 | 272 | 585 | 364 | 866 | 219 | 147 | 128 | 146 | 251 | 274 |
| 6/22 | 172 | 249 | 290 | 646 | 509 | 1,056 | 239 | 186 | 237 | 171 | 323 | 326 |
| 6/23 | 395 | 465 | 325 | 670 | 628 | 1,239 | 350 | 197 | 320 | 251 | 347 | 365 |
| 6/24 | 461 | 706 | 346 | 718 | 833 | 1,370 | 422 | 290 | 381 | 340 | 366 | 400 |
| 6/25 | 499 | 754 | 353 | 771 | 966 | 1,489 | 454 | 338 | 455 | 429 | 375 | 543 |
| 6/26 | 505 | 836 | 368 | 793 | 1,027 | 1,640 | 556 | 393 | 518 | 528 | 394 | 586 |
| 6/27 | 536 | 918 | 385 | 836 | 1,055 | 1,785 | 748 | 436 | 572 | 588 | 411 | 664 |
| 6/28 | 605 | 963 | 407 | 994 | 1,133 | 1,901 | 869 | 560 | 619 | 629 | 428 | 709 |
| 6/29 | 622 | 986 | 424 | 1,207 | 1,222 | 2,052 | 920 | 710 | 660 | 729 | 446 | 813 |
| 6/30 | 660 | 998 | 446 | 1,296 | 1,283 | 2,204 | 971 | 833 | 813 | 766 | 491 | |
| 7/01 | 724 | 1,020 | 464 | 1,395 | 1,315 | 2,298 | 1,164 | 934 | 933 | 818 | 515 | |
| 7/02 | 782 | 1,048 | 482 | 1,462 | 1,352 | 2,365 | 1,247 | 1,014 | 1,092 | 892 | 545 | |
| 7/03 | 817 | 1,096 | 486 | 1,495 | 1,418 | 2,440 | 1,379 | 1,046 | 1,178 | 979 | 561 | |
| 7/04 | 845 | 1,115 | 496 | 1,528 | 1,507 | 2,512 | 1,520 | 1,077 | 1,251 | 1,048 | 594 | |

-continued-

**Chum Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Chum Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/10 | 18 | 3 | 50 | 6 | 22 | 0 | 15 | 8 | 9 | 9 | 9 | 17 |
| 6/11 | 18 | 3 | 103 | 8 | 25 | 13 | 35 | 11 | 12 | 9 | 9 | 22 |
| 6/12 | 18 | 3 | 146 | 11 | 34 | 25 | 41 | 11 | 18 | 12 | 15 | 22 |
| 6/13 | 18 | 9 | 180 | 17 | 71 | 38 | 133 | 23 | 18 | 14 | 26 | 31 |
| 6/14 | 18 | 9 | 202 | 30 | 110 | 49 | 210 | 34 | 20 | 20 | 31 | 39 |
| 6/15 | 18 | 9 | 285 | 49 | 144 | 87 | 266 | 57 | 41 | 42 | 50 | 60 |
| 6/16 | 18 | 11 | 299 | 77 | 179 | 95 | 350 | 74 | 66 | 69 | 86 | 63 |
| 6/17 | 20 | 17 | 338 | 103 | 229 | 131 | 499 | 94 | 80 | 75 | 133 | 85 |
| 6/18 | 29 | 53 | 552 | 108 | 310 | 188 | 747 | 110 | 94 | 91 | 386 | 135 |
| 6/19 | 43 | 67 | 665 | 148 | 371 | 252 | 927 | 138 | 106 | 99 | 542 | 199 |
| 6/20 | 86 | 73 | 801 | 198 | 450 | 537 | 1012 | 258 | 161 | 105 | 588 | 241 |
| 6/21 | 124 | 73 | 836 | 226 | 547 | 844 | 1482 | 343 | 190 | 135 | 764 | 276 |
| 6/22 | 155 | 78 | 903 | 235 | 659 | 1288 | 1595 | 407 | 264 | 149 | 954 | 371 |
| 6/23 | 224 | 98 | 1047 | 270 | 959 | 1587 | 1916 | 506 | 337 | 301 | 1049 | 414 |
| 6/24 | 250 | 183 | 1181 | 291 | 1260 | 1817 | 2188 | 632 | 437 | 397 | 1163 | 433 |
| 6/25 | 324 | 346 | 1329 | 312 | 1583 | 1918 | 2412 | 840 | 598 | 532 | 1224 | 597 |
| 6/26 | 363 | 557 | 1466 | 349 | 1926 | 2077 | 2646 | 1075 | 753 | 783 | 1340 | 769 |
| 6/27 | 435 | 619 | 1622 | 375 | 2014 | 2183 | 2941 | 1308 | 921 | 904 | 1524 | 963 |
| 6/28 | 574 | 637 | 1897 | 496 | 2271 | 2273 | 3402 | 1783 | 1099 | 1028 | 1613 | 1165 |
| 6/29 | 676 | 651 | 2048 | 791 | 2514 | 2631 | 4031 | 2589 | 1176 | 1407 | 1738 | 1607 |
| 6/30 | 727 | 654 | 2136 | 1059 | 2653 | 2989 | 4660 | 2917 | 1550 | 1800 | 1931 | |
| 7/01 | 908 | 676 | 2299 | 1387 | 2690 | 3455 | 5530 | 3341 | 2010 | 1959 | 2196 | |
| 7/02 | 1222 | 744 | 2660 | 1711 | 2736 | 3982 | 6437 | 3861 | 2377 | 2104 | 2378 | |
| 7/03 | 1475 | 900 | 2768 | 2031 | 2819 | 4650 | 6937 | 4252 | 2680 | 2339 | 2838 | |
| 7/04 | 1794 | 1148 | 3147 | 2413 | 2965 | 5464 | 7424 | 4736 | 2953 | 2663 | 3172 | |

-continued-

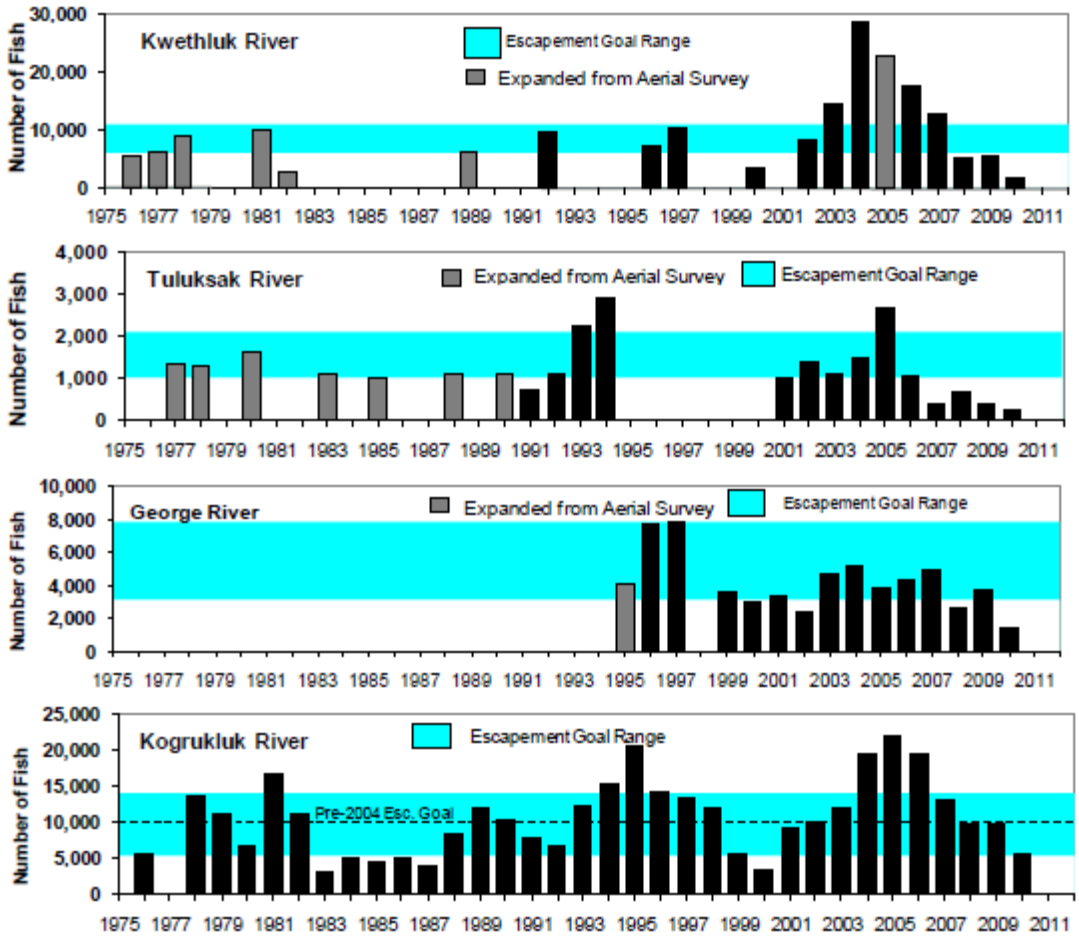
## ESCAPEMENT MONITORING

### Status of Salmon Assessment Projects as of June 30,2011

- Tuluksak Weir – Operation on June 25
- Kwethluk Weir – Began installation on June 30
- Aniak Sonar – Operational since June 26 (Only one bank counts for June 26 & 27)
- George Weir – Operational since June 16
- Tatlawiksuk Weir – Operational since June 15
- Kogrukluk Weir – Operational since June 21
- Takotna Weir – Operational since June 29
- Telaquana Weir – Operation since June 29

### CHINOOK SALMON -Weir Escapement Goal Ranges

| | |
|---|---|
| Kwethluk River | 6,000 – 11,000 |
| Tuluksak River | 1,000 – 2,100 |
| George River | 3,100 – 7,900 |
| Kogrukluk River | 5,300 – 14,000 |

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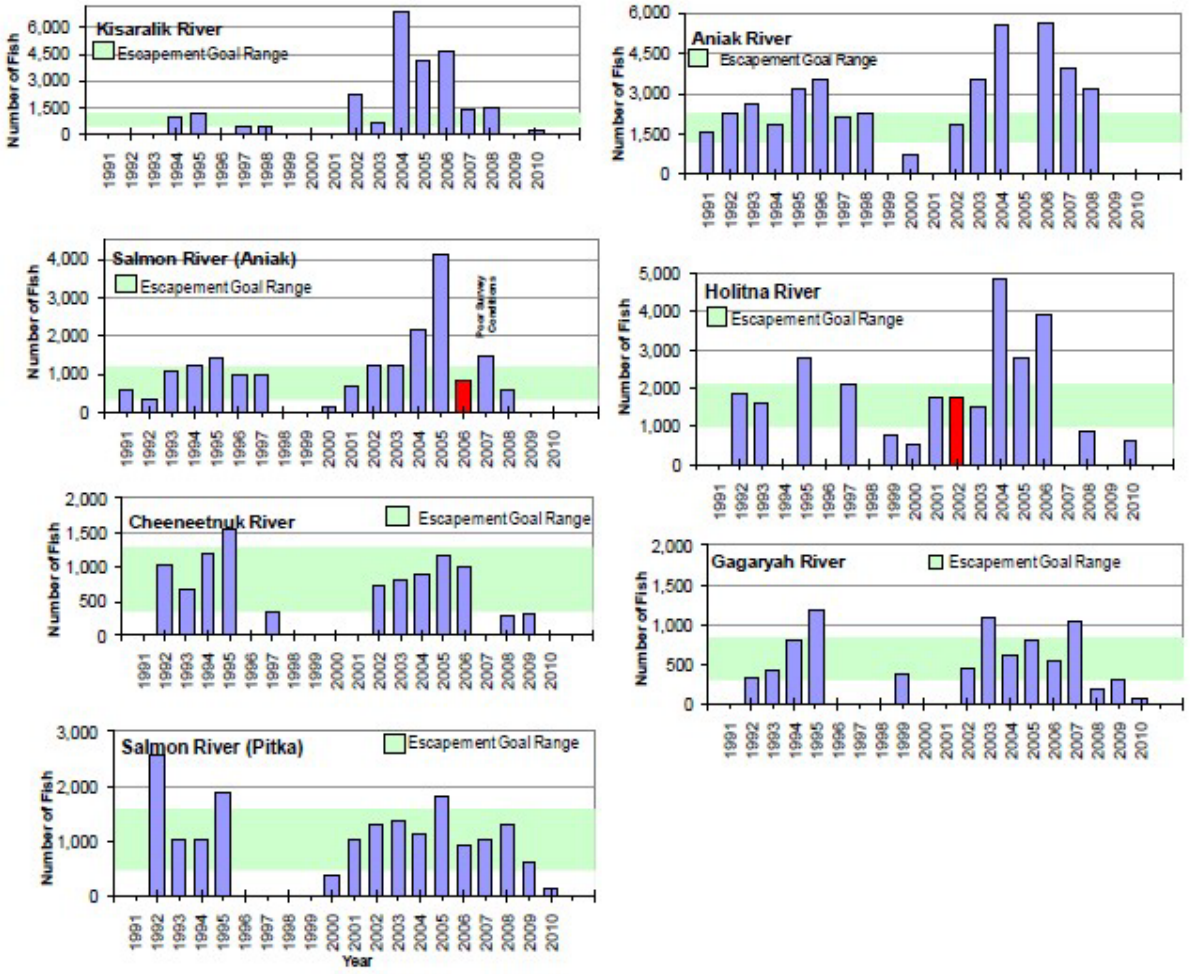
## ESCAPEMENT MONITORING *(Continued)*

### CHINOOK SALMON – Aerial Survey Escapement Goal Ranges

| | |
|---|---|
| Kisaralik River | 400 – 1,200 |
| Aniak River | 1,200 – 2,300 |
| Salmon River (Aniak R) | 330 – 1,200 |
| Holitna River | 970 – 2,100 |
| Cheeneetnuk R (Stony R) | 340 – 1,300 |
| Gagaryah River (Stony R) | 300 – 830 |
| Salmon River (Pitka Fork | 470 – 1,600 |




-continued-

## ESCAPEMENT MONITORING *(Continued)*

### CHINOOK SALMON – Weir Counts

**Tuluksak River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal: 1,000 to 2,100**

| Date | Cumulative Daily Passage | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1991 | 1992 | 1993 | 1994 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| TUL Total | 697 | 1,083 | 2,218 | 2,917 | 997 | 1,346 | 1,064 | 1,475 | 2,653 | 1,044 | 374 | 665 | 404 | 239 | |
| KOG. Esc. | 7,850 | 6,755 | 12,332 | 15,227 | 9,298 | 10,104 | 11,771 | 19,651 | 22,000 | 19,414 | 13,029 | 9,730 | 9,702 | 5,690 | |
| 6/26 | 7 | 1 | 2 | | | 3 | 8 | 1 | 5 | 3 b | 0 | 0 | 0 | 0 | 0 |
| 6/27 | 10 | 1 | 4 | | | 7 | 8 | 6 | 19 | 4 b | 0 | 0 | 0 | 0 | 0 |
| 6/28 | 14 | 3 | 5 | | | 16 | 8 | 80 | 26 | 14 b | 0 | 0 | 0 | 0 | 0 |
| 6/29 | 15 | 7 | 5 | 0 | 1 b | 149 | 8 | 114 | 66 | 33 b | 0 | 0 | 0 | 0 | 0 |
| 6/30 | 21 | 17 | 19 | 5 | 7 b | 175 | 8 | 180 | 91 | 46 b | 2 | 0 | 1 | 0 | |
| 7/01 | 29 | 32 | 59 | 9 | 18 b | 192 | 10 | 255 | 94 | 55 | 5 | 1 | 1 | 0 | |
| 7/02 | 35 | 44 | 94 | 14 | 27 b | 198 | 33 | 259 | 118 | 66 | 18 | 2 | 2 | 0 | |

**George River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal: 3,100 to 7,900**

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| GEO Total | 3,548 | 2,960 | 3,309 | 2,444 | 4,693 | 5,207 | 3,845 | 4,357 | 4,883 | 2,698 | 3,663 | 1,500 | |
| 6/26 | 33 b | 29 | 46 | 141 | 499 b | 99 b | 363 | 26 | 3 | 9 | 16 | 10 | 19 |
| 6/27 | 43 b | 149 | 62 | 165 | 636 b | 409 | 506 | 31 | 13 | 11 | 19 | 10 | 19 |
| 6/28 | 76 b | 149 | 162 | 208 | 881 b | 639 | 620 | 72 | 13 | 15 e | 20 | 10 | 22 |
| 6/29 | 88 b | 157 | 467 | 232 | 1,152 b | 944 | 1,012 | 90 | 49 | 22 b | 23 | 17 | 22 |
| 6/30 | 93 b | 165 | 482 | 652 | 1,438 b | 1,164 | 1,214 | 281 | 110 | 32 b | 54 | 25 | |
| 7/01 | 131 b | 228 | 525 | 1,018 | 1,792 e | 1,264 | 1,322 | 669 | 123 | 44 b | 194 | 42 | |
| 7/02 | 142 b | 644 | 688 | 1,041 | 2,305 e | 1,289 | 1,444 | 733 | 204 | 58 b | 216 | 78 | |

**Tatlawiksuk River weir historical cumulative daily Chinook salmon escapement.**

= years of generally low Chinook salmon escapements in the Kuskokwim River. **Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| TAT Total | 1,490 | 810 | 2,010 | 2,237 | 1,683 | 2,833 | 2,920 | 1,700 | 2,061 | 1,071 | 1,071 | 567 | |
| 6/26 | 14 | 35 | 83 | 100 | 43 | 348 | 57 | 4 | 10 | 2 | 5 | 2 | 3 |
| 6/27 | 18 | 37 | 101 | 617 | 46 | 369 | 67 | 26 | 13 | 2 | 9 | 3 | 4 |
| 6/28 | 32 | 42 | 139 | 638 | 198 | 453 | 72 | 29 | 36 | 2 | 11 | 4 | 5 |
| 6/29 | 37 | 44 | 154 | 833 | 495 | 528 | 77 | 33 | 37 | 3 b | 17 | 19 | 5 |
| 6/30 | 39 | 66 | 259 | 858 | 552 | 571 | 269 | 75 | 37 | 5 b | 20 | 19 | |
| 7/01 | 55 | 92 | 623 | 873 | 593 | 886 | 293 | 98 | 129 | 8 b | 22 | 20 | |
| 7/02 | 60 | 241 | 647 | 957 | 601 | 1,017 | 367 | 119 | 151 | 12 b | 36 | 23 | |

**Kogrukluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal: 5,300 to 14,000**

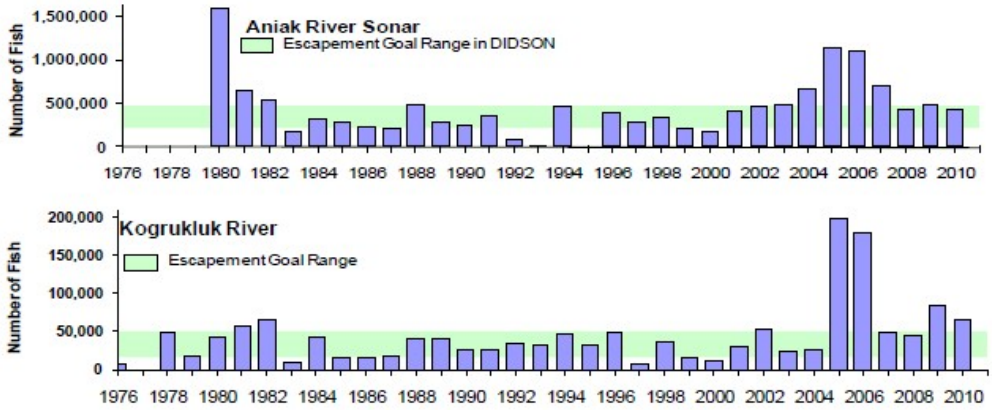
| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| KOG. Esc. | 5570 | 3,310 | 9,298 | 10,104 | 11,771 | 19,651 | 22,000 | 19,414 | 13,029 | 9,730 | 9,702 | 5,690 | |
| 6/26 | | | 64 b | 15 | 13 | 107 | 118 | | 0 d | | 0 | | 0 |
| 6/27 | | | 108 b | 158 | 37 | 215 | 154 | | 1 | | 0 | 1 | 0 |
| 6/28 | | | 137 b | 261 | 77 | 302 | 210 | 0 d | 2 | | 5 | 3 | 0 |
| 6/29 | | | 261 b | 540 | 127 | 730 | 291 | 6 | 2 | | 9 | 3 | 13 |
| 6/30 | | | 315 b | 629 | 201 | 1,011 | 362 | 31 | 3 | | 15 | 3 | |
| 7/01 | 6 b | | 454 b | 816 | 218 | 1,308 | 741 | 111 | 17 | | 28 | 3 | |
| 7/02 | 8 b | 1 | 709 b | 1,126 | 490 | 1,658 | 1,284 | 344 | 27 | | 57 | 4 | |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Escapement Goal Ranges

| | | |
|---|---|---|
| Aniak River | 220,000 – 480,000 | Sonar/Index |
| Kogrukluk River | 15,000 – 49,000 | Weir |







### CHUM SALMON – Weir Counts

**Aniak River sonar historical cumulative daily chum salmon escapement index.**

= years below escapement goal. **Esc Goal: 220,000 to 480,000**

| Date | Cumulative Daily Count | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| ANI Tota | 214,429 | 177,384 | 408,830 | 472,346 | 477,544 | 673,445 | 1,173,155 | 1,108,626 | 699,178 | 427,911 | 479,531 | 429,643 | |
| 6/26 | 1,831 | 2,002 | 3,436 | 6,545 | 3,971 | 3,774 | 4,338 | 9,562 | 1,396 | 201 | 78 | 1,830 | 158 * |
| 6/27 | 5,172 | 3,985 | 9,741 | 13,467 | 11,273 | 15,882 | 9,846 | 36,599 | 3,472 | 483 | 629 | 5,526 | 702 * |
| 6/28 | 7,148 | 5,206 | 13,452 | 21,621 | 14,762 | 32,837 | 16,471 | 43,345 | 5,414 | 829 | 1,677 | 7,382 | 1,170 |
| 6/29 | 10,548 | 6,024 | 19,870 | 30,161 | 18,187 | 50,061 | 26,123 | 56,817 | 7,501 | 1,011 | 3,225 | 9,388 | 1,745 |
| 6/30 | 10,973 | 6,600 | 24,476 | 41,661 | 20,435 | 63,358 | 38,230 | 68,755 | 10,549 | 1,691 | 6,519 | 12,876 | |
| 7/01 | 12,546 | 8,365 | 29,785 | 54,856 | 24,221 | 77,500 | 43,235 | 95,595 | 17,048 | 2,338 | 10,341 | 20,520 | |
| 7/02 | 14,886 | 10,574 | 33,905 | 74,389 | 28,601 | 83,482 | 56,690 | 128,353 | 23,856 | 3,771 | 14,579 | 27,531 | |

**Kogrukluk River weir historical cumulative daily chum salmon escapement.**

= years below escapement goal. **Esc Goal: 15,000 to 49,000**

| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| KOG. Esc. | 13,820 | 11,491 | 30,570 | 51,570 | 23,413 | 24,201 | 197,723 | 180,594 | 49,505 | 44,978 | 84,940 | 63,583 | |
| 6/26 | | | c | 247 | 25 | 289 | 35 | | 0 d | | 10 | | 10 |
| 6/27 | | | c | 877 | 59 | 438 | 60 | | 22 | | 25 | 1 | 25 |
| 6/28 | | | 6 b | 1,351 | 107 | 552 | 105 | 336 d | 37 | | 58 | 2 | 48 |
| 6/29 | | | 31 b | 2,324 | 135 | 1,012 | 210 | 1,293 | 72 | | 118 | 12 | 77 |
| 6/30 | | | 40 b | 3,405 | 216 | 1,560 | 370 | 2,644 | 116 | | 158 | 27 | |
| 7/01 | 3 b | | 77 b | 4,450 | 283 | 2,076 | 768 | 4,686 | 220 | | 223 | 50 | |
| 7/02 | 18 b | 27 | 163 b | 5,383 | 555 | 2,507 | 1,084 | 7,189 | 395 | | 309 | 64 | |

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## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Weir Counts

**Tuluksak River weir historical cumulative daily chum salmon escapement.**

= years of generally low chum salmon escapements in the Kuskokwim River. **Esc Goal: none**

| Date | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| TUL Total | 19,321 | 9,958 | 11,724 | 11,796 | 35,696 | 25,648 | 17,286 | 12,518 | 13,671 | 13,424 | |
| 6/26 | | 65 | 4 | 167 | 0 | 125 b | 1 | | 3 | 0 | 0 |
| 6/27 | | 87 | 4 | 290 | 38 | 271 b | 1 | | 3 | 0 | 2 |
| 6/28 | | 278 | 5 | 612 | 81 | 474 b | 1 | | 3 | 0 | 2 |
| 6/29 | 59 b | 451 | 9 | 772 | 163 | 596 b | 1 | 7 | 3 | 0 | 4 |
| 6/30 | 159 b | 505 | 9 | 1,568 | 299 | 1,017 b | 2 | 13 | 7 | 1 | |
| 7/01 | 316 b | 735 | 44 | 1,706 | 332 | 1,356 | 91 | 24 | 9 | 27 | |
| 7/02 | 450 b | 837 | 124 | 1,707 | 460 | 1,570 | 146 | 49 | 18 | 30 | |

**George River weir historical cumulative daily chum salmon escapement.**

= years of generally low chum salmon escapements in the Kuskokwim River. **Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| GEO Total | 11,552 | 3,492 | 11,601 | 6,543 | 33,666 | 14,409 | 14,828 | 41,467 | 55,842 | 29,978 | 7,941 | 26,154 | |
| 6/26 | 50 b | 84 | 285 | 573 | 195 b | 1,353 b | 192 | 1,123 | 68 | 130 | 59 | 206 | 301 |
| 6/27 | 79 b | 174 | 302 | 691 | 256 b | 2,236 | 257 | 1,390 | 244 | 266 | 60 | 237 | 365 |
| 6/28 | 157 b | 174 | 341 | 928 | 353 b | 2,838 | 318 | 2,014 | 313 | 400 e | 68 | 274 | 421 |
| 6/29 | 235 b | 178 | 481 | 1,077 | 435 b | 3,405 | 588 | 2,371 | 475 | 587 b | 88 | 554 | 466 |
| 6/30 | 302 b | 190 | 488 | 1,280 | 460 b | 3,765 | 816 | 2,946 | 833 | 828 b | 115 | 1,116 | |
| 7/01 | 408 b | 298 | 528 | 1,455 | 641 e | 3,913 | 967 | 4,142 | 1,074 | 1,121 b | 191 | 1,692 | |
| 7/02 | 507 b | 571 | 638 | 1,489 | 973 e | 4,092 | 1,307 | 4,877 | 1,601 | 1,468 b | 257 | 2,149 | |

**Tatlawiksuk River weir historical cumulative daily chum salmon escapement.**

= years of generally low chum salmon escapements in the Kuskokwim River. **Esc Goal: none**

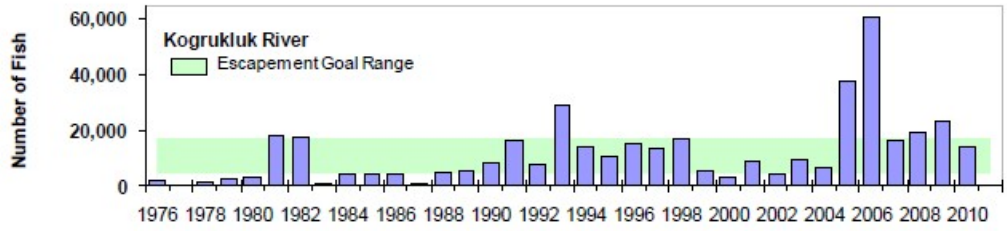
| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| TAT Total | 9,599 | 6,965 | 23,718 | 24,542 | n.a. | 21,245 | 55,720 | 32,301 | 83,246 | 30,896 | 19,975 | 36,701 | |
| 6/26 | 43 | 159 | 251 | 1,104 | 28 | 1,651 | 131 | 690 | 125 | 80 | 47 | 49 | 199 |
| 6/27 | 68 | 166 | 320 | 1,496 | 48 | 1,826 | 174 | 1,131 | 226 | 129 | 78 | 77 | 246 |
| 6/28 | 135 | 176 | 463 | 2,070 | 154 | 2,002 | 230 | 1,398 | 468 | 129 | 98 | 251 | 311 |
| 6/29 | 202 | 179 | 596 | 2,904 | 225 | 2,268 | 360 | 1,862 | 541 | 210 b | 112 | 631 | 319 |
| 6/30 | 260 | 267 | 964 | 3,538 | 360 | 2,646 | 726 | 3,231 | 684 | 347 b | 132 | 858 | |
| 7/01 | 351 | 443 | 1,404 | 3,962 | 438 | 3,108 | 939 | 3,689 | 1,469 | 541 b | 165 | 1,558 | |
| 7/02 | 437 | 935 | 1,547 | 4,999 | 479 | 3,798 | 2,544 | 3,897 | 1,917 | 791 b | 221 | 2,134 | |

-continued-

**ESCAPEMENT MONITORING *(Continued)***

**SOCKEYE SALMON – Escapement Goal Range**

Kogrukluk River 4,440 – 17,000 Weir




**SOCKEYE SALMON-Weir Counts**

**Kogrukluk River weir historical cumulative daily sockeye salmon escapement.**

= years below escapement goal. **Esc Goal: 4,400 to 17,000**

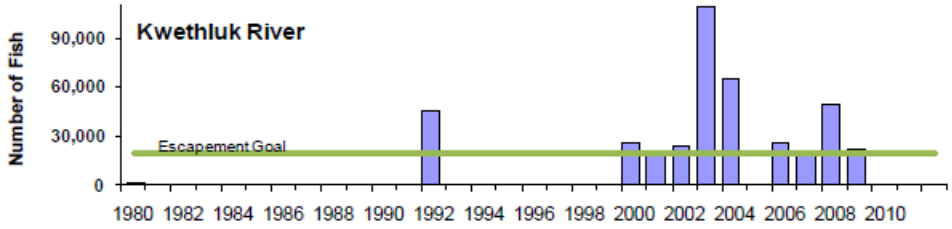
| Date | Cumulative Daily Passage | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| KOG. Es | 5,864 | 2,865 | 8,776 | 4,050 | 9,164 | 6,775 | 37,939 | 60,807 | 16,525 | 19,675 | 23,785 | 13,995 | |
| 6/26 | | | 20 b | 3 | 0 | 0 | 2 | | 0 d | | 0 | | 0 |
| 6/27 | | | 25 b | 8 | 1 | 3 | 8 | | 0 | | 1 | 0 | 0 |
| 6/28 | | | 35 b | 9 | 2 | 9 | 17 | 5 d | 0 | | 2 | 0 | 0 |
| 6/29 | | | 50 b | 26 | 3 | 22 | 23 | 13 | 1 | | 7 | 0 | 1 |
| 6/30 | | | 73 b | 32 | 14 | 64 | 25 | 60 | 1 | | 7 | 0 | |
| 7/01 | | | 207 b | 48 | 18 | 106 | 57 | 223 | 2 | | 13 | 0 | |
| 7/02 | | 0 | 298 b | 125 | 38 | 157 | 137 | 483 | 2 | | 17 | 0 | |

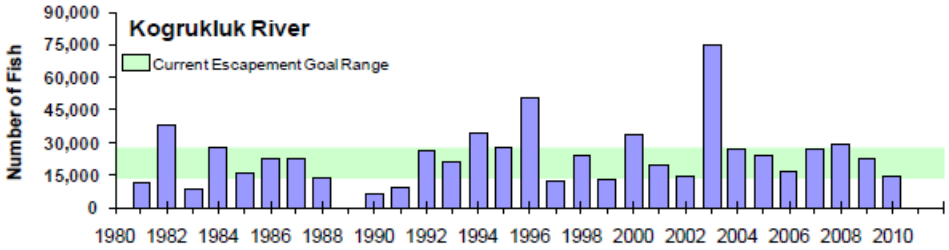
-continued-

**ESCAPEMENT MONITORING *(Continued)***

**COHO SALMON – Escapement Goals**

| | | |
|---|---|---|
| Kwethluk River | 19,000 | Weir/Lower Bound |
| Kogrukluk River | 13,000 – 28,000 | Weir/Range |

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**Chinook Age Compositions:**

**Kuskokwim Chinook Salmon Ages**
**(Average of 2006-2010 Compositions)**

| | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|
| Commercial Harvest | 0.0% | 41.7% | 36.7% | 20.5% | 1.0% |
| Subsistence Harvest | 0.1% | 7.3% | 39.7% | 49.2% | 3.7% |
| Escapement (from weirs) | 0.3% | 32.6% | 33.6% | 30.5% | 3.0% |
| Total Run | 0.2% | 25.8% | 35.2% | 35.7% | 3.0% |

- The dominant age classes of Chinook salmon in the Kuskokwim River overall are 4- 5- and 6- year-old salmon.
- The dominant age class of the Chinook salmon commercial harvest on the Kuskokwim is 4-year-old salmon.
- The dominant age class of Chinook salmon from samples received from the subsistence harvest is 6-year-old.
- Quality of escapement concern: Larger/older/female Chinook are being exploited heavily, what actions can be implemented to reduce this harvest?
- Run timing of each individual age class overlaps greatly with other age classes, making it difficult to target a specific age class at different times of the run.
    - The commercial fishery uses 6" or less mesh and catches smaller age 4 Chinook predominantly.
    - The subsistence fishery uses predominantly 8" mesh and catches a higher proportion of larger age 6 Chinook.

-continued-

**Background Information on Salmon Bycatch in Groundfish Fisheries**

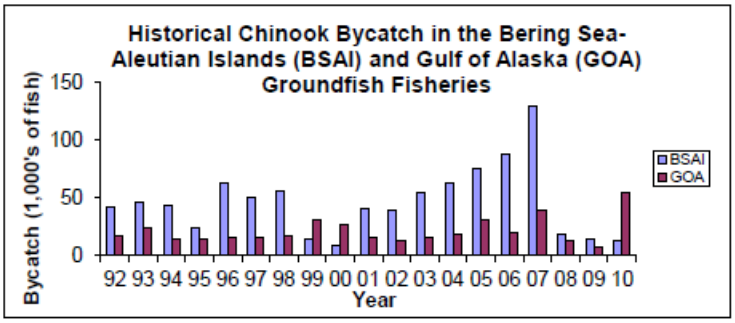
- The Groundfish fisheries (also called the "Pollock" or "trawl fisheries") are managed by the North Pacific Fishery Management Council. The Commissioner of ADF&G holds one of 11 voting seats on the council and represents the state of Alaska along with 5 other members representing Alaska.
    - Steps have been made to place caps on Chinook bycatch in these fisheries (See attached document: *Understanding the NPFMC bycatch action 2009*)
- The Bering Sea-Aleutian Island (BSAI) groundfish fishery primarily catches walleye pollock.
- BSAI groundfish fishery bycatch includes salmon originating from rivers in Western Alaska, Southcentral and Southeast Alaska, Russia, British Columbia, Washington, and elsewhere.
- Millions of salmon are in the Bering Sea at any time, and Western Alaska stocks make up a relatively small amount of those fish.
- Based on migration patterns of Western Alaskan Chinook salmon, it is believed that these fish stay in the Bering Sea and few, if any, would be found in the Gulf of Alaska (GOA) or Area M bycatch.
- Migration patterns of Western Alaskan Chum salmon are not as well understood as Chinook but it is believed that their migration patterns are different from Chinook salmon, and these fish could be vulnerable to GOA and Area M fisheries.
- While there have been estimates developed for the numbers of Western Alaskan salmon in the bycatch, these estimates are problematic and unreliable because prior to January 2011, bycatch sampling was inadequate. A new sampling plan should provide accurate and reliable estimates of Western Alaskan salmon captured in the bycatch.
- Not all fish captured in the bycatch would have survived to maturity and returned to their rivers of origin to spawn, because some would have died from natural mortality (from predators, disease, etc) during their remaining life at sea.
- Chinook salmon bycatch is primarily immature fish that are one or two years away from returning to their river of origin. For instance, bycatch in 2007 includes fish that would have returned to rivers (if they survived to maturity) in 2008 and 2009. Therefore, 2011 Chinook returns could have been impacted by the bycatch in 2009 and 2010, but the few Chinook that may have been caught in bycatch *prior* to 2009 would have limited, if any, impact on the current run.

-continued-

**Weekly Chinook Bycatch in Groundfish Fisheries, Bering Sea Aleutian Islands and Gulf of Alaska, 2011.**

| Week | Week_Date | BSAI | GOA |
|---|---|---|---|
| 01-Jan-11 | 1-Jan | 0 | 0 |
| 08-Jan-11 | 8-Jan | 0 | 0 |
| 15-Jan-11 | 15-Jan | 0 | 0 |
| 22-Jan-11 | 22-Jan | 35 | 19 |
| 29-Jan-11 | 29-Jan | 272 | 259 |
| 05-Feb-11 | 5-Feb | 1,404 | 121 |
| 12-Feb-11 | 12-Feb | 615 | 71 |
| 19-Feb-11 | 19-Feb | 1,771 | 58 |
| 26-Feb-11 | 26-Feb | 231 | 1,643 |
| 05-Mar-11 | 5-Mar | 973 | 215 |
| 12-Mar-11 | 12-Mar | 322 | 773 |
| 19-Mar-11 | 19-Mar | 1,256 | 636 |
| 26-Mar-11 | 26-Mar | 1,250 | 259 |
| 02-Apr-11 | 2-Apr | 133 | 92 |
| 09-Apr-11 | 9-Apr | 97 | 449 |
| 16-Apr-11 | 16-Apr | 239 | 1,776 |
| 23-Apr-11 | 23-Apr | 139 | 1,347 |
| 30-Apr-11 | 30-Apr | 0 | 0 |
| 07-May-11 | 7-May | 0 | 40 |
| 14-May-11 | 14-May | 0 | 99 |
| 21-May-11 | 21-May | 0 | 74 |
| 28-May-11 | 28-May | 0 | 80 |
| 04-Jun-11 | 4-Jun | 0 | 2 |
| 11-Jun-11 | 11-Jun | 0 | 74 |
| ***total thru 11th June:** | | **8,737** | **8,087** |

*The data for 2011 is not complete as the season is currently underway

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**Interception of Kuskokwim Area fish in AREA M Fisheries**:

- This commercial fishing area is managed by ADFG, Westward Region by staff based in Kodiak.
- Based on migration patterns of Western Alaskan Chinook salmon, it is believed that these fish stay in the Bering Sea and few, if any, would be found in the Gulf of Alaska (GOA) or Area M bycatch.
- Salmon intercepted in Area M are legally harvested under regulatory allocations, unlike salmon bycatch in the Groundfish fisheries that are prohibited species.
- The current reported AREA M total harvest of Chinook salmon as of June 28, 2011 is 4,814.

Appendix B5.– Information Packet, July 7, Kuskokwim River Salmon Management Working Group, 2011. Meeting cancelled.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Information Packet

**July 7, 2011**

**KNA Weekly Subsistence Fishing Reports, July 1 to July 8, 2011**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| Kalskag | FAMILY | Yes | Drift Net | NR | | | |
| Comments: Interviewed on Wednesday 7-6-11<br><br>Since last contacted have not fished. Done for the year. | | | | | Sockeye | NR | NR |
| | | | | | Chinook | NR | NR |
| | | | | | Coho | NR | NR |
| | | | | | Chum | NR | NR |
| Aniak | FAMILY | No | Drift/Set | NR | | | |
| Comments: Interviewed on Tuesday 7-5-11<br><br>Since last contacted have not fished. No comments. | | | | | Sockeye | NR | NR |
| | | | | | Chinook | NR | NR |
| | | | | | Coho | NR | NR |
| | | | | | Chum | NR | NR |
| Aniak | FAMILY | Yes | Drift/Set | 6" | | | |
| Comments: Interviewed on Wednesday 7-6-11<br><br>Since last contacted caught 10 kings, 45 chum, and 16 sockeye. Said they are releasing most of the kings, noticed that fish numbers increased for all species. The chum have doubled in numbers, there are a lot of kings, and the size of the fish has increased. | | | | | Sockeye | NR | 16 (Week total) |
| | | | | | Chinook | NR | 10 (week total) |
| | | | | | Coho | NR | |
| | | | | | Chum | NR | 45 (week total) |
| Chuathbaluk | FAMILY | Yes | Drift Net | 6" | | | |
| Comments: Interviewed on Wednesday 7-6-11<br><br>Since last contacted have not fished. No comments. | | | | | Sockeye | NR | NR |
| | | | | | Chinook | NR | NR |
| | | | | | Coho | NR | NR |
| | | | | | Chum | NR | NR |
| Chuathbaluk | FAMILY | Yes | Drift Net | NR | | | |
| Comments: Interviewed on Wednesday 7-6-11<br><br>Since last contacted caught 4 kings, 12 sockeye, and 6 chum. Said the fishing has picked up, but it's slow compared to other years. | | | | | Sockeye | Average | 12 (week total) |
| | | | | | Chinook | Below Average | 4 (week total) |
| | | | | | Coho | NR | |
| | | | | | Chum | Average | 6 (week total) |

-continued-

**KNA Weekly Subsistence Fishing Reports, July 1 to July 8, 2011 (Continued)**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Crooked Creek** | **FAMILY** | Yes | Drift Net | 7" | | | |
| Comments:<br>Interviewed on Tuesday 7-5-11<br><br>Since last contacted caught 18 kings, 5 sockeye, and 27 chum. Said the fishing has dropped compared to recent years. | | | | | **Sockeye** | Below Average | 5 (week total) |
| | | | | | **Chinook** | Below Average | 18 (week total) |
| | | | | | **Coho** | Below Average | |
| | | | | | **Chum** | Below Average | 27 (week total) |
| **Crooked Creek** | **FAMILY** | Yes | Drift Net | 5 ¾" | | | |
| Comments:<br>Interviewed on Tuesday 7-5-11<br><br>28th: 4 kings, 20 chum, and 14 sockeye.<br>29th: 4 kings and 7 sockeye.<br>30th: 6 kings, 2 chum, and 3 sockeye.<br>1st: 5 kings, 4 chum, and 4 sockeye. | | | | | **Sockeye** | Below Average | 28 (week total) |
| | | | | | **Chinook** | Average | 19 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | Average | 33 (week total) |
| **Sleetmute** | **FAMILY** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed on Tuesday 7-5-11<br><br>Since last contacted they have caught 1 king, 6 sockeye, and 32 chum.<br>Said the king numbers didn't pick up, there was a peak then a dramatic drop. The sockeyes came in really nice. | | | | | **Sockeye** | Average | 6 (week total) |
| | | | | | **Chinook** | Below Average | 1 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | Average | 32 (week total) |
| **Stony River** | **FAMILY** | Yes | Fish Wheel | NR | | | |
| Comments:<br>Interviewed on Tuesday 7-5-11<br><br>1st: 7 kings, 2 sockeye, 3 chum, and 1 white fish.<br>2nd: 5 kings, 1 sockeye, 6 chum, and 1 shee fish.<br>3rd: 4 kings, 6 chum, and 1 white fish.<br>4th: 10 kings, 11 chum, and 5 white fish.<br>5th: 1 sockeye, and 11 chum. | | | | | **Sockeye** | Average | 4 (week total) |
| | | | | | **Chinook** | Average | 26 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | Average | 37 (week total) |

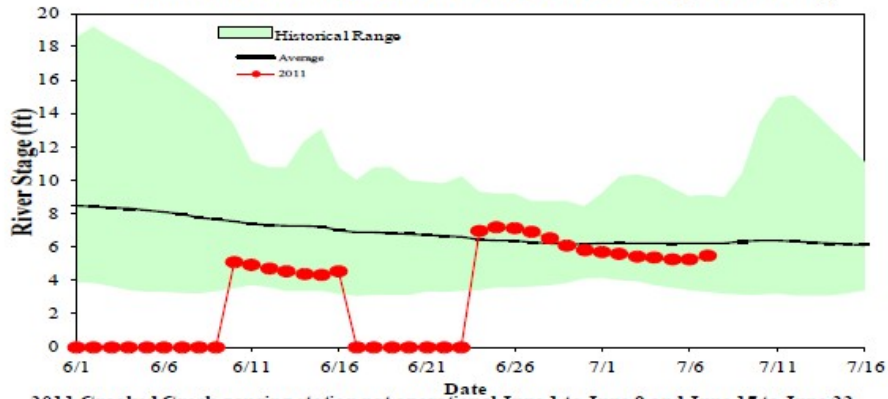
**KNA Comments:**

The following participant families have not been able to contact:
Kalskag (2 families), McGrath (1 family)
The following participant families are done fishing as of last week:
Aniak (1 family), Chuathbaluk (1 family)
The following participant families are done fishing this week:
Kalskag (1 family)
* Families were asked how the runs compared to different years; some answered clearly and others were difficult to comprehend.

-continued-

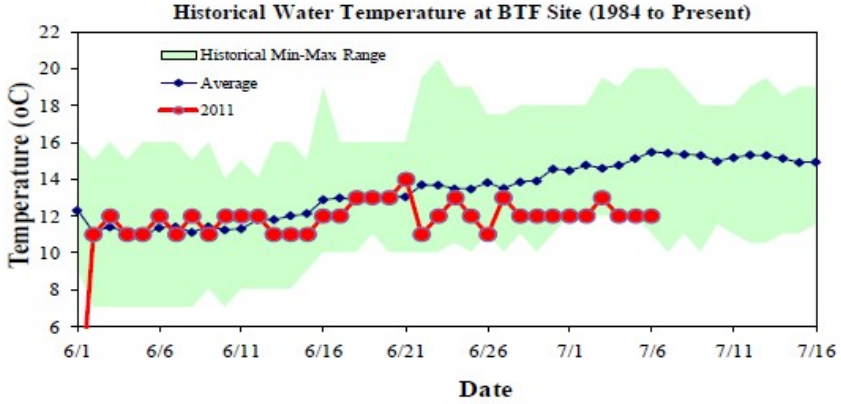
**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS**

Historical Kuskokwim River Water Level at Crooked Creek (1984 to Present)

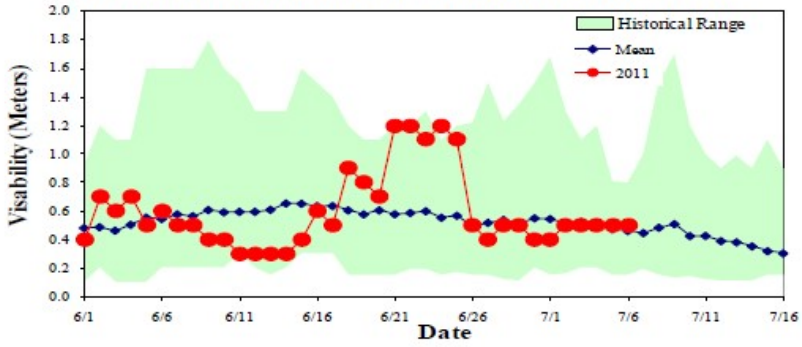



2011 Crooked Creek gauging station not operational June 1 to June 9 and June 17 to June 22.

Historical Water Temperature at BTF Site (1984 to Present)

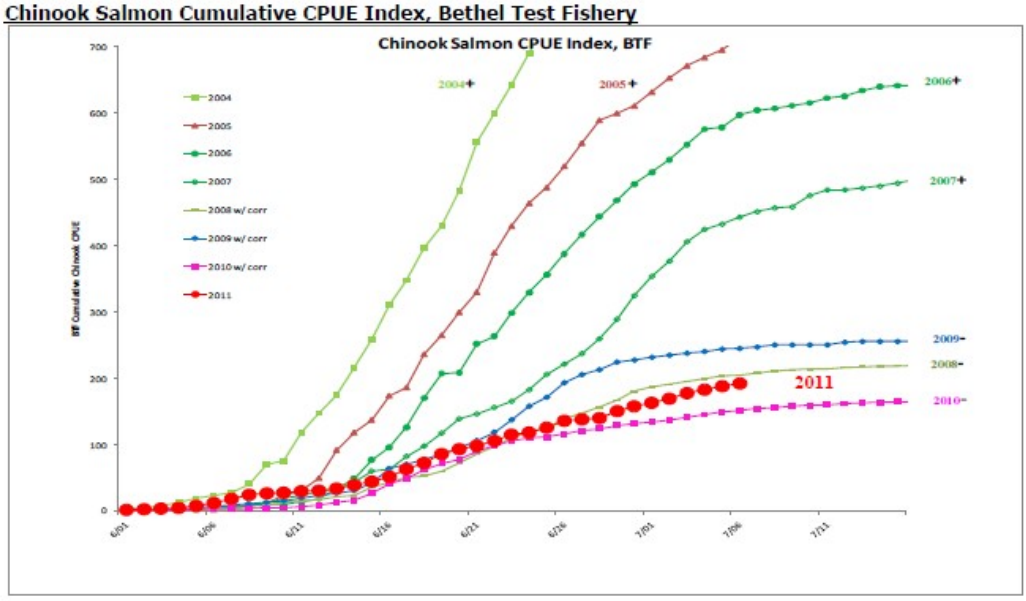



Historical Kuskokwim River Water Clarity at BTF (1984 to Present)



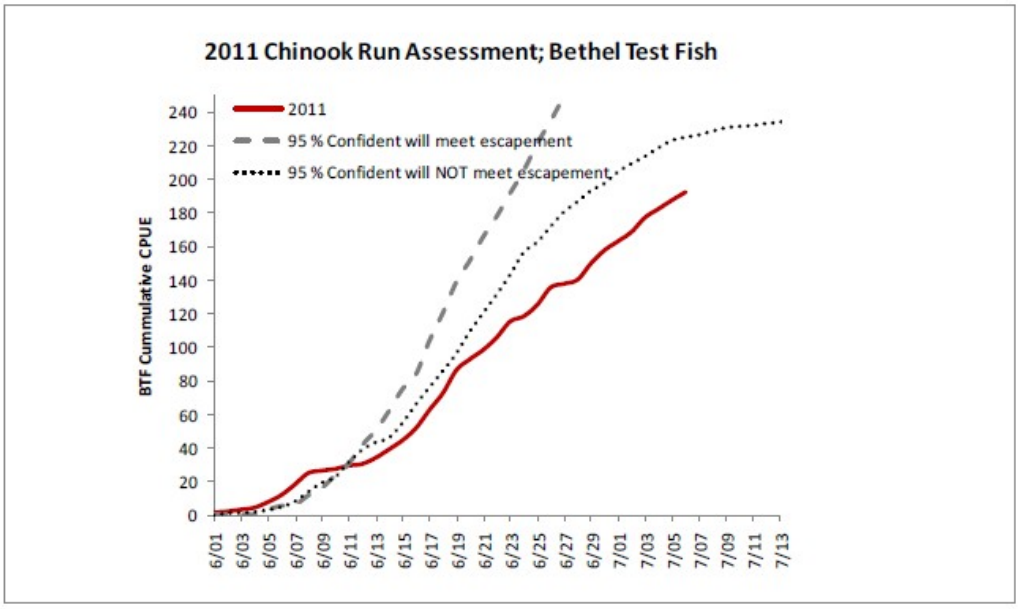

-continued-

**Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery**




| Chinook Salmon Cumulative CPUE Index, BTF | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Date | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 6/20 | 484 | 299 | 208 | 138 | 72 | 95 | 77 | 93 |
| 6/21 | 556 | 330 | 252 | 146 | 85 | 106 | 90 | 98 |
| 6/22 | 600 | 389 | 263 | 156 | 97 | 118 | 99 | 106 |
| 6/23 | 643 | 430 | 298 | 165 | 110 | 137 | 105 | 115 |
| 6/24 | 691 | 464 | 329 | 182 | 119 | 158 | 109 | 118 |
| 6/25 | 738 | 488 | 356 | 206 | 126 | 171 | 111 | 125 |
| 6/26 | 785 | 520 | 388 | 221 | 139 | 193 | 116 | 135 |
| 6/27 | 801 | 555 | 417 | 237 | 148 | 205 | 121 | 138 |
| 6/28 | 848 | 589 | 444 | 259 | 156 | 213 | 124 | 140 |
| 6/29 | 893 | 600 | 469 | 289 | 167 | 224 | 129 | 150 |
| 6/30 | 928 | 611 | 493 | 325 | 181 | 227 | 131 | 158 |
| 7/01 | 951 | 632 | 511 | 354 | 187 | 232 | 134 | 163 |
| 7/02 | 967 | 653 | 530 | 377 | 191 | 235 | 137 | 169 |
| 7/03 | 979 | 672 | 553 | 406 | 195 | 238 | 141 | 177 |
| 7/04 | 985 | 684 | 576 | 425 | 199 | 241 | 145 | 182 |
| 7/05 | 993 | 696 | 579 | 433 | 204 | 244 | 149 | 188 |
| 7/06 | 1,002 | 715 | 598 | 443 | 205 | 245 | 151 | 192 |
| 7/07 | 1,006 | 744 | 604 | 451 | 208 | 247 | 154 | |
| 7/08 | 1,013 | 775 | 607 | 457 | 211 | 250 | 156 | |
| 7/09 | 1,023 | 795 | 611 | 459 | 213 | 250 | 157 | |
| 7/10 | 1,026 | 809 | 616 | 476 | 214 | 250 | 159 | |

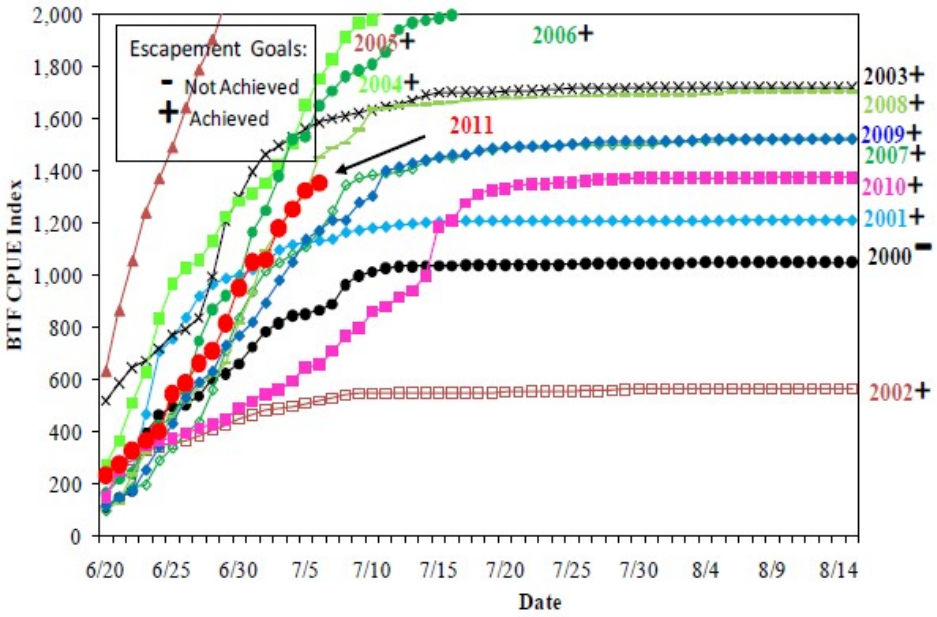
-continued-




- If BTF tracks *below* the *dotted* line, we are 95% confident that escapement goals will NOT be met.
- If BTF tracks *above* the *dashed* line, we are 95% confident that escapement goals will be met.

-continued-

**Sockeye Salmon Cumulative CPUE Index, Bethel Test Fishery**

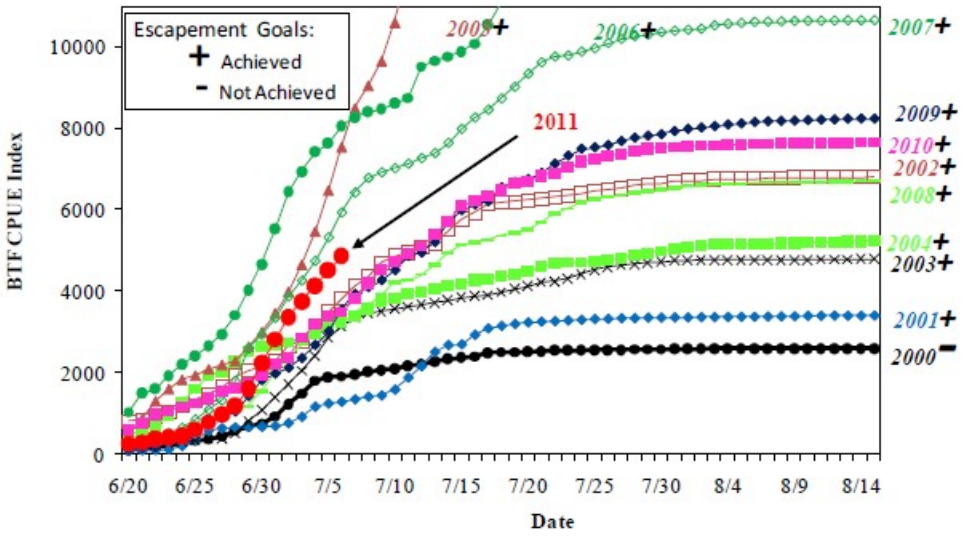



**Sockeye Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/20 | 108 | 166 | 240 | 518 | 270 | 634 | 160 | 98 | 102 | 113 | 149 | 231 |
| 6/21 | 146 | 219 | 272 | 585 | 364 | 866 | 219 | 147 | 128 | 146 | 251 | 274 |
| 6/22 | 172 | 249 | 290 | 646 | 509 | 1,056 | 239 | 186 | 237 | 171 | 323 | 326 |
| 6/23 | 395 | 465 | 325 | 670 | 628 | 1,239 | 350 | 197 | 320 | 251 | 347 | 365 |
| 6/24 | 461 | 706 | 346 | 718 | 833 | 1,370 | 422 | 290 | 381 | 340 | 366 | 400 |
| 6/25 | 499 | 754 | 353 | 771 | 966 | 1,489 | 454 | 338 | 455 | 429 | 375 | 543 |
| 6/26 | 505 | 836 | 368 | 793 | 1,027 | 1,640 | 556 | 393 | 518 | 528 | 394 | 586 |
| 6/27 | 536 | 918 | 385 | 836 | 1,055 | 1,785 | 748 | 436 | 572 | 588 | 411 | 664 |
| 6/28 | 605 | 963 | 407 | 994 | 1,133 | 1,901 | 869 | 560 | 619 | 629 | 428 | 709 |
| 6/29 | 622 | 986 | 424 | 1,207 | 1,222 | 2,052 | 920 | 710 | 660 | 729 | 446 | 813 |
| 6/30 | 660 | 998 | 446 | 1,296 | 1,283 | 2,204 | 971 | 833 | 813 | 766 | 491 | 952 |
| 7/01 | 724 | 1,020 | 464 | 1,395 | 1,315 | 2,298 | 1,164 | 934 | 933 | 818 | 515 | 1,048 |
| 7/02 | 782 | 1,048 | 482 | 1,462 | 1,352 | 2,365 | 1,247 | 1,014 | 1,092 | 892 | 545 | 1,058 |
| 7/03 | 817 | 1,096 | 486 | 1,495 | 1,418 | 2,440 | 1,379 | 1,046 | 1,178 | 979 | 561 | 1,180 |
| 7/04 | 845 | 1,115 | 496 | 1,528 | 1,507 | 2,512 | 1,520 | 1,077 | 1,251 | 1,048 | 594 | 1,252 |
| 7/05 | 850 | 1,123 | 508 | 1,560 | 1,647 | 2,583 | 1,528 | 1,107 | 1,312 | 1,136 | 645 | 1,324 |
| 7/06 | 865 | 1,132 | 518 | 1,586 | 1,753 | 2,655 | 1,650 | 1,165 | 1,450 | 1,169 | 655 | 1,353 |
| 7/07 | 887 | 1,137 | 528 | 1,600 | 1,825 | 2,715 | 1,704 | 1,243 | 1,487 | 1,209 | 708 | |
| 7/08 | 962 | 1,163 | 542 | 1,608 | 1,912 | 2,773 | 1,763 | 1,343 | 1,509 | 1,209 | 766 | |
| 7/09 | 998 | 1,171 | 546 | 1,621 | 1,965 | 2,816 | 1,784 | 1,371 | 1,557 | 1,277 | 795 | |
| 7/10 | 1,012 | 1,179 | 546 | 1,633 | 1,980 | 2,845 | 1,807 | 1,381 | 1,634 | 1,302 | 858 | |
| 7/11 | 1,025 | 1,184 | 548 | 1,646 | 2,010 | 2,860 | 1,854 | 1,389 | 1,636 | 1,400 | 879 | |
| 7/12 | 1,033 | 1,192 | 550 | 1,652 | 2,013 | 2,870 | 1,941 | 1,394 | 1,647 | 1,414 | 914 | |

-continued-

**Chum Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Chum Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/20 | 86 | 73 | 801 | 198 | 450 | 537 | 1012 | 258 | 161 | 105 | 588 | 241 |
| 6/21 | 124 | 73 | 836 | 226 | 547 | 844 | 1482 | 343 | 190 | 135 | 764 | 276 |
| 6/22 | 155 | 78 | 903 | 235 | 659 | 1288 | 1595 | 407 | 264 | 149 | 954 | 371 |
| 6/23 | 224 | 98 | 1047 | 270 | 959 | 1587 | 1916 | 506 | 337 | 301 | 1049 | 414 |
| 6/24 | 250 | 183 | 1181 | 291 | 1260 | 1817 | 2188 | 632 | 437 | 397 | 1163 | 433 |
| 6/25 | 324 | 346 | 1329 | 312 | 1583 | 1918 | 2412 | 840 | 598 | 532 | 1224 | 597 |
| 6/26 | 363 | 557 | 1466 | 349 | 1926 | 2077 | 2646 | 1075 | 753 | 783 | 1340 | 769 |
| 6/27 | 435 | 619 | 1622 | 375 | 2014 | 2183 | 2941 | 1308 | 921 | 904 | 1524 | 963 |
| 6/28 | 574 | 637 | 1897 | 496 | 2271 | 2273 | 3402 | 1783 | 1099 | 1028 | 1613 | 1165 |
| 6/29 | 676 | 651 | 2048 | 791 | 2514 | 2631 | 4031 | 2589 | 1176 | 1407 | 1738 | 1607 |
| 6/30 | 727 | 654 | 2136 | 1059 | 2653 | 2989 | 4660 | 2917 | 1550 | 1800 | 1931 | 2223 |
| 7/01 | 908 | 676 | 2299 | 1387 | 2690 | 3455 | 5530 | 3341 | 2010 | 1959 | 2196 | 2812 |
| 7/02 | 1222 | 744 | 2660 | 1711 | 2736 | 3982 | 6437 | 3861 | 2377 | 2104 | 2378 | 3353 |
| 7/03 | 1475 | 900 | 2768 | 2031 | 2819 | 4650 | 6937 | 4252 | 2680 | 2339 | 2838 | 3750 |
| 7/04 | 1794 | 1148 | 3147 | 2413 | 2965 | 5464 | 7424 | 4736 | 2953 | 2663 | 3172 | 4127 |
| 7/05 | 1879 | 1227 | 3480 | 2857 | 3120 | 6477 | 7629 | 5314 | 3197 | 3000 | 3380 | 4504 |
| 7/06 | 1901 | 1267 | 3800 | 3127 | 3226 | 7542 | 8053 | 5927 | 3391 | 3530 | 3478 | 4854 |
| 7/07 | 1941 | 1328 | 4107 | 3352 | 3395 | 8496 | 8278 | 6414 | 3471 | 3917 | 3802 | |
| 7/08 | 2008 | 1397 | 4367 | 3447 | 3561 | 9055 | 8409 | 6775 | 3660 | 4083 | 4205 | |
| 7/09 | 2063 | 1423 | 4696 | 3503 | 3733 | 9656 | 8468 | 6914 | 3909 | 4256 | 4524 | |
| 7/10 | 2085 | 1568 | 4846 | 3558 | 3800 | 10604 | 8609 | 7011 | 4219 | 4502 | 4716 | |
| 7/11 | 2162 | 1863 | 4945 | 3618 | 3945 | 11899 | 8743 | 7127 | 4260 | 4855 | 4940 | |
| 7/12 | 2193 | 2141 | 5068 | 3663 | 3993 | 12658 | 9519 | 7261 | 4396 | 4937 | 5089 | |

-continued-

## ESCAPEMENT MONITORING

### CHINOOK SALMON -Weir Escapement Goal Ranges

| | |
|---|---|
| Kwethluk River | 6,000 – 11,000 |
| Tuluksak River | 1,000 – 2,100 |
| George River | 3,100 – 7,900 |
| Kogrukluk River | 5,300 – 14,000 |

### CHINOOK SALMON – Aerial Survey Escapement Goal Ranges

| | |
|---|---|
| Kisaralik River | 400 – 1,200 |
| Aniak River | 1,200 – 2,300 |
| Salmon River (Aniak R.) | 330 – 1,200 |
| Holitna River | 970 – 2,100 |
| Cheeneetnuk River (Stony R.) | 340 – 1,300 |
| Gagaryah River (Stony R.) | 300 – 830 |
| Salmon River (Pitka Fork) | 470 – 1,600 |

### CHINOOK SALMON – Weir Counts

**Kwethluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. Esc Goal Range: 6,000 to 11,000

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | . | 2,253 | 3,663 | 11,804 | . | 3,655 | 296 | 246 | 452 | 135 | 432 |
| 7/05 | . | 2,397 | 4,333 | 12,700 | . | 4,855 | 1,152 | 347 | 852 | 292 | 501 |
| 7/06 | . | 3,114 | 4,805 | 13,621 | . | 6,563 | 1,652 | 553 | 900 | 360 | 607 |
| 7/07 | . | 3,654 | 4,955 | 13,960 | . | 7,459 | 2,255 | 1,004 | 1,269 | 361 | |
| 7/08 | . | 3,900 | 5,264 | 14,968 | . | 8,264 | 3,059 | 1,488 | 1,286 | 372 | |
| 7/09 | . | 4,288 | 6,727 | 17,294 | . | 9,393 | 3,493 | 1,568 | 1,470 | 405 | |
| 7/10 | . | 4,554 | 7,124 | 19,489 | . | 9,887 | 4,427 | 1,630 | 1,740 | 522 | |
| Season Total | NA | 8,502 | 14,474 | 28,605 | NA | 17,619 | 13,267 | 5,312 | 5,744 | 1,693 | NA |

**Tuluksak River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal Esc Goal Range: 1,000 to 2,100

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 87 | 216 | 528 | 470 | 665 | 89 | 39 | 3 | 3 | 8 | 13 |
| 7/05 | 120 | 275 | 552 | 489 | 744 | 124 | 70 | 5 | 6 | 13 | 13 |
| 7/06 | 155 | 522 | 555 | 499 | 896 | 155 | 84 | 10 | 15 | 15 | 13 |
| 7/07 | 218 | 579 | 563 | 527 | 1,018 | 197 | 96 | 21 | 23 | 20 | |
| 7/08 | 237 | 627 | 581 | 692 | 1,078 | 208 | 106 | 81 | 23 | 20 | |
| 7/09 | 240 | 649 | 609 | 708 | 1,483 | 228 | 112 | 101 | 25 | 39 | |
| 7/10 | 252 | 651 | 625 | 849 | 1,592 | 246 | 116 | 104 | 41 | 43 | |
| Season Total | 997 | 1,346 | 1,064 | 1,475 | 2,653 | 1,044 | 374 | 665 | 404 | 239 | NA |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### CHINOOK SALMON – Weir Counts

**George River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. Esc Goal Range: 3,100 to 7,900

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 732 | 1,187 | 2,684 | 1,859 | 2,184 | 1,421 | 402 | 94 | 316 | 134 | 351 |
| 7/05 | 764 | 1,289 | 3,044 | 2,398 | 2,386 | 1,621 | 495 | 115 | 626 | 351 | 408 |
| 7/06 | 1,295 | 1,381 | 3,257 | 2,773 | 2,478 | 1,841 | 945 | 139 | 835 | 457 | 462 |
| 7/07 | 1,541 | 1,519 | 3,712 | 2,925 | 2,618 | 2,281 | 1,409 | 166 | 1,256 | 544 | |
| 7/08 | 1,577 | 1,646 | 3,829 | 3,323 | 2,679 | 2,340 | 2,324 | 216 | 1,374 | 593 | |
| 7/09 | 1,647 | 1,726 | 3,894 | 3,517 | 2,781 | 2,387 | 2,769 | 224 | 1,577 | 629 | |
| 7/10 | 1,802 | 1,748 | 3,911 | 3,586 | 2,842 | 2,542 | 3,037 | 237 | 1,693 | 707 | |
| Season Total | 3,309 | 2,444 | 4,693 | 5,207 | 3,845 | 4,357 | 4,883 | 2,698 | 3,663 | 1,500 | NA |

**Tatlawiksuk River weir historical cumulative daily Chinook salmon escapement.**

Esc Goal Range: none

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 687 | 1,200 | 726 | 1,268 | 1,096 | 252 | 306 | 23 | 39 | 44 | 111 |
| 7/05 | 798 | 1,538 | 786 | 1,511 | 1,335 | 299 | 358 | 30 | 225 | 82 | 162 |
| 7/06 | 1,226 | 1,602 | 827 | 1,518 | 1,422 | 486 | 404 | 37 | 230 | 116 | 268 |
| 7/07 | 1,396 | 1,747 | 841 | 1,602 | 1,562 | 521 | 480 | 46 | 393 | 197 | |
| 7/08 | 1,417 | 1,757 | 868 | 1,708 | 1,660 | 599 | 749 | 54 | 462 | 224 | |
| 7/09 | 1,446 | 1,781 | 997 | 1,937 | 1,772 | 827 | 1,237 | 65 | 543 | 258 | |
| 7/10 | 1,475 | 1,808 | 1,033 | 2,102 | 1,867 | 973 | 1,384 | 81 | 576 | 262 | |
| Season Total | 2,010 | 2,237 | 1,683 | 2,833 | 2,920 | 1,700 | 2,061 | 1,071 | 1,071 | 567 | NA |

**Kogrukluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. Esc Goal Range: 5,300 to 14,000

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 1,495 | 1,873 | 1,063 | 2,898 | 2,252 | 1,170 | 160 | 14 | 130 | 14 | 74 |
| 7/05 | 1,655 | 1,963 | 1,473 | 3,754 | 3,327 | 1,681 | 188 | 19 | 313 | 38 | 87 |
| 7/06 | 2,052 | 3,155 | 1,927 | 4,453 | 4,303 | 2,321 | 223 | 37 | 408 | 50 | 97 |
| 7/07 | 2,438 | 3,278 | 2,406 | 6,024 | 5,522 | 2,976 | 294 | 56 | 542 | 132 | |
| 7/08 | 3,136 | 4,004 | 2,998 | 7,348 | 6,479 | 4,016 | 656 | 83 | 815 | 282 | |
| 7/09 | 3,932 | 4,245 | 3,856 | 8,410 | 7,697 | 4,768 | 1,335 | 104 | 1,040 | 333 | |
| 7/10 | 4,268 | 4,695 | 4,418 | 9,482 | 9,006 | 5,616 | 1,799 | 116 | 1,242 | 405 | |
| Season Total | 9,298 | 10,104 | 11,771 | 19,651 | 22,000 | 19,414 | 13,029 | 9,730 | 9,702 | 5,690 | NA |

-continued-

**ESCAPEMENT MONITORING *(Continued)***

**CHINOOK SALMON – Weir Counts**

Takotna River weir historical cumulative daily Chinook salmon escapement.

Esc Goal Range: none

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 78 | 19 | 15 | 79 | 108 | 21 | 39 | 28 | 16 | 13 | 0 |
| 7/05 | 79 | 22 | 21 | 85 | 121 | 32 | 56 | 33 | 20 | 13 | 0 |
| 7/06 | 82 | 33 | 27 | 102 | 142 | 44 | 71 | 35 | 33 | 17 | 0 |
| 7/07 | 97 | 50 | 33 | 108 | 157 | 61 | 77 | 46 | 69 | 19 | |
| 7/08 | 207 | 82 | 43 | 127 | 178 | 85 | 88 | 56 | 75 | 23 | |
| 7/09 | 224 | 89 | 80 | 274 | 189 | 136 | 130 | 63 | 93 | 24 | |
| 7/10 | 293 | 91 | 103 | 290 | 227 | 168 | 163 | 67 | 99 | 40 | |
| Season Total | 721 | 316 | 378 | 461 | 499 | 539 | 418 | 413 | 311 | 178 | NA |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Escapement Goal Ranges

| | | |
|---|---|---|
| Aniak River | 220,000–480,000 | Sonar/Index |
| Kogrukluk River | 15,000–49,000 | Weir |

### CHUM SALMON – Weir Counts

**Kwethluk River weir historical cumulative daily chum salmon escapement.**

Esc Goal Range: none

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | | 4,709 | 1,632 | 9,260 | | 6,368 | 1,160 | 493 | 741 | 2,276 | 495 |
| 7/05 | | 5,417 | 1,799 | 9,965 | | 8,427 | 2,019 | 1,032 | 1,170 | 2,949 | 751 |
| 7/06 | | 6,700 | 2,006 | 10,653 | | 10,502 | 2,825 | 1,437 | 1,550 | 3,415 | 999 |
| 7/07 | | 7,625 | 2,175 | 10,850 | | 12,645 | 4,094 | 2,369 | 2,340 | 3,488 | |
| 7/08 | | 8,073 | 2,694 | 11,621 | | 14,064 | 6,410 | 3,279 | 2,600 | 4,184 | |
| 7/09 | | 8,926 | 4,056 | 12,494 | | 17,037 | 7,945 | 3,835 | 3,011 | 4,341 | |
| 7/10 | | 10,217 | 4,665 | 14,679 | | 20,073 | 9,495 | 4,080 | 3,777 | 5,141 | |
| Season Total | NA | 35,854 | 41,812 | 38,646 | NA | 47,490 | 54,913 | 20,030 | 32,191 | 19,242 | NA |

**Tuluksak River weir historical cumulative daily chum salmon escapement.**

Esc Goal Range: none

| Date | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 825 | 968 | 522 | 2,336 | 1,475 | 2,441 | 381 | 194 | 35 | 561 | 189 |
| 7/05 | 1,040 | 1,166 | 592 | 2,826 | 1,802 | 3,199 | 628 | 328 | 44 | 995 | 189 |
| 7/06 | 1,216 | 1,386 | 615 | 3,221 | 2,208 | 3,879 | 736 | 496 | 101 | 1,501 | 189 |
| 7/07 | 1,565 | 1,681 | 663 | 3,533 | 2,850 | 4,733 | 801 | 754 | 160 | 1,697 | |
| 7/08 | 1,761 | 1,711 | 746 | 3,896 | 3,688 | 4,800 | 993 | 913 | 169 | 1,811 | |
| 7/09 | 1,860 | 1,790 | 1,052 | 4,047 | 4,362 | 5,533 | 1,208 | 1,126 | 176 | 2,196 | |
| 7/10 | 2,010 | 1,865 | 1,095 | 4,122 | 5,838 | 7,344 | 1,613 | 1,321 | 249 | 2,441 | |
| Season Total | 19,321 | 9,958 | 11,724 0 | 11,796 | 35,696 | 25,648 | 17,286 | 12,518 | 13,671 | 13,424 | NA |

**George River weir historical cumulative daily chum salmon escapement.**

Esc Goal Range: none

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 685 | 1,677 | 1,396 | 5,107 | 2,462 | 7,353 | 3,120 | 2,321 | 577 | 2,873 | 4,395 |
| 7/05 | 753 | 1,869 | 1,531 | 5,551 | 2,812 | 9,060 | 4,024 | 2,827 | 817 | 4,214 | 5,657 |
| 7/06 | 981 | 2,387 | 1,697 | 6,236 | 3,252 | 10,334 | 5,539 | 3,386 | 1,054 | 4,837 | 6,642 |
| 7/07 | 1,406 | 2,726 | 1,833 | 7,208 | 3,620 | 11,293 | 6,546 | 4,021 | 1,219 | 5,164 | |
| 7/08 | 1,579 | 2,912 | 2,657 | 7,722 | 4,128 | 11,972 | 9,557 | 4,778 | 1,350 | 6,100 | |
| 7/09 | 1,898 | 3,110 | 4,019 | 8,033 | 4,558 | 12,590 | 11,811 | 5,352 | 1,612 | 7,135 | |
| 7/10 | 2,247 | 3,427 | 4,679 | 8,338 | 5,076 | 13,890 | 13,152 | 6,195 | 1,867 | 7,890 | |
| Season Total | 11,601 | 6,543 | 33,666 | 14,409 | 14,828 | 41,467 | 55,842 | 29,978 | 7,941 | 26,154 | NA |

-continued-

**ESCAPEMENT MONITORING *(Continued)***

**CHUM SALMON – Weir Counts**

**Tatlawiksuk River weir historical cumulative daily chum salmon escapement.**

Esc Goal Range: none

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 1,880 | 6,259 | | 4,983 | 6,034 | 6,851 | 4,709 | 1,461 | 276 | 3,713 | 3,736 |
| 7/05 | 2,368 | 7,537 | | 5,465 | 7,421 | 7,198 | 6,144 | 1,880 | 770 | 5,171 | 5,022 |
| 7/06 | 2,986 | 9,299 | | 5,700 | 8,414 | 8,307 | 8,042 | 2,356 | 849 | 6,196 | 7,779 |
| 7/07 | 3,764 | 10,108 | | 6,338 | 9,477 | 9,052 | 11,183 | 2,888 | 1,493 | 7,228 | |
| 7/08 | 4,664 | 10,774 | | 7,149 | 10,916 | 9,897 | 14,915 | 3,363 | 1,885 | 8,412 | |
| 7/09 | 5,725 | 11,614 | | 7,985 | 12,664 | 12,038 | 19,984 | 4,065 | 2,300 | 9,513 | |
| 7/10 | 7,124 | 12,442 | | 8,612 | 14,210 | 13,829 | 24,018 | 5,326 | 2,798 | 10,500 | |
| Season Total | 23,718 | 24,542 | NA | 21,245 | 55,720 | 32,301 | 83,246 | 30,896 | 19,975 | 36,701 | NA |

**Kogrukluk River weir historical cumulative daily chum salmon escapement.**

= years below escapement goal.

Esc Goal Range: 15,000 to 49,000

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 653 | 8,421 | 1,311 | 3,732 | 2,688 | 15,238 | 1,049 | 123 | 515 | 513 | 394 |
| 7/05 | 1,076 | 10,126 | 2,023 | 4,541 | 5,430 | 22,037 | 1,369 | 233 | 791 | 1,243 | 543 |
| 7/06 | 1,439 | 12,515 | 2,712 | 5,433 | 10,566 | 29,757 | 1,791 | 404 | 971 | 1,943 | 797 |
| 7/07 | 2,059 | 14,781 | 3,338 | 6,455 | 15,582 | 36,169 | 2,545 | 782 | 1,241 | 3,106 | |
| 7/08 | 2,830 | 17,057 | 3,918 | 7,657 | 21,840 | 43,604 | 3,440 | 1,232 | 1,913 | 4,707 | |
| 7/09 | 3,748 | 19,430 | 4,576 | 8,606 | 28,586 | 49,558 | 4,748 | 1,597 | 2,744 | 6,617 | |
| 7/10 | 4,792 | 22,573 | 5,143 | 9,867 | 34,186 | 56,695 | 6,469 | 1,936 | 4,044 | 8,367 | |
| Season Total | 30,570 | 51,570 | 23,413 | 24,201 | 197,723 | 180,594 | 49,505 | 44,978 | 84,940 | 63,583 | NA |

**Takotna River weir historical cumulative daily chum salmon escapement.**

Esc Goal Range: none

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/04 | 230 | 1,172 | 190 | 378 | 292 | 1,430 | 508 | 415 | 222 | 176 | 291 |
| 7/05 | 251 | 1,422 | 301 | 426 | 514 | 1,781 | 674 | 526 | 250 | 306 | 364 |
| 7/06 | 311 | 1,626 | 421 | 534 | 719 | 2,374 | 823 | 705 | 277 | 392 | 476 |
| 7/07 | 417 | 1,877 | 547 | 600 | 1,020 | 2,990 | 1,075 | 860 | 321 | 512 | |
| 7/08 | 605 | 2,001 | 684 | 665 | 1,418 | 3,449 | 1,314 | 1,051 | 364 | 644 | |
| 7/09 | 683 | 2,111 | 826 | 757 | 1,618 | 3,929 | 1,688 | 1,226 | 391 | 776 | |
| 7/10 | 887 | 2,316 | 914 | 844 | 1,945 | 4,391 | 2,103 | 1,386 | 445 | 934 | |
| Season Total | 5,414 | 4,377 | 3,393 | 1,630 | 6,467 | 12,598 | 8,900 | 5,691 | 2,487 | 4,062 | NA |

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**ESCAPEMENT MONITORING *(Continued)***

**CHUM SALMON**

**Aniak River sonar historical cumulative daily chum salmon escapement index.**

= years below escapement goal. **Esc Goal Range: 220,000 to 480,000**

| Date | Cumulative Daily Count | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/04 | 56,091 | 95,748 | 47,386 | 111,404 | 101,097 | 181,283 | 50,142 | 7,592 | 22,573 | 45,923 | 15,059 |
| 7/05 | 67,921 | 119,318 | 59,408 | 124,150 | 124,297 | 227,180 | 78,629 | 12,865 | 26,457 | 54,493 | 18,072 |
| 7/06 | 77,615 | 139,902 | 71,732 | 134,310 | 147,925 | 271,134 | 88,340 | 22,297 | 33,229 | 63,377 | 22,604 |
| 7/07 | 89,003 | 148,947 | 80,626 | 160,272 | 181,456 | 318,832 | 93,898 | 34,606 | 47,443 | 71,636 | |
| 7/08 | 102,053 | 163,000 | 98,607 | 181,698 | 213,464 | 349,857 | 110,595 | 42,490 | 58,229 | 81,239 | |
| 7/09 | 115,281 | 175,333 | 120,149 | 204,845 | 251,614 | 398,376 | 145,168 | 51,298 | 61,883 | 98,847 | |
| 7/10 | 126,019 | 200,914 | 139,213 | 223,885 | 303,921 | 447,265 | 163,826 | 59,476 | 70,627 | 111,071 | |
| Season Total | 408,830 | 472,346 | 477,544 | 673,445 | 1,173,155 | 1,108,626 | 699,176 | 427,911 | 479,531 | 429,643 | NA |

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## ESCAPEMENT MONITORING *(Continued)*

### SOCKEYE SALMON – Weir Escapement Goal Ranges

Kogrukluk River 4,440–17,000

### SOCKEYE SALMON – Weir Counts

Kogrukluk River weir historical cumulative daily sockeye salmon escapement.

= years below escapement goal. Esc Goal Range: 4,400 to 17,000

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/04 | 640 | 505 | 124 | 351 | 333 | 2,168 | 25 | 2 | 34 | 1 | 10 |
| 7/05 | 690 | 663 | 173 | 534 | 1,152 | 3,010 | 39 | 7 | 72 | 6 | 20 |
| 7/06 | 820 | 1,085 | 444 | 857 | 2,604 | 4,351 | 45 | 7 | 130 | 12 | 21 |
| 7/07 | 1,065 | 1,128 | 617 | 1,458 | 4,311 | 5,446 | 76 | 9 | 200 | 58 | |
| 7/08 | 1,552 | 1,619 | 1,083 | 1,828 | 6,966 | 6,920 | 161 | 43 | 312 | 239 | |
| 7/09 | 2,155 | 1,670 | 1,745 | 2,241 | 8,482 | 9,179 | 312 | 65 | 632 | 307 | |
| 7/10 | 2,500 | 1,860 | 1,965 | 2,743 | 10,545 | 11,302 | 509 | 87 | 1,131 | 385 | |
| Season Total | 8,776 | 4,050 | 9,164 | 6,775 | 37,939 | 60,807 | 16,525 | 19,675 | 23,785 | 13,995 | NA |

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## COMMERCIAL CATCH REPORT

**July 11, Subdistric 1-A Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/11/1998 | 1-A | 128 | 4 | 367 | 0.72 | 4,131 | 8.1 | 8,948 | 17.5 | 5 | 0.0 |
| 7/12/1995 | 1-A | 95 | 2 | 115 | 0.61 | 2,093 | 11.0 | 8,970 | 47.2 | 390 | 2.1 |

**July 13, Subdistrict 1-B Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/14/1995 | 1-B | 298 | 4 | 348 | 0.29 | 2,360 | 2.0 | 25,682 | 21.5 | 174 | 0.1 |

**July 15, Subdistric 1-A Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/14/2010 | 1-A | 51 | 2 | 50 | 0.49 | 2,113 | 20.7 | 2,975 | 29.2 | 5 | 0.0 |

**Total cumulative harvest in District 5 through July 5, 2011**

| | Sub- | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Distrit | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/5/2011 | 1B | 116 | 4 | 192 | 0.41 | 2,471 | 5.3 | 13,657 | 29.4 | 0 | 0.0 |
| Total | 1-A & 1-B | 116 | 4 | 192 | | 2,471 | | 13,657 | | 0 | |

* Results are preliminary and subject to change (includes catcher/seller)

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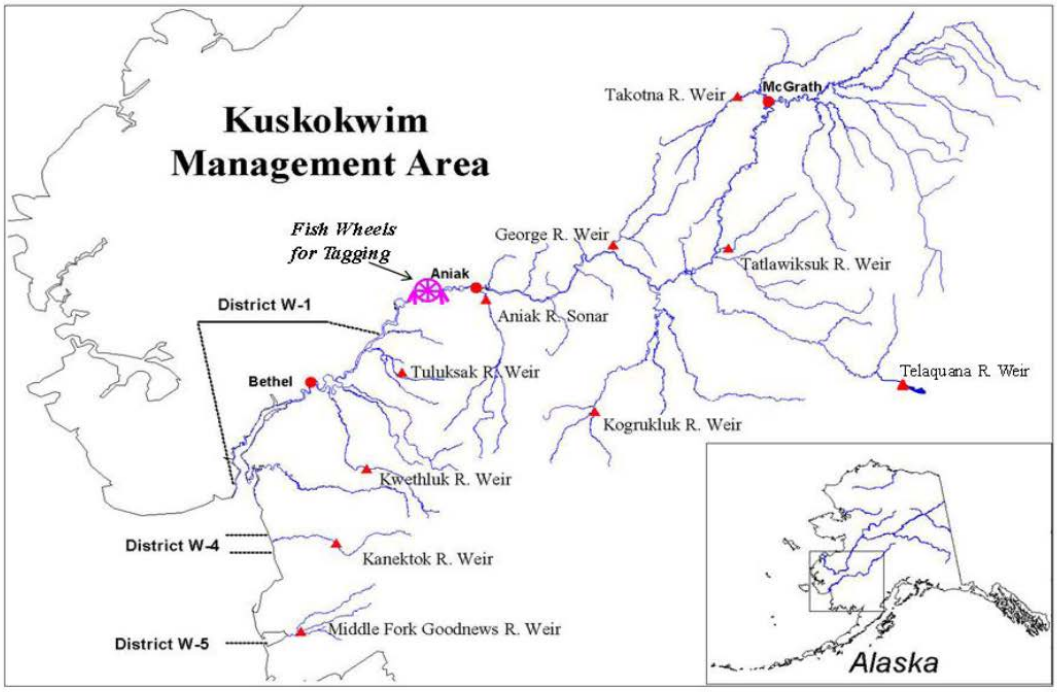

Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
District W-5
Middle Fork Goodnews R. Weir
Alaska

Appendix B6.–Information Packet, July 14, Kuskokwim River Salmon Management Working Group, 2011.

## Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

### Information Packet

**July 14, 2011**

**Orutsararmiut Native Council**
**Kuskokwim River Inseason Subsistence Catch Monitoring Report**

Date July 11, 2011

**Fishing reports from July 4 – July 10, 2011.**

| Families Surveyed | Families Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both | Rod & Reel |
|---|---|---|---|---|---|---|---|---|
| 71 | 15 | 13 | 1 | 1 | 5 | 6 | 3 | 1 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 2 | 0 | 10 | 12 | 1 | 0 | 5 | 3 | 5 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 0 | 6 | 5 | 1 | 10 | 0 | 0 | 8 | 4 |

**Comments:** Prior to this survey week, federal waters of the Kuskokwim River were closed to subsistence salmon fishing with mesh greater than 4 inches from June 30 through July 2. This survey week, salmon fishing was restricted to 6-inch mesh or smaller until July 7th, and after July 7th all mesh sizes were allowed again in the ONC survey area. There was a commercial fishery opening in W1 sub-district 1-B (below Bethel's Straight Slough) on July 5, so that area was closed to subsistence salmon fishing 6 hours before, during, and 3 hours afterwards. There were 2 subsequent commercial openings this week on July 7 and July 9th in sub-district 1A (above Bethel). The Kuskokwim River was closed to subsistence salmon fishing 6 hours before, during, and 3 hours after these openers.

**71** families were surveyed this week for the in-season subsistence monitoring program. 15 (21%) of the families were fishing this week. 16 (23%) of the families said they did not fish this week because of the closures. 14 (20%) of the families that didn't fish are waiting for Coho to finish harvest goals. 3 (20%) of the families that didn't fish for salmon this week are going to start harvesting Cisco. 40 (56%) of the families reported to be done fishing.

13 (87%) families reported using drift nets, 1 (7%) family reported using set net, and 1 (7%) family reported using both. 1 (7%) family started rod and reeling for freezer fish. 6 (40%) of the families fishing used gill nets greater than 6-inch mesh. 5 (33%) of the families reported using 6-inch mesh or less. 3 (20%) families reported using both.

The majority of families that were surveyed this week were finished their salmon fishing for the year or were satisfied with what they had, which they had indicated on prior surveys. Many of these families reported that they had harvested less Chinook than in normal years but made up for some of their total harvest goals by harvesting more sockeye and chum. Families who had started fishing later in the season expressed frustration and discouragement at the overlapping Federal and State subsistence closures. These families felt the short notice was confusing and they hadn't had a chance to put up enough fish to dry until after the closures when it was too rainy to dry fish properly. Some of these families indicated that they didn't have enough dry fish for the year yet, but did not plan to fish again unless the weather improved.

-continued-

Many families interviewed this week indicated that they planned to fish for Coho. Some of these families usually fish for some coho and preserve it as frozen fish, but others said that they don't normally fish for Coho but would this year to try and augment their lower Chinook catches. Some families said they would target more whitefish to meet their total subsistence needs this year because 4-inch mesh was still allowed during the subsistence closures and closures around commercial salmon fishing periods.

**Chinook:**
**Catch rate:** Of the 15 families fishing this week, 2 (13%) families reported the Chinook catch as very good, 0 families reported the catch as normal, 10 (67%) families reported it as poor. 3 (20%) families were not able to comment. Mesh restrictions allowing 6-inch and smaller nets were lifted on Thursday, July 7th. Many families still made observations that the Chinook seemed to be smaller in size and less abundant overall than last year's run. A few fishers thought that low catch rates in their set nets were caused by people stealing fish, which seemed to be more of a problem this year than before.

**Run timing:** 0 families reported the run as early, 6 (40%) families reported the run timing as normal for this time, and 5 (33%) families reported the run to be late this year. 4 (27%) families did not comment on run timing for this week. People who are still fishing or retained their commercial catch of Chinook for subsistence (as required by ADF&G) noted that they were still catching a few kings that were still silver with no spawning color. Some fishers indicated that normally around June 20th of every year through the first week of July is when they start to catch bigger and more female kings. However, this year they were unsure of the overall run timing due to not fishing around the subsistence closures.

**Harvest Goals**: 14 of the families interviewed this week met harvest goals. Many families that reported being done fishing in previous ONC surveys had already met their Chinook harvest goals for the year, or harvested less Chinook for conservation reasons. 5 families interviewed this week reported not meeting their Chinook harvest goals.

**Chum:**
**Catch Rate:** Of the 15 families fishing this week, 12 (80%) families reported their catch rates as good. 1 (7%) family reported their catches as normal. 0 families reported their chum catches as poor. 2 (13%) families were not able to comment. Many fishermen reported fishing one minute drifts and pulling in their nets as fast as they can, due to the high abundance of chum.

**Run timing:** 2 (13%) families reported the run return as early. 10 (67%) families reported the salmon run timing as normal. 0 families reported the run to be late. 3 (20%) families were not able to comment.

**Harvest Goals**: 15 of the families reported meeting their harvest goals for chum this year. 1 family reported not meeting their chum harvest goals yet.

**Sockeye:**
**Catch Rate:** Of the 15 families fishing this week, 5 (33%) families reported their catch rates as good. 3 (20%) families reported their catches as normal. 5 (33%) families reported their sockeye catches as poor. 2 (13%) families were not able to comment. Many fishers reported very good catches of sockeye and were happy that the run was strong enough to put up more sockeye this year, which will augment their smaller king catches.

**Run timing:** 0 families reported the run return as early. 8 (53%) families reported the salmon run timing as normal. 4 (27%) families reported the run to be late compared to previous years. 3 (20%) families were not able to comment.

**Harvest Goals**: 15 of the families reported to meet harvest their harvest goals for sockeye this year. 1 family reported not meeting their sockeye goals yet.

-continued-

**KNA Weekly Subsistence Fishing Reports, July 9 to July 13, 2011**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | TOTAL # FISH CAUGHT |
|---|---|---|---|---|---|---|---|
| **Kalskag** | **FAMILY A** | Yes | Drift Net | NR | | | |
| Comments: Interviewed on Wednesday 7-13-11<br><br>Since last contacted they have caught 3-5 Kings per drift and they did approximately 8 drifts for the week. Said the fishing is below average and it might help to slow down commercial fishing again. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | Below Average | 24-40 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 1 |
| **Aniak** | **FAMILY D** | Yes | Drift Net | 8" | | | |
| Comments: Interviewed on Wednesday 7-13-11<br><br>Since last contacted made 2 drifts and caught 19 Kings and 1 Chum. For this time of year above average, they do not usually fish this late in the season for Kings. The kings caught were large in size. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | Above Average | 19 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 1 |
| **Aniak** | **FAMILY E** | Yes | Drift Net | 5" | | | |
| Comments: Interviewed on Wednesday 7-13-11<br><br>Since last contacted caught 9 Kings, 38 Chum, 2 Sockeye. There is a large amount of chum and old king. The kings are less firm, the sockeye numbers have dropped off and the chum are thick in size. | | | | | **Sockeye** | Above Average | 2 |
| | | | | | **Chinook** | Above Average | 9 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | Above Average | 38 |
| **Chuathbaluk** | **FAMILY H** | Yes | Drift Net | NR | | | |
| Comments: Interviewed on Wednesday 7-13-11<br><br>Since last contacted caught 50 Kings, 200 Chum, 60 Sockeye. The run is average. They will be done in a few days because they have what they need. The closure in Bethel helped. | | | | | **Sockeye** | Average | 60 |
| | | | | | **Chinook** | Average | 50 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | Average | 200 |
| **Chuathbaluk** | **FAMILY I** | Yes | Drift Net | NR | | | |
| Comments: Interviewed on Wednesday 7-13-11<br><br>Since last contacted caught 6 Kings. Said the number is below average. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | Below Average | 6 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |

-continued-

**KNA Weekly Subsistence Fishing Reports, July 9 to July 13, 2011 (Continued)**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | TOTAL # FISH CAUGHT |
|---|---|---|---|---|---|---|---|
| **Crooked Creek** | **FAMILY N** | No | NR | NR | | | |
| Comments:<br>Interviewed on Wednesday 7-13-11<br><br>Since last contacted they have not been fishing. | | | | | **Sockeye** | NR | NR |
| | | | | | **Chinook** | NR | NR |
| | | | | | **Coho** | NR | NR |
| | | | | | **Chum** | NR | NR |
| **Sleetmute** | **FAMILY O** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed on Tuesday 7-12-11<br><br>Since last contacted they have caught an average of 22 Sockeye per day of drifting and 0 Kings. They drifted 3 days. They will be done in a few more days with what they need for the winter. Said everyone in the area is happy with the Sockeye run. | | | | | **Sockeye** | Average | 66 |
| | | | | | **Chinook** | Below Average | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Sleetmute** | **Family P** | Yes | Drift Net | 6" | | | |
| Comments:<br>Interviewed on Wednesday 7/13<br><br>Since last contacted, fished 2 days and caught 4 Kings, 23 Chum, 23 Sockeye. The sockeye run is above average and it's making up for the Kings. The King run is average for the last 5-10 years, but not like it was 20 years ago. | | | | | **Sockeye** | Above | 23 |
| | | | | | **Chinook** | Average | 4 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 23 |
| **Stony River** | **FAMILY Q** | Yes | Fish Wheel | 4 feet wide | | | |
| Comments:<br>Interviewed on Tuesday 7-12-11<br><br>6th: 2 Kings, 8 Chum, 1 White Fish<br>7th: 3 Kings, 12 Chum, 1 Sockeye<br>8th: 4 Kings, 14 Chum, 5 Sockeye, 2 White Fish<br>9th: 6 Kings, 6 Chum, 1 Sockeye<br>10th : 4 Kings, 6 Chum<br>11th: 6 Chum<br>12th: 7 Chum, 2 White Fish<br><br>Asked others in the area fishing with nets about the fishing and they mentioned they were catching a little bit more than the wheel, but didn't give numbers. The wheel is on the West side of the bank, but going to move it to the East side to see if it will do better. | | | | | **Sockeye** | Average | 7 |
| | | | | | **Chinook** | Average | 19 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | Average | 59 |

**KNA Comments:**

The following participant families have not been able to contact: Kalskag: 1 Family

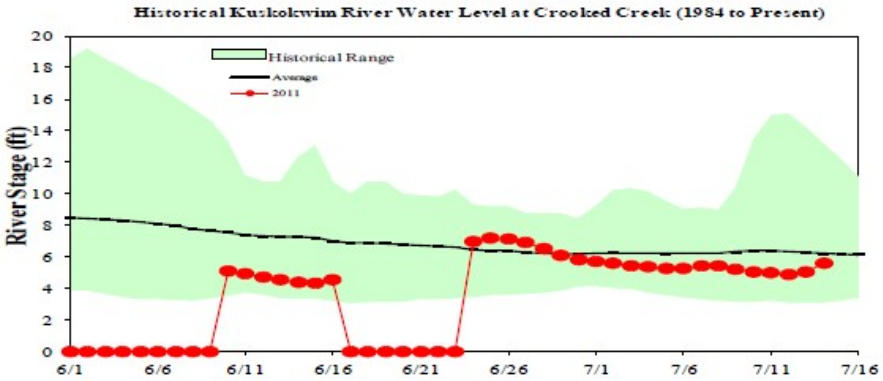
The following participant families are done fishing as of last week: Aniak: 1 Family

The following participant families did not fish this week: Crooked Creek: 1 Family

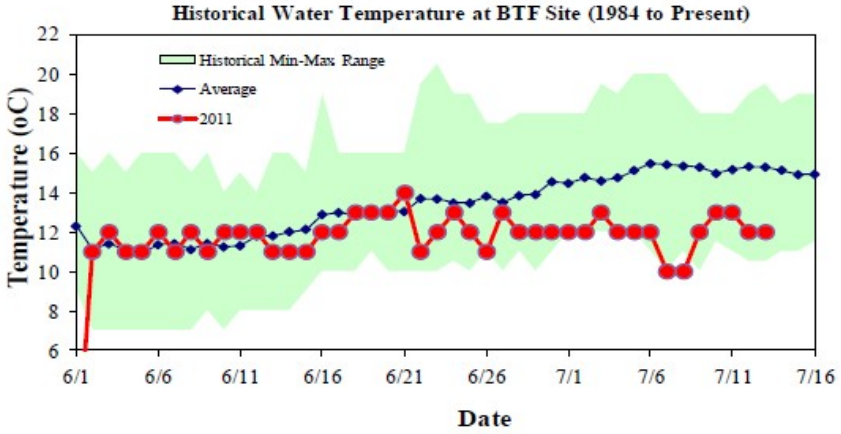
**There is one family from Napaimute that wanted to be added to the report, but we were unable to contact him.

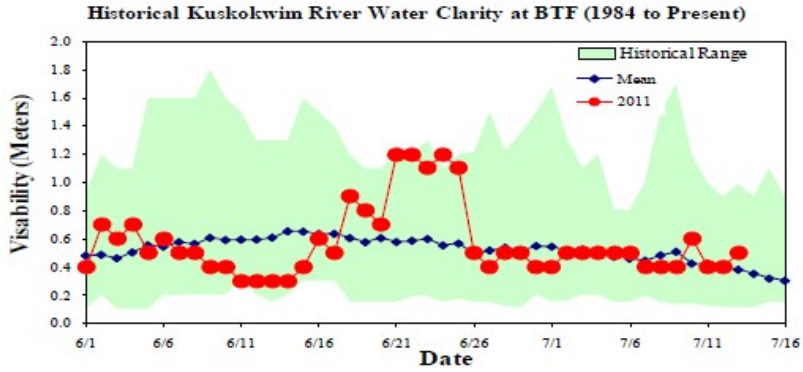
## OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSMENT PROJECTS

-continued-



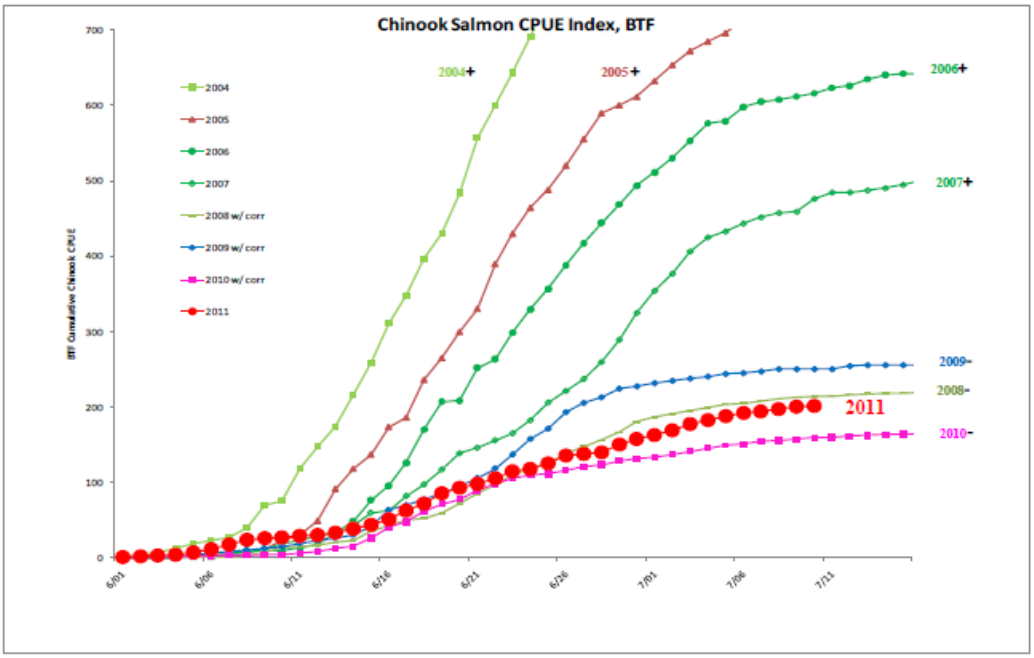

2011 Crooked Creek gauging station not operational June 1 to June 9 and June 17 to June 22.




-continued-

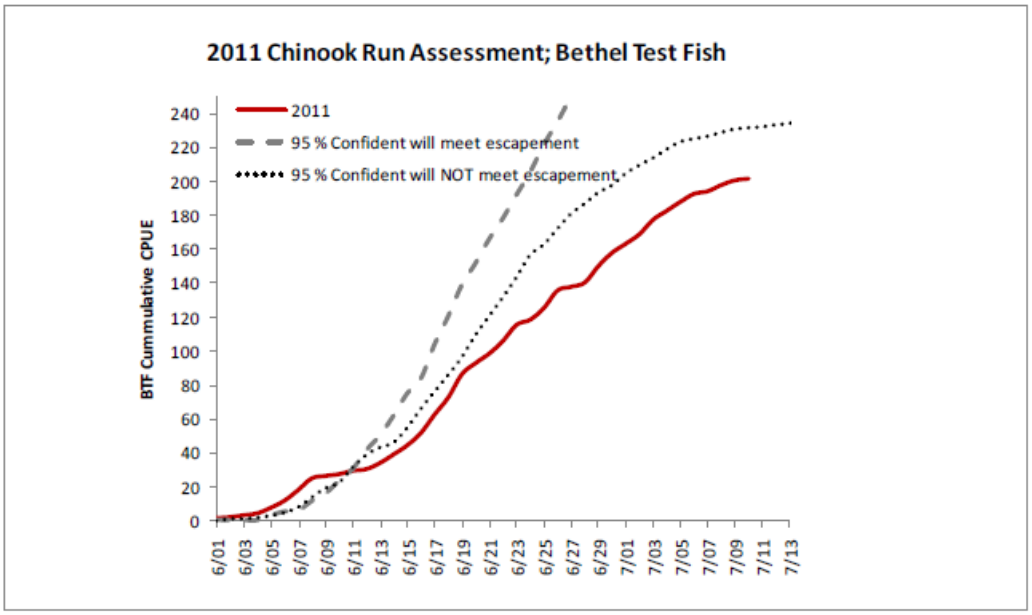
**Chinook Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Chinook Salmon Cumulative CPUE Index, BTF**

| Date | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|
| 6/20 | 484 | 299 | 208 | 138 | 72 | 95 | 77 | 93 |
| 6/21 | 556 | 330 | 252 | 146 | 85 | 106 | 90 | 98 |
| 6/22 | 600 | 389 | 263 | 156 | 97 | 118 | 99 | 106 |
| 6/23 | 643 | 430 | 298 | 165 | 110 | 137 | 105 | 115 |
| 6/24 | 691 | 464 | 329 | 182 | 119 | 158 | 109 | 118 |
| 6/25 | 738 | 488 | 356 | 206 | 126 | 171 | 111 | 125 |
| 6/26 | 785 | 520 | 388 | 221 | 139 | 193 | 116 | 135 |
| 6/27 | 801 | 555 | 417 | 237 | 148 | 205 | 121 | 138 |
| 6/28 | 848 | 589 | 444 | 259 | 156 | 213 | 124 | 140 |
| 6/29 | 893 | 600 | 469 | 289 | 167 | 224 | 129 | 150 |
| 6/30 | 928 | 611 | 493 | 325 | 181 | 227 | 131 | 158 |
| 7/01 | 951 | 632 | 511 | 354 | 187 | 232 | 134 | 163 |
| 7/02 | 967 | 653 | 530 | 377 | 191 | 235 | 137 | 169 |
| 7/03 | 979 | 672 | 553 | 406 | 195 | 238 | 141 | 177 |
| 7/04 | 985 | 684 | 576 | 425 | 199 | 241 | 145 | 182 |
| 7/05 | 993 | 696 | 579 | 433 | 204 | 244 | 149 | 188 |
| 7/06 | 1,002 | 715 | 598 | 443 | 205 | 245 | 151 | 192 |
| 7/07 | 1,006 | 744 | 604 | 451 | 208 | 247 | 154 | 194 |
| 7/08 | 1,013 | 775 | 607 | 457 | 211 | 250 | 156 | 198 |
| 7/09 | 1,023 | 795 | 611 | 459 | 213 | 250 | 157 | 201 |
| 7/10 | 1,026 | 809 | 616 | 476 | 214 | 250 | 159 | 201 |

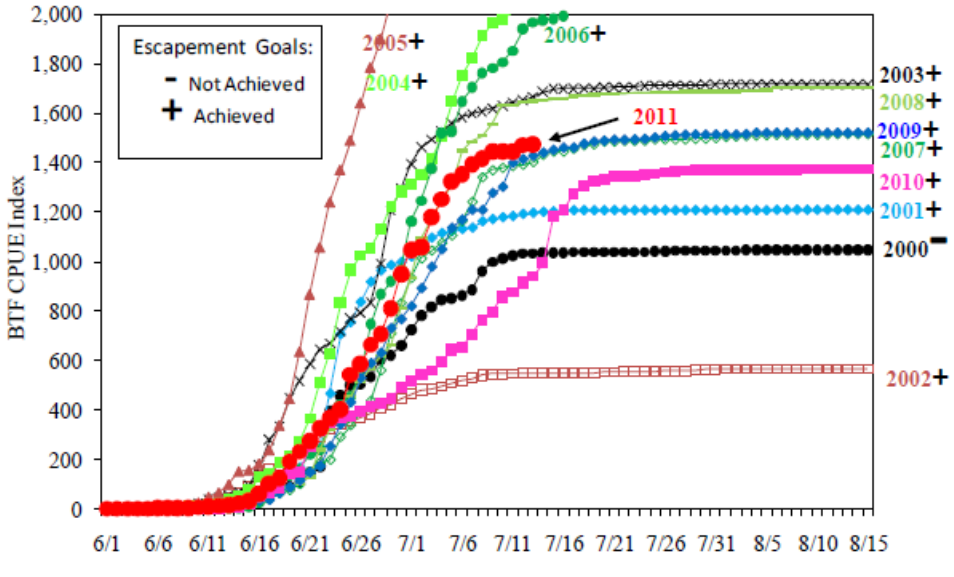
-continued-




- If BTF tracks *below* the *dotted* line, we are 95% confident that escapement goals will NOT be met.
- If BTF tracks *above* the *dashed* line, we are 95% confident that escapement goals will be met.

-continued-

**Sockeye Salmon Cumulative CPUE Index, Bethel Test Fishery**

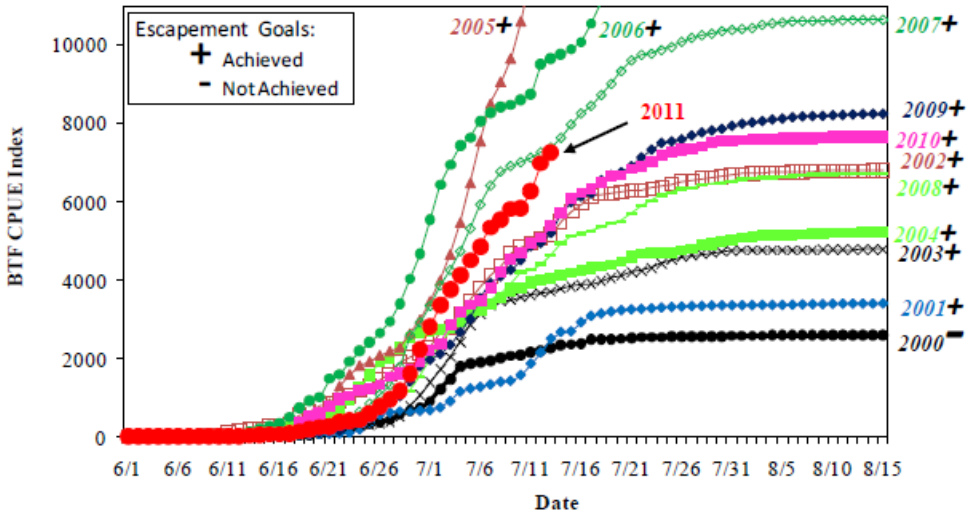



**Sockeye Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30 | 660 | 998 | 446 | 1,296 | 1,283 | 2,204 | 971 | 833 | 813 | 766 | 491 | 952 |
| 7/01 | 724 | 1,020 | 464 | 1,395 | 1,315 | 2,298 | 1,164 | 934 | 933 | 818 | 515 | 1,048 |
| 7/02 | 782 | 1,048 | 482 | 1,462 | 1,352 | 2,365 | 1,247 | 1,014 | 1,092 | 892 | 545 | 1,058 |
| 7/03 | 817 | 1,096 | 486 | 1,495 | 1,418 | 2,440 | 1,379 | 1,046 | 1,178 | 979 | 561 | 1,180 |
| 7/04 | 845 | 1,115 | 496 | 1,528 | 1,507 | 2,512 | 1,520 | 1,077 | 1,251 | 1,048 | 594 | 1,252 |
| 7/05 | 850 | 1,123 | 508 | 1,560 | 1,647 | 2,583 | 1,528 | 1,107 | 1,312 | 1,136 | 645 | 1,324 |
| 7/06 | 865 | 1,132 | 518 | 1,586 | 1,753 | 2,655 | 1,650 | 1,165 | 1,450 | 1,169 | 655 | 1,353 |
| 7/07 | 887 | 1,137 | 528 | 1,600 | 1,825 | 2,715 | 1,704 | 1,243 | 1,487 | 1,209 | 708 | 1,396 |
| 7/08 | 962 | 1,163 | 542 | 1,608 | 1,912 | 2,773 | 1,763 | 1,343 | 1,509 | 1,209 | 766 | 1,417 |
| 7/09 | 998 | 1,171 | 546 | 1,621 | 1,965 | 2,816 | 1,784 | 1,371 | 1,557 | 1,277 | 795 | 1,448 |
| 7/10 | 1,012 | 1,179 | 546 | 1,633 | 1,980 | 2,845 | 1,807 | 1,381 | 1,634 | 1,302 | 858 | 1,448 |
| 7/11 | 1,025 | 1,184 | 548 | 1,646 | 2,010 | 2,860 | 1,854 | 1,389 | 1,636 | 1,400 | 879 | 1,448 |
| 7/12 | 1,033 | 1,192 | 550 | 1,652 | 2,013 | 2,870 | 1,941 | 1,394 | 1,647 | 1,414 | 914 | 1,472 |
| 7/13 | 1,033 | 1,197 | 550 | 1,668 | 2,025 | 2,880 | 1,968 | 1,405 | 1,650 | 1,428 | 942 | 1,476 |
| 7/14 | 1,035 | 1,201 | 550 | 1,688 | 2,032 | 2,890 | 1,976 | 1,434 | 1,653 | 1,441 | 995 | |
| 7/15 | 1,035 | 1,203 | 550 | 1,699 | 2,035 | 2,896 | 1,985 | 1,447 | 1,658 | 1,452 | 1,186 | |
| 7/16 | 1,035 | 1,206 | 550 | 1,700 | 2,035 | 2,896 | 1,995 | 1,447 | 1,661 | 1,461 | 1,209 | |
| 7/17 | 1,039 | 1,208 | 550 | 1,700 | 2,039 | 2,904 | 2,018 | 1,459 | 1,669 | 1,461 | 1,275 | |
| 7/18 | 1,039 | 1,208 | 550 | 1,700 | 2,043 | 2,912 | 2,026 | 1,473 | 1,672 | 1,476 | 1,309 | |
| 7/19 | 1,039 | 1,208 | 550 | 1,700 | 2,052 | 2,923 | 2,031 | 1,477 | 1,674 | 1,485 | 1,328 | |
| 7/20 | 1,039 | 1,208 | 554 | 1,704 | 2,059 | 2,934 | 2,073 | 1,488 | 1,677 | 1,489 | 1,333 | |

-continued-

**Chum Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Chum Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6/30 | 727 | 654 | 2136 | 1059 | 2653 | 2989 | 4660 | 2917 | 1550 | 1800 | 1931 | 2223 |
| 7/01 | 908 | 676 | 2299 | 1387 | 2690 | 3455 | 5530 | 3341 | 2010 | 1959 | 2196 | 2812 |
| 7/02 | 1222 | 744 | 2660 | 1711 | 2736 | 3982 | 6437 | 3861 | 2377 | 2104 | 2378 | 3353 |
| 7/03 | 1475 | 900 | 2768 | 2031 | 2819 | 4650 | 6937 | 4252 | 2680 | 2339 | 2838 | 3750 |
| 7/04 | 1794 | 1148 | 3147 | 2413 | 2965 | 5464 | 7424 | 4736 | 2953 | 2663 | 3172 | 4127 |
| 7/05 | 1879 | 1227 | 3480 | 2857 | 3120 | 6477 | 7629 | 5314 | 3197 | 3000 | 3380 | 4504 |
| 7/06 | 1901 | 1267 | 3800 | 3127 | 3226 | 7542 | 8053 | 5927 | 3391 | 3530 | 3478 | 4854 |
| 7/07 | 1941 | 1328 | 4107 | 3352 | 3395 | 8496 | 8278 | 6414 | 3471 | 3917 | 3802 | 5340 |
| 7/08 | 2008 | 1397 | 4367 | 3447 | 3561 | 9055 | 8409 | 6775 | 3660 | 4083 | 4205 | 5542 |
| 7/09 | 2063 | 1423 | 4696 | 3503 | 3733 | 9656 | 8468 | 6914 | 3909 | 4256 | 4524 | 5811 |
| 7/10 | 2085 | 1568 | 4846 | 3558 | 3800 | 10604 | 8609 | 7011 | 4219 | 4502 | 4716 | 5843 |
| 7/11 | 2162 | 1863 | 4945 | 3618 | 3945 | 11899 | 8743 | 7127 | 4260 | 4855 | 4940 | 6264 |
| 7/12 | 2193 | 2141 | 5068 | 3663 | 3993 | 12658 | 9519 | 7261 | 4396 | 4937 | 5089 | 6978 |
| 7/13 | 2268 | 2498 | 5165 | 3706 | 4061 | 13135 | 9656 | 7389 | 4637 | 5193 | 5385 | 7245 |
| 7/14 | 2334 | 2667 | 5488 | 3772 | 4122 | 13612 | 9759 | 7636 | 4941 | 5688 | 5712 | |
| 7/15 | 2360 | 2682 | 5758 | 3838 | 4175 | 13830 | 9887 | 7976 | 5135 | 5977 | 6087 | |
| 7/16 | 2385 | 2917 | 5936 | 3873 | 4254 | 13876 | 10078 | 8257 | 5198 | 6124 | 6210 | |
| 7/17 | 2477 | 3078 | 6140 | 3893 | 4309 | 14239 | 10541 | 8452 | 5259 | 6200 | 6334 | |
| 7/18 | 2492 | 3136 | 6187 | 3973 | 4364 | 14640 | 11098 | 8728 | 5355 | 6538 | 6482 | |
| 7/19 | 2496 | 3185 | 6206 | 4052 | 4395 | 15047 | 11619 | 9014 | 5441 | 6667 | 6652 | |
| 7/20 | 2506 | 3225 | 6238 | 4120 | 4471 | 15560 | 12181 | 9337 | 5514 | 6742 | 6686 | |

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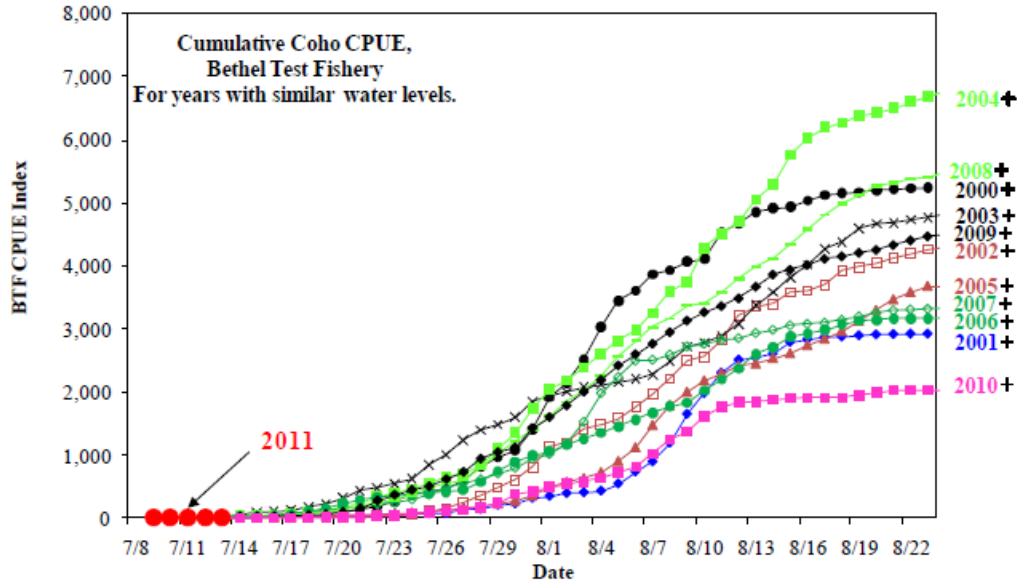
**Coho Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Bethel Test Fish Coho Cumulative CPUE**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/9 | 5 | 0 | 0 | 2 | 9 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 7/10 | 5 | 0 | 2 | 2 | 11 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 7/11 | 5 | 1 | 2 | 5 | 16 | 0 | 3 | 5 | 6 | 5 | 0 | 0 |
| 7/12 | 6 | 7 | 2 | 11 | 16 | 0 | 18 | 5 | 6 | 8 | 0 | 0 |
| 7/13 | 6 | 7 | 3 | 16 | 23 | 0 | 18 | 5 | 6 | 10 | 0 | 0 |
| 7/14 | 8 | 7 | 4 | 41 | 27 | 0 | 18 | 20 | 8 | 10 | 0 | |
| 7/15 | 12 | 7 | 5 | 78 | 30 | 2 | 19 | 26 | 16 | 10 | 0 | |
| 7/16 | 33 | 14 | 7 | 99 | 33 | 2 | 26 | 39 | 30 | 14 | 3 | |
| 7/17 | 74 | 17 | 9 | 116 | 56 | 7 | 48 | 63 | 52 | 14 | 3 | |
| 7/18 | 87 | 21 | 11 | 166 | 78 | 13 | 98 | 82 | 68 | 35 | 3 | |
| 7/19 | 93 | 24 | 11 | 217 | 120 | 26 | 148 | 120 | 93 | 51 | 5 | |
| 7/20 | 97 | 28 | 11 | 316 | 173 | 41 | 226 | 148 | 127 | 80 | 7 | |

-continued-

## ESCAPEMENT MONITORING

### CHINOOK SALMON – Weir Counts

**Tuluksak River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal — **Esc Goal Range: 1,000 to 2,100**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 252 | 651 | 625 | 849 | 1,592 | 246 | 116 | 104 | 41 | 43 | 18 |
| 7/11 | 318 | 702 | 630 | 921 | 1,621 | 286 | 140 | 108 | 105 | 44 | 18 |
| 7/12 | 381 | 731 | 636 | 933 | 1,667 | 348 | 142 | 113 | 145 | 53 | 35 |
| 7/13 | 471 | 925 | 645 | 962 | 1,730 | 358 | 146 | 113 | 151 | 53 | 47 |
| 7/14 | 689 | 952 | 652 | 983 | 1,793 | 367 | 151 | 125 | 151 | 62 | |
| 7/15 | 715 | 964 | 660 | 1,002 | 1,845 | 392 | 152 | 131 | 154 | 65 | |
| 7/16 | 746 | 988 | 671 | 1,025 | 1,942 | 402 | 158 | 168 | 117 | 66 | |
| Season Total | 997 | 1,346 | 1,064 | 1,475 | 2,653 | 1,044 | 374 | 665 | 404 | 239 | NA |

**Kwethluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. — **Esc Goal Range: 6,000 to 11,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | . | 4,554 | 7,124 | 19,489 | . | 9,887 | 4,427 | 1,630 | 1,740 | 522 | 1,169 |
| 7/11 | | 5,040 | 7,522 | 20,436 | | 10,242 | 4,798 | 1,773 | 2,217 | 526 | 1,395 |
| 7/12 | | 5,400 | 7,905 | 21,479 | | 11,006 | 5,695 | 1,854 | 2,928 | 557 | 1,526 |
| 7/13 | | 5,663 | 8,902 | 22,122 | | 11,488 | 6,978 | 2,016 | 3,030 | 638 | 1,708 |
| 7/14 | | 5,938 | 9,634 | 22,774 | | 11,738 | 7,372 | 2,074 | 3,315 | 668 | |
| 7/15 | | 6,030 | 10,085 | 22,935 | | 11,908 | 7,656 | 2,346 | 3,363 | 699 | |
| 7/16 | | 6,239 | 10,380 | 22,978 | | 12,110 | 7,952 | 2,459 | 3,675 | 763 | |
| Season Total | NA | 8,502 | 14,474 | 28,605 | NA | 17,619 | 13,267 | 5,312 | 5,744 | 1,693 | NA |

**George River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. — **Esc Goal Range: 3,100 to 7,900**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 1,802 | 1,748 | 3,911 | 3,586 | 2,842 | 2,542 | 3,037 | 237 | 1,693 | 707 | 615 |
| 7/11 | 1,866 | 1,890 | 3,916 | 3,830 | 2,953 | 2,874 | 3,220 | 247 | 1,945 | 814 | 686 |
| 7/12 | 2,476 | 1,927 | 3,956 | 4,070 | 3,061 | 3,040 | 3,396 | 288 | 2,262 | 835 | 901 |
| 7/13 | 2,533 | 1,982 | 4,015 | 4,178 | 3,138 | 3,072 | 3,486 | 519 | 2,620 | 951 | 1,035 |
| 7/14 | 2,646 | 2,056 | 4,055 | 4,277 | 3,190 | 3,078 | 3,614 | 676 | 2,868 | 979 | |
| 7/15 | 2,732 | 2,085 | 4,145 | 4,352 | 3,276 | 3,085 | 3,738 | 923 | 2,963 | 1,001 | |
| 7/16 | 2,758 | 2,120 | 4,156 | 4,441 | 3,337 | 3,292 | 3,856 | 1,045 | 3,020 | 1,048 | |
| Season Total | 3,309 | 2,444 | 4,693 | 5,207 | 3,845 | 4,357 | 4,883 | 2,698 | 3,663 | 1,500 | N/A |

**Tatlawiksuk River weir historical cumulative daily Chinook salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 1,475 | 1,808 | 1,033 | 2,102 | 1,867 | 973 | 1,384 | 81 | 576 | 262 | 434 |
| 7/11 | 1,489 | 1,856 | 1,068 | 2,145 | 2,010 | 1,019 | 1,459 | 120 | 728 | 278 | 460 |
| 7/12 | 1,537 | 1,875 | 1,102 | 2,161 | 2,111 | 1,130 | 1,489 | 184 | 792 | 302 | 554 |
| 7/13 | 1,687 | 1,895 | 1,190 | 2,259 | 2,197 | 1,189 | 1,526 | 235 | 820 | 337 | 698 |
| 7/14 | 1,735 | 1,916 | 1,255 | 2,288 | 2,320 | 1,241 | 1,553 | 385 | 879 | 355 | |
| 7/15 | 1,782 | 2,019 | 1,293 | 2,319 | 2,355 | 1,282 | 1,623 | 452 | 891 | 374 | |
| 7/16 | 1,794 | 2,029 | 1,321 | 2,366 | 2,451 | 1,318 | 1,678 | 480 | 899 | 399 | |
| Season Total | 2,010 | 2,237 | 1,683 | 2,833 | 2,920 | 1,700 | 2,061 | 1,071 | 1,071 | 567 | NA |

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## ESCAPEMENT MONITORING *(Continued)*

### CHINOOK SALMON – Weir Counts

**Kogrukluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal Range: 5,300 to 14,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 4,268 | 4,695 | 4,418 | 9,482 | 9,006 | 5,616 | 1,799 | 116 | 1,242 | 405 | 336 |
| 7/11 | 4,912 | 5,499 | 4,489 | 10,651 | 10,013 | 6,025 | 2,392 | 167 | 1,676 | 682 | 456 |
| 7/12 | 5,427 | 6,046 | 5,091 | 11,578 | 10,687 | 6,784 | 3,005 | 191 | 2,209 | 944 | 506 |
| 7/13 | 5,835 | 6,488 | 5,448 | 12,045 | 11,165 | 7,301 | 3,640 | 901 | 2,784 | 1,088 | 519 |
| 7/14 | 6,283 | 6,890 | 6,209 | 12,617 | 11,999 | 7,887 | 4,295 | 1,265 | 3,176 | 1,402 | |
| 7/15 | 6,504 | 7,271 | 6,763 | 13,167 | 12,685 | 8,516 | 4,972 | 1,485 | 3,484 | 1,762 | |
| 7/16 | 6,948 | 7,586 | 7,409 | 13,509 | 13,514 | 9,749 | 5,669 | 1,788 | 4,019 | 2,034 | |
| Season Total | 9,298 | 10,104 | 11,771 | 19,651 | 22,000 | 19,414 | 13,029 | 9,730 | 9,702 | 5,690 | NA |

**Takotna River weir historical cumulative daily Chinook salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 293 | 91 | 103 | 290 | 227 | 168 | 163 | 67 | 99 | 40 | 16 |
| 7/11 | 302 | 184 | 113 | 305 | 249 | 189 | 205 | 70 | 121 | 52 | 16 |
| 7/12 | 332 | 235 | 129 | 319 | 266 | 209 | 225 | 73 | 131 | 59 | 30 |
| 7/13 | 377 | 237 | 153 | 322 | 322 | 224 | 235 | 83 | 136 | 66 | |
| 7/14 | 406 | 239 | 158 | 338 | 339 | 241 | 245 | 86 | 176 | 80 | |
| 7/15 | 447 | 241 | 160 | 350 | 342 | 241 | 277 | 96 | 179 | 82 | |
| 7/16 | 475 | 241 | 165 | 359 | 385 | 244 | 280 | 106 | 199 | 83 | |
| Season Total | 721 | 316 | 378 | 461 | 499 | 539 | 418 | 413 | 311 | 178 | NA |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Weir Counts

**Tuluksak River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/10 | 2,010 | 1,865 | 1,095 | 4,122 | 5,838 | 7,344 | 1,613 | 1,321 | 249 | 2,441 | 450 |
| 7/11 | 2,377 | 2,410 | 1,208 | 4,425 | 6,324 | 7,972 | 2,748 | 1,678 | 460 | 2,607 | 593 |
| 7/12 | 2,951 | 2,640 | 1,444 | 4,764 | 7,206 | 9,019 | 2,889 | 2,065 | 1,343 | 2,939 | 856 |
| 7/13 | 3,599 | 3,091 | 1,725 | 5,007 | 10,003 | 9,059 | 3,302 | 2,302 | 1,524 | 3,364 | 977 |
| 7/14 | 4,584 | 3,375 | 1,848 | 5,356 | 11,302 | 9,291 | 3,806 | 2,646 | 1,677 | 3,706 | |
| 7/15 | 5,355 | 3,571 | 2,045 | 5,510 | 13,140 | 9,784 | 4,255 | 2,879 | 1,716 | 4,574 | |
| 7/16 | 6,304 | 4,246 | 2,261 | 5,624 | 14,901 | 10,710 | 4,906 | 3,301 | 2,094 | 4,948 | |
| Season Total | 19,321 | 9,958 | 11,724 0 | 11,796 | 35,696 | 25,648 | 17,286 | 12,518 | 13,671 | 13,424 | NA |

**Kwethluk River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | | 10,217 | 4,665 | 14,679 | | 20,073 | 9,495 | 4,080 | 3,777 | 5,141 | 2,261 |
| 7/11 | | 11,498 | 5,476 | 16,002 | | 21,338 | 11,274 | 4,459 | 5,965 | 5,274 | 2,948 |
| 7/12 | | 12,921 | 7,163 | 17,151 | | 23,939 | 13,820 | 4,865 | 8,663 | 5,665 | 3,479 |
| 7/13 | | 13,643 | 9,617 | 18,089 | | 25,298 | 17,157 | 5,475 | 9,708 | 6,207 | 4,036 |
| 7/14 | | 14,592 | 11,313 | 19,692 | | 25,718 | 18,431 | 5,924 | 10,375 | 7,119 | |
| 7/15 | | 15,665 | 12,786 | 20,102 | | 26,605 | 20,001 | 6,809 | 10,743 | 7,722 | |
| 7/16 | | 17,203 | 13,331 | 20,343 | | 28,950 | 21,719 | 7,665 | 12,070 | 8,553 | |
| Season Total | NA | 35,854 | 41,812 | 38,646 | NA | 47,490 | 54,913 | 20,030 | 32,191 | 19,242 | NA |

**Aniak River sonar historical cumulative daily chum salmon escapement index.**

= years below escapement goal.

**Esc Goal Range: 220,000 to 480,000**

| Date | Cumulative Daily Count | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 126,019 | 200,914 | 139,213 | 223,885 | 303,921 | 447,265 | 163,826 | 59,476 | 70,627 | 111,071 | 52,105 |
| 7/11 | 136,248 | 221,020 | 147,944 | 246,221 | 349,188 | 474,291 | 181,764 | 66,550 | 90,197 | 128,709 | 59,073 |
| 7/12 | 147,706 | 241,227 | 160,416 | 270,531 | 379,367 | 506,439 | 196,424 | 75,137 | 116,523 | 145,483 | 71,483 |
| 7/13 | 165,932 | 252,772 | 180,543 | 297,149 | 417,930 | 542,957 | 244,752 | 89,461 | 145,729 | 167,207 | 90,295 |
| 7/14 | 183,728 | 264,931 | 211,860 | 324,887 | 494,582 | 562,772 | 302,338 | 115,892 | 162,776 | 177,127 | |
| 7/15 | 199,404 | 284,114 | 228,189 | 349,021 | 550,087 | 581,276 | 310,097 | 149,012 | 174,623 | 200,001 | |
| 7/16 | 215,107 | 308,555 | 237,903 | 376,351 | 591,633 | 624,344 | 318,052 | 168,608 | 185,264 | 224,323 | |
| Season Total | 408,830 | 472,346 | 477,544 | 673,445 | 1,173,155 | 1,108,626 | 699,178 | 427,911 | 479,531 | 429,643 | NA |

**George River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 2,247 | 3,427 | 4,679 | 8,338 | 5,076 | 13,890 | 13,152 | 6,195 | 1,867 | 7,890 | 10,753 |
| 7/11 | 2,793 | 3,826 | 4,903 | 8,805 | 5,535 | 15,426 | 14,061 | 7,258 | 2,407 | 8,638 | 12,251 |
| 7/12 | 3,393 | 4,105 | 5,704 | 9,077 | 6,290 | 16,624 | 15,324 | 9,085 | 2,772 | 9,645 | 14,706 |
| 7/13 | 3,822 | 4,254 | 7,560 | 9,489 | 6,887 | 17,072 | 16,690 | 10,849 | 2,995 | 11,146 | |
| 7/14 | 4,432 | 4,457 | 9,580 | 9,870 | 7,620 | 17,247 | 18,086 | 13,114 | 3,528 | 12,005 | |
| 7/15 | 4,969 | 4,733 | 11,119 | 10,168 | 8,098 | 17,565 | 19,563 | 14,472 | 3,679 | 12,645 | |
| 7/16 | 5,294 | 4,938 | 11,587 | 10,350 | 8,599 | 18,529 | 21,122 | 15,427 | 3,918 | 13,843 | |
| Season Total | 11,601 | 6,543 | 33,666 | 14,409 | 14,828 | 41,467 | 55,842 | 29,978 | 7,941 | 26,154 | NA |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Weir Counts

**Tatlawiksuk River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 7,124 | 12,442 | | 8,612 | 14,210 | 13,829 | 24,018 | 5,326 | 2,798 | 10,500 | 19,545 |
| 7/11 | 7,720 | 13,680 | | 9,037 | 16,951 | 14,847 | 27,384 | 6,566 | 3,478 | 11,903 | 22,519 |
| 7/12 | 8,899 | 14,549 | | 9,539 | 19,726 | 16,212 | 31,300 | 8,169 | 4,176 | 13,735 | 27,597 |
| 7/13 | 10,098 | 15,251 | | 10,506 | 22,336 | 17,215 | 34,932 | 9,977 | 4,899 | 15,534 | 32,855 |
| 7/14 | 11,399 | 15,958 | | 11,265 | 25,431 | 17,719 | 37,592 | 12,079 | 5,802 | 17,255 | |
| 7/15 | 12,729 | 17,081 | | 11,907 | 28,211 | 18,210 | 40,347 | 13,290 | 6,497 | 18,880 | |
| 7/16 | 13,821 | 17,758 | | 12,736 | 31,494 | 19,139 | 44,078 | 14,678 | 7,269 | 20,996 | |
| Season Total | 23,718 | 24,542 | NA | 21,245 | 55,720 | 32,301 | 83,246 | 30,896 | 19,975 | 36,701 | NA |

**Kogrukluk River weir historical cumulative daily chum salmon escapement.**

= years below escapement goal.

**Esc Goal Range: 15,000 to 49,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 4,792 | 22,573 | 5,143 | 9,867 | 34,186 | 56,695 | 6,469 | 1,936 | 4,044 | 8,367 | 3,196 |
| 7/11 | 5,851 | 25,975 | 5,295 | 10,993 | 39,185 | 61,702 | 8,133 | 2,387 | 5,735 | 10,766 | 4,414 |
| 7/12 | 7,062 | 29,031 | 5,839 | 11,443 | 43,065 | 68,316 | 9,945 | 2,759 | 7,922 | 13,236 | 4,879 |
| 7/13 | 8,827 | 31,368 | 6,328 | 11,664 | 46,999 | 74,210 | 11,907 | 3,635 | 10,406 | 15,143 | 5,179 |
| 7/14 | 10,673 | 33,462 | 7,465 | 12,062 | 55,056 | 79,238 | 14,017 | 4,299 | 12,286 | 17,024 | |
| 7/15 | 12,262 | 35,616 | 8,535 | 12,484 | 63,201 | 83,891 | 16,277 | 5,377 | 14,492 | 19,144 | |
| 7/16 | 14,073 | 37,791 | 9,592 | 12,984 | 73,375 | 89,782 | 18,685 | 7,930 | 17,607 | 21,743 | |
| Season Total | 30,570 | 51,570 | 23,413 | 24,201 | 197,723 | 180,594 | 49,505 | 44,978 | 84,940 | 63,583 | NA |

**Takotna River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/10 | 887 | 2,316 | 914 | 844 | 1,945 | 4,391 | 2,103 | 1,386 | 445 | 934 | 1,385 |
| 7/11 | 1,085 | 2,575 | 961 | 918 | 2,138 | 4,860 | 2,636 | 1,568 | 521 | 1,020 | 1,641 |
| 7/12 | 1,457 | 2,841 | 1,038 | 991 | 2,361 | 5,348 | 3,057 | 1,847 | 598 | 1,190 | 2,063 |
| 7/13 | 1,732 | 2,921 | 1,100 | 1,014 | 2,581 | 5,796 | 3,528 | 2,057 | 645 | 1,322 | |
| 7/14 | 2,041 | 3,024 | 1,240 | 1,047 | 2,770 | 6,313 | 4,042 | 2,278 | 724 | 1,409 | |
| 7/15 | 2,306 | 3,121 | 1,369 | 1,069 | 3,011 | 6,726 | 4,297 | 2,544 | 779 | 1,560 | |
| 7/16 | 2,563 | 3,209 | 1,524 | 1,100 | 3,302 | 7,118 | 4,643 | 2,833 | 816 | 1,698 | |
| Season Total | 5,414 | 4,377 | 3,393 | 1,630 | 6,467 | 12,598 | 8,900 | 5,691 | 2,487 | 4,062 | NA |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### SOCKEYE SALMON – Weir Counts

**Kwethluk River historical cumulative daily sockeye salmon escapement.**

Esc Goal: none

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/10 | 134 | 1,975 | 2,881 | | 4,878 | 3,033 | 1,345 | 2,304 | 2,341 | 877 |
| 7/11 | 145 | 2,072 | 2,956 | | 5,026 | 3,265 | 1,464 | 2,682 | 2,416 | 935 |
| 7/12 | 154 | 2,207 | 3,005 | | 5,175 | 3,495 | 1,535 | 3,039 | 2,554 | 1,008 |
| 7/13 | 157 | 2,358 | 3,043 | | 5,266 | 3,595 | 1,632 | 3,069 | 2,677 | 1,062 |
| 7/14 | 163 | 2,457 | 3,101 | | 5,336 | 3,634 e | 1,651 | 3,120 | 2,793 | |
| 7/15 | 170 | 2,500 | 3,111 | | 5,432 | 3,713 f | 1,718 | 3,225 | 2,884 | |
| 7/16 | 182 | 2,522 | 3,119 | | 5,541 | 3,798 f | 1,758 | 3,395 | 3,099 | |
| KWE Total | 272 | 2,928 | 3,490 | n.a. | 6,732 | 5,262 | 2,451 | 4,211 | 4,264 | |

**Kogrukluk River weir historical cumulative daily sockeye salmon escapement.**

= years below escapement goal.

Esc Goal Range: 4,400 to 17,000

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/10 | 2,500 | 1,860 | 1,965 | 2,743 | 10,545 | 11,302 | 509 | 87 | 1,131 | 385 | 252 |
| 7/11 | 3,134 | 2,281 | 2,054 | 3,250 | 12,076 | 12,646 | 781 | 137 | 2,116 | 739 | 356 |
| 7/12 | 3,882 | 2,556 | 2,474 | 3,612 | 13,534 | 14,965 | 1,150 | 177 | 3,381 | 986 | 425 |
| 7/13 | 4,406 | 2,683 | 2,923 | 3,798 | 14,956 | 16,496 | 1,616 | 576 | 4,330 | 1,115 | 462 |
| 7/14 | 5,252 | 2,888 | 3,681 | 4,018 | 17,115 | 18,884 | 2,180 | 1,009 | 5,040 | 1,352 | |
| 7/15 | 5,751 | 3,045 | 4,386 | 4,225 | 18,908 | 21,504 | 2,842 | 1,300 | 6,241 | 1,686 | |
| 7/16 | 6,097 | 3,256 | 4,888 | 4,350 | 21,155 | 25,641 | 3,601 | 1,822 | 7,852 | 2,046 | |
| Season Total | 8,776 | 4,050 | 9,164 | 6,775 | 37,939 | 60,807 | 16,525 | 19,675 | 23,785 | 13,995 | NA |

**Telequana Lake Weir histroical cumulative daily sockeye salmon escapement.**

Esc Goal Range: None

| Date | Cummulative Daily Passage | |
|---|---|---|
| | 2010 | 2011 |
| 7/10 | 3,937 | 910 |
| 7/11 | 5,983 | 3,340 |
| 7/12 | 7,239 | 6,319 |
| 7/13 | 7,677 | 8,358 |
| 7/14 | 8,318 | |
| 7/15 | 8,762 | |
| 7/16 | 9,187 | |
| Season Total | 72,021 | N/A |

-continued-

**COMMERCIAL CATCH REPORT**

**July 20, Subdistric 1-A Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/19/2010 | **1-A** | 61 | 4 | 68 | 0.28 | 2,475 | 10.1 | 3,918 | 16.1 | 0 | 0.0 |

**July 22, Subdistrict 1-B Comparison of Most Recent Opening to Similar Dates With Fishing**

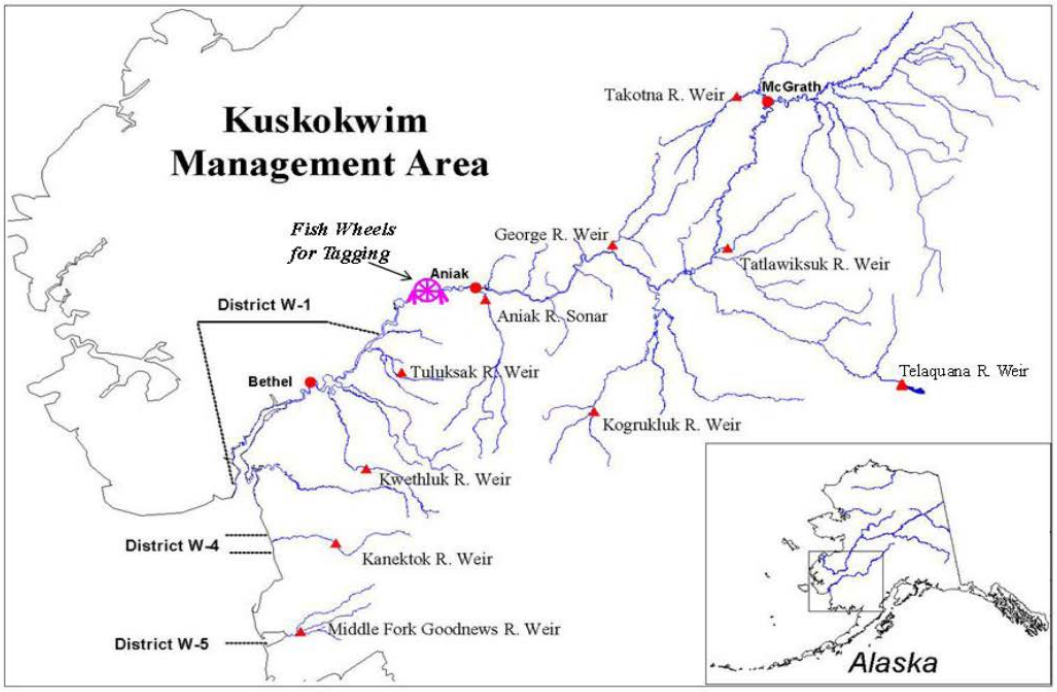
| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/21/2010 | **1-B** | 141 | 4 | 86 | 0.15 | 902 | 1.6 | 7,385 | 13.1 | 1,554 | 2.8 |

**Total cumulative harvest in District 1**

| | Sub- | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Distrit | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/5/2011 | **1B** | 116 | 4 | 192 | 0.41 | 2,471 | 5.3 | 13,657 | 29.4 | 0 | 0.0 |
| 7/7/2011 | **1A** | 63 | 3 | 127 | 0.67 | 2,339 | 12.4 | 8,130 | 43.0 | 0 | 0.0 |
| 7/9/2011 | **1A** | 61 | 3 | 74 | 0.40 | 2,541 | 13.9 | 6,850 | 37.4 | 1 | 0.0 |
| 7/11/2011 | **1A** | 76 | 3 | 89 | 0.39 | 2,024 | 8.9 | 11,258 | 49.4 | 0 | 0.0 |
| 7/13/2011 | **1B** | 145 | 4 | 53 | 0.09 | 531 | 0.9 | 19,525 | 33.7 | 46 | 0.1 |
| Total | **1-A & 1-B** | 240 | 17 | 535 | | 9,906 | | 59,420 | | 47 | |

*** Results are preliminary and subject to change (includes catcher/seller)**

-continued-


Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
District W-5
Middle Fork Goodnews R. Weir
Alaska

Appendix B7.–Agenda and Information Packet, July 20, Kuskokwim River Salmon Management Working Group, 2011.

## Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

### Agenda

Date: **July 20, 2011** Time: **10:00 am** Place: **Bethel**

Time Called to Order Chair Time Adjourned

**ROLL CALL TO ESTABLISH QUORUM:** **QUORUM MET? Yes / No**

**Upriver Elder:** **Processor:**
**Downriver Elder:** **Member at Large:**
**Commercial Fisher:** **Sport Fisher:**
**Lower River Subsistence:** **Western Interior RAC:**
**Middle River Subsistence:** **Y-K Delta RAC:**
**Upper River Subsistence:** **ADF&G:**
**Headwaters Subsistence:**

**INTRODUCTIONS:**
**INVOCATION:**
**APPROVAL OF AGENDA:**
**PEOPLE TO BE HEARD:**

**CONTINUING BUSINESS:**

1. Subsistence Reports:
    a. Lower River:
    b. ONC Inseason Subsistence:
    c. Middle River:
    d. KNA Inseason Subsistence:
    e. Upper River:
    f. Headwaters:
2. Overview of Kuskokwim River salmon run assessment projects:
    a. Bethel Test Fish
    b. Weirs/Sonar/Mark-Recapture/Aerial Surveys/Other:
3. Commercial Catch Report:
4. Processor Report:
5. Sport Fish Report:
6. Weather Forecast:
7. Recommendation:
8. Motion for Discussion and Action:

**OLD BUSINESS:**

1) Background material provided in last packet, if still questions:
    a.) ADF&G will provide age composition data of Kuskokwim Chinook salmon runs from 2006-2010.
    b.) ADF&G will provide updated information regarding Chinook bycatch in the Pollock fishery and Chinook intercepted in Area M.
    c) ADF&G will provide Bethel Test Fishery project specifics
2.) Nick Souza would like Tony Joaquin to be his alternate for Processor

**NEW BUSINESS:**

.

**COMMENTS FROM WORKING GROUP MEMBERS:**

**NEXT MEETING DATE:**_____ Time:_____ Place:_____

-continued-

## Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

**Information Packet**

July 20, 2011

### KNA Weekly Subsistence Fishing Reports, July 14 to July 19, 2011

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | TOTAL # FISH CAUGHT |
|---|---|---|---|---|---|---|---|
| Kalskag | FAMILY A | No | NR | NR | | | |
| Comments: Interviewed on Tuesday 7-19-11<br><br>Since last contacted they have not been fishing. | | | | | Sockeye | NR | 0 |
| | | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 0 |
| Aniak | FAMILY D | Yes | Drift Net | 5" | | | |
| Comments: Interviewed on Monday 7-18-11<br><br>Since last contacted they caught 47 Chum, 5 sockeye, and no kings had let them go. Fishing for dog food not eating fish. Switched to 5" mesh to catch the Chum salmon. Since mid July the Chum and Kings have been abundant. The Sockeye numbers have dropped. | | | | | Sockeye | NR | 5 |
| | | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 47 |
| Aniak | FAMILY E | No | NR | NR | | | |
| Comments: Interviewed on Tuesday 7-19-11<br><br>Since last contacted they have not fished. | | | | | Sockeye | NR | 0 |
| | | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 0 |
| Chuathbaluk | FAMILY H | No | NR | NR | | | |
| Comments: Interviewed on Tuesday 7-19-11<br><br>Since last contacted has not fished. | | | | | Sockeye | NR | 0 |
| | | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 0 |

-continued-

**KNA Weekly Subsistence Fishing Reports, July 14 to July 19, 2011**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | TOTAL # FISH CAUGHT |
|---|---|---|---|---|---|---|---|
| Crooked Creek | FAMILY N | No | NR | NR | | | |
| Comments: Interviewed on Monday 7-18-11<br>Since last contacted they have not been fishing. Done fishing until the Coho run starts. | | | | | Sockeye | NR | 0 |
| | | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 0 |
| Crooked Creek | FAMILY O | No | NR | NR | | | |
| Comments: Interviewed on Monday 7-18-11<br>Since last contacted they have not been fishing. Not done fishing, just haven't fished in the past week. | | | | | Sockeye | NR | 0 |
| | | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 0 |
| Sleetmute | FAMILY P | Yes | Set Net | NR | | | |
| Comments: Interviewed on Monday 7-18-11<br>Since last contacted they have caught an average of 12 sockeye a day. Caught 2 kings that were in good shape and 8 white fish. | | | | | Sockeye | Average | 84 |
| | | | | | Chinook | NR | 2 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 0 |
| Sleetmute | Family Q | Yes | Drift Net | 6" | | | |
| Comments: Interviewed on Monday 7-18-11<br>Since last contacted, fished 2 days and caught 14 chum and 1 sockeye. Fishing for dog food now, so probably won't be fishing as much. | | | | | Sockeye | NR | 1 |
| | | | | | Chinook | NR | 0 |
| | | | | | Coho | NR | 0 |
| | | | | | Chum | NR | 14 |

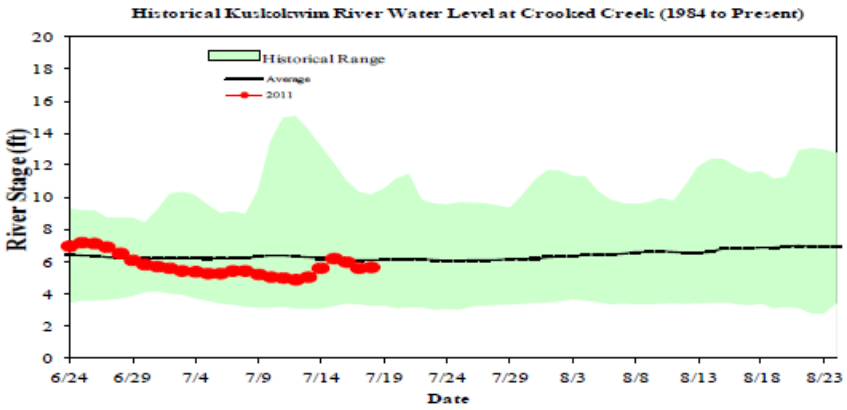
**KNA Comments:**
The following participant families have not been able to contact:
Chuathbaluk: 1 family, Stony River: 1 family

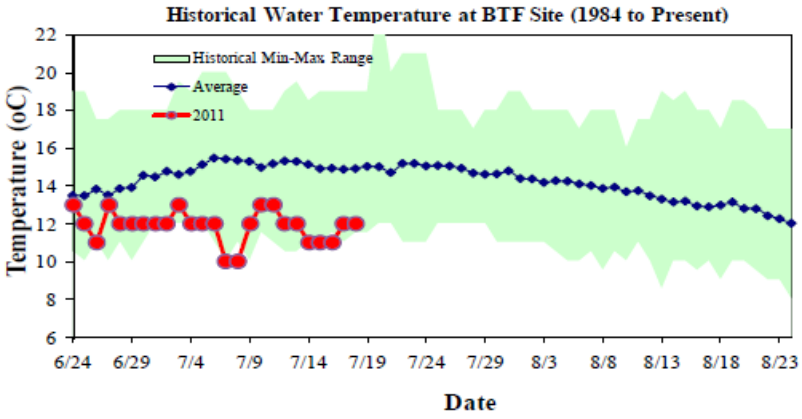
The following participant families are done fishing as of last week:
Kalskag: 1 Family

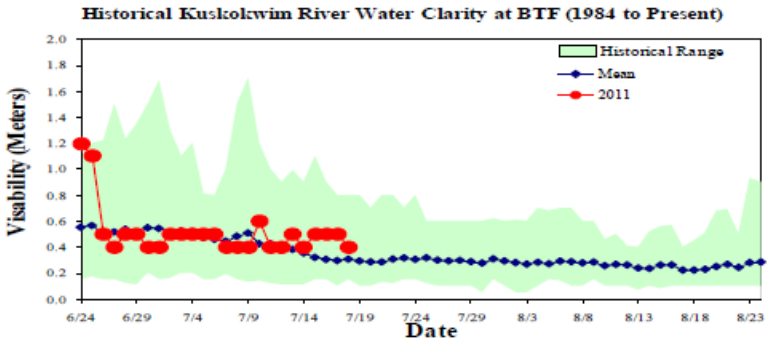
The following participant families did not fish this week:
Crooked Creek: 2 Families, Chuathbaluk: 1 family, Aniak: 1 family, Kalskag: 1 family

-continued-

**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS**

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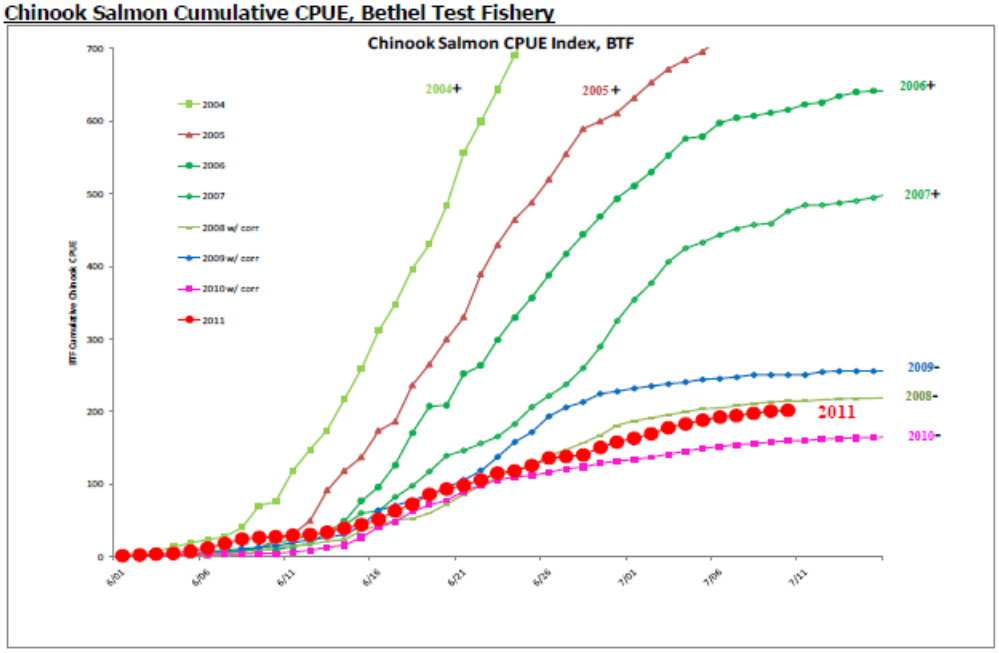
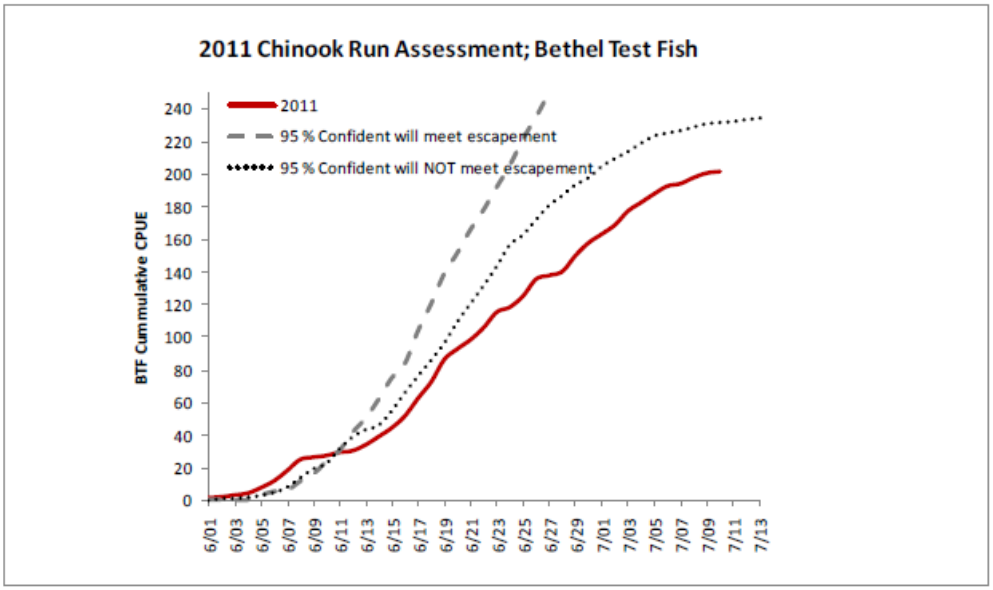
**Chinook Salmon Cumulative CPUE, Bethel Test Fishery**




**Chinook Salmon Cumulative CPUE Index, BTF**

| Date | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|
| 6/20 | 484 | 299 | 208 | 138 | 72 | 95 | 77 | 93 |
| 6/21 | 556 | 330 | 252 | 146 | 85 | 106 | 90 | 98 |
| 6/22 | 600 | 389 | 263 | 156 | 97 | 118 | 99 | 106 |
| 6/23 | 643 | 430 | 298 | 165 | 110 | 137 | 105 | 115 |
| 6/24 | 691 | 464 | 329 | 182 | 119 | 158 | 109 | 118 |
| 6/25 | 738 | 488 | 356 | 206 | 126 | 171 | 111 | 125 |
| 6/26 | 785 | 520 | 388 | 221 | 139 | 193 | 116 | 135 |
| 6/27 | 801 | 555 | 417 | 237 | 148 | 205 | 121 | 138 |
| 6/28 | 848 | 589 | 444 | 259 | 156 | 213 | 124 | 140 |
| 6/29 | 893 | 600 | 469 | 289 | 167 | 224 | 129 | 150 |
| 6/30 | 928 | 611 | 493 | 325 | 181 | 227 | 131 | 158 |
| 7/01 | 951 | 632 | 511 | 354 | 187 | 232 | 134 | 163 |
| 7/02 | 967 | 653 | 530 | 377 | 191 | 235 | 137 | 169 |
| 7/03 | 979 | 672 | 553 | 406 | 195 | 238 | 141 | 177 |
| 7/04 | 985 | 684 | 576 | 425 | 199 | 241 | 145 | 182 |
| 7/05 | 993 | 696 | 579 | 433 | 204 | 244 | 149 | 188 |
| 7/06 | 1,002 | 715 | 598 | 443 | 205 | 245 | 151 | 192 |
| 7/07 | 1,006 | 744 | 604 | 451 | 208 | 247 | 154 | 194 |
| 7/08 | 1,013 | 775 | 607 | 457 | 211 | 250 | 156 | 198 |
| 7/09 | 1,023 | 795 | 611 | 459 | 213 | 250 | 157 | 201 |
| 7/10 | 1,026 | 809 | 616 | 476 | 214 | 250 | 159 | 201 |

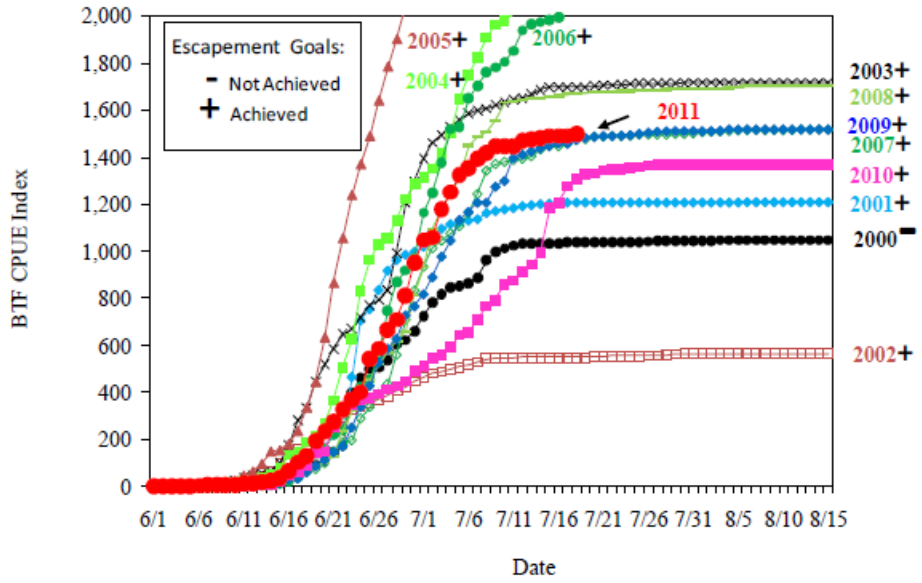
-continued-




- If BTF tracks *below* the *dotted* line, we are 95% confident that escapement goals will NOT be met.
- If BTF tracks *above* the *dashed* line, we are 95% confident that escapement goals will be met.

-continued-

**Sockeye Salmon Cumulative CPUE Index, Bethel Test Fishery**

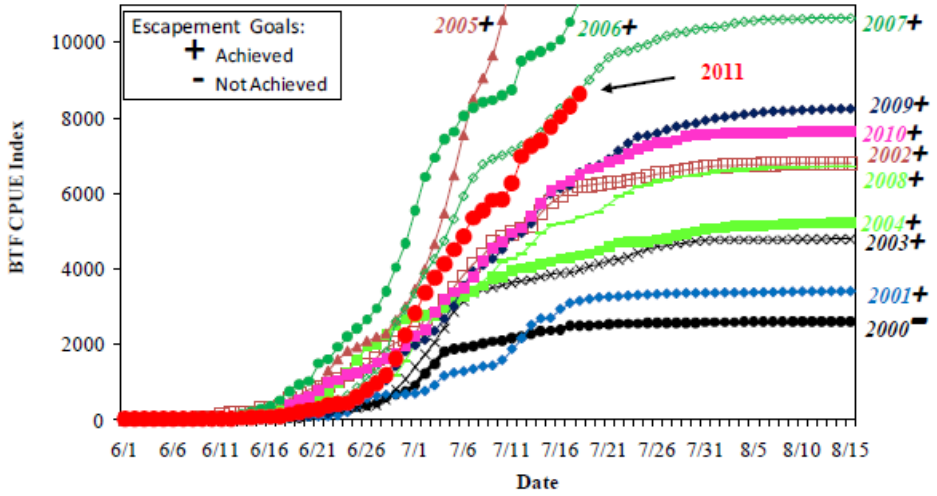



**Sockeye Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/01 | 724 | 1,020 | 464 | 1,395 | 1,315 | 2,298 | 1,164 | 934 | 933 | 818 | 515 | 1,048 |
| 7/02 | 782 | 1,048 | 482 | 1,462 | 1,352 | 2,365 | 1,247 | 1,014 | 1,092 | 892 | 545 | 1,058 |
| 7/03 | 817 | 1,096 | 486 | 1,495 | 1,418 | 2,440 | 1,379 | 1,046 | 1,178 | 979 | 561 | 1,180 |
| 7/04 | 845 | 1,115 | 496 | 1,528 | 1,507 | 2,512 | 1,520 | 1,077 | 1,251 | 1,048 | 594 | 1,252 |
| 7/05 | 850 | 1,123 | 508 | 1,560 | 1,647 | 2,583 | 1,528 | 1,107 | 1,312 | 1,136 | 645 | 1,324 |
| 7/06 | 865 | 1,132 | 518 | 1,586 | 1,753 | 2,655 | 1,650 | 1,165 | 1,450 | 1,169 | 655 | 1,353 |
| 7/07 | 887 | 1,137 | 528 | 1,600 | 1,825 | 2,715 | 1,704 | 1,243 | 1,487 | 1,209 | 708 | 1,396 |
| 7/08 | 962 | 1,163 | 542 | 1,608 | 1,912 | 2,773 | 1,763 | 1,343 | 1,509 | 1,209 | 766 | 1,417 |
| 7/09 | 998 | 1,171 | 546 | 1,621 | 1,965 | 2,816 | 1,784 | 1,371 | 1,557 | 1,277 | 795 | 1,448 |
| 7/10 | 1,012 | 1,179 | 546 | 1,633 | 1,980 | 2,845 | 1,807 | 1,381 | 1,634 | 1,302 | 858 | 1,448 |
| 7/11 | 1,025 | 1,184 | 548 | 1,646 | 2,010 | 2,860 | 1,854 | 1,389 | 1,636 | 1,400 | 879 | 1,448 |
| 7/12 | 1,033 | 1,192 | 550 | 1,652 | 2,013 | 2,870 | 1,941 | 1,394 | 1,647 | 1,414 | 914 | 1,472 |
| 7/13 | 1,033 | 1,197 | 550 | 1,668 | 2,025 | 2,880 | 1,968 | 1,405 | 1,650 | 1,428 | 942 | 1,476 |
| 7/14 | 1,035 | 1,201 | 550 | 1,688 | 2,032 | 2,890 | 1,976 | 1,434 | 1,653 | 1,441 | 995 | 1,483 |
| 7/15 | 1,035 | 1,203 | 550 | 1,699 | 2,035 | 2,896 | 1,985 | 1,447 | 1,658 | 1,452 | 1,186 | 1,491 |
| 7/16 | 1,035 | 1,206 | 550 | 1,700 | 2,035 | 2,896 | 1,995 | 1,447 | 1,661 | 1,461 | 1,209 | 1,491 |
| 7/17 | 1,039 | 1,208 | 550 | 1,700 | 2,039 | 2,904 | 2,018 | 1,459 | 1,669 | 1,461 | 1,275 | 1,491 |
| 7/18 | 1,039 | 1,208 | 550 | 1,700 | 2,043 | 2,912 | 2,026 | 1,473 | 1,672 | 1,476 | 1,309 | 1,499 |
| 7/19 | 1,039 | 1,208 | 550 | 1,700 | 2,052 | 2,923 | 2,031 | 1,477 | 1,674 | 1,485 | 1,328 | |
| 7/20 | 1,039 | 1,208 | 554 | 1,704 | 2,059 | 2,934 | 2,073 | 1,488 | 1,677 | 1,489 | 1,333 | |
| 7/21 | 1,039 | 1,208 | 554 | 1,708 | 2,071 | 2,937 | 2,077 | 1,488 | 1,677 | 1,493 | 1,346 | |
| 7/22 | 1,039 | 1,208 | 556 | 1,708 | 2,074 | 2,939 | 2,089 | 1,490 | 1,682 | 1,493 | 1,348 | |

-continued-

**Chum Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Chum Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/01 | 908 | 676 | 2299 | 1387 | 2690 | 3455 | 5530 | 3341 | 2010 | 1959 | 2196 | 2812 |
| 7/02 | 1222 | 744 | 2660 | 1711 | 2736 | 3982 | 6437 | 3861 | 2377 | 2104 | 2378 | 3353 |
| 7/03 | 1475 | 900 | 2768 | 2031 | 2819 | 4650 | 6937 | 4252 | 2680 | 2339 | 2838 | 3750 |
| 7/04 | 1794 | 1148 | 3147 | 2413 | 2965 | 5464 | 7424 | 4736 | 2953 | 2663 | 3172 | 4127 |
| 7/05 | 1879 | 1227 | 3480 | 2857 | 3120 | 6477 | 7629 | 5314 | 3197 | 3000 | 3380 | 4504 |
| 7/06 | 1901 | 1267 | 3800 | 3127 | 3226 | 7542 | 8053 | 5927 | 3391 | 3530 | 3478 | 4854 |
| 7/07 | 1941 | 1328 | 4107 | 3352 | 3395 | 8496 | 8278 | 6414 | 3471 | 3917 | 3802 | 5340 |
| 7/08 | 2008 | 1397 | 4367 | 3447 | 3561 | 9055 | 8409 | 6775 | 3660 | 4083 | 4205 | 5542 |
| 7/09 | 2063 | 1423 | 4696 | 3503 | 3733 | 9656 | 8468 | 6914 | 3909 | 4256 | 4524 | 5811 |
| 7/10 | 2085 | 1568 | 4846 | 3558 | 3800 | 10604 | 8609 | 7011 | 4219 | 4502 | 4716 | 5843 |
| 7/11 | 2162 | 1863 | 4945 | 3618 | 3945 | 11899 | 8743 | 7127 | 4260 | 4855 | 4940 | 6264 |
| 7/12 | 2193 | 2141 | 5068 | 3663 | 3993 | 12658 | 9519 | 7261 | 4396 | 4937 | 5089 | 6978 |
| 7/13 | 2268 | 2498 | 5165 | 3706 | 4061 | 13135 | 9656 | 7389 | 4637 | 5193 | 5385 | 7245 |
| 7/14 | 2334 | 2667 | 5488 | 3772 | 4122 | 13612 | 9759 | 7636 | 4941 | 5688 | 5712 | 7395 |
| 7/15 | 2360 | 2682 | 5758 | 3838 | 4175 | 13830 | 9887 | 7976 | 5135 | 5977 | 6087 | 7769 |
| 7/16 | 2385 | 2917 | 5936 | 3873 | 4254 | 13876 | 10078 | 8257 | 5198 | 6124 | 6210 | 8031 |
| 7/17 | 2477 | 3078 | 6140 | 3893 | 4309 | 14239 | 10541 | 8452 | 5259 | 6200 | 6334 | 8296 |
| 7/18 | 2492 | 3136 | 6187 | 3973 | 4364 | 14640 | 11098 | 8728 | 5355 | 6538 | 6482 | 8637 |
| 7/19 | 2496 | 3185 | 6206 | 4052 | 4395 | 15047 | 11619 | 9014 | 5441 | 6667 | 6652 | |
| 7/20 | 2506 | 3225 | 6238 | 4120 | 4471 | 15560 | 12181 | 9337 | 5514 | 6742 | 6686 | |
| 7/21 | 2517 | 3242 | 6274 | 4207 | 4599 | 15901 | 12549 | 9613 | 5696 | 6895 | 6836 | |
| 7/22 | 2534 | 3254 | 6302 | 4238 | 4681 | 16177 | 12847 | 9755 | 5896 | 7120 | 6909 | |
| 7/23 | 2538 | 3271 | 6343 | 4309 | 4700 | 16445 | 13078 | 9782 | 6026 | 7319 | 7034 | |
| 7/24 | 2538 | 3288 | 6384 | 4416 | 4703 | 16598 | 13118 | 9876 | 6174 | 7490 | 7172 | |
| 7/25 | 2546 | 3303 | 6444 | 4516 | 4714 | 16775 | 13284 | 9955 | 6245 | 7527 | 7253 | |

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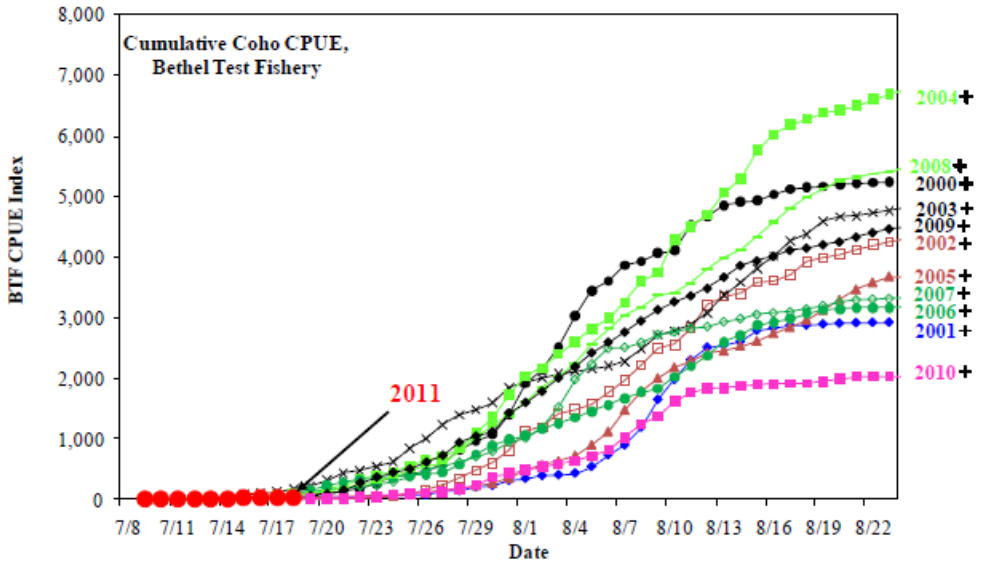
**Coho Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Bethel Test Fish Coho Cumulative CPUE**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/9 | 5 | 0 | 0 | 2 | 9 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 7/10 | 5 | 0 | 2 | 2 | 11 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 7/11 | 5 | 1 | 2 | 5 | 16 | 0 | 3 | 5 | 6 | 5 | 0 | 0 |
| 7/12 | 6 | 7 | 2 | 11 | 16 | 0 | 18 | 5 | 6 | 8 | 0 | 0 |
| 7/13 | 6 | 7 | 3 | 16 | 23 | 0 | 18 | 5 | 6 | 10 | 0 | 0 |
| 7/14 | 8 | 7 | 4 | 41 | 27 | 0 | 18 | 20 | 8 | 10 | 0 | 3 |
| 7/15 | 12 | 7 | 5 | 78 | 30 | 2 | 19 | 26 | 16 | 10 | 0 | 16 |
| 7/16 | 33 | 14 | 7 | 99 | 33 | 2 | 26 | 39 | 30 | 14 | 3 | 16 |
| 7/17 | 74 | 17 | 9 | 116 | 56 | 7 | 48 | 63 | 52 | 14 | 3 | 22 |
| 7/18 | 87 | 21 | 11 | 166 | 78 | 13 | 98 | 82 | 68 | 35 | 3 | 26 |
| 7/19 | 93 | 24 | 11 | 217 | 120 | 26 | 148 | 120 | 93 | 51 | 5 | |
| 7/20 | 97 | 28 | 11 | 316 | 173 | 41 | 226 | 148 | 127 | 80 | 7 | |
| 7/21 | 134 | 28 | 12 | 429 | 228 | 44 | 280 | 169 | 167 | 141 | 13 | |
| 7/22 | 180 | 36 | 21 | 473 | 337 | 51 | 320 | 219 | 231 | 265 | 30 | |
| 7/23 | 251 | 46 | 32 | 534 | 385 | 57 | 352 | 235 | 285 | 356 | 40 | |
| 7/24 | 362 | 55 | 49 | 616 | 447 | 74 | 365 | 286 | 365 | 436 | 64 | |
| 7/25 | 409 | 59 | 95 | 841 | 539 | 90 | 382 | 368 | 480 | 491 | 79 | |
| 7/26 | 450 | 67 | 148 | 1,001 | 645 | 110 | 408 | 478 | 550 | 606 | 103 | |

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## ESCAPEMENT MONITORING

### Status of Salmon Assessment Projects as of July 20, 2011

All weirs are operational. Aerial surveys are set to begin later this week, weather permitting.

### CHINOOK SALMON – Weir Counts

**Kwethluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal Range: 6,000 to 11,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | | 6,239 | 10,380 | 22,978 | | 12,110 | 7,952 | 2,459 | 3,675 | 763 | 2,915 |
| 7/17 | | 6,527 | 10,587 | 23,134 | | 12,385 | 8,292 | 3,097 | 3,871 | 897 | 3,056 |
| 7/18 | | 6,738 | 10,833 | 23,793 | | 13,206 | 8,887 | 3,192 | 4,041 | 970 | 3,188 |
| 7/19 | | 7,072 | 11,167 | 24,599 | | 13,818 | 9,459 | 3,334 | 4,188 | 1,021 | |
| 7/20 | | 7,304 | 11,977 | 24,795 | | 14,525 | 9,838 | 3,352 | 4,247 | 1,107 | |
| 7/21 | | 7,428 | 12,084 | 25,318 | | 15,039 | 10,103 | 3,357 | 4,359 | 1,166 | |
| Season Total | n.a. | 8,502 | 14,474 | 28,604 | n.a. | 17,618 | 12,927 | 5,275 | 5,744 | 1,693 | |

**Tuluksak River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal **Esc Goal Range: 1,000 to 2,100**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 746 | 988 | 671 | 1,025 | 1,942 | 402 | 158 | 168 | 117 | 66 | 89 |
| 7/17 | 755 | 1,014 | 682 | 1,046 | 2,072 | 439 | 163 | 209 | 152 | 66 | 124 |
| 7/18 | 768 | 1,088 | 736 | 1,115 | 2,119 | 509 | 176 | 329 | 156 | 69 | 134 |
| 7/19 | 791 | 1,142 | 747 | 1,125 | 2,141 | 542 | 197 | 399 | 164 | 77 | |
| 7/20 | 815 | 1,155 | 756 | 1,147 | 2,163 | 592 | 212 | 409 | 182 | 84 | |
| 7/21 | 828 | 1,176 | 767 | 1,176 | 2,214 | 645 | 220 | 419 | 185 | 96 | |
| Season Total | 998 | 1,346 | 1,064 | 1,475 | 2,653 | 1,043 | 394 | 701 | 362 | 201 | |

**George River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal Range: 3,100 to 7,900**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 2,758 | 2,120 | 4,156 | 4,441 | 3,337 | 3,292 | 3,856 | 1,045 | 3,020 | 1,048 | 1,106 |
| 7/17 | 2,803 | 2,162 | 4,194 | 4,527 | 3,420 | 3,402 | 3,970 | 1,312 | 3,107 | 1,090 | 1,159 |
| 7/18 | 2,900 | 2,184 | 4,241 | 4,624 | 3,463 | 3,575 | 4,079 | 1,346 | 3,182 | 1,118 | 1,213 |
| 7/19 | 2,941 | 2,209 | 4,313 | 4,738 | 3,488 | 3,743 | 4,183 | 1,480 | 3,268 | 1,151 | |
| 7/20 | 3,029 | 2,238 | 4,363 | 4,804 | 3,529 | 3,893 | 4,282 | 1,655 | 3,312 | 1,203 | |
| 7/21 | 3,063 | 2,265 | 4,453 | 4,844 | 3,552 | 3,982 | 4,376 | 2,079 | 3,336 | 1,261 | |
| Season Total | 3,309 | 2,444 | 4,693 | 5,207 | 3,845 | 4,357 | 4,883 | 2,698 | 3,663 | 1,500 | |

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## ESCAPEMENT MONITORING *(Continued)*

### CHINOOK SALMON – Weir Counts

**Kogrukluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal Range: 5,300 to 14,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 6,948 | 7,586 | 7,409 | 13,509 | 13,514 | 9,749 | 5,669 | 1,788 | 4,019 | 2,034 | 1,141 a |
| 7/17 | 7,178 | 7,916 | 7,868 | 14,180 | 14,650 | 10,360 | 6,388 | 2,208 | 4,353 | 2,250 | 1,429 |
| 7/18 | 7,289 | 8,227 | 8,268 | 14,696 | 15,518 | 10,872 | 7,113 | 2,587 | 4,684 | 2,383 | 1,840 |
| 7/19 | 7,605 | 8,516 | 8,709 | 15,181 | 16,035 | 11,434 | 7,867 | 3,014 | 5,257 | 2,522 | |
| 7/20 | 7,869 | 8,785 | 9,085 | 15,800 | 16,586 | 12,516 | 8,506 | 3,506 | 5,639 | 2,811 | |
| 7/21 | 8,053 | 9,054 | 9,627 | 16,457 | 17,479 | 13,163 | 9,046 | 4,252 | 6,074 | 3,107 | |
| Season Total | 9,298 | 10,104 | 11,771 | 19,651 | 22,000 | 19,414 | 13,029 | 9,730 | 9,702 | 5,690 | |

a = daily passage was estimated due a hole in the weir.

**Tatlawiksuk River weir historical cumulative daily Chinook salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 1,794 | 2,029 | 1,321 | 2,366 | 2,451 | 1,318 | 1,678 | 480 | 899 | 399 | 770 |
| 7/17 | 1,813 | 2,044 | 1,339 | 2,527 | 2,521 | 1,341 | 1,730 | 537 | 905 | 403 | 780 |
| 7/18 | 1,844 | 2,047 | 1,361 | 2,580 | 2,586 | 1,406 | 1,781 | 587 | 911 | 407 | 801 |
| 7/19 | 1,880 | 2,062 | 1,390 | 2,597 | 2,666 | 1,458 | 1,819 | 633 | 949 | 421 | |
| 7/20 | 1,897 | 2,070 | 1,462 | 2,609 | 2,718 | 1,487 | 1,848 | 655 | 960 | 437 | |
| 7/21 | 1,905 | 2,084 | 1,471 | 2,631 | 2,754 | 1,511 | 1,869 | 736 | 988 | 451 | |
| Season Total | 2,010 | 2,237 | 1,683 | 2,833 | 2,920 | 1,700 | 2,061 | 1,071 | 1,071 | 567 | |

**Takotna River weir historical cumulative daily Chinook salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 475 | 241 | 165 | 359 | 385 | 244 | 280 | 106 | 199 | 83 | 47 |
| 7/17 | 492 | 244 | 174 | 363 | 400 | 263 | 285 | 118 | 206 | 92 | 47 |
| 7/18 | 506 | 249 | 196 | 372 | 406 | 276 | 297 | 128 | 207 | 95 | 48 |
| 7/19 | 537 | 253 | 222 | 373 | 424 | 317 | 307 | 133 | 210 | 100 | |
| 7/20 | 563 | 262 | 248 | 376 | 431 | 378 | 321 | 147 | 211 | 100 | |
| 7/21 | 586 | 267 | 256 | 382 | 432 | 420 | 346 | 170 | 230 | 103 | |
| Season Total | 721 | 316 | 378 | 461 | 499 | 539 | 418 | 413 | 311 | 178 | |

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## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Weir Counts

**Kwethluk River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | | 17,203 | 13,331 | 20,343 | | 28,950 | 21,719 | 7,665 | 12,070 | 8,553 | 7,664 |
| 7/17 | | 18,699 | 13,703 | 21,362 | | 31,044 | 24,200 | 8,444 | 13,457 | 9,605 | 8,316 |
| 7/18 | | 20,491 | 15,002 | 23,397 | | 34,000 | 27,504 | 8,893 | 14,088 | 10,217 | 8,737 |
| 7/19 | | 22,021 | 17,197 | 24,634 | | 35,417 | 28,338 | 9,567 | 15,070 | 10,489 | |
| 7/20 | | 23,566 | 20,164 | 25,520 | | 37,218 | 29,485 | 9,708 | 15,670 | 10,957 | |
| 7/21 | | 24,797 | 20,803 | 26,533 | | 37,705 | 31,066 | 9,838 | 16,364 | 11,868 | |
| Season Total | n.a. | 35,854 | 41,812 | 38,646 | n.a. | 47,490 | 54,913 | 20,030 | 32,191 | 19,242 | |

**Tuluksak River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 6,304 | 4,246 | 2,261 | 5,624 | 14,901 | 10,710 | 4,906 | 3,301 | 2,094 | 4,948 | 1,872 |
| 7/17 | 6,532 | 4,932 | 2,411 | 5,894 | 16,282 | 12,434 | 6,302 | 3,952 | 3,127 | 5,481 | 2,115 |
| 7/18 | 6,973 | 5,696 | 3,327 | 6,579 | 17,371 | 13,693 | 7,178 | 4,889 | 3,287 | 5,702 | 2,356 |
| 7/19 | 7,710 | 6,316 | 3,850 | 7,040 | 18,752 | 14,649 | 7,716 | 5,758 | 3,611 | 6,124 | |
| 7/20 | 8,633 | 6,392 | 3,939 | 7,428 | 20,661 | 15,327 | 8,107 | 6,297 | 4,440 | 6,780 | |
| 7/21 | 9,215 | 6,583 | 4,052 | 8,011 | 22,306 | 16,159 | 8,755 | 6,615 | 4,645 | 7,183 | |
| Season Total | 19,311 | 9,958 | 11,724 | 0 11,796 | 35,696 | 25,650 | 17,647 | 12,550 | 13,671 | 13,042 | |

**Aniak River sonar historical cumulative daily chum salmon escapement index.**

= years below escapement goal.

**Esc Goal Range: 220,000 to 480,000**

| Date | Cumulative Daily Count | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 215,107 | 308,555 | 237,903 | 376,351 | 591,633 | 624,344 | 318,052 | 168,608 | 185,264 | 224,323 | 111,106 |
| 7/17 | 233,622 | 328,783 | 247,652 | 393,253 | 638,690 | 685,983 | 336,628 | 187,358 | 226,406 | 248,988 | 129,860 |
| 7/18 | 249,131 | 348,940 | 256,187 | 417,035 | 672,970 | 738,606 | 369,624 | 204,532 | 242,910 | 261,600 | 141,402 |
| 7/19 | 261,921 | 359,403 | 275,190 | 447,981 | 700,142 | 781,665 | 400,230 | 229,074 | 250,270 | 276,944 | |
| 7/20 | 283,500 | 368,420 | 298,718 | 475,523 | 750,200 | 818,800 | 419,486 | 248,166 | 278,228 | 285,640 | |
| 7/21 | 302,225 | 380,518 | 322,323 | 504,939 | 819,563 | 868,510 | 440,102 | 260,724 | 302,288 | 300,102 | |
| Season Total | 408,830 | 472,346 | 477,544 | 673,445 | 1,173,155 | 1,108,626 | 699,178 | 427,911 | 479,531 | 429,643 | |

**George River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 5,294 | 4,938 | 11,587 | 10,350 | 8,599 | 18,529 | 21,122 | 15,427 | 3,918 | 13,843 | 21,052 |
| 7/17 | 5,721 | 5,092 | 12,262 | 10,544 | 9,096 | 20,038 | 22,761 | 16,528 | 4,138 | 14,884 | 22,812 |
| 7/18 | 6,223 | 5,281 | 13,108 | 10,855 | 9,336 | 22,190 | 24,483 | 17,224 | 4,424 | 15,874 | 24,376 |
| 7/19 | 6,756 | 5,412 | 14,688 | 11,163 | 9,610 | 24,985 | 26,285 | 18,445 | 4,709 | 16,664 | |
| 7/20 | 7,183 | 5,475 | 16,293 | 11,360 | 10,122 | 27,459 | 28,169 | 19,387 | 5,105 | 17,264 | |
| 7/21 | 7,513 | 5,590 | 17,523 | 11,628 | 10,649 | 29,611 | 30,134 | 20,311 | 5,373 | 18,097 | |
| Season Total | 11,601 | 6,543 | 33,666 | 14,409 | 14,828 | 41,467 | 55,842 | 29,978 | 7,941 | 26,154 | |

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## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Weir Counts

**Kogrukluk River weir historical cumulative daily chum salmon escapement.**

= years below escapement goal. **Esc Goal Range: 15,000 to 49,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 14,073 | 37,791 | 9,592 | 12,984 | 73,375 | 89,782 | 18,685 | 7,930 | 17,607 | 21,743 | 13,426 a |
| 7/17 | 14,853 | 38,456 | 10,547 | 13,614 | 81,502 | 94,544 | 21,243 | 11,116 | 20,047 | 24,469 | 16,461 |
| 7/18 | 16,074 | 39,739 a | 11,614 | 14,249 | 87,655 | 100,367 | 24,164 | 12,709 | 22,372 | 27,262 | 19,803 |
| 7/19 | 17,726 | 40,747 | 13,036 | 15,151 | 96,389 | 107,693 | 26,656 | 14,778 | 25,407 | 29,231 | |
| 7/20 | 18,933 | 41,850 a | 14,393 | 16,023 | 105,630 | 114,903 | 27,935 | 16,675 | 28,914 | 31,286 | |
| 7/21 | 20,218 | 42,953 a | 15,976 | 16,840 | 115,514 | 122,572 | 29,248 | 18,441 | 32,182 | 33,563 | |
| 7/22 | 21,472 | 44,151 | 17,054 | 17,503 | 124,093 | 128,519 | 30,595 | 19,838 | 35,687 | 35,751 | |
| 7/23 | 22,237 | 45,303 | 17,593 | 17,940 | 131,962 | 134,101 | 32,435 | 21,457 | 39,083 | 37,889 | |
| 7/24 | 23,227 | 48,216 | 18,077 | 18,288 | 139,285 | 138,597 | 33,355 | 22,994 | 42,738 | 39,933 | |
| Season Total | 30,570 | 51,570 | 23,413 | 24,201 | 197,723 | 180,594 | 49,505 | 44,978 | 84,940 | 63,583 | NA |

**Tatlawiksuk River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 13,821 | 17,758 | | 12,736 | 31,494 | 19,139 | 44,078 | 14,678 | 7,269 | 20,996 | 42,398 |
| 7/17 | 15,022 | 18,717 | | 13,599 | 33,864 | 20,118 | 47,310 | 16,170 | 7,868 | 22,486 | 45,853 |
| 7/18 | 16,629 | 19,597 | | 14,399 | 36,124 | 20,917 | 50,746 | 17,507 | 8,632 | 23,003 | 49,477 |
| 7/19 | 17,488 | 20,304 | | 15,054 | 38,239 | 21,976 | 53,652 | 18,844 | 9,807 | 24,115 | |
| 7/20 | 18,187 | 20,772 | | 15,627 | 40,395 | 23,082 | 56,197 | 19,891 | 10,762 | 25,227 | |
| 7/21 | 18,948 | 21,276 | | 16,184 | 42,591 | 24,297 | 58,606 | 21,107 | 11,863 | 26,092 | |
| Season Total | 23,718 | 24,542 | n.a. | 21,245 | 55,720 | 32,301 | 83,246 | 30,896 | 19,975 | 36,701 | |

**Takotna River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 2,563 | 3,209 | 1,524 | 1,100 | 3,302 | 7,118 | 4,643 | 2,833 | 816 | 1,698 | 3,683 |
| 7/17 | 2,769 | 3,326 | 1,674 | 1,157 | 3,716 | 7,510 | 4,990 | 3,075 | 872 | 1,913 | 4,075 |
| 7/18 | 3,033 | 3,399 | 1,846 | 1,249 | 4,017 | 7,903 | 5,339 | 3,352 | 952 | 2,103 | 4,499 |
| 7/19 | 3,385 | 3,560 | 2,033 | 1,278 | 4,390 | 8,346 | 5,719 | 3,581 | 1,051 | 2,269 | |
| 7/20 | 3,686 | 3,669 | 2,264 | 1,314 | 4,703 | 8,701 | 6,094 | 3,774 | 1,195 | 2,460 | |
| 7/21 | 3,898 | 3,741 | 2,419 | 1,329 | 4,845 | 9,142 | 6,571 | 4,050 | 1,291 | 2,669 | |
| Season Total | 5,414 | 4,377 | 3,393 | 1,630 0 | 6,467 | 12,598 | 8,900 | 5,691 | 2,487 | 4,062 | |

-continued-

**SOCKEYE SALMON-Weir Counts**

**Kwethluk River historical cumulative daily sockeye salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 182 | 2,522 | 3,119 | | 5,541 | 3,798 f | 1,758 | 3,395 | 3,099 | 2,143 |
| 7/17 | 204 | 2,535 | 3,130 | | 5,628 | 3,908 | 1,864 | 3,467 | 3,363 | 2,151 |
| 7/18 | 208 | 2,564 | 3,167 | | 5,750 | 4,030 | 1,896 d | 3,530 | 3,419 | 2,172 |
| 7/19 | 214 | 2,604 | 3,200 | | 5,844 | 4,117 | 1,929 | 3,592 | 3,449 | |
| 7/20 | 219 | 2,664 | 3,214 | | 5,993 | 4,181 | 1,935 | 3,617 | 3,561 | |
| 7/21 | 222 | 2,674 | 3,253 | | 6,057 | 4,217 | 1,940 | 3,646 | 3,655 | |
| KWE Total | 272 | 2,928 | 3,491 | n.a. | 6,732 | 5,262 | 2,451 | 4,230 | 4,242 | |

**Kogrukluk River weir historical cumulative daily sockeye salmon escapement.**

= years below escapement goal.

**Esc Goal Range: 4,400 to 17,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/16 | 6,097 | 3,256 | 4,888 | 4,350 | 21,155 | 25,641 | 3,601 | 1,822 | 7,852 | 2,046 | 1,325 a |
| 7/17 | 6,328 | 3,478 | 5,354 | 4,561 | 23,576 | 28,331 | 4,457 | 3,605 | 8,523 | 2,348 | 1,591 |
| 7/18 | 6,473 | 3,645 | 5,823 | 4,745 | 25,685 | 30,165 | 5,509 | 4,239 | 9,009 | 2,531 | 2,072 |
| 7/19 | 6,708 | 3,712 | 6,527 | 5,133 | 26,773 | 32,268 | 6,365 | 5,399 | 10,408 | 2,758 | |
| 7/20 | 7,025 | 3,761 | 7,065 | 5,378 | 27,889 | 36,932 | 7,198 | 6,658 | 11,469 | 3,233 | |
| 7/21 | 7,346 | 3,810 | 7,513 | 5,611 | 30,013 | 40,408 | 7,910 | 7,925 | 12,562 | 4,069 | |
| Season Total | 8,776 | 4,050 | 9,164 | 6,775 | 37,939 | 60,807 | 16,525 | 19,675 | 23,785 | 13,995 | NA |

a = Daily passage was estimated due to a hole in the weir.

**Telequana Lake Weir historical cumulative daily sockeye salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | |
|---|---|---|
| | 2010 | **2011** |
| 7/16 | 9,187 | 8,358 |
| 7/17 | 9,958 | 10,649 |
| 7/18 | 11,076 | 10,649 |
| 7/19 | 12,243 | 10,649 |
| 7/20 | 13,564 | 10,649 |
| 7/21 | 14,898 | 10,649 |
| Season Total | 72,021 | |

-continued-

**COMMERCIAL CATCH REPORT:**

**July 20, Subdistrict 1-A Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/19/2010 | **1-A** | 61 | 4 | 68 | 0.28 | 2,475 | 10.1 | 3,918 | 16.1 | 0 | 0.0 |

**July 22, Subdistrict 1-B Comparison of Most Recent Opening to Similar Dates With Fishing**

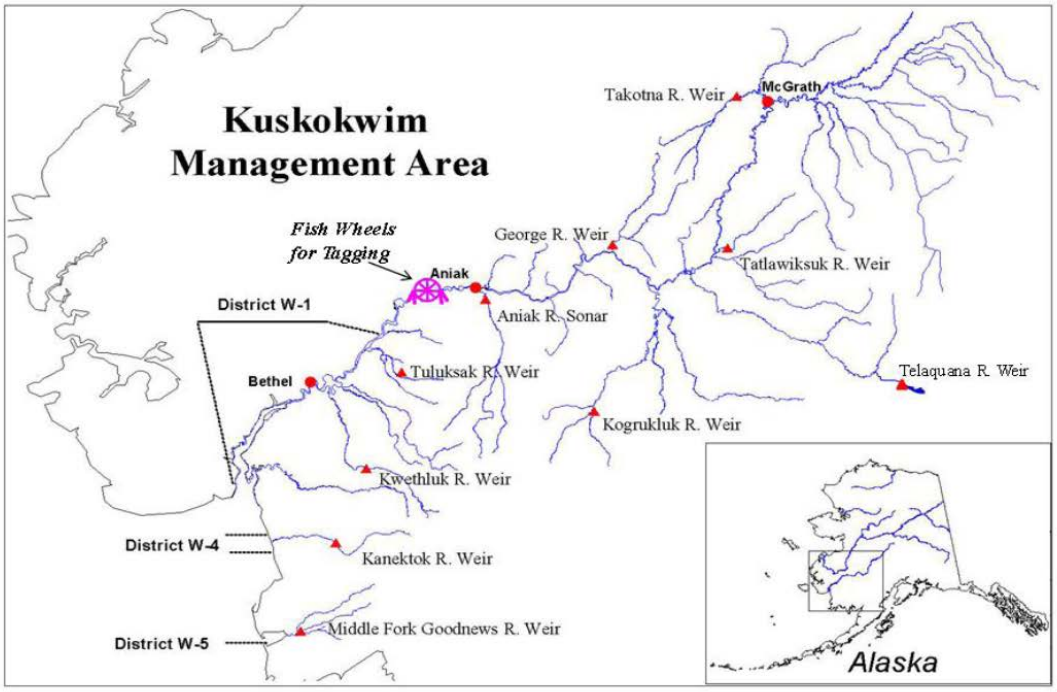
| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/21/2010 | **1-B** | 141 | 4 | 86 | 0.15 | 902 | 1.6 | 7,385 | 13.1 | 1,554 | 2.8 |

**Total cumulative harvest in District 1**

| | Sub- | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Distrit | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/5/2011 | **1B** | 116 | 4 | 192 | 0.41 | 2,471 | 5.3 | 13,657 | 29.4 | 0 | 0.0 |
| 7/7/2011 | **1A** | 63 | 3 | 127 | 0.67 | 2,339 | 12.4 | 8,130 | 43.0 | 0 | 0.0 |
| 7/9/2011 | **1A** | 61 | 3 | 74 | 0.40 | 2,541 | 13.9 | 6,850 | 37.4 | 1 | 0.0 |
| 7/11/2011 | **1A** | 76 | 3 | 89 | 0.39 | 2,024 | 8.9 | 11,258 | 49.4 | 0 | 0.0 |
| 7/13/2011 | **1B** | 145 | 4 | 53 | 0.09 | 531 | 0.9 | 19,525 | 33.7 | 46 | 0.1 |
| 7/15/2011 | **1A** | 87 | 4 | 79 | 0.23 | 1,999 | 5.7 | 12,432 | 35.7 | 38 | 0.1 |
| 7/18/2011 | **1B** | 158 | 4 | 7 | 0.01 | 282 | 0.4 | 12,040 | 19.1 | 187 | 0.3 |
| Total | **1-A & 1-B** | 240 | 25 | 621 | | 12,187 | | 83,892 | | 272 | |

* **Results are preliminary and subject to change (includes catcher/seller)**

-continued-


Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
Middle Fork Goodnews R. Weir
District W-5
Alaska

Appendix B8.–Information Packet, July 27, 2011, Kuskokwim River Salmon Management Working Group, 2011. No meeting held.

## Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

### Meeting Agenda

Date: **July 27, 2011** Time: **10:00 am** Place: **Bethel**

Time Called to Order Chair Time Adjourned

**ROLL CALL TO ESTABLISH QUORUM:** **QUORUM MET? Yes / No**

**Upriver Elder:** **Processor:**
**Downriver Elder:** **Member at Large:**
**Commercial Fisher:** **Sport Fisher:**
**Lower River Subsistence:** **Western Interior RAC:**
**Middle River Subsistence:** **Y-K Delta RAC:**
**Upper River Subsistence:** **ADF&G:**
**Headwaters Subsistence:**

**INTRODUCTIONS:**
**INVOCATION:**
**APPROVAL OF AGENDA:**
**PEOPLE TO BE HEARD:**

**CONTINUING BUSINESS:**

1. Subsistence Reports:
    a. Lower River:
    b. Middle River:
    c. KNA Inseason Subsistence:
    d. Upper River:
    e. Headwaters:
2. Overview of Kuskokwim River salmon run assessment projects:
    a. Bethel Test Fish
    b. Weirs/Sonar/Mark-Recapture/Aerial Surveys/Other:
3. Commercial Catch Report:
4. Processor Report:
5. Sport Fish Report:
6. Weather Forecast:
7. Recommendation:
8. Motion for Discussion and Action:

**OLD BUSINESS:**

**NEW BUSINESS:**

**COMMENTS FROM WORKING GROUP MEMBERS:**

**NEXT MEETING DATE:**_____ Time:_____ Place:_____

-continued-

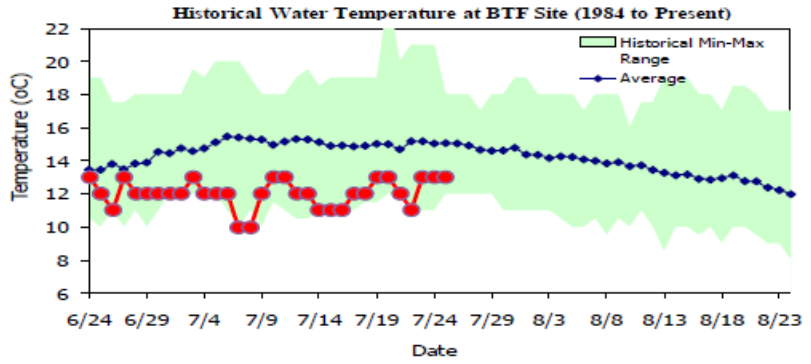
# Kuskokwim River Salmon Management Working Group

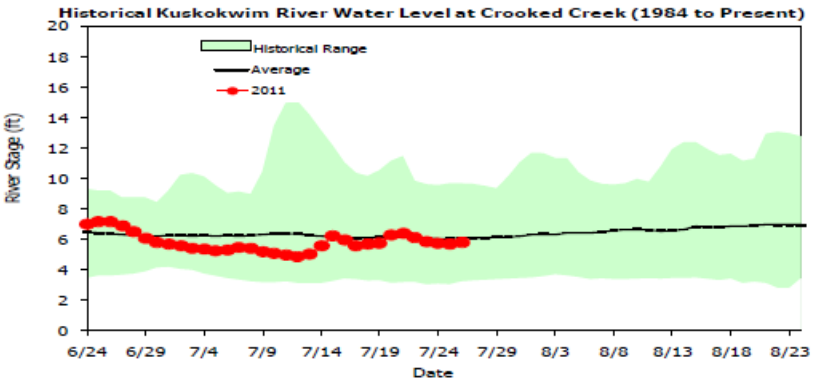
1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

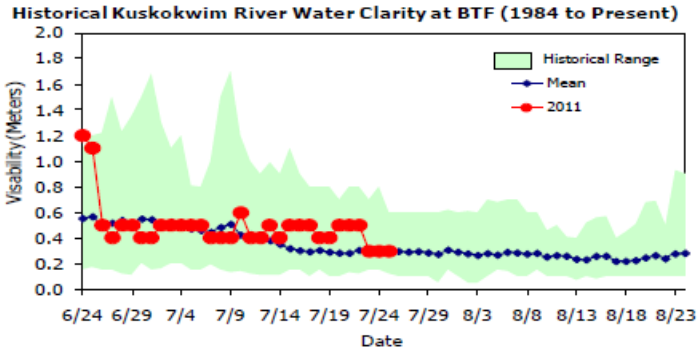
## Information Packet

**July 27, 2011**

**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS**

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| KNA 2011 Inseason Subsistence Surveys Summary | | | | | |
|---|---|---|---|---|---|
| **VILLAGE** | **FAMILY** | **FISHING Y/N** | **GEAR TYPE** | **How was the salmon run for 2011?** | **Total # of fish for 2011 season** |
| **Kalskag** | **Family E** | Yes | Set Net | | |
| Chinook- Real slow at first and the run was low, even lower than last year. Sockeye- very abundant. Chum- lots as usual, about the same as the Sockeye. | | | | Below Average<br>Average<br>Average | Chinook: 24-40<br>Sockeye: 0<br>Chum: 0 |
| **Aniak** | **Family B** | Yes | Drift Net 5" mesh | | |
| Chinook- Slow in June then in mid July they were thick but the meat was mushy. Sockeye- were fine. Chum- were normal. Future fishing probably will be the same as this year for Chinook. Should bypass a few fish or down fishing downriver a little bit so fish could get up river again. | | | | Average<br>Average<br>Average | Chinook: 27<br>Sockeye: 27<br>Chum: 141 |
| **Aniak** | **Family C** | Yes | Set Net | | |
| Chinook- were poor. Chum- a little below average and late. Sockeye- below average. | | | | Below Average<br>Below Average<br>Below Average | Chinook: 21<br>Sockeye: 0<br>Chum: 0 |
| **Aniak** | **Family D** | Yes | Drift Net 6" Mesh | | |
| Chinook- alright. Sockeye- Good. Chums- always good. No comments. | | | | Average<br>Average<br>Average | Chinook: 19<br>Sockeye: 0<br>Chum: 2 |
| **Chuathbaluk** | **Family J** | Yes | Drift Net 7 1/2" | | |
| Chinook- Good, 3x better than last year. Sockeye- came in thick, but same as last year. Chum- lots. Everything went good with the closures down river, hope they do it again next year. | | | | Above Average<br>Average<br>Average | Chinook: 118<br>Sockeye: 102<br>Chum: 288 |
| **Chuathbaluk** | **Family L** | Yes | Drift Net | | |
| Chinook- kind of bad even with closures. Sockeye- quite a few reds this year, was a good run. Chum- lots. People from down river need to let fish go past. | | | | Below Average<br>Average<br>Average | Chinook: 6<br>Sockeye: 0<br>Chum: 0 |
| **Crooked Creek** | **Family M** | Yes | Drift Net 5 1/2" | | |
| Chinook- a little better then last year. Sockeye- missed the run didn't catch many. Chums- good year for them. Overall everything was a little bit better then last year. | | | | Above Average<br>NR<br>Average | Chinook: 34<br>Sockeye: 34<br>Chum: 54 |
| **Crooked Creek** | **Family N** | Yes | Drift Net 7" | | |
| Chinook- were mediocre, weren't very many of them. Wouldn't really know for Sockeye because didn't fish for any. The Chums didn't seem like there were very many.There hasn't been as many fish as there used to be, fishing was on a poor side overall. | | | | Below Average<br>NR<br>Below Average | Chinook: 20<br>Sockeye: 10<br>Chum: 37 |
| **Sleetmute** | **Family H** | Yes | Set Net | | |
| Chinook- much smaller this year. Numbers were adequate, of all the kings caught all were males, a little concerning. Chum- average for the past few years but not like 20 years ago and they were in very good condition. Sockeye- excellent big, shiny, and lots. Noticable when they closed downriver fisheries and its much appreciated. | | | | Below Average<br>Above Average<br>Average | Chinook: 61<br>Sockeye: 51<br>Chum: 88 |
| **Sleetmute** | **Family I** | Yes | Set Net | | |
| Chinook- were late and the water was high so the fish were swimming out in the middle of the river. So people didn't catch as much and had to make up with Sockeye, but no complaints. There were lots of Sockeye there was plenty to make up for the kings. Chum-doesn't really fish for them that much but they are always good. | | | | Below Average<br>Average<br>Average | Chinook: 2<br>Sockeye: 84<br>Chum: 0 |
| ****Totals based on information given to us during interviews**** | | | | | |

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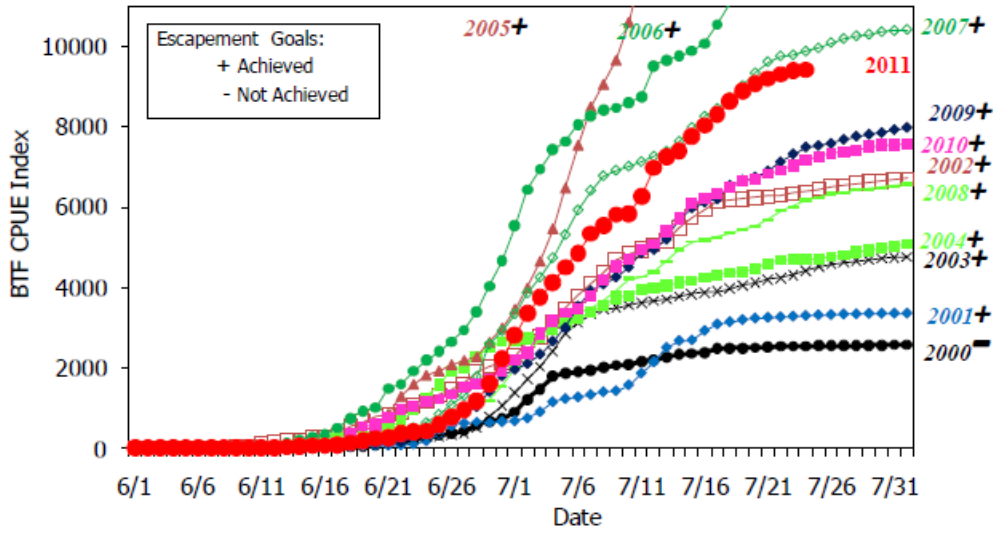
**Chum Salmon Cumulative CPUE Index, Bethel Test Fishery**

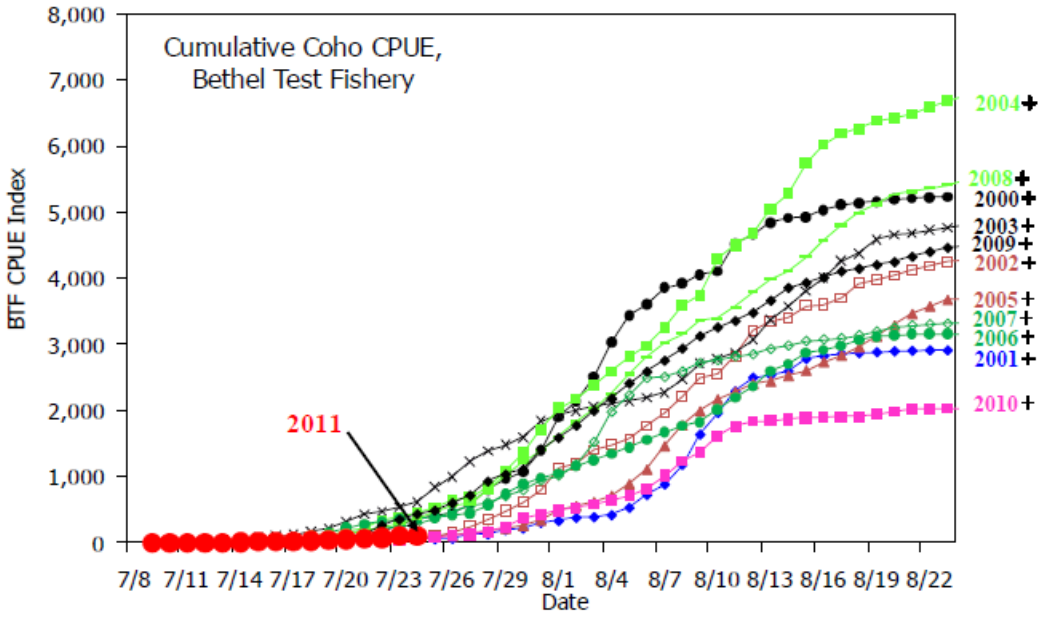



**Chum Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/01 | 908 | 676 | 2299 | 1387 | 2690 | 3455 | 5530 | 3341 | 2010 | 1959 | 2196 | 2812 |
| 7/02 | 1222 | 744 | 2660 | 1711 | 2736 | 3982 | 6437 | 3861 | 2377 | 2104 | 2378 | 3353 |
| 7/03 | 1475 | 900 | 2768 | 2031 | 2819 | 4650 | 6937 | 4252 | 2680 | 2339 | 2838 | 3750 |
| 7/04 | 1794 | 1148 | 3147 | 2413 | 2965 | 5464 | 7424 | 4736 | 2953 | 2663 | 3172 | 4127 |
| 7/05 | 1879 | 1227 | 3480 | 2857 | 3120 | 6477 | 7629 | 5314 | 3197 | 3000 | 3380 | 4504 |
| 7/06 | 1901 | 1267 | 3800 | 3127 | 3226 | 7542 | 8053 | 5927 | 3391 | 3530 | 3478 | 4854 |
| 7/07 | 1941 | 1328 | 4107 | 3352 | 3395 | 8496 | 8278 | 6414 | 3471 | 3917 | 3802 | 5340 |
| 7/08 | 2008 | 1397 | 4367 | 3447 | 3561 | 9055 | 8409 | 6775 | 3660 | 4083 | 4205 | 5542 |
| 7/09 | 2063 | 1423 | 4696 | 3503 | 3733 | 9656 | 8468 | 6914 | 3909 | 4256 | 4524 | 5811 |
| 7/10 | 2085 | 1568 | 4846 | 3558 | 3800 | 10604 | 8609 | 7011 | 4219 | 4502 | 4716 | 5843 |
| 7/11 | 2162 | 1863 | 4945 | 3618 | 3945 | 11899 | 8743 | 7127 | 4260 | 4855 | 4940 | 6264 |
| 7/12 | 2193 | 2141 | 5068 | 3663 | 3993 | 12658 | 9519 | 7261 | 4396 | 4937 | 5089 | 6978 |
| 7/13 | 2268 | 2498 | 5165 | 3706 | 4061 | 13135 | 9656 | 7389 | 4637 | 5193 | 5385 | 7245 |
| 7/14 | 2334 | 2667 | 5488 | 3772 | 4122 | 13612 | 9759 | 7636 | 4941 | 5688 | 5712 | 7395 |
| 7/15 | 2360 | 2682 | 5758 | 3838 | 4175 | 13830 | 9887 | 7976 | 5135 | 5977 | 6087 | 7769 |
| 7/16 | 2385 | 2917 | 5936 | 3873 | 4254 | 13876 | 10078 | 8257 | 5198 | 6124 | 6210 | 8031 |
| 7/17 | 2477 | 3078 | 6140 | 3893 | 4309 | 14239 | 10541 | 8452 | 5259 | 6200 | 6334 | 8296 |
| 7/18 | 2492 | 3136 | 6187 | 3973 | 4364 | 14640 | 11098 | 8728 | 5355 | 6538 | 6482 | 8637 |
| 7/19 | 2496 | 3185 | 6206 | 4052 | 4395 | 15047 | 11619 | 9014 | 5441 | 6667 | 6652 | 8884 |
| 7/20 | 2506 | 3225 | 6238 | 4120 | 4471 | 15560 | 12181 | 9337 | 5514 | 6742 | 6686 | 9069 |
| 7/21 | 2517 | 3242 | 6274 | 4207 | 4599 | 15901 | 12549 | 9613 | 5696 | 6895 | 6836 | 9200 |
| 7/22 | 2534 | 3254 | 6302 | 4238 | 4681 | 16177 | 12847 | 9755 | 5896 | 7120 | 6909 | 9303 |
| 7/23 | 2538 | 3271 | 6343 | 4309 | 4700 | 16445 | 13078 | 9782 | 6026 | 7319 | 7034 | 9394 |
| 7/24 | 2538 | 3288 | 6384 | 4416 | 4703 | 16598 | 13118 | 9876 | 6174 | 7490 | 7172 | 9418 |
| 7/25 | 2546 | 3303 | 6444 | 4516 | 4714 | 16775 | 13284 | 9955 | 6245 | 7527 | 7253 | |
| 7/26 | 2548 | 3312 | 6506 | 4592 | 4758 | 16969 | 13421 | 10090 | 6322 | 7581 | 7329 | |
| 7/27 | 2554 | 3326 | 6530 | 4630 | 4797 | 17011 | 13481 | 10189 | 6352 | 7679 | 7364 | |
| 7/28 | 2557 | 3330 | 6590 | 4663 | 4884 | 17031 | 13547 | 10259 | 6429 | 7760 | 7419 | |
| 7/29 | 2560 | 3340 | 6623 | 4692 | 4935 | 17094 | 13616 | 10296 | 6456 | 7809 | 7507 | |
| 7/30 | 2564 | 3342 | 6651 | 4719 | 4980 | 17211 | 13675 | 10359 | 6499 | 7848 | 7542 | |
| 7/31 | 2570 | 3348 | 6697 | 4750 | 5029 | 17368 | 13721 | 10390 | 6527 | 7924 | 7552 | |

-continued-

**Coho Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Bethel Test Fish Coho Cumulative CPUE**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/9 | 5 | 0 | 0 | 2 | 9 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 7/10 | 5 | 0 | 2 | 2 | 11 | 0 | 0 | 5 | 0 | 0 | 0 | 0 |
| 7/11 | 5 | 1 | 2 | 5 | 16 | 0 | 3 | 5 | 6 | 5 | 0 | 0 |
| 7/12 | 6 | 7 | 2 | 11 | 16 | 0 | 18 | 5 | 6 | 8 | 0 | 0 |
| 7/13 | 6 | 7 | 3 | 16 | 23 | 0 | 18 | 5 | 6 | 10 | 0 | 0 |
| 7/14 | 8 | 7 | 4 | 41 | 27 | 0 | 18 | 20 | 8 | 10 | 0 | 3 |
| 7/15 | 12 | 7 | 5 | 78 | 30 | 2 | 19 | 26 | 16 | 10 | 0 | 16 |
| 7/16 | 33 | 14 | 7 | 99 | 33 | 2 | 26 | 39 | 30 | 14 | 3 | 16 |
| 7/17 | 74 | 17 | 9 | 116 | 56 | 7 | 48 | 63 | 52 | 14 | 3 | 22 |
| 7/18 | 87 | 21 | 11 | 166 | 78 | 13 | 98 | 82 | 68 | 35 | 3 | 26 |
| 7/19 | 93 | 24 | 11 | 217 | 120 | 26 | 148 | 120 | 93 | 51 | 5 | 39 |
| 7/20 | 97 | 28 | 11 | 316 | 173 | 41 | 226 | 148 | 127 | 80 | 7 | 50 |
| 7/21 | 134 | 28 | 12 | 429 | 228 | 44 | 280 | 169 | 167 | 141 | 13 | 60 |
| 7/22 | 180 | 36 | 21 | 473 | 337 | 51 | 320 | 219 | 231 | 265 | 30 | 68 |
| 7/23 | 251 | 46 | 32 | 534 | 385 | 57 | 352 | 235 | 285 | 356 | 40 | 95 |
| 7/24 | 362 | 55 | 49 | 616 | 447 | 74 | 365 | 286 | 365 | 436 | 64 | 106 |
| 7/25 | 409 | 59 | 95 | 841 | 539 | 90 | 382 | 368 | 480 | 491 | 79 | |
| 7/26 | 450 | 67 | 148 | 1,001 | 645 | 110 | 408 | 478 | 550 | 606 | 103 | |
| 7/27 | 585 | 131 | 244 | 1,229 | 692 | 156 | 445 | 550 | 596 | 721 | 124 | |
| 7/28 | 809 | 131 | 351 | 1,389 | 828 | 185 | 563 | 605 | 785 | 931 | 170 | |
| 7/29 | 962 | 196 | 478 | 1,479 | 1,093 | 219 | 742 | 697 | 1,020 | 1,037 | 229 | |
| 7/30 | 1,070 | 219 | 605 | 1,596 | 1,354 | 262 | 885 | 790 | 1,216 | 1,112 | 374 | |
| 7/31 | 1,395 | 305 | 794 | 1,838 | 1,720 | 344 | 985 | 936 | 1,393 | 1,418 | 421 | |
| 8/1 | 1,910 | 336 | 1,129 | 1,936 | 2,034 | 486 | 1,047 | 1,008 | 1,616 | 1,593 | 488 | |

-continued-

## ESCAPEMENT MONITORING

### CHINOOK SALMON – Aerial Survey Escapement Goal Ranges

**Aerial surveys currently in progress (see table below)*

| | |
|---|---|
| Kisaralik River | 400 – 1,200 |
| Aniak River | 1,200 – 2,300 |
| Salmon River (Aniak R.) | 330 – 1,200 |
| Holitna River | 970 – 2,100 |
| Cheeneetnuk River (Stony R.) | 340 – 1,300 |
| Gagaryah River (Stony R.) | 300 – 830 |
| Salmon River (Pitka Fork) | 470 – 1,600 |

**Chinook salmon spawning aerial survey index estimates, Kuskokwim River Drainage, Kuskokwim Management Area, 2001-2011.**

| | Lower Kuskokwim River [a] | | | | Middle Kuskokwim River [a] | | | | | | Upper Kuskokwim River [a] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Eek | Kwethluk Canyon C. | Kisaralik | Tuluksak | Aniak | Kipchuk | Salmon | Holokuk | Oskawalik | Holitna | Gagarayah | Cheeneetnuk | Salmon (Pitka) |
| 2001 | | | | | | | 598 | | 186 | 1,130 | 143 | | 1,033 |
| 2002 | | 1,795 | 1,727 | | | 1,615 | 1,236 | 186 | 295 | 1,578 | 452 | | 1,255 |
| 2003 | 1,236 | 2,628 | 654 | 94 | 3,514 | 1,493 | 1,242 | 528 | 844 | | 1,095 | 810 | 1,241 |
| 2004 | 4,653 | 6,801 | 6,913 | 1,196 | 5,569 | 1,868 | 2,177 | 539 | 293 | 4,842 | 670 | 918 | 1,138 |
| 2005 | | 5,059 | 4,112 | 672 | | 1,944 | 4,097 | 510 | 582 | 2,795 | 788 | 1,155 | 1,809 |
| 2006 | | | 4,734 | | 5,639 | 1,618 | | 705 | 386 | 3,924 | 531 | 1,015 | 928 |
| 2007 | | | 1,373 | 173 | 3,984 | 2,147 | 1,458 | 146 | | | 1,035 | | 1,014 |
| 2008 | | 487 | 1,493 | | 3,222 | 1,061 | 589 | 418 | 213 | 832 | 177 | 290 | 1,305 |
| 2009 | | | | | | | | 565 | 378 | | 303 | 323 | 632 |
| 2010 | | | 235 | | | | | 229 | | 587 | 62 | | 150 |
| 2011 | | | **535** | | | | **——— In Progress ———** | | | | **100** | **279** | **767** |

[a] Estimates are from aerial surveys conducted during peak spawning periods under 'good' or 'fair' survey conditions.

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### CHINOOK SALMON – Weir Counts

**Kwethluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal Range: 6,000 to 11,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | | 7,612 | 12,441 | 25,947 | | 15,682 | 10,716 | 3,576 | 4,986 | 1,249 | 3,881 |
| 7/24 | | 7,749 | 12,729 | 26,139 | | 15,793 | 10,951 | 3,709 | 5,163 | 1,308 | 3,956 |
| 7/25 | | 7,863 | 12,909 | 26,387 | | 16,102 | 11,464 | 3,859 | 5,255 | 1,354 | 4,100 |
| 7/26 | | 7,863 | 12,909 | 26,387 | | 16,102 | 11,464 | 3,859 | 5,291 | 1,428 | |
| 7/27 | | 7,863 | 12,909 | 26,387 | | 16,102 | 11,464 | 3,859 | 5,366 | 1,472 | |
| 7/28 | | 7,863 | 12,909 | 26,387 | | 16,102 | 11,464 | 3,859 | 5,428 | 1,522 | |
| Season Total | n.a. | 8,502 | 14,474 | 28,604 | n.a. | 17,618 | 12,927 | 5,275 | 5,744 | 1,693 | |

**Tuluksak River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal **Esc Goal Range: 1,000 to 2,100**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 865 | 1,211 | 821 | 1,314 | 2,366 | 764 | 272 | 438 | 209 | 118 | 237 |
| 7/24 | 869 | 1,214 | 834 | 1,328 | 2,467 | 788 | 292 | 458 | 234 | 125 | 243 |
| 7/25 | 885 | 1,244 | 864 | 1,347 | 2,499 | 800 | 311 | 484 | 261 | 129 | 253 |
| 7/26 | 885 | 1,244 | 864 | 1,347 | 2,499 | 800 | 311 | 484 | 263 | 132 | |
| 7/27 | 885 | 1,244 | 864 | 1,347 | 2,499 | 800 | 311 | 484 | 265 | 137 | |
| 7/28 | 885 | 1,244 | 864 | 1,347 | 2,499 | 800 | 311 | 484 | 280 | 153 | |
| Season Total | 998 | 1,346 | 1,064 | 1,475 | 2,653 | 1,043 | 394 | 701 | 362 | 201 | |

**George River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal Range: 3,100 to 7,900**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 3,126 | 2,299 | 4,490 | 4,906 | 3,605 | 4,101 | 4,555 | 2,257 | 3,441 | 1,284 | 1,430 |
| 7/24 | 3,130 | 2,317 | 4,503 | 4,944 | 3,636 | 4,120 | 4,611 | 2,294 | 3,456 | 1,315 | 1,445 |
| 7/25 | 3,142 | 2,323 | 4,521 | 4,973 | 3,672 | 4,152 | 4,662 | 2,381 | 3,468 | 1,342 | 1,467 |
| 7/26 | 3,142 | 2,323 | 4,521 | 4,973 | 3,672 | 4,152 | 4,662 | 2,381 | 3,502 | 1,366 | |
| 7/27 | 3,142 | 2,323 | 4,521 | 4,973 | 3,672 | 4,152 | 4,662 | 2,381 | 3,508 | 1,375 | |
| 7/28 | 3,142 | 2,323 | 4,521 | 4,973 | 3,672 | 4,152 | 4,662 | 2,381 | 3,539 | 1,402 | |
| Season Total | 3,309 | 2,444 | 4,693 | 5,207 | 3,845 | 4,357 | 4,883 | 2,698 | 3,663 | 1,500 | |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

## CHINOOK SALMON – Weir Counts

**Kogrukluk River weir historical cumulative daily Chinook salmon escapement.**

= years below escapement goal. **Esc Goal Range: 5,300 to 14,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 8,480 | 9,417 | 10,316 | 17,217 | 18,749 | 14,631 | 9,864 | 5,571 | 6,649 | 3,552 | 3,728 |
| 7/24 | 8,621 | 9,593 | 10,573 | 17,402 | 19,205 | 15,178 | 10,164 | 6,105 | 6,876 | 3,750 | 4,013 |
| 7/25 | 8,736 | 9,724 | 10,821 | 17,623 | 19,590 | 16,001 | 10,505 | 6,845 | 7,079 | 3,823 | 4,465 |
| 7/26 | 8,793 | 9,806 | 10,937 | 17,820 | 19,949 | 16,371 | 10,988 | 7,449 | 7,540 | 4,061 | |
| 7/27 | 8,836 | 9,856 | 11,090 | 18,305 | 20,222 | 16,721 | 11,338 | 7,810 | 7,956 | 4,185 | |
| 7/28 | 8,886 | 9,893 | 11,196 | 18,600 | 20,542 | 17,166 | 11,588 | 8,221 | 8,193 | 4,305 | |
| Season Total | 9,298 | 10,104 | 11,771 | 19,651 | 22,000 | 19,414 | 13,029 | 9,730 | 9,702 | 5,690 | |

**Tatlawiksuk River weir historical cumulative daily Chinook salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 1,937 | 2,126 | 1,503 | 2,678 | 2,788 | 1,555 | 1,903 | 816 | 994 | 472 | 900 |
| 7/24 | 1,950 | 2,133 | 1,528 | 2,697 | 2,803 | 1,576 | 1,934 | 842 | 1,001 | 478 | 909 |
| 7/25 | 1,959 | 2,151 | 1,544 | 2,710 | 2,814 | 1,586 | 1,971 | 890 | 1,009 | 484 | 913 |
| 7/26 | 1,959 | 2,151 | 1,544 | 2,710 | 2,814 | 1,586 | 1,971 | 890 | 1,014 | 495 | |
| 7/27 | 1,959 | 2,151 | 1,544 | 2,710 | 2,814 | 1,586 | 1,971 | 890 | 1,017 | 501 | |
| 7/28 | 1,959 | 2,151 | 1,544 | 2,710 | 2,814 | 1,586 | 1,971 | 890 | 1,024 | 507 | |
| Season Total | 2,010 | 2,237 | 1,683 | 2,833 | 2,920 | 1,700 | 2,061 | 1,071 | 1,071 | 567 | |

**Takotna River weir historical cumulative daily Chinook salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 620 | 269 | 277 | 410 | 442 | 444 | 354 | 240 | 239 | 108 | 108 |
| 7/24 | 637 | 269 | 288 | 411 | 446 | 448 | 357 | 272 | 256 | 108 | 109 |
| 7/25 | 647 | 275 | 295 | 411 | 453 | 451 | 364 | 307 | 257 | 112 | 114 |
| 7/26 | 647 | 275 | 295 | 411 | 453 | 451 | 364 | 307 | 257 | 117 | |
| 7/27 | 647 | 275 | 295 | 411 | 453 | 451 | 364 | 307 | 264 | 123 | |
| 7/28 | 647 | 275 | 295 | 411 | 453 | 451 | 364 | 307 | 265 | 127 | |
| Season Total | 721 | 316 | 378 | 461 | 499 | 539 | 418 | 413 | 311 | 178 | |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON – Weir Counts

**Kwethluk River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | | 26,640 | 23,150 | 28,115 | | 38,512 | 34,938 | 10,651 | 20,118 | 12,909 | 12,110 |
| 7/24 | | 27,315 | 23,703 | 29,262 | | 38,912 | 37,284 | 11,503 | 21,380 | 13,751 | 12,571 |
| 7/25 | | 27,987 | 25,076 | 30,070 | | 40,245 | 39,714 | 12,302 | 21,836 | 14,137 | 13,461 |
| 7/26 | | 27,987 | 25,076 | 30,070 | | 40,245 | 39,714 | 12,302 | 22,284 | 14,597 | |
| 7/27 | | 27,987 | 25,076 | 30,070 | | 40,245 | 39,714 | 12,302 | 23,409 | 15,126 | |
| 7/28 | | 27,987 | 25,076 | 30,070 | | 40,245 | 39,714 | 12,302 | 24,452 | 16,007 | |
| Season Total | n.a. | 35,854 | 41,812 | 38,646 | n.a. | 47,490 | 54,913 | 20,030 | 32,191 | 19,242 | |

**Tuluksak River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 10,934 | 7,163 | 4,260 | 8,845 | 24,520 | 17,386 | 10,425 | 7,618 | 6,502 | 7,921 | 4,704 |
| 7/24 | 11,302 | 7,250 | 4,565 | 9,186 | 26,610 | 18,151 | 11,189 | 8,022 | 7,228 | 8,263 | 4,869 |
| 7/25 | 12,191 | 7,499 | 5,305 | 9,452 | 28,407 | 18,533 | 11,744 | 8,343 | 7,376 | 8,601 | 5,502 |
| 7/26 | 12,191 | 7,499 | 5,305 | 9,452 | 28,407 | 18,533 | 11,744 | 8,343 | 7,703 | 9,114 | |
| 7/27 | 12,191 | 7,499 | 5,305 | 9,452 | 28,407 | 18,533 | 11,744 | 8,343 | 8,215 | 9,547 | |
| 7/28 | 12,191 | 7,499 | 5,305 | 9,452 | 28,407 | 18,533 | 11,744 | 8,343 | 9,098 | 10,055 | |
| Season Total | 19,311 | 9,958 | 11,724 | 0 11,796 | 35,696 | 25,650 | 17,647 | 12,550 | 13,671 | 13,042 | |

**Aniak River sonar historical cumulative daily chum salmon escapement index.**

= years below escapement goal.

**Esc Goal Range: 220,000 to 480,000**

| Date | Cumulative Daily Count | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 330,809 | 401,536 | 355,975 | 547,695 | 919,907 | 937,360 | 497,837 | 290,507 | 343,252 | 333,333 | 234,860 |
| 7/24 | 342,682 | 408,700 | 373,186 | 570,848 | 960,642 | 960,286 | 534,667 | 309,196 | 369,274 | 347,065 | 246,402 |
| 7/25 | 353,723 | 420,645 | 385,977 | 587,736 | 993,213 | 980,114 | 558,134 | 342,814 | 391,722 | 362,103 | 259,444 |
| 7/26 | 353,723 | 420,645 | 385,977 | 587,736 | 993,213 | 980,114 | 558,134 | 342,814 | 400,532 | 370,337 | |
| 7/27 | 353,723 | 420,645 | 385,977 | 587,736 | 993,213 | 980,114 | 558,134 | 342,814 | 416,200 | 380,475 | |
| 7/28 | 353,723 | 420,645 | 385,977 | 587,736 | 993,213 | 980,114 | 558,134 | 342,814 | 443,718 | 394,139 | |
| Season Total | 408,830 | 472,346 | 477,544 | 673,445 | 1,173,155 | 1,108,626 | 699,178 | 427,911 | 479,531 | 429,643 | |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

## CHUM SALMON – Weir Counts

**George River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 8,118 | 5,728 | 19,665 | 12,094 | 11,358 | 32,411 | 34,227 | 22,126 | 5,855 | 19,120 | 33,142 |
| 7/24 | 8,382 | 5,798 | 20,253 | 12,345 | 11,651 | 33,411 | 37,561 | 22,998 | 6,008 | 19,602 | 34,212 |
| 7/25 | 8,626 | 5,858 | 21,002 | 12,555 | 11,857 | 34,241 | 40,739 | 23,931 | 6,157 | 20,413 | 35,406 |
| 7/26 | 8,626 | 5,858 | 21,002 | 12,555 | 11,857 | 34,241 | 40,739 | 23,931 | 6,362 | 21,028 | |
| 7/27 | 8,626 | 5,858 | 21,002 | 12,555 | 11,857 | 34,241 | 40,739 | 23,931 | 6,508 | 21,635 | |
| 7/28 | 8,626 | 5,858 | 21,002 | 12,555 | 11,857 | 34,241 | 40,739 | 23,931 | 6,695 | 22,133 | |
| Season Total | 11,601 | 6,543 | 33,666 | 14,409 | 14,828 | 41,467 | 55,842 | 29,978 | 7,941 | 26,154 | |

**Kogrukluk River weir historical cumulative daily chum salmon escapement.**

= years below escapement goal.

**Esc Goal Range: 15,000 to 49,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 22,237 | 45,303 | 17,593 | 17,940 | 131,962 | 134,101 | 32,435 | 21,457 | 39,083 | 37,889 | 39,106 |
| 7/24 | 23,227 | 48,216 | 18,077 | 18,288 | 139,285 | 138,597 | 33,355 | 22,994 | 42,738 | 39,933 | 43,130 |
| 7/25 | 23,909 | 49,354 | 18,935 | 18,821 | 145,986 | 142,843 | 34,067 | 24,783 | 46,384 | 41,537 | 46,113 |
| 7/26 | 23,909 | 49,354 | 18,935 | 18,821 | 145,986 | 142,843 | 34,067 | 24,783 | 49,405 | 43,830 | |
| 7/27 | 23,909 | 49,354 | 18,935 | 18,821 | 145,986 | 142,843 | 34,067 | 24,783 | 51,859 | 45,872 | |
| 7/28 | 23,909 | 49,354 | 18,935 | 18,821 | 145,986 | 142,843 | 34,067 | 24,783 | 56,093 | 47,807 | |
| Season Total | 30,570 | 51,570 | 23,413 | 24,201 | 197,723 | 180,594 | 49,505 | 44,978 | 84,940 | 63,583 | |

**Tatlawiksuk River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 20,212 | 22,200 | | 17,192 | 45,504 | 26,183 | 62,215 | 23,079 | 13,406 | 27,803 | 63,201 |
| 7/24 | 20,723 | 22,451 | | 17,655 | 46,656 | 26,938 | 64,872 | 24,031 | 14,247 | 28,638 | 65,363 |
| 7/25 | 21,114 | 22,657 | | 18,129 | 47,794 | 27,672 | 67,270 | 25,137 | 15,012 | 29,539 | 68,014 |
| 7/26 | 21,114 | 22,658 | | 18,129 | 47,794 | 27,672 | 67,270 | 25,137 | 15,665 | 30,768 | |
| 7/27 | 21,114 | 22,659 | | 18,129 | 47,794 | 27,672 | 67,270 | 25,137 | 16,341 | 31,784 | |
| 7/28 | 21,114 | 22,660 | | 18,129 | 47,794 | 27,672 | 67,270 | 25,137 | 16,982 | 32,694 | |
| Season Total | 23,718 | 24,542 | n.a. | 21,245 | 55,720 | 32,301 | 83,246 | 30,896 | 19,975 | 36,701 | |

-continued-

**ESCAPEMENT MONITORING *(Continued)***

**CHUM SALMON – Weir Counts**

**Takotna River weir historical cumulative daily chum salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 4,278 | 3,915 | 2,674 | 1,412 | 5,238 | 9,751 | 7,167 | 4,472 | 1,505 | 2,893 | 6,583 |
| 7/24 | 4,446 | 3,982 | 2,743 | 1,445 | 5,360 | 10,069 | 7,359 | 4,582 | 1,614 | 3,033 | 6,837 |
| 7/25 | 4,591 | 4,044 | 2,806 | 1,460 | 5,487 | 10,337 | 7,610 | 4,707 | 1,657 | 3,125 | 7,043 |
| 7/26 | 4,591 | 4,044 | 2,806 | 1,460 | 5,487 | 10,337 | 7,610 | 4,707 | 1,748 | 3,287 | |
| 7/27 | 4,591 | 4,044 | 2,806 | 1,460 | 5,487 | 10,337 | 7,610 | 4,707 | 1,823 | 3,401 | |
| 7/28 | 4,591 | 4,044 | 2,806 | 1,460 | 5,487 | 10,337 | 7,610 | 4,707 | 1,895 | 3,501 | |
| Season Total | 5,414 | 4,377 | 3,393 | 1,630 0 | 6,467 | 12,598 | 8,900 | 5,691 | 2,487 | 4,062 | |

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## ESCAPEMENT MONITORING *(Continued)*

### SOCKEYE SALMON – Weir Counts

**Kwethluk River historical cumulative daily sockeye salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | | 228 | 2,730 | 3,276 | | 6,179 | 4,339 | 2,006 | 3,817 | 3,776 | 2,361 |
| 7/24 | | 228 | 2,740 | 3,279 | | 6,200 | 4,373 | 2,041 | 3,868 | 3,860 | 2,378 |
| 7/25 | | 228 | 2,757 | 3,294 | | 6,241 | 4,483 | 2,083 | 3,906 | 3,902 | 2,417 |
| 7/26 | | 228 | 2,757 | 3,294 | | 6,241 | 4,483 | 2,083 | 3,916 | 3,953 | |
| 7/27 | | 228 | 2,757 | 3,294 | | 6,241 | 4,483 | 2,083 | 3,970 | 4,014 | |
| 7/28 | | 228 | 2,757 | 3,294 | | 6,241 | 4,483 | 2,083 | 4,024 | 4,056 | |
| KWE Total | n.a. | 272 | 2,928 | 3,491 | n.a. | 6,732 | 5,262 | 2,451 | 4,230 | 4,242 | |

**Kogrukluk River weir historical cumulative daily sockeye salmon escapement.**

= years below escapement goal.

**Esc Goal Range: 4,400 to 17,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/23 | 7,663 | 3,858 | 7,926 | 5,860 | 32,566 | 46,547 | 8,925 | 10,263 | 14,155 | 5,462 | 5,041 |
| 7/24 | 7,803 | 3,917 | 8,101 | 5,918 | 33,342 | 48,302 | 9,443 | 11,405 | 14,723 | 6,102 | 5,382 |
| 7/25 | 7,900 | 3,950 | 8,422 | 6,056 | 33,939 | 49,672 | 10,180 | 13,025 | 15,043 | 6,424 | 5,854 |
| 7/26 | 7,900 | 3,950 | 8,422 | 6,056 | 33,939 | 49,672 | 10,180 | 13,025 | 15,890 | 7,284 | |
| 7/27 | 7,900 | 3,950 | 8,422 | 6,056 | 33,939 | 49,672 | 10,180 | 13,025 | 17,120 | 8,023 | |
| 7/28 | 7,900 | 3,950 | 8,422 | 6,056 | 33,939 | 49,672 | 10,180 | 13,025 | 18,073 | 8,524 | |
| Season Total | 8,776 | 4,050 | 9,164 | 6,775 | 37,939 | 60,807 | 16,525 | 19,675 | 23,785 | 13,995 | |

**Telequana Lake Weir historical cumulative daily sockeye salmon escapement.**

**Esc Goal Range: none**

| Date | Cumulative Daily Passage | |
|---|---|---|
| | 2010 | **2011** |
| 7/23 | 17,457 | 28,047 |
| 7/24 | 18,582 | 29,369 |
| 7/25 | 20,015 | 30,234 |
| 7/26 | 22,347 | |
| 7/27 | 25,700 | |
| 7/28 | 28,991 | |
| Season Total | 72,021 | |

-continued-

**COMMERCIAL CATCH REPORT:**

**July 29, Subdistrict 1-A Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/28/2010 | **1-A** | 68 | 6 | 36 | 0.09 | 71 | 0.2 | 2,380 | 5.8 | 2,920 | 7.2 |

**August 1, Subdistrict 1-B Comparison of Most Recent Opening to Similar Dates With Fishing**

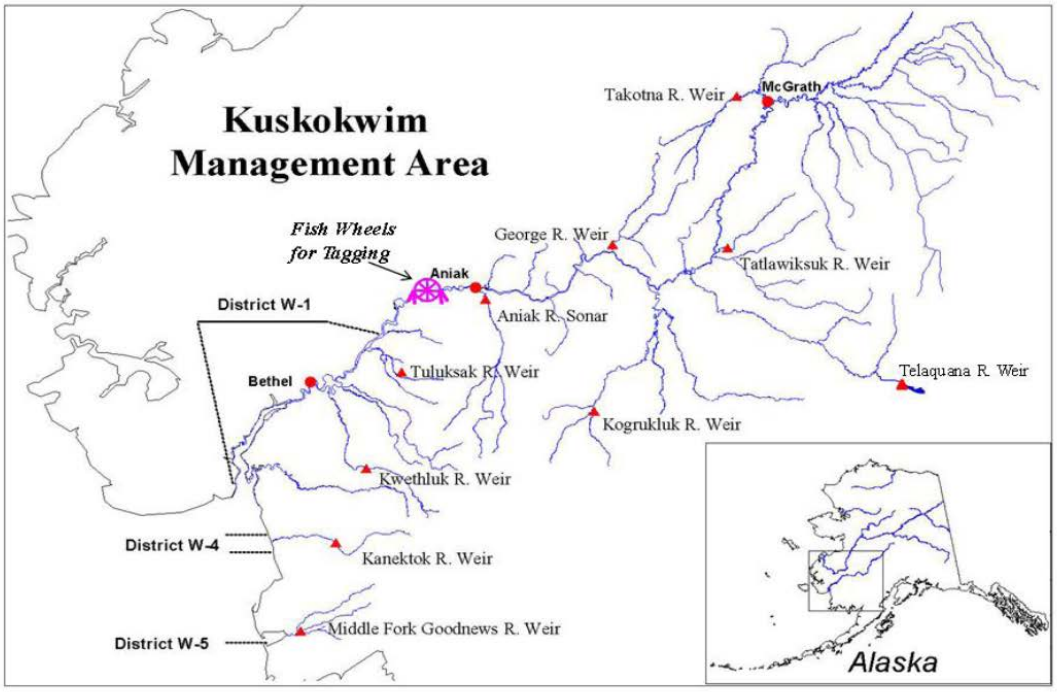
| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 8/1/2009 | **1-B** | 220 | 4 | 24 | 0.03 | 80 | 0.1 | 1,605 | 1.8 | 16,792 | 19.1 |

**Total cumulative harvest in District 1**

| | Sub- | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Distrit | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/5/2011 | **1B** | 116 | 4 | 192 | 0.41 | 2,471 | 5.3 | 13,657 | 29.4 | 0 | 0.0 |
| 7/7/2011 | **1A** | 63 | 3 | 127 | 0.67 | 2,339 | 12.4 | 8,130 | 43.0 | 0 | 0.0 |
| 7/9/2011 | **1A** | 61 | 3 | 74 | 0.40 | 2,541 | 13.9 | 6,850 | 37.4 | 1 | 0.0 |
| 7/11/2011 | **1A** | 76 | 3 | 89 | 0.39 | 2,024 | 8.9 | 11,258 | 49.4 | 0 | 0.0 |
| 7/13/2011 | **1B** | 145 | 4 | 53 | 0.09 | 531 | 0.9 | 19,525 | 33.7 | 46 | 0.1 |
| 7/15/2011 | **1A** | 87 | 4 | 79 | 0.23 | 1,999 | 5.7 | 12,432 | 35.7 | 38 | 0.1 |
| 7/18/2011 | **1B** | 158 | 4 | 7 | 0.01 | 282 | 0.4 | 12,040 | 19.1 | 187 | 0.3 |
| 7/20/2011 | **1A** | 83 | 4 | 27 | 0.08 | 647 | 1.9 | 9,465 | 28.5 | 273 | 0.8 |
| 7/22/2011 | **1B** | 156 | 4 | 0 | 0.00 | 207 | 0.3 | 8,471 | 13.6 | 1,522 | 2.4 |
| 7/25/2011 | **1B** | 80 | 4 | 24 | 0.08 | 51 | 0.2 | 7,021 | 21.9 | 2,710 | 8.5 |
| Total | **1-A & 1-B** | 103 | 37 | 672 | | 13,092 | | 108,849 | | 4,777 | |

*** Results are preliminary and subject to change (includes catcher/seller)**

-continued-


Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
District W-5
Middle Fork Goodnews R. Weir
Alaska

Appendix B9.–Information Packet, August 2, Kuskokwim River Salmon Management Working Group, 2011.

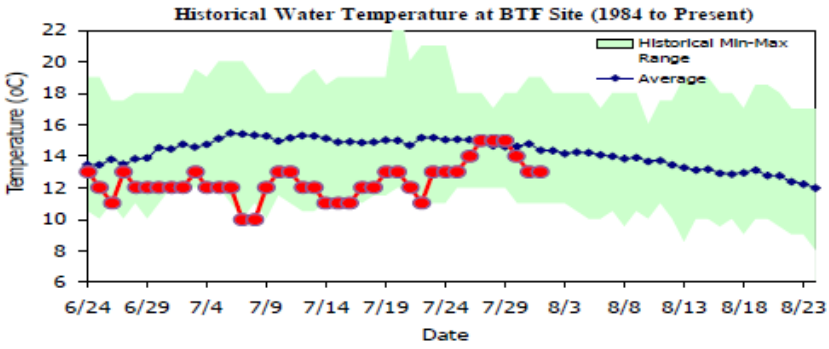
## Kuskokwim River Salmon Management Working Group

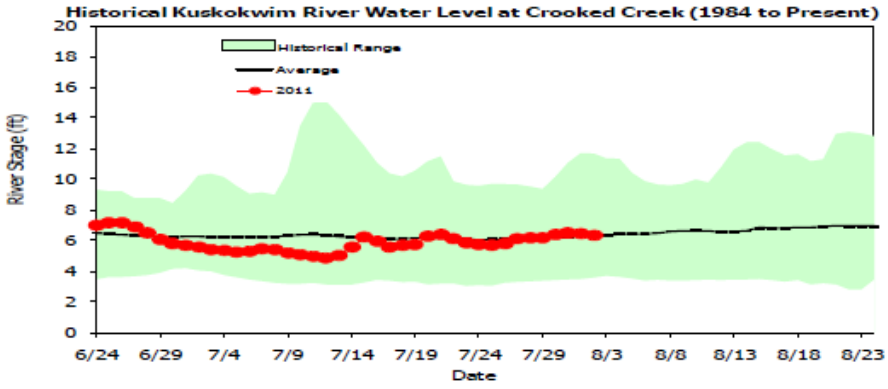
1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

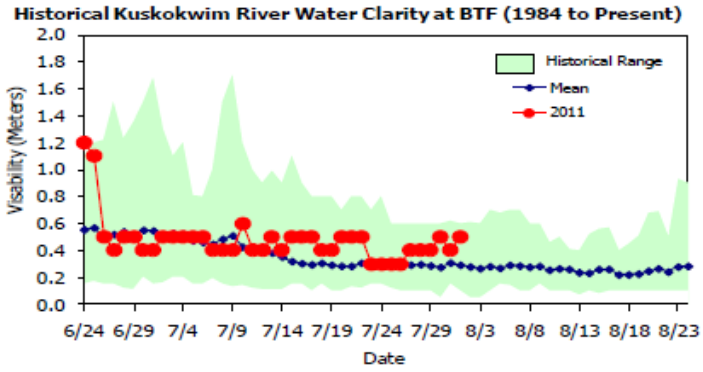
### Information Packet

**August 2, 2011**

**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS**

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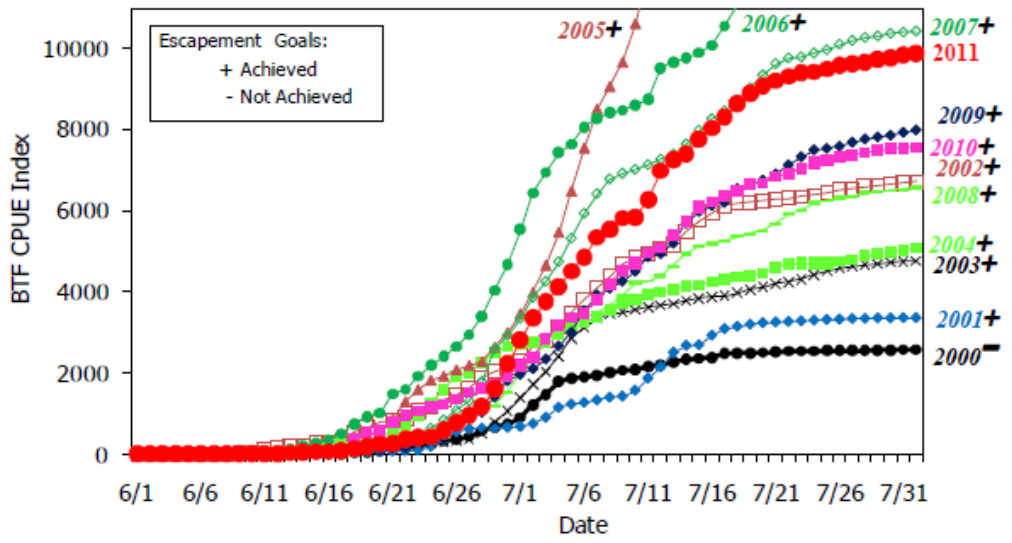
**Chum Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Chum Salmon Cumulative CPUE Index**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | %Passage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/04 | 1794 | 1148 | 3147 | 2413 | 2965 | 5464 | 7424 | 4736 | 2953 | 2663 | 3172 | 4127 | 50% |
| 7/05 | 1879 | 1227 | 3480 | 2857 | 3120 | 6477 | 7629 | 5314 | 3197 | 3000 | 3380 | 4504 | |
| 7/06 | 1901 | 1267 | 3800 | 3127 | 3226 | 7542 | 8053 | 5927 | 3391 | 3530 | 3478 | 4854 | |
| 7/07 | 1941 | 1328 | 4107 | 3352 | 3395 | 8496 | 8278 | 6414 | 3471 | 3917 | 3802 | 5340 | |
| 7/08 | 2008 | 1397 | 4367 | 3447 | 3561 | 9055 | 8409 | 6775 | 3660 | 4083 | 4205 | 5542 | |
| 7/09 | 2063 | 1423 | 4696 | 3503 | 3733 | 9656 | 8468 | 6914 | 3909 | 4256 | 4524 | 5811 | |
| 7/10 | 2085 | 1568 | 4846 | 3558 | 3800 | 10604 | 8609 | 7011 | 4219 | 4502 | 4716 | 5843 | |
| 7/11 | 2162 | 1863 | 4945 | 3618 | 3945 | 11899 | 8743 | 7127 | 4260 | 4855 | 4940 | 6264 | |
| 7/12 | 2193 | 2141 | 5068 | 3663 | 3993 | 12658 | 9519 | 7261 | 4396 | 4937 | 5089 | 6978 | 75% |
| 7/13 | 2268 | 2498 | 5165 | 3706 | 4061 | 13135 | 9656 | 7389 | 4637 | 5193 | 5385 | 7245 | |
| 7/14 | 2334 | 2667 | 5488 | 3772 | 4122 | 13612 | 9759 | 7636 | 4941 | 5688 | 5712 | 7395 | |
| 7/15 | 2360 | 2682 | 5758 | 3838 | 4175 | 13830 | 9887 | 7976 | 5135 | 5977 | 6087 | 7769 | |
| 7/16 | 2385 | 2917 | 5936 | 3873 | 4254 | 13876 | 10078 | 8257 | 5198 | 6124 | 6210 | 8031 | |
| 7/17 | 2477 | 3078 | 6140 | 3893 | 4309 | 14239 | 10541 | 8452 | 5259 | 6200 | 6334 | 8296 | |
| 7/18 | 2492 | 3136 | 6187 | 3973 | 4364 | 14640 | 11098 | 8728 | 5355 | 6538 | 6482 | 8637 | |
| 7/19 | 2496 | 3185 | 6206 | 4052 | 4395 | 15047 | 11619 | 9014 | 5441 | 6667 | 6652 | 8884 | |
| 7/20 | 2506 | 3225 | 6238 | 4120 | 4471 | 15560 | 12181 | 9337 | 5514 | 6742 | 6686 | 9069 | 90% |
| 7/21 | 2517 | 3242 | 6274 | 4207 | 4599 | 15901 | 12549 | 9613 | 5696 | 6895 | 6836 | 9200 | |
| 7/22 | 2534 | 3254 | 6302 | 4238 | 4681 | 16177 | 12847 | 9755 | 5896 | 7120 | 6909 | 9303 | |
| 7/23 | 2538 | 3271 | 6343 | 4309 | 4700 | 16445 | 13078 | 9782 | 6026 | 7319 | 7034 | 9394 | |
| 7/24 | 2538 | 3288 | 6384 | 4416 | 4703 | 16598 | 13118 | 9876 | 6174 | 7490 | 7172 | 9418 | |
| 7/25 | 2546 | 3303 | 6444 | 4516 | 4714 | 16775 | 13284 | 9955 | 6245 | 7527 | 7253 | 9484 | 95% |
| 7/26 | 2548 | 3312 | 6506 | 4592 | 4758 | 16969 | 13421 | 10090 | 6322 | 7581 | 7329 | 9572 | |
| 7/27 | 2554 | 3326 | 6530 | 4630 | 4797 | 17011 | 13481 | 10189 | 6352 | 7679 | 7364 | 9627 | |
| 7/28 | 2557 | 3330 | 6590 | 4663 | 4884 | 17031 | 13547 | 10259 | 6429 | 7760 | 7419 | 9651 | |
| 7/29 | 2560 | 3340 | 6623 | 4692 | 4935 | 17094 | 13616 | 10296 | 6456 | 7809 | 7507 | 9715 | |
| 7/30 | 2564 | 3342 | 6651 | 4719 | 4980 | 17211 | 13675 | 10359 | 6499 | 7848 | 7542 | 9759 | |
| 7/31 | 2570 | 3348 | 6697 | 4750 | 5029 | 17368 | 13721 | 10390 | 6527 | 7924 | 7552 | 9835 | |
| 8/01 | 2571 | 3348 | 6717 | 4755 | 5084 | 17523 | 13746 | 10416 | 6582 | 7979 | 7565 | 9864 | |
| 8/02 | 2576 | 3353 | 6719 | 4760 | 5103 | 17599 | 13760 | 10439 | 6598 | 8015 | 7579 | | |

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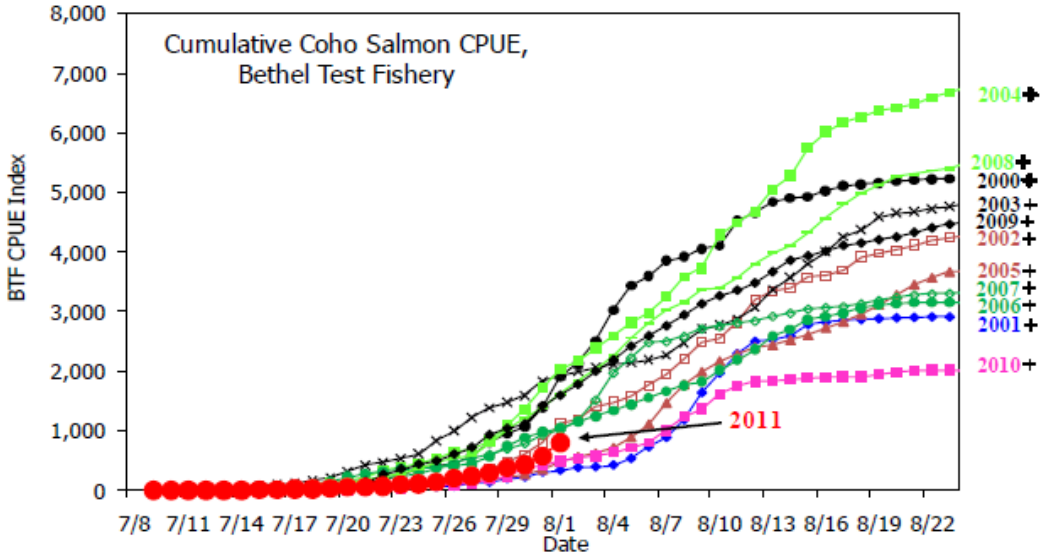
**Coho Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Bethel Test Fish Coho Salmon Cumulative CPUE**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | % Passage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/9 | 5 | 0 | 0 | 2 | 9 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | |
| 7/10 | 5 | 0 | 2 | 2 | 11 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | |
| 7/11 | 5 | 1 | 2 | 5 | 16 | 0 | 3 | 5 | 6 | 5 | 0 | 0 | |
| 7/12 | 6 | 7 | 2 | 11 | 16 | 0 | 18 | 5 | 6 | 8 | 0 | 0 | |
| 7/13 | 6 | 7 | 3 | 16 | 23 | 0 | 18 | 5 | 6 | 10 | 0 | 0 | |
| 7/14 | 8 | 7 | 4 | 41 | 27 | 0 | 18 | 20 | 8 | 10 | 0 | 3 | |
| 7/15 | 12 | 7 | 5 | 78 | 30 | 2 | 19 | 26 | 16 | 10 | 0 | 16 | |
| 7/16 | 33 | 14 | 7 | 99 | 33 | 2 | 26 | 39 | 30 | 14 | 3 | 16 | |
| 7/17 | 74 | 17 | 9 | 116 | 56 | 7 | 48 | 63 | 52 | 14 | 3 | 22 | |
| 7/18 | 87 | 21 | 11 | 166 | 78 | 13 | 98 | 82 | 68 | 35 | 3 | 26 | |
| 7/19 | 93 | 24 | 11 | 217 | 120 | 26 | 148 | 120 | 93 | 51 | 5 | 39 | |
| 7/20 | 97 | 28 | 11 | 316 | 173 | 41 | 226 | 148 | 127 | 80 | 7 | 50 | |
| 7/21 | 134 | 28 | 12 | 429 | 228 | 44 | 280 | 169 | 167 | 141 | 13 | 60 | |
| 7/22 | 180 | 36 | 21 | 473 | 337 | 51 | 320 | 219 | 231 | 265 | 30 | 68 | |
| 7/23 | 251 | 46 | 32 | 534 | 385 | 57 | 352 | 235 | 285 | 356 | 40 | 95 | |
| 7/24 | 362 | 55 | 49 | 616 | 447 | 74 | 365 | 286 | 365 | 436 | 64 | 106 | |
| 7/25 | 409 | 59 | 95 | 841 | 539 | 90 | 382 | 368 | 480 | 491 | 79 | 142 | |
| 7/26 | 450 | 67 | 148 | 1,001 | 645 | 110 | 408 | 478 | 550 | 606 | 103 | 200 | |
| 7/27 | 585 | 131 | 244 | 1,229 | 692 | 156 | 445 | 550 | 596 | 721 | 124 | 240 | |
| 7/28 | 809 | 131 | 351 | 1,389 | 828 | 185 | 563 | 605 | 785 | 931 | 170 | 296 | 10% |
| 7/29 | 962 | 196 | 478 | 1,479 | 1,093 | 219 | 742 | 697 | 1,020 | 1,037 | 229 | 378 | |
| 7/30 | 1,070 | 219 | 605 | 1,596 | 1,354 | 262 | 885 | 790 | 1,216 | 1,112 | 374 | 437 | |
| 7/31 | 1,395 | 305 | 794 | 1,838 | 1,720 | 344 | 985 | 936 | 1,393 | 1,418 | 421 | 578 | |
| 8/1 | 1,910 | 336 | 1,129 | 1,936 | 2,034 | 486 | 1,047 | 1,008 | 1,616 | 1,593 | 488 | 802 | |
| 8/2 | 2,138 | 382 | 1,192 | 2,001 | 2,173 | 561 | 1,158 | 1,171 | 1,837 | 1,777 | 531 | | 25% |
| 8/3 | 2,512 | 393 | 1,405 | 2,067 | 2,389 | 622 | 1,250 | 1,519 | 2,030 | 2,000 | 580 | | |
| 8/4 | 3,031 | 422 | 1,483 | 2,112 | 2,599 | 715 | 1,344 | 1,975 | 2,253 | 2,190 | 634 | | |
| 8/5 | 3,444 | 532 | 1,572 | 2,147 | 2,819 | 892 | 1,447 | 2,234 | 2,560 | 2,418 | 713 | | |
| 8/6 | 3,605 | 726 | 1,768 | 2,197 | 2,982 | 1,112 | 1,560 | 2,491 | 2,806 | 2,595 | 804 | | |
| 8/7 | 3,864 | 887 | 1,959 | 2,272 | 3,255 | 1,466 | 1,668 | 2,506 | 3,032 | 2,762 | 1,011 | | |
| 8/8 | 3,929 | 1,184 | 2,215 | 2,483 | 3,594 | 1,783 | 1,767 | 2,590 | 3,163 | 2,946 | 1,242 | | 50% |
| 8/9 | 4,063 | 1,640 | 2,489 | 2,711 | 3,740 | 1,994 | 1,827 | 2,719 | 3,373 | 3,132 | 1,371 | | |
| 8/10 | 4,112 | 1,968 | 2,553 | 2,782 | 4,294 | 2,174 | 2,019 | 2,762 | 3,402 | 3,266 | 1,616 | | |
| 8/11 | 4,528 | 2,294 | 2,831 | 2,877 | 4,505 | 2,286 | 2,193 | 2,821 | 3,573 | 3,363 | 1,762 | | |
| 8/12 | 4,670 | 2,501 | 3,207 | 3,074 | 4,694 | 2,406 | 2,369 | 2,850 | 3,801 | 3,485 | 1,831 | | |
| 8/13 | 4,852 | 2,537 | 3,351 | 3,375 | 5,057 | 2,444 | 2,601 | 2,931 | 3,990 | 3,672 | 1,840 | | 75% |

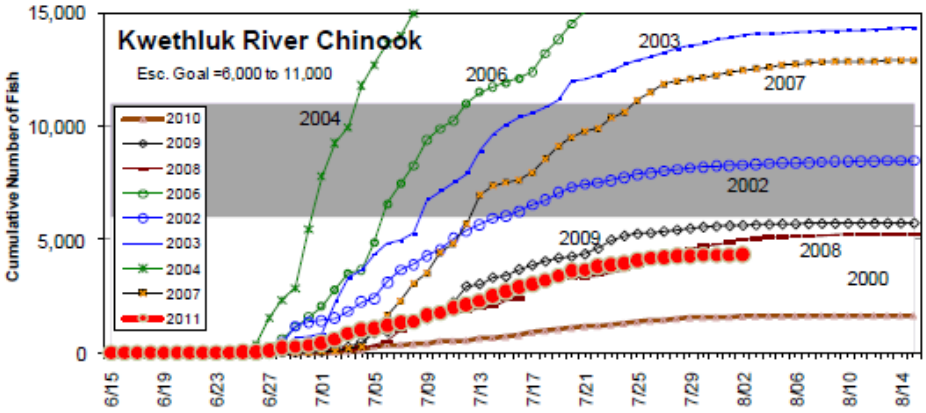
-continued-

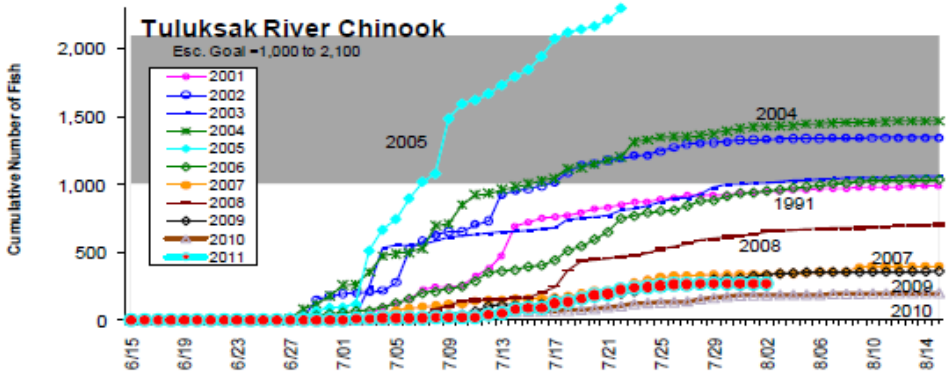
## ESCAPEMENT MONITORING

### CHINOOK SALMON

- Chinook salmon migration at escapement projects appears to be near an end.
- Escapements at most locations appear to be relatively low.
- Ground based escapement goals were not met at the Kwethluk, Tuluksak, and George River weirs.
- Escapement on the Kwethluk River is now more than double the 2010 escapement.
- The Kogrukluk River escapement goal was met on July 28, 2011.
- Tuluksak, George and Kogrukluk River escapements are higher than, but similar to, 2010 escapements.

### CHINOOK SALMON – Weir Counts

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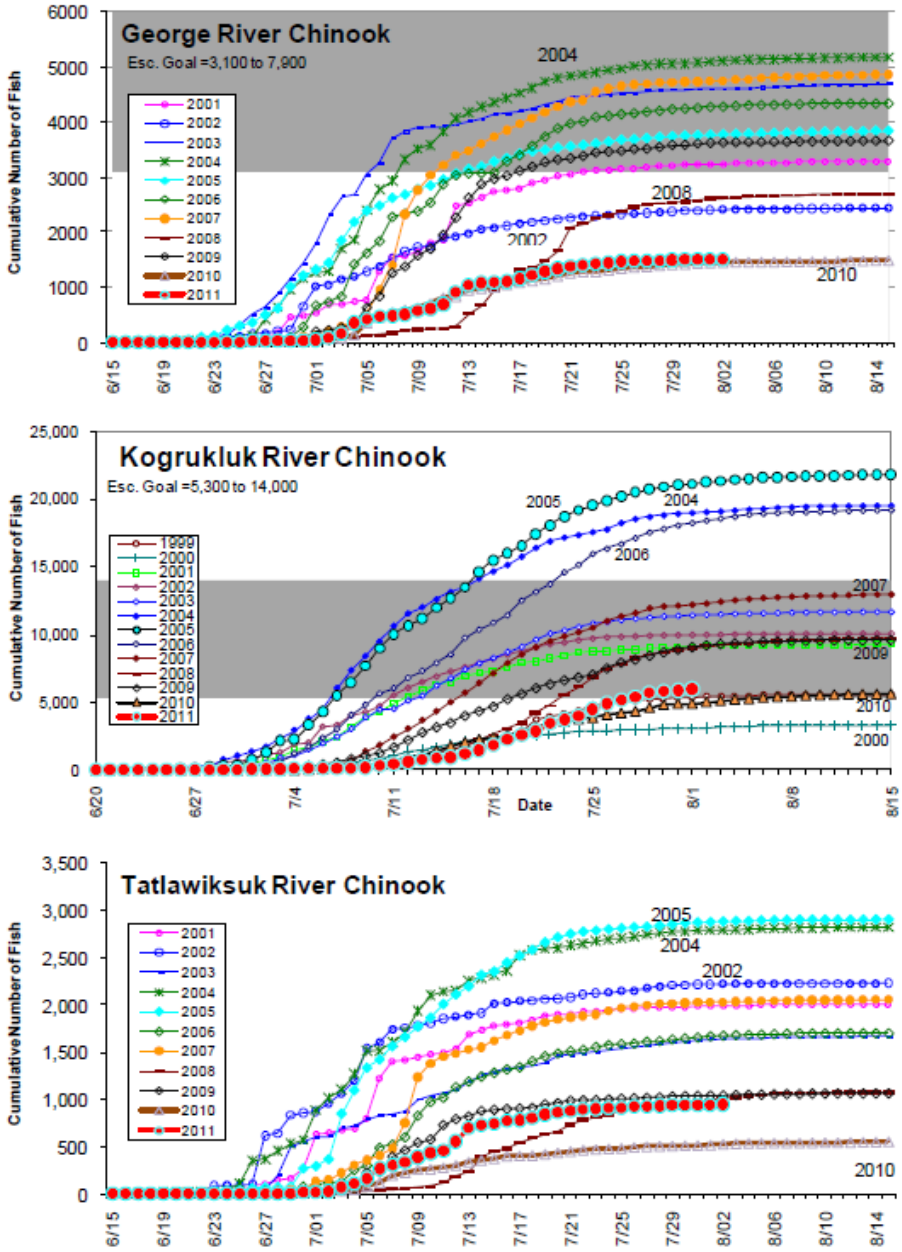
**ESCAPEMENT MONITORING *(Continued)***

**CHINOOK SALMON – Weir Counts**

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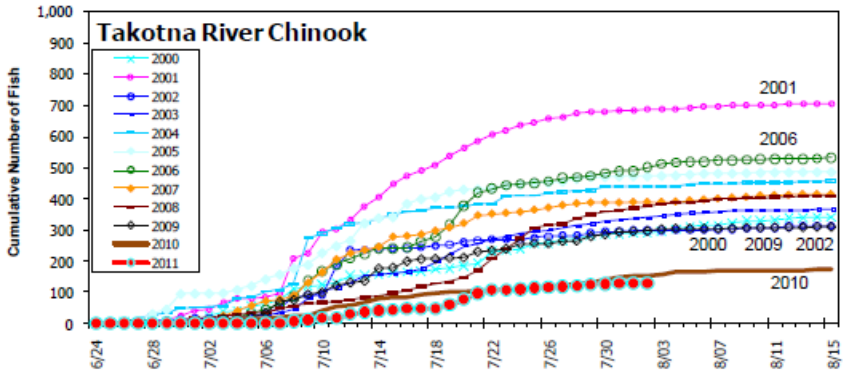
**ESCAPEMENT MONITORING *(Continued)***

**CHINOOK SALMON – Weir Counts**

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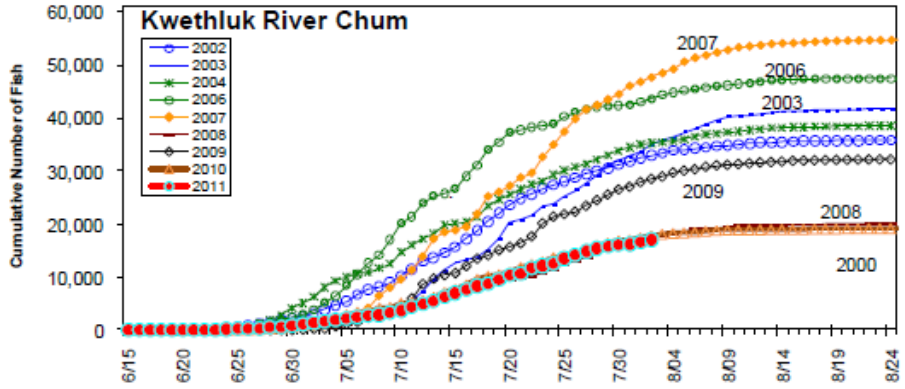
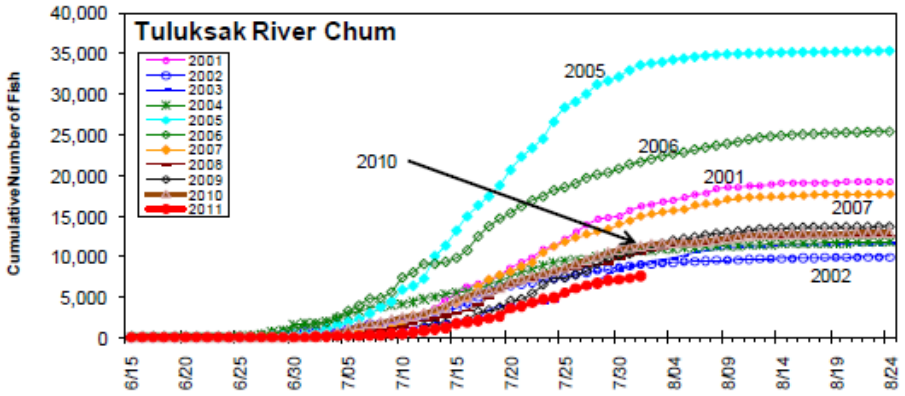
## ESCAPEMENT MONITORING *(Continued)*

### CHUM SALMON

- Chum salmon escapements at Kuskokwim River assessment projects appear to be adequate in 2010.
- Escapement goals were achieved or exceeded for Aniak and Kogrukluk Rivers.
- The Kwethluk and Tuluksak Rivers show the lowest escapements on record for this date.
- Escapements at George, Tatlawiksuk, and Takotna River weirs are among the highest on record.

### CHUM SALMON – Weir Counts

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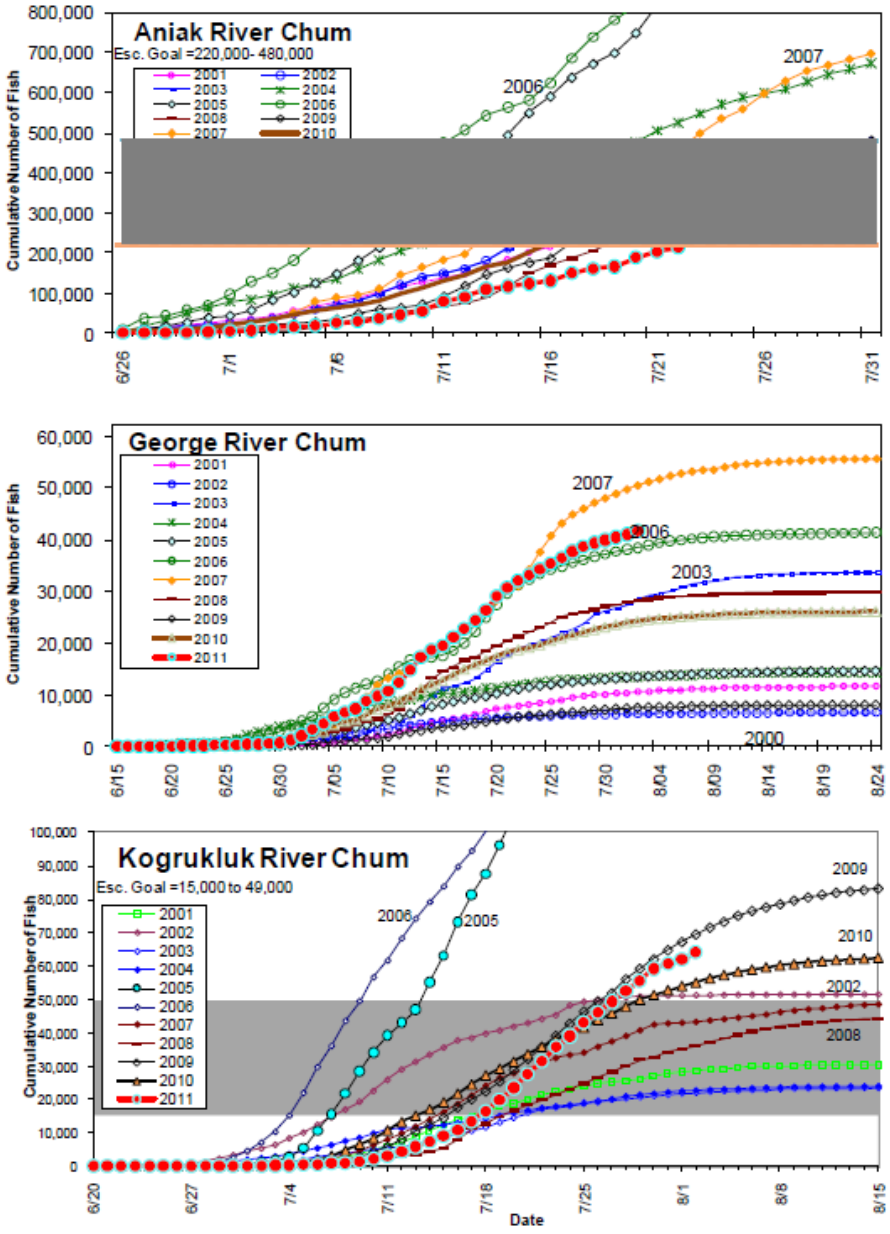
**ESCAPEMENT MONITORING *(Continued)***

**CHUM SALMON – Weir Counts**

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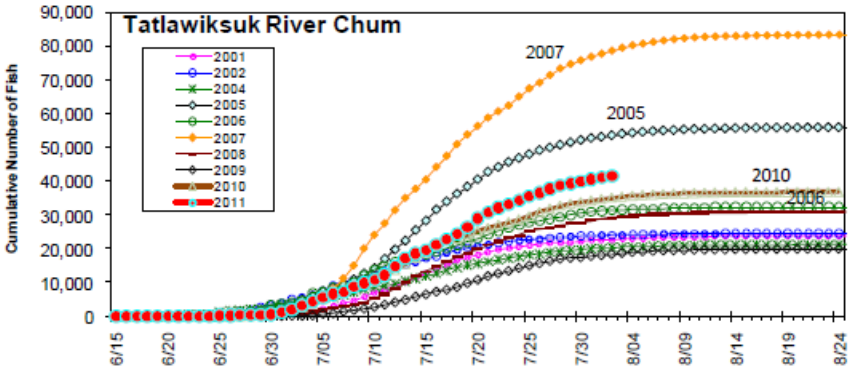
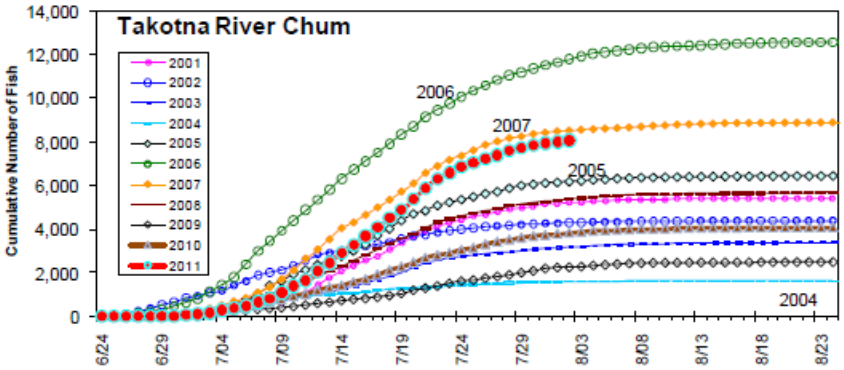
**ESCAPEMENT MONITORING *(Continued)***

**CHUM SALMON – Weir Counts**

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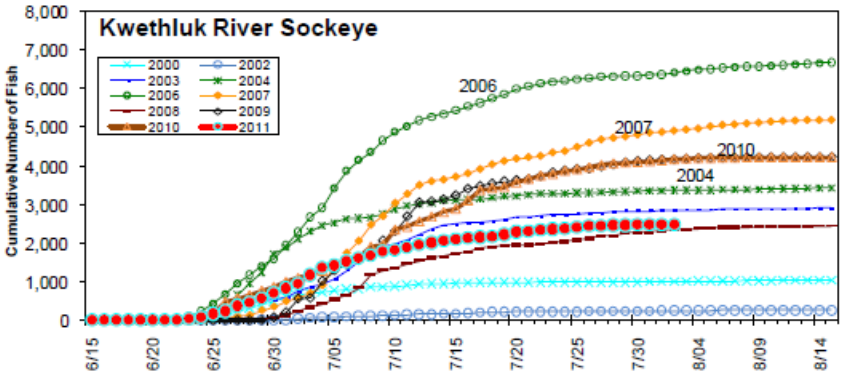
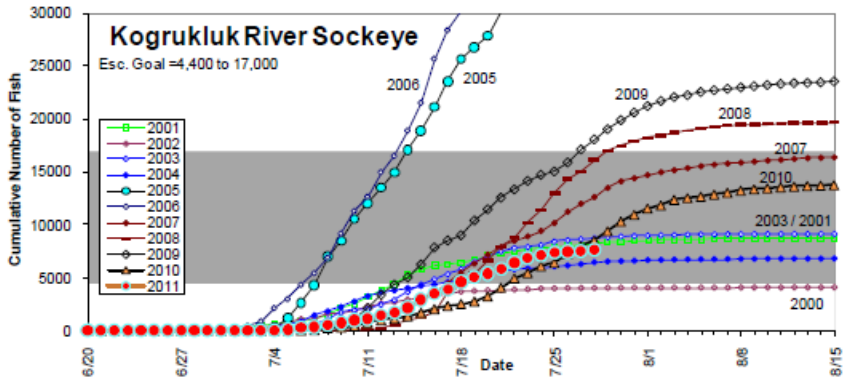
## ESCAPEMENT MONITORING *(Continued)*

### SOCKEYE SALMON

- The Kogrukluk River sockeye salmon escapement goal was met on July 22, 2011.
- Kwethluk River escapement in 2011 is below average for this time of year.
- Escapements at the Telaquana River weir, a short term project, are behind 2010 for this time of year.
- Telaquana River escapements are included only for reference and cannot be used to provide perspectives on the Kuskokwim River sockeye salmon run strength at this time.

### SOCKEYE SALMON – Weir Counts

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**ESCAPEMENT MONITORING *(Continued)***

**SOCKEYE SALMON – Weir Counts**

**Telequana Lake Weir historical cumulative daily sockeye salmon escapement.**

| | Esc Goal Range: none | |
|---|---|---|
| Date | Cumulative Daily Passage | |
| | 2010 | **2011** |
| 7/29 | 32,104 | 32,569 |
| 7/30 | 35,053 | 32,818 |
| 7/31 | 40,295 | 33,171 |
| 8/01 | 45,530 | 33,521 |
| 8/02 | 50,834 | 33,762 |
| 8/03 | 55,169 | |
| 8/04 | 58,811 | |
| Season Total | 72,021 | |

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON

- Coho salmon have been observed returning to all ground based Kuskokwim River salmon assessment projects.
- It is early in the run and definitive conclusions on run strength are not possible at this time.
- Coho salmon runs do appear to be somewhat late at most locations (except Kwethluk).

### COHO SALMON – Weir Counts

**Kwethluk River historical cumulative daily coho salmon escapement.**

= year below minimum threshold escapement goal of >19,000 coho salmon. **Esc Goal: >19,000**

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/29 | 70 | 15 | 490 | 449 | 605 | 561 | 322 | 244 | 3 | 96 |
| 7/30 | 94 | 32 | 523 | 606 | 623 | 610 | 381 | 352 | 7 | 101 |
| 7/31 | 149 | 84 | 775 | 758 | 679 | 731 | 459 | 427 | 8 | 107 |
| 8/1 | 205 | 142 | 840 | 927 | 796 | 877 | 545 | 539 | 8 | 126 |
| 8/2 | 257 | 202 | 1,142 | 1,109 | 1,025 | 1,032 | 809 | 610 | 8 | 178 |
| 8/3 | 357 | 287 | 1,419 | 1,195 | 1,366 | 1,276 | 859 | 686 | 8 | |
| 8/4 | 441 | 401 | 1,500 | 1,278 | 1,670 | 1,447 | 1,259 | 873 | 22 | |
| Season Total | 20,723 | 23,298 | 109,163 | 64,216 | 25,664 | 20,257 | 49,971 | 21,911 | n.a | |

**Tuluksak River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/29 | 8 | 2 | 76 | 143 | 19 | 51 | 38 | 22 | 7 | 7 | 13 |
| 7/30 | 13 | 4 | 95 | 176 | 24 | 74 | 43 | 33 | 7 | 10 | 13 |
| 7/31 | 38 | 4 | 106 | 237 | 38 | 102 | 49 | 45 | 11 | 14 | 13 |
| 8/01 | 76 | 5 | 121 | 281 | 67 | 111 | 60 | 72 | 14 | 17 | 15 |
| 8/02 | 99 | 5 | 136 | 324 | 80 | 136 | 65 | 98 | 16 | 18 | 23 |
| 8/03 | 118 | 8 | 139 | 399 | 91 | 166 | 86 | 126 | 26 | 20 | |
| 8/04 | 127 | 16 | 152 | 463 | 123 | 222 | 124 | 155 | 68 | 20 | |
| Season Total | 23,768 | 11,487 | 41,071 | 20,336 | 11,324 | 6,111 | 2,807 | 7,457 | 8,137 | 1,216 | |

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## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

**George River weir historical cumulative daily coho salmon escapement.**

Esc Goal: none

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/29 | 1 | 4 | 104 | 13 | 34 | 23 | 66 | 13 | 8 | 7 | 34 |
| 7/30 | 4 | 5 | 116 | 15 | 41 | 29 | 73 | 20 | 14 | 13 | 42 |
| 7/31 | 10 | 6 | 127 | 25 | 47 | 35 | 85 | 33 | 29 | 21 | 65 |
| 8/01 | 17 | 8 | 148 | 42 | 57 | 46 | 113 | 51 | 47 | 32 | 84 |
| 8/02 | 28 | 17 | 178 | 52 | 74 | 50 | 152 | 78 | 54 | 40 | 152 |
| 8/03 | 37 | 30 | 201 | 58 | 87 | 56 | 197 | 96 | 65 | 55 | |
| 8/04 | 40 | 52 | 223 | 101 | 94 | 71 | 278 | 147 | 72 | 65 | |
| Season Total | 14,398 | 6,759 | 33,280 | 12,499 | 8,200 | 11,296 | 29,317 | 21,931 | 12,464 | 12,961 | |

**Kogrukluk River weir historical cumulative daily coho salmon escapement.**

= years below escapement goal.

Esc Goal Range: 13,000 to 28,000

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/29 | 0 | 25 | 112 | 61 | 37 | 109 | 29 | 12 | 10 | 1 | 7 |
| 7/30 | 0 | 25 | 139 | 81 | 54 | 120 | 46 | 26 | 31 | 1 | 8 |
| 7/31 | 2 | 25 | 164 | 96 | 62 | 138 | 52 | 35 | 62 | 1 | 12 |
| 8/01 | 4 | 25 | 211 | 129 | 83 | 150 | 67 | 42 | 104 | 1 | 16 |
| 8/02 | 13 | 28 | 278 | 151 | 112 | 175 | 90 | 54 | 155 | 1 | 18 |
| 8/03 | 18 | 34 | 329 | 162 | 155 | 218 | 130 | 88 | 218 | 1 | |
| 8/04 | 30 | 39 | 380 | 208 | 189 | 283 | 174 | 122 | 259 | 1 | |
| Season Total | 19,387 | 14,516 | 74,604 | 27,041 | 24,116 | 17,011 | 27,033 | 29,661 | 22,981 | 13,971 | |

**Tatlawiksuk River weir historical cumulative daily coho salmon escapement.**

Esc Goal: none

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 7/29 | 1 | 9 | 110 | 90 | 108 | 75 | 46 | 11 | 2 | 15 |
| 7/30 | 9 | 17 | 125 | 127 | 138 | 109 | 50 | 20 | 4 | 39 |
| 7/31 | 27 e | 20 | 231 | 165 | 195 | 147 | 131 | 28 | 7 | 61 |
| 8/01 | 56 b | 25 | 286 | 185 | 247 | 197 | 198 | 54 | 10 | 89 |
| 8/02 | 98 b | 36 | 379 | 214 | 297 | 220 | 226 | 78 | 18 | 107 |
| 8/03 | 152 e | 52 | 477 | 284 | 336 | 264 | 299 | 208 | 28 | |
| 8/04 | 194 | 56 | 605 | 320 | 391 | 323 | 452 | 285 | 42 | |
| Season Total | 10,539 | 11,345 | 16,410 | 7,495 | 9,453 | 8,685 | 11,065 | 10,148 | 3,520 | |

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**ESCAPEMENT MONITORING *(Continued)***

**COHO SALMON – Weir Counts**

Takotna River weir historical cumulative daily coho salmon escapement.

Esc Goal: none

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 7/29 | 0 | 0 | 0 | 15 | 0 | 10 | 0 | 5 | 0 | 2 | 0 | 2 |
| 7/30 | 0 | 1 | 1 | 20 | 0 | 11 | 1 | 6 | 0 | 2 | 0 | 2 |
| 7/31 | 0 | 1 | 2 | 25 | 1 | 11 | 2 | 6 | 1 | 2 | 0 | 2 |
| 8/01 | 0 | 1 | 2 | 31 | 2 | 13 | 3 | 9 | 2 | 3 | 0 | 2 |
| 8/02 | 0 | 1 | 2 | 35 | 3 | 15 | 5 | 11 | 3 | 3 | 0 | 2 |
| 8/03 | 0 | 2 | 2 | 43 | 3 | 16 | 13 | 15 | 6 | 3 | 0 | |
| 8/04 | 3 | 2 | 2 | 56 | 6 | 24 | 28 | 26 | 9 | 4 | 0 | |
| Season Total | 3,957 | 2,606 | 3,984 | 7,171 | 3,207 | 2,216 | 5,548 | 2,853 | 2,817 | 2,708 | 3,217 | |

-continued-

**COMMERCIAL CATCH REPORT:**

**August 8, Subdistrict 1-A Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 8/8/2008 | **1-A** | 92 | 6 | 12 | 0.02 | 3 | 0.0 | 456 | 0.8 | 15,325 | 27.8 |

**August 10, Subdistrict 1-B Comparison of Most Recent Opening to Similar Dates With Fishing**

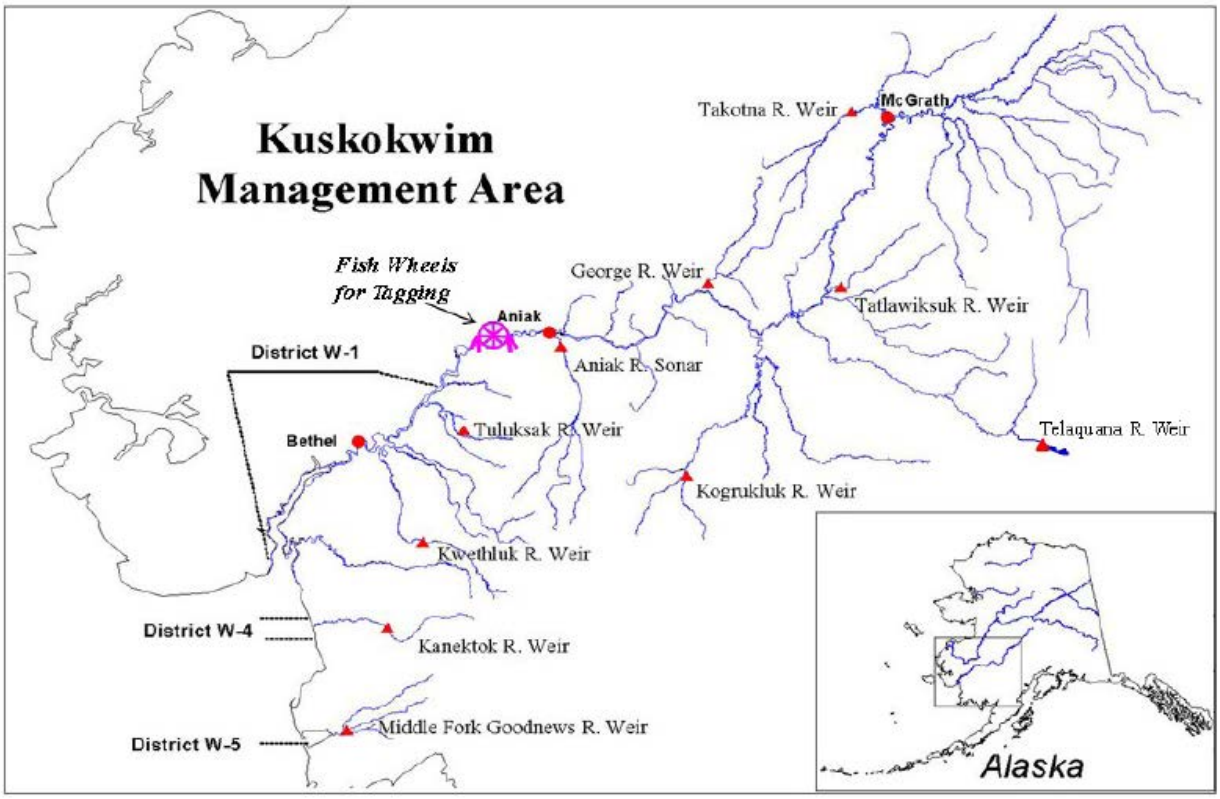
| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 8/10/2007 | **1-B** | 187 | 6 | 29 | 0.03 | 128 | 0.1 | 724 | 0.6 | 13,059 | 11.6 |

**Total cumulative harvest in District 1**

| | Sub- | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Distrit | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/5/2011 | **1B** | 116 | 4 | 192 | 0.41 | 2,471 | 5.3 | 13,657 | 29.4 | 0 | 0.0 |
| 7/7/2011 | **1A** | 63 | 3 | 127 | 0.67 | 2,339 | 12.4 | 8,130 | 43.0 | 0 | 0.0 |
| 7/9/2011 | **1A** | 61 | 3 | 74 | 0.40 | 2,541 | 13.9 | 6,850 | 37.4 | 1 | 0.0 |
| 7/11/2011 | **1A** | 76 | 3 | 89 | 0.39 | 2,024 | 8.9 | 11,258 | 49.4 | 0 | 0.0 |
| 7/13/2011 | **1B** | 145 | 4 | 53 | 0.09 | 531 | 0.9 | 19,525 | 33.7 | 46 | 0.1 |
| 7/15/2011 | **1A** | 87 | 4 | 79 | 0.23 | 1,999 | 5.7 | 12,432 | 35.7 | 38 | 0.1 |
| 7/18/2011 | **1B** | 158 | 4 | 7 | 0.01 | 282 | 0.4 | 12,040 | 19.1 | 187 | 0.3 |
| 7/20/2011 | **1A** | 83 | 4 | 27 | 0.08 | 647 | 1.9 | 9,465 | 28.5 | 273 | 0.8 |
| 7/22/2011 | **1B** | 156 | 4 | 0 | 0.00 | 207 | 0.3 | 8,471 | 13.6 | 1,522 | 2.4 |
| 7/25/2011 | **1A** | 80 | 4 | 24 | 0.08 | 51 | 0.2 | 7,021 | 21.9 | 2,710 | 8.5 |
| 7/27/2011 | **1B** | 180 | 4 | 0 | 0.00 | 74 | 0.1 | 3,620 | 5.0 | 5,677 | 7.9 |
| 8/1/2011 | **1A** | 80 | 3 | 6 | 0.03 | 15 | 0.1 | 1,631 | 6.8 | 7,353 | 30.6 |
| Total | **1-A & 1-B** | 107 | 44 | 678 | | 13,181 | | 114,100 | | 17,807 | |

* **Results are preliminary and subject to change (includes catcher/seller)**

-continued-


Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
Middle Fork Goodnews R. Weir
District W-5
Alaska

Appendix B10.–Information Packet, August 9, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

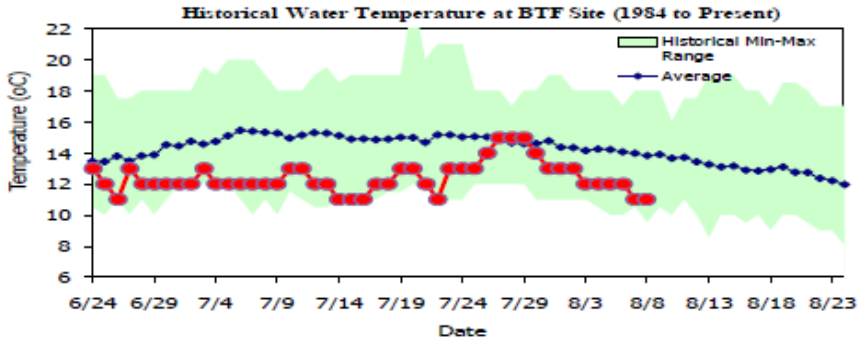
1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

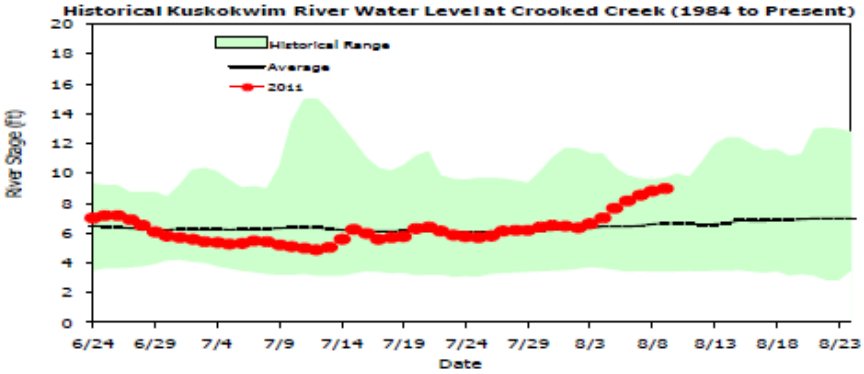
## Information Packet

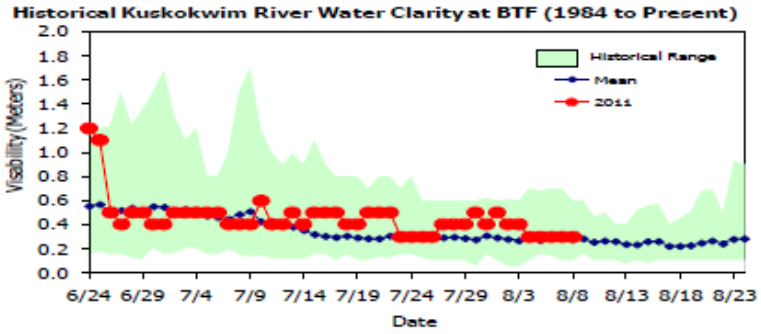
**August 9, 2011**

**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS**

- Water levels at Crooked Creek have come up
- Water temperatures at Bethel have gone down below average
- Water clarity at BTF site has been average

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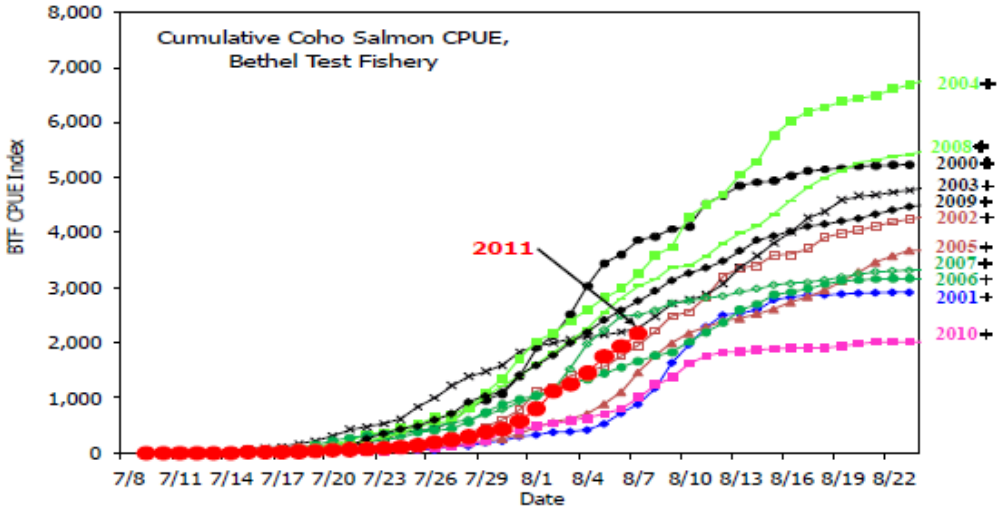
## Coho Salmon Cumulative CPUE Index, Bethel Test Fishery

- BTF coho salmon cumulative index is tracking most closely with 2002 and 2003




**Bethel Test Fish Coho Salmon Cumulative CPUE**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | % Passage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7/20 | 97 | 28 | 11 | 316 | 173 | 41 | 226 | 148 | 127 | 80 | 7 | 50 | |
| 7/21 | 134 | 28 | 12 | 429 | 228 | 44 | 280 | 169 | 167 | 141 | 13 | 60 | |
| 7/22 | 180 | 36 | 21 | 473 | 337 | 51 | 320 | 219 | 231 | 265 | 30 | 68 | |
| 7/23 | 251 | 46 | 32 | 534 | 385 | 57 | 352 | 235 | 285 | 356 | 40 | 95 | |
| 7/24 | 362 | 55 | 49 | 616 | 447 | 74 | 365 | 286 | 365 | 436 | 64 | 106 | |
| 7/25 | 409 | 59 | 95 | 841 | 539 | 90 | 382 | 368 | 480 | 491 | 79 | 142 | |
| 7/26 | 450 | 67 | 148 | 1,001 | 645 | 110 | 408 | 478 | 550 | 606 | 103 | 200 | |
| 7/27 | 585 | 131 | 244 | 1,229 | 692 | 156 | 445 | 550 | 596 | 721 | 124 | 240 | |
| 7/28 | 809 | 131 | 351 | 1,389 | 828 | 185 | 563 | 605 | 785 | 931 | 170 | 296 | 10% |
| 7/29 | 962 | 196 | 478 | 1,479 | 1,093 | 219 | 742 | 697 | 1,020 | 1,037 | 229 | 378 | |
| 7/30 | 1,070 | 219 | 605 | 1,596 | 1,354 | 262 | 885 | 790 | 1,216 | 1,112 | 374 | 437 | |
| 7/31 | 1,395 | 305 | 794 | 1,838 | 1,720 | 344 | 985 | 936 | 1,393 | 1,418 | 421 | 578 | |
| 8/1 | 1,910 | 336 | 1,129 | 1,936 | 2,034 | 486 | 1,047 | 1,008 | 1,616 | 1,593 | 488 | 802 | |
| 8/2 | 2,138 | 382 | 1,192 | 2,001 | 2,173 | 561 | 1,158 | 1,171 | 1,837 | 1,777 | 531 | 1,126 | 25% |
| 8/3 | 2,512 | 393 | 1,405 | 2,067 | 2,389 | 622 | 1,250 | 1,519 | 2,030 | 2,000 | 580 | 1,252 | |
| 8/4 | 3,031 | 422 | 1,483 | 2,112 | 2,599 | 715 | 1,344 | 1,975 | 2,253 | 2,190 | 634 | 1,454 | |
| 8/5 | 3,444 | 532 | 1,572 | 2,147 | 2,819 | 892 | 1,447 | 2,234 | 2,560 | 2,418 | 713 | 1,749 | |
| 8/6 | 3,605 | 726 | 1,768 | 2,197 | 2,982 | 1,112 | 1,560 | 2,491 | 2,806 | 2,595 | 804 | 1,932 | |
| 8/7 | 3,864 | 887 | 1,959 | 2,272 | 3,255 | 1,466 | 1,668 | 2,506 | 3,032 | 2,762 | 1,011 | 2,177 | |
| 8/8 | 3,929 | 1,184 | 2,215 | 2,483 | 3,594 | 1,783 | 1,767 | 2,590 | 3,163 | 2,946 | 1,242 | | 50% |
| 8/9 | 4,063 | 1,640 | 2,489 | 2,711 | 3,740 | 1,994 | 1,827 | 2,719 | 3,373 | 3,132 | 1,371 | | |
| 8/10 | 4,112 | 1,968 | 2,553 | 2,782 | 4,294 | 2,174 | 2,019 | 2,762 | 3,402 | 3,266 | 1,616 | | |
| 8/11 | 4,528 | 2,294 | 2,831 | 2,877 | 4,505 | 2,286 | 2,193 | 2,821 | 3,573 | 3,363 | 1,762 | | |
| 8/12 | 4,670 | 2,501 | 3,207 | 3,074 | 4,694 | 2,406 | 2,369 | 2,850 | 3,801 | 3,485 | 1,831 | | |
| 8/13 | 4,852 | 2,537 | 3,351 | 3,375 | 5,057 | 2,444 | 2,601 | 2,931 | 3,990 | 3,672 | 1,840 | | 75% |
| 8/14 | 4,916 | 2,598 | 3,403 | 3,581 | 5,290 | 2,529 | 2,707 | 2,983 | 4,115 | 3,865 | 1,871 | | |
| 8/15 | 4,937 | 2,784 | 3,585 | 3,810 | 5,758 | 2,610 | 2,874 | 3,053 | 4,334 | 3,940 | 1,889 | | |
| 8/16 | 5,037 | 2,826 | 3,605 | 4,012 | 6,026 | 2,737 | 2,921 | 3,077 | 4,582 | 4,019 | 1,901 | | |
| 8/17 | 5,120 | 2,862 | 3,705 | 4,266 | 6,193 | 2,837 | 2,984 | 3,096 | 4,815 | 4,115 | 1,913 | | |
| 8/18 | 5,148 | 2,870 | 3,925 | 4,380 | 6,272 | 2,963 | 3,065 | 3,140 | 4,995 | 4,156 | 1,913 | | 90% |

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## ESCAPEMENT MONITORING

**Current Status of Salmon Assessment Projects:**

### CHINOOK SALMON

- The Chinook salmon escapement goal for the Kogrukluk River was met on 18 July.
- Escapement goals at the Kwethluk, Tuluksak, and George Rivers were not met.
- The Chinook salmon escapement to the Kwethluk River was 40% higher than the 2010.
- Chinook salmon escapements at the Tuluksak, George, and Kogrukluk Rivers were similar to 2010.
- Chinook salmon escapements were generally later than average at all Kuskokwim River escapement projects.
- Small numbers of Chinook salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

### CHUM SALMON

- The chum salmon escapement goal for the Aniak River sonar was met on 24 July.
- The chum salmon escapement goal for the Kogrukluk River weir was met on 18 July.
- Chum salmon escapements to Kwethluk and Tuluksak Rivers were among the lowest on record in 2011.
- Chum salmon escapements to the George, Tatlawiksuk, Takotna and Kogrukluk Rivers were among the highest on record in 2011.
- Chum salmon run timing was near average at most Kuskokwim River assessment projects.
- Chum salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

### SOCKEYE SALMON

- The sockeye salmon escapement goal for the Kogrukluk River weir was met on 18 July.
- Sockeye salmon escapement was below average for the Kwethluk River, but was above five of twelve good years of data for this project.
- Small numbers of sockeye salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

**Kwethluk River historical cumulative daily coho salmon escapement.**

= year below minimum threshold escapement goal. **Esc Goal: >19,000**

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/6 | 714 | 474 | 2,165 | 2,475 | 2,022 | 2,948 | 1,885 | 1,424 | 51 | 365 |
| 8/7 | 835 | 525 | 2,915 | 2,827 | 2,190 | 3,201 | 2,054 | 1,814 | 73 | 406 |
| 8/8 | 924 | 572 | 4,268 | 3,007 | 2,293 | 3,527 | 2,336 | 2,031 | 126 | 456 |
| 8/9 | 1,089 | 617 | 6,358 | 3,403 | 2,424 | 3,801 | 3,081 | 2,065 | 173 | |
| 8/10 | 1,246 | 859 | 6,748 | 3,630 | 2,749 | 4,289 | 3,885 | 2,134 | 204 | |
| Season Total | 20,723 | 23,298 | 109,163 | 64,216 | 25,664 | 20,257 | 49,971 | 21,911 | n.a | |

- As of 8 August 2011, coho salmon counts are lowest on record for Kwethluk River weir.
- Counts are similar to 2002, a year that the escapement goal was reached for this river.

**Tuluksak River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/05 | 135 | 18 | 190 | 521 | 165 | 271 | 223 | 193 | 94 | 23 | 51 |
| 8/06 | 141 | 24 | 292 | 837 | 188 | 310 | 286 | 271 | 110 | 24 | 56 |
| 8/07 | 162 | 31 | 393 | 1,107 | 224 | 342 | 299 | 315 | 131 | 27 | 61 |
| 8/08 | 253 | 37 | 728 | 1,181 | 266 | 385 | 309 | 346 | 155 | 50 | 66 |
| 8/09 | 284 | 56 | 1,163 | 1,439 | 316 | 430 | 380 | 491 | 165 | 60 | |
| 8/10 | 305 | 65 | 1,404 | 1,686 | 381 | 539 | 437 | 605 | 182 | 72 | |
| Season Total | 23,768 | 11,487 | 41,071 | 20,336 | 11,324 | 6,111 | 2,807 | 7,457 | 8,137 | 1,216 | |

- 2011 coho salmon counts for Tuluksak River weir are fourth lowest of fifteen years of data.

**George River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/05 | 52 | 68 | 285 | 143 | 112 | 96 | 661 | 199 | 76 | 77 | 371 |
| 8/06 | 77 | 86 | 383 | 181 | 131 | 103 | 995 | 265 | 92 | 81 | 439 |
| 8/07 | 99 | 92 | 539 | 250 | 153 | 117 | 1,430 | 307 | 103 | 99 | 448 a |
| 8/08 | 161 | 106 | 652 | 322 | 352 | 125 | 1,968 | 530 | 118 | 108 | ? |
| 8/09 | 193 | 118 | 1,159 | 391 | 424 | 133 | 1,977 | 736 | 150 | 160 | |
| 8/10 | 206 | 161 | 1,499 | 836 | 585 | 158 | 2,285 | 1,052 | 230 | 196 | |
| Season Total | 14,398 | 6,759 | 33,280 | 12,499 | 8,200 | 11,296 | 29,317 | 21,931 | 12,464 | 12,961 | |

a. partial day count.

- George River weir became inoperable due to high water on 7 August 2011.
- As of 6 August, coho salmon counts were third highest on record at this project.

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

**Kogrukluk River weir historical cumulative daily coho salmon escapement.**

= years below escapement goal. **Esc Goal Range: 13,000 to 28,000**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/05 | 34 | 45 | 417 | 281 | 206 | 386 | 233 | 191 | 363 | 1 | 49 a |
| 8/06 | 54 | 53 | 470 | 357 | 236 | 453 | 304 | 236 | 464 | 1 | 60 b |
| 8/07 | 61 | 59 | 605 | 468 | 273 | 559 | 390 | 263 | 591 | 1 | 76 |
| 8/08 | 93 | 79 | 672 | 563 | 351 | 648 | 469 | 313 | 725 | 1 | 93 |
| 8/09 | 109 | 91 | 941 | 676 | 398 | 713 | 587 | 367 | 875 | 1 | |
| 8/10 | 118 | 99 | 1,265 | 893 | 463 | 771 | 678 | 390 | 1,097 | 1 | |
| Season Total | 19,387 | 14,516 | 74,604 | 27,041 | 24,116 | 17,011 | 27,033 | 29,661 | 22,981 | 13,971 | |

a = The weir was not operational; daily passage was estimated.
b = Partial day count, passage was estimated.

- Kogrukluk River weir was briefly inoperable due to high water from August 4 to 6 August.
- Missed passage was estimated.
- As of 8 August, cumulative coho salmon counts are greater than five of six years in which the escapement goal was not achieved.
- Also as of 8 August, cumulative coho salmon counts were greater than nine other years in which the escapement goal *was* reached for this location.

**Tatlawiksuk River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/03 | 152 e | 52 | 477 | 284 | 336 | 264 | 299 | 208 | 28 | 122 |
| 8/04 | 194 | 56 | 605 | 320 | 391 | 323 | 452 | 285 | 42 | ? |
| 8/05 | 285 | 89 | 819 | 356 | 438 | 424 | 534 | 346 | 83 | ? |
| 8/06 | 332 | 112 | 1,271 | 407 | 590 | 550 b | 774 | 474 | 132 | ? |
| 8/07 | 406 | 158 | 1,739 | 487 a | 665 | 722 b | 894 | 589 | 173 e | ? |
| 8/08 | 541 | 201 | 2,176 | 547 | 722 | 940 b | 1,168 | 679 | 204 | ? |
| 8/09 | 671 | 280 | 2,673 | 719 | 801 | 1,204 b | 1,483 | 929 | 247 | |
| 8/10 | 935 | 353 | 3,209 | 837 | 842 | 1,513 b | 1,682 | 1,092 | 284 | |
| Season Total | 10,539 | 11,345 | 16,410 | 7,495 | 9,453 | 8,685 | 11,065 | 10,148 | 3,520 | |

- Tatlawiksuk River weir became inoperable on 4 August, 2011 due to high water.
- As of 3 August, coho salmon counts were fourth lowest of eleven years for this date.

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

Takotna River weir historical cumulative daily coho salmon escapement.

Esc Goal: none

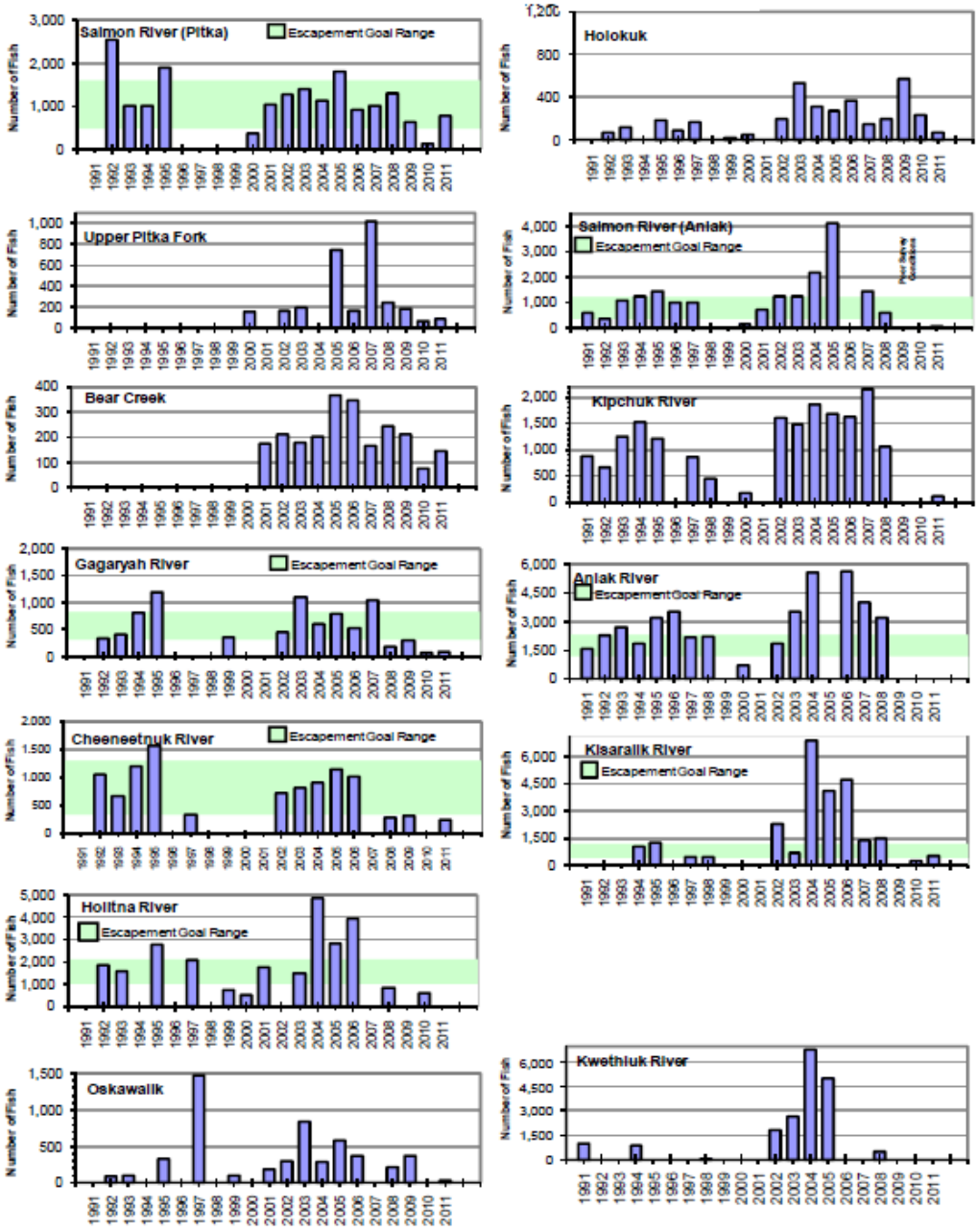
| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 8/02 | 0 | 1 | 2 | 35 | 3 | 15 | 5 | 11 | 3 | 3 | 0 | 2 |
| 8/03 | 0 | 2 | 2 | 43 | 3 | 16 | 13 | 15 | 6 | 3 | 0 | ? |
| 8/04 | 3 | 2 | 2 | 56 | 6 | 24 | 28 | 26 | 9 | 4 | 0 | ? |
| 8/05 | 14 | 2 | 2 | 71 | 10 | 31 | 36 | 41 | 11 | 5 | 0 | ? |
| 8/06 | 22 | 5 | 4 | 98 | 26 | 36 | 44 | 58 e | 14 | 13 | 0 | ? |
| 8/07 | 36 | 6 | 4 | 123 | 40 | 38 | 60 | 79 b | 18 | 21 | 0 | ? |
| 8/08 | 55 | 7 | 6 | 171 | 59 | 48 | 75 | 105 e | 33 | 29 | 0 | ? |
| 8/09 | 95 | 9 | 12 | 211 | 83 | 54 | 100 | 143 | 40 | 52 | 2 | |
| 8/10 | 126 | 12 | 18 | 261 | 101 | 60 | 107 | 164 | 51 | 70 | 5 | |
| Season Total | 3,944 | 2,606 | 3,962 | 7,146 | 3,201 | 2,209 | 5,556 | 2,837 | 2,807 | 2,704 | 3,217 | |

- Takotna River weir became inoperable 3 August 2011, due to high water.
- As of 3 August, cumulative coho salmon counts were similar to eight of eleven years of operation.

-continued-

## KUSKOKWIM RIVER AERIAL STREAM SURVEYS- Chinook Salmon

**Note:** Aerial survey data not available for the Holitna, Kwethluk, and Aniak Rivers due to poor survey conditions.

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**COMMERCIAL CATCH REPORT:**

**August 8, Subdistrict 1-A Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subdistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 8/8/2008 | **1-A** | 92 | 6 | 12 | 0.02 | 3 | 0.0 | 456 | 0.8 | 15,325 | 27.8 |

**August 3, Subdistrict 1-B Comparison of Most Recent Opening to Similar Dates With Fishing**

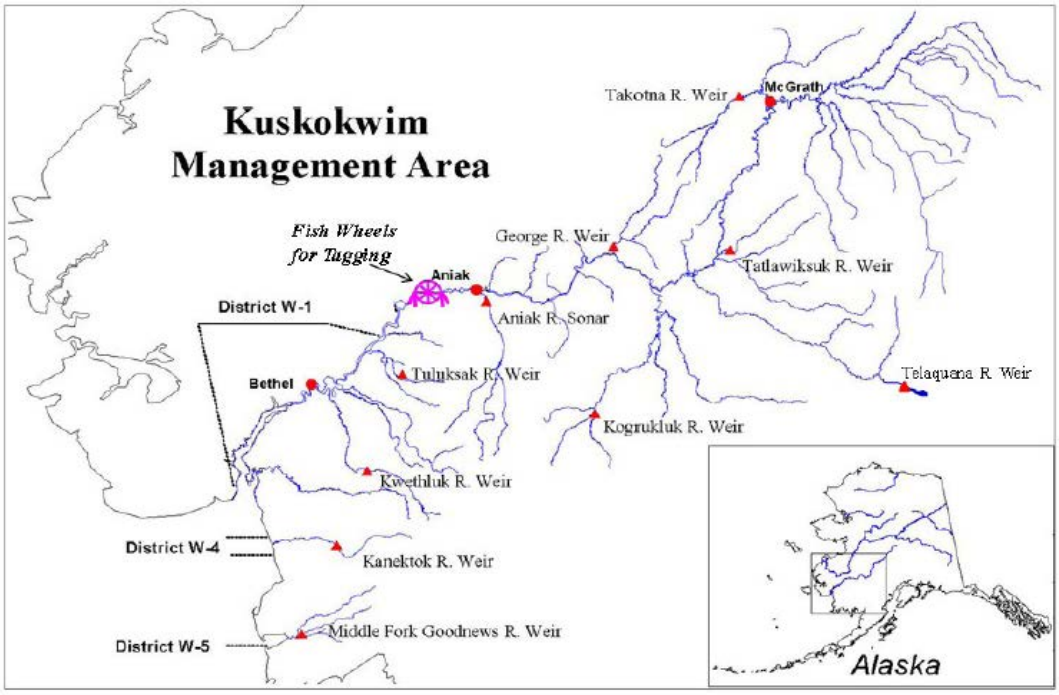
| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subdistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 8/4/2009 | **1-B** | 180 | 4 | 26 | 0.04 | 70 | 0.1 | 1,736 | 2.4 | 19,444 | 27.0 |

**Total cumulative harvest in District 1**

| | Sub- | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | District | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/5/2011 | **1B** | 111 | 4 | 237 | 0.53 | 2,517 | 5.7 | 13,794 | 31.1 | 0 | 0.0 |
| 7/7/2011 | **1A** | 62 | 3 | 96 | 0.52 | 2,348 | 12.6 | 8,142 | 43.8 | 0 | 0.0 |
| 7/9/2011 | **1A** | 61 | 3 | 70 | 0.38 | 2,561 | 14.0 | 6,850 | 37.4 | 0 | 0.0 |
| 7/11/2011 | **1A** | 75 | 3 | 89 | 0.40 | 2,158 | 9.6 | 11,441 | 50.8 | 1 | 0.0 |
| 7/13/2011 | **1B** | 147 | 4 | 63 | 0.11 | 520 | 0.9 | 19,683 | 33.5 | 55 | 0.1 |
| 7/15/2011 | **1A** | 86 | 4 | 95 | 0.28 | 2,005 | 5.8 | 12,433 | 36.1 | 60 | 0.2 |
| 7/18/2011 | **1B** | 159 | 4 | 7 | 0.01 | 283 | 0.4 | 11,941 | 18.8 | 188 | 0.3 |
| 7/20/2011 | **1A** | 83 | 4 | 27 | 0.08 | 649 | 2.0 | 9,475 | 28.5 | 274 | 0.8 |
| 7/22/2011 | **1B** | 155 | 4 | 0 | 0.00 | 209 | 0.3 | 8,501 | 13.7 | 1,525 | 2.5 |
| 7/25/2011 | **1A** | 80 | 4 | 24 | 0.08 | 54 | 0.2 | 7,151 | 22.3 | 2,722 | 8.5 |
| 7/27/2011 | **1B** | 182 | 4 | 0 | 0.00 | 72 | 0.1 | 4,635 | 6.4 | 5,688 | 7.8 |
| 8/1/2011 | **1A** | 80 | 3 | 6 | 0.03 | 15 | 0.1 | 1,631 | 6.8 | 7,353 | 30.6 |
| 8/3/2011 | **1B** | 215 | 4 | 0 | 0.00 | 42 | 0.0 | 1,451 | 1.7 | 12,740 | 14.8 |
| 8/8/2011 | **1A** | 100 | 3 | 0 | 0.00 | 6 | 0.0 | 381 | 1.3 | 13,798 | 46.0 |
| Total | **1-A & 1-B** | 363 | 51 | 714 | | 13,439 | | 117,509 | | 44,404 | |

*** Results are preliminary and subject to change (includes catcher/seller)**

-continued-


Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
Middle Fork Goodnews R. Weir
District W-5
Alaska

Appendix B11.–Information Packet, August 15, Kuskokwim River Salmon Management Working Group, 2011.

## Kuskokwim River Salmon Management Working Group

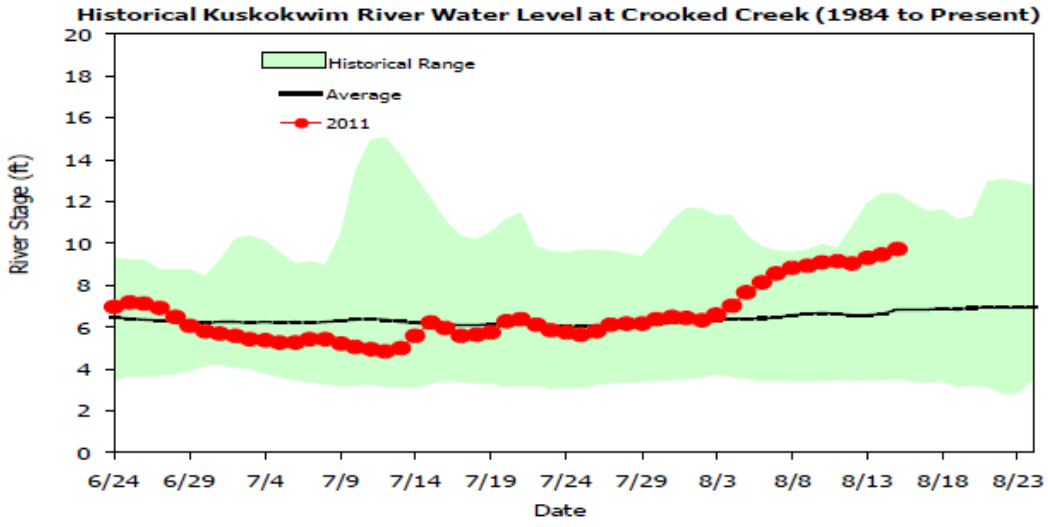
1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

### Information Packet

**August 15, 2011**

**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS**

- Water levels continue to rise since August 4.
- Water temperature at the Bethel test fish site is tracking well below average.
- Water clarity at Bethel test fish site are tracking at or slightly below average.
- Bethel test fish cumulative index for coho salmon is tracking most closely to 2007 and above the lower abundance year of 2010.

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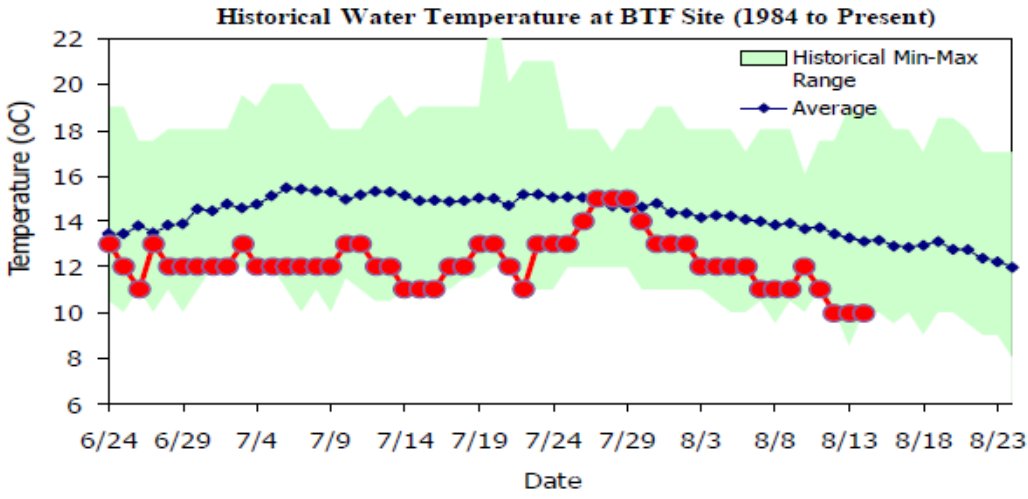
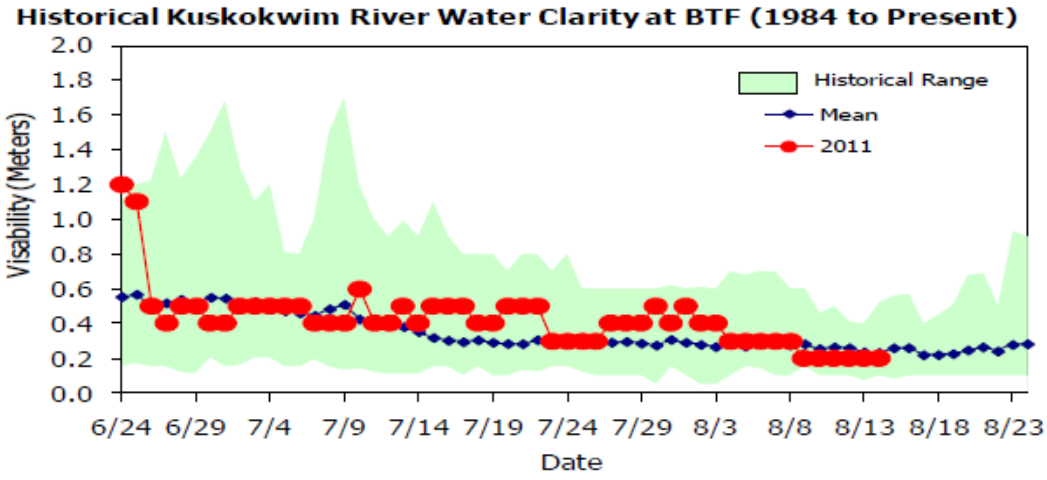
**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT *(Continued)***

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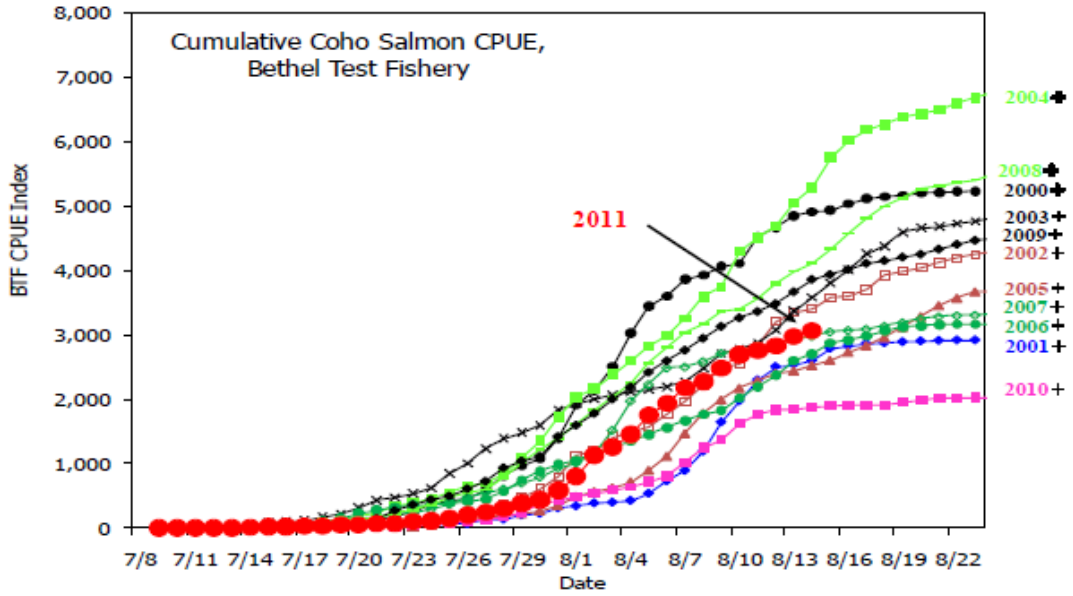
**Coho Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Bethel Test Fish Coho Salmon Cumulative CPUE**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/1 | 1,910 | 336 | 1,129 | 1,936 | 2,034 | 486 | 1,047 | 1,008 | 1,616 | 1,593 | 488 | 802 |
| 8/2 | 2,138 | 382 | 1,192 | 2,001 | 2,173 | 561 | 1,158 | 1,171 | 1,837 | 1,777 | 531 | 1,126 |
| 8/3 | 2,512 | 393 | 1,405 | 2,067 | 2,389 | 622 | 1,250 | 1,519 | 2,030 | 2,000 | 580 | 1,252 |
| 8/4 | 3,031 | 422 | 1,483 | 2,112 | 2,599 | 715 | 1,344 | 1,975 | 2,253 | 2,190 | 634 | 1,454 |
| 8/5 | 3,444 | 532 | 1,572 | 2,147 | 2,819 | 892 | 1,447 | 2,234 | 2,560 | 2,418 | 713 | 1,749 |
| 8/6 | 3,605 | 726 | 1,768 | 2,197 | 2,982 | 1,112 | 1,560 | 2,491 | 2,806 | 2,595 | 804 | 1,932 |
| 8/7 | 3,864 | 887 | 1,959 | 2,272 | 3,255 | 1,466 | 1,668 | 2,506 | 3,032 | 2,762 | 1,011 | 2,177 |
| 8/8 | 3,929 | 1,184 | 2,215 | 2,483 | 3,594 | 1,783 | 1,767 | 2,590 | 3,163 | 2,946 | 1,242 | 2,276 |
| 8/9 | 4,063 | 1,640 | 2,489 | 2,711 | 3,740 | 1,994 | 1,827 | 2,719 | 3,373 | 3,132 | 1,371 | 2,489 |
| 8/10 | 4,112 | 1,968 | 2,553 | 2,782 | 4,294 | 2,174 | 2,019 | 2,762 | 3,402 | 3,266 | 1,616 | 2,691 |
| 8/11 | 4,528 | 2,294 | 2,831 | 2,877 | 4,505 | 2,286 | 2,193 | 2,821 | 3,573 | 3,363 | 1,762 | 2,758 |
| 8/12 | 4,670 | 2,501 | 3,207 | 3,074 | 4,694 | 2,406 | 2,369 | 2,850 | 3,801 | 3,485 | 1,831 | 2,832 |
| 8/13 | 4,852 | 2,537 | 3,351 | 3,375 | 5,057 | 2,444 | 2,601 | 2,931 | 3,990 | 3,672 | 1,840 | 2,979 |
| 8/14 | 4,916 | 2,598 | 3,403 | 3,581 | 5,290 | 2,529 | 2,707 | 2,983 | 4,115 | 3,865 | 1,871 | 3,069 |
| 8/15 | 4,937 | 2,784 | 3,585 | 3,810 | 5,758 | 2,610 | 2,874 | 3,053 | 4,334 | 3,940 | 1,889 | |
| 8/16 | 5,037 | 2,826 | 3,605 | 4,012 | 6,026 | 2,737 | 2,921 | 3,077 | 4,582 | 4,019 | 1,901 | |
| 8/17 | 5,120 | 2,862 | 3,705 | 4,266 | 6,193 | 2,837 | 2,984 | 3,096 | 4,815 | 4,115 | 1,913 | |
| 8/18 | 5,148 | 2,870 | 3,925 | 4,380 | 6,272 | 2,963 | 3,065 | 3,140 | 4,995 | 4,156 | 1,913 | |
| 8/19 | 5,167 | 2,887 | 3,984 | 4,596 | 6,385 | 3,123 | 3,123 | 3,197 | 5,133 | 4,211 | 1,951 | |
| 8/20 | 5,203 | 2,899 | 4,044 | 4,663 | 6,433 | 3,292 | 3,142 | 3,252 | 5,272 | 4,256 | 1,986 | |
| 8/21 | 5,215 | 2,907 | 4,122 | 4,682 | 6,497 | 3,464 | 3,160 | 3,291 | 5,320 | 4,336 | 2,016 | |
| 8/22 | 5,229 | 2,914 | 4,198 | 4,734 | 6,602 | 3,579 | 3,164 | 3,307 | 5,376 | 4,411 | 2,018 | |
| 8/23 | 5,236 | 2,914 | 4,251 | 4,768 | 6,690 | 3,678 | 3,164 | 3,314 | 5,413 | 4,472 | 2,022 | |
| 8/24 | 5,236 | 2,914 | 4,289 | 4,819 | 6,771 | 3,678 | 3,164 | 3,328 | 5,494 | 4,495 | 2,024 | |

-continued-

## ESCAPEMENT MONITORING

**CHINOOK SALMON-** No change

- The Chinook salmon escapement goal for the Kogrukluk River was met on July 18, 2011.
- Escapement goals at Kwethluk, Tuluksak, and George Rivers have not been met.
- The Chinook salmon escapement to the Kwethluk River was 40% higher than the 2010 escapement.
- Chinook salmon escapements at Tuluksak, George, and Kogrukluk Rivers were similar to 2010.
- Chinook salmon escapements were generally later than average at all Kuskokwim River escapement projects.
- Small numbers of Chinook salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

**CHUM SALMON-** No change

- The chum salmon escapement goal for the Aniak River sonar was met on July 24, 2011.
- The chum salmon escapement goal for the Kogrukluk River weir was met on July 18, 2011.
- Chum salmon escapements to Kwethluk and Tuluksak Rivers were among the lowest on record in 2011.
- Chum salmon escapements to the George, Tatlawiksuk, Takotna and Kogrukluk Rivers were among the highest on record in 2011.
- Chum salmon run timing was near average at most Kuskokwim River assessment projects.
- Chum salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

**SOCKEYE SALMON**-No change

- The sockeye salmon escapement goal for the Kogrukluk River weir was met on July 18, 2011.
- The sockeye salmon escapement was below average for the Kwethluk River.
- Small numbers of sockeye salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

**Kwethluk River historical cumulative daily coho salmon escapement.**

= year below minimum threshold escapement goal. **Esc Goal: >19,000**

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/6 | 714 | 474 | 2,165 | 2,475 | 2,022 | 2,948 | 1,885 | 1,424 | 51 | 365 |
| 8/7 | 835 | 525 | 2,915 | 2,827 | 2,190 | 3,201 | 2,054 | 1,814 | 73 | 406 |
| 8/8 | 924 | 572 | 4,268 | 3,007 | 2,293 | 3,527 | 2,336 | 2,031 | 126 | 456 |
| 8/9 | 1,089 | 617 | 6,358 | 3,403 | 2,424 | 3,801 | 3,081 | 2,065 | 173 | 583 b |
| 8/10 | 1,246 | 859 | 6,748 | 3,630 | 2,749 | 4,289 | 3,885 | 2,134 | 204 | 709 b |
| 8/11 | 1,676 | 971 | 6,772 | 5,361 | 3,401 | 4,657 | 4,678 | 2,192 | 226 | 912 |
| 8/12 | 1,872 | 1,271 | 7,908 | 6,171 | 4,452 | 4,988 | 6,215 | 2,769 | 292 | 1,048 |
| 8/13 | 2,821 | 1,351 | 9,602 | 8,104 | 5,466 | 5,962 | 6,567 | 2,897 | 345 | |
| 8/14 | 3,197 | 1,452 | 11,368 | 9,694 | 6,031 | 6,310 | 7,902 | 3,050 | 579 | |
| Season Total | 20,723 | 23,298 | 109,163 | 64,216 | 25,664 | 20,257 | 49,971 | 21,911 | n.a | |

b. partial day count. Passage estimate.

- The weir has been inoperable due to high water since 12 August.
- As of August 12, 2011, coho salmon counts remain lower than all other cumulative counts for this project (in years when weir operations were successfully completed at Kwethluk River weir).
- As of this date, cumulative daily passage remains greater than 2010, which was a year in which a final escapement estimate was not possible due to the weir becoming inoperable from high water.

**Tuluksak River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/09 | 284 | 56 | 1,163 | 1,439 | 316 | 430 | 380 | 491 | 165 | 60 | 66 |
| 8/10 | 305 | 65 | 1,404 | 1,686 | 381 | 539 | 437 | 605 | 182 | 72 | 66 |
| 8/11 | 328 | 111 | 1,505 | 2,850 | 448 | 606 | 478 | 911 | 197 | 81 | 66 |
| 8/12 | 349 | 308 | 1,773 | 3,007 | 506 | 685 | 540 | 1,103 | 410 | 102 | 66 |
| 8/13 | 565 | 402 | 2,612 | 3,211 | 628 | 772 | 566 | 1,305 | 422 | 110 | 66 |
| 8/14 | 791 | 410 | 4,233 | 4,054 | 751 | 875 | 626 | 1,728 | 512 | 126 | 66 |
| 8/15 | 1,982 | 471 | 5,087 | 5,010 | 856 | 957 | 741 | 1,879 | 638 | 176 | |
| 8/16 | 2,763 | 537 | 5,376 | 5,741 | 888 | 1,003 | 811 | 2,418 | 829 | 190 | |
| Season Total | 23,768 | 11,487 | 41,071 | 20,336 | 11,324 | 6,111 | 2,807 | 7,457 | 8,137 | 1,216 | |

- 2011 coho salmon counts for Tuluksak River weir are fourth lowest out of fifteen years of data.
- The weir became partially inoperable on August 9, 2011, and partial day counts have been recorded since then.
- Counts are an underestimate of coho salmon passage at this location.

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

**George River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** | |
| 8/05 | 52 | 68 | 285 | 143 | 112 | 96 | 661 | 199 | 76 | 77 | 371 | |
| 8/06 | 77 | 86 | 383 | 181 | 131 | 103 | 995 | 265 | 92 | 81 | 439 | |
| 8/07 | 99 | 92 | 539 | 250 | 153 | 117 | 1,430 | 307 | 103 | 99 | 448 | a |
| 8/08 | 161 | 106 | 652 | 322 | 352 | 125 | 1,968 | 530 | 118 | 108 | ? | |
| 8/09 | 193 | 118 | 1,159 | 391 | 424 | 133 | 1,977 | 736 | 150 | 160 | | |
| 8/10 | 206 | 161 | 1,499 | 836 | 585 | 158 | 2,285 | 1,052 | 230 | 196 | | |
| Season Total | 14,398 | 6,759 | 33,280 | 12,499 | 8,200 | 11,296 | 29,317 | 21,931 | 12,464 | 12,961 | | |

a. partial day count.

- George River weir became inoperable due to high water on August 7, 2011.
- As of August 6, coho salmon counts were third highest on record for this project.

**Kogrukluk River weir historical cumulative daily coho salmon escapement.**

= years below escapement goal. **Esc Goal Range: 13,000 to 28,000**

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** | |
| 8/05 | 34 | 45 | 417 | 281 | 206 | 386 | 233 | 191 | 363 | 1 | 49 | a |
| 8/06 | 54 | 53 | 470 | 357 | 236 | 453 | 304 | 236 | 464 | 1 | 60 | b |
| 8/07 | 61 | 59 | 605 | 468 | 273 | 559 | 390 | 263 | 591 | 1 | 76 | |
| 8/08 | 93 | 79 | 672 | 563 | 351 | 648 | 469 | 313 | 725 | 1 | 93 | |
| 8/09 | 109 | 91 | 941 | 676 | 398 | 713 | 587 | 367 | 875 | 1 | 126 | |
| 8/10 | 118 | 99 | 1,265 | 893 | 463 | 771 | 678 | 390 | 1,097 | 1 | 148 | |
| 8/11 | 162 | 104 | 1,292 | 978 | 533 | 977 | 729 | 473 | 1,242 | 1 | 191 | |
| 8/12 | 352 | 154 | 2,247 | 1,218 | 699 | 1,133 | 1,016 | 683 | 1,426 | 1 | | |
| 8/13 | 456 | 213 | 2,794 | 1,310 | 906 | 1,314 | 1,438 | 800 | 1,444 | 10 | | |
| Season Total | 19,387 | 14,516 | 74,604 | 27,041 | 24,116 | 17,011 | 27,033 | 29,661 | 22,981 | 13,971 | | |

a = The weir was not operational; daily passage was estimated.
b = Partial day count, passage was estimated.

- Kogrukluk River weir was briefly inoperable due to high water from August 4-6, 2011. Missed passage was estimated.
- Kogrukluk River became inoperable again on August 12, but operations are expected to resume on August 15, 2011.
- As of August 11, cumulative coho salmon counts were greater than years when goals were not achieved.
- As of August 11, cumulative coho salmon counts were greater than nine other years in which the escapement goal *was* reached for this location.

-continued-

## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

**Tatlawiksuk River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/03 | 152 e | 52 | 477 | 284 | 336 | 264 | 299 | 208 | 28 | 122 |
| 8/04 | 194 | 56 | 605 | 320 | 391 | 323 | 452 | 285 | 42 | ? |
| 8/05 | 285 | 89 | 819 | 356 | 438 | 424 | 534 | 346 | 83 | ? |
| 8/06 | 332 | 112 | 1,271 | 407 | 590 | 550 b | 774 | 474 | 132 | ? |
| 8/07 | 406 | 158 | 1,739 | 487 a | 665 | 722 b | 894 | 589 | 173 e | ? |
| 8/08 | 541 | 201 | 2,176 | 547 | 722 | 940 b | 1,168 | 679 | 204 | ? |
| 8/09 | 671 | 280 | 2,673 | 719 | 801 | 1,204 b | 1,483 | 929 | 247 | |
| 8/10 | 935 | 353 | 3,209 | 837 | 842 | 1,513 b | 1,682 | 1,092 | 284 | |
| Season Total | 10,539 | 11,345 | 16,410 | 7,495 | 9,453 | 8,685 | 11,065 | 10,148 | 3,520 | |

- Tatlawiksuk River weir has been inoperable since August 4, 2011, due to high water.
- As of August 3, 2011, coho salmon counts were fourth lowest out of eleven years for this date.

**Takotna River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/02 | 0 | 1 | 2 | 35 | 3 | 15 | 5 | 11 | 3 | 3 | 0 | 2 |
| 8/03 | 0 | 2 | 2 | 43 | 3 | 16 | 13 | 15 | 6 | 3 | 0 | ? |
| 8/04 | 3 | 2 | 2 | 56 | 6 | 24 | 28 | 26 | 9 | 4 | 0 | ? |
| 8/05 | 14 | 2 | 2 | 71 | 10 | 31 | 36 | 41 | 11 | 5 | 0 | ? |
| 8/06 | 22 | 5 | 4 | 98 | 26 | 36 | 44 | 58 e | 14 | 13 | 0 | ? |
| 8/07 | 36 | 6 | 4 | 123 | 40 | 38 | 60 | 79 b | 18 | 21 | 0 | ? |
| 8/08 | 55 | 7 | 6 | 171 | 59 | 48 | 75 | 105 e | 33 | 29 | 0 | ? |
| 8/09 | 95 | 9 | 12 | 211 | 83 | 54 | 100 | 143 | 40 | 52 | 2 | |
| 8/10 | 126 | 12 | 18 | 261 | 101 | 60 | 107 | 164 | 51 | 70 | 5 | |
| Season Total | 3,944 | 2,606 | 3,982 | 7,146 | 3,201 | 2,209 | 5,556 | 2,837 | 2,807 | 2,704 | 3,217 | |

- Takotna River weir has been inoperable since August 3, 2011, due to high water.
- As of August 3, cumulative coho salmon counts were similar to eight out of eleven years of operation.

-continued-

**COMMERCIAL CATCH REPORT:**

**August 8, Subdistrict 1-A Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 8/8/2008 | **1-A** | 92 | 6 | 12 | 0.02 | 3 | 0.0 | 456 | 0.8 | 15,325 | 27.8 |

**August 10, Subdistrict 1-B Comparison of Most Recent Opening to Similar Dates With Fishing**

| | | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Subistrict | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 8/10/2007 | **1-B** | 187 | 6 | 29 | 0.03 | 128 | 0.1 | 724 | 0.6 | 13,059 | 11.6 |

**Total cumulative harvest in District 1**

| | Sub- | | | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Distrit | Permits | Hours | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/5/2011 | **1B** | 111 | 4 | 237 | 0.53 | 2,517 | 5.7 | 13,794 | 31.1 | 0 | 0.0 |
| 7/7/2011 | **1A** | 62 | 3 | 96 | 0.52 | 2,348 | 12.6 | 8,142 | 43.8 | 0 | 0.0 |
| 7/9/2011 | **1A** | 61 | 3 | 70 | 0.38 | 2,561 | 14.0 | 6,850 | 37.4 | 0 | 0.0 |
| 7/11/2011 | **1A** | 75 | 3 | 89 | 0.40 | 2,158 | 9.6 | 11,441 | 50.8 | 1 | 0.0 |
| 7/13/2011 | **1B** | 147 | 4 | 63 | 0.11 | 520 | 0.9 | 19,683 | 33.5 | 55 | 0.1 |
| 7/15/2011 | **1A** | 86 | 4 | 95 | 0.28 | 2,005 | 5.8 | 12,433 | 36.1 | 60 | 0.2 |
| 7/18/2011 | **1B** | 159 | 4 | 7 | 0.01 | 283 | 0.4 | 11,941 | 18.8 | 188 | 0.3 |
| 7/20/2011 | **1A** | 83 | 4 | 27 | 0.08 | 649 | 2.0 | 9,475 | 28.5 | 274 | 0.8 |
| 7/22/2011 | **1B** | 155 | 4 | 0 | 0.00 | 209 | 0.3 | 8,501 | 13.7 | 1,525 | 2.5 |
| 7/25/2011 | **1A** | 80 | 4 | 24 | 0.08 | 54 | 0.2 | 7,151 | 22.3 | 2,722 | 8.5 |
| 7/27/2011 | **1B** | 182 | 4 | 0 | 0.00 | 72 | 0.1 | 4,635 | 6.4 | 5,688 | 7.8 |
| 8/1/2011 | **1A** | 80 | 3 | 6 | 0.03 | 15 | 0.1 | 1,631 | 6.8 | 7,353 | 30.6 |
| 8/3/2011 | **1B** | 215 | 4 | 0 | 0.00 | 42 | 0.0 | 1,451 | 1.7 | 12,563 | 14.6 |
| 8/8/2011 | **1A** | 100 | 3 | 0 | 0.00 | 6 | 0.0 | 381 | 1.3 | 13,838 | 46.1 |
| 8/10/2011 | **1B** | 211 | 4 | 0 | 0.00 | 45 | 0.1 | 258 | 0.3 | 7,670 | 9.1 |
| Total | **1-A & 1-B** | 363 | 55 | 714 | | 13,484 | | 117,767 | | 51,937 | |

* **Results are preliminary and subject to change (includes catcher/seller)**

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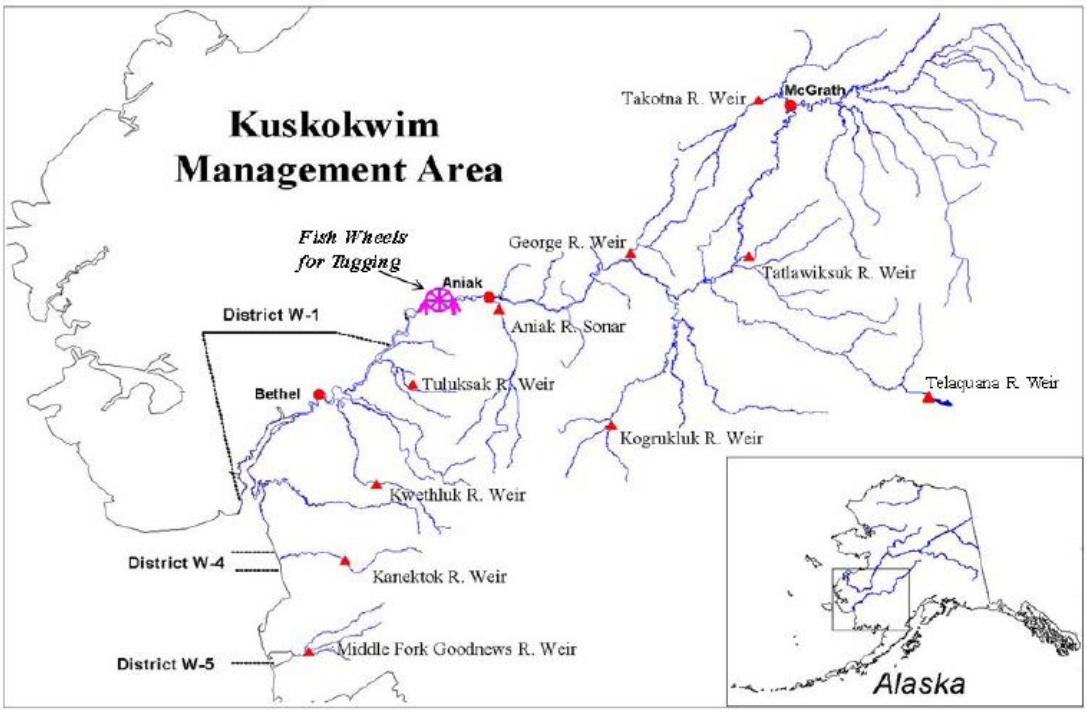

Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
District W-5
Middle Fork Goodnews R. Weir
Alaska

Appendix B12.–Information Packet, August 25, Kuskokwim River Salmon Management Working Group, 2011.

## Kuskokwim River Salmon Management Working Group

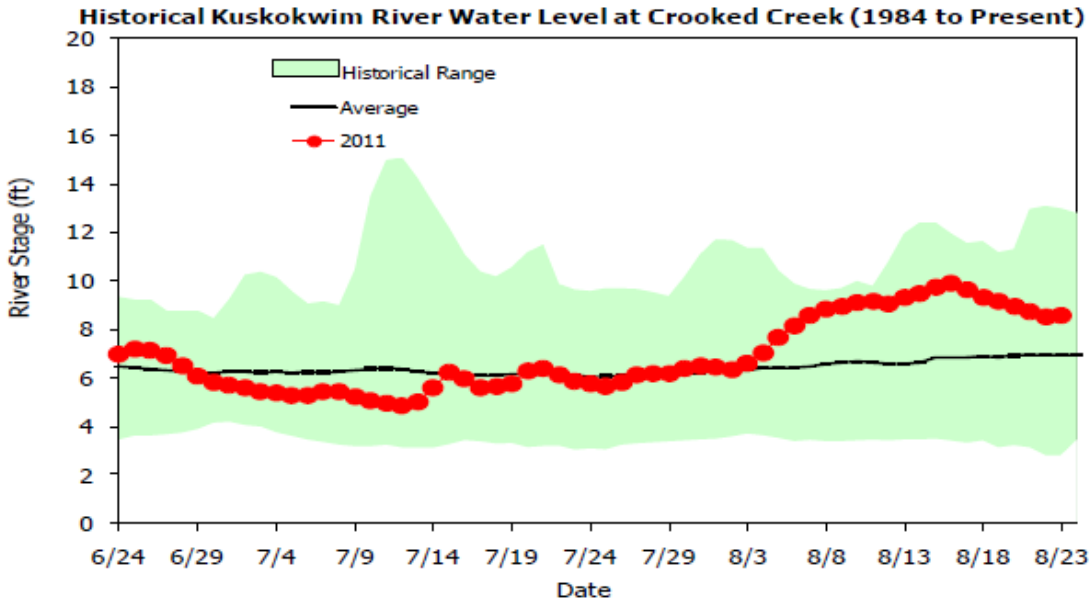
1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

**Information Packet**

**August 25, 2011**

**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT PROJECTS**

- BTF discontinued operations on August 21
- Kuskokwim River water level at Crooked Creek was above average for the month of August
- Water temperature at Bethel test fish site was below average for the month of August
- Water clarity at Bethel test fish site was near average for the month of August

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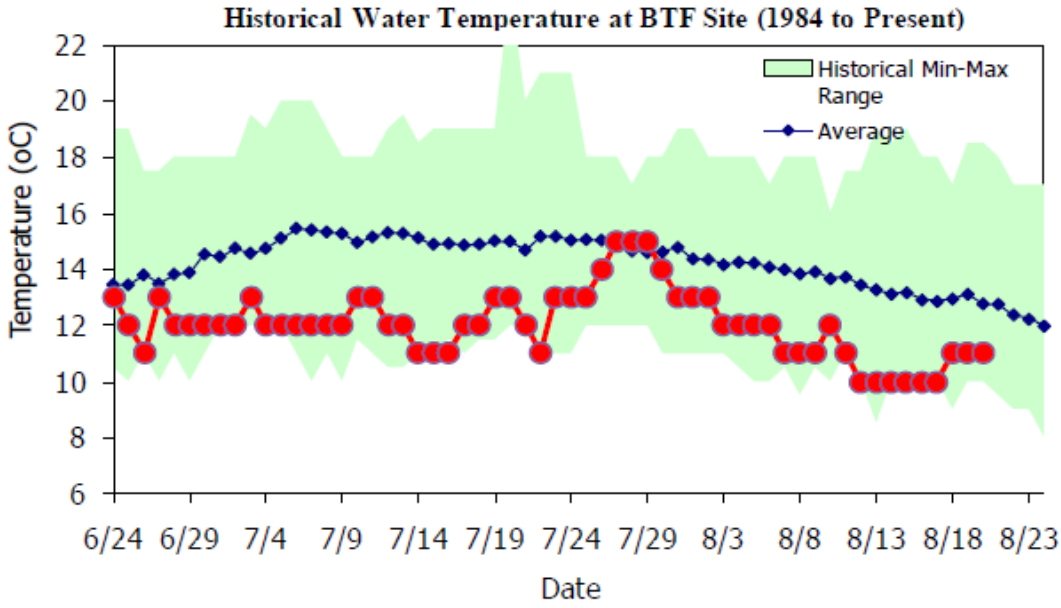
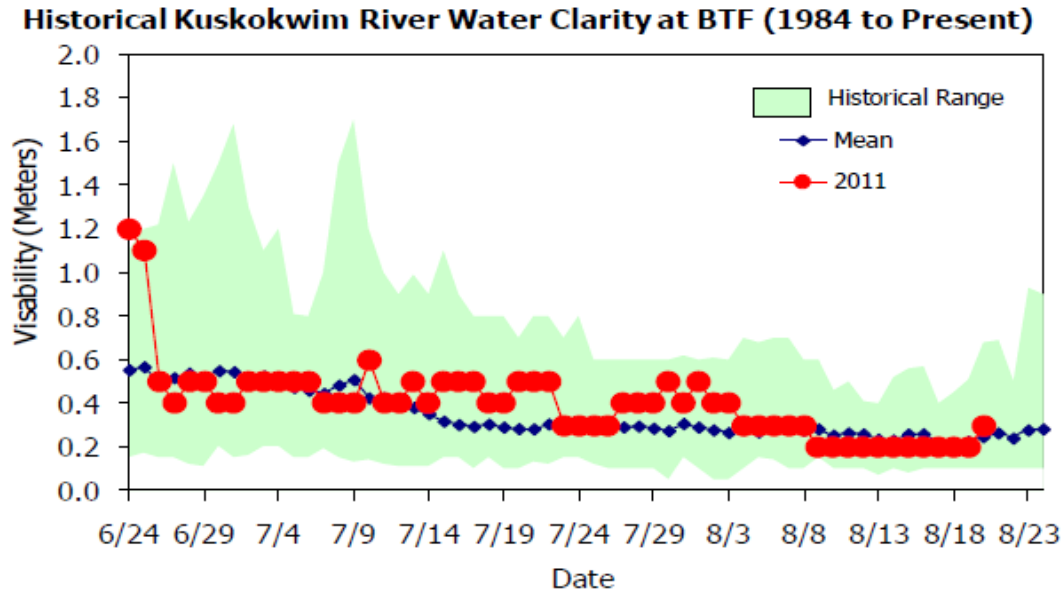
**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSSSMENT *(Continued)***

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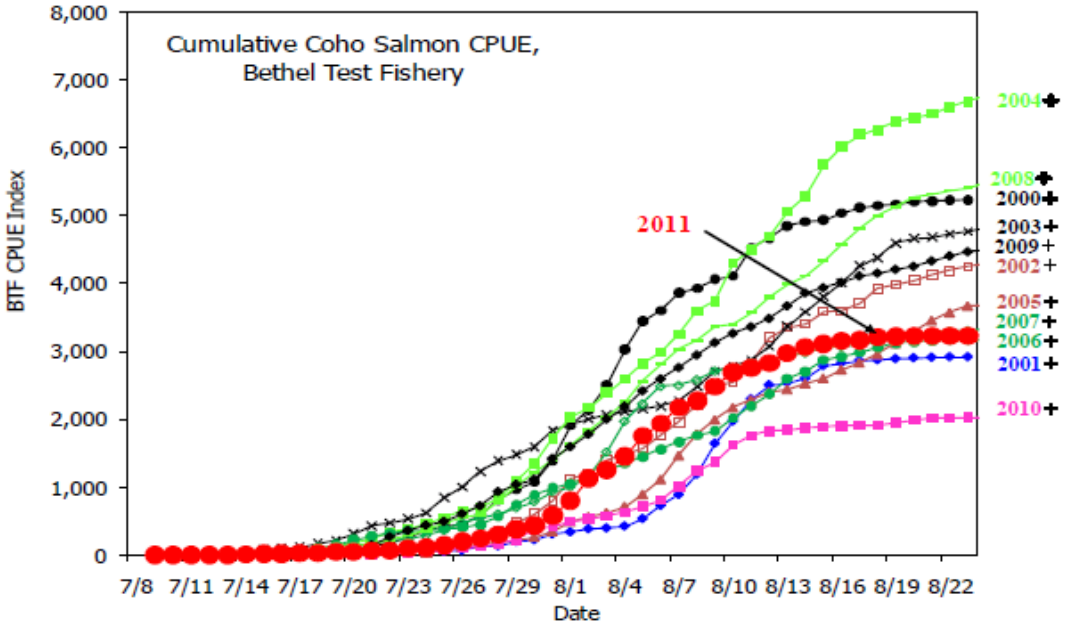
**Coho Salmon Cumulative CPUE Index, Bethel Test Fishery**




**Bethel Test Fish Coho Salmon Cumulative CPUE**

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | | % Passage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 8/1 | 1,910 | 336 | 1,129 | 1,936 | 2,034 | 486 | 1,047 | 1,008 | 1,616 | 1,593 | 488 | 802 | | |
| 8/2 | 2,138 | 382 | 1,192 | 2,001 | 2,173 | 561 | 1,158 | 1,171 | 1,837 | 1,777 | 531 | 1,126 | | 25% |
| 8/3 | 2,512 | 393 | 1,405 | 2,067 | 2,389 | 622 | 1,250 | 1,519 | 2,030 | 2,000 | 580 | 1,252 | | |
| 8/4 | 3,031 | 422 | 1,483 | 2,112 | 2,599 | 715 | 1,344 | 1,975 | 2,253 | 2,190 | 634 | 1,454 | | |
| 8/5 | 3,444 | 532 | 1,572 | 2,147 | 2,819 | 892 | 1,447 | 2,234 | 2,560 | 2,418 | 713 | 1,749 | | |
| 8/6 | 3,605 | 726 | 1,768 | 2,197 | 2,982 | 1,112 | 1,560 | 2,491 | 2,806 | 2,595 | 804 | 1,932 | | |
| 8/7 | 3,864 | 887 | 1,959 | 2,272 | 3,255 | 1,466 | 1,668 | 2,506 | 3,032 | 2,762 | 1,011 | 2,177 | | |
| 8/8 | 3,929 | 1,184 | 2,215 | 2,483 | 3,594 | 1,783 | 1,767 | 2,590 | 3,163 | 2,946 | 1,242 | 2,276 | | 50% |
| 8/9 | 4,063 | 1,640 | 2,489 | 2,711 | 3,740 | 1,994 | 1,827 | 2,719 | 3,373 | 3,132 | 1,371 | 2,489 | | |
| 8/10 | 4,112 | 1,968 | 2,553 | 2,782 | 4,294 | 2,174 | 2,019 | 2,762 | 3,402 | 3,266 | 1,616 | 2,691 | | |
| 8/11 | 4,528 | 2,294 | 2,831 | 2,877 | 4,505 | 2,286 | 2,193 | 2,821 | 3,573 | 3,363 | 1,762 | 2,758 | | |
| 8/12 | 4,670 | 2,501 | 3,207 | 3,074 | 4,694 | 2,406 | 2,369 | 2,850 | 3,801 | 3,485 | 1,831 | 2,832 | | |
| 8/13 | 4,852 | 2,537 | 3,351 | 3,375 | 5,057 | 2,444 | 2,601 | 2,931 | 3,990 | 3,672 | 1,840 | 2,979 | | 75% |
| 8/14 | 4,916 | 2,598 | 3,403 | 3,581 | 5,290 | 2,529 | 2,707 | 2,983 | 4,115 | 3,865 | 1,871 | 3,069 | | |
| 8/15 | 4,937 | 2,784 | 3,585 | 3,810 | 5,758 | 2,610 | 2,874 | 3,053 | 4,334 | 3,940 | 1,889 | 3,109 | | |
| 8/16 | 5,037 | 2,826 | 3,605 | 4,012 | 6,026 | 2,737 | 2,921 | 3,077 | 4,582 | 4,019 | 1,901 | 3,153 | | |
| 8/17 | 5,120 | 2,862 | 3,705 | 4,266 | 6,193 | 2,837 | 2,984 | 3,096 | 4,815 | 4,115 | 1,913 | 3,168 | | |
| 8/18 | 5,148 | 2,870 | 3,925 | 4,380 | 6,272 | 2,963 | 3,065 | 3,140 | 4,995 | 4,156 | 1,913 | 3,212 | | 90% |
| 8/19 | 5,167 | 2,887 | 3,984 | 4,596 | 6,385 | 3,123 | 3,123 | 3,197 | 5,133 | 4,211 | 1,951 | 3,223 | | |
| 8/20 | 5,203 | 2,899 | 4,044 | 4,663 | 6,433 | 3,292 | 3,142 | 3,252 | 5,272 | 4,256 | 1,986 | 3,234 | | 95% |
| 8/21 | 5,215 | 2,907 | 4,122 | 4,682 | 6,497 | 3,464 | 3,160 | 3,291 | 5,320 | 4,336 | 2,016 | 3,234 | * | |
| 8/22 | 5,229 | 2,914 | 4,198 | 4,734 | 6,602 | 3,579 | 3,164 | 3,307 | 5,376 | 4,411 | 2,018 | 3,234 | | |
| 8/23 | 5,236 | 2,914 | 4,251 | 4,768 | 6,690 | 3,678 | 3,164 | 3,314 | 5,413 | 4,472 | 2,022 | 3,234 | | |
| 8/24 | 5,236 | 2,914 | 4,289 | 4,819 | 6,771 | 3,678 | 3,164 | 3,328 | 5,494 | 4,495 | 2,024 | 3,234 | | |

* August 20, 2011 was last day of operation.

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**ESCAPEMENT MONITORING**

**CHINOOK SALMON-** No change

- The Chinook salmon escapement goal for the Kogrukluk River was met on July 18, 2011.
- Escapement goals at Kwethluk, Tuluksak, and George Rivers have not been met.
- The Chinook salmon escapement to the Kwethluk River was 40% higher than the 2010 escapement.
- Chinook salmon escapements at Tuluksak, George, and Kogrukluk Rivers were similar to 2010.
- Chinook salmon escapements were generally later than average at all Kuskokwim River escapement projects.
- Small numbers of Chinook salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

**CHUM SALMON-** No change

- The chum salmon escapement goal for the Aniak River sonar was met on July 24, 2011.
- The chum salmon escapement goal for the Kogrukluk River weir was met on July 18, 2011.
- Chum salmon escapements to Kwethluk and Tuluksak Rivers were among the lowest on record in 2011.
- Chum salmon escapements to the George, Tatlawiksuk, Takotna and Kogrukluk Rivers were among the highest on record in 2011.
- Chum salmon run timing was near average at most Kuskokwim River assessment projects.
- Chum salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

**SOCKEYE SALMON**-No change

- The sockeye salmon escapement goal for the Kogrukluk River weir was met on July 18, 2011.
- The sockeye salmon escapement was below average for the Kwethluk River.
- Small numbers of sockeye salmon are still arriving at most assessment projects and final escapement numbers are not yet available.

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## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

**Kwethluk River historical cumulative daily coho salmon escapement.**

= year below minimum threshold escapement goal. **Esc Goal: >19,000**

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/4 | 869 | 441 | 401 | 1,500 | 1,278 | | 1,670 | 1,447 | 1,259 | 873 | 22 | 261 |
| 8/5 | 1,111 | 567 | 423 | 1,831 | 1,630 | | 1,806 | 2,495 | 1,427 | 1,263 | 36 | 301 |
| 8/6 | 1,197 | 714 | 474 | 2,165 | 2,475 | | 2,022 | 2,948 | 1,885 | 1,424 | 51 | 365 |
| 8/7 | 1,402 | 835 | 525 | 2,915 | 2,827 | | 2,190 | 3,201 | 2,054 | 1,814 | 73 | 406 |
| 8/8 | 1,560 | 924 | 572 | 4,268 | 3,007 | | 2,293 | 3,527 | 2,336 | 2,031 | 126 | 456 |
| 8/9 | 1,764 | 1,089 | 617 | 6,358 | 3,403 | | 2,424 | 3,801 | 3,081 | 2,065 | 173 | 583 a |
| 8/10 | 2,070 | 1,246 | 859 | 6,748 | 3,630 | | 2,749 | 4,289 | 3,885 | 2,134 | 204 | 709 a |
| 8/11 | 2,979 | 1,676 | 971 | 6,772 | 5,361 | | 3,401 | 4,657 | 4,678 | 2,192 | 226 | 912 b |
| 8/12 | 3,912 | 1,872 | 1,271 | 7,908 | 6,171 | | 4,452 | 4,988 | 6,215 | 2,769 | 292 | 1,048 b |
| 8/13 | 5,356 | 2,821 | 1,351 | 9,602 | 8,104 | | 5,466 | 5,962 | 6,567 | 2,897 | 345 | c |
| 8/14 | 6,626 | 3,197 | 1,452 | 11,368 | 9,694 | | 6,031 | 6,310 | 7,902 | 3,050 | 579 | c |
| Season Total | 25,610 | 20,723 | 23,298 | 109,163 | 64,216 | n.a | 25,664 | 20,257 | 49,971 | 21,911 | n.a | |

a - Weir inoperable due to high water: Estimates made
b - Partially operational: Counts an under estimate
c - Weir inoperable: No estimates available.

- Kwethluk River weir became inoperable on August 8, 2011. Though estimates were made in conjunction with a few partial day data sets, the passage is underestimated from August 9-12.
- Up to August 8, escapement was similar to 2002, a year in which the escapement goal threshold of 19,000 coho salmon was met.
- Kwethluk River weir remains inoperable at this time.

**Tuluksak River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/04 | 127 | 16 | 152 | 463 | 123 | 222 | 124 | 155 | 68 | 20 | 44 |
| 8/05 | 135 | 18 | 190 | 521 | 165 | 271 | 223 | 193 | 94 | 23 | 51 |
| 8/06 | 141 | 24 | 292 | 837 | 188 | 310 | 286 | 271 | 110 | 24 | 56 |
| 8/07 | 162 | 31 | 393 | 1,107 | 224 | 342 | 299 | 315 | 131 | 27 | 61 |
| 8/08 | 253 | 37 | 728 | 1,181 | 266 | 385 | 309 | 346 | 155 | 50 | 66 |
| 8/09 | 284 | 56 | 1,163 | 1,439 | 316 | 430 | 380 | 491 | 165 | 60 | a |
| 8/10 | 305 | 65 | 1,404 | 1,686 | 381 | 539 | 437 | 605 | 182 | 72 | a |
| Season Total | 23,768 | 11,487 | 41,071 | 20,336 | 11,324 | 6,111 | 2,807 | 7,457 | 8,137 | 1,216 | |

a - Weir inoperable: No estimates available.

- Tuluksak River weir became inoperable on August 9.
- At that time, counts were third lowest in eleven years of data.

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## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

George River weir historical cumulative daily coho salmon escapement.

Esc Goal: none

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/06 | 89 | 77 | 86 | 383 | 181 | 131 | 103 | 995 | 265 | 92 | 81 | 439 |
| 8/07 | 114 | 99 | 92 | 539 | 250 | 153 | 117 | 1,430 | 307 | 103 | 99 | 448 |
| 8/08 | 233 | 161 | 106 | 652 | 322 | 352 | 125 | 1,968 | 530 | 118 | 108 | 448 a |
| 8/09 | 238 | 193 | 118 | 1,159 | 391 | 424 | 133 | 1,977 | 736 | 150 | 160 | 448 a |
| 8/10 | 291 | 206 | 161 | 1,499 | 836 | 585 | 158 | 2,285 | 1,052 | 230 | 196 | 448 a |
| 8/11 | 407 | 208 | 176 | 1,685 | 913 | 610 | 225 | 2,429 | 1,460 | 334 | 245 | 448 a |
| 8/12 | 652 | 460 | 230 | 1,989 | 995 | 737 | 443 | 2,762 | 1,685 | 392 | 316 | 448 a |
| 8/13 | 1,561 | 733 | 243 | 2,135 | 1,056 | 915 | 464 | 3,707 | 2,009 | 611 | 455 | 448 a |
| 8/14 | 2,041 | 856 | 257 | 3,755 | 1,113 | 1,187 | 800 | 5,926 | 2,212 | 738 | 709 | 448 a |
| 8/15 | 2,304 | 1,043 | 488 | 4,290 e | 1,825 | 1,295 | 1,591 | 6,122 | 2,790 | 1,691 | 898 | 448 a |
| 8/16 | 2,511 | 2,577 | 603 | 4,666 b | 2,141 | 1,363 | 1,991 | 6,543 | 3,756 | 2,016 | 1,004 | 448 a |
| 8/17 | 2,697 | 3,878 | 625 | 4,947 b | 2,348 | 1,739 | 2,120 | 7,136 | 4,853 | 2,445 | 1,239 | 448 a |
| 8/18 | 3,255 | 4,587 | 658 | 5,053 e | 2,503 | 1,802 | 2,901 | 8,499 | 5,751 | 3,047 | 1,416 | 448 a |
| 8/19 | 3,471 | 5,524 | 669 | 5,269 | 2,599 | 1,855 | 3,155 | 9,196 | 6,385 | 3,343 | 1,600 | 448 a |
| 8/20 | 4,648 | 6,394 | 679 | 5,622 | 2,898 | 1,880 | 3,405 | 10,437 | 6,792 | 3,729 | 1,791 | 448 a |
| 8/21 | 6,099 | 7,197 | 698 | 7,686 | 3,387 | 1,956 | 3,649 | 11,472 | 7,821 | 4,253 | 1,945 | 448 a |
| 8/22 | 6,534 | 7,932 | 1,223 | 8,541 | 3,555 | 1,983 | 3,888 | 12,803 | 9,022 | 4,376 | 2,186 | 448 a |
| 8/23 | 6,583 | 8,600 | 1,369 | 9,212 | 3,756 | 2,691 | 4,122 | 13,921 | 10,194 | 4,600 | 2,565 | 448 a |
| 8/24 | 6,803 | 9,201 | 1,417 | 9,686 | 3,903 | 2,737 | 4,352 | 14,911 | 10,724 | 4,749 | 2,802 | 1,091 b |
| 8/25 | 7,076 | 9,734 | 1,455 | 12,358 | 4,052 | 2,892 | 4,576 | 16,713 | 11,107 | 4,933 | 3,257 | |
| 8/26 | 7,386 | 10,200 | 1,467 | 14,590 | 4,140 | 3,068 | 4,913 | 17,637 | 11,256 | 5,093 | 3,534 | |
| 8/27 | 8,614 | 10,630 | 1,600 | 16,595 | 4,302 | 3,117 | 5,014 | 19,765 | 12,423 | 5,177 | 3,883 | |
| Season Total | 11,262 | 14,398 | 6,759 | 33,280 | 12,499 | 8,200 | 11,296 | 29,317 | 21,931 | 12,464 | 12,961 | |

a - Weir inoperable due to high water.
b - partial day count.

- George River weir was inoperable between August 7-23.
- Cumulative passage as of August 7 was greater than 10 out of 13 years of operation at this location.
- A partial day count of 643 coho salmon on August 24 suggests that good numbers of coho are passing the weir and that the run is approaching peak.
- Full estimates of passage will be done post season.

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## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

**Tatlawiksuk River weir historical cumulative daily coho salmon escapement.**

**Esc Goal: none**

| Date | Cumulative Daily Passage | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/01 | 85 | 56 | 25 | 286 | 185 | 247 | 197 | 198 | 54 | 10 | 89 |
| 8/02 | 195 | 98 | 36 | 379 | 214 | 297 | 220 | 226 | 78 | 18 | 107 |
| 8/03 | 367 | 152 | 52 | 477 | 284 | 336 | 264 | 299 | 208 | 28 | 122 |
| 8/04 | 582 | 194 | 56 | 605 | 320 | 391 | 323 | 452 | 285 | 42 | 122 a |
| 8/05 | 755 | 285 | 89 | 819 | 356 | 438 | 424 | 534 | 346 | 83 | 122 a |
| 8/06 | 884 | 332 | 112 | 1,271 | 407 | 590 | 550 | 774 | 474 | 132 | 122 a |
| 8/07 | 1,161 | 406 | 158 | 1,739 | 487 | 665 | 722 | 894 | 589 | 173 | 122 a |
| 8/08 | 1,269 | 541 | 201 | 2,176 | 547 | 722 | 940 | 1,168 | 679 | 204 | 122 a |
| 8/09 | 1,536 | 671 | 280 | 2,673 | 719 | 801 | 1,204 | 1,483 | 929 | 247 | 122 a |
| 8/10 | 2,155 | 935 | 353 | 3,209 | 837 | 842 | 1,513 | 1,682 | 1,092 | 284 | 122 a |
| 8/11 | 2,885 | 1,147 | 416 | 3,659 | 938 | 896 | 1,869 | 1,889 | 1,128 | 328 | 122 a |
| 8/12 | 4,008 | 1,453 | 853 | 4,381 | 1,029 | 998 | 2,250 | 2,234 | 1,184 | 377 | 122 a |
| 8/13 | 5,437 | 1,767 | 1,640 | 4,915 | 1,102 | 1,229 | 2,672 | 2,391 | 1,239 | 430 | 122 a |
| 8/14 | 5,756 | 2,631 | 1,880 | 5,561 | 1,269 | 1,405 | 3,111 | 2,727 | 1,549 | 487 | 122 a |
| 8/15 | | 3,161 | 2,100 | 6,189 | 1,351 | 1,665 | 3,339 | 3,267 | 1,637 | 548 | 122 a |
| 8/16 | | 4,021 | 2,445 | 6,704 | 1,422 | 1,855 | 3,614 | 3,814 | 2,246 | 614 | 122 a |
| 8/17 | | 4,673 | 2,498 | 7,279 | 1,699 | 2,137 | 3,967 | 4,448 | 3,785 | 684 | 122 a |
| 8/18 | | 5,283 | 2,847 | 7,870 | 1,861 | 2,362 | 4,310 | 5,128 | 4,788 | 761 | 122 a |
| 8/19 | | 5,850 | 2,874 | 8,586 | 1,986 | 2,438 | 4,565 | 5,621 | 5,231 | 844 | 122 a |
| 8/20 | | 6,375 | 2,902 | 8,981 | 2,104 | 2,512 | 4,989 | 6,318 | 5,308 | 934 | 122 a |
| 8/21 | | 6,856 | 4,101 | 9,689 | 2,215 | 3,169 | 5,489 | 6,820 | 5,410 | 1,030 | 852 b |
| 8/22 | | 7,296 | 4,521 | 10,514 | 2,295 | 3,420 | 5,832 | 7,335 | 5,486 | 1,133 | 1,528 |
| 8/23 | | 7,692 | 5,868 | 11,193 | 3,052 | 4,475 | 6,033 | 7,684 | 5,911 | 1,252 | 2,123 |
| 8/24 | | 8,046 | 6,895 | 11,666 | 3,933 | 5,433 | 6,291 | 8,037 | 6,421 | 1,352 | 2,732 |
| 8/25 | | 8,358 | 7,437 | 12,304 | 4,210 | 5,843 | 6,668 | 8,340 | 6,665 | 1,526 | |
| 8/26 | | 8,626 | 8,187 | 12,570 | 4,409 | 6,320 | 6,844 | 8,580 | 6,683 | 1,697 | |
| Season Total | n.a. | 10,539 | 11,345 | 16,410 | 7,495 | 9,453 | 8,685 | 11,065 | 10,148 | 3,520 | |

a - Weir inoperable due to high water.
b - partial day count.

- Tatlawiksuk River weir was inoperable between August 4-12.
- Passage numbers as of August 4 were among the lower range for that date.
- High daily passages between August 22-25 indicate that good numbers of coho salmon are currently passing the Tatlawiksuk River weir and that the run is approaching its peak.
- Full estimates of passage will be done post season.

-continued-

**ESCAPEMENT MONITORING *(Continued)***

**COHO SALMON – Weir Counts**

Kogrukluk River weir historical cumulative daily coho salmon escapement.

= years below escapement goal. Esc Goal Range: 13,000 to 28,000

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | **2011** |
| 8/22 | 10,069 | 5,481 | 2,220 | 11,918 | 6,998 | 4,380 | 4,044 | 5,641 | 3,101 | 5,641 | 668 | 1,488 a |
| 8/23 | 11,120 | 6,038 | 3,178 | 12,929 | 7,997 | 5,327 | 4,469 | 7,109 | 3,776 | 6,097 | 831 | 1,883 |
| 8/24 | 12,185 | 7,044 | 3,992 | 14,522 | 8,686 | 7,397 | 4,919 | 8,246 | 4,212 | 6,539 | 973 | 2,159 |
| 8/25 | 12,777 | 7,758 | 5,072 | 16,287 | 10,077 | 8,231 | 5,394 | 9,944 | 4,827 | 7,564 | 1,216 | |
| 8/26 | 13,185 | 8,389 | 5,315 | 19,458 | 10,918 | 8,320 | 5,942 | 10,743 | 5,744 | 8,344 | 1,481 | |
| Season Total | 33,135 | 19,387 | 14,516 | 74,604 | 27,041 | 24,116 | 17,011 | 27,033 | 29,661 | 22,981 | 13,971 | |

a - Partial day count, passage was estimated.

- Kogrukluk River weir was inoperable for three short periods during the coho salmon run and preliminary estimates have been made.
- Cumulative passage for this time is estimated to be better than four of six years in which the escapement goal was not met at this location.
- The crew reports that most passing coho are male, suggesting that the run is still in early stages and therefore late.

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## ESCAPEMENT MONITORING *(Continued)*

### COHO SALMON – Weir Counts

Takotna River weir historical cumulative daily coho salmon escapement.

Esc Goal: none

| Date | Cumulative Daily Passage | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 8/01 | 0 | 1 | 2 | 31 | 2 | 13 | 3 | 9 | 2 | 3 | 0 | 2 |
| 8/02 | 0 | 1 | 2 | 35 | 3 | 15 | 5 | 11 | 3 | 3 | 0 | 2 a |
| 8/03 | 0 | 2 | 2 | 43 | 3 | 16 | 13 | 15 | 6 | 3 | 0 | 2 a |
| 8/04 | 3 | 2 | 2 | 56 | 6 | 24 | 28 | 26 | 9 | 4 | 0 | 2 a |
| 8/05 | 14 | 2 | 2 | 71 | 10 | 31 | 36 | 41 | 11 | 5 | 0 | 2 a |
| 8/06 | 22 | 5 | 4 | 98 | 26 | 36 | 44 | 58 | 14 | 13 | 0 | 2 a |
| 8/07 | 36 | 6 | 4 | 123 | 40 | 38 | 60 | 79 | 18 | 21 | 0 | 2 a |
| 8/08 | 55 | 7 | 6 | 171 | 59 | 48 | 75 | 105 | 33 | 29 | 0 | 2 a |
| 8/09 | 95 | 9 | 12 | 211 | 83 | 54 | 100 | 143 | 40 | 52 | 2 | 2 a |
| 8/10 | 126 | 12 | 18 | 261 | 101 | 60 | 107 | 164 | 51 | 70 | 5 | 2 a |
| 8/11 | 170 | 24 | 22 | 346 | 129 | 72 | 219 | 188 | 65 | 85 | 6 | 2 a |
| 8/12 | 250 | 43 | 48 | 485 | 207 | 82 | 259 | 218 | 77 | 121 | 12 | 3 a |
| 8/13 | 292 | 63 | 75 | 635 | 227 | 101 | 312 | 294 | 93 | 138 | 24 | 3 a |
| 8/14 | 343 | 92 | 98 | 847 | 288 | 121 | 343 | 352 | 116 | 201 | 36 | 3 a |
| 8/15 | 401 | 123 | 134 | 987 | 348 | 143 | 417 | 408 | 139 | 276 | 39 | 3 a |
| 8/16 | 455 | 174 | 183 | 1,118 | 440 | 157 | 535 | 489 | 181 | 363 | 60 | 3 a |
| 8/17 | 553 | 218 | 203 | 1,239 | 622 | 175 | 710 | 568 | 255 | 454 | 104 | 3 a |
| 8/18 | 699 | 295 | 362 | 1,399 | 746 | 232 | 831 | 617 | 324 | 495 | 151 | 3 a |
| 8/19 | 891 | 361 | 379 | 1,747 | 802 | 254 | 990 | 764 | 444 | 539 | 188 | 35 a |
| 8/20 | 971 | 452 | 390 | 1,944 | 876 | 279 | 1,161 | 900 | 502 | 593 | 220 | 76 |
| 8/21 | 1,358 | 543 | 656 | 2,300 | 933 | 305 | 1,342 | 1,015 | 597 | 625 | 275 | 149 |
| 8/22 | 1,536 | 634 | 982 | 2,554 | 994 | 332 | 1,535 | 1,088 | 744 | 670 | 335 | 193 |
| 8/23 | 1,777 | 708 | 1,310 | 2,730 | 1,082 | 443 | 1,660 | 1,223 | 796 | 708 | 484 | 262 |
| 8/24 | 1,929 | 853 | 1,707 | 2,919 | 1,139 | 701 | 1,943 | 1,390 | 880 | 775 | 579 | 392 |
| 8/25 | 2,036 | 1,009 | 2,008 | 3,136 | 1,276 | 905 | 2,233 | 1,437 | 962 | 794 | 652 | |
| 8/26 | 2,122 | 1,284 | 2,275 | 3,435 | 1,848 | 1,019 | 2,344 | 1,480 | 1,064 | 810 | 753 | |
| Season Total | 3,944 | 2,606 | 3,962 | 7,146 | 3,201 | 2,209 | 5,556 | 2,837 | 2,807 | 2,704 | 3,217 | |

a - Weir inoperable: passage estimated.

- The Takotna River weir was inoperable from August 3-20.
- Full passage estimates will be done post season.
- Before becoming inoperable, cumulative passage at the weir was similar to six of ten years of operation.
- Since becoming operation, daily counts have been similar to other operation years for this time and the run appears to be building.

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**COMMERCIAL CATCH REPORT:**

**Total Cumulative Harvest in District 1**

| Date | Sub-Distrit | Permits | Hours | Chinook | | Sockeye | | Chum | | Coho | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Catch | CPUE | Catch | CPUE | Catch | CPUE | Catch | CPUE |
| 7/5/2011 | **1B** | 116 | 4 | 192 | 0.41 | 2,471 | 5.3 | 13,657 | 29.4 | 0 | 0.0 |
| 7/7/2011 | **1A** | 63 | 3 | 127 | 0.67 | 2,339 | 12.4 | 8,130 | 43.0 | 0 | 0.0 |
| 7/9/2011 | **1A** | 61 | 3 | 74 | 0.40 | 2,541 | 13.9 | 6,850 | 37.4 | 1 | 0.0 |
| 7/11/2011 | **1A** | 76 | 3 | 89 | 0.39 | 2,024 | 8.9 | 11,258 | 49.4 | 0 | 0.0 |
| 7/13/2011 | **1B** | 145 | 4 | 53 | 0.09 | 531 | 0.9 | 19,525 | 33.7 | 46 | 0.1 |
| 7/15/2011 | **1A** | 87 | 4 | 79 | 0.23 | 1,999 | 5.7 | 12,432 | 35.7 | 38 | 0.1 |
| 7/18/2011 | **1B** | 158 | 4 | 7 | 0.01 | 282 | 0.4 | 12,040 | 19.1 | 187 | 0.3 |
| 7/20/2011 | **1A** | 83 | 4 | 27 | 0.08 | 647 | 1.9 | 9,465 | 28.5 | 273 | 0.8 |
| 7/22/2011 | **1B** | 156 | 4 | 0 | 0.00 | 207 | 0.3 | 8,471 | 13.6 | 1,522 | 2.4 |
| 7/25/2011 | **1A** | 80 | 4 | 24 | 0.08 | 51 | 0.2 | 7,021 | 21.9 | 2,710 | 8.5 |
| 7/27/2011 | **1B** | 180 | 4 | 0 | 0.00 | 74 | 0.1 | 3,620 | 5.0 | 5,677 | 7.9 |
| 8/1/2011 | **1A** | 80 | 3 | 6 | 0.03 | 15 | 0.1 | 1,631 | 6.8 | 7,353 | 30.6 |
| 8/3/2011 | **1B** | 215 | 4 | 0 | 0.00 | 42 | 0.0 | 1,451 | 1.7 | 12,740 | 14.8 |
| 8/8/2011 | **1A** | 100 | 3 | 0 | 0.00 | 6 | 0.0 | 381 | 1.3 | 13,798 | 46.0 |
| 8/10/2011 | **1B** | 211 | 4 | 0 | 0.00 | 45 | 0.1 | 258 | 0.3 | 7,670 | 9.1 |
| 8/15/2011 | **1A** | 104 | 4 | 0 | 0.00 | 3 | 0.0 | 132 | 0.3 | 5,243 | 12.6 |
| 8/17/2011 | **1B** | 116 | 4 | 0 | 0.00 | 11 | 0.0 | 42 | 0.1 | 4,557 | 9.8 |
| 8/19/2011 | **1A** | 91 | 4 | 0 | 0.00 | 1 | 0.0 | 56 | 0.2 | 5,098 | 14.0 |
| 8/22/2011 | **1A** | 99 | 4 | 0 | 0.00 | 2 | 0.0 | 58 | 0.1 | 6,249 | 15.8 |
| Total | **1-A & 1-B** | 117 | 71 | 678 | | 13,291 | | 116,478 | | 73,162 | |

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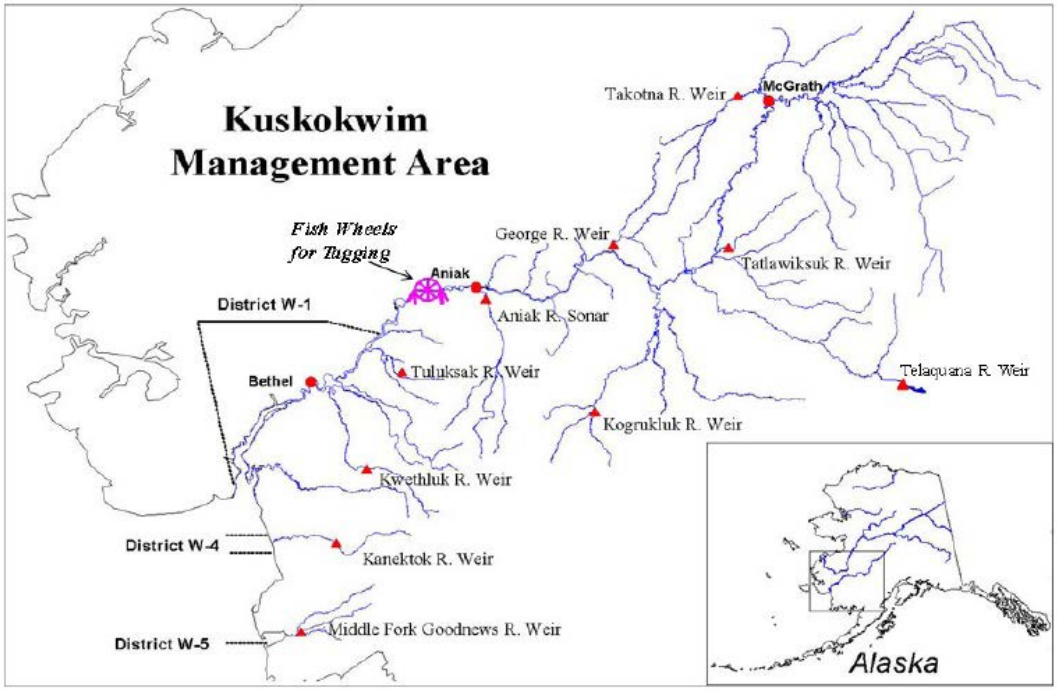
Kuskokwim
Management Area
Fish Wheels
for Tagging
Aniak
District W-1
Bethel
Takotna R. Weir
McGrath
George R. Weir
Tatlawiksuk R. Weir
Aniak R. Sonar
Tuluksak R. Weir
Telaquana R. Weir
Kogrukluk R. Weir
Kwethluk R. Weir
District W-4
Kanektok R. Weir
District W-5
Middle Fork Goodnews R. Weir
Alaska

# APPENDIX C: MEETING SUMMARIES

Appendix C1.–Meeting Summary, March 18, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

March 18, 2011

Called to order at 9:10 am on Friday, at ADFG Rabbit Creek Rifle Range in Anchorage, and adjourned at 4:00 pm. Twelve of thirteen members were present, a quorum was established.

AGENDA ITEMS:

1.) Continuing Business
2.) Old Business

WORKING GROUP ACTION ITEMS:

1.) The Working Group would like to see more information regarding the quality of escapement at weir projects.

2.) State and federal agencies will give information regarding the implementation of a system for reporting of salmon (all species) shipped out of the Kuskokwim Area.

3.) Listing Bethel Test Fish data on the fish counts webpage on the ADF&G website. Members requested a link to this site to access the updates *daily*. BTF is not currently on the webpage, and the Working Group has requested to add it.

4.) Discuss the Iyana Gusty award at a future meeting.

MEETING ACTION ANNOUNCEMENT:

The next Working Group meeting will be on Tuesday, May 3, at 10:00 am at ADF&G in Bethel.

ADF&G COMMERCIAL FISHING OUTLOOK:

- Chuck Brazil stated that commercial fishing could be delayed to as late as the first week of July. If commercial fishing is implemented, the estimated surplus for potential incidental harvest of Chinook is 0 to 10,000. (There has not been a directed commercial fishery for Chinook salmon in the Kuskokwim River since 1987.) The outlook for Chum salmon is an estimated surplus of 200,000 to 300,000; for sockeye 20,000-30,000; and for Coho 60,000 to 150,000.
- Commercial fishing will be delayed so that subsistence needs can be met, and BTF data has to be evaluated daily to determine when a commercial fishery will be implemented.

PEOPLE TO BE HEARD: none

AGENDA ITEMS: OLD BUSINESS: none

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AGENDA ITEMS: CONTINUING BUSINESS:

**1.) SUBSISTENCE REPORTS:** N/A
**2.) OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSESSMENT PROJECTS:** N/A
**3.) COMMERCIAL CATCH REPORT:** N/A
**4.) PROCESSOR REPORT:** none
**5.) SPORT FISH REPORT:** N/A
**6.) WEATHER FORECAST:** N/A

**7.) ADF&G FISHING RECOMMENDATIONS:**

- The Alaska Department of Fish and Game (ADF&G) and US Fish and Wildlife Service (USFWS) Yukon River Delta National Wildlife Refuge cooperatively manage Kuskokwim River Chinook salmon subsistence fisheries. In 2010 the Kwethluk and Tuluksak rivers did not achieve escapement goals for the third and fourth consecutive years, respectively. The Kisaralik River had the lowest aerial index count ever recorded at 235 Chinook salmon, which was the first documented year that the Kisaralik did not meet the lower end of the established Sustainable Escapement Goal (SEG). The 2010 total in-river return of Chinook salmon to the Kuskokwim River was the lowest on record. The current outlook for 2011 is expected to be similar to 2010 and there is a joint concern from USFWS and ADF&G that some form of preseason management action is required for conservation of Chinook salmon in lower Kuskokwim River tributaries.
- ADF&G facilitated the *2011 Chinook Salmon Pre-Season Management Options Open Discussion* at the March 17 Interagency meeting. The goal of the open discussion was to review data and determine if conservation efforts were warranted, and to solicit ideas from the group on how to conserve stocks. ADF&G presented notes from this discussion at the March 18 Working Group meeting:
    - In-season subsistence harvest monitoring does an excellent job of informing whether or not people are meeting needs (subsistence opportunity), but unfortunately does not appear to be a good index of run strength.
    - BTF is a good predictor of weir escapement. Whether or not escapement needs will be met in 2011 may be assessed as early as June 11. Weirs are the best indicator, but assessments can't be made using weirs until after approximately 50% of the run has passed, which is too late. Mark-recapture and aerial surveys are only available for post-season assessment.
    - Management options are limited to regulating harvest (when, where, and types of gear used in harvest). Subsistence use is priority, and by law, sport fish and commercial closures will precede any subsistence closures.
    - Gaps in data brought up at the interagency meeting:
        - Run timing information specific to lower river
        - When subsistence harvest takes place for specific stocks
        - Uncertainty in stock recruitment analysis

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- Do not have whole river (mainstem) escapement goal (so can't put into context of whole river escapement needs)
- Don't have documentation of fish shipped out of Kuskokwim
- Uncertainty in level of customary trade
- Uncertain about decline of other species (i.e., Blackfish).

- Need to weigh options: No action means increased potential for meeting subsistence goals but potential for not achieving lower river escapement goals. Taking action means reduced potential to meet subsistence goals but increased potential of conserving stocks.
- Recognize a likely shift in fishing areas with closures.
- For lower river tributaries, the general consensus at the interagency meeting was that there is a problem. Much discussion on a pro-active cooperative appeal to the public (public outreach), which will accompany any action that takes place.
- Management actions might be relaxed or changed as the run progresses and depending on BTF numbers. Stocks in these rivers will be monitored to see if the actions are having an effect on escapement.

- *Proposed Management Action Options for Lower Kuskokwim River Tributary Chinook Conservation* (See individual motions below for Working Group chosen options and ADF&G and USFWS preferences):
  - The Division of Sport Fish and the Commercial Fisheries Division, in conjunction with USFWS, are responsible for implementing any closures.
  - All options presented at the Working Group meeting were discussed within legal parameters that both state and federal agencies could adhere to.
  - Options were ranked in order of achieving the objective of addressing conservation.
  - The agencies' preferred options are noted with each motion.

WORKING GROUP MOTIONS:

1.) Headwater Subsistence members: Daniel Esai will be primary member for Headwater Subsistence and Nick Petruska will be the alternate. Motion passed, unanimous (12 Yeas, O Nays).

2.) Tuluksak Motion: Recommend the following Preseason restrictions for the Tuluksak River for conservation of Chinook.

*Area defined as:* All waters of the Tuluksak River, to the southern point of the island immediately west of where the Tuluksak River meets the Kuskokwim River mainstem. A buffer was discussed but not officially defined (to be decided later). Motion passed, unanimous (10 Yeas, O Nays):

a. Sport Fishery – Closed to all Chinook salmon directed effort through the current regulatory closure of sport fishing harvest of Chinook salmon to July 25.

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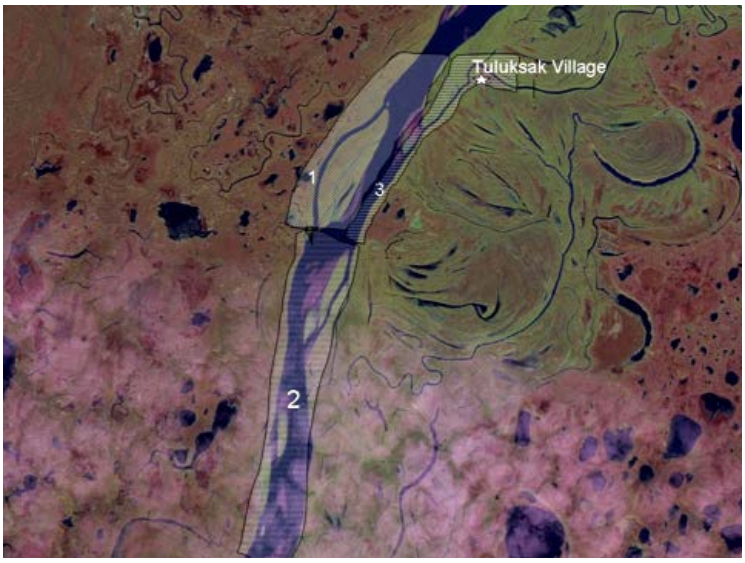
b. Subsistence Fishery – Allow 4” mesh gillnets. Allow rod and reel harvest of non-Chinook species.

ADF&G & USFWS preferred option differs from Working Group recommendation only for section b. above, which states:
Subsistence Fishery – Closed to subsistence fishing. This includes all gillnet mesh sizes and rod and reel directed Chinook salmon fishing.

- The Working Group thus chose an option that was slightly less restrictive and allows 4” gillnets and rod and reel for non-Chinook species in the subsistence fishery.

COMMENTS for Tuluksak Motion:

- Downriver elder agrees with the closures and says that they need to use a geographic point that local people know because a marker can be moved. Much discussion regarding the boundaries followed.
- ADF&G clarified the description of the final motion passed to be, “the upstream side of Mishevik Slough across to bottom of island that cuts across on east bank.”




- USFWS explained that closing the Tuluksak River alone would not be enough, especially since a growing sandbar creates a funnel of fish at the mouth and nets could easily be set there. YK Delta RAC member agreed, saying that the shore is deep and that’s where the salmon hang out.
- USFWS said that 70% of the Tuluksak subsistence harvest occurs in zone 2 (see map above), which is downriver of where the closure would be. Only 8% of the community fish in zone 3.
- YK Delta RAC member thought that the head of Mishevik Slough was an ideal place for a river-wide marker. Western Interior RAC member commented that it is better if people are fishing in zone 2 where stock is mixed, and that zone 1 should be closed because all

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- those fish are headed upriver. He also said that a river-wide closure would be better because tides move boats, which can't be controlled.
- Sport fish member stressed the importance of public outreach to prevent public outcry. ADF&G reassured her that an outreach plan comes with any closures for these communities, and more public knowledge results in fewer tickets. Downriver elder commented that it is especially important to notify the older folks ahead of time to make sure they understand and can adjust to the change.
- It was clarified that for any closures, it is anticipated that ADF&G will take the actions and USFWS will adopt them.

3.) Kwethluk, Kisaralik, and Kasigluk Motion: Recommend the following preseason restrictions for the Kwethluk, Kisaralik, and Kasigluk Rivers (see below) for Chinook conservation. Motion passed, unanimous (11 Yeas, O Nays).

- *Area defined as:* All waters of the Kwethluk, Kisaralik, and Kasigluk Rivers to the confluence with Kuskokuak slough, including the "old" Kuskokuak slough channel.

a. Sport Fishery – Closed to all Chinook salmon directed effort through the current regulatory closure of sport fishing harvest of Chinook salmon to July 25.

b. Subsistence Fishery – Allow 4" mesh gillnets. Allow rod and reel harvest of non-Chinook species.

ADF&G & USFWS preferred option differs from Working Group recommendation only for section b. above, which states:
Subsistence Fishery – Closed to subsistence fishing. This includes all gillnet mesh sizes and rod and reel directed Chinook salmon fishing.

- The Working Group thus chose an option that was slightly less restrictive and allows 4" gillnets and rod and reel for non-Chinook species in the subsistence fishery.

COMMENTS for Kwethluk, Kisaralik and Kasigluk Motion:

- ADF&G addressed why these three rivers are grouped together. Data from the interagency meeting showed that they have escapement relationships. Another reason is to avoid the shift of fishing effort from one system to another nearby system.
- The Kwethluk Weir's mid-point passage is a good indicator of run strength, but it takes the fish about 19 days to get there from Bethel. Using the adjusted BTF CPUE, run strength can be projected two weeks before arriving at the Kwethluk Weir.

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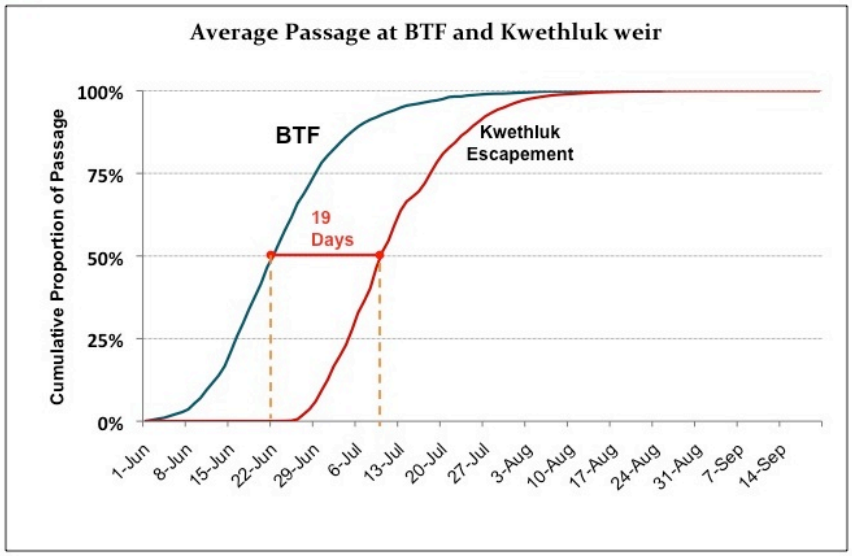
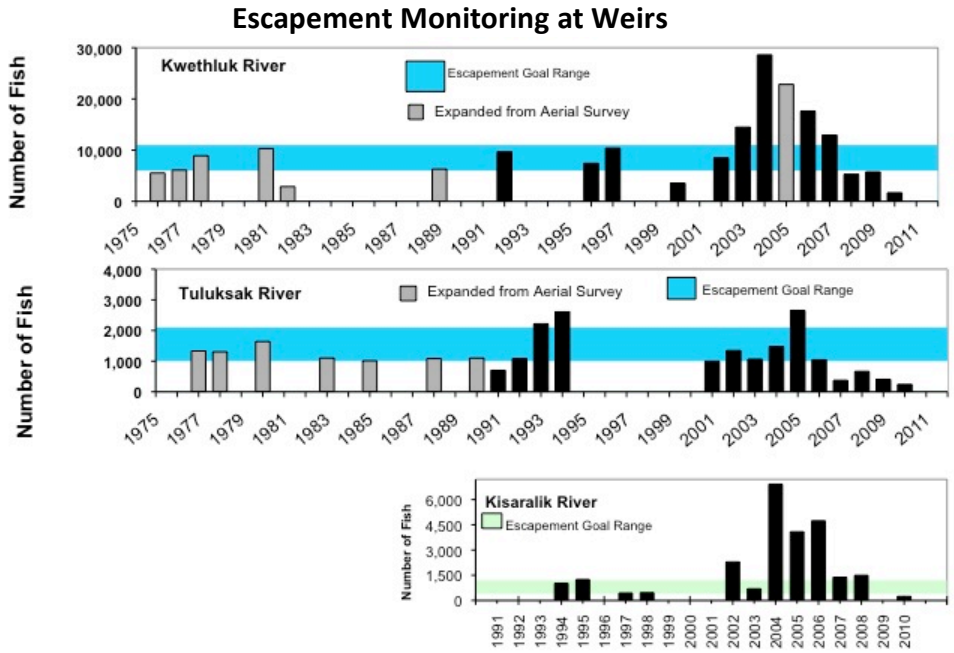



- ADF&G showed how the Kwethluk escapement of 1,669 Chinook in 2010 was lowest on record, and was the third year it did not meet escapement goals. The Tuluksak escapement of 239 Chinook was also the lowest on record, and the fourth year it did not meet escapement goals. The 2010 Kisaralik aerial index count of 235 Chinook (with fair surveying conditions) was the lowest recorded, and was below the escapement goal of 400 to 1,200 Chinook salmon (this SEG established by ADF&G in 2005).

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- As an action item, the Working Group would like to see more information regarding the quality of escapement at weir projects. USFWS commented that we need to watch the quality of escapement through the weirs. He suggested that escapement goals may need to be revisited so that the Chinook do not get smaller and smaller, because jacks do not contribute as much to spawning. ADF&G commented that a healthy population is comprised of a variety of ages, and age class proportions change over time.
- John Andrew shared the recommendations and concerns of the Kwethluk Tribal Council:
    - *The following are recommended actions, or actions Kwethluk could support:*
        - Closing all sport fishing and rod and reel subsistence fishing until the end of July
        - No chum or king set nets allowed in the river or at the mouth of the river, only 4" mesh
        - To collaborate with ADF&G and USFWS because last year that worked well. There was some resistance but the majority of fishers went along with it.
    - *The following are concerns of the Kwethluk Tribal Council:*
        - The mouths of these rivers have shifted.
        - For the last 5 years, the water has been extremely low.
        - Beavers are destroying spawning grounds with their dams on small creeks.
- Sport fish member stressed the importance of reminding sport fishermen that they can't target Chinook. She also said that she wouldn't be comfortable with restrictions on other species. ADF&G replied that other species couldn't be restricted because there is no conservation concern.
- Middle River Subsistence member asked if there is data on how many people subsistence fish on the Kisaralik, Kwethluk and Kasigluk rivers. USFWS responded no, and that OSM funded subsistence harvest research on the Tuluksak specifically because of concern regarding the size of females. USFWS agreed that this type of data would be useful in the future.
- ADF&G explained that most of the fishing activity occurs just downstream of the Kasigluk and downstream of the Kisaralik, so if just the area at the confluence is closed the issue of people coming out of Bethel and setting nets to target fish destined specifically for those tributaries won't be addressed.
- Western Interior RAC member expressed concern regarding Chinook bycatch. ADF&G clarified that for incidental harvested Chinook, subsistence fishers may keep them and sport fishers must let them go unharmed.

4.) Kuskokuak Slough Motion: Recommend preseason restrictions for Kuskokuak Slough waters (see below) for Chinook conservation actions. Motion passed, unanimous (10 Yeas, O Nays).

*Area defined as*: All waters of Kuskokuak Slough between ADFG commercial fishing markers, and including waters of the "old Kuskokuak slough."

a. Sport Fishery – Closed to all Chinook salmon directed effort through the current regulatory closure of sport fishing harvest of Chinook salmon to July 25.
b. Subsistence Fishery – Allow 4" mesh gillnets. Allow rod and reel harvest of non-Chinook species.

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ADF&G & USFWS preferred option differs from Working Group recommendation only for section b. above, which states:
Subsistence Fishery – Closed to subsistence fishing. This includes all gillnet mesh sizes and rod and reel directed Chinook salmon fishing.

- The Working Group thus chose an option that was slightly less restrictive and allows 4" gillnets and rod and reel for non-Chinook species in the subsistence fishery.

COMMENTS for Kuskokuak Slough Motion:

- ADF&G explained that the purpose of the Kuskokuak Slough closure would be to minimize harvest of bank-oriented fish destined for Kwethluk, Kasigluk, and Kisaralik. The area defined is from the top of slough all the way down to where the commercial closure begins.
- Sport fish member requested John Andrew's input regarding the percent of people from Kwethluk that subsistence fish for Chinook on the slough. He responded that he didn't think that they would accept closures because they would have to go out to the main Kuskokwim, and then have to deal with all the Akiachak and Akiak fishers. Also, people who don't have the horsepower fish close to the village. ADF&G pointed out that if the area above Kwethluk was not closed and people could fish there because it is close to the village, then they would be targeting the fish bound for the tributaries we're concerned about. USFWS agreed that even though it is hard for people without horsepower, it would be most effective to close the entire slough.
- John Andrew would not speak for Akiak or Akiachak regarding the motion, because they have set nets below the Kisaralik.
- Sport fish member recalled the poor numbers of escapement and encouraged closure of the whole slough.
- Regarding mesh size and effectiveness of catching Chinook, ADF&G Area Manager stated that 6" gear does still catch Chinook and that in the BTF the 5 3/8" gear catches more Chinook than 8." If 6" mesh were allowed, it may not reduce the harvest of Chinook salmon. Eva Patton with ONC agreed because subsistence fishermen report catching more Chinook in 6" mesh. Western Interior RAC member said that 6" mesh also could kill larger Chinook that get gilled but then fall out of the nets.

5.) Lower Mainstem Kuskokwim River Motion: Recommend restriction for lower mainstem Kuskokwim subsistence fishery (see below), for Chinook conservation. Motion passed, unanimous (10 Yeas, 0 Nays).

- *Area defined as*: All waters within the W-1 commercial fishing District.
    a. Start season with no restriction.
    b. If projected to not meet Kuskokwim River tributary escapement goals, move to windows subsistence fishing schedule.
- This was ADF&G and USFWS agency-preferred option.

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COMMENTS for Mainstem Kuskokwim River:

- ADF&G stated the following regarding the restrictions on the Kuskokwim River:
  - If we close the mainstem Kuskokwim subsistence fishery pre-season, we would lose the ability to track the relative run abundance because the BTF index project occurs upriver from much of the harvest. If that harvest was decreased, the BTF CPUES would be much higher and would not be comparable to previous years when subsistence harvest was occurring without closures.
  - ADF&G stated that using BTF, we can monitor passage of Chinook salmon past Bethel, and that BTF is a good indicator of run strength to the Kwethluk River. BTF is also a good indicator of run strength for all other escapement projects combined, and as such is a good indicator of Kuskokwim River Chinook salmon run strength.
  - Run timing of Lower Kuskokwim River tributary Chinook salmon is not well documented. However, there is a general trend for upriver stocks to travel past Kalskag earlier than stocks bound for middle river tributaries. If this trend holds true into the lower Kuskokwim River tributaries, then the timing through the Bethel area may be towards the end of the run, and harvest shifted later in the run may target the stocks bound for lower tributaries that we are trying to bolster.
- Sport fish member commented that the majority of subsistence fishing in Bethel occurs after June 13, usually June 13-15. Eva Patton with ONC agreed that most people fish the last two weeks of June and the first week of July. Lower River Subsistence member commented that people don't bother to go to fish camp until the fish come, and members agreed that because of the price of gas most people wait until a pulse comes. ADF&G commented that if the Kwethluk weir starts June 29$^{th}$, then we have to remember that those fish are getting to Bethel sooner than that, which is the time period to consider conserving fish.
- Western Interior RAC member commented that we need to remember upstream stocks, because they will be fished all the way through. He urged that some action be taken in the future for upriver-bound Chinook. ADF&G responded that there is not enough genetic separation and therefore it is impossible to manage based on mixed stocks.
- Upriver Subsistence member commented that last year her family caught only 6 kings to feed 25 people, which were all small and male. She says that they are getting less and less every year, and is very concerned about subsistence harvests upriver. ADF&G clarified that the area of possible mainstem restrictions is defined as the W-1 commercial fishing zone, with possibly no restrictions above W-1. It is noted that the level of harvest downriver decreases the density of fish as they come upriver and makes it more difficult for people in the middle and upper river areas to catch fish.
- Downriver Elder asked what was wrong with the window closures used at the beginning of June in 2000 and 2001. ADF&G responded that when windows were implemented, the level of harvest did not decrease because people just fished harder during the windows. It was further clarified that the original intent of the windows when implemented was not to reduce harvest, but to spread the harvest out throughout the run.

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- Much clarification occurred, but ADF&G and USFWS stated that 35,000 *more* fish than last year need to get past the mainstem subsistence fishery in order to get enough fish up to the Kwethluk to meet escapement. The consensus between the agencies was that without closures on the lower river, necessary savings may not occur.
- Members asked how many Chinook were harvested in the commercial fishery in 2010, and ADF&G responded about 3,700 fish.
- Sport fish member asked if having windows until June 15th would work, if the [hypothetical] trigger point for assessing the run is June 11. ADF&G replied that different stocks overlap, even though they come in at different times. BTF can be used to assess the run. Since the bulk of the run occurs during the last two weeks of June, this is when windows would probably take place. Sport fish member then expressed concern that people might go out the first week of June if there will be closures later in the month.
- Downriver Elder inquired about changing the times of windows. For example, change closures to weekends when people who can afford to buy food from the store are working.
- Sport fish member commented that people would be more receptive to closures if we start the season without restrictions.
- Downriver Elder reminded ADF&G that people need to know ahead of time because the run times vary so much from year to year.
- Co-chair commented, "It is good to not to have fear get to you too early, but trends really seem to look downhill." He was referring to restricting pre-season because of the fear of low escapement. Co-chair is hoping that total river closures would finally help upriver, because upriver has been dealing with low escapement for years. He is happy that this issue has finally gotten the lower river's attention.
- YK Delta RAC member asked if Chinook harvest needs were met when windows were implemented in previous years, when the windows were 4 days open and 3 days closed. ADF&G responded that the original intention was not to limit the harvest, but to spread out the run so that the large females got upriver. Also, closures were implemented at a time when the runs were beginning to rebound after being very low (so their effectiveness may not compare to what we would see now when the run abundance is low). ADF&G biometrician stated that, in order to be effective, closures should be longer (i.e., fishing closed for 4 days, open for three, and possibly closed on weekends) in order to reduce harvest. Window length, when windows are in place and how they are implemented in areas along the river are important factors to consider.
- YK Delta RAC member stated that in previous years when the scheduled closures were in place, upriver fishermen didn't always know when they could and couldn't fish. Whatever system is used needs to be clear to the fishermen, with good public outreach.
- Upriver Subsistence member suggested that this issue should be brought to the Seven Generations Training because all villages have an ICAP person, who could potentially help facilitate public outreach.

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6.) Federally Qualified Users Motion: Recommend that Chinook harvest in the Kuskokwim is limited to federally qualified users only in 2011. Motion passed (9 Yeas, 1 Nay).

- *Federally qualified users defined as:* Residents of the Kuskokwim area, except residents of military installations.
- Action would only take place in areas with federal jurisdiction, such as the Yukon Delta Wildlife Refuge (i.e., no areas above Aniak would be included in this action).

COMMENTS for Federally Qualified Users Motion:

- USFWS clarified the effects of the recommended motion: A non-Kuskokwim resident could not drive the fishing boat or handle the net (they can't be actively involved with the physical harvest). Processing the fish afterwards and being a passenger in the boat would be allowed. A non-resident of the Kuskokwim could still take a share of the harvest, but the motion would restrict the ability of someone without family or other contacts on the river to come and take fish. People who come across from the Yukon to fish could be affected. ADF&G pointed out that non-Kuskokwim residents could still fish above Aniak, because that area is outside the refuge jurisdiction.
- USFWS reminded that this would be a "blunt tool" and to consider the effect of limiting people in areas where there are no escapement problems. ADF&G commented that the state and federal agencies have different definitions of subsistence users, and to make sure to consider the effect of this recommendation because both agencies have to manage the river together. YK Delta RAC member asked if the Working Group has to go with the state's definition of subsistence users because they are a state-sanctioned agency, and ADF&G replied yes. Sport fish member thought it would be better not to complicate things by introducing a law like this.
- ADF&G asked if this motion would even have a conservation effect, since many people have families on the Kuskokwim. Sport fish member replied that it would be easier to tell non-Kuskokwim residents not to come for fishing if this law passes.

7.) Special Action Request motion: Expedite state and federal agencies to get information on the implementation of a reporting system of salmon shipped out of the Kuskokwim area (all salmon species). Motion passed, unanimous (10 Yeas, 0 Nays).

8.) Confirming Chairs motion: Motion to re-confirm the three current chairs: Lamont Albertson, Beverly Hoffman, and Greg Roczicka. Motion passed, unanimous (11 Yeas, O Nays).

***Note:** Processor left mid-meeting and ADFG area manager abstains from votes regarding the fishery, which explains the difference in total number of votes.

**OTHER COMMENTS:**

- Processor asked if the reason for delaying the harvest is to help the Chinook run. He clarified with ADF&G that commercial processors take a very small percentage of Chinook, as opposed to subsistence. ADF&G agreed and stated, "The reason for the delay is the low abundance of Chinook salmon, because our primary objective is to meet escapement goals." Chuck Brazil with ADF&G already talked to the two processors and they are both in agreement with him. He reiterated that Chinook are an incidental

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- harvest; the primary markets are for chum and sockeye. Processor alternate member agreed, and said that last year Kuskokwim Seafoods got very few Chinook.
- Processor asked when chums start running. ADF&G replied the third week of June, but we won't be fishing until July if there is a commercial fishery, which will be about at the 30% point of the chum run.
- Sport fish member commented that, after looking at all that data in the interagency meeting, she is happy that ADF&G is being conservative regarding commercial fishing and taking a proactive approach to the situation. Lower River subsistence member asked what are the chances of commercial fishing being implemented sooner than July. ADF&G responded that BTF data has to be evaluated daily in order to determine the strength of the run.
- There was much discussion about sport fishing, especially near Aniak.
    - Co-Chair wanted to make sure that the state and federal agencies were "on the same page" and had the same regulations regarding enforcement of sport fishing. Both ADF&G and USFWS replied that yes, the rules are the same for both agencies, and during Chinook closures sport fishers are not allowed to target Chinook.
    - Co-chair expressed concern about sport fishing on the Nushagak River because many clients and guides there are not Alaska residents. ADF&G responded that sport fishers and guides have a management plan in place that they have to adhere to. ADF&G member could not comment about the effectiveness of this plan because the Nushagak is outside of his management area.
    - Members expressed concern about sport fishers targeting large salmon in the Aniak River. Co-chair stressed, "One salmon who has gotten all the way up there and going through the spawning process is worth 50 down at the mouth of the river." Middle River Subsistence Member said that last year an elder in Aniak complained about a sport fishing guide setting nets by subsistence fishers on the main Kuskokwim. Multiple members requested that USFWS bring more enforcement to the area.
    - Western Interior RAC member suggested that instead of making the sport fish guides responsible, change the permitting. ADFG said that type of change would have to go to the Board of Fish.
- Downriver Elder suggested that the Working Group needs a Primary member from the tundra because representation is missing from some places. Other members pointed out that there is fairly even representation, with five upriver and five downriver members, with Kalskag in the middle. ADF&G suggested that we should wait until we have volunteers for the position, since it is hard to fill vacant positions, to get involvement in general, and that it can be difficult to get a quorum sometimes.
- YK Delta RAC member also noted the vacancy of the Upriver Elder position. Upriver Subsistence member commented that she had someone in mind from Stony River, but the individual is tentative about using the teleconference and would be more comfortable meeting in person. Some members commented on the Bush Tel service not working, and others prefer teleconferences because they do not have to travel.

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- Sport Fish member suggested that John Andrew and someone from Tuluksak should be involved in the Working Group. Eva Patton with ONC commented that funding is needed to fly people from Tuluksak to meetings.
- Sport Fish member wants to do community outreach as soon as possible, and encouraged all members to step up as community leaders. For example, multiple members could call into a radio show. ADFG stated that the Working Group will have to take the action for outreach, since the Working Group Coordinator doesn't have sufficient time or resources, and often, the message is best delivered coming from community members rather than state agency staff.
- Downriver Elder spoke regarding the decline of Chinook. One factor could be Chinook by-catch. The water level has also been down, which prevents fish from reaching spawning grounds. He urges us to work together, and is happy that the state, federal government, and villages work together and don't fight over the resource. Traditional belief is that when there is fighting over the resource, it won't come back.
- Commercial Fisher is concerned about the pike in the Kanektok River because they eat anything, and asked if there are any current studies about this. ADF&G responded that the increase in pike could be naturally occurring. Since the Commercial Fisheries Division does not manage this species, Sport Fish would need to provide the research. Pike are very resilient and can migrate through different levels of salinity. The Chair mentioned that pike are also present in the Aniak River. Commercial Fisher also concerned about tags and is concerned that Kuskokwim fish are getting caught in the Kanektok, ADF&G replied that yes, they are, but is unquantified.
- Member at Large commented that the Working Group needs to inform areas of the river about the decline of fish, especially Chinook, because these interagency meetings are very informative. He is also worried about the decline of blackfish. He also asked about the effect of beaver dams because when the dams are naturally broken in the spring the beaver repairs them, but when people cut the dam many whitefish come out. ADF&G responded that whitefish spawn in the mainstem river, use ponds as summer rearing habitats, then go back out to the river in the fall if possible. Beavers can have a positive and negative effect on the fish, but it is all a balance. ADF&G asked if people were catching the whitefish or letting them go when they broke the dams, and Member at Large said that they do both.
- YK Delta RAC member said that they have been having trouble getting people to come to the Working Group meetings. He commented that the Working Group has come a long way and has seen so much good change, because the main objective has been, "What are we going to do to restore our king salmon?" He stressed the importance of somehow finding a way to bring our salmon back.
- Downriver Elder expressed gratitude because he always learns a lot at the meetings, there is not fighting like before, and he likes how everyone works together. Headwater Subsistence member Daniel Esai agreed that we have a good group that can accomplish something.
- Upriver Subsistence member commented, "The river defines everything that we are. Unless we instill the importance of it to ourselves and our children, we will be without."

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- ADF&G commented that these agencies and the Working Group have made tremendous success in Chinook management. The management has been a collaborative effort and we should all be proud.
- Headwaters Subsistence member brought recognition to Western Interior RAC member Ray Collins, for he and his wife have been made Honorary Tribal Members from the village of Nikolai. Ray and his wife been given the names "People who are strong for our people."
- ADF&G employee Doug Molyneaux has retired. Members of the Working Group and the audience expressed gratitude towards Doug for his years of dedication and work on the Kuskokwim.
    - Middle River Subsistence member Angela Morgan noted that much work and good information was put into the meeting. She wanted to thank Doug Molyneaux for his help getting the Aniak Sonar and Georgetown Weir projects going, so we can have access to that data.
    - Sport fish member Beverly Hoffman will miss Doug and hopes that he will stay involved, and she hopes he knows how much his peers respect him. She wanted to thank the agencies for providing such up-to-date information, and agrees that we can work together for the common good of the River.
    - Western Interior RAC member Ray Collins stated that Doug Molyneaux's legacy is the Working Group, which has been such an important educational tool.
    - Lower River Subsistence member Greg Roczicka said that he will miss Doug.

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## WORKING GROUP ATTENDANCE

| MEMBER | NAME | OTHER |
|---|---|---|
| **Upriver Elder** | VACANT | Kevin Schaberg, ADF&G |
| **Downriver Elder** | James Charles, Chuck Chaliak | Holly Carroll, ADF&G |
| **Commercial Fisher** | Charlie Brown | Alice Bailey, ADF&G |
| **Lower River Subsistence** | Greg Roczicka | Dan Gillikin, USFWS |
| **Middle River Subsistence** | Angela Morgan | Zach Liller, ADF&G |
| **Upper River Subsistence** | Evelyn Thomas | Josh Clark, ADF&G |
| **Headwaters Subsistence** | Daniel Esai | Chris Shelden, ADF&G |
| **Processor** | Allen Hepler (Kuskokwim Seafoods) | Travis Elison, ADF&G |
| **Member at Large** | Henry Lupie | Steve Miller, USFWS |
| **Sport Fisher** | Beverly Hoffman | Ken Harper, USFWS |
| **Western Interior RAC** | Ray Collins | Doug Molyneaux, ADF&G |
| **Y-K Delta RAC** | Bob Aloysius | Dan Bergstrom, ADF&G |
| **ADF&G** | Chuck Brazil | Carl Berger, Lower Kuskokwim Economic Council |
| **Chair** | Lamont Albertson | |
| | | Don Rivard, USFWS |
| | | Aaron Moses, USFWS |
| | | Doug Bue, ADF&G |
| | | Tracy Hanson, ADF&G |
| | | Janet Bavilla, ADF&G |
| | | John Chythlook, ADF&G |
| | | Eva Patton, ONC |
| | | John Andrew, Kwethluk |
| | | Robert Sundown, USFWS |
| | | Rod Campbell, USFWS |
| | | Gene Peltola, USFWS |
| | | Naomi Brodersen, ADF&G |

GLOSSARY OF ACRONYMS:

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**Working Group** or **WG**), Sustainable Escapement Goal **(SEG),** Biological Escapement Goal **(BEG).**

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

May 3, 2011

Called to order at 10:10 am on Tuesday, at ADF&G Bethel office and adjourned at 11:45 a.m. Eight of thirteen members were present, but because two members arrived later in the meeting, no quorum was established at the outset; a Working Group session was held.

AGENDA ITEMS:

Continuing Business - **N/A**

Old Business:

1) Update on BTF daily CPUE posting on ADF&G website
2) Update on implementation of a system for reporting salmon shipped from Bethel

New Business: Public Outreach plan for Chinook Conservation for the Kuskokwim:

1) Updates from member about their interactions regarding this issue
2) Updates from USFWS and ADF&G staff on meetings with villages
3) Upcoming planned meetings and events

WORKING GROUP ACTION ITEMS:

- Dan Gillikin will provide an update to Working Group on federal reporting requirements of fish shipped out of Bethel by next meeting.
- Bev Hoffman will notify the public once she knows what time the talk show will air.
- Dan Gillikin will coordinate with Alex Nick to get information out about Chinook conservation thru the Federal RACs.
- Alissa Joseph will get information out about Chinook conservation information out to State advisory council members.
- Neil Rodriquez (CVS) will talk to Nick Souza (CVS General Manager) about the mesh sharing project funding for the Kuskokwim.
- ADF&G Staff will give a report on mesh size, what is being done, and what is known about its effects on Chinook from Yukon staff and present at next Working Group meeting.
- ADF&G staff including the Working Group chairs will create "talking points" on Chinook conservation that could be used for public-wide distribution, and present it at next Working Group meeting.

WORKING GROUP MOTIONS: none

MEETING ACTION ANNOUNCEMENT:

The next Working Group meeting will be on **Tuesday, May 17, at 10:00 a.m.** at ADF&G in Bethel. Main focus will be to discuss and disseminate talking points for public outreach.

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PEOPLE TO BE HEARD: none

AGENDA ITEMS:

OLD BUSINESS:

Update on BTF daily CPUE posting on ADF&G website:
It was requested at a previous meeting that ADF&G provide information on posting BTF CPUE daily information on the state website. Chuck Brazil, Kuskokwim Area manager, doesn't think it will be possible because it's not an actual estimate of fish abundance so it could cause misinterpretation as to what the index means (without historical context), and it doesn't conform to current Sport Fish website database standards (because it's not an abundance estimate). The Chair, Bev Hoffman, responded that it might be good tool if you could post the data with a disclaimer and that it would be good for public outreach. The processor suggested blogging about the information, but when asked if ADF&G would do it, the Area Manager responded that it'd be more appropriate for someone else since its public info, and it is not part of his job description. The Chair reiterated that it's important to get the word out, even using Facebook and other "technology." Working Group coordinator reiterated that ADF&G can help other people to develop these, can help summarize or review public documents for posting, but ADF&G has strict departmental policies on blogs, and other forms of public communication and staff are limited in that regard.

Update on implementation of a system for federally-enacted reporting salmon shipped from Bethel:
Dan Gillikin (USFWS) gave an update regarding this issue saying that it may not take place this year. Requirements would need to go through Federal subsistence board regulatory process, and funding may need to be pursued from OSM, (for developing the reporting form and collecting data, etc.) Chair asked who would have to put proposal in and to whom? The answer was that it would go thru the Federal subsistence board process, but the regulatory fish cycle was completed this year and won't come up again until 2013. Greg Roczicka (Lower River Subsistence member) suggested the Working Group submit an emergency petition to the Federal board, and reminded the group that the reporting system had been a direct request from Working Group at last meeting (March 18) and had believed it could have been implemented this season. Working Group chair also had been under the impression it would happen this summer. ADF&G Area manager said Working Group could have a meeting with Gene Peltola at USFWS to pursue some sort of voluntary system of reporting for shippers, even if a regulation wasn't possible this season. Later in the meeting, Dan Gillikin, who had gotten a brief update from Gene Peltola about harvest reporting, said that it may be possible to implement this year via special action, but this hasn't been coordinated with OSM, so need to do that before they can take action at refuge level. Dan said that he would provide an update to Working Group on this issue by next meeting.

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NEW BUSINESS:

Public Outreach plan for Chinook Conservation for the Kuskokwim:

Updates from members about their interactions regarding this issue:

Bev called Friday KYUK talk line to talk about Chinook conservation concerns and what folks can do about it. At tribal ONC meeting the previous week she talked about bethel specifically, and highlighted that local people need to talk to newcomers and reach out to them about harvesting salmon responsibly. May 2nd, she met with Casie Stockdale (AVCP) and discussed opportunities to get the word out collaboratively. Bev also wrote her first editorial as a Working Group member, and scheduled a talk show with Chuck Brazil for May 19th, which will be handled by KYUK news, heavily promoted, to air in the early afternoon. Bev will get the word out to general public once she knows what time the talk show will air. She also noted that absent member James Charles had discussed the issue on the Yupik talk line in Bethel. Greg Roczicka also discussed the issue on the ONC radio program, where he brought up alternatives discussed at Working Group meeting. He said he didn't get many "call backs" on it, perhaps because it's early in the season. He pointed out there's a phrase people are using—"we are the most regulated people on the planet now"—and Greg wanted to point out that the Kuskokwim Area is the LEAST regulated subsistence fishery in the entire state of Alaska, so he gave that as a tip that people need to know and to disseminate when discussing the issue.

When asked whether communities affected by the joint agency recommended Chinook conservations actions were providing feedback or concerns, Greg responded that about 50% of folks were in full support, and the others don't want to be regulated. He reiterated that people are aware of the issue and talk of it is circulating. Bev noted that people like the idea of a reporting system for fish shipped out of Bethel because they feel there's a large quantity of fish involved, so it's important to understand in terms of sustainability. She noted too that local people (now living outside of the Kuskokwim Area) want to return home and fish and help their families harvest, but they are concerned that they will look bad for being "outsiders." She gave an example of having a friend who is not from the area who, in the past, has come to help her and share her harvest, but she had to tell him he couldn't come out this year. She felt it was hard for him to understand because the word isn't getting out that abundance has been declining. In regard to considering going to smaller mesh gillnets when fishing for Chinook, she expressed that it's unclear whether that's going to help preserve the big females, and that we may be losing that gene pool. She wants to hear suggestions about steps we can take to protect the large females, from public not just biologists.

Casie Stockdale discussed ways their organization can get public information out. They can send faxes to all AVCP villages; also AVCP has been approved to have a Facebook page (organized by Valerie Bue, public relations) but will need to look into what kind of info they can post. They also have newsletters, but those are quarterly so wouldn't be timely enough for some issues. None of these have a public feedback mechanism other than Facebook. Tim Andrew (AVCP) verified that the faxes are divided into river-specific groups (i.e., Yukon and Kuskokwim) so it could be that we'd have a duplicating effort if ADF&G has similar fax system.

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Tim has meetings throughout the summer with AVCP communities and there is an executive Board meeting coming up, and Bev confirmed that she has already asked to be put on agenda for that meeting. Bev also suggested that Working Group members within their own communities have a radio or VHF meeting to talk about the issues before the season begins.

Herman Morgan from Aniak cautioned that 20 years ago people were on the radio talking about these same issues, and if we're not careful, we could be facing closures, like with moose. He felt we need to let people know that they can do voluntary things to help Chinook like using smaller mesh and felt it was important that people understand the reasons for conserving the fish for the future. He also mentioned that it might be good to have a hatchery in the area. Bob Aloysius (YK Delta RAC member) said that when he talks to people who fish in the Kalskag area, they are in support of closures on Tuluksak and Kwethluk rivers because they believe what affects lower river affects Upper River too, so they want to conserve what they can. Dan Gillikin pointed out the importance of getting the word out through regional advisory councils, and said that he would coordinate with Alex Nick on that. Alissa Joseph (ADF&G Board Support Central western region) said she will also work on "State side" to get information out to advisory council members.

It was asked what the status was on the "gillnet swap for locals" (a proposed project of ONC,) Greg Roczicka responded that OSM is not forwarding that proposal, and no funding is available in federal budget for that. Doug Molyneaux (formerly ADF&G) said Gene Sandone at KwikPak is providing funding for that on the Yukon, so someone should check availability of similar funds for the Kuskokwim. Neil Rodriquez (CVS) said he would talk to Nick Souza (CVS General Manager) about the issue.

It was noted that there are mixed messages coming from ADF&G regarding the effects of mesh size on Chinook between the Kuskokwim and Yukon Rivers, and Doug Molyneaux thinks the arguments for going to smaller mesh do hold for the Kuskokwim, and suggested that department staff coordinate on that issue. Staff said they'd get a report on mesh size, what is being done, and what is known about its effects on Chinook from Yukon staff and present at next Working Group meeting.

Tim Andrew mentioned that customary trade of salmon is an area AVCP sees as a concern and they're addressing how to reduce that harvest on Yukon to meet Canadian obligations, perhaps discussion about this issue for Kuskokwim would be good.

Tom Gould of Aniak brought up issue of sport fishing and its effect on spawning. Is there a report that captures data about caught as well as released fish? John Chythlook (ADF&G Sport Fish Division) said their survey does ask that information, and clarified that there's a concern for Chinook on Kuskokwim, that information regarding the issue has been sent to guides, etc., and some folks have said they're cancelling clients, and making changes because of that. Bev mentioned that her guiding business targets trout, but that in discussions with other operators in the area (e.g., Papa bear, Ptarmigan air) she hears concerns from them as to why restrictions are placed on sport fishery if they harvest less fish? Bev made it clear to them its important in low-

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abundance years to reduce harvest. Greg also reiterated that compliance to restrictions by local subsistence fishers relies on the fact that sport fishing (especially by outsiders) is also restricted. It was clarified that by law, restrictive actions must be taken in sport fishery before the subsistence fishery.
Ray Collins suggested creating posters regarding the need to conserve kings, which could be hung in post offices to get word the out. He also said he doesn't believe in catch and release of salmon because it puts stress on salmon about to spawn.

Mike Thalhauser (KNA Aniak) had been to community meetings in Kalskag, Chuathbaluk, and Tuluksak. He said most people are supportive of protecting those tributaries and aren't too worried about restrictions because they don't think there'll be much of an effect on residents in Aniak area. He also agrees a pamphlet to give to sport fish guides to tell them about conservation of Chinook and respectful harvest and handling would be a good initiative.
It was decided that ADF&G staff including the Working Group chairs would have a "subcommittee" meeting before the next Working Group meeting to create "talking points" on Chinook conservation that could be used for public-wide distribution.

Updates from USFWS and ADF&G staff on meetings with villages:
Dan Gillikin and Chuck Brazil visited Kwethluk for the 4 villages council meeting (Kwethluk and Akiak representatives were there, Tuluksak and Akiachak representatives did not attend), and plan to have future meetings with dates to be determined. As a future agenda item, the chair would like to address membership and/or participation from Lower River communities, e.g., Akiachak, Tuluksak, in the Working Group process because she felt they are under-represented currently. Greg Roczicka clarified that changing Working Group membership may not be necessary; rather that addressing participation is what is needed.
Chuck pointed out that particularly now, in light of having concerns about Chinook returns, Working Group members really need to make an effort to attend, and make it clear to other residents in their communities that meetings and the Working Group process is important.

Upcoming planned meetings and events
Because much of this topic was discussed throughout the meeting, there were just brief reminders from Bev about upcoming planned meetings or events: May 19 talk show on KYUK, Bethel chamber of commerce meeting May 18th, at which Chuck Brazil and Bev will give the season outlook and proposed management strategy. BNC annual meeting coming up this week, Bev will be in attendance to discuss the issues. Greg reminded group that the community outreach documents already created provide good information to use now to keep getting the word out about the issues.

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## WORKING GROUP ATTENDANCE

| MEMBER | NAME | OTHER |
|---|---|---|
| **Upriver Elder** | VACANT | Alissa Joseph ADF&G Board Support |
| **Downriver Elder** | absent | Holly Carroll, ADF&G |
| **Commercial Fisher** | absent | Mark Jeffers and Ed Fleming, Ottertail |
| **Lower River Subsistence** | Greg Roczicka | Dan Gillikin, USFWS |
| **Middle River Subsistence** | absent | Tim Andrew and Casie Stockdale, AVCP |
| **Upper River Subsistence** | Evelyn Thomas | Terry Reeve, Marine Advisory UAF |
| **Headwaters Subsistence** | Daniel Esai | Darryl Sipary, USFWS |
| **Processor** | Stuart Currie (Kuskokwim Seafoods) | Travis Elison, ADF&G |
| **Member at Large** | absent | Steve Miller, USFWS |
| **Sport Fisher** | Beverly Hoffman | Mike Thalhauser, KNA |
| **Western Interior RAC** | Ray Collins | Doug Molyneaux |
| **Y-K Delta RAC** | Bob Aloysius | Ben Balivet, ADF&G Subsistence |
| **ADF&G** | Chuck Brazil | Rod Campbell and Pippa Kenner , USFWS OSM |
| **Chair** | Bev Hoffman | |
| | | Tom Gould, NRCS Aniak |
| | | Neil Rodriguez, CVS |
| | | Doug Bue, ADF&G |
| | | Caroline Brown and Hiroko Ikuta, ADF&G Subsistence |
| | | Tom Taube, ADF&G Sport Fish |
| | | John Chythlook, ADF&G Sport Fish |
| | | George Johnson, Napaskiak |
| | | Herman Morgan, Aniak |

GLOSSARY OF ACRONYMS:

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**KRSMWG or Working Group, WG**), Sustainable Escapement Goal (**SEG**), Biological Escapement Goal **(BEG).**

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

May 17, 2011

Called to order at 10:05 am on Tuesday, at ADF&G Bethel office and adjourned at 11:36 a.m. Five of thirteen members were present; no quorum was established; a Working Group session was held.

AGENDA ITEMS:

Continuing Business - **N/A**

Old Business:

3) Update on implementation of a system for reporting salmon shipped from Bethel
4) Date and Time of KYUK talk show discussing Chinook Conservation
5) Update on CVS funding for mesh sharing project
6) ADF&G staff report on mesh size effects on Chinook in Kuskokwim
7) Review proposed actions for Chinook Conservation

New Business:

4) Discuss "talking points" for Chinook conservation
5) Discuss participation of lower river communities in Working Group

WORKING GROUP ACTION ITEMS:

1) Finished Chinook conservation posters will be sent to WG distribution
2) Bev Hoffman will contact newspapers about submitting posters
3) Alissa Joseph will pursue poster printing/funding with Calista and/or CVRF.
4) Greg Roczicka will draft letter with co-chairs (by first of June) to communities affected by proposed management actions.
5) Chuck Brazil will follow up with CVS about mesh sharing project funds

WORKING GROUP MOTIONS: none

MEETING ACTION ANNOUNCEMENT:

The next meeting will be on **Monday, June 13, at 10:00 a.m.** at ADF&G in Bethel. Main focus will be to discuss the salmon runs and inseason management.

PEOPLE TO BE HEARD: none

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AGENDA ITEMS:

OLD BUSINESS:

1) Update on implementation of a system for reporting salmon shipped from Bethel:
Dan Gillikin (USFWS) had no new update because Gene Peltola (USFWS) is still awaiting details from OSM. One of the discussion points being clarified with OSM is where the authority level lies for creating reporting requirements for shipping fish out of Bethel.
Bev Hoffman (Sport Fishing member) said she got a call from someone saying that in the 1970's Kuskokwim River Chinook were not allowed to be shipped out, she asked if there's any knowledge of that being true? No one had a response, but Doug Molyneaux suggested looking in ADF&G Annual Management reports around the time when Dee Dee Jonrowe was in charge to see if there's mention of that.

2) Date and Time of KYUK talk show discussing Chinook Conservation:

Chuck Brazil, Bev Hoffman, and Gene Peltola will be on a live talk show 2 pm, May 19th on KYUK radio (640 AM). The show can also be streamed online at www.KYUK.org. The telephone number to call in is: 1 (800) 995-8954, or locally in Bethel: 543-5985 or 543-2756

3) Update on CVS funding for mesh sharing project: N/A no processors were present

4) ADF&G staff report on mesh size effects on Chinook in Kuskokwim:

No formal staff report was given but Kevin Schaberg (ADFG Kuskokwim Area research biologist replacing Doug Molyneaux who retired), said that we have limited data on this issue, but BTF data which uses two different mesh sizes (5 3/8" and 8") indicates that using the smaller mesh catches more fish than 8" mesh, but smaller fish, but that's all the data we have.

Bev Hoffman wanted ADF&G opinion on whether we should urge people to fish with smaller mesh. Chuck Brazil responded that the commercial fishery is restricted to 6" mesh or less, and that primarily, smaller kings are caught in that fishery and that it is likely that 8" mesh catches larger fish. From this standpoint you catch larger fish in 8" gear, but in 6" you'll catch larger fish as well, but you'll catch more of the smaller fish. Bev pointed out that she'd received a letter from Napaimute resident Mark Leary in response to the need to conserve Chinook salmon, he'd made a personal choice to use 6" inch mesh when fishing for Chinook to reduce harvest of big females.

Holly Carroll (ADF&G Kuskokwim River Assistant Manager) clarified that on the Kuskokwim, data is more limited than it is on the Yukon, i.e., we have incomplete data sets (i.e., data has not been collected every year) and also data we have is for 6" and smaller mesh, or for what is caught in the 8" in BTF. That is not enough data to take a specific position on whether for example, a 7" or any other specific mesh size would be better for catching less Chinook, because we simply don't have data to show that; data gaps exist.

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Chuck Brazil said ADF&G would hold staff meetings to address these data gaps after the busy fishing season.

Doug Molyneaux clarified that escapement goals are only based on numbers of fish, not on size of fish. So if folks shifted to small mesh gear, they could catch higher numbers of salmon, so if everyone switched to smaller mesh, we might see a decrease in numbers of Chinook returning to spawning grounds, though more of the bigger females might make it up there. He further clarified that in the Yukon mesh size selectivity study report they suggested restricting mesh sizes to 7.5" and smaller. However, those Yukon River results can't be exactly applied on the Kuskokwim because size and age classes of Chinook on the Yukon are not exactly the same as the Kuskokwim, so the exact mesh size that is ideal, should be determined specifically by a mesh size selectivity project on the Kuskokwim. In regards to the Yukon study, Dan Gillikin noted that there was not a change in CPUE when going to smaller mesh size, and felt this was a confusing point (from that report) that may or may not apply to Kuskokwim.

Eva Patton (ONC) reminded the group that ONC had submitted a proposal for a mesh selectivity study to OSM which wasn't ultimately funded, but it was determined more data was needed before encouraging people to make the shift to smaller mesh. She pointed out that fishermen surveyed during inseason harvest monitoring surveys said they were catching more fish with smaller mesh sizes.

Kevin Schaberg explained that subsistence fishermen want a desired volume of fish each year, so with 6" mesh (if they catch smaller fish) they may need more fish to meet their goals. Eva agreed and said that inseason feedback was that fishermen were getting smaller kings, so switched to smaller gear to catch more fish, catching a greater total number of fish to make up for smaller size.

Also, the mesh size used can affect the chum to Chinook ratios in the harvest. Doug Molyneaux, to give some historical perspective, said that using 5 3/8" and 6.5" mesh in BTF in 80's they found that chum, which are larger early in season, were caught more frequently in 6.5" mesh but then by July, the 6.5" mesh was catching more Chinook. So this illustrates how what is caught in different meshes can change temporally (over time), but he also speculated that if people use smaller mesh and catch more chums, they can use those chums to offset how many total Chinook they might harvest.

5) Review proposed actions for Chinook Conservation:

Chuck Brazil reminded the group that the Tuluksak, Kwethluk, and Kisaralik Rivers and Kuskokuak slough would be limited to 4" and smaller mesh gillnets, and that rod and reel subsistence fishing for Chinook as well as sport-fishing for Chinook would also be closed in those areas. He reminded the group that the Working Group motion to restrict fishing to federally qualified users was not supported by ADFG or USFWS. Greg Roczicka also reminded the group that though it was not currently on the table for discussion, they might be

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looking at windows restrictions for mainstem later in the season. Bev Hoffman asked if there will be enforcement for the rod and reel restrictions (on the tributaries) and Dan Gillikin responded that USFWS research staff working in the area will remind fishermen about the closures, and can report any violation to law enforcement officers, and once regulations are in place there will be enforcement from ADF&G and USFWS. Dan Gillikin will also be contacting all guides, transporters, outfitters in area to notify them on any actions. Chuck Brazil would like to get these action notifications out to the public by May 24th. They will be released as Emergency Orders and News Releases, and sent to local press.

Lamont Albertson (Sport Fishing Member) pointed out there's hotspots in Aniak where sport-fishing guides will be targeting kings, .e.g., in front of Aniak where Kuskokwim and Aniak rivers meet and felt that as Working Group members, we may have more influence to directly appeal to the guides to not target king salmon which will be important so that Aniak subsistence fishers don't see sport fishers targeting those kings. John Chythlook (ADF&G SF) stated that he has made efforts to call or contact guides in Aniak, of course they can proceed with their business as they normally would, but they should realize this is a poor king year and should modify their operations accordingly. He did not have an indication of how they'll proceed with that.

It was pointed out that the proposed actions for Chinook conservation will not include restrictions on harvest of Chinook in Aniak. Bev Hoffman asked why Aniak wasn't included in the originally recommended conservation actions, and Kevin Schaberg said that ADF&G didn't have indications that there was a need to conserve Chinook in the Aniak River specifically, and that because the focus was on how to conserve the most Chinook, actions are being taken in the lower river. He stressed that the Aniak issue is important, but tributary escapements in the lower river area were the main concern (because escapement goals hadn't been made on the Kwethluk and Tuluksak for multiple years).

NEW BUSINESS:

1) Discuss "talking points" for Chinook conservation:

A subcommittee met to brainstorm simple talking points to use when delivering the message about conserving Chinook this season, either for use in posters, or in direct conversations. Alissa Joseph (ADF&G) passed posters around table for members present in Bethel to view. The main points addressed in the posters are: The projected 2011 Chinook outlook is low, there is a need for conservation of Chinook, it's important to preserve the traditional way of life, and we need to think long-term sustainability. The Bethel high school art club will be helping to produce posters to go out to public.

Greg Roczicka reminded the group that an important talking point to remember is that the Kuskokwim Area is the least regulated subsistence fishery in the state, and we want to keep it that way by being proactive.

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Dan Gillikin suggested putting the size of subsistence harvest in context for people because they are often surprised by it, e.g., 85,000 Chinook harvested annually, which is very large in comparison to the harvest of Chinook in commercial and sport fisheries combined.

2) Discuss participation of lower river communities in Working Group:

Bev Hoffman expressed concern about adding more members to the Working Group, to see if there'd be more participation and wondered if the Traditional councils know that they can attend meetings. She feels the representation is missing key communities. Greg Roczicka would like to see a specific request for action (as an action item on Tribal Council [TC] meeting agendas) to appoint the Tribal Administrators to sit-in on meetings, even as just participators. Lamont Albertson agreed that as long as it didn't make the Working Group to too big, it would be good to have the TCs appoint members to serve with them. Holly Carroll commented about participation in general, that it seems current Working Group member alternates rarely come, and perhaps specific work should be done to encourage increased involvement with existing members. Lamont Albertson suggested having Working Group meetings in other communities, e.g., Kwethluk, which might stimulate varied discussion during Working Group.

GENERAL COMMENTS FROM WORKING GROUP MEMBERS:

Angie Morgan (Middle River Subsistence) said the ice jam in Aniak broke up so there was no flooding in that community.

Bev Hoffman reminded the group that AVCP has an account set up at a local bank for donations to help residents in Crooked Creek who were flooded out recently.

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## WORKING GROUP ATTENDANCE

| MEMBER | NAME | OTHER |
|---|---|---|
| **Upriver Elder** | VACANT | Alissa Joseph, ADF&G Board Support & ONC |
| **Downriver Elder** | absent | Holly Carroll, ADF&G |
| **Commercial Fisher** | absent | Kevin Schaberg, ADF&G |
| **Lower River Subsistence** | Greg Roczicka | Dan Gillikin, USFWS |
| **Middle River Subsistence** | Angie Morgan | Casie Stockdale, AVCP |
| **Upper River Subsistence** | absent | Becca Robbins-Gisclair, YRDFA |
| **Headwaters Subsistence** | absent | Carl Berger, Lower River Economic Council |
| **Processor** | absent | Travis Elison, ADF&G |
| **Member at Large** | absent | Steve Miller, USFWS |
| **Sport Fisher** | Beverly Hoffman | Lamont Albertson (Sport Fisher member) |
| **Western Interior RAC** | absent | Doug Molyneaux |
| **Y-K Delta RAC** | absent | Ben Balivet, ADF&G Subsistence |
| **ADF&G** | Chuck Brazil | Tom Taube, ADF&G Sport Fish |
| **Chair** | Greg Roczicka | John Chythlook, ADF&G Sport Fish |
| | | Eva Patton, ONC |
| | | Ken Harper, USFWS |
| | | Shane Iverson, KYUK |

GLOSSARY OF ACRONYMS:

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**KRSMWG or Working Group, WG**), Sustainable Escapement Goal (**SEG**), Biological Escapement Goal (**BEG**).

Appendix C4.–Meeting Summary, June 13, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

**June 13, 2011**

Called to order at 10:02 am at ADFG in Bethel and adjourned at 2:00 pm. Ten of the thirteen members were present and a quorum was established.

**AGENDA ITEMS:**

1.) Continuing Business
2.) Old Business
3.) New Business

**WORKING GROUP ACTION ITEMS:**

1. KRSMWG Chair requested that Pete Probasco (DARD-OSM) provide a response regarding the issue of salmon shipped out of Bethel.

**MEETING ACTION ANNOUNCEMENT:**

The next KRSMWG meeting will be Monday, June 20, 2011 at 10:00 am at ADF&G in Bethel.

**ADF&G RECOMMENDATIONS:**

Effective 12:01 am Wednesday, June 16, 2011 to 11:59 pm Saturday, June 18, 2011, subsistence salmon fishing is closed in District 1 of the Kuskokwim River drainage, from the mouth upstream to Bogus Creek. Subsistence fishing for non-salmon species in District 1 will be allowed during the closure, the gillnet mesh not to exceed 4-inch and not to exceed 60-feet.

**WORKING GROUP MOTIONS:**

1) Support of the ADF&G recommendation. **Motion failed** (3 Yeas, 6 Nays).
2) (As an amendment to Motion 1), effective 12:01 am Thursday, June 16, 2011, to 11:59 pm Sunday, June 19, 2011, subsistence salmon fishing is closed in District 1 of the Kuskokwim River drainage, from the mouth upstream to Bogus Creek. Subsistence fishing for non-salmon species in District 1 will be allowed during the closure, the gillnet mesh not to exceed 4-inch and not to exceed 60-feet. **Motion passed unanimously** (9 Yeas, 0 Nays). **USFWS and ADF&G agreed to accept Motion 2**

**PEOPLE TO BE HEARD:**

1.) Bud Rivet (public member) asked what type of program is set up to identify the Kuskokwim Chinook caught as bycatch in the trawl fisheries on the high seas.

Dan Bergstrom (ADF&G) said there is genetic information to differentiate some Chinook, but it is hard to break apart the Western Alaska group of fish into specifically Yukon and Kuskokwim stocks. Dan Gilikin (USFWS) mentioned a report based on Chinook bycatch from the A and B season. Doug Molyneaux (public member) stated that Chinook salmon also share the Bering Sea with Chinook from Southeast Alaska, Cook Inlet, and all the way down to California, Oregon, and Washington. He agreed that it is difficult to differentiate Kuskokwim Chinook.

2.) Tundy Rogers (public member) expressed much concern about processors dumping Chinook bycatch.

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Stuart Currie (Processor Kuskokwim Seafoods) responded that processors have been working on this issue for years. 2011 is the first year with a "hard cap" on the bycatch and trawlers are making a concerted effort to reduce the amount of Chinook intercepted in this manner.

Chuck Brazil (ADF&G) reported that the total allocation for Chinook bycatch is 60,000. In the A season the allocation is 42,000; of that 7,135 were caught. In the current B season no Chinook have been caught yet. ADF&G reiterated that only a portion of these Chinook caught are Kuskokwim salmon.

Beverly Hoffman (Sport Fishing) reminded everyone that the KRSMWG includes processors, agency staff, people who have been fishing for many years. The goal of the KRSMWG is to work together for sustainability and conservation in order to ensure that Kuskokwim Chinook return for many years to come.

3.) Daniel Nelson from Napakiak suggested that more fish came when the wind switched from east to south. Also, we should not be pointing fingers because there are a lot of additional hazards to Chinook to look at now. For instance, jet boats and hovercraft on shallow water may damage juvenile fish.

## CONTINUING BUSINESS:

### LOWER RIVER SUBSISTENCE REPORTS:

James Charles (Downriver Elder) reported that catches in Tuntutuliak picked up and he thinks that the fish are on the way. People caught at least 20 nice size Chinook over the weekend but before that the fish were small and the run was slower. Gas prices were over six dollars a gallon, so many waited until last weekend to start fishing. People were using 7.5-inch and 8-inch "king gear."

Mike Williams (Lower River Subsistence) in Akiak had a similar report as James Charles. He reported that people in Akiak began to put up Chinook for drying, that the fish were smaller, and fishermen were using smaller mesh than the average 7-inch size. The average catch mentioned was five to eight Chinook per drift, and many reported catching sheefish. Starting Saturday the Chinook were bigger so people who had waited to fish because of gas prices started then. Some people reported that lower in the river catches were higher but the run seemed late. His recommendation was to continue fishing for Chinook, not have commercial fishing in the river yet, and to monitor the subsistence fishermen.

Peter Pavil (public member) in Tuntutuliak reported 30 to 40 Chinook in one tide on Saturday and Sunday. The first Chinook were small and traditional knowledge states that when the first ones are small there may be many fish that summer.

George Alexie (Commercial Fisher) in Eek reported an average Chinook run on the lower river and that fishermen were doing well. Two or three families already had Chinook that they need and were waiting for the reds and chums to come. Many people were out fishing and he caught 22 male Chinook and one female, all an average size of two to three feet in length. Bud Rivet commented that someone caught 40 kings near Eek Island.

Greg Roczicka (Chair) in Bethel was fishing every day and noticed that on Saturday and Sunday the fish were getting larger, indicating that the main run was just starting to come in. People had been happy with the numbers of fish they were seeing from the first week of June, they noted a lot of smaller fish, so switched to 6" gear. Felt the run was getting back to "average" as opposed to the "late runs" in recent years. The last 3-4 days the run had slacked off, though.

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ONC IN-SEASON SUBSISTENCE REPORT:

***Note** that the summary for June 2 –June 5 was read at the meeting, and the June 9 – 12 summary was sent out afterwards. (Please see the ONC Current and Historical table at the end of the summary.)

**Kuskokwim River Inseason Subsistence Catch Monitoring Report**
**Orutsararmiut Native Council, June 06, 2011**

**Fishing reports from June 2 – June 5, 2011.**

| Families Surveyed | Families Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both |
|---|---|---|---|---|---|---|---|
| 36 | 11 | 3 | 7 | 1 | 9 | 1 | 1 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 4 | 4 | 0 | N/A | N/A | N/A | 1 | 1 | 0 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 4 | 4 | 0 | N/A | N/A | N/A | 2 | 0 | 0 |

**Comments:** This week the ONC inseason subsistence fishery technicians distributed a total of 20 ASL sampling kits. Most kits were distributed to the people who had sampled for the subsistence Chinook ASL program in previous years and a few kits were provided to new families that expressed interest in sampling this year.

36 families were surveyed this week for the In-season Subsistence Monitoring Program. 11 (31%) of the families interviewed were fishing this week. 25 (69%) of the families did not fish this week. 3 (27%) families reported using driftnets. 7 (63%) families reported using set nets. 1 (9%) families reported using both. 9 (82%) of the fishing families use gill net using 8 inch mesh, referred to as King gear. 1 (9%) of the families reported 6 inch mesh or less. 1 (9%) families reported using both.

25 (69%) of the families interviewed had not yet started fishing and said that they were just starting to get ready for the fishing season. Many families are just beginning fishing after fixing and cleaning their fish camps after the winter. Interviewees not fishing yet were getting their equipment ready and waiting for the fish run to increase. ONC technician's observations of fish activity on the river from the upper mouth of church slough down to Oscarville a total of 32 set nets, 31 drifters, and 6 whitefish nets.

**Chinook:** Of the 11 families fishing this week. 4 (36%) families this week reported the Chinook catch is very good, 4 (36%) families reported the catch as normal, no families reported as poor. 25 (69%) families that have not started their Chinook harvest are just finishing up their repairs on camps. Many of the nets that used to catch king salmon this year are a lot larger mesh than previous years, due to the early run and high number of large kings that are coming into the river this year versus last year slow and small run.

Of the 11 (31%) families that reported fishing this week 4 (36%) families reported the run as early, 4 (36%) families reported the run timing as normal, no families reported the run to be late this year

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Detailed feedback from the fishers on the health, timing, and abundance of the Chinook run were generally positive. Most who were catching fish felt that the run seemed to be healthy thus far, with much larger Chinook being caught earlier than last year.

One fisher reported catching a Chinook estimated to be over 45 lbs., and expressed surprise how large some of his first catches were this early in the run. Another fisherman noted that the Chinook are coming in strong along with very large size sheefish.

Overall those catching fish felt the Chinook are coming in strong, healthy, and more abundant than the past few years. Some expressed that their catches seemed better catches than average overall and a few families even reported that they haven't seen a Chinook run this early since they were much younger. Other fishers expressed that the catch rates for this time were normal when compared to their many years of fishing on the Kuskokwim but were better when compared to the last few years.

**Chum:** Still too early in the season to assess the run. N/A indicates the question was not asked specially at this time, as it is too early to be relevant.

**Sockeye:** Of the fishermen interviewed only 2 had caught sockeye. These two families (18%) reported the run timing as early, viewing it as unusual to catch sockeye in their first efforts of fishing for Chinook. No families report the sockeye run timing as normal. No families reported the sockeye run to be late compared to previous years.

It is still too early for most fishers to comment on catch rates for the sockeye run, although one fisher (9%) interviewed felt his catch for this time-period was very good and 1 family (9%) reported their catches as normal. No families reported their sockeye catches as poor.

## Kuskokwim River In-season Subsistence Catch Monitoring Report
## Orutsararmiut Native Council, June 13, 2011

**Fishing reports from June 9 – June 12, 2011.**

| Families Surveyed | Families Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both |
|---|---|---|---|---|---|---|---|
| 69 | 41 | 24 | 6 | 11 | 20 | 3 | 18 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 3 | 14 | 20 | 4 | 19 | 4 | 4 | 19 | 3 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 11 | 18 | 8 | 16 | 10 | 3 | 14 | 12 | 2 |

**Comments:** 69 families were surveyed this week for the in-season subsistence monitoring program. 41 (59%) of the families were fishing this week. 28 (41%) of the families did not fish this week. 24 (59%) families reported using driftnets. 6 (15%) families reported using set nets. 11 (27%) families reported using both. 20 (49%) of the families fishing used gill nets greater than 6 inch mesh. Many referred to using specifically 8 inch mesh called "king gear." 3 (7%) of the families reported 6 inch mesh or less. 18 (44%) families reported using both. 28 (41%) families had not

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yet started fishing and said that they were just starting to get ready for the fishing season. Many families are still fixing and cleaning fish camps after the winter season and have not yet started fishing. Some families are waiting for the Chinook run to increase or middle of the run when they can catch all three species for efficiency. Many families reported that they are switching to smaller mesh gear to target the more abundant small sized Chinook. A few families specifically stated they saw the Chinook conservation posters initiated by the Kuskokwim Salmon Management Working Group and they would make an effort to target more abundant sockeye using smaller mesh size throughout the entire season.

Some families that started early are well under way to getting their subsistence fish for the year and some have reported that they have met their harvest goals for king salmon. ONC received numerous reports of concern about a person in uniform contacting people at their fish camps to inform them there would be a subsistence closure this past weekend.

No fishing closure was yet discussed or planned by the Kuskokwim Salmon Management Working Group but many people expressed they responded to this rumor by rushing to get their Chinook salmon needs met before any closures were enacted. Many fishers also commented that the river was heavily congested with set nets unlike they had ever seen before in their lifetime of fishing.

**Chinook:**

**Catch rate:** Of the 41 families fishing this week. 3 (7%) families this week reported the Chinook catch is very good, 14 (34%) families reported the catch as normal, 20 (49%) families reported as poor. 4 (10%) families that have not started their Chinook harvest are just finishing up their repairs on camps. Many fishers noted using 8 inch King gear but others noted they switched to smaller mesh gear in the form of 6-inch range or their 5.5 inch nets to get better catch rates of smaller kings as they felt fish were hitting the net and getting through. Others switched nets because they caught big snags on log debris and had to repair their 8 inch mesh.

**Run timing:** Of the 41 families that reported fishing this week 11 (27%) families reported the run as early 18 (44%) families reported the run timing as normal, 8 (19%) families reported the run to be late this year. 4 (10%) families were unable to comment on run timing as they had just set their net for the first time this year.
Many families noted that they were catching fewer kings after Wednesday, getting just a few fish per drift of in their set nets or none at all. Many fishers noted that they were catching more small kings this week with fewer large size kings than last week or normal years. A couple fishers noted they felt the smaller catch rates this week after good catch rates last week reflected the lull between two pulses of kings they often observe each year. Other fishers noted they are still setting up camp would just begin fishing this week and mid-June was the normal time they start fishing each year.

**Chum:**

**Catch Rate:** 4 (10%) families reported their catch rates as good. 19 (46%) families reported their catches as normal. 4 (10%) families reported their sockeye catches as poor. 14 (34%) families didn't report due to no chum catches yet.

**Run timing:** 16 (39%) families reported the run return as early. 10 (25%) families report the salmon run timing as normal. 3 (7%) families reported the run to be late compared to previous years. 12 (29%) families were unable to report due to no chum catches yet.
Many people felt it was too early to comment on the timing or catch rate for chum as they were not targeting them specifically or catching any yet.

**Sockeye:**

**Catch Rate:** 4 (10%) families reported their catch rates as good. 19 (46%) families reported their catch as normal. 3 (7%) families reported their sockeye catches as poor. 15 (37%) families didn't report due to no sockeye catches yet. Many people were catching sockeye as by-catch in their king gear.

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**Run timing:** 14 (34%) families reported the run return as early. 12 (29%) families report the salmon run timing as normal. 2(5%) families reported the run to be late compared to previous years. 13 (32%) families were unable to report due to no sockeye catches yet.

MIDDLE RIVER SUBSISTENCE REPORT:

Wayne Morgan (Middle River Subsistence) in Aniak reported that the Chinook numbers were low. There was not much fishing effort yet due to the high price of gas. His catch using "king gear" was one Chinook on Saturday, five Chinook on Sunday, and one red salmon.

Zack Liller (ADF&G) reported that in the Kalskag area near the tagging wheels, he heard from a few fishermen that fishing is good.

KNA INSEASON SUBSISTENCE REPORT:

Please see KNA weekly subsistence survey results for June 6-12, 2011, on Page 7 of this summary.

UPPER RIVER SUBSISTENCE REPORT:

Ray Collins (Western Interior RAC) reported that four Chinook were caught at Blackwater. No Chinook have been caught in McGrath.

HEADWATERS SUBSISTENCE REPORT: no members present

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## KNA Weekly Subsistence Fishing Report
**June 6-10, 2011**

| Village | Family | Fishing Y/N | Gear Type | Mesh Size | Species | How does the run compare to recent years? *NR = no response | Average # fish caught: |
|---|---|---|---|---|---|---|---|
| **Aniak** | **Family A** | Yes | Drift & Set Net | 6" | | | |
| | Comments:<br>Interviewed 06-10-11<br>Sunday, used 1 set net, caught 1 king.<br>Monday, used drift net, caught 1 king.<br>Wednesday, 3 drifts caught 1 king. | | | | **Sockeye** | NR | 0 |
| | | | | | | | |
| | | | | | **Chinook** | NR | 1 drift/day |
| | | | | | | | |
| | | | | | **Coho** | NR | 0 |
| | | | | | | | |
| | | | | | **Chum** | NR | 0 |
| | **Family B** | Yes | Drift Net | ? | | | |
| | Comments :<br>Interviewed 6/09/11<br>Made 3 drifts but didn't catch anything. | | | | **Sockeye** | NR | 0 |
| | | | | | | | |
| | | | | | **Chinook** | NR | 0 |
| | | | | | | | |
| | | | | | **Coho** | NR | 0 |
| | | | | | | | |
| | | | | | **Chum** | NR | 0 |
| | **Family C** | Yes | Set Net | ? | | | |
| | Comments:<br>Interviewed 06-10-11<br>Family reported that there was hardly any fish. | | | | **Sockeye** | NR | 0 |
| | | | | | | | |
| | | | | | **Chinook** | Below Average | 5/day |
| | | | | | | | |
| | | | | | **Coho** | NR | 0 |
| | | | | | | | |
| | | | | | **Chum** | NR | 0 |
| **Stony River** | **Family D** | Yes | Fish Wheel | ? | | | |
| | Comments:<br>Interviewed 6/10/11<br>Said had the fish wheel in for 10 days but only been using for a week. Caught 5 sheefish, 1 humpback white fish, 3 bering cisco, and 2 least cisco. He added that the run seems to be dropping in all types of fish as time goes on.<br>. | | | | **Sockeye** | NR | 0 |
| | | | | | | | |
| | | | | | **Chinook** | NR | 0 |
| | | | | | | | |
| | | | | | **Coho** | NR | 0 |
| | | | | | | | |
| | | | | | **Chum** | NR | 0 |

**KNA Comments:** Many participant families have not started fishing yet:
Sleetmute (2 families contacted), Kalskag (3 families contacted), Chuathbaluk (3 families contacted), Crooked Creek (2 families contacted), and Aniak (2 families contacted). All of these families were contacted, but have not started fishing.

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**OVERVIEW OF KUSKOKWIM RIVER SALMON RUN ASSESSMENT PROJECTS:** The information packet contained some background information on some new analyses and graphs that ADF&G and USFWS came up with to use BTF CPUE to help predict whether or not escapements for the Kuskokwim River for CHINOOK SALMON will be met. These new graphs were discussed at length.

Chuck Brazil gave some background: Chinook Escapement at Kwethluk and Tuluksak were below the escapement goals for three and four years respectively. The total 2010 Kuskokwim River Chinook salmon return was 142,796 with a spawning escapement of approximately 56, 000, which was the lowest on record.

Correction Factor of Bethel Test Fish (BTF) Catch Per Unit Effort (CPUE):
2008-2010 shows a shift in BTF catch efficiency, which is likely due to changes in gillnet mesh and river morphology. Specifically, the filament and the twine used at the project were more effective at catching fish starting in 2008. Therefore, for the same amount of effort more fish were caught. A 0.37 difference was calculated between the CPUE linear relationships of the BTF CPUE with overall Kuskokwim River escapements after this mesh change occurred. When the correction factor is used, the BTF CPUE data from 2008 to 2010 lines up with the BTF CPUE data from previous years, making it more comparable. (See both graphs on page 12 of information packet). We assume that a correction factor will continue to be necessary in 2011, however we will monitor both corrected and non-corrected values of BTF CPUE. There is a strong linear relationship between BTF CPUE and escapement at Kwethluk River weir. This means that we can use BTF to project the relative escapement at Kwethluk River weir.

Using only years when all weirs were operational (2000, 2002-2004, & 2006-2010) we see the same shift in BTF catch efficiency starting in 2008. Using the same correction factor of 0.37, 2008-2010 fit nicely within the strong linear relationship with BTF CPUE and Kuskokwim River monitored escapement. This means we can use BTF Cumulative CPUE to project relative Kuskokwim River escapement. The difference between achieving escapement needs and not meeting them becomes more evident after June 11 (see top graph on page 14 of Information Packet.)

Current BTF Chinook Data:
There was a good push of Chinook before June 8th, but then the numbers slowed way down. Even though they are better than 2008 and 2009, they are not as good as what we would like to see. The CPUE for Chinook on June 13th was 30. However, we needed the CPUE to be at least 50 by that date to meet the lowest end of the confidence interval for escapement. This means BTF CPUE indicates the Chinook run is about 40% behind where it needs to be for achieving escapement goals.

The CPUE values for further restrictions on June 11=31.4; June 12=38.9; and June 13=43.4. If inseason values are less than these, further restriction is warranted.

DISCUSSION OF RUN ASSESSMENT DATA:
ADF&G clarified that BTF uses 8-inch mesh and 5 3/8-inch mesh. The nets are 50-fathom drift gillnets. Two drifts are done with each net at three rotating drift stations. BTF goes out one hour after the high tide, once during the day and once at night.

Bob Aloysius (YK Delta RAC) asked why no fishing is done at low tide because some fishermen have good luck on the incoming tide when the fish are coming in and the water is lower. ADF&G responded that it is important to fish in similar locations and at similar times so that the data can be compared among years. However, testing at low tide and having set schedules are options that have been discussed for the future.

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One reason that BTF uses three rotating stations is because of changing river morphology. However, Doug Molyneaux explained that in more recent years the channels have not been changing as much, so this more recent data is weighted more. ADF&G noted that the reason that BTF has not been catching lately is not because of changing channels, but because there is currently a much higher fishing effort on the river. Dan Gillikin reminded the group that the goal of BTF is not to catch as many fish as we can, but to standardize the methodology and compare with more recent years.

Stuart Currie (Processor Kuskokwim Seafoods) asked if the model ADF&G is using takes into account run timing. ADF&G responded that there was an early push of fish, possible because of a storm early in June. However, it is difficult to tell if the run is slightly late or slightly early because we only have a limited data for the current season. Dan Gillikin explained that the model was developed including many years' run timing data and therefore the confidence intervals were very good. Chuck Brazil emphasized that with the current model and data he was pretty confident that we would not meet escapement goals unless BTF CPUEs increased.

Doug Molyneaux suggested that Phil Mundy's data (using temperature to assess inseason run timing) suggests a near average run timing for the Yukon River, plus or minus a few days. He asked if the water temperature data from Point Moller could also indicate Kuskokwim River run timing. Chris Shelden (ADF&G research staff) responded that they have not seen the Point Moller data yet, but that Mundy's forecast is being applied to what ADF&G expects for the Kuskokwim.

Chuck Brazil stated that there is a good relationship between Kuskokwim River and Nushagak River Chinook salmon. The Nushagak is about 40% behind on their escapements for this time of year, as well. They are subsistence fishing there but not commercial fishing. Nushagak run timing is two to three days late this year.

James Charles asked if all the runs from 2006 to 2010 were late runs (See page 13 of Information Packet) because he has noticed that since 2006 fish racks seem to fill late in the season. ADF&G responded that 2006 and 2007 were late and 2010 was slightly late. Typically when the run is late there is low abundance of Chinook upriver.

Fritz Charles (Member at Large) pointed out that both 2007 and 2011 show a CPUE of 30 on 6/12/11 (see page 13 of Information Packet.) He believes that the Chinook from 2007 (brood year) will return this year and escapement will be met. ADF&G responded that 2007's run timing was much later than this year, but that anything is possible. However, it is important to realize that we did not meet escapement in 2008, 2009, and 2010, so three out of four years we did not meet escapement goals.

Dan Gillikin agreed that many factors and some uncertainty go into salmon returns, which is why we use as much information as possible to make decisions. Independent lines of data have the same conclusions regarding 2011 Chinook returns. For instance, USFWS analysis of the Kwethluk River used SARON data (the number of juvenile fish in the river and their subsequent returns). USFWS also looked at the number of three-year old fish that had escaped the previous year. Both studies showed that the 2011 return would be low.

A member of the public asked if any Chinook out-migration studies are used. USFWS replied that these types of studies could be valuable, but would be very expensive and require funding.

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Fritz Charles asked if the high water in 2010 affected the accuracy of weir numbers. ADF&G responded that the high water did not occur at the peak of the run so most of the fish were counted and the remainder of the run was estimated. Furthermore, many years of data are used in this model of plotting BTF CPUE against past escapements.

Much discussion followed regarding the recent "flat-lining" of the BTF CPUE graph (see page 14 of Information Packet) and fishing effort on the river:

The general consensus of agency staff and KRSMWG members was that the decrease in BTF CPUE was due to a drastic increase in fishing effort on the river. One member of the public commented that he has never seen this "combat fishing" before, nor so many fish racks full this early, nor so many nets across the river in Oscarville.

ONC inseason surveys also confirmed more effort in the last week, with some fishermen putting out two set nets and two drift nets. The increased effort may have been because a false rumor circulated, saying that the fishery was going to close on June 11, 2011. When the rumor was dispelled, fishing effort decreased and went back to average. However, ONC surveys showed that about one-third of subsistence fishermen interviewed had not panicked because of false rumors and elders believe that a second pulse of fish will come.

Bev Hoffman (Sport Fishing) asked if a correction factor was necessary because of this recent doubling of fishing effort. Chuck Brazil clarified that BTF is always affected by harvest and that the BTF CPUE will be lower if the harvest is higher. In other words, it is accurate because fewer fish are going upriver. The run index is currently 40% below where it needs to be and the numbers are not climbing. Holly Carroll (ADF&G) further emphasized that BTF CPUE graph, though affected by harvest, is far below the confidence interval where we would meet escapements, and even if every single person stopped fishing immediately, the cumulate CPUE would need to nearly double, which isn't as likely with a projected low return- it would need to be a very strong, late run to make up the difference.

Casie Stockdale (AVCP) was concerned about people panicking if a subsistence fishing closure was made, and that on the Yukon that happened and people harvested more fish.

Lamont Albertson (Sport Fishing) commented that, "A fish in the hand is proof that fish are in the river." He is very concerned that Chinook are not getting upriver.

WEIRS/SONAR/MARK-RECAPTURE/AERIAL SURVEYS:
ADF&G reported that the weirs were being installed on schedule during the third and fourth week of June.

**WEATHER FORECAST:**
The Kuskokwim Delta forecast for the week of June 13–June 19 is mostly cloudy with scattered showers. Southwest winds 10 to 15 mph are forecasted for Monday through Wednesday. Lows will be from 40 degrees F and highs will be up to 55 degrees F.

The Marine Weather forecast for Southwest Alaska (Cape Newenham to Dall Point) the week of June 13 –June 19 is W wind 10 to 15 KT Monday and Tuesday. Wednesday will have a SE wind of 15 KT. Thursday and Friday will have an E wind of 20 KT.

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**RECOMMENDATION:**

Chuck Brazil (ADF&G) recommended that effective 12:01 am Wednesday, June 16, 2011 to 11:59 pm Saturday, June 18, 2011, subsistence salmon fishing is closed in District 1 of the Kuskokwim River drainage from the mouth upstream to Bogus Creek. Subsistence fishing would be closed in this area for four days in order to allow passage upriver. Subsistence fishing for non-salmon species in District 1 will be allowed during the closure, the gillnet mesh not to exceed 4-inch and not to exceed 60-feet.

**WORKING GROUP MOTIONS:**

**MOTION 1**: Motion 1 (in support of the ADF&G recommendation) states that effective 12:01 am Wednesday, June 16, 2011 to 11:59 pm Saturday, June 18, 2011, subsistence salmon fishing is closed in District 1 of the Kuskokwim River drainage, from the mouth upstream to Bogus Creek. Subsistence fishing for non-salmon species in District 1 will be allowed during the closure, the gillnet mesh not to exceed 4-inch and not to exceed 60-feet. **Motion failed** (3 yeas, 6 Nays).

COMMENTS FOR MOTION 1:

Ray Collins supported the motion because he was concerned that "no one listened to conservation." He was especially worried because the first pulse of fish was headed for upriver and he was concerned about the Takotna and Salmon Rivers. He urged, "It is important that this pulse gets up to the headwaters."

Much discussion about the length of the closure followed:

James Charles worried that after the closure people would fish harder. He suggested hour-long closures instead of days because some people still have not caught their fish. He agreed that the first pulse of fish needs to get upriver.

Alissa Joseph (ONC) disagreed with the motion, saying that in retaliation of such a long closure people may break the law. She said, "We told the people that the rumor was false and they took their nets out, and now the rumor is true." People may have been "combat fishing" near Bethel but she is concerned about the fishermen in other villages who are just starting now.

Bev Hoffman said, "We all are concerned about conservation," but she was concerned about the closure because her family has nothing on their drying rack yet because this coming week is when they always start fishing. She felt that the closure wouldn't go over well and would create hardship and hard feelings. "Hours versus days would be a better compromise."

Fritz Charles suggested postponing the closure for seven days in order to give people a chance to fish. Ray Collins (who made the motion) responded, "We can't wait a whole week because we need to let some fish go upriver." He said that some action right now is essential, even if the motion went to hours or different days. Totally postponing it for a week would have the same effect we're seeing now, with more people out there combat fishing, because they know that a closure is coming.

A member of the public agreed that more people would be out there fishing. He referred to Alaska State Law 16.05.258 stating, "A reasonable opportunity must be provided to subsistence users first, before providing to other uses of any harvestable surplus of a fish or game population." A reasonable timeline should be given to subsistence fishermen to get ready for the closure, and tomorrow two days is not enough. He thought one or two day closures would be better with more warning.

Bob Aloysius recalled the KRSMWG meeting in Anchorage on March 18th. At that meeting, members voiced a preference for closures on Fridays, Saturdays, and Sundays to protect the traditional fish camp

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way of smoking the fish all week, with the intention of restricting more "recreational" weekend fishers from Bethel. He reminded the group that discussions at the March meeting had been about 3-day closures, not 4-day. One day of notice is not realistic, though.

Doug Molyneaux mentioned that the Lower Yukon was currently in the middle of a 5 ½-day closure.

ADF&G then clarified that subsistence fishing for non-salmon species in District 1 would be allowed during the closure, with gillnet mesh not exceeding 4-inches and not longer than 60-feet.

After empathizing with everyone's frustrations and concerns, Ray Collins said that Bethel remained an intercept fishery for upriver. He did not see any other viable solutions offered, so he did not see any other way than a closure.

Chuck Brazil clarified that we were currently at 14% of the run, and in three days the run will build to 25%. Next week it will build to 50%. He stated that, "Realistically, for us to get any savings upriver, now is actually the time to make a decision in order to move fish past the fishery here [in Bethel]." Because it takes about four days for the fish to get from the lower river to Tuluksak, the closure would have to be for multiple days to be effective. "It would be really good to get a good solid push of fish past where the main part of the fishery is, to help us achieve our escapements and so we can have some confidence in our numbers. We can re-evaluate those numbers and see where we stand over the weekend. If those numbers are good and we feel comfortable with the analysis of the BTF CPUE, then we can decide if we can leave it open or go to shorter closures or not." He noted that the in-depth analysis of BTF would occur that would be adjusted for the lack of subsistence fishing during the closure. He also added that ADF&G's recommendation seemed reasonable, considering the current situation, the last three years of poor escapements, and what has been happening in other area systems. Finally, he said, "I really do empathize with everybody."

Sport Fish member asked if a Friday, Saturday, Sunday, and Monday closure would be effective. Dan Gillikin responded with his concern that the fishing effort that would occur before the closure started would be on the front end of the run. He explained, "It is easier to get conservation numbers earlier in the run because it is easier to make up numbers earlier rather than later." USFWS agreed with ADF&G that only three days of closure would be ineffective because the fish would not get past the lower river fishery.

Stuart Currie asked if the BTF data would need to be corrected based on the decrease in the subsistence harvest. Dan Gillikin responded we could generate an exploitation rate and generate a correction factor for the current trend in BTF CPUE data. However, he made it clear that BTF CPUE was only one tool out of many indicators that would be used to make a decision.

Bob Aloysius then suggested a closure beginning on Thursday, June 16th, so people would have more notice to prepare for it.

**MOTION 2:** As an amendment to Motion 1, Motion 2 states that effective 12:01 am Thursday, June 16, 2011, to 11:59 pm Sunday, June 19, 2011, subsistence salmon fishing is closed in District 1 of the Kuskokwim River drainage, from the mouth upstream to Bogus Creek. Subsistence fishing for non-salmon species in District 1 will be allowed during the closure, the gillnet mesh not to exceed 4-inch and not to exceed 60-feet. **Motion passed unanimously** (9 Yeas, 0 Nays). **USFWS and ADF&G agreed to accept Motion 2, as stated above.**

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COMMENTS FOR MOTION 2:
ADF&G clarified that sport fishing would be closed District 1, as well.

Chris Shelden explained that they are not necessarily trying to reduce harvest, but to spread it out over the run. Even if people do not have much time to prepare, they may have fishing opportunities after the closure.

Fritz Charles worried that the weather would be rainy soon, which was bad for drying. He was worried about fish spoiling and "that ADF&G would make them into criminals for wasting." Bev Hoffman disagreed, saying that subsistence fishermen never have a guarantee on the weather, and people have to take extra care of fish, but we should be committed to getting fish to the spawning grounds and that the weather forecast during the closure was mostly cloudy and not good for drying, anyway.

Gene Peltola stated that even a single day of delaying the closure could be worth thousands of fish.

Alissa Joseph approved of Motion 2. Bev Hoffman approved and stated that she was worried about having Chinook in the future. She said, "This isn't going to be easy and it is going to be hard to sell to people. It is going to be hard, but harder if there are no fish someday."

Greg Roczicka (Chair) liked that Motion 2 gave people who waited to fish more time to get fish hanging in their racks. He also liked that conservation would be at the peak of the run. What made this decision so difficult for him was, "We have artificially created the situation by trying to be pro-active, than having this big push of fishing that created this 40% deficiency in the Bethel Test Fishery." He also thought that the parent years (2006 and 2007) and forecast in the level of returns for five and six year-old fish seemed pretty good. Even though it was difficult to support any closure, "earlier is better."

Even though he is voting for the motion, Bob Aloysius thinks that the fish are going upriver and people upriver just need to fish harder to get them. Bev Hoffman disagreed, saying that she called Crooked Creek every day last year, and they were trying hard to fish.

Many included pre-season outreach efforts in their comments:
ADF&G said that the whole point of the pre-season outreach plan was to educate people about conservation concerns and the first assessment point in June. Therefore, the agency made three months of effort to notify the public. Even though it was not what the department and what the KRSMWG intended, clearly the message got out because of the increased fishing effort early in the season.

Lamont Albertson (Sport Fishing) reminded everyone the escapement is the priority over subsistence. People upriver no longer subsistence fish because there are not many fish in the river there. They have no alternative. He agreed with ADF&G, that we have had plenty of time to think about closures since the March KRSMWG meeting.

James Charles felt better about Motion 2 and thought that people might expect it because they have been discussing restrictions since the Anchorage meeting.

Nick Souza (Processor Coastal Village Seafoods) agreed that Motion 2 should not be a surprise because fishermen's meetings had been discussing restrictions all spring.

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Bev Hoffman recommended that KRSMWG members tell the public that this was a very tough decision. This was the compromise that had to be made in order to get fish to the spawning grounds.

**OLD BUSINESS:**

1.) Show Chinook Conservation posters and give update on their Distribution:

The KRSMWG commended Alissa Joseph for making and spreading Chinook conservation posters around Bethel. She thought that they were effective, because some of the fishermen surveyed by ONC said that they would focus on reds and chums instead of Chinook. However, even though the posters were meant to target the new people in town, one common response from fishermen was that they already knew to take only what they needed.

James Charles said that he hung his posters in Tuntutuliak. Bob Aloysius liked how the posters showed pictures of how salmon was prepared. AVCP hung posters at the office and put them in newsletters to all the villages.

2.) Update from USFWS on reporting salmon shipped out of Bethel:

USFWS is still waiting to find a mechanism for this to happen. It is not within the authority of the federal inseason manager nor is it possible as a special action.

Chair requested that Pete Probasco (DARD-OSM), through Rod Campbell, provide a response as soon as possible, especially because the Kuskokwim is having subsistence closures. He believes that this issue should be a priority at the federal level. Bob Aloysius agreed that something needs to happen immediately.

Lamont Albertson member pointed out that sport fishing may be part of the problem of fish leaving the region.

3.) Status on Iyana Gusty Award:

Holly Carroll (ADF&G) reminded the group it was last discussed at the April 1, 2010, KRSMWG meeting, and that Robert Sundown (USFWS) was going to develop something to present to the Gusty family, but there has been no update on this. The annual Robert Nick award was something that had been proposed by the group at the same meeting to honor those involved in community-level fish and wildlife conservation efforts, but no guidelines have been created for implementing this.

4.) Status on the replacement of the Upriver Elder seat:

The boundary that the KRSMWG uses to define upriver communities is Crooked Creek and above. A recruitment letter was sent out to upriver communities but the KRSMWG has not heard anything back yet. The KRSMWG requests help from upriver for recommendations.

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**NEW BUSINESS:** N/A

**GENERAL COMMENTS FROM WORKING GROUP MEMBERS:**

George Alexi commented that in Eek people were fishing hard at the end of May and the first week of June. He also requested that the Chinook conservation posters be hung in schools. He believes that if kids learn the message they will tell their parents.

Greg Roczicka expressed that he "really does not think that we should be here, and that this whole thing is artificially created," because of the rumor going around last week and people doubling their fishing effort. He "hopes that severe administration action is taken" with the agency person who caused the rumor, because he believes that this rumor is "truly what caused this."

Bob Aloysius encouraged people to use 6-inch gear so that the bigger Chinook can go through. He commended the KRSMWG for coming such a long way over the years and for "being more gentle and kind to each other." Contrary to what some people may think, "they use many years of experience and data for what they recommend. It takes a lot of thought, a lot of times very heartbreaking thought, to make motions and follow through on them."

James Charles said that he got nervous about not having enough notice in the first motion, but "he feels much better about the second one and people will feel better about that one because we don't like short notice." Talking about it at this meeting, other meetings, KYUK talk show, and passing on information from the Anchorage meeting had made them all aware about Chinook conservation. He said, "Iyana Gusty used to tell us to work together up and down the river and with ADF&G and USFWS," and he is happy that we did and pleased that the motion passed.

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**WORKING GROUP ATTENDANCE:**

| **MEMBER SEAT:** | **NAME:** |
|---|---|
| UPRIVER ELDER | *VACANT* |
| DOWNRIVER ELDER | James Charles |
| COMMERCIAL FISHER | George Alexie |
| LOWER RIVER SUBSISTENCE | Greg Roczicka |
| MIDDLE RIVER SUBSTENCE | Wayne Morgan |
| UPPER RIVER SUBSISTENCE | *absent* |
| HEADWATERS SUBSISTENCE | *absent* |
| PROCESSOR | Nick Souza |
| MEMBER AT LARGE | Fritz Charles |
| SPORT FISHER | Lamont Albertson |
| WESTERN INTERIOR RAC | Ray Collins |
| Y-K DELTA RAC | Bob Aloysius |
| ADF&G | Chuck Brazil |
| CHAIR | Greg Roczicka |

| **Other Participants:** | |
|---|---|
| ADF&G Comm. Fish : Dan Bergstrom, Travis Elison, Chris Shelden, Alice Bailey, Doug Bue, Holly Carroll, Amy Brodersen, Zach Liller, Scott Ayers, Dan Steele<br>Sport Fish : Tom Taube), John Chythlook<br>Subsistence Division: David Runfola, Andrew Brenner, Dora Johnson, Hiroko Ikuta | |
| USFWS: Gene Peltola, Dan Gillikin, Steve Miller, Robert Sundown, Aaron Moses, Darryl Sipary<br>OSM: Alex Nick, Rod Campbell, Pippa Kenner | |
| Eva Patton, ONC<br>Iyana Dull, ONC<br>Daniel Nelson<br>Nils Alexie<br>Jolie Morgan<br>Henry Cole<br>Tundy Rogers<br>Steve Walsh<br>Casie Stockdale, AVCP<br>Bud Rivet<br>Jeff Sanders<br>Henry Reed<br>Wendy Rodgers | Shane Iverson, KYUK in Bethel<br>Doug Molyneaux<br>Terry Reeve, Marine Advisory UAF Dave Cannon, Aniak<br>Angela Morgan, Middle River Subsistence member<br>Bev Hoffman, Sport Fishing member<br>Carl Morgan, Aniak<br>Elsie Simeon, Aniak Tribal Administrator<br>Mary Sattler<br>Stuart Currie Processor Kuskokwim Seafoods<br>Maridon Boario, Senator Hoffman's office<br>Alissa Joseph, ADF&G Board Support and ONC |

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## GLOSSARY OF ACRONYMS:

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**KRSMWG or Working Group, WG**), Sustainable Escapement Goal (**SEG**), Biological Escapement Goal (**BEG**).

**ONC Inseason Subsistence Surveys – 2011 Current and Historic Catch Rate Information**

Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week"? "ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

| | | Number of Families | | | Chinook salmon | | | Chum salmon | | | Sockeye salmon | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Week Ending | Inter-viewed | Fishing | Not Fishing | Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 2011 | Jun 05 | 36 | 11 | 25 | 36% | 36% | 0 | ND | ND | ND | 9% | 9% | 0 |
| | Jun 12 | 69 | 41 | 28 | 7% | 34% | 49% | 10% | 46% | 10% | 10% | 46% | 7% |
| 2010 | Jun 06 | 19 | 6 | 13 | 0 | 100% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 13 | 39 | 28 | 11 | 4% | 50% | 46% | 0 | 72% | 28% | ND | ND | ND |
| | Jun 20 | 26 | 23 | 3 | 9% | 65% | 26% | 0 | 100% | 0 | 0 | 96% | 4% |
| | Jun 27 | 37 | 37 | 0 | 3% | 73% | 24% | 3% | 92% | 5% | 5% | 81% | 14% |
| | Jul 04 | 38 | 36 | 2 | 8% | 69% | 22% | 14% | 78% | 8% | 3% | 69% | 28% |
| | Jul 11 | 20 | 11 | 9 | 0 | 91% | 0% | 27% | 64% | 0 | 18% | 55% | 18% |
| 2009 | Jun 07 | 20 | 6 | 14 | 0 | 67% | 33% | ND | ND | ND | ND | ND | ND |
| | Jun 14 | 43 | 38 | 5 | 29% | 50% | 21% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 21 | 44 | 44 | 0 | 41% | 36% | 23% | 0 | 100% | 0 | 0 | 86% | 14% |
| | Jun 28 | 36 | 31 | 5 | 39% | 55% | 6% | 3% | 77% | 9% | 6% | 71% | 23% |
| | Jul 05 | 36 | 5 | 31 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jul 12 | 36 | 2 | 34 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| 2008 | Jun 08 | 27 | 5 | 22 | 20% | 60% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 16 | 34 | 17 | 17 | 0 | 76% | 24% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 22 | 32 | 27 | 5 | 56% | 44% | 0 | 0 | 74% | 26% | 81% | 19% | 0 |
| | Jun 29 | 33 | 27 | 6 | 52% | 48% | 0 | 15% | 85% | 0 | 56% | 44% | 0 |
| | Jul 08 | 35 | 15 | 20 | 20% | 80% | 0 | 0 | 100% | 0 | 47% | 53% | 0 |
| | Jul 13 | 32 | 3 | 29 | 0 | 100% | 0 | 33% | 67% | 0 | 0 | 100% | 0 |
| 2007 | Jun 03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Jun 12 | 39 | 28 | 11 | 0 | 29% | 71% | ND | ND | ND | ND | ND | ND |
| | Jun 17 | 40 | 33 | 7 | 0 | 30% | 70% | ND | ND | ND | ND | ND | ND |
| | Jun 24 | 44 | 40 | 4 | 0 | 35% | 65% | ND | ND | ND | ND | ND | ND |
| | Jul 02 | 36 | 20 | 12 | 45% | 45% | 10% | 80% | 20% | 0 | 0 | 40 | 60% |
| | Jul 08 | 33 | 10 | 23 | 60% | 40% | 0 | 80% | 20% | 0 | 30% | 70% | 0 |
| | Jul 14 | 33 | 6 | 27 | 0 | 0 | 100 | 0 | 33% | 67% | 0 | 17% | 83% |
| 2006 | Jun 03 | 22 | 0 | 22 | 0 | 0 | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 10 | 32 | 19 | 13 | 32% | 68% | 0 | 0 | 0 | 0 | ND | ND | ND |
| | Jun 17 | 36 | 30 | 6 | 60% | 40% | 0 | 60% | 40% | 0 | 53% | 47% | 0 |
| | Jun 25 | 48 | 43 | 5 | 79% | 21% | 0 | 91% | 9% | 0 | 19% | 56% | 26% |
| | Jul 02 | 46 | 14 | 32 | 21% | 79% | 0 | 71% | 29% | 0 | 43% | 57% | 0 |
| | Jul 09 | 38 | 8 | 30 | 0 | 100% | 0 | 25% | 75% | 0 | 37% | 63% | 0 |
| | Jul 17 | 26 | 5 | 21 | 0 | 100% | 0 | 100 | 0 | 0 | 0 | 100% | 0 |

Appendix C5.–Meeting Summary, June 20, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

**June 20, 2011**

Called to order at ADF&G in Bethel and adjourned at 12:50 pm. Nine of the thirteen members were present and a quorum was established.

**AGENDA ITEMS:**

1.) Continuing Business
2.) Old Business
3.) New Business

**WORKING GROUP ACTION ITEMS:**

1.) ADF&G provide graphs of escapement goals at weirs at the next meeting.

**MEETING ACTION ANNOUNCEMENT:**

The next KRSMWG meeting will be at 10:00 am Monday, June 27, 2011, at ADF&G in Bethel.

**ADF&G RECOMMENDATIONS:**

**Option 1:** To take no further action. The only restrictions would be those already in place for the Kwethluk, Tuluksak, and Kisaralik Rivers and Kuskokuak Slough.

**Option 2:** To close District 1 subsistence fishing for 5 days from Thursday, June 23, until Monday June 27, to help meet escapement objectives. This closure would be during the 50% and 70% passage point of the Chinook salmon run. 4-inch mesh nets not exceeding 60 feet in length would be allowed during this closure.

**WORKING GROUP MOTIONS:**

1.) Motion to suspend the rules in order to hear public input. Motion passed.
2.) Motion to support ADF&G Option 1, to take no action. Motion failed.
3.) Motion to support ADF&G Option 2, but to amend the option to have a 5-day closure in District 1 beginning at 12:01 am Wednesday, June 22, until 11:59 pm Sunday, June 26. Motion failed.
4.) Motion to support ADF&G Option 2, a 5-Day subsistence fishing closure beginning at 12:01 am Thursday, June 23, and ending at 11:59 pm Monday, June 28. Motion failed.

**The department decided to adopt Option 2.**

**PEOPLE TO BE HEARD:**

1.) Daniel Nelson (public member) from Napakiak gave a fishing report. He had 93 Chinook, 13 chums, and 8 reds as of June 15. Most people share a fish rack with their family and he counted 27 fish racks. The river has been open because of the closure, but he has heard of sightings of beluga in the Tuntutuliak and Quinhagak area, and felt that when belugas are in the immediate area, there are no fish to catch.

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2.) Jeff Sanders (public member) asked who funds the Kalskag fish wheel project, and Zach Liller (ADF&G) responded that it is a cooperation between KNA and ADF&G, partnered with the park service for the tagging component. Sanders then asked if this project can be used to estimate inseason harvests between BTF and Kalskag. Liller responded that we cannot yet, because the focus of the project and tagging effort changes annually.

3.) Tim Andrews (AVCP) asked if the downward trend on the BTF CPUE graph is a function of abundance. Chuck Brazil (ADF&G) responded that it could be a function of abundance but possibly changing river morphology and travel patterns. Chris Shelden (ADF&G) added that decreasing abundance is not always a concern because sometimes low abundance can bring about high returns. Conversely, high abundance years can yield lower returns. The dip in the BTF graph may be part of a natural cycle.

## CONTINUING BUSINESS:

### LOWER RIVER SUBSISTENCE REPORTS:

Bev Hoffman (Chair) gave Robert Enoch's (public member) report from Tuntutuliak. He caught 38 fish before the closure, but has heard a rumor that people have been seeing beluga. This might be the reason that people are not getting as many kings. He feels that the closure is not necessary downriver because the river is so wide and some families are just starting to fish.

James Charles (Downriver Elder) also had reports of beluga whales. At Eek Island, fishermen thought that the belugas were eating fish down in the water while they fished; so many people had to go farther upriver. James reported that someone from Tuntutuliak was unhappy because he thinks that the Chinook have better chance of getting by there because the river is wide. However, James thought that the closure last week may have helped the fish pass. In Eek and Tuntutuliak, some people are finished fishing (for Chinook) and others want to catch a few more. One complaint that people have had is that the channel marker buoys are in the way, and he asked ADF&G to ask the Coast Guard to move them so that they are not in commercial and subsistence fishing spots.

Mike Williams (Lower River Subsistence) in Akiak met with subsistence fishermen and many were reserving their time on the river because of the high price of gas. The fish have been smaller, the water clear, and the water level low, so fishermen are waiting for a more abundant time. People have been using Facebook and texting to monitor Tuntutuliak and the lower river. Mike agrees with James Charles and Robert Enoch that the closure put a crimp on fishing because the bigger Chinook were just beginning to show up. Since the closure, people have been using 4-inch mesh and are catching sockeye, chum, and quite a few small Chinook. Catch rates are almost triple on the deep parts of the bank. Mike said that it has been a hard time because people like to fish when the weather is good for drying, but many families are just starting because the fish seem late. About 75% will be fishing this week. One common concern was that because of the closure coming, people went out and wiped out the salmon by "combat fishing." But Mike Agrees with James, and Robert, and with Mr. Nelson that fish are coming and seems like this year they're going through deep parts of banks. His cousin fished a deep eddy and was catching 4 times as many as they were on the sandbar side.

Beverly Hoffman (Chair) reported that today was her first day of fishing. She caught 18 Chinook with 7-inch mesh. She also said that the stampede of people from Bethel trying to get on the river was scary. She got a call from someone upriver who wondered if people even care about upriver escapement.

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ONC IN-SEASON SUBSISTENCE REPORT:

*Please see the ONC Current and Historic Catch Rate Table on page 14.*

***Note:** Salmon Fishing was closed in the survey area for a Chinook conservation closure Thursday, June 16, through Sunday, June 19. Thus, this survey report reflects subsistence fishing effort for the time-period of Monday, June 13, through Wednesday, June 15.

**Fishing reports from June 13 –June 18, 2011.**

| Families Surveyed | Families Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both |
|---|---|---|---|---|---|---|---|
| 57 | 56 | 37 | 3 | 16 | 24 | 12 | 19 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 14 | 21 | 20 | 8 | 29 | 11 | 8 | 32 | 10 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 10 | 27 | 16 | 10 | 30 | 7 | 7 | 35 | 6 |

**Comments:** 57 families were surveyed this week for the inseason subsistence monitoring program. 56 (98%) of the families were fishing this week. 1 (2%) of the family did not fish this week. 37 (66%) families reported using driftnets. 3 (5%) families reported using set nets. 16 (29%) families reported using both types of net. 24 (43%) of the families fishing used gill nets greater than 6-inch mesh. Most using greater than 6-inch mesh referred to using specifically 8-inch mesh (called "king gear"), but some indicated that they were using 7-inch gear. 12 (21%) of the families reported 6-inch mesh or less. 19 (34%) families reported using both large and small sizes of mesh.

The families interviewed this week were at various stages of fishing. The families that had begun fishing a day or two before the closure indicated that mid-June is when they normally start fishing. Other families indicated that they had started early or had increased their effort before the closure. These families met their subsistence Chinook harvest goals for the year or were satisfied with what they had. However, most families interviewed were mid-way through their salmon harvest goals and planned to resume fishing after the closure.

All families indicated that the weather had been good for drying fish and the flies had not yet come out. Several families who had just started fishing were concerned that the weather would become rainier later in June. They worried that fish caught after this week's closure may not dry properly and spoil if flies arrived to lay eggs. Their primary concern was the lack of flexibility to harvest fish when the weather was best for preserving them.

Many families reported that they had switched to smaller mesh gear to target the more abundant smaller Chinook. They also reported catching fewer females than usual. Some noted that they were just beginning to catch a few bigger Chinook in the last couple days and a greater percentage of females, which may indicate the arrival of what they referred to as the "second pulse." Many families were switching back and forth between mesh sizes or had different sized set nets and drift nets.

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A few families specifically stated that they saw the Chinook conservation posters initiated by the Kuskokwim Salmon Management Working Group. They said that they would make an effort to target more abundant sockeye using smaller mesh size throughout the entire season. Many families commented they understood the Chinook conservation measures being sought by the closure. Some interviewees commented that the population of Bethel was growing and they had never seen such a high level of congested drift and set net fishing on the Kuskokwim River in their lifetime as that of last week.

**Chinook:**
**Catch rate:** Of the 56 families fishing this week, 14 (25%) reported the Chinook catch as very good, 21 (38%) families reported the catch as normal, 20 (37%) families reported it as poor. Many fishers used 8-inch gear but others switched to smaller mesh (6-inch or 5.5 inch), in order to catch the smaller Chinook that were getting through the net. Many reported using both Chinook gear and 6-inch or less to increase their catch rate. Most noted they had better catch rates of Chinook with the smaller size mesh. A few fishers reported larger Chinook arriving a day or two before the closure. Many had fewer females in their catch than they normally would at this point in the run, but others think that females usually come in the "second pulse" instead.

**Run timing:** Of the 56 families that reported fishing this week, 10 (18%) reported the run as early, 27 (48%) reported the run timing as normal, 16 (29%) reported the run to be late this year. 3 (5%) families did not comment on run timing because they had just begun fishing and could not yet assess the flow of fish for this time period.

**Chum:**
**Catch Rate:** 8 (14%) families reported their catch rates as good. 29 (52%) families reported their catches as normal. 11 (20%) families reported their catches as poor. 8 (14%) families didn't report due to no chum catches yet or felt that catches were only a reflection of by-catch in 8-inch mesh.

**Run timing:** 10 (18%) families reported the run return as early. 30 (54%) families report the salmon run timing as normal. 7 (13%) families reported the run to be late compared to previous years. 9 (16%) families were unable to report due to no chum catches yet. Some people felt it was too early to comment on the timing or catch rate for chum, as they were not targeting them specifically.

**Sockeye:**
**Catch Rate:** 8 (14%) families reported their catch rates as good, 32 (57%) reported it as normal, 10 (18%) reported it as poor. 6 (11%) families didn't report due to not targeting sockeye yet. Some people reported sockeye catch rates as the normal rate of by-catch in their king gear.

**Run timing:** 7 (12%) families reported the run return as early, 35 (63%) reported timing as normal. 6 (11%) families reported the run to be late compared to previous years. 8 (14%) families were unable to report on run timing due to not specifically targeting sockeye yet.

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MIDDLE RIVER SUBSISTENCE REPORT:
Angie Morgan (Middle River Subsistence) in Aniak reported that for six days in a row her set nets caught zero fish (all species), until last night when she caught 1 Chinook. With a drift net, they caught zero fish. Their net upriver had only caught 3 chum and one small Chinook in one night. One fisherman reported catching 2 small chum and 1 Sheefish in a six hour period. People in Aniak are eager to start fishing and have been trying very hard to put away Chinook.

Lamont Albertson (Sport Fishing) said that fishing for Chinook in Aniak is "as dire as it's ever been." Even without the data, the absence is obvious. "There's not 50 kings on racks in all of Aniak."

Bob Aloysius (YK Delta RAC member) asked how many days it takes the fish to get from Eek to Bethel. Chuck Brazil (ADF&G Area Manager) responded that it is about 60 miles and takes 2 to 3 days. It takes two more days for them to get from Bethel to Aniak (so about a week from the mouth to Aniak). Bob reported an influx of sockeye and chum, so hopefully Chinook will arrive on Friday. People are very concerned and are all in favor of a closure. Especially in the bigger villages, we need to remember that the population of the Kuskokwim is growing so the harvest is higher. If the good drying weather does not hold, he reminded everyone not to overlook methods like salting and jarring.

Elsie Simeon (public member) reported that they are catching Sheefish in Aniak. She was worried that the first pulse passed because she and many others waited to fish.

KNA INSEASON SUBSISTENCE REPORT:
*Please see KNA weekly subsistence survey results for June 11 017, 2011, on pages 6-8 of this document.*

After the report, Stuart Currie (Processor, Kuskokwim Seafoods) asked for clarification on how the different salmon species are traditionally used. Members responded that the large kings are made into strips because their oil acts as a preservative. The sockeye dry out and are smaller.

UPPER RIVER SUBSISTENCE REPORT:
Ray Collins (Western Interior RAC member) reported that Blackwater Camp is getting fish, but did not have a report. He also mentioned that Headwaters subsistence member Daniel Esai is unable to attend meetings because of work, but that he would check with Nick Petruska about giving reports for future meetings.

HEADWATERS SUBSISTENCE REPORT: no report

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**KNA Weekly Subsistence Fishing Report June 11-17, 2011**

| Village | Name | Fishing Y/N | Gear Type | Mesh Size | Species Type: | How does the run compare to recent years? *NR= no response | Average # fish caught daily: |
|---|---|---|---|---|---|---|---|
| **Kalskag** | Family A | Yes | Drift Net | Dog Net | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Started fishing just recently, said that they caught 5 small kings, a couple chum, and a couple Shee fish. Fishing is way below average. Commented that the Commercial fishing should slow down near the mouth of the Kuskokwim. | | | | | | |
| | | | | | **Chinook** | Below Average | 5 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 2 week total |
| | Family B | Yes | Set Net | ? | **Sockeye** | NR | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Hasn't caught any fish in the set net so far. | | | | | | |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| | Family C | Yes | Set Net | ? | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Caught 13 kings and 1 Shee fish. Hasn't been catching very much, below average. | | | | | | |
| | | | | | **Chinook** | Below Average | 13 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |

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**KNA Weekly Subsistence Fishing Report June 11-17, 2011 (Continued)**

| Village | Name | Fishing Y/N | Gear Type | Mesh Size | Species Type: | How does the run compare to recent years? *NR= no response | Average # fish caught daily: |
|---|---|---|---|---|---|---|---|
| **Aniak** | Family D | Yes | Drift Net | 7" | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Made 3 drifts on Monday caught 0, Tuesday made 2 drifts caught 0, Wednesday made 3 drifts caught 2 jack Kings. Adequate weather. Said the fishing is terrible. Been fishing since 1981 never had so many drifts and catch nothing. Hopefully closer will give upriver more fish. | | | | **Chinook** | Below Average | 2 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |
| | Family E | Yes | Drift Net | 7" | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Drifted once yesterday caught 1 small king. | | | | **Chinook** | Below Average | 1 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |
| | Family F | Yes | Drift Net | 6" | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Saturday: 1 king, 1 Dog. Fishing is below average. | | | | **Chinook** | Below Average | 1 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 1 week total |
| **Chuathbaluk** | Family G | Yes | Drift Net | 7 1/4" | **Sockeye** | NR | 1 week total |
| | **Comments:** Interviewed: Thursday, 06-16-11 Fished on Monday and Wednesday caught a total of 3 small kings, 2 chums, and 1 red. Not sure if its average fishing. CHU usually starts getting fish about this time. | | | | **Chinook** | NR | 3 week total |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 2 week total |
| | Family H | Yes | Drift Net | ? | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Sunday: caught 6 small kings and 6 sheefish. Wednesday: No fish. Haven't fished since then. The run never really hit yet. | | | | **Chinook** | Below Average | 6 week total |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |

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**KNA Weekly Subsistence Fishing Report June 11-17, 2011 (Continued)**

| Village | Name | Fishing Y/N | Gear Type | Mesh Size | Species Type: | How does the run compare to recent years? *NR= no response | Average # fish caught daily: |
|---|---|---|---|---|---|---|---|
| **Crooked Creek** | Family I | Yes | Drift Net | 7" | **Sockeye** | Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Made one drift since last contacted. Good weather hopefully means good fishing. Thanks for closure downriver, upriver needs some fish too. | | | | | | |
| | | | | | **Chinook** | Average | 2 week total |
| | | | | | **Coho** | Average | 0 |
| | | | | | **Chum** | Average | 2 week total |
| | Family J | Yes | Drift Net | 5 3/4" | **Sockeye** | NR | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Fished on the 11th and on the 14th caught a total of 2 kings and 1 chum. Can't tell if it's normal or below fishing yet but seems like it. Said that they think commercial fishing cleaned out the river. | | | | | | |
| | | | | | **Chinook** | NR | 2 week total |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 1 week total |
| **Sleetmute** | Family K | Yes | Set Net | ? | **Sockeye** | NR | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 11th: caught 1 pike 12th: caught 1 lush and 2 pike. People have been catching kings up that way. Too early to tell if the fish run is normal or not. | | | | | | |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Stony River** | Family L | Yes | Fish Wheel | | **Sockeye** | Below Average | 0 |
| | **Comments:** Interviewed: Thursday, 06-16-11 Fish wheel has been going daily averaging 1-2 fish a day. 6 small white fish so far. No salmon yet, used to catch lots by now. Fishing is Below Average. Said the cup used to be full by now but the cup is 1/4 from empty. Not getting better. | | | | | | |
| | | | | | **Chinook** | Below Average | 0 |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |

**KNA Comments:** The following participant families have not started fishing yet: Sleetmute (1 family contacted), Chuathbaluk (1 family contacted), Kalskag (1 family contacted).

The following participant families have not been able to contact: Aniak (1 family), McGrath (1 family).

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**DISCUSSION OF RUN ASSESSMENT DATA:**

Chuck Brazil reported lower than average water level, increased water clarity as the water drops, and normal water temperature.

Even with the 4-day break in fishing last week, the BTF CPUE for Chinook is similar to 2008, 2009, and 2010 (and 2010 had very poor escapement and total run for Chinook.) We expected BTF abundance to increase steeply during the closure, but it did not. Instead, the line representing abundance is running parallel below the "not meeting escapement" lower confidence interval. Therefore, since BTF is about 40% lower than it needs to be, we are confident that we are not going to meet Chinook escapement goals on several river systems.

Chuck Brazil reminded the group of the great relationship between BTF indices and the escapement projects which was established at previous meetings, and which makes BTF cumulative CPUE a good indicator of potential Chinook escapement at the spawning grounds. Stuart Curry asked about Chinook run timing. ADF&G responded that today's date is historically the 40% to 45% passage point of the run; tomorrow is 50%.

Sockeye and chum abundance are good. We are about 15% into the sockeye run and the return is strong with good abundance. The chum CPUE jumped 64 points today and we are at 10% of the run.

**WEIRS/SONAR/MARK-RECAPTURE/AERIAL SURVEYS:**

Chris Shelden (ADF&G) reported that all the weir projects are on schedule, and two projects are counting fish. No Chinook have passed yet. Members requested having escapement goal graphs at the next meeting.

**WEATHER FORECAST:**

The forecast for the Kuskokwim Delta: partly cloudy with winds 10 to 20 mph (good drying weather). The marine forecast is N and NW winds 10 to 20 kts all week.

**ADF&G RECOMMENDATION:**

**Option 1:** To take no action or further closures. The only restrictions would be those already in place for the Kwethluk, Tuluksak, and Kisaralik Rivers and Kuskokuak Slough.

**Option 2:** To close District 1 subsistence fishing for 5 days from Thursday, June 23, until Monday June 27, to help meet escapement objectives. This closure would be during the 50% and 70% of the Chinook salmon run. 4-inch mesh nets not exceeding 60 feet in length would be allowed during this closure.

**WORKING GROUP MOTIONS:**

**MOTION 1**: Motion to suspend the rules in order to hear public input. **Motion passed** unanimously (10 Yeas, 0 Nays).

**MOTION 2:** Motion to support ADF&G Option 1, to take no action. **Motion failed** (3 Yeas, 5 Nays).

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COMMENTS FOR MOTION 2:

Tim Andrew (AVCP) said that a gear study on the Yukon showed that 6-inch mesh harvested a lower number of Chinook than other species. He wasn't sure how applicable this study would be to the Kuskokwim, due to the different sizes of Chinook on each river, but he proposed allowing 6-inch mesh to harvest more abundant sockeye and chum. ADF&G responded that BTF shows that more Chinook are caught in smaller mesh (5 3/8-inch) than in larger mesh (8-inch). So allowing 6-inch mesh during the closure would not help reduce the number of Chinook caught. Escapement savings may not increase because goals are based on numbers of fish. Eva Patton (ONC) said that the inseason surveys also showed that people have better catch-ability with smaller mesh.

Dan Gillikin (USFWS) reminded everyone that the primary goal is meeting escapement goals. The graph on page 10 of the Information Packet shows that we have been paralleling the lineof years when we did not meet escapements. We do not want to continue on this same trajectory.

George Alexie (Commercial Fisher) said that the river is deep, so he recommended that the lower W-1 area stay open for subsistence fishing because the fish can avoid the nets by going under them. ADF&G responded that we are trying to move fish past the entire lower river.

Mike Williams was concerned that fish camps that are in closed areas like Kuskokuak Slough have historically been able to fish at this time. Even though he is concerned about the resource, he supports Option 1.

James Charles supported Option 1 because someone he had talked to in Tuluksak was angry about the closures during good drying weather. Since the spring Anchorage meeting people expected restrictions but some still need to finish getting fish on their racks.

Stuart Currie commented that if there is no action, we will not meet escapement. He is a processor so of course he wants to go fishing, but we have to think about the future. He would support an action that allowed gear restrictions. Chair agreed with Stuart and stated that not meeting escapement would hurt for years to come. We have been looking at the data, and we need to take action.

Mike Williams stated that for thousands of years people only took what they needed. However, he is worried about "combat fishing" before the closure. The humane thing to do is to let people get their fish, but fish would not even have a chance of getting upriver.

Lamont Albertson commented that the folks upriver don't need to "wrap up" their fishing; they don't have any fish at all. He strongly disagrees with Option 1.

Bob Aloysius opposed the motion. The fishermen downriver were almost finished and the Bethel "combat fishing" was even more reason for closure. The population has gone way up and so has the harvest of Chinook salmon.

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**MOTION 3:** Motion to support ADF&G Option 2, but amend it to have a 5-day closure in District 1 beginning at 12:01 am Wednesday, June 22, until 11:59 pm Sunday, June 26. **Motion failed** unanimously (0 Yeas, 8 Nays).

**MOTION 4:** Motion to support ADF&G Option 2, a 5-Day subsistence fishing closure beginning at 12:01 am Thursday, June 23, and ending at 11:59 pm Monday, June 28. **Motion failed** (5 Yeas, 3 Nays).

**The department decided to adopt Motion 4 (ADF&G Option 2.)**

COMMENTS FOR MOTION 4:
ADF&G said that a closure during this time would protect Chinook while a large proportion of run was passing.

Chair was concerned that people would only have 48 hours to fish before the closure in good drying weather, instead of 72 hours.

Mike Williams does not think that District 1 "will scrape the river dry" before the closure and this motion will do more damage instead of giving salmon relief.

Fritz Charles suggested voting this motion down, and then making another that is only four days long. Many people were almost finished putting away fish in the good drying weather.

James Charles thought that we would not close the river again and he is not happy about this motion. Some people were commercial fishing in Quinhagak so they did not go subsistence fishing when they could have. ADF&G responded that they could not give an answer at the last meeting about future closures because they needed to look at the current data first.

**OLD BUSINESS:**
1.) In regard to fish being shipped out of Bethel and the possibility of implementing a reporting system, Ray Collins suggested bringing the issue to the August, 2011, Federal Subsistence Board meeting. Customary trade issues on the Yukon will be discussed, which could be an avenue for discussing the KRSMWG's idea of reporting salmon shipped out of the area.

COMMENTS:
The Chair reiterated that we still have no data on how many fish are shipped to other places. She had talked to Patty Wheeler with OSM, and Patty thought that it could be possible to have people report it but that it is not required.

Mike Williams said that due to the ANILCA consultation policy with tribal governments there needs to be a hearing on this issue. He felt that the State of Alaska and USFWS do not recognize tribal governments enough and the agencies should consult directly with the tribes. He would love to see a full-fledged hearing on this issue to create regulations. There needs to be a process in the United States where people are consulted on these issues.

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**NEW BUSINESS:** none

**GENERAL COMMENTS FROM WORKING GROUP MEMBERS:**

Mike Williams commented that ADF&G needs to be more culturally sensitive when dealing with issues. He did not think it was fair that the department decided to adopt Motion 4 even though the motion failed. He added that in the future there will be even more climate change and devastation, and he appreciates the KRSMWG and believes that it will ensure salmon for the future. Earlier in the meeting, Mike mentioned his concerned for the Kisaralik because people have fished there for the last 10,000 years, and now people use high-powered motors on it. He also said that the high seas fisheries that intercept Chinook should have to do some "damage repair."

Lamont Albertson commented that he has not heard much from the Sport Fish Division, especially since the Aniak River has much sport fishing pressure on it. John Chythlook responded that they would restrict sport fishing only if there were subsistence restrictions, and so far the subsistence restrictions have been for the lower river areas only.

Angela Morgan wished luck to people who have no fish and she thinks that these comments are important to future generations. Because of the population growth in the Kuskokwim area, she wondered if the department would consider increasing their escapement numbers in the future. She thanked ADF&G for its action today.

Fritz Charles talked about how the way of life has changed: "We have been doing this for thousands of years. Now we have bigger boats and longer nets, but before welfare came around 50 years ago, families used to put away 55-gallon drums full of Chinook. That was with the cotton mesh gear. Now everyone eats at the AC and village stores so they don't even need 100 fish, which would probably fit into four or five 5-gallon buckets." He felt that we are being punished for what the high-seas fisheries are catching. "Every fish counts."

Bob Aloysius wanted to applaud ADF&G and USFWS for the actions they took.

Ray Collins thought that the action was necessary. He reminded everyone that upriver, *no one* meets their needs. These are the people who have been making the biggest sacrifice. We have to get the fish upriver to meet escapement goals.

Chuck Brazil wanted to thank the KRSMWG for its discussion. He knows that it's important for people to meet their subsistence needs and closures are tough decisions for agency staff to make. However, the decisions are made in order to improve escapements.

Bev Hoffman knew it was a tough day for everyone up and down the river. However, she is "more sad for the king salmon that are having a hard time no matter what the reasons." If given the chance, she would have voted to close the fishery because we are not making escapement.

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## WORKING GROUP ATTENDANCE:

| MEMBER SEAT: | NAME: |
|---|---|
| UPRIVER ELDER | *Vacant* |
| DOWNRIVER ELDER | James Charles |
| COMMERCIAL FISHER | George Alexie **not present for all voting* |
| LOWER RIVER SUBSISTENCE | Mike Williams |
| MIDDLE RIVER SUBSTENCE | Angela Morgan |
| UPPER RIVER SUBSISTENCE | *Absent* |
| HEADWATERS SUBSISTENCE | *Absent* |
| PROCESSOR | Stuart Currie |
| MEMBER AT LARGE | Fritz Charles |
| SPORT FISHER | Lamont Albertson |
| WESTERN INTERIOR RAC | Ray Collins |
| Y-K DELTA RAC | Bob Aloysius |
| ADF&G | Charles Brazil |
| CHAIR | Beverly Hoffman |

**Other Participants:**

ADF&G Comm. Fish : Travis Elison, Jan Conitz, Alice Bailey, Holly Carroll, John Linderman, Dan Bergstrom, Zach Liller, Amy Brodersen, Chris Shelden
Sport Fish : John Chythlook, Tom Taube
Subsistence Division: David Runfola, Andrew Brenner, Ben Balivet, Dora Johnson

USFWS: Dan Gillikin, Robert Sundown, Tom Doolittle, Aaron Moses, Steve Miller
OSM: Pippa Kenner, Don Rivard, Rod Campbell, Alex Nick

| | |
|---|---|
| Tim Andrew, AVCP | Eva Patton, ONC |
| Jeff Sanders, Bethel | Alissa Joseph, ADF&G and ONC |
| Daniel Nelson, Napakiak | Maridon Boario, Senator Hoffman's office |
| Dave Cannon, Aniak | Doug Molyneaux |
| Tom Gould, Aniak NRCS | Casie Stockdale, AVCP |
| Shane Iverson, KYUK Bethel | Elsie Simeon, Aniak TC |
| La Donn Robbins, KNA | Nick Souza, CVS |

## GLOSSARY OF ACRONYMS:

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**KRSMWG or Working Group, WG**), Sustainable Escapement Goal (**SEG**), Biological Escapement Goal (**BEG**).

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**Summary of Subsistence Salmon Information Collected by ONC Technicians.**
Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week"? "ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

| | | Number of Families | | | Chinook salmon | | | Chum salmon | | | Sockeye salmon | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Week Ending | Inter-viewed | Fishing | Not Fishing | Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 2011 | Jun 05 | 36 | 11 | 25 | 36% | 36% | 0 | ND | ND | ND | 9% | 9% | 0 |
| | Jun 12 | 69 | 41 | 28 | 7% | 34% | 49% | 10% | 46% | 10% | 10% | 46% | 7% |
| | Jun 19 | 57 | 56 | 1 | 25% | 38% | 37% | 14% | 52% | 20% | 14% | 57% | 18% |
| 2010 | Jun 06 | 19 | 6 | 13 | 0 | 100% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 13 | 39 | 28 | 11 | 4% | 50% | 46% | 0 | 72% | 28% | ND | ND | ND |
| | Jun 20 | 26 | 23 | 3 | 9% | 65% | 26% | 0 | 100% | 0 | 0 | 96% | 4% |
| | Jun 27 | 37 | 37 | 0 | 3% | 73% | 24% | 3% | 92% | 5% | 5% | 81% | 14% |
| | Jul 04 | 38 | 36 | 2 | 8% | 69% | 22% | 14% | 78% | 8% | 3% | 69% | 28% |
| | Jul 11 | 20 | 11 | 9 | 0 | 91% | 0% | 27% | 64% | 0 | 18% | 55% | 18% |
| 2009 | Jun 07 | 20 | 6 | 14 | 0 | 67% | 33% | ND | ND | ND | ND | ND | ND |
| | Jun 14 | 43 | 38 | 5 | 29% | 50% | 21% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 21 | 44 | 44 | 0 | 41% | 36% | 23% | 0 | 100% | 0 | 0 | 86% | 14% |
| | Jun 28 | 36 | 31 | 5 | 39% | 55% | 6% | 3% | 77% | 9% | 6% | 71% | 23% |
| | Jul 05 | 36 | 5 | 31 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jul 12 | 36 | 2 | 34 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| 2008 | Jun 08 | 27 | 5 | 22 | 20% | 60% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 16 | 34 | 17 | 17 | 0 | 76% | 24% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 22 | 32 | 27 | 5 | 56% | 44% | 0 | 0 | 74% | 26% | 81% | 19% | 0 |
| | Jun 29 | 33 | 27 | 6 | 52% | 48% | 0 | 15% | 85% | 0 | 56% | 44% | 0 |
| | Jul 08 | 35 | 15 | 20 | 20% | 80% | 0 | 0 | 100% | 0 | 47% | 53% | 0 |
| | Jul 13 | 32 | 3 | 29 | 0 | 100% | 0 | 33% | 67% | 0 | 0 | 100% | 0 |
| 2007 | Jun 03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Jun 12 | 39 | 28 | 11 | 0 | 29% | 71% | ND | ND | ND | ND | ND | ND |
| | Jun 17 | 40 | 33 | 7 | 0 | 30% | 70% | ND | ND | ND | ND | ND | ND |
| | Jun 24 | 44 | 40 | 4 | 0 | 35% | 65% | ND | ND | ND | ND | ND | ND |
| | Jul 02 | 36 | 20 | 12 | 45% | 45% | 10% | 80% | 20% | 0 | 0 | 40 | 60% |
| | Jul 08 | 33 | 10 | 23 | 60% | 40% | 0 | 80% | 20% | 0 | 30% | 70% | 0 |
| | Jul 14 | 33 | 6 | 27 | 0 | 0 | 100 | 0 | 33% | 67% | 0 | 17% | 83% |
| 2006 | Jun 03 | 22 | 0 | 22 | 0 | 0 | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 10 | 32 | 19 | 13 | 32% | 68% | 0 | 0 | 0 | 0 | ND | ND | ND |
| | Jun 17 | 36 | 30 | 6 | 60% | 40% | 0 | 60% | 40% | 0 | 53% | 47% | 0 |
| | Jun 25 | 48 | 43 | 5 | 79% | 21% | 0 | 91% | 9% | 0 | 19% | 56% | 26% |
| | Jul 02 | 46 | 14 | 32 | 21% | 79% | 0 | 71% | 29% | 0 | 43% | 57% | 0 |
| | Jul 09 | 38 | 8 | 30 | 0 | 100% | 0 | 25% | 75% | 0 | 37% | 63% | 0 |
| | Jul 17 | 26 | 5 | 21 | 0 | 100% | 0 | 100 | 0 | 0 | 0 | 100% | 0 |

**ONC Inseason Subsistence Surveys**
**Current and Historic Catch Rate Information, 2011**

Appendix C6.–Meeting Summary, June 27, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

**June 27, 2011**

Called to order at 10:17 am at ADF&G in Bethel and adjourned at 12:55 pm. Ten of the thirteen members were present and a quorum was established.

**AGENDA ITEMS:**

1.) Continuing Business
2.) Old Business
3.) New Business
    1.) Gerald Simeon replaces Calvin Simeon as primary Middle River Subsistence member.

**WORKING GROUP ACTION ITEMS:**

1.) ADF&G will provide updated information at the next meeting regarding Chinook bycatch in the Pollock fishery and Chinook intercepted in Area M.
2.) ADF&G provide Kuskokwim salmon age classification information at the next meeting.

**MEETING ACTION ANNOUNCEMENT:**

The next KRSMWG meeting will be at 10:00 am Friday, July 1, 2011.

**ADF&G RECOMMENDATION:**

ADF&G recommended that effective at 12:01 am Wednesday, June 29, until 11:59 pm Thursday, July 7, subsistence salmon fishing be restricted in District 1 of the Kuskokwim River drainage. Subsistence fishing in District 1 would be allowed with gillnets not exceeding 6-inches in stretched mesh size, not more than 45 meshes deep, and not more than 50-fathoms in length.

**USFWS RECCOMENDATION:**

USFWS presented two recommendations that would not be district-wide. The proposed boundary would be from the mouth of the Kuskokwim River up to Kuskokuak Slough. USFWS recommended a subsistence fishing closure effective 12:01 am Wednesday, June 29, to 11:59 pm Friday, July 1. During this time, only 4-inch mesh nets not greater than 60 feet would be allowed. USFWS also recommended that this closure be followed by another subsistence fishing restriction effective 12:01 am Saturday, July 2 until 11:59 pm Thursday, July 7. During this time subsistence fishing would be allowed with mesh sizes 6-inches or less.

**WORKING GROUP MOTIONS:**

1.) Motion to suspend the KRSMWG rules in order to allow input from members of the public. Motion passed unanimously (10 Yeas, 0 Nays).
2.) Motion to support ADF&G recommendation (see above). Motion passed unanimously (8 Yeas, 0 Nays.)
3.) Motion to replace primary Middle River Member Calvin Simeon with Gerald Simeon. Motion passed unanimously (10 Yeas, 0 Nays).

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**PEOPLE TO BE HEARD:**

1.) Bev Hoffman (Chair) read an email from Mark Leary in Napaimute, who reported fishing improved after the closure. He said that people were feeling better about meeting their needs, but that there were not enough big kings.
2.) Bev was also contacted by Myron Naneng, who prefers meetings on Tuesdays and was concerned about "severe" restrictions and people being fined.
3.) Peter Green, a commercial and subsistence fisherman, was a KRSMWG member in 1989 during the "chum crash." At that time, he translated for elders at the meetings. Peter said that elders had much more input at meetings back then, and that traditional knowledge is still important today. He shared some knowledge from Kenneth Peter, an elder from Akiachak, who says that when the water is low the salmon will mingle at the mouth of the river and the tributaries. When Kenneth recently caught some larger kings, he noticed that they looked like they had been swimming in fresh water for a while.

**CONTINUING BUSINESS:**

LOWER RIVER SUBSISTENCE REPORTS:

Mike Williams (Lower River Subsistence member) reported that Alga Kinegak in Tuluksak said that about 50% of people had met their subsistence needs and that bigger fish had been showing up above Bogus Creek. Mike is about 75% done fishing in Akiachak, and in Akiak the majority of people are 30% to 50% finished. Mike reported smaller Chinook but an abundance of red salmon in Akiak. Overall, fishing looked good in reports up and down the area, especially since larger Chinook have been caught in 4-inch nets. He thinks that in the next few days many people will meet their subsistence needs.

Mike also reported that in Akiak there have been many concerns and complaints about the current closure. The Akiak elders called a meeting last week and convinced people to prepare to fish illegally during the closure. However, after Chuck Brazil (ADF&G Area Manager) talked with the community, the elders felt less desperate and decided not to go through with the protest fishery.

James Charles (Downriver Elder) reported that people in Tuntutuliak have enough fish. The only people who have not met their subsistence needs were those with motor problems. One reason that people have enough already is that it didn't take long to catch what they needed. For instance, a few days ago his chum net was out for fifteen minutes and he caught 11 Chinook, 11 chum, and 16 reds. James believes that the fish are milling around at the mouth of the Kuskokwim. He hopes that the current storm will push fish upriver. Tim Andrew (AVCP) agreed with what James Charles said about fish milling around at the mouth. He talked to someone from Quinhagak who said that there seems to be a high abundance of Chinook in the Bay.

IN-SEASON SUBSISTENCE REPORT:

*****Please see ONC 2011 Current and Historical Table at the end of the summary

**Kuskokwim River In-season Subsistence Catch Monitoring Report**
**Orutsararmiut Native Council**

Date June 25, 2011

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**Fishing reports from June 20 –June 24, 2011.**

| Families Surveyed | Families Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both |
|---|---|---|---|---|---|---|---|
| 49 | 44 | 31 | 6 | 7 | 24 | 11 | 8 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 6 | 10 | 28 | 9 | 16 | 15 | 10 | 26 | 4 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 3 | 23 | 9 | 1 | 29 | 6 | 2 | 32 | 1 |

**Comments:** Salmon Fishing was closed in the survey area for a 5-day Chinook conservation closure beginning 12:01 am Thursday, June 23, through 12:01 Tuesday, June 28. Thus, this survey report reflects subsistence fishing effort for the time-period of Monday, June 20, through Wednesday, June 22. 49 families were surveyed this week for the in-season subsistence monitoring program. 44 (90%) of the families were fishing this week. 5 (10%) of the families did not fish this week. 31 (70%) families reported using drift nets. 6 (14%) families reported using set nets. 7 (16%) families reported using both. 24 (55%) of the families fishing used gill nets greater than 6-inch mesh. Most using the greater than 6-inch category referred to using specifically 8-inch mesh called "king gear," but some indicated they were using 7-inch gear. 11 (25%) of the families reported 6-inch mesh or less. 8 (18%) families reported using both. 1 family interviewed said that the fisher was not present and they were not sure what size mesh was used that week.

Some interviewed this week had just completed their harvest goals for Chinook. Others had some Chinook drying on the rack but planned to fish more to meet their harvest goals for the year if there was an opportunity. Some indicated they did not have as much Chinook as they normally put up for their families for the year but planned to target more Sockeye to make up for the difference. A couple of elders that indicated they had started fishing at their normal time in mid-June had net or boat repairs that kept them from fishing during this 3-day subsistence opening. They were concerned about being able to catch enough kings for their extended family after the 5-day closure, since they only had a handful of Chinook so far. A few elders also expressed they were concerned about the rush to fish that occurred before the closure, both out of concern that few fish would pass through to spawning grounds and the difficulty to fish in usual places because the river was so congested with boats.

The majority of families interviewed were satisfied with caches so far and were well underway to meeting their salmon harvest goals for the season. Some families indicated that they were fishing a little less in order to conserve Chinook. Many planned to resume fishing for a few more kings and to target sockeye specifically after the closure to meet their family's salmon needs for the year. All families indicated the weather had still been decent for drying fish this week. Some families expressed concern that the weather would be rainy after the fishing closure which would make drying fish more prone to spoiling.

Some families were still reporting that they had switched to smaller mesh gear to target more abundant smaller Chinook and that they were catching fewer females than usual. A few fishers indicated that Chinook were getting

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smaller each year, even though many fishers caught larger and more female kings in the last day or two of the subsistence opening. A few families were already catching Chinook slightly blush with spawning colors.

**Chinook:**

**Catch rate:** Of the 44 families fishing this week, 6 (14%) families reported the Chinook catch as very good, 10 (22%) families reported the catch as normal, 28 (64%) families reported it as poor. Many fishers noted using 8-inch "king gear" but others noted they switched to smaller mesh gear (6-inch or 5.5-inch) to catch smaller kings and to prevent fish from hitting the net and getting through it. Some reported using both "king gear" and 6-inch or less to increase their catch rate because of the greater percentage of small kings. Most noted they had better catch rates of Chinook with the smaller size mesh this week but more fishers reported some larger Chinook showing up a day or two before the closure. Several fishers commented that the water levels were low and clear which may allow fish to see the nets or swim deeper. These fishers noted better catches at night with less visibility and an overall majority of catches near the bottom of the net just above the lead line.

**Run timing:** Of the 44 families that reported fishing this week, 3 (7%) families reported the run as early, 23 (52%) families reported the run timing as normal, and 9 (20%) families reported the run to be late this year. 9 (20%) families did not comment on run timing. Many noted their own fishing pattern was different this year due to the closures and so they felt they didn't have a good sense of what stage the run was at.

**Chum:**

**Catch Rate:** 9 (21%) families reported their catch rates as good. 16 (36%) families reported their catches as normal. 15 (35%) families reported their chum catches as poor. 4 (9%) families didn't report due to no chum catches yet or felt that catches were only a reflection of by-catch in 8-inch mesh.

**Run timing:** 1 (2%) family reported the run return as early. 29 (66%) families reported the salmon run timing as normal. 6 (14%) families reported the run to be late compared to previous years. 8 (18%) families were unable to report due to few chum catches yet.

**Sockeye:**

**Catch Rate:** 10 (23%) families reported their catch rates as good. 26 (59%) families reported their catch as normal. 4 (9%) families reported their sockeye catches as poor. 4 (9%) families didn't report due to not targeting sockeye yet. Some fishers indicated getting good catches of large robust sockeye this year and hoped to dry more sockeye to make up for smaller Chinook harvests.

**Run timing:** 2 (5%) families reported the run return as early. 32 (73%) families reported the salmon run timing as normal. 1 (2%) family reported the run to be late compared to previous years. 9 (20%) families were unable to report on run timing due to not specifically targeting sockeye yet.

MIDDLE RIVER SUBSISTENCE REPORT:

Wayne Morgan reported that people in Aniak started catching fish last Wednesday. At that time the average was six to ten good-sized (30 pound) fish. Then the numbers decreased when fishermen used smaller mesh. He reported mostly small fish (20 pounds or less) overall. Since June 17, two families with two boats and two nets caught only 45 Chinook with "king gear," only ten of which were over 30 pounds. Some reds and chums were caught, as well. Since then, the water rose and had much debris. Many people fished last weekend, but caught only a few fish for their effort.

KNA INSEASON SUBSISTENCE REPORT:

Please see KNA weekly subsistence survey results for June 18 through June 24, 2011, on pages 6-8 of this document. According to survey results, three households specifically mentioned that they supported the closures in District 1.

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UPPER RIVER SUBSISTENCE REPORT:
Ray Collins reported that fishing was slow and he had nothing specific to add to the KNA report.

Bob Aloysius (YK Delta RAC member) said that in Kalskag they were "catching sticks," and not Chinook. In nine drifts only three fish were over 30 pounds; five were less than twenty pounds; and some reds and chums were caught in Chinook gear. People were very frustrated. He reported that the most successful fishermen were using 7-inch gear.

HEADWATERS SUBSISTENCE REPORT: no report

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## KNA Weekly Subsistence Fishing Reports, June 18 to June 24, 2011

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Kalskag** | **FAMILY A** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Since last contacted, caught 6 reds, 13 kings, and 9 dogs. Said the fish numbers are going up. Would like to say thank you for whatever the working group is doing; it's working and much appreciated. | | | | | **Sockeye** | NR | 6 (week total) |
| | | | | | **Chinook** | NR | 13 (week total) |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 9 (week total) |
| **Kalskag** | **FAMILY B** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Since last contacted, caught 4 reds and 5 kings. Salmon run still below average. | | | | | **Sockeye** | Below Average | 4 (week total) |
| | | | | | **Chinook** | Below Average | 5 (week total) |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |
| **Aniak** | **FAMILY C** | Yes | Drift Net | 7", 5 ¼ " | | | |
| Comments:<br>Interviewed 06/24/11 Friday<br><br>Drifted using a 7" king net and a 5 ¼" red net. Caught 17 kings (1 female king so far), 41 chum, and 12 sockeye. Mentioned the fishing is still not good, there are hardly any big kings, they are all small. The closure downriver doesn't seem to be helping up here, we can barely see a change. | | | | | **Sockeye** | NR | 12 |
| | | | | | **Chinook** | NR | 17 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 41 |
| **Aniak** | **FAMILY D** | Yes | Drift Net | 6" | | | |
| Comments:<br>Interviewed: 06-24-11 Friday<br><br>Drifted 3 times and caught 3 sockeye, 1 Chinook and 19 chum. Mentioned there are usually more kings this time of year, Things seem to be below average. | | | | | **Sockeye** | Below Average | 3 (week total) |
| | | | | | **Chinook** | Below Average | 1 (week total) |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | Below Average | 19 (week total) |
| **Aniak** | **FAMILY E** | Yes | Drift Net | 6" | | | |
| Comments:<br>Interviewed 6/23/11 Thursday<br><br>Have been fishing on and off since last contacted. Caught 5 chum and 2 jack kings. The numbers are below average for the king salmon and the kings caught are all small. | | | | | **Sockeye** | Below Average | 0 |
| | | | | | **Chinook** | Below Average | 2 (week total) |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 5 (week total) |

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**KNA Weekly Subsistence Fishing Reports, June 18 to June 24, 2011 (Continued)**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Chuathbaluk** | **FAMILY G** | Yes | Drift Net | "dog" | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Just started drifting, only caught 2 kings so far. The closure was good to have again because there's hardly any fish upriver. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 2 (week total) |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Chuathbaluk** | **FAMILY H** | Yes | Drift Net | 7 ¼" | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Since last contacted, caught 27 kings, 50 dogs, and 20 reds. Fishing is picking up and doing better with the closure down river. | | | | | **Sockeye** | NR | 20 |
| | | | | | **Chinook** | NR | 27 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 50 |
| **Crooked Creek** | **FAMILY I** | Yes | Drift Net | 7" | | | |
| Comments:<br>Interviewed: 06-22-11 Wednesday<br><br>Monday: 2 drifts caught 1 dog.<br>Way below average. | | | | | **Sockeye** | Below Average | 0 |
| | | | | | **Chinook** | Below Average | 0 |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 1 (week total) |
| **Crooked Creek** | **FAMILY J** | Yes | Drift Net | 5 ¾" | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>In the past week have caught a total amount of 6 kings, 3 dogs, and 1 red. Fishing is still below average. | | | | | **Sockeye** | Below Average | 1 (week total) |
| | | | | | **Chinook** | Below Average | 6 (week total) |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 3 (week total) |
| **Sleetmute** | **FAMILY K** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed: 06-23-11 Thursday<br><br>Caught 8 kings and 1 red in this last week. Would say for sure the salmon size is below average. Below average fishing. | | | | | **Sockeye** | Below Average | 1 (week total) |
| | | | | | **Chinook** | Below Average | 8 (week total) |
| | | | | | **Coho** | Below Average | 0 |
| | | | | | **Chum** | Below Average | 0 |

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**KNA Weekly Subsistence Fishing Reports, June 18 to June 24, 2011 (Continued)**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Stony River** | **FAMILY L** | Yes | Fish Wheel | NR | | | |
| Comments:<br>Interviewed: 06-23-11<br><br>Caught 3 small female kings since last contacted. Still below average for fishing. Said KNA doing this report is a good idea because it lets people know how bad fishing is upriver. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 3 (week total) |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |

**KNA Comments**:

The following participant families have not been able to contact:
Aniak (1 family), McGrath (1 family)

The following participant families have not started fishing yet:
Sleetmute (1 family contacted)

## DISCUSSION OF RUN ASSESSMENT DATA:

### BETHEL TEST FISH:

The Crooked Creek water gauge has been working intermittently but the water level has been rising. Water temperature fluctuated from average to below average, and water visibility remains clear.

Chinook run passage is currently at 70%. According to the BTF CPUE, we are about 37 points below the lower confidence interval of not meeting Chinook escapement goals.

Sockeye run passage is at 48%. Sockeye abundance is good and better than the last five years. Chum run passage is at 25% with good abundance as the run continues to build.

### WEIRS/SONAR/MARK-RECAPTURE/AERIAL SURVEYS:

Chris Shelden (ADF&G) reported that the Tuluksak weir was operational on June 25th but had no salmon pass yet. Water on the Kwethluk River was still high and the site will be assessed for weir installation in a few days. Aniak sonar began operation this week, and weirs were operational on the George, Tatlawiksuk, and Kogrukluk Rivers.

Chinook numbers at the George River are looking better than recent years. Kogrukluk had the earliest installation since 2005 but it was too early for any salmon passage. Chris pointed out that out of four weirs with escapement goals, Kogrukluk was the only one that met Chinook goals in 2010.

For Chum salmon, the passage at the George River weir is currently higher than any of the years when escapement goals were not met.

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COMMMENTS:
Wayne Morgan (Middle River Subsistence) commented that even with the closure, the cumulative Chinook CPUE was still low. ADF&G staff replied that yes, he was correct.

Ray Collins (Western Interior RAC) asked about 2010 aerial surveys on the Pitka Fork of the Salmon River. Chris Shelden responded that bad weather made the surveys lower quality, but still useable. It was further stated that visibility, when poor, affects aerial assessments of abundance on all rivers.

Jeff Sanders asked if ADF&G managed the 6-year old age class of the Chinook. Chris Shelden replied that no, the agency manages based on numbers of fish. Jeff asked why, since age classes of all salmon species except for pinks can be assessed by weir projects. ADF&G explained that weirs cannot provide this age data early enough in the run, due to the distance between BTF and the different projects. The only age data available inseason is from the previous year.

Wayne Morgan asked when fish are counted at weirs. Chris Shelden responded that counting occurs during daylight hours, usually 8 am through 11 pm. Counting is not constant and it stops during ASL sampling. Dan Gillikin (USFWS) added that Tuluksak is a video weir that counts 24 hours a day. Travis Ellison (ADF&G) added that the highest Chinook passage is between 8 pm and midnight. Chris commented that at Kogrukluk, in the past, counting was done at night with lights, but when they compared counting 24 hours a day with the daylight passage, the numbers were not significantly different.

**PROCESSOR REPORT:**
Stuart Currie (Kuskokwim Seafoods) has finalized preparations and is ready to process.

**SPORT FISH REPORT:**
John Chythlook (Sport Fish) did not have much to report for the mainstem Kuskokwim, but he heard that sport fishing had been good on the Kanektok and Goodnews Rivers. No reports yet from fishers in the Aniak area.

**WEATHER FORECAST:**
Showers in the Bethel area. 30-40 mph winds in Tuntutuliak.

**ADF&G RECOMMENDATION:**
Effective at 12:01 am Wednesday, June 29, 2011 until 11:59 pm Thursday, July 7, 2011, subsistence salmon fishing is restricted in District 1 of the Kuskokwim River Drainage. Subsistence fishing in District 1 is allowed with gillnets not exceeding 6-inches in stretched mesh size. Nets may not be more than 45 meshes deep and not more than 50-fathoms in length. *It was clarified that District 1 consists of waters upstream of a line from Apokak Slough to the southernmost tip of Eek Island to the Popokamiut, upstream to Bogus Creek.*

**USFWS RECOMMENDATION:**
USFWS presented two recommendations that would not be district-wide. The proposed area affected would be from the mouth of the Kuskokwim River up to Kuskokuak Slough. USFWS recommended a subsistence fishing closure effective 12:01 am Wednesday, June 29, until 11:59 pm Friday, July 1. During this time, only 4-inch mesh nets not greater than 60 feet would be allowed. This closure would be followed by another restriction effective 12:01 am Saturday, July 2, until 11:59 pm Thursday, July 7. During this time subsistence fishing with 6-inch or smaller mesh would be allowed.

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**WORKING GROUP MOTIONS:**

**MOTION 1**: Motion to suspend the KRSMWG rules in order to allow input from members of the public. Motion passed unanimously (10 Yeas, 0 Nays).

**MOTION 2**: Motion to support ADF&G recommendation (see above). Motion passed unanimously (8 Yeas, 0 Nays) (*Middle River Subsistence Member not present for the vote*.). USFWS will negotiate with the state about taking further federal action.

COMMENTS FOR MOTION 2:

Stuart Currie asked for clarification on run passage and how BTF CPUE applies to tributaries of concern. Kevin Schaberg (ADF&G) said that Chinook passage on today's date historically is at 71%, and on July 6 it will be at 90%. Since the run is composed of mixed stocks, it is difficult to tell how harvest will affect individual stocks.

Dave Cannon questioned ADF&G's recommendation as a conservation tool, since it had been mentioned at previous meetings that smaller mesh can have greater Chinook catch efficiency. Chuck Brazil responded that the higher density of chum and sockeye will prevent too many Chinook from being caught in 6-inch mesh at this time in the season.

Casie Stockdale (AVCP) asked why ADF&G proposed restrictions for the whole district, and ADF&G explained that the Tuluksak River, which still has a conservation concern, is located at the upper end of District 1.

Stuart Currie was concerned that people may waste the other species while trying to target Chinook. Chuck replied that he hopes that people will use the opportunity to supplement their Chinook harvest with sockeye and chum. Alissa Joseph (ONC) agreed with Chuck and said that even when people are targeting Chinook, they use other stocks and nothing is wasted. Chair said she also used chum for making strips (instead of the traditional kings) this year because of the conservation concern.

USFWS was still very concerned about escapement on tributaries in the conservation unit. Tom Doolittle (USFWS) objected to ADF&G's recommendation because he felt that it would not allow enough large Chinook salmon to reach spawning grounds. He stated that offspring from larger females have better survival rates, which is why getting these females upstream is especially important. Bev Hoffman argued that they have had a 4-day closure and a 5-day closure, which should have allowed many fish to get upstream. The fish catches from downriver showed that people are only 50% to 75% finished, and further restrictions will create more hardships for those who need to finish filling their fish racks. Henry Lupie agreed with the Chair, and reminded the group that many people cooperated with the first two closures. He was concerned that some people would be reluctant to go along with another closure and thought that the 6" mesh restriction was a more reasonable alternative than the 4" mesh restriction.

James Charles agreed with the ADF&G recommendation. After the discussion, Mike Williams agreed, as well.

Stuart Currie asked Chuck Brazil if he knew when a commercial fishing opener would be possible. Chuck could not give an immediate answer but would get back to him as soon as possible.

**MOTION 3**: Motion to replace primary Middle River Subsistence Member Calvin Simeon with Gerald Simeon. Motion passed unanimously (10 Yeas, 0 Nays).

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**GENERAL COMMENTS:**

Regarding the discussion earlier in the meeting about fish possibly milling around the mouth of the river and the impact of commercial fishing in Kuskokwim Bay on river-bound Chinook, Travis Ellison (ADF&G) explained that most information regarding Kuskokwim River-bound fish harvested in Quinhagak came from Ray Baxter's 1969-1970 study. District 4 Chinook were tagged and released by commercial fishermen for the study, and results showed that in 1969, 0.6% of tagged fish were recaptured in the Kuskokwim River; in 1970 0.9% were recaptured in the river. If the high estimate of 0.9% is applied to the 2010 District 4 commercial harvest of 14,230 Chinook, then only 128 Chinook bound for the Kuskokwim River were harvested in District 4 last year.

Members voiced their concern for Chinook caught in high seas fisheries and in Area M. Henry Lupie said that in the future the KRSMWG should have a management agreement with the high seas fisheries. Confrontations between Yukon and Kuskokwim communities and law enforcement happened in the 1970's, and Henry "would hate to see the same thing happen again on the Kuskokwim." George Alexie requested that ADF&G present data at the next meeting regarding Chinook bycatch in Area M. Henry Lupie also wanted this information, and asked if the fish are retained or thrown away. Mike Williams agreed that heavier measures need to be taken in the high-seas. In regard to these issues, Doug Molyneaux responded, "Kuskokwim River (and Yukon River) Chinook spend their entire marine residency in the Bering Sea, not in the Gulf of Alaska. It is unlikely that many of the Area M Chinook….would include Kuskokwim (or Yukon) Chinook….By the time the Area M fishery occurs, nearly all Kuskokwim (and Yukon) Chinook should be more than halfway across the Bering Sea en route to these rivers." Additionally, Molyneaux mentioned the WASSIP genetics study, but it was corrected after the meeting that this study only addresses chum and sockeye, not Chinook.

Henry Lupie suggested that something to consider for next year is Tuntutuliak's concern about fishing closures during good drying weather. However, he was happy that the KRSMWG voted in favor of ADF&G's recommendation.

Ray Collins thanked downriver communities for enduring the closures. Gerald Simeon said that we all have to get our fish, and wanted to thank downriver, as well.

Bob Aloysius would like agency recommendations to be decided upon prior to meetings. However, the Chair reminded him that the agencies want to take the data and member input from the meeting into consideration, which is why the mid-meeting caucuses are necessary.

Stuart Currie empathized with subsistence fishermen meeting their needs. However, he is also concerned about keeping a commercial fishing operation on the Kuskokwim River because of its positive impact on the community. "It is now on the verge of becoming as endangered as the Kwethluk and Tuluksak king salmon are," which is unfortunate because for ten years there was no commercial fishery and they worked hard to bring it back.

Mike Williams stated that "by using tribal governments and elders we can achieve much with conservation." The elders from Akiak say to only take what we need, and we need to continue to respect traditional knowledge. Communities should take proper protocols when fishing. He strongly recommended that ADF&G and USFWS travel to villages to talk to people, because miscommunication is the greatest enemy. He said that we need to look at why the Yukon and Kuskokwim are having trouble. Finally, he commented that since this area is economically poor, commercial fishing effort should be applauded for providing economic opportunity to local communities.

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James Charles commented that in the past, announcements made by the department were more clear and gave more notice. They were even in the Delta Discovery newspaper sometimes. People from up and down the river have been calling him to complain about the short notices. He also thinks that advanced notification will prevent citations. Robert Sundown (USFWS) suggested that people use the 24-hour recording available at 907-543-2433, which is updated as soon as ADF&G takes any action. ADF&G said that they will also send out the information by phone, fax, KYUK radio, and through the email news release system.

Bev Hoffman commented that nine total days of closure was "a hard chip." She wants ADF&G and USFWS to work together "with clear minds" in order to get the word out ASAP. She added that because of the rainy weather, we need to be very vigilant about taking care of our fish so that they don't spoil.

**WORKING GROUP ATTENDANCE:**

| **MEMBER SEAT:** | **NAME:** |
|---|---|
| UPRIVER ELDER | *Vacant* |
| DOWNRIVER ELDER | James Charles |
| COMMERCIAL FISHER | George Alexie |
| LOWER RIVER SUBSISTENCE | Mike Williams |
| MIDDLE RIVER SUBSTENCE | Wayne Morgan |
| UPPER RIVER SUBSISTENCE | *Absent* |
| HEADWATERS SUBSISTENCE | *Absent* |
| PROCESSOR | Stuart Currie |
| MEMBER AT LARGE | Henry Lupie |
| SPORT FISHER | Beverly Hoffman |
| WESTERN INTERIOR RAC | Ray Collins |
| Y-K DELTA RAC | Bob Aloysius |
| ADF&G | Chuck Brazil |
| CHAIR | Beverly Hoffman |

| **Other Participants:** | |
|---|---|
| ADF&G Comm. Fish : Chuck Brazil, Kevin Schaberg, Christopher Shelden, Holly Carroll, Alice Bailey, Scott Ayers, Travis Elison<br>Sport Fish : John Chythlook, Tom Taube<br>Subsistence Division: Dora Johnson, Hiroko Ikuta, David Runfola, Andrew Brenner | |
| USFWS: Dan Gillikin, Tom Doolittle, Robert Sundown, Steve Miller<br>OSM: Alex Nick, Don Rivard, Rod Campbell, Ken Harper | |
| Doug Molyneaux<br>Shane Iverson, KYUK<br>Carl Berger<br>Ron Kaiser<br>Jeff Sanders<br>Peter Green<br>Jolie Morgan<br>Paul Jacobs<br>Dave Cannon, Aniak | La Donn Robbins, KNA<br>Gerald Simeon, (new) Middle River Subsistence member<br>Elsie Simeon, Aniak TC Administrator<br>Fritz Charles, Member at Large<br>Alissa Joseph, ADF&G Board Support and ONC<br>Iyana Dull, ONC<br>Eva Patton, ONC<br>Casie Stockdale, AVCP<br>Tim Andrew AVCP |

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## GLOSSARY OF ACRONYMS:

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**KRSMWG or Working Group, WG**), Sustainable Escapement Goal (**SEG**), Biological Escapement Goal (**BEG**).

**ONC Inseason Subsistence Surveys – 2011 Current and Historical Catch Rate Information**

Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week?"
"ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

| | | Number of Families | | | Chinook salmon | | | Chum salmon | | | Sockeye salmon | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Week Ending | Inter-viewed | Fishing | Not Fishing | Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 2011 | Jun 05 | 36 | 11 | 25 | 36% | 36% | 0 | ND | ND | ND | 9% | 9% | 0 |
| | Jun 12 | 69 | 41 | 28 | 7% | 34% | 49% | 10% | 46% | 10% | 10% | 46% | 7% |
| | Jun 19 | 57 | 56 | 1 | 25% | 38% | 37% | 14% | 52% | 20% | 14% | 57% | 18% |
| | Jun 26 | 49 | 44 | 5 | 14% | 22% | 64% | 21% | 36% | 34% | 23% | 59% | 9% |
| 2010 | Jun 06 | 19 | 6 | 13 | 0 | 100% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 13 | 39 | 28 | 11 | 4% | 50% | 46% | 0 | 72% | 28% | ND | ND | ND |
| | Jun 20 | 26 | 23 | 3 | 9% | 65% | 26% | 0 | 100% | 0 | 0 | 96% | 4% |
| | Jun 27 | 37 | 37 | 0 | 3% | 73% | 24% | 3% | 92% | 5% | 5% | 81% | 14% |
| | Jul 04 | 38 | 36 | 2 | 8% | 69% | 22% | 14% | 78% | 8% | 3% | 69% | 28% |
| | Jul 11 | 20 | 11 | 9 | 0 | 91% | 0% | 27% | 64% | 0 | 18% | 55% | 18% |
| 2009 | Jun 07 | 20 | 6 | 14 | 0 | 67% | 33% | ND | ND | ND | ND | ND | ND |
| | Jun 14 | 43 | 38 | 5 | 29% | 50% | 21% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 21 | 44 | 44 | 0 | 41% | 36% | 23% | 0 | 100% | 0 | 0 | 86% | 14% |
| | Jun 28 | 36 | 31 | 5 | 39% | 55% | 6% | 3% | 77% | 9% | 6% | 71% | 23% |
| | Jul 05 | 36 | 5 | 31 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jul 12 | 36 | 2 | 34 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| 2008 | Jun 08 | 27 | 5 | 22 | 20% | 60% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 16 | 34 | 17 | 17 | 0 | 76% | 24% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 22 | 32 | 27 | 5 | 56% | 44% | 0 | 0 | 74% | 26% | 81% | 19% | 0 |
| | Jun 29 | 33 | 27 | 6 | 52% | 48% | 0 | 15% | 85% | 0 | 56% | 44% | 0 |
| | Jul 08 | 35 | 15 | 20 | 20% | 80% | 0 | 0 | 100% | 0 | 47% | 53% | 0 |
| | Jul 13 | 32 | 3 | 29 | 0 | 100% | 0 | 33% | 67% | 0 | 0 | 100% | 0 |
| 2007 | Jun 03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Jun 12 | 39 | 28 | 11 | 0 | 29% | 71% | ND | ND | ND | ND | ND | ND |
| | Jun 17 | 40 | 33 | 7 | 0 | 30% | 70% | ND | ND | ND | ND | ND | ND |
| | Jun 24 | 44 | 40 | 4 | 0 | 35% | 65% | ND | ND | ND | ND | ND | ND |
| | Jul 02 | 36 | 20 | 12 | 45% | 45% | 10% | 80% | 20% | 0 | 0 | 40 | 60% |
| | Jul 08 | 33 | 10 | 23 | 60% | 40% | 0 | 80% | 20% | 0 | 30% | 70% | 0 |
| | Jul 14 | 33 | 6 | 27 | 0 | 0 | 100 | 0 | 33% | 67% | 0 | 17% | 83% |
| 2006 | Jun 03 | 22 | 0 | 22 | 0 | 0 | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 10 | 32 | 19 | 13 | 32% | 68% | 0 | 0 | 0 | 0 | ND | ND | ND |
| | Jun 17 | 36 | 30 | 6 | 60% | 40% | 0 | 60% | 40% | 0 | 53% | 47% | 0 |
| | Jun 25 | 48 | 43 | 5 | 79% | 21% | 0 | 91% | 9% | 0 | 19% | 56% | 26% |
| | Jul 02 | 46 | 14 | 32 | 21% | 79% | 0 | 71% | 29% | 0 | 43% | 57% | 0 |
| | Jul 09 | 38 | 8 | 30 | 0 | 100% | 0 | 25% | 75% | 0 | 37% | 63% | 0 |
| | Jul 17 | 26 | 5 | 21 | 0 | 100% | 0 | 100 | 0 | 0 | 0 | 100% | 0 |

Appendix C7.–Meeting Summary, July 1, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

**July 1, 2011**

Meeting was called to order at 10:05 am at ADF&G in Bethel and adjourned at 1:22 pm. The meeting began with eight of the thirteen members, but by voting time only six members were present and a quorum could not be established. Due to the length of the meeting, the agenda was not entirely addressed. Old business and new business items will be discussed at the next meeting.

**AGENDA ITEMS:**
1.) Continuing Business

**WORKING GROUP ACTION ITEMS:** none

**MEETING ACTION ANNOUNCEMENT:**
The next KRSMWG meeting will be at 10:00 am on Wednesday, July 20, at ADF&G in Bethel.

**ADF&G RECOMMENDATIONS:**
Subdistrict 1-B within District 1 opens to commercial salmon fishing for 4 hours from 12:00 pm until 4:00 pm on Tuesday, July 5, 2011. On Thursday, July 7, 2011, Subdistrict 1-A within District 1 opens to commercial salmon fishing for 3 hours from 12:00 pm until 3:00 pm. Salmon may be taken with 6-inch or smaller mesh not exceeding 50 fathoms in length. Processors will not purchase any Chinook salmon. All Chinook salmon must be kept for subsistence use and recorded on the ADF&G fish ticket.

**WORKING GROUP MOTIONS:**
***Note:*** *Even though there was not a quorum, Chairs wanted to "informally" support these motions.*
1.) Motion to support ADF&G commercial fishing recommendation (see above). Motion passed unanimously (6 Yeas, 0 Nays).
2.) Request that federal subsistence closures and restrictions be lifted immediately. Motion passed unanimously (6 Yeas, 0 Nays).

**PEOPLE TO BE HEARD:**
***Note:*** *Please see the two USFWS documents included at the end of the summary. The first document was presented by Tom Doolittle, acting refuge manager for Gene Peltola, Jr. The second document was presented by Dan Gillikin, USFWS fisheries biologist.*

1.) USFWS gave a presentation explaining recent federal actions on the Kuskokwim River watershed within YK Delta conservation boundaries effective 12:01 am Thursday, June 29, through 11:59 pm Saturday, July 2, 2011.

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DISCUSSION:

*Two hours of discussion followed the USFWS presentation.*

James Charles (Downriver Elder) commented that people were not happy with the federal closures because they didn't know where federal waters were. "We know the Kuskokwim River, but water is water to us." Short notice "Special Action" closures surprise people and many do not get the message in time. James was gone commercial fishing in Quinhagak and when he came back he went subsistence fishing in front of Tuntutuliak, not knowing about the federal actions. "That broke my record. I am 71 and my record was clean of being a criminal, but I am a criminal now and that made me upset." He didn't get cited but is reporting it himself, even though he was fishing for chums and didn't catch any Chinook. Tom Doolittle (USFWS) replied that these Chinook conservation "special actions" are rare, and USFWS made extensive outreach effort by email, faxes, and phone calls to villages. Dan Gillikin also went to Napaskiak by special request last night. James Charles said that he was commercial fishing and "did not have a computer in his boat." Before he left to go fishing, he had broadcasted the ADF&G 6-inch mesh restriction on the radio. Dan Gillikin then explained the USFWS boundaries. USFWS is limited to federal boundaries, which are different than ADF&G commercial fishing boundaries. There were no good physical landmarks, so USFWS used GPS coordinates.

George Alexie (Commercial Fisher) asked, "Who owns the river?" If the feds want actions to be noticed, they should go to the village councils. He understood the state's recommendation of 6-inch mesh or smaller which was supported unanimously at the last meeting, but this federal closure made things very confusing. George said that Chinook season was over and people should be able to fish for sockeye and chum now. He finished by saying, "subsistence life is not easy" and "no one can control what swims under the water." Tom Doolittle responded that the federal government has the ability to supersede the state, even though that seldom happens.

Stuart Currie (Processor) asked if there are any remaining trigger points. Dan Gillikin answered that there is one more assessment point regarding weir escapement, but there were no more trigger points based on BTF passage. Stuart asked if the feds disagreed with commercial fishing, and Dan clarified that USFWS supports commercial openings.

Fritz Charles (Member at Large) asked where federal waters start and stop, and USFWS replied that all Kuskokwim River tributaries flowing through the conservation unit are included. Federal jurisdiction is from south of Eek Island up to the entire Aniak River drainage. Fritz stated that he supports conservation, but asked why a closure was necessary for such a small percentage of the Chinook run, especially since we will not meet escapement anyway. Tom Doolittle replied that an additional 600-700 Chinook could make a difference, plus their spawning and dying will add nutrients and improve a river system's ability to produce salmon. He continued, "We are very fortunate. This is one of the last great places for Chinook runs, and we are starting to see some of the problems that other Chinook fisheries have seen throughout the Pacific Rim." He said that the latest federal actions were purely a conservation effort targeted at the Lower Kuskokwim to allow more salmon escapement upriver at other watersheds. Fritz replied that conservation "should be the whole river." He does not think that lower river tributaries should have to "pay the price" while upriver is not restricted. Dan Gillikin replied that the federal actions took place on the lower river because that is where federal jurisdiction is. Furthermore, the majority of the subsistence harvest is below Bethel. USFWS had to use a "blunt tool" of conservation, because they do not have the ability to select specific areas within the refuge. Dan reiterated his point about trying to meet escapement, especially because of the large females swimming upriver right now. "Maybe we won't make our goal, but maybe we might not fall as short."

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Fran Rich questioned the value of weirs as an assessment tool. Dan Gillikin responded that even though weirs can sometimes be difficult to operate, depending on conditions, variability in data can be addressed by expanding estimates and using regressions to estimate fish that have not been counted. Other tools may be used, as well. On the Kwethluk River, for example, aerial surveys have been used and a good relationship exists between aerial surveys and weirs. BTF remains an important inseason management tool. Doug Molyneaux responded to Fran by urging him not to dismiss the weirs, because high water and other problems only happen for a few days out of the season. The agencies have worked hard on escapement models which is why multiple tools exist (inseason BTF and ONC inseason surveys are used before weirs). He stated that weirs should not be undermined because they are valuable.

Beverly Hoffman (Sport Fishing) was upset about the federal actions. She commented that she has been to all of the meetings and has been able to relate to all the ADF&G restrictions and closures. In fact, she felt that the KRSMWG truly processed the data presented by ADF&G and USFWS at the last meeting, and afterwards the KRSMWG unanimously agreed with the ADF&G recommendation instead of the USFWS recommendation. Bev was upset that USFWS did not come forward at that time with their intent to override state regulations. "We might be just an advisory people, this Kuskokwim Working Group, but we are volunteers to you. Our credibility to take the message forward gets shot down when you don't acknowledge what we bring to the table… I felt like we were on the right track." Bev urged them not to use aerial counts from the Kisaralik and Kwethluk River because of murky water. Finally, she told USFWS "Don't create an upriver/downriver thing. We have worked so damn hard to work together for the better of the fish. Now it ends up that you folks can come in and undo it all. Don't think that we don't want to save the king [salmon]. We know that we have the best damn river in the state of Alaska and we know that we have a great resource."

Mike Williams (Lower River Subsistence) commented that the sudden federal action was not taken lightly in the villages. Questions were directed to him as a KRSMWG member, and he described people as being in a "tail spin" because of such huge confusion. Mike stated that people have had a greater commitment to conservation this year and they already had experienced nine days of closures. He thinks that BTF is the most reliable management tool, and he agreed with the ADF&G 6-inch mesh restriction. He knows that the tools are not perfect but up until the federal closure people were happily fishing. Mike also said that USFWS needs to consult with tribal governments before federal actions affect their way of life. Formal consultation between tribal governments and the federal government should be *mandatory*. Like James Charles, he was away from the internet or cell service when the closures were announced, and better communication would have helped greatly. Mike finished by saying that everyone is working hard to conserve Chinook through the KRSMWG meetings and these conversations need to continue.

Tim Andrew (AVCP) suggested that ADF&G and USFWS announce regulations twice a day on KYUK radio in Bethel, because frequent radio announcements about closures seem to work well on the lower Yukon.

Gerri Sumpter (Senator Murkowski's office) asked how many times USFWS has implemented closures. Dan Gillikin replied that in 2010 the Kwethluk and Tuluksak Rivers were closed to subsistence fishing to non-federally qualified users. However, after implementing these closures, USFWS discovered that federal closures must be for the entire conservation unit and not specific areas, unless decided pre-season. **Note:** See USFWS document on pages 21 - 22 of this document, "Subsistence Fishing Schedule and History."

Beverly Hoffman asked if sport fishing was closed. John Chythlook (ADF&G Sport Fish) replied that sport fishing for salmon was closed on the Aniak River (and also closed on the mainstem in areas of

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federal closures). Bev then asked if commercial fishing was still allowed in the Bay, and Dan Gillikin replied that the Kuskokwim Bay was out of the USFWS jurisdiction.

Tom Doolittle then presented a resolution from the Traditional Council of Crooked Creek in full support of the federal closure, and said that Napaimute also had made a resolution supporting the closure. Beverly Hoffman asked if these resolutions were solicited, and Dan Gillikin said that they were solicited by the refuge manager. Dan also stated that he went to Napaskiak and received a resolution signed by 144 community members who did not support the closure. Mike Williams stated that the entire community of Akiak opposed the closure, as well.

Stuart Currie asked if USFWS had any plans to refine their management tools. Dan Gillikin replied, "We were hoping to never be at this point, with this blunt tool, but as we evaluate this year's fishery and the actions that we took and develop refined strategies, then that would be the time to go to the Board [of Fish] and see if we can adjust our authorities and accommodate that."

Robert Sundown (USFWS) disagreed with comments about USFWS's lack of communication effort. He pointed out that the lack of agreement with the state was the primary source of confusion. As far as effort, faxes were sent to all the villages, KYUK did a feature story the day before the closure, and the Tundra Drums posted something, as well.

**PEOPLE TO BE HEARD (Continued)**

2.) Timothy Andrew (AVCP) voiced concern about Chinook runs declining state-wide. "This is such a valuable economic, social, and subsistence resource….If we lose it is an incredible loss." Possible factors could be quality of escapement, the current changing environment, the Bering Sea ecosystem, the trawl fishery's parametric "boot strapping" method of estimating Chinook bycatch, or changes to spawning grounds. He stated that we might not know exactly what is happening, but we need to find out as an interdisciplinary group and take management action.

3.) Henry Kohl (member of the public) stated, "This is the Working Group, and one decision should come out of here, not two."

**CONTINUING BUSINESS:**

LOWER RIVER SUBSISTENCE REPORTS:

James Charles reported that people have enough Chinook. A few people want to put up chums and sockeye and they were fine with the ADF&G 6-inch mesh restriction. The only people who do not have enough fish had broken motors or not enough gas.

Mike Williams thanked everyone for continuing Chinook conservation. In Akiachak many families are close to meeting their needs. Some of the Chinook had spawning colors. Before the federal closure, 25% of catches (averaging 100 fish per catch) were Chinook and the rest were chums and sockeye. It was a good sign to see plenty of fish. Many people were at fish camp without radio and had been pacing their harvest amounts. When they heard about the closure they panicked and went fishing before it started. Fishermen with dog teams still need more of other species.

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ONC IN-SEASON SUBSISTENCE REPORT:

**Kuskokwim River In-season Subsistence Catch Monitoring Report**
**Orutsararmiut Native Council**
Date July 1, 2011

**Fishing reports from June 28 –June 30, 2011.**

| Families Surveyed | Families Fishing | Using Driftnets | Using Setnets | Both | Gillnets More than 6" mesh | Gillnets 6" mesh or less | Both |
|---|---|---|---|---|---|---|---|
| 45 | 41 | 32 | 4 | 5 | 9 | 19 | 13 |

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

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 27 | 6 | 8 | 32 | 4 | 4 | 31 | 7 | 2 |

**Does the salmon run appear to be running early, late, or normal?**

| Chinook | | | Chum | | | Sockeye | | |
|---|---|---|---|---|---|---|---|---|
| Early | Normal | Late | Early | Normal | Late | Early | Normal | Late |
| 3 | 29 | 6 | 4 | 32 | 3 | 7 | 27 | 5 |

**Comments:** Salmon Fishing was closed in the survey area for a 5-day Chinook conservation closure beginning 12:01 am Thursday, June 23, through 12:01 Tuesday, June 28. Thus, this survey report reflects subsistence fishing effort for the time-period of Tuesday, June 28, through Wednesday, June 29th. Subsistence fishing was allowed with up to greater than 6-inch mesh on Tuesday June 28th after an ADF&G and joint Kuskokwim Salmon Management Working Group closure from 12:01 a.m. Thursday June 23 through 11:59 p.m. Monday June 27th. Fishing was allowed on Wednesday June 29 with 6-inch mesh and less after an ADF&G and joint Working Group decision to limit subsistence fisheries to 6-inch mesh and less until July 7th. Subsequently the USFWS Yukon Delta National Wildlife Refuge announced an emergency closure to all salmon fishing and restricted the use of nets to only 4-inch mesh or less from 12:01 am Thursday June 30 through 12:59 pm Saturday July 2nd.

45 families were surveyed this week for the in-season subsistence monitoring program. 41 (91%) of the families were fishing this week. 4 (09%) of the families did not fish this week. 32 (78%) families reported using drift nets. 4 (10%) families reported using set nets. 5 (12%) families reported using both. 9 (22%) of the families fishing used gill nets greater than 6-inch mesh. 19 (46%) of the families reported 6-inch mesh or less. 13 (32%) families reported using both.

Most fishers interviewed this week had just reached their harvest goals for Chinook after the two day opening. Many indicated they did not have as many Kings as they normally would but were satisfied with what they had for the year. Some families indicated that they were fishing a little less this year in order to conserve Chinook. Some still planned to resume fishing to target sockeye and chum salmon specifically after the closure to meet their family's salmon needs for the year. All families indicated the weather had been dry enough with moderate temperatures for drying fish this week with hardly any flies that spoil fish.

Some elders interviewed at fish camp were concerned about meeting their salmon needs this year as they had just begun fishing at their usual time in mid-June and then had difficulties with getting out to drift fish between subsequent scheduled subsistence closures due to torn nets, boat problems, or other reasons. Other elders indicated they only used a set net for salmon and could not catch enough fish in the set net with the short openings between subsistence closures.

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**Chinook:**

**Catch rate:** Of the 41 families fishing this week, 27 (66%) families reported the Chinook catch as very good, 6 (15%) families reported the catch as normal, 8 (19%) families reported it as poor. Greater than 6-inch mesh was only allowed on one day this survey period but many fishers reported getting good catches of larger and more female kings on Tuesday when larger mesh gear was allowed. Many fishers expressed that earlier their catches consisted of predominantly unusually small, male kings but they caught their biggest kings this year on this recent subsistence opening. Many expressed they felt this was the strongest part of the Chinook run they experienced yet this summer.

**Run timing:** Of the 41 families that reported fishing this week, 3 (7%) families reported the run as early, 29 (71%) families reported the run timing as normal for this time, and 6 (15%) families reported the run to be late this year overall. 3 (7%) families did not comment on run timing for this week. Many fishers noted that a large number of the kings they caught were quite red and appeared nearing spawning condition. Some fishers expressed that when the salmon are blush with spawning colors indicated the Chinook were nearing the tail end of the run.

**Chum:**

**Catch Rate:** 32 (78%) families reported their catch rates as good. 4 (10%) families reported their catches as normal. 4 (10%) families reported their chum catches as poor. 1 (2%) families didn't report due to no chum catches yet or felt that catches were only a reflection of by-catch in 8-inch mesh.
Many fishermen reported getting their nets full of chum after only setting the net out and that they finished fishing on Wednesday after a big catch of bright, robust chum.

**Run timing:** 4 (10%) family reported the run return as early. 32 (78%) families reported the salmon run timing as normal. 3 (7%) families reported the run to be late compared to previous years. 1 (2%) families were unable to report due to few chum catches yet.

**Sockeye:**

**Catch Rate:** 31 (76%) families reported their catch rates as good. 7 (17%) families reported their catches as normal. 2 (5%) families reported their sockeye catches as poor. 1 (2%) families didn't report due to not targeting sockeye yet. Many fishers reported very good catches of sockeye and were happy the run was strong to put up more sockeye this year to augment their smaller than usual king catches.

**Run timing:** 7 (17%) families reported the run return as early. 27 (66%) families reported the salmon run timing as normal. 5 (12%) families reported the run to be late compared to previous years. 2 (5%) families did not report on run timing.

DISCUSSION:

Beverly Hoffman asked if there were any comments about the federal action during the surveys. Eva Patton replied that most fish camps had not heard the news and ONC surveyors were the first to explain the federal actions. However, the fishing the days before the closure had been good so many people felt that they had already met their needs, and just went out to get a few more sockeye.

Stuart Currie asked if people generally have pre-season harvest goals. Eva responded yes, that families have an idea of numbers of fish or a percentage of their fish rack necessary to meet their needs. She commented that people were aware of the posters and Chinook conservation this year, and some indicated that they did not fish for Chinook as much this year.

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MIDDLE RIVER SUBSISTENCE REPORT:
Gerald Simeon reported that people in Aniak were about 90% finished fishing. The first time he heard about the closure was when an elder came up to him and was concerned he couldn't fish but Aniak guides were still bringing clients out. Dan Gillikin responded that on June 28th he called every guide personally and made sure that they were aware that the river was closed to Chinook sport fishing.

KNA INSEASON SUBSISTENCE REPORT:
Please see KNA weekly subsistence survey results for June 25 to June 30, 2011, on pages 8 – 10 of this document.

UPPER RIVER SUBSISTENCE REPORT: none

HEADWATERS SUBSISTENCE REPORT:
Ray Collins talked to Nick Petruska, who reported that in Nicolai only one net was in the water and it caught a few kings. In McGrath set nets were catching only about one Chinook a day, but fishing was better above Blackwater. Stuart Currie asked how many of each species are harvested. Ray replied that the harvest has shifted. People used to put up 20-30 Chinook caught incidentally while fishing for dog food, but now if they freeze 10-12 Chinook they are doing well. Holly Carroll (ADF&G) provided subsistence salmon harvest estimates from 2009, which show that McGrath does not harvest as many Chinook as other areas. McGrath's total estimated harvest was 594 Chinook. The average household harvest was 4 Chinook, 5.7 chum, 6 sockeye, and 8 Coho.

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**KNA Weekly Subsistence Fishing Reports, June 25 to June 30, 2011**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Kalskag** | **FAMILY** | Yes | Drift Net | NR | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>Since last contacted caught 15 kings, 10 Sockeyes, and 35 Chum. Fishing numbers and fish size have been increasing. They would still like to see more fish up this way. | | | | | **Sockeye** | NR | 10 (week total) |
| | | | | | **Chinook** | NR | 15 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 35 (week total) |
| **Aniak** | **FAMILY** | Yes | Drift Net | 7” | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>Fishing for 3-4 days have been using the 7” mesh. Since last contacted caught 8 Kings, 11 Chums, and 4 Sockeye. Said the King size is picking up, getting bigger. They are getting the fish they need. | | | | | **Sockeye** | NR | 4 (week total) |
| | | | | | **Chinook** | NR | 8 (week total) |
| | | | | | **Coho** | NR | 11 (week total) |
| | | | | | **Chum** | NR | |
| **Aniak** | **FAMILY** | No | Drift Net | 7” | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>Said they are done fishing as of Sunday. Have not caught any fish since last contacted. | | | | | **Sockeye** | NR | |
| | | | | | **Chinook** | NR | |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | |
| **Aniak** | **FAMILY** | Yes | Drift/Set | NR | | | |
| Comments:<br>Interviewed on Wednesday 6-29-11<br><br>Since last contacted have not fished. No comments | | | | | **Sockeye** | NR | |
| | | | | | **Chinook** | NR | |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | |
| **Chuathbaluk** | **FAMILY** | Yes | Drift Net | 6” | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>Since last contacted caught 55 kings, 80 chum, and 30 sockeye. Said fishing has been picking up, the closure down river helped upriver a lot. Mostly catching fish with a chum net. Said they would be done fishing for the year on Friday. | | | | | **Sockeye** | NR | 30 (week total) |
| | | | | | **Chinook** | NR | 55 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 80 (week total) |

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**KNA Weekly Subsistence Fishing Reports, June 18 to June 22, 2011**

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Chuathbaluk** | **FAMILY** | Yes | Drift Net | NR | | | |
| Comments:<br>Interviewed on Wednesday 6-29-11<br><br>Since last contacted, caught a total amount of 9 kings, 15 chum, and 16 sockeye. Fishing has been pretty good, the numbers are starting to pick up. | | | | | **Sockeye** | NR | 16 (week total) |
| | | | | | **Chinook** | NR | 9 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 15 (week total) |
| **Chuathbaluk** | **FAMILY** | Yes | Drift Net | NR | | | |
| Comments:<br>Interviewed on Wednesday 6-29-11<br><br>Said fishing it getting better up this way, the run is starting to hit. Since last contacted have not fished. | | | | | **Sockeye** | NR | |
| | | | | | **Chinook** | NR | |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | |
| **Crooked Creek** | **FAMILY** | Yes | Drift Net | 7” | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>Since last contacted they made 3 drifts and caught a total amount of 8 chum and 5 sockeye. Said can’t really tell if the numbers picked up, it’s about the same. Wish there were more kings. | | | | | **Sockeye** | NR | 5 (week total) |
| | | | | | **Chinook** | NR | |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 8 (week total) |
| **Crooked Creek** | **FAMILY** | Yes | Drift Net | 5 ¾” | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>25th: caught 4 kings, 6 chum, and 2 sockeye.<br>26th: caught 6 kings, 15 chum, and 4 sockeye.<br>Said the king fishing is picking up. For sockeyes not sure (maybe, barely picking up). | | | | | **Sockeye** | NR | 6 (week total) |
| | | | | | **Chinook** | NR | 10 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 21 (week total) |
| **Sleetmute** | **FAMILY** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>Since last contacted they have caught 56 kings, 21 sockeye, 19 chum, 4 sheefish, 4 pike, and 1 broad whitefish.<br>Said it’s not that they’re not catching a lot, but the salmon size is small. Compared to last week the size is increasing. The sockeye run is good, its spectacular, and the quality is good. | | | | | **Sockeye** | NR | 21 (week total) |
| | | | | | **Chinook** | NR | 56 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | 19 (week total) |

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**KNA Weekly Subsistence Fishing Reports, June 18 to June 22, 2011**
*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | AVERAGE # FISH CAUGHT DAILY |
|---|---|---|---|---|---|---|---|
| **Stony River** | **FAMILY** | Yes | Fish Wheel | NR | | | |
| Comments:<br>Interviewed on Tuesday 6-28-11<br><br>They have only caught 1 small female king and 1 small female sockeye since last contacted on Thursday 6-23-11.<br>Other people they talked to about fishing have said they are not catching much either. | | | | | **Sockeye** | NR | 1 (week total) |
| | | | | | **Chinook** | NR | 1 (week total) |
| | | | | | **Coho** | NR | |
| | | | | | **Chum** | NR | |

**KNA Comments:**
The following participant families we have not been able to contact:
Kalskag (2 families), McGrath (1 family)

## DISCUSSION OF RUN ASSESSMENT DATA:

### BETHEL TEST FISH:

Water level was average, water temperature below average, and water clarity was average.

Chinook passage is at 80% and is not a very good run, but is better than 2010. However, passage remains well below the 95% confidence interval of not meeting escapement needs. Sockeye passage is at 63% and the return looks very good. Chum passage is at 35% and abundance is increasing nicely.

### WEIRS/SONAR/MARK-RECAPTURE/AERIAL SURVEYS:

Kevin Schaberg (ADF&G) reported that the Tuluksak weir has been in operation since June 25. Kwethluk weir began installation on June 30 and with the water dropping it will hopefully be fish-tight by July 2. Aniak Sonar has been operational since June 26, with only one bank of counts for the first 2 days. The George River weir has been operational since June 16th; the Tatlawiksuk since June 15; the Kogrukluk since June 21; the Takotna since June 29; and the Telaquana since June 29; operation has been continuous since installation.

The Tuluksak River has not seen fish yet, but it is early in the season. The George River is lower than 2009 when escapement goals were met, but also lower than 2008 and 2010 when goals were not met. The Tatlawiksuk River currently looks similar to the last three years, including 2010 when there was a conservation concern for the entire river. The Kogrukluk River weir passage is higher than the past five years when escapement goals were met.

For Chum salmon, Kogrukluk River weir passage is similar to years that have met escapement goals. The Tuluksak River has no escapement goal, but chum salmon passage is currently higher than 2010 and is in the middle range of past years' escapements. George River weir chum passage is higher than the last five years, including 1999 and 2000 which were years of concern. The Tatlawiksuk weir chum passage is higher than 1999 and 2000 which were low escapement years. For sockeye, the Kogrukluk weir only has

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seen one fish and it is too early in season. There are no Coho numbers yet. Takotna River weir data will be included in the next information packet.

**COMMERCIAL CATCH REPORT:**

Chuck Brazil presented historical catch and CPUE comparisons of commercial openings during similar dates. In Subdistrict 1-B on July 9, 2010, with 146 permit holders and a 4-hour commercial fishing opener, harvests were 176 Chinook; 7,303 sockeye; 15,437 chum; and 0 Coho. In Subdistrict 1-A on July 6, 2010, with 87 permit holders and a 6-hour commercial fishing opener, harvests were 290 Chinook; 3,554 sockeye; 17,467 chum; and 0 coho.

**PROCESSOR REPORT:**

Stuart Currie has $350,000 invested and 30 people employed. He is standing by and ready to process.

**SPORT FISH REPORT:**

John Chythlook reported that some Aniak guides have seen Chinook on the river, even though they are not fishing for them.

Beverly Hoffman reported that her company Kuskokwim Wilderness Adventures has not been sport fishing. She noticed a lot of traffic on the river and commented that people do not seem to be aware of the restrictions about enforcement on tributaries. Robert Sundown (USFWS) said that USFWS was currently training staff members to drive jet boats, but the agency was currently short-staffed for enforcement in these areas. Bev suggested that the agency should contract locals who know the river. Dan Gillikin commented that his crew on the Kwethluk has not seen fishermen targeting Chinook.

**WEATHER FORECAST:**

The forecast for the Kuskokwim Delta is scattered showers with highs in the 40's and 50's, with winds of 10 to 15 mph.

**RECOMMENDATION:**

A 4-hour commercial fishing period in Subdistrict 1-B within District 1 from 12:00 pm until 4:00 pm on Tuesday, July 5, 2011. Two processors will be buying fish harvested in Subdistrict 1-B. ADF&G also recommends a 3-hour commercial fishing period in Subdistrict 1-A within District 1 from 12:00 pm until 3:00 pm on Thursday, July 7, 2011. The area of the Kuskokwim River mainstem between ADF&G regulatory markers located at the upstream side of the mouth of the Tuluksak at its confluence with the mainstem, downstream to ADF&G regulatory markers located upstream of Mishevik Slough, is closed to commercial fishing. One processor will be buying fish in Subdistrict 1-A.

For all commercial fishing, salmon can be taken with 6-inch or smaller mesh not exceeding 50 fathoms in length. Processors will not purchase any Chinook salmon, and all Chinook must be kept for subsistence or personal use and recorded on an ADF&G fish ticket.

The hours for subsistence salmon closures adjacent to periods of commercial fishing on the Kuskokwim River are 6 hours before, during, and 3 hours after commercial fishing. The area closed to subsistence during Subdistrict 1-B commercial fishing is from the upper end of Straight Slough downstream to the mouth of the Kuskokwim River, which is defined by a line from Apokak Slough to the southern-most tip of Eek Island. The area closed to subsistence during Subdistrict 1-A is from Bogus Creek downstream to a line across the river between Oscarville and Napaskiak. During these closures only 4-inch or smaller mesh nets are allowed.

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DISCUSSION:
Chuck Brazil (ADF&G Area Manager) explained that by July 5th salmon run assessment indicates that the majority of Chinook (90%), sockeye (80%), and chum (50%) will have passed through Subdistrict 1-B of District 1. At this time escapement goals for sockeye and chum will likely be met based on abundance indices at BTF and a harvestable surplus is available for these species. Processors are present and anticipate adequate capacity for this upcoming commercial period.

**WORKING GROUP MOTIONS:**
***Note:*** *Even though there was not a quorum, Chairs wanted to "informally" support these motions.*

**MOTION 1**: To accept ADF&G commercial fishing recommendation (see above). Motion passed unanimously (6 Yeas, 0 Nays).

COMMENTS FOR MOTION 1:
Stuart asked if the department was willing to work with him in the event that he will need to limit the opener to two hours, depending on his capacity. Chuck Brazil replied that yes, they would stay in contact.

It was clarified that the federal closure would be over by Saturday, July 2, at 11:59 pm, which is when the 6-inch mesh restriction would apply to subsistence salmon fishing again.

Beverly Hoffman asked how the Chinook salmon caught in the commercial fishery would be distributed so they were not wasted. She reviewed the numbers of Chinook caught during commercial fishing presented by Chuck Brazil earlier (290 Chinook on 7/6/10; 176 Chinook on 7/9/10). Mike Williams replied that these Chinook would help people meet their subsistence needs, and if the weather was too rainy for drying they could be preserved in other ways. James Charles would was going to inquire about a mechanism for distributing Chinook in Tuntutuliak and Eek. Nick Souza (CVS) offered to give ice to fishermen so they could transfer Chinook back to their villages from the processor. Stuart Currie said that he would also give out ice, and asked if there were any legal problems with processors giving Chinook away. The agencies responded that there was no problem and processors could donate fish just like BTF does. Dan Gillikin commented that Napaskiak elders need fish, and he would be happy to help distribute Chinook to them. Eva Patton offered that ONC could distribute fish to Oscarville and Napaskiak.

Beverly then said that she was nervous about a commercial fishery after what we have been through this summer. However, she recognized that many people depend on the cash. She said that she usually opposed commercial fishing because she is worried about escapement, but she is inclined to support this commercial opening.

Mike Williams pointed out that there was good weather right now, but it might be rainy next week. He said that this is the time to get fish on the drying racks to fill any remaining needs. He commented that he understands the toll that the commercial fishermen have had to take this year, and is not worried about fish passage at this point after seeing the current numbers.

Greg Roczicka commented that he prefers it when commercial fishing starts above Bethel first, followed by an opener below Bethel, so that the same group of fish is not fished upon twice. He does not believe that any more conservation efforts will be effective and doubts the effectiveness the current measure. Greg's also commented that he was concerned about the word getting out if the upriver processor reached capacity. Chuck Brazil replied that the announcement would be made the day of the fishery.

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Doug Molyneaux asked if this recommendation was also supported by USFWS. USFWS replied that they agreed with it and were not planning a special action.

**MOTION 2**: Request that federal subsistence closures be lifted immediately. Motion passed unanimously (6 Yeas, 0 Nays).

COMMENTS FOR MOTION 2:

Mike Williams "whole-heartedly" supported the motion. In the future more communication and more conservation effort (twice as much) should be made.

James Charles supported the motion. Even though he voted for commercial fishing, he was concerned because many people will not be happy about a commercial opening. Working Group members like him have been getting all the blame for regulatory actions, whether the members agree with ADF&G and USFWS or not.

**GENERAL COMMENTS FROM WORKING GROUP MEMBERS:**

Greg Roczicka (Chair) reiterated the importance of communication in regard to management actions on the river. Second, he asked how BTF can be used as tool to evaluate the run post-season because of the "terrible, terrible miscommunication that happened" (referring to rumors of closures in early June), resulting in the "entire subsistence fleet" going out and flat-lining the BTF CPUE graph. "No one had ever seen anything like that, even in the banner years of commercial fishing. It was totally unprecedented." He asked ADF&G if there was anything that can be done to factor this into the test fishery data. Kevin Schaberg replied that ADF&G will look into estimating exploitation rates by time, since small bumps of CPUE increase during closures can be seen on the BTF CPUE graph, to see if timing of closures or restrictions would have made a difference. He said that it will be difficult to pinpoint the change in exploitation, but this is one method that can be used. Doug Molyneaux disagreed with Greg. As far as the cumulative (long term) BTF index and its relation to escapement, Doug pointed out that because BTF only indexes passage at Bethel the extra effort downstream is factored into it. Doug also stated that the extra effort during this brief period would only be a problem if people harvested more fish for the season than they usually do. Dan Gillikin added, "The real proof of the pudding is going to be escapement, which will be evaluated post-season then we can we see if the tool worked or not." Greg Roczicka commented that if cycles are any indication, a bumper crop of Chinook may come in 2017.

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## WORKING GROUP ATTENDANCE:

| MEMBER SEAT: | NAME: |
|---|---|
| UPRIVER ELDER | *vacant* |
| DOWNRIVER ELDER | James Charles |
| COMMERCIAL FISHER | George Alexie |
| LOWER RIVER SUBSISTENCE | Mike Williams |
| MIDDLE RIVER SUBSTENCE | Gerald Simeon |
| UPPER RIVER SUBSISTENCE | *absent* |
| HEADWATERS SUBSISTENCE | *absent* |
| PROCESSOR | Stuart Currie |
| MEMBER AT LARGE | Fritz Charles |
| SPORT FISHER | Beverly Hoffman |
| WESTERN INTERIOR RAC | Ray Collins |
| Y-K DELTA RAC | absent |
| ADF&G | Charles Brazil |
| CHAIR | Greg Roczicka |

***Note:** Due to the long meeting time, some members left early so a quorum could not be established at voting time.*

| **Other Participants:** | |
|---|---|
| ADF&G Comm. Fish : Dan Bergstrom, John Linderman, Jan Conitz, Kevin Schaberg, Steven Hall, Zach Liller, Travis Elison, Alice Bailey, Holly Carroll, Scott Ayers, Amy Brodersen<br>Sport Fish : John Chythlook, Tom Taube<br>Subsistence Division: Hiroko Ikuta | |
| USFWS: Tom Doolittle, Dan Gillikin, Steve Miller, Robert Sundown, Tom Bennett, Aaron Moses, Bill Raften, Ken Harper<br>OSM: Don Rivard, Rich Cannon | |
| Tim Andrew, AVCP<br>Casie Stockdale, AVCP<br>Jeff Sanders<br>Eva Patton, ONC<br>Iyana Dull, ONC<br>Henry Kohl<br>Carl Berger, LKEDC Bethel<br>Shane Iverson, KYUK Bethel | Tiffany Zulkosky, Sen. Begich's office<br>Shawna Thomas, Sen. Begich's office<br>Gerri Sumpter, Sen. Murkowski's office<br>Nick Souza, CVS (Processor member)<br>LaDonn Robbins, KNA<br>Dave Cannon, Aniak<br>Fran Rich<br>Staff from Rep. Don Young's office<br>Elsie Simeon, Aniak TC |

## GLOSSARY OF ACRONYMS:

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**KRSMWG or Working Group, WG**), Sustainable Escapement Goal (**SEG**), Biological Escapement Goal (**BEG**).

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**ONC Inseason Subsistence Surveys – 2011 Current and Historical Catch Rate Information**

Responses from the question: "Compared with this time in a "Normal" year, how were catch rates for salmon this week"? "ND" indicates that no data was collected because respondents felt it was too early in the run to assess this information.

| | | Number of Families | | | Chinook salmon | | | Chum salmon | | | Sockeye salmon | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Week Ending | Inter-viewed | Fishing | Not Fishing | Very Good | Normal | Poor | Very Good | Normal | Poor | Very Good | Normal | Poor |
| 2011 | Jun 05 | 36 | 11 | 25 | 36% | 36% | 0 | ND | ND | ND | 9% | 9% | 0 |
| | Jun 12 | 69 | 41 | 28 | 7% | 34% | 49% | 10% | 46% | 10% | 10% | 46% | 7% |
| | Jun 19 | 57 | 56 | 1 | 25% | 38% | 37% | 14% | 52% | 20% | 14% | 57% | 18% |
| | Jun 26 | 49 | 44 | 5 | 14% | 22% | 64% | 21% | 36% | 34% | 23% | 59% | 9% |
| | Jul 03 | 45 | 41 | 4 | 66% | 15% | 19% | 78% | 10% | 10% | 76% | 17% | 5% |
| 2010 | Jun 06 | 19 | 6 | 13 | 0 | 100% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 13 | 39 | 28 | 11 | 4% | 50% | 46% | 0 | 72% | 28% | ND | ND | ND |
| | Jun 20 | 26 | 23 | 3 | 9% | 65% | 26% | 0 | 100% | 0 | 0 | 96% | 4% |
| | Jun 27 | 37 | 37 | 0 | 3% | 73% | 24% | 3% | 92% | 5% | 5% | 81% | 14% |
| | Jul 04 | 38 | 36 | 2 | 8% | 69% | 22% | 14% | 78% | 8% | 3% | 69% | 28% |
| | Jul 11 | 20 | 11 | 9 | 0 | 91% | 0% | 27% | 64% | 0 | 18% | 55% | 18% |
| 2009 | Jun 07 | 20 | 6 | 14 | 0 | 67% | 33% | ND | ND | ND | ND | ND | ND |
| | Jun 14 | 43 | 38 | 5 | 29% | 50% | 21% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 21 | 44 | 44 | 0 | 41% | 36% | 23% | 0 | 100% | 0 | 0 | 86% | 14% |
| | Jun 28 | 36 | 31 | 5 | 39% | 55% | 6% | 3% | 77% | 9% | 6% | 71% | 23% |
| | Jul 05 | 36 | 5 | 31 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jul 12 | 36 | 2 | 34 | 0 | 100% | 0 | 0 | 100% | 0 | 0 | 100% | 0 |
| 2008 | Jun 08 | 27 | 5 | 22 | 20% | 60% | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 16 | 34 | 17 | 17 | 0 | 76% | 24% | 0 | 100% | 0 | 0 | 100% | 0 |
| | Jun 22 | 32 | 27 | 5 | 56% | 44% | 0 | 0 | 74% | 26% | 81% | 19% | 0 |
| | Jun 29 | 33 | 27 | 6 | 52% | 48% | 0 | 15% | 85% | 0 | 56% | 44% | 0 |
| | Jul 08 | 35 | 15 | 20 | 20% | 80% | 0 | 0 | 100% | 0 | 47% | 53% | 0 |
| | Jul 13 | 32 | 3 | 29 | 0 | 100% | 0 | 33% | 67% | 0 | 0 | 100% | 0 |
| 2007 | Jun 03 | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| | Jun 12 | 39 | 28 | 11 | 0 | 29% | 71% | ND | ND | ND | ND | ND | ND |
| | Jun 17 | 40 | 33 | 7 | 0 | 30% | 70% | ND | ND | ND | ND | ND | ND |
| | Jun 24 | 44 | 40 | 4 | 0 | 35% | 65% | ND | ND | ND | ND | ND | ND |
| | Jul 02 | 36 | 20 | 12 | 45% | 45% | 10% | 80% | 20% | 0 | 0 | 40 | 60% |
| | Jul 08 | 33 | 10 | 23 | 60% | 40% | 0 | 80% | 20% | 0 | 30% | 70% | 0 |
| | Jul 14 | 33 | 6 | 27 | 0 | 0 | 100 | 0 | 33% | 67% | 0 | 17% | 83% |
| 2006 | Jun 03 | 22 | 0 | 22 | 0 | 0 | 0 | ND | ND | ND | ND | ND | ND |
| | Jun 10 | 32 | 19 | 13 | 32% | 68% | 0 | 0 | 0 | 0 | ND | ND | ND |
| | Jun 17 | 36 | 30 | 6 | 60% | 40% | 0 | 60% | 40% | 0 | 53% | 47% | 0 |
| | Jun 25 | 48 | 43 | 5 | 79% | 21% | 0 | 91% | 9% | 0 | 19% | 56% | 26% |
| | Jul 02 | 46 | 14 | 32 | 21% | 79% | 0 | 71% | 29% | 0 | 43% | 57% | 0 |
| | Jul 09 | 38 | 8 | 30 | 0 | 100% | 0 | 25% | 75% | 0 | 37% | 63% | 0 |
| | Jul 17 | 26 | 5 | 21 | 0 | 100% | 0 | 100 | 0 | 0 | 0 | 100% | 0 |

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# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Yukon Delta National Wildlife Refuge
P.O. Box 346
Bethel, Alaska 99559

IN REPLY REFER TO: 110701chinook

**DATE:** July 1, 2011

**TO:** Kuskokwim River Salmon Management Working Group

**FROM:** Thomas C.J. Doolittle, Supervisory Wildlife Biologist

**THROUGH:** Gene Peltola Jr., Refuge Manager

**SUBJECT:** Oral presentation to the Kuskokwim Salmon Management Working Group on U.S. Fish and Wildlife Closures on the Kuskokwim River

Dear Honorable Chair and Working Group Members:

On February 8, 2011, in-season management on the Chinook fishery was first discussed between U.S. Fish and Wildlife Service (Service) and the State of Alaska (State) and again at the inter-agency meeting on March 16-17, 2011. The discussions were prompted by the prediction of a poor Chinook salmon run in the Kuskokwim River in 2011. The outcomes of the inter-agency meeting and agreed upon management options were subsequently shared and discussed with the Kuskokwim River Salmon Management Working Group (KRSMWG) on March 18, 2011 The KRSMWG has been, and still acts as a user group advisory and consultation forum for fishermen for in-season salmon management on the Kuskokwim River. There was also a joint meeting on April 4, 2011 with the villages of Kwethluk, Akiak, and Akiachak to discuss management options that included fishing schedules (closures) considering the prediction of a poor Chinook salmon run. Fishing schedules were an agreed upon management option between the State, Service and the KRSMWG and closures have also continued to be an option throughout the month. Considering the history of timely communications, pre-season and throughout the in-season management process, we are concerned of the perception by some that consultation and notification by the Service has not occurred. We empathize with the fishermen and the patience they have exhibited in the protection of Chinook salmon with the future of the fishery in mind. Please know the Service's decision to close the fishery was not made lightly but with goals of allowing escapement up river and especially to move additional Chinook salmon into lower Kuskokwim River tributaries. We felt at this point since the Tuluksak River had not met escapement for 4 years and the Kwethluk River for three years and in a poor run year (possibly the second worst since 1980) that every Chinook salmon reaching their spawning grounds counts on a watershed scale. The responsibility in maintenance of a healthy Chinook fishery is escapement throughout the entire system and targeting actions to enhance escapement into tributaries of concern.

The past two closures were implemented through cooperative action with the State and not through the federalization of the fishery by Service. Thus, the Service did not independently close the fishery during the last two closures, though we have supported the State's action and the KRSMWG decisions throughout the season AND only at this late season juncture have we diverged in management strategy between the State and the KRSMWG. The Service's recent special action was not intended to negate Chinook salmon conservation measures implemented by the KRSMWG through the State's Emergency Order to use 6" mesh or less BUT to add an additional layer of

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protection to have a more directed conservation effort to increase escapement throughout the watershed and especially in lower Kuskokwim River tributaries. The action was implemented through two closures:

1. Close Chinook salmon fishing to non-federally qualified users
2. Restrict subsistence fishermen to 4" mesh or less as a more conservative action of Chinook salmon conservation.

Again, we understand the additional hardships to users because of this action, but the Service felt that additional measures were necessary to maintain a strong Chinook population for future generations. The decision was based on best available science and the traditional knowledge of Kuskokwim River fishermen. The Service also appreciates the support for the recent closure by some villages and their resolutions of support.

Lastly, we have provided each KRSMWG member in attendance with a white paper which summarizes the scientific basis for our decision and we can email or mail hard copies to others that would like a copy.

Thank-you for listening and working on these complex issues for the benefit of sustainable salmon fisheries on the Kuskokwim River.

Sincerely,

Thomas C. J. Doolittle
Acting for:
Gene Peltola Jr., Refuge Manager

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# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Yukon Delta National Wildlife Refuge
P.O. Box 346
Bethel, Alaska 99559

Justification for Chinook Salmon Conservation
Special Actions, 3-KS-01_11 and 3-KS-02-11
Restrictions on Chinook Salmon fishing in the Kuskokwim River and its Tributaries
YDNWR June 27th, 2011

Background:

In 2010 Kwethluk and Tuluksak rivers did not achieve established Chinook salmon escapement objectives for the third and fourth consecutive years, respectively. The Kisaralik River had the lowest aerial index count ever recorded at 235 Chinook salmon, this was the first documented year that Kisaralik River did not meet the lower end of the established escapement goal. The projected outlook for Kuskokwim River Chinook salmon for 2011 was similar to the 2010 return which was the lowest on record. The total return of Chinook salmon to the Kuskokwim drainage has been declining since 2004. Since 1976 Chinook salmon abundance has varied widely, with annual total returns ranging from 140,000 to 470,000 and escapements ranging from 56,000 to 358,000.

The directed commercial Chinook salmon fishery was discontinued in 1987. Since 2000, commercial harvest of Chinook salmon has ranged from 72 to 8,865 fish with exploitation rates ranging from less than 1% to 3.7% of the total return to Kuskokwim River. The Kuskokwim River supports the largest subsistence Chinook salmon fishery in the state. Since 2000 the subsistence harvest in the Kuskokwim Management Area has averaged an estimated 73,584 Chinook salmon with an estimated in river harvest of 98,521 in 2008 and 78,491 in 2009. The majority of recent (2000-2010) Chinook salmon harvest has been by subsistence fishers. Exploitation rate (including commercial catch) estimates have ranged from 21% to as high as 60% (in 2010), based on the Draft Chinook Salmon Run Reconstruction by ADF&G.

In March of this year local area fisheries managers met with the Kuskokwim River Salmon Management Working Group (Working Group), Office of Subsistence Management Staff, RAC Members, AVCP Staff, Village Representatives and other stakeholders to discuss and develop management recommendations for the 2011 season. A summary of the recommendation and the Working Group's level of support is provided in *2011 Proposed Management Actions for Chinook Salmon Conservation in Lower Kuskokwim River Tributaries*, attachment #1. Additionally, ADF&G published the management strategies related to Chinook salmon management in their news release on June 8th, 2011 *Kuskokwim River Salmon Fishery Release 3*, attachment #2.

One of the in-season management strategies agreed on at the March meeting was to use the corrected Bethel Test Fishery (BTF) in-season data as a indices of abundance and establish trigger points for taking management actions based on that data, specifically implementation of windows (periods of closure) in the main stem of the Kuskokwim River were discussed. Statistical models were developed based on BTF data for years when greater than 50% of the established escapement objectives were met and for years when 50% were not met and 95% confidence intervals were developed for each scenario. Additionally, it was agreed on that more specific tributary and local area closures would be necessary pre-season around tributaries of particular concern to reduce stock specific harvest resulting from river bank orientation by returning Chinook salmon.

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Management Actions to date:

1) ADF&G Emergency Order 3-KS-01-11, area closure of sport fishing
2) ADF&G Emergency Order #1, Area closure for subsistence salmon fishing
3) ADF&G Emergency Order #2, a 3 day subsistence salmon fishing closure
4) ADF&G Emergency Order #3, a 5 day subsistence salmon fishing closure
5) ADF&G Emergency Order #4, restricting gillnets to 6 inch or less

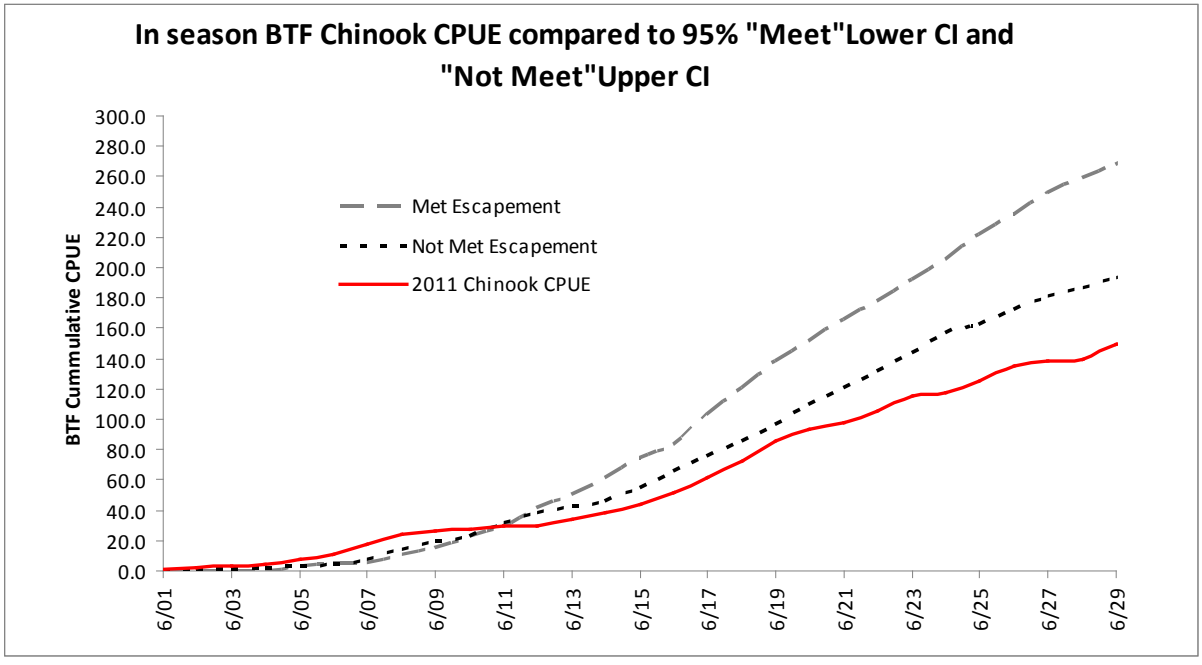
Related Action:

U.S. Fish and Wildlife Service (FWS) staff and management has not oppose the commercial fishery opening after the Federal closure providing that no incidentally caught Chinook salmon are sold in the fishery and that they may be retained for subsistence purposes.

Justification for Proposed Actions:

Under title 16 USC 3126 of ANILCA the Secretary (or his designee) may immediately close public lands to subsistence uses to assure the continued viability of a particular fish or wildlife population. The State of Alaska has a similar mandate and responsibility under the Sustainable Fisheries Policy (5AAC39.222).

Based on Bethel Test Fishery data as of 6/29/2011 Chinook salmon abundance is approximately 23% below the upper 95% confidence interval for years of failed escapements, 44% below the lower 95% confidence interval for years escapement objectives were generally meet and 52% below the historic average. The average percentage of Chinook salmon passage at the BTF for this date is approximately 77%. These numbers place us well below the point at which the agreed strategy indicated the need for management action.

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There are however two mitigating factors relative to the BTF CPUE, deferred harvest above the BTF as a result of the previous closures and the local area closures enacted pre-season. However, it is only possible to evaluate the effects of these action post season once final escapement numbers from the monitoring sites are available, or can be reliably projected. The most recent action taken by ADF&G, a gear size restriction of six inch or less may also further reduce harvest particularly of older age class Chinook salmon and potentially females thereby improving the quality of the escapement (more even sex ratio) however, at this juncture we do not believe this additional action will be sufficient to meet escapement objectives.

Sustainable Escapement Goals (SEG's) for Chinook have been established at 4 of 6 weir sites, two of which are on the Tuluksak and Kwethluk Rivers located within the YDNWR conservation unit boundary. While it is too early to evaluate escapement at these weirs due to the lag period between BTF and the weirs, current BTF information suggest that these two systems will again not meet their SEG's this year. For the Tuluksak it will be the fifth consecutive year and the Kwethluk the fourth.

Given the best information to date our opinion that it is unlikely that a 44% deficit (to meet escapement objectives) in the BTF CPUE data will be overcome this late in the Chinook salmon run, even with the previous management action that have been put in place. Therefore additional closures of the Chinook salmon subsistence fishery on the Kuskokwim River and its tributaries are warranted.

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*Dan Gillikin from USFWS provided this supplemental information after the meeting, to clarify the question about previous federal closures on the Kuskokwim River.*

**Subsistence Fishing Schedule and History**

Starting in 1997, salmon returns to the Kuskokwim River (and throughout western Alaska) started to decline significantly. This led to a declaration of the Kuskokwim River as an economic disaster area by the State of Alaska in 1997, 1998, 2000 and 2001. In 2000, the commercial chum salmon fishery was restricted and the Kuskokwim River Salmon Management Working Group (KRSMWG), the ADF&G and other Native and local organizations appealed to subsistence fishers to conserve fish and minimize harvest of chum and Chinook salmon. In 2001, the commercial chum salmon fishery was closed for the entire fishing season to conserve both Chinook and chum salmon.

Also in 2001, the Alaska Board of Fisheries (BOF) authorized the ADF&G to implement a subsistence fishing closure schedule, "windows", throughout the Kuskokwim River drainage, under the Kuskokwim River Salmon Rebuilding Management Plan (5 ACC 07.365). The primary objectives of the windows were to reduce the harvest of early-migrant/upper-river stocks, shift lower-river harvest timing closer to the migration timing and, consequently, allow more fish of the early-migrant/upper-river stocks to escape to spawning grounds and ensure harvests for upper-river communities. Implementation of the windows was not necessarily to reduce total Chinook salmon subsistence harvests, since there are no harvest limits in subsistence fisheries.

Windows were put in place, in varying degrees for the years 2001 -2006. Per the recommendation of the KRSMWG, based on polling throughout Kuskokwim River communities, the subsistence salmon fishery was reduced by the ADF&G and the U.S. Fish and Wildlife Service from 7 to 4 days per week, from Wednesday to Saturday. During the other three days, Sunday through Tuesday, subsistence fishing with gillnets with a mesh size greater than 4 inches and with fish wheels, was prohibited. The windows schedule was implemented in a step-wise progression up the river, consistent with salmon run timing, and could be (and was) altered based on run strength to achieve escapement goals. Once escapement goals were assured for Chinook and chum salmon, subsistence fishing was allowed 7 days per week.

There have been no "windows" for the years 2007 -2010; subsistence salmon fishing was been allowed 7 days per week throughout the fishing season, except for closings around commercial fishing periods, per both Federal and State regulations.

In 2010, spawning escapements were generally among the lowest on record. Five of 6 salmon enumeration projects (weirs) recorded the lowest Chinook passage yet observed at the project, except the Kogrukluk River, where the lower bound of the escapement range was achieved.

As conservation measure, the Kwethluk and Tuluksak rivers were closed, with local support, on 10 July 2010 by Special Action (Nos. 3-KS-01-10 and 3-KS-02-10) to subsistence fishing for Chinook salmon by non-federally qualified users. Gillnets larger than 4-inch mesh and longer than 60 feet were prohibited. ADF&G closed sport fishing at same time. These two tributaries were targeted for restrictions because they were in their third and fourth consecutive year, respectively, of not achieving escapement goals.

Windows schedule implementation dates, and closures 2001- 2010. Note 2010 was a tributary specific closure on the Kwethluk and Tuluksak Rivers.

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| Year | Fishing District | | Upper River |
|---|---|---|---|
| | W-1 | W-2 | |
| 2001 | 03 June – 31 July | 10 June – 31 July | 17 June – 31 July |
| 2002 | 02-25 June | 09-25 June | 16-25 June |
| 2003 | 01 June – 01 July | 08 June – 01 July | 15 June – 01 July |
| 2004 | 06-20 June | 13-20 June | n/a |
| 2005 | 05-16 June | 12-16 June | n/a |
| 2006 | 04-16 June | 11-16 June | n/a |
| 2007 | None | | |
| 2008 | None | | |
| 2009 | None | | |
| 2010 | 10 July – 25 July | | |

Appendix C8.–Meeting Summary, July 20, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

**July 20, 2011**

Called to order at 10:00 am at ADF&G in Bethel and adjourned at 1:20 pm. Eight of thirteen members were present and a quorum was established.

**AGENDA ITEMS:**

1.) Continuing Business
2.) Old Business
3.) New Business

**WORKING GROUP ACTION ITEMS:**

1.) KNA will give cumulative harvest totals for each species for families surveyed inseason.
2.) Dr. Katie Howard will follow up with information on bycatch donation programs.
3.) Doug Bue will provide a map of BTF fishing stations.
4.) Chuck Brazil (ADF&G) and Gene Peltola (USFWS) have been invited to attend the Yupiit Nations Meeting in Tuntutuliak on July 29-30 to discuss issues and share information with the public. John Linderman will be attending, as well.
5.) Stuart Currie will make a draft of talking points regarding Chinook salmon bycatch in ocean groundfish fisheries. It was requested that these talking points be distributed to the Tundra Drums or Delta Discovery newspapers, and to KRSMWG members and other community leaders after review by KRSMWG members.
6.) Request for more research on pike in the Aniak River. Concern that as their population moves up the Aniak River they are eating juvenile salmon.
7.) ADF&G will look at return per spawner information in hopes of describing high returns from low escapement years, from Chinook retrospective run reconstructions.

**MEETING ACTION ANNOUNCEMENT:**

The next KRSMWG meeting will be at 10:00 am on Wednesday, June 27, at ADF&G in Bethel.

**ADF&G RECOMMENDATIONS:**

The Lower section of Subdistrict 1-B be open to commercial salmon fishing for 6 hours from 10:00 am until 4:00 pm on Friday, July 22, 2011. The Upper section of Subdistrict 1-B will be open to commercial salmon fishing for four hours from 12:00 pm until 4:00 pm on Friday, July 22, 2011. Salmon may be taken with 6-inch or smaller mesh not exceeding 50 fathoms in length. Processors will not purchase any Chinook salmon. All Chinook salmon must be kept for subsistence or personal use and recorded on the ADF&G fish ticket.

**WORKING GROUP MOTIONS:**

1.) To accept ADF&G recommendation (see above). Motion passed unanimously (7 Yeas, 0 Nays).
2.) Tony Joaquin will be alternate Processor member for Nick Souza. Motion passed unanimously (9 Yeas, 0 Nays).

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**PEOPLE TO BE HEARD:**

1.) Bev Hoffman (Chair) read a letter to Greg Roczicka from Peter Probasco (Assistant Regional Director, Office of Subsistence Management, USFWS) written on June 29, 2011, responding to the KRSMWG's request to implement a reporting system for salmon shipped out of Bethel. The request was made during the June 13th KRSMWG meeting in light of restrictions placed on subsistence users and concern that Chinook salmon shipped out were likely to people not from the area. The letter stated, "Unfortunately, the direct monitoring of fish being shipped out of the Bethel airport falls outside the purview of both the Federal Subsistence Board and the delegated Federal in-season fisheries manager for the Kuskokwim River, Gene Peltola, Manager of the Yukon Delta National Wildlife Refuge."

Mr. Probasco made some suggestions to address the concern. If the KRSMWG decides to pursue action he encouraged the group to work with the Office of Subsistence Management to refine their ideas.

1.) Submitting a proposal to the Federal Subsistence Board to limit customary trade of subsistence caught Chinook salmon (a similar issue will be brought to the Board in Spring 2012 for the Yukon River).
2.) Requesting that a customary trade keeping form be implemented (also being considered for the Yukon Area).
3.) The KRSMWG could conduct informal surveys with airline staff at the Bethel airport, as long as it was clear that the survey was voluntary.

2.) Chair read an email from Mike Williams from July 12, reporting "a slug of 7-8 year-old kings passing by as we fish with 6 inches and got strips made from a couple of drifts. It looks good after the hoopla over the kings." He also reported sighting "a huge slug" of Chinook resting on the Kisaralik River.

**CONTINUING BUSINESS:**

LOWER RIVER SUBSISTENCE REPORTS:

Mike Williams (Lower River Subsistence member) reported that people generally back off from fishing when they know that they have enough food to survive the winter, and now they have their Chinook and chums. He also observed that there are a lot of sockeye and whitefish hanging in fish racks now and he was happy to hear that Chinook have been milling around in Kisaralik River eddies lately.

James Charles (Downriver Elder) reported that people in Tuntutuliak have their Chinook but not their chums because the weather has been too wet. People were happy when the department recommended 6-inch or smaller mesh two meetings ago, but by the time the federal closure was finished the weather turned bad. James also reported that people complain about commercial fishing because it is easier to catch fish upriver where the river is narrower.

ONC IN-SEASON SUBSISTENCE REPORT:

Eva Patton (ONC) reported that ONC finished surveying for the 2011 season. She gave an oral report for the ONC survey results distributed in the July 14 information packet. Overall, people were challenged this year depending on their location. For instance, Napaskiak was in mourning for a funeral and not fishing when the weather was good and before the federal closures. After the closures, the weather was rainy and they did not fish because they worried about spoilage. Some people caught whitefish during the closures in 4-inch nets to augment their salmon harvest. Survey results were different depending on where each family's fish camp was, but the majority of camps upriver did well.

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Beverly Hoffman (Chair) reported that people in Bethel had to be vigilant because of the cold, wet weather. Some people who had spoiled fish gave them to her dog team.

MIDDLE RIVER SUBSISTENCE REPORT:
Lamont Albertson (Sport Fishing) talked to guides, who reported catching 3 year-old Chinook that were silver to light pink. They were also catching sheefish and pike.

Bob Aloysius (YK Delta RAC) reported that people were happy after the closures were over. He also commented that people always complain about fish spoiling in the rain and cold, but smokehouses can serve two purposes: dry wood can be used to heat the smokehouse so the fish can dry, then later wet wood can be added to smoke them. People who try to fish catch them, despite the impression that downriver may have about no one fishing. Upriver people were really happy about the closures and the results of the closures because they were seeing more fish. However, they empathized with downriver for enduring the closures. Bob said that yesterday the river was "boiling with fish," which were chums (still pretty bright). He hopes that there will be a lot of coho too.

Dave Cannon in Aniak reported that one person caught 59 Chinook in one drift and at least 20 Chinook per drift was common.

KNA INSEASON SUBSISTENCE REPORT:
Mike Thalhauser (KNA) reported that people caught more Chinook this year than the last few years, so they were happy with the closures.

**Note:** Please see KNA weekly subsistence survey results on pages 4-5 of this document. Most people were already finished fishing and this was the last week for surveys.

HEADWATERS SUBSISTENCE REPORT:
Ray Collins (Western Interior RAC) reported that fishing in McGrath was slow like it always is, and just a few Chinook had been caught. However, the Gregory's fish camp got what they needed and appreciated the closures. Ray noted that all the fish caught this year have been smaller than normal.

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## KNA Weekly Subsistence Fishing Reports, July 14 to July 19, 2011

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | TOTAL # FISH CAUGHT |
|---|---|---|---|---|---|---|---|
| **Kalskag** | **FAMILY A** | No | NR | NR | | | |
| Comments:<br>Interviewed on Tuesday 7-19-11<br><br>Since last contacted they have not been fishing. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Aniak** | **FAMILY D** | Yes | Drift Net | 5” | | | |
| Comments:<br>Interviewed on Monday 7-18-11<br><br>Since last contacted they caught 47 Chum, 5 sockeye, and no kings had let them go. Fishing for dog food not eating fish. Switched to 5” mesh to catch the Chum salmon. Since mid July the Chum and Kings have been abundant. The Sockeye numbers have dropped. | | | | | **Sockeye** | NR | 5 |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 47 |
| **Aniak** | **FAMILY E** | No | NR | NR | | | |
| Comments:<br>Interviewed on Tuesday 7-19-11<br><br>Since last contacted they have not fished. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Chuathbaluk** | **FAMILY H** | No | NR | NR | | | |
| Comments:<br>Interviewed on Tuesday 7-19-11<br><br>Since last contacted has not fished. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |

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## KNA Weekly Subsistence Fishing Reports, July 14 to July 19, 2011

*NR = No Response

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | MESH SIZE | SPECIES | RUN COMPARED TO RECENT YEARS | TOTAL # FISH CAUGHT |
|---|---|---|---|---|---|---|---|
| **Crooked Creek** | **FAMILY N** | No | NR | NR | | | |
| Comments:<br>Interviewed on Monday 7-18-11<br><br>Since last contacted they have not been fishing. Done fishing until the Coho run starts. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Crooked Creek** | **FAMILY 0** | No | NR | NR | | | |
| Comments:<br>Interviewed on Monday 7-18-11<br><br>Since last contacted they have not been fishing. Not done fishing, just haven't fished in the past week. | | | | | **Sockeye** | NR | 0 |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Sleetmute** | **FAMILY P** | Yes | Set Net | NR | | | |
| Comments:<br>Interviewed on Monday 7-18-11<br><br>Since last contacted they have caught an average of 12 sockeye a day. Caught 2 kings that were in good shape and 8 white fish. | | | | | **Sockeye** | Average | 84 |
| | | | | | **Chinook** | NR | 2 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 0 |
| **Sleetmute** | **Family Q** | Yes | Drift Net | 6" | | | |
| Comments:<br>Interviewed on Monday 7-18-11<br><br>Since last contacted, fished 2 days and caught 14 chum and 1 sockeye. Fishing for dog food now, so probably won't be fishing as much. | | | | | **Sockeye** | NR | 1 |
| | | | | | **Chinook** | NR | 0 |
| | | | | | **Coho** | NR | 0 |
| | | | | | **Chum** | NR | 14 |

**KNA Comments:**
The following participant families have not been able to contact:
Chuathbaluk: 1 family, Stony River: 1 family

The following participant families are done fishing as of last week:
Kalskag: 1 Family

The following participant families did not fish this week:
Crooked Creek: 2 Families, Chuathbaluk: 1 family, Aniak: 1 family, Kalskag: 1 family

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DISCUSSION OF RUN ASSESSMENT DATA:
Water level is slightly below average, water temperature is below average (like it has been all season), and water clarity is slightly above average.

Chuck Brazil (ADF&G) reported that BTF Chinook passage is at 95% and on July 10, BTF stopped using 8-inch mesh (king gear). The 2011 Chinook cumulative CPUE is at 201, which is better than 2010 but less than 2008 and 2009. BTF has not caught any Chinook in the last few days and the return looks below average like predicted.

In BTF the sockeye indices of 1499 look good. Chum are at 90% of run passage with an indices of 8,637, which ranks in the top four of the last 12 years. BTF had to go to one drift period a day (temporarily) due to the high abundance of chum, in the interest of not wasting fish. ADF&G has been able to donate chums to dog mushers and those interested in taking them for subsistence use.

Coho are at 1% of run passage and by next week ADF&G will have a better idea of how the run looks.

COMMENTS:
Doug Molyneaux explained that pulling a BTF drift period is standard procedure (in the event of weather or fish abundance), and the index is standardized to be consistent with normal drift patterns.

Beverly Hoffman asked if the senior center was still receiving fish from BTF. Doug Bue (ADF&G) replied that the center had met their needs for Chinook and sockeye, and may request coho soon.

Eva Patton said that many people surveyed by ONC indicated that they intend to fish for coho this year for freezing and jarring.

Charlie Brown (Commercial Fisher) asked Doug Bue if BTF always fishes in the same area. Doug Bue replied that the project has been operating the same way since it started in 1984, and uses three stations (the shallow sandbar side, the middle of the river, and the cut bank side). Doug added that it is too early for coho, but he anticipates that BTF will start catching some soon.

Charlie asked if this summer's cold weather has affected catching fish. Doug Bue said that the cool weather has been good for fishing, except for a couple of days with high winds. Beverly Hoffman asked if colder temperatures cause Chinook to run later. Doug Bue replied that if there were still Chinook in the river, BTF would be catching them with 5 3/8-inch nets.

WEIRS/SONAR/MARK-RECAPTURE/AERIAL SURVEYS:
This year there have been low escapements in the lower river tributaries and high escapements upriver.

Chinook: At the Kwethluk River weir, the current Chinook count is similar to 2008 when escapement was not met, but considerably greater than 2010. At Tuluksak, the count is similar to years when escapement was not met. At Tatlawiksuk, the count is similar to 2009 but there is no escapement goal for that river. At Kogrukluk the count is similar to 2000, when the escapement goal was not met, but also similar to 2010 which was a low abundance year overall but the escapement goal was met. At Takotna the count is currently the lowest on record, but it is hard to make assessment at this time because the project is so far upriver. Overall, Chinook salmon returns seem consistent with predictions. Chris added that we don't know the effect of special actions on these tributaries yet.

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Chum: Kwethluk counts are better than 2000, which was a low escapement year for chum on the Kuskokwim River. At Tuluksak there is not an escapement goal for chum but this year has the lowest escapement to date (the project was not operational in 1999 and 2000, which were stock of concern years, so we can't compare across these years). Aniak River Sonar numbers are low, but are projected to be within the goal range for chum. Upriver, the George River has high chum escapement and the Tatlawiksuk has the 3rd highest escapement numbers on record. The Kogrukluk has already reached chum escapement goals. Takotna has the 3rd highest escapement so far for chum.

Sockeye: Three projects count sockeye salmon passage. The Kwethluk River has no escapement goal, but so far numbers are average out of 13 years. The Kogrukluk River count is below 2002 when escapement was not reached, but similar to 2010 when there was high abundance of sockeye. Telaquana Lake's count is twice as high as last year, which shows a very high abundance of sockeye.

COMMENTS:

Beverly Hoffman asked if sockeye compete with Chinook at the spawning grounds. Chris Shelden responded that Chinook prefer swifter, deeper water and larger cobbles, so he does not believe so. Eva Patton agreed and said that Kwethluk Science Camp students, who learn about spawning characteristics of different fish, made this same observation. Stuart Currie then asked if sockeye were competing with Chinook for food. Chris Shelden replied they do not, because Chinook are predatory whereas sockeye eat plankton and smaller things. Chum salmon migrate out immediately after hatching, so they have no in river food competition. Chinook and Coho may compete for food to some degree.

Greg Roczicka (Lower River Subsistence) asked how the flat-lining of the June 8 – 12, 2011, BTF CPUE graph correlated with escapement numbers. Chris Shelden replied that by the end of the season they might have a better idea of escapement, especially if there was a sudden upswing in numbers. Chris also explained that if no flat lining had occurred, escapement numbers may have been low but BTF would have shown a higher CPUE number.

Chuck Brazil reported that aerial surveys have started.

**COMMERCIAL CATCH REPORT:**

The last commercial opener was in Subdistrict 1B on July 18th with 158 permit holders. Harvest for this opener was 7 Chinook (all kept for subsistence use); 282 sockeye; and 12,040 chum salmon. Sockeye catches are on the decline and the CPUE for chum salmon is average this year.

So far this year's total harvest is 621 Chinook; 12,187 sockeye; 83,892 chum; and 272 coho. The Chinook commercial catch is well below last year's total harvest of 3,000 fish.

**PROCESSOR REPORT:**

Stuart Currie (Processor) reported that things are going well at Kuskokwim Seafoods. He is happy to be processing and is able to keep up with the commercial harvest. The huge Cook Inlet sockeye and chum runs have been a challenge (in the market), and he has not been selling in the fresh market as much as he planned. Instead, the fish are sent to Anchorage and Seattle for filleting. He hopes to be able to fillet here in Bethel next year.

Stuart pointed out that the average weight for chums is noticeably smaller than normal (6 lbs. instead of 6 ½ lbs.). Roe this year is also different than usual. It seems immature with small to medium size eggs

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instead of large. Some roe is darker in color than normal. Kevin Schaberg (ADF&G) commented that Age/Sex/Length (ASL) research on Kuskokwim and Yukon stocks shows smaller than average fish lengths this year.

COMMENTS:

Beverly Hoffman asked if the majority of commercial fishermen kept Chinook or gave them to the processor. Stuart replied that most fishermen took Chinook home or gave them to their families. Processors gave away the other 10% and didn't keep any.

Doug Molyneaux asked if people accurately reported Chinook on fish tickets. Stuart replied yes, reporting was accurate.

James Charles commented that he also noticed that the chums seemed smaller this year.

Charlie Brown was concerned about Chinook caught incidentally because it was too wet to dry them. Chuck Brazil reiterated that processors agreed not to buy Chinook.

**SPORT FISH REPORT:**

John Chythlook (ADF&G) did not have much to report. He said that Aniak guides wanted the KRSMWG to know that they have a "no kill" policy for Chinook, and are releasing all of them.

Lamont Albertson is concerned that increasing numbers of pike moving up the Aniak River are preying on juvenile salmon. He requested more research on this.

Beverly Hoffman reported that rafters have been cold and mostly interested in trout, and that their experience this year was "different than expected."

**WEATHER FORECAST:**

The Kuskokwim Delta forecast was for rain or chance of rain all week.

**RECOMMENDATION:**

The Lower section of Subdistrict 1-B will be open to commercial salmon fishing for 6 hours from 10:00 am until 4:00 pm on Friday, July 22, 2011. Area defined as the line between ADF&G regulatory markers located approximately 15 miles downstream of the Johnson River down to the lower boundary of District 1 (the line from Apokak Slough to the southernmost tip of Eek Island to Popokamiut).

The Upper section of Subdistrict 1-B will be open to commercial salmon fishing for four hours from 12:00 pm until 4:00 pm on Friday, July 22, 2011. Area defined as Bethel ADF&G regulatory markers down to regulatory markers located approximately 15 miles downstream of the Johnson River.

Salmon may be taken with 6-inch or smaller mesh not exceeding 50 fathoms in length. Processors will not purchase any Chinook salmon. All Chinook salmon must be kept for subsistence or personal use and recorded on the ADF&G fish ticket.

**WORKING GROUP MOTIONS:**

**MOTION 1**: To accept ADF&G recommendation (see above). Motion passed unanimously (7 Yeas, 0 Nays).

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COMMENTS FOR MOTION 1:
Stuart Currie thought that we stayed in chum management until coho were more abundant than chum. Chuck replied yes, which is why he needs to evaluate the numbers on Monday of next week before he has more commercial fishing opener recommendations.

Charlie Brown commented that the reason he liked the two-hour commercial fishing extension on the lower river was because it takes time to reach their fishing destinations.

Bob Aloysius wondered about the quality of chum brought to the processors. Stuart Currie replied that there were still a lot of bright chum so quality was good.

**MOTION 2:** Tony Joaquin will be alternate Processor member for Nick Souza. Tony is Nick's foreman in Bethel. Motion passed unanimously (9 Yeas, 0 Nays).

**OLD BUSINESS:**
1.) Kevin Schaberg presented an average of Kuskokwim Chinook age compositions from 2006 to 2010. He explained that the dominant ages of Chinook in the Kuskokwim River are 4, 5, and 6-year-olds. The dominant age of Chinook harvested by commercial fishing on the Kuskokwim River is 4-year-olds, caught in 6-inch or smaller mesh nets. The dominant age of Chinook sampled by subsistence fishermen is 6-year-olds, predominantly caught with 8-inch mesh nets.

Kevin stated that because the run timing of all the age classes overlaps, it is difficult to target a specific age class at specific run times. However, quality of escapement is a concern since larger, older Chinook are heavily exploited.

COMMENTS:
Ray Collins commented that this information seemed consistent with what he had been hearing from fishermen upriver, because large fish have been taken and they have more eggs. Kevin Schaberg agreed, and reiterated that large mesh harvests large fish, which results in lower escapements.

Greg Roczicka commented that the numbers he has seen before agree with what Kevin presented. He requested to see return per spawner information because years of poor escapement sometimes lead to the best returns.

Stuart Currie asked if there was any way to estimate what the escapement might be if more large fish made it to the spawning grounds. Kevin Schaberg replied that he could do a fecundity assessment, but the subsistence fishery is a biomass fishery which poses some questions: How many smaller fish does it take to equal a large fish on the spawning grounds and on the fish racks? If you decrease the harvest of larger fish, are more small fish harvested? He could get a number but he is not sure how reflective it would be. Stuart replied that even a "guestimate" would be interesting. Chris Shelden added that a limited amount of data is available on age compositions. Escapement age compositions from the Kogrukluk River could be used, but commercial fishing did not always differentiate smaller fish by species and subsistence data was sparse in early years.

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Jan Conitz (ADF&G) commented that an expert panel with the Sustainable Salmon Initiative is currently looking at questions of returns per spawner, return abundance, and age composition data in the Yukon River, Kuskokwim River, and Norton Sound. The panel has based initial hypotheses on data analysis that this group and other groups have done. She predicts that in the next year we should see some good information and discussions.

Lamont Albertson commented that we keep talking about getting Chinook upriver, and he wants to discuss ways for this to finally happen at the spring interagency meeting.

Bob Aloysius asked where ADF&G gets the ASL figures for subsistence harvests. Kevin Schaberg replied that most samples are from below Bogus Creek because that is where the majority of the harvest comes from.

Ray Collins asked if fish poundage information was collected. Kevin Schaberg replied that the total weight was divided by numbers of fish, so they do not have the individual weights.

Beverly Hoffman asked how many years it would take to reverse what has happened (referring to the majority of subsistence harvests being older, larger fish caught with 8-inch nets). Kevin Schaberg replied at least one generation (6 -7 years), but efforts would have to continue to be in effect for long term. For instance, if the subsistence fishery went to 6-inch mesh people might be upset and want to switch back to larger mesh, then the same group of fish would be targeted again when they are larger and older. Chris Shelden added that this is not a decision that could be made quickly because we are not sure of its implications. Kevin said that ADF&G wants to get more data first.

Eva Patton asked if escapement management takes quality of escapement in consideration. Chris Shelden replied, not yet. Doug Molyneaux added that Jeff Bromaghin (USFWS) has done work on this and presented it at interagency meetings before. Alaska's Sustainable Salmon policy mentions quality of escapement (in terms of large female fish), but Doug agreed that it would be difficult to implement. Ray Collins asked if genetics was a factor, and if we have already done damage by eliminating the largest fish. He asked what leads them to stay in the ocean and then come back. Do they put on weight because of genetics? Doug replied that Jeff Bromaghin's work touches on genetics. The Chair commented that this would be a good discussion at the interagency meeting. Doug Molyneaux explained that additional test fisheries were tried in the 1980's and 1990's but were not successful. He thinks that ASL programs in more communities would be a good idea, and also gear type surveys in more communities.

Mike Williams commented that traditional knowledge is a missing factor in the research process, and he recommended more engagement with tribal members. Bev Hoffman commented that Cora Campbell (Commissioner) was invited to attend the AVCP Fish Summit in spring of 2012. Beverly Hoffman added that Casie Stockdale, a biologist working for AVCP, is currently trying to bridge the gap between traditional knowledge and current research. Mike Williams added that Casie's work was a good solution. He added that the KRSMWG is voluntary and we should use state and federal financial resources more.

2.) John Linderman (Arctic-Yukon-Kuskokwim (AYK) Commercial Fisheries Regional Supervisor) and Dr. Katie Howard (AYK Regional Coordinator, Fisheries Biologist IV) gave a presentation about Chinook bycatch in ocean fisheries. One of Dr. Howard's duties will be to work with extended jurisdiction staff on groundfish fisheries for the region.

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He explained that there were two distinct groundfish (a.k.a. "pollock" or "trawl") fisheries. Both are federally managed: the Gulf of Alaska (GOA) fishery and Bering Sea Aleutian Islands (BSAI) groundfish fishery. The management is overseen by the North Pacific Fishery Management Council, and the Commissioner of the Alaska Department of Fish and Game holds one of 11 voting seats. Five members represent Alaska.

Salmon are a prohibited species in groundfish fisheries. Area M is separate and is a commercial fishery managed by ADF&G based out of Kodiak. Salmon are legally harvested under regulatory allocations in Area M. The south peninsula in Area M has a June fishery, which is likely when Western Alaskan chum are moving through Area M districts.

Based on migration patterns, it is believed that Western Alaskan Chinook salmon stay in the Bering Sea and few, if any, would be found in the GOA bycatch or Area M harvest. There was low Chinook bycatch in BSAI from 2008 – 2010, and 2011 numbers appear to be similar to these years. In 2010 the GOA had record high bycatch which raised concern. Pacific Northwest stocks are present in the GOA and some are on the endangered species list (such as Snake River Chinook from the Columbia River), so swift regulatory action was taken to address the high 2010 Chinook bycatch observed in the GOA fishery.

It is important to note that salmon taken as bycatch in groundfish fisheries are immature and a certain number would not have survived to adulthood because of natural mortality, regardless of being taken as bycatch. Understanding the salmon stock composition of BSAI bycatch is complicated by the current state of genetic stock identification and adequacy of sample sizes taken from the bycatch historically. More comprehensive observer (100% coverage) and sampling programs were implemented within the BSAI groundfish fishery in 2011 which is expected to address historical concerns over bycatch sampling and enumeration. Salmon genetic baselines and their ability to differentiate among more discrete stocks continues to advance, so over time the ability to accurately identify more discrete stocks within the bycatch (such as Kuskokwim River) is expected to improve.

Chum salmon have different migration patterns than Chinook, and some Western Alaska chum go into the GOA where they are susceptible to bycatch or harvest in Area M fisheries. Area M is primarily a sockeye fishery with allocations and management plans based on the strength of Bristol Bay sockeye runs. An ongoing multi-year ADF&G study called WASSIP is a large scale mixed stock genetic sampling and baseline development program that is expected to provide better insight into chum and sockeye interception in Area M. A lot of weight will be put on this study and results are expected to be available for the next Area M and AYK Board of Fisheries meetings in early 2013.

COMMENTS:

Bob Aloysius asked if there was anyone at the village level on the North Pacific Fishery Management Council. John Linderman replied not yet, but they are making an effort towards that. Bob also clarified that the villages are "remote" and not "rural". Lamont Albertson asked who had the votes in the council and if they were professionals. John Linderman replied federal agencies, members of the public, industry representative, etc.

Stuart Currie asked what percent of Chinook harvested as bycatch in the pollock fishery are destined for the Kuskokwim River. Dr. Howard replied that up until recently there were problems with analysis due to poor sampling programs producing unreliable estimates. She explained that this changed in January of 2011 and now every boat is required to have observers taking data. Therefore, starting in January of 2012

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there will be better analysis of scale patterns and genetics of Chinook caught in these areas, thus origin of stock data will be more reliable.

Beverly Hoffman was disappointed that with all of the concern about Chinook there was so much uncertainty. John Linderman reassured her that the uncertainty will improve. For genetics, it is difficult to tease out stocks from different tributaries, even if the samples are taken in the river. It is even more difficult to be accurate from ocean samples because stocks there are from all over the world. He believes that research is developing in the right direction.

Charlie Brown asked if pollock only live in the ocean, and John Linderman replied that yes, they are ocean fish.

Stuart Currie reminded the group that trawl fishers are making an effort to avoid catching Chinook. He said they stopped fishing in an area if they started to catch Chinook, even before mandates were in place. Nick Souza (CVS) added that they even use underwater cameras. Captains collaborate informally within fishing fleets to avoid areas of Chinook, as well. "Hotspots" are marked areas of no fishing, but are geared mostly toward chum salmon. Each boat has a Fishmaster, whose job is to look at historical data of where salmon have been caught.

James Charles said that folks always complain about Chinook bycatch, so he requested a brief report to bring back to the villages. Kevin Schaberg responded that the National Marine Fisheries Service is a good place to research updated bycatch on the internet. Stuart Currie volunteered to create a draft of talking points for the public for James and others to use. James requested that these talking points also be distributed to the Delta Discovery or Tundra Drums newspapers.

Charlie Brown asked if nuclear radiation in Japan affects our fish. Dr. Howard replied that has been is a common question. Different agencies are monitoring radiation levels (like NOAA). She said that from what we know about migration patterns and how the ocean dilutes radiation, we should not be concerned. John Linderman stated that chum from Japan get into the Bering Sea and can be taken as bycatch.

Eva Patton asked if Yukon and Kuskokwim origin salmon can be distinguished genetically. Dr. Howard replied that there is not enough genetic difference between coastal Alaska stocks, except for tributaries far up the rivers. John Linderman specified that Norton Sound, Lower Kuskokwim, Lower Yukon, and Nushagak fish are the stocks that are hard to differentiate genetically. Eva then asked if the previous NOAA Yukon genetic analysis was accurate. John replied that when they go back and reconstruct the Canadian Yukon run, they can use genetics because Canadian fish have very distinct markers and half of the Yukon run goes to Canada.

Nick Souza explained what the Pollock fishery does with Chinook bycatch. It is logistically difficult to get the fish to Western Alaska, so these Chinook are donated to food shelters in Seattle and Anchorage. Casie Stockdale reported that the majority is donated to the lower 48 because Western Alaskans don't want "salmon welfare." They want change that will protect their way of life, not young and mashed up Chinook. Doug Molyneaux commented that the general public impression is that all the Chinook are thrown overboard. Dr. Howard offered to find information about the amount of Chinook sent for donations (see page 20 of this document). Nick Souza clarified that only "food grade" fish are donated.

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Bob Aloysius pointed out that there was a steep climb in BSAI Chinook bycatch from 2000 – 2007, then when people made noise the bycatch dropped down to almost nothing. He questioned the validity of the data.

George Alexie asked for clarification on Area M stat areas. Greg Roczicka replied that stat areas 517, 518, 525, and 530 are all within Area M.

Doug Molyneaux commented that the timing of the June fishery in Area M does not correlate with Chinook passage through that area, which is another reason why the AYK stocks are not intercepted there.

3.) Doug Bue presented BTF project specifics. **Note:** Please see "History and Overview of Bethel Test Fishery" on pages 16-19 of this document.

COMMENTS:
Charlie Brown asked if BTF drifts in the same area every time. Doug Bue replied yes, they have to be consistent tide to tide, every year. The test fishery is located on the river where most of the water flows through. Straight Slough has slowly gotten larger over the years, so they have slightly adjusted the drift areas but have remained within the same two miles since 1983 when BTF started.

Charlie Brown asked if the same gear or mixed gear is used in one tide, and then changed for the next tide. Doug Bue replied that from June 1 to July 10, BTF fishes one hour after each high tide using 8-inch gear twice per tide and 5 3/8-inch gear twice per tide. Now that the Chinook have passed, BTF only uses the 5 3/8-inch net.

Beverly Hoffman commented that they have been so fortunate to have Doug Bue all these years because he has added consistency to the BTF project.

**GENERAL COMMENTS FROM WORKING GROUP MEMBERS:**
James Charles commented that even though the KRSMWG members are volunteers, they try to represent people with their votes on ADF&G recommendations. Members get the blame all the time because not everyone is happy with how votes are made on commercial and subsistence fishing management actions. However, James said that members tell people that they have to be fair to everyone up and down the river. He thanked everyone in the KRSMWG for their time.

Charlie Brown commented that he wasn't happy about the federal closures because he thought that ADF&G was supposed to manage the fish. He also explained that he could not attend meetings earlier in the season because he was taking care of his wife.

Mike Williams invited Gene Peltola and Chuck Brazil to the Yupiit Nation Meeting in Tuntutuliak next week. Mike thought that their attendance would help with some of the anger that has been building up. He said that KRSMWG members have been acting as shields and getting beat up for decisions that might not have necessarily been their own. Issues that he would like addressed at the meeting in Tuntutuliak are BTF, bycatch, and the distinction between USFWS and ADF&G management. He believes that the more information we share, the more understanding people will have. Mike commented earlier that he appreciated the stamina of the villages putting up fish to beat the wet weather and prevent spoiling. Beating the weather has always been a struggle and this year's 12 days of closures added even more pressure.

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Bob Aloysius stated that we need to regulate jet boats during the spawning season, because they are wreaking havoc on the tributaries. When he was a kid, the elders used to define a boundary on the Aniak River where people couldn't go during spawning time. They compared it to "a nursery." He thinks we should do the same today.

Lamont wants to re-discuss mesh size and bycatch issues at the spring meeting. He would also like to review Stuart's bycatch talking points before they are distributed. Finally, he thanked John Linderman and Dr. Katie Howard for attending the meeting.

Chuck Brazil thanked the KRSMWG for all their hard work this summer.

Beverly Hoffman requested a comment from Tom Doolittle (USFWS). Tom commented that USFWS has much respect for the KRSMWG. He also said that when he looks at federal actions relative to Chinook conservation and the overall strength of the run, USFWS remains firm in its beliefs about Chinook conservation. He looks forward to evaluating the Chinook run and conservation actions this winter.

**WORKING GROUP ATTENDANCE:**

| **MEMBER SEAT:** | **NAME:** |
|---|---|
| UPRIVER ELDER | *Vacant* |
| DOWNRIVER ELDER | James Charles |
| COMMERCIAL FISHER | Charlie Brown |
| LOWER RIVER SUBSISTENCE | Mike Williams |
| MIDDLE RIVER SUBSTENCE | *Absent* |
| UPPER RIVER SUBSISTENCE | *Absent* |
| HEADWATERS SUBSISTENCE | *Absent* |
| PROCESSOR | Stuart Currie |
| MEMBER AT LARGE | George Alexie *arrived after first vote |
| SPORT FISHER | Lamont Albertson |
| WESTERN INTERIOR RAC | Ray Collins |
| Y-K DELTA RAC | Bob Aloysius |
| ADF&G | Chuck Brazil |
| CHAIR | Beverly Hoffman |

| **Other Participants:** | |
|---|---|
| ADF&G Comm. Fish: John Linderman, Dr. Katie Howard, Jan Conitz, Kevin Schaberg, Chris Shelden, Doug Bue, Alice Bailey, Holly Carroll, Zach Liller<br>Sport Fish: John Chythlook<br>Subsistence Division: David Runfola, Andrew Brenner | |
| USFWS: Tom Doolittle<br>OSM: Don Rivard, Rod Campbell | |
| Doug Molyneaux<br>Dave Cannon<br>Eva Patton (ONC)<br>Carl Berger, LYEDC Bethel | Maridon Boario (Senator Hoffman's office)<br>Mike Thalhauser (KNA)<br>Greg Roczicka (Lower River Subsistence member)<br>Lucinda Alexie (Kuskokwim Seafoods) |

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## GLOSSARY OF ACRONYMS:

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**KRSMWG or Working Group, WG**), Sustainable Escapement Goal (**SEG**), Biological Escapement Goal (**BEG**).

### Bethel Test Fishery Overview

Presented by Doug Bue (ADF&G) to the KRSMWG on July 20, 2011

Introduction

The Bethel test fishery provides an inseason catch per unit effort (CPUE) index comparable to historical test-fish CPUE indices that fishery managers use to address inseason salmon run timing and relative abundance. The current year test-fish CPUE index can be compared to prior year indices and, along with associated subsistence reports and weir, sonar, and aerial survey data, can be used to assess salmon run strength. Keep in mind, however, the comparison of test-fish CPUE data between years should be approached cautiously due to an array of factors affecting salmon catchability at the test-fish site. Such factors include, but are not limited to, water level and clarity, height of the flooding tides, weather conditions, river channel morphology and hydrology, fish size relative to gillnet mesh size, net saturation effects, and test-fish crew technique.

The location of the Bethel test fishery within the Kuskokwim River drainage is important to salmon managers in providing some of the first information on the development of salmon runs in a given year. Historically managers relied on test fisheries, commercial catch statistics, and informal reports from subsistence and sport fishermen to gauge inseason salmon run abundance. In 1987, the directed Chinook salmon commercial fishery was discontinued in the Kuskokwim River due to conservation concerns. In the absence of a June fishery, early inseason salmon run information is limited primarily to test-fish data and subsistence harvest reports.

Project Background

From 1966 through 1983, ADF&G conducted a set gillnet test fishery below Tuntutuliak near an abandoned fish camp called Kwegooyuk. At that site, the river ranged from approximately 3 to 4 miles in width and had two major channels; one channel along the east shore and one along the west shore. The river channels were separated by soft sandy shoals that were mostly flooded at high tide. It was also difficult to predict which side, east shore or west shore, would be the “main” river channel in a given year and it appears that it may have fluctuated several times during the history of that project. In that expansive body of water, the Kwegooyuk test fishery gillnets, 27 fathoms in length, were set from the east shore just upstream of the lower boundary of District W-1 and fished 24 hours a day.

The goals of the Kwegooyuk test fishery were to describe run timing and provide an index of abundance for Chinook, sockeye, and chum salmon, similar to the present day Bethel test fishery. Managers believed that run timing was adequately described by the Kwegooyuk test fishery, but the project did not provide a satisfactory index of run abundance. This problem was attributed to fluctuations in the migratory route of salmon between the east and west river channels as influenced inseason by changes in weather patterns and tidal stages, and between seasons by alterations in river channel morphology. The Kwegooyuk test fishery was also shown to be a poor predictor of Chinook and chum salmon catches in the District 1commercial fishery. Due to the remoteness of the test-fish site, daily catches of fish were not able to be sold or distributed to the public for subsistence uses. This made discarding of the daily catches difficult or impossible, resulting in unavoidable waste that was not acceptable to ADF&G, local residents, and the industry.

In an effort to provide a more reliable index of relative abundance and run strength, and to provide a better avenue for the sale of test-fish catches, a drift gillnet test fishery program near Bethel was evaluated in July of 1983. This program ran at the same time with the Kwegooyuk test fishery. The focus was on the use of drift gillnets in a narrower river channel of the mainstem Kuskokwim River near Bethel. The objectives of the 1983 drift gillnet test

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fishery were to assess the feasibility of collecting run timing and abundance information for coho salmon. The new site was in the mainstem Kuskokwim River about 3 miles upstream from Bethel, just above the boundary line separating subdistricts 1-A and 1-B. The river was approximately ½ mile wide at the new location and had a single major channel that allowed drift gillnets to collect CPUE information at selected stations across the entire channel width. At that time four small channels circumvented the site (Steamboat, Straight, Church, and Napaskiak sloughs), but their influence on the test fishery was assumed minimal. The new test fish location was also conveniently located in close proximity to local fish processors for the timely distribution and sale of daily catches. Conclusions from the 1983 program evaluation were that the drift gillnet test fishery at Bethel was viable and offered a more reliable means of monitoring salmon run timing and abundance than the Kwegooyuk test fishery. The Kwegooyuk set gillnet program was then discontinued after 1983 and replaced with a multiple-mesh drift gillnet project referred to as the Bethel test fishery.

Operating at a point upriver of most commercial and subsistence harvest means that instead of indexing total run abundance, the Bethel test fishery provides an index of relative abundance for salmon at a point midway in the commercial fishing district. This distinction is important because downriver commercial and subsistence harvests are not accounted for in the Bethel test fishery index. Moreover, the exploitation rate of the commercial fishery is likely inconsistent because of changes in gear efficiency, changes in regulations designed to alter harvest efficiency, variability in fishing patterns (such as length of openings and frequency of openings), changes in water level, variability in the timing of openings with salmon entry patterns into the river, the occurrence of fishermen strikes, etc. Any of these variables confound the comparison of current year data with historical test-fish data. Inconsistencies in exploitation rates of the commercial fishery, the effect of subsistence closures, or management actions influence the ability of the Bethel test fish project to accurately and consistently estimate total run abundance and salmon escapement. Instead, it is more appropriate to use the Bethel test fish data as an index of relative salmon abundance at Bethel. Taken within the context of these limitations, the Bethel test fishery provides timely and useful insights beneficial to salmon management in the Kuskokwim area.

Project Objectives

The two primary objectives for the Bethel test fishery salmon run monitoring project include:

1. Determine a daily mean index expressed as catch per unit effort or CPUE and a cumulative daily mean CPUE index for Chinook, sockeye, chum and coho salmon at the Bethel test-fish site from June 1 through August 24.
2. Estimate relative run abundance and timing of Chinook, sockeye, chum and coho salmon at the Bethel test fish site by comparison of historical test fish information.

Methods

The methods and location currently used to achieve the objectives of this project are similar to those used since 1984. Following each high tide, a series of gillnet drifts are conducted by the test fish crew in the Kuskokwim River approximately 3 miles upstream of Bethel, just below where Straight Slough diverges from the main river channel. A 3-person crew performs the drifts. The crew utilizes a 20 ft. skiff and two 50 fathom drift gillnets of different mesh sizes. Each series of drifts begins approximately 1 hour after the published high slack tide for Bethel to ensure all drifts are conducted in water flowing downstream. If the weather conditions and high tide magnitude caused a delay in the ebbing of the tide, the time that the drifts begin is delayed. Each drift is conducted at one of 3 stations across the width of the main channel. For each high tide drift series, one of 6 unique permutations from a repeating fishing schedule is used to determine which mesh size will be fished at each station. This means that no station is fished with the same mesh size twice during a single high tide. However, this design dictates that one station is fished twice each high tide; first with the 8-inch gear and then with the 5 3/8-inch gear. The 2 remaining stations are fished only once; one station with the 8-inch gear and the other station with the 5 3/8-inch gear. The station fished and the station missed by a given mesh size varies with the random fishing schedule. The duration of each drift is approximately 20 minutes and the mean fishing time is calculated as half the time it takes to deploy and retrieve the gillnet, plus the time the gillnet is fully deployed. The river distance traversed by each drift varies depending on water and channel conditions, but the distance is generally less than 2 miles.

Beginning June 1 and continuing through July 10, two different mesh sizes are used; the first two drifts of each tide are conducted with the 8-inch mesh gillnet, and the second two drifts are performed with the 5 3/8-inch mesh gillnet.

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Different mesh sizes are used because the larger mesh catches larger Chinook salmon, whereas the smaller mesh is more effective on smaller Chinook and other salmon species. Beginning July 11, the use of the 8-inch mesh gear is discontinued for the remainder of the season because, typically, by mid-July the Chinook salmon migration in the lower Kuskokwim River is essentially over.

The catch for each drift is tallied by species and by drift station. At the end of each series of drifts, the catch is either donated to charities or individuals desiring the fish for subsistence purposes. The data are entered into a Microsoft Excel™ computer program for analysis and recorded in the office log.

Test Fishing Index

The actual salmon catch for each drift is converted to catch per unit effort (CPUE) to enhance the comparability of catch results. This is done by converting the difference in net length and mean fishing time of each drift to the number of fish caught by 100 fathoms of net fished for 60 minutes. This standard net length and fishing time is a technique used in many gillnet test fisheries conducted by ADF&G throughout the state.

For each high tide, the drift CPUEs are averaged over all stations to calculate a mean tidal CPUE index for each species. For Chinook salmon the mean is calculated using the drift CPUEs from both 8-inch and 5 3/8-inch mesh nets with each drift and mesh size weighted equally. In contrast, only catches in the 5 3/8-inch mesh nets are used to calculate mean tidal CPUEs for sockeye, chum and coho salmon.

The mean tidal CPUEs are summed by species throughout the season to generate a cumulative CPUE index for the season and it is this data that is presented to the Working Group in the visual graph form to illustrate the comparison of current run information with known historical run results.

Conclusion

Kuskokwim River subsistence and commercial fishery salmon managers have found the Bethel test fishery project to be successful at indexing the relative abundance and migratory timing of salmon runs. Fishery managers require timely inseason assessment of salmon run abundance. Due to the great river distances between areas of harvest and escapement project locations throughout the drainage, escapement projects provide limited usefulness early in the salmon runs. As the runs progress, a relationship can be seen between inseason index information and escapement project information.

In order for the Bethel test fishery to be successful in achieving its objectives, project methods and procedures must be performed consistency between tides throughout the season and that consistency must be maintained between years. Again, it is not possible to account for the array of factors that affect salmon catchability during the season so it is best to compare the current year's data with the more recent historical years' data to reduce the influence of slower changing factors.

As one of the salmon stock assessment programs, the Bethel test fishery has evolved into the primary inseason salmon management tool. Consistency in methods, completeness of a historical database, frequency of operation, and timeliness of results contribute to the success of this program. The test fishery by itself is an imperfect tool. It requires a measure of subjectivity by experienced staff to interpret the information effectively. When used in conjunction with other inseason assessment tools, the test fishery can provide managers with insight into salmon run abundance and migratory timing to provide for sustained yield fishery management on the Kuskokwim River.

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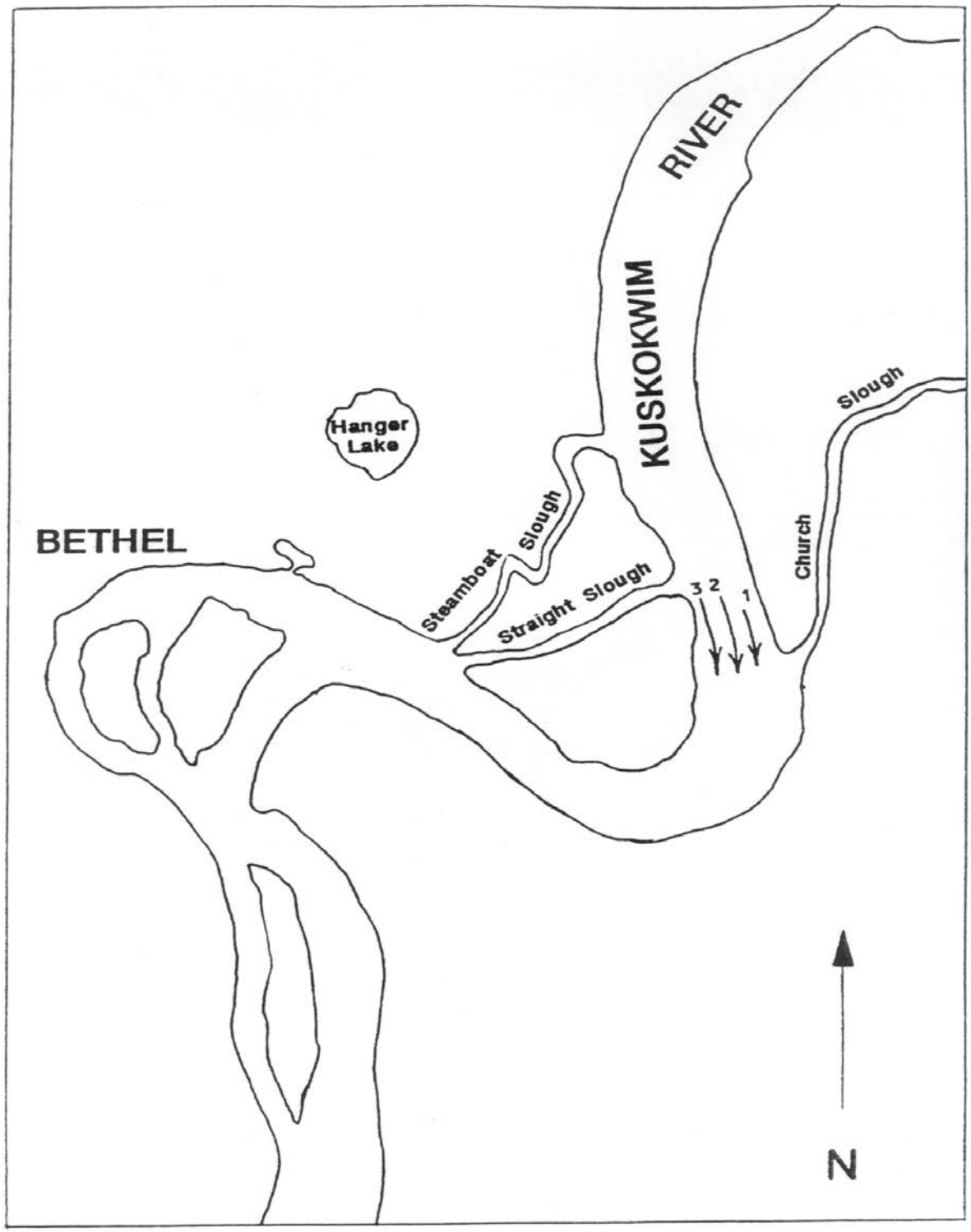
**Bethel Test Fishery Drift Stations 1, 2 and 3.**

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**Links regarding the salmon bycatch donation program:**

Provided by Dr. Katie Howard (ADF&G)

- Currently SeaShare is the only organization currently permitted to accept bycatch salmon for donation. http://www.seashare.org/
- While information on individual processors' participation in the program cannot be provided by NMFS due to confidentiality issues, SeaShare has some donor information on their web site. http://www.seashare.org/Seashare-Donors.htm
- All processors of GOA pollock (which, by regulation, must be delivered shore-side) have agreed to participate in SeaShare
- The regulations for the program are at 50 CFR 679.26 http://alaskafisheries.noaa.gov/regs/679b26.pdf
- NMFS posts the notices for the donation program on the web site at: http://alaskafisheries.noaa.gov/index/notice/notices.asp?Yr=2011 under Prohibited Species Donation Program

**Some more info….**
Chris Stark with Bering Sea Fisherman's Association is currently working on trying to increase participation of the fleet in the program, and working towards getting more of those donations to Alaska. Here's additional info he sent:

- SeaShare is presently distributing about 10% of the bycatch to food banks in Pacific Northwest region.
- All Mothership and some of catcher/sea processor bycatch (10% of total) is kept on board (frozen whole) until the ship gets to Seattle (postseason). Sea Shares picks up and distributes.
- Chris is working on having the shore processors do the same, but to be delivered to Anchorage for Alaskan consumption/distribution
- Presently the remaining bycatch (90%) is hauled to Dutch Harbor (or some other Bering Sea shore processing location), run through the processing plant, commonly frozen, stored, then all is loaded up and dumped at sea
- Chris expects his work to expand bycatch fish donation to include all food-grade fish is about a year out, and it is likely that the groundfish fishery will pay the extra costs as a good-will initiative for their industry.

Appendix C9.–Meeting Summary, July 27, Kuskokwim River Salmon Management Working Group, 2011.

# Kuskokwim River Salmon Management Working Group

1 (800) 315-6338 (MEET) Code: 58756# (KUSKO)

## Meeting Summary

**July 27, 2011**

Called to order at 10:10 am at ADF&G in Bethel and adjourned at 11:08 am. Five of thirteen members were present and a quorum was not established.

A moment of silence was observed for Calvin Simeon, Middle River Subsistence member, who passed away last week, and will be greatly missed.

**AGENDA ITEMS:**
1.) Continuing Business
2.) Old Business
3.) New Business

**WORKING GROUP ACTION ITEMS:** none

**MEETING ACTION ANNOUNCEMENT:**
The next KRSMWG meeting will be at the call of the Chairs.

**ADF&G RECOMMENDATIONS:**
ADF&G did not make a formal recommendation at this time. BTF indices and commercial catch statistics from the 4-hour commercial opener in Subdistrict 1-B on July 27, 2011 (today), will be evaluated to determine when the next commercial fishing period will be announced.

**WORKING GROUP MOTIONS:** none

**PEOPLE TO BE HEARD:** none

**CONTINUING BUSINESS:**

LOWER RIVER SUBSISTENCE REPORTS:
Alyssa Joseph (ONC) reported that people are fishing for coho to make up for harvesting fewer Chinook.

Greg Roczicka (Chair) knew of two families who were still targeting chums while the weather was good.

MIDDLE RIVER SUBSISTENCE REPORT:
Mike Thalhauser (KNA) said that most people were done fishing in Aniak for now, and waiting for coho to make up for fewer Chinook.

Bob Aloysius (YK Delta RAC) said that there was not much activity currently, except for people going upriver to catch a coho for dinner or to salt.

Mike Williams (Lower River Subsistence) reported that people have put away fish and are ready for winter. They will salt and can coho now.

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KNA INSEASON SUBSISTENCE REPORT:

Please see KNA subsistence surveys on page 2 of this document. Mike Thalhauser (KNA) reported that people appreciated the closures and saw results from them.

UPPER RIVER SUBSISTENCE REPORT:

Ray Collins (Western Interior RAC) said that there were still a few Chinook in the Salmon River. People are fishing for chum or waiting for coho.

**KNA 2011 Inseason Subsistence Surveys Summary**

| VILLAGE | FAMILY | FISHING Y/N | GEAR TYPE | How was the salmon run for 2011? | Total # of fish for 2011 season |
|---|---|---|---|---|---|
| **Kalskag** | **Family E** | Yes | Set Net | | |
| Chinook- Real slow at first and the run was low, even lower than last year. Sockeye- very abundant. Chum- lots as usual, about the same as the Sockeye. | | | | Below Average | Chinook: 24-40 |
| | | | | Average | Sockeye: 0 |
| | | | | Average | Chum: 0 |
| **Aniak** | **Family B** | Yes | Drift Net 5" mesh | | |
| Chinook- Slow in June then in mid July they were thick but the meat was mushy. Sockeye- were fine. Chum- were normal. Future fishing probably will be the same as this year for Chinook. Should bypass a few fish or down fishing downriver a little bit so fish could get up river again. | | | | Average | Chinook: 27 |
| | | | | Average | Sockeye: 27 |
| | | | | Average | Chum: 141 |
| **Aniak** | **Family C** | Yes | Set Net | | |
| Chinook- were poor. Chum- a little below average and late. Sockeye- below average. | | | | Below Average | Chinook: 21 |
| | | | | Below Average | Sockeye: 0 |
| | | | | Below Average | Chum: 0 |
| **Aniak** | **Family D** | Yes | Drift Net 6" Mesh | | |
| Chinook- alright. Sockeye- Good. Chums- always good. No comments. | | | | Average | Chinook: 19 |
| | | | | Average | Sockeye: 0 |
| | | | | Average | Chum: 2 |
| **Chuathbaluk** | **Family J** | Yes | Drift Net 7 1/2" | | |
| Chinook- Good, 3x better than last year. Sockeye- came in thick, but same as last year. Chum- lots. Everything went good with the closures down river, hope they do it again next year. | | | | Above Average | Chinook: 118 |
| | | | | Average | Sockeye: 102 |
| | | | | Average | Chum: 288 |
| **Chuathbaluk** | **Family L** | Yes | Drift Net | | |
| Chinook- kind of bad even with closures. Sockeye- quite a few reds this year, was a good run. Chum- lots. People from down river need to let fish go past. | | | | Below Average | Chinook: 6 |
| | | | | Average | Sockeye: 0 |
| | | | | Average | Chum: 0 |
| **Crooked Creek** | **Family M** | Yes | Drift Net 5 1/2" | | |
| Chinook- a little better then last year. Sockeye- missed the run didn't catch many. Chums- good year for them. Overall everything was a little bit better then last year. | | | | Above Average | Chinook: 34 |
| | | | | NR | Sockeye: 34 |
| | | | | Average | Chum: 54 |
| **Crooked Creek** | **Family N** | Yes | Drift Net 7" | | |
| Chinook- were mediocre, weren't very many of them. Wouldn't really know for Sockeye because didn't fish for any. The Chums didn't seem like there were very many.There hasn't been as many fish as there used to be, fishing was on a poor side overall. | | | | Below Average | Chinook: 20 |
| | | | | NR | Sockeye: 10 |
| | | | | Below Average | Chum: 37 |
| **Sleetmute** | **Family H** | Yes | Set Net | | |
| Chinook- much smaller this year. Numbers were adequate, of all the kings caught all were males, a little concerning. Chum- average for the past few years but not like 20 years ago and they were in very good condition. Sockeye- excellent big, shiny, and lots. Noticable when they closed downriver fisheries and its much appreciated. | | | | Below Average | Chinook: 61 |
| | | | | Above Average | Sockeye: 51 |
| | | | | Average | Chum: 88 |
| **Sleetmute** | **Family I** | Yes | Set Net | | |
| Chinook- were late and the water was high so the fish were swimming out in the middle of the river. So people didn't catch as much and had to make up with Sockeye, but no complaints. There were lots of Sockeye there was plenty to make up for the kings. Chum-doesn't really fish for them that much but they are always good. | | | | Below Average | Chinook: 2 |
| | | | | Average | Sockeye: 84 |
| | | | | Average | Chum: 0 |
| ****Totals based on information given to us during interviews**** | | | | | |

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DISCUSSION OF RUN ASSESSMENT DATA:
Water temperature is colder than normal, water level is average, and water clarity is average.

WEIRS/SONAR/MARK-RECAPTURE/AERIAL SURVEYS:
Aerial Surveys: Zach Liller (ADF&G) explained that aerial surveys for Chinook are made on seven tributaries at peak spawning, and surveys are currently in progress. Upriver survey results show that escapement goals for the Pitka Fork of the Salmon River have been met. The Gagaryah and Cheeneetnuk Rivers, tributaries of the Stony River, did not meet escapement goals. Minimum escapement goals have been reached on the Kisaralik River.

Chinook: Historically by this date 85-90% of Chinook passage has been counted at weir projects. The Kwethluk River count is currently below the escapement goal but is above other low years. The Tuluksak River has low passage but is two times greater than last year's. The Kogrukluk River count is below the escapement goal range but is greater than all other years that escapement has not been met (1999 and 2000, but the escapement goal at that time was 10,000 fish and not a goal range). However, the Kogrukluk River usually meets its escapement goal by the end of the year. Takotna is the only project to date with a cumulative passage less than 2010, but Chinook are still passing.

Chum: Chum escapement is strong this year in the upper river, but not so far in the lower river. The Kwethluk River's count is greater than only two years on record (1999 and 2000). The Tuluksak River's count is also low and above only 1991 and 2003. Aniak Sonar has achieved its minimum escapement goal. The George River's count is very high and is greater than all previous years except 2007. The Kogrukluk River has achieved its escapement goal. The Tatlawiksuk River has the largest escapement to date and the largest on record, and chum are still passing. The Takotna River's count is the third highest on this date.

Sockeye: Escapement on the Kwethluk River is looking good. The Kogrukluk River has achieved its minimum escapement goal for sockeye. Telaquana Lake (the headwaters of the Stony River) has almost 10,000 more fish than last year at this point.

Coho: Escapement numbers for coho will be in the next information packet.

COMMENTS:
Greg Roczicka read an email from Casie Stockdale (AVCP) who could not attend the meeting. She asked what the water quality was when the Kisaralik aerial surveys were flown. She wanted to determine the reliability of that estimate because this year's survey results seemed surprisingly high. Zach Liller replied that surveys are used if rated as "fair" or "good" condition, regarding the visibility of fish in the water. Chuck Brazil (ADF&G), who flew the 2011 survey, reported that water on the Kisaralik was crystal clear and he could see every fish. The conditions were some of the best he has ever seen while surveying Chinook. Zach added that USFWS and ADF&G Sport Fish just finished floating the Kisaralik and reported seeing many Chinook.

Ray Collins asked about the aerial survey count for Pitka's Fork on the Salmon River. Zach Liller replied that the count was 767 individual Chinook. Chuck Brazil added that he talked to Larry Nicholson who has been flying there for 20 years and Justin Cross who surveys there. They both said that survey conditions this year were some of the clearest water conditions that they have ever seen. These pilots also flew Bear Creek separately but Chuck does not have that data yet. The count of 767 for the Salmon River only includes Pitka's Fork.

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Mike Williams appreciated hearing the report about the Kisaralik River. He fully agreed with the assessment and had "no question that the Kisaralik looks good for kings."
Greg Roczicka commented that people were thinking about berries more than fish right now. Mike Williams agreed, and looks forward to lengthier discussions about fisheries issues at this week's Yupiit Nations meeting in Tuntutuliak.

Doug Molyneaux requested the aerial survey data for tributaries, and bar graphs be added into the info packets.

Bob Aloysius asked if the dates of previous years' surveys correspond to the 2011 aerial surveys. Zach Liller replied that surveys are always flown the last week of July through the first week of August, so they are always at similar times. The surveys start at the top of the Kuskokwim and progress downstream.

Chair read another comment from Casie Stockdale. She said that given our concern for escapement on the Kwethluk and Tuluksak Rivers, it seems very important to get these aerial surveys (by the same surveyor who flew the Kisaralik) as soon as possible. She thought that this data paired with escapement numbers would be valuable information.

Dan Gillikin (USFWS) asked if ADF&G knew why chum escapement numbers were low on the lower river. Kevin Schaberg said that there could still be a push of fish coming because BTF numbers are still good, but it is too early to tell. Greg Roczicka thought that commercial fishing could be a factor because the commercial season started late this year. Kevin replied that there could be many factors so we should wait and see instead of making speculations.

**COMMERCIAL CATCH REPORT:**
The harvest from the 4-hour commercial fishing opener in Subdistrict 1B on July 25 with 80 permits was 24 Chinook; 51 sockeye; 7,021 chum; and 2,710 coho. The CPUE for chum salmon was above average and the CPUE for coho was below average for this time.

Current cumulative salmon harvest in District 1 for an average of 103 permit holders and 37 hours of commercial fishing are 672 Chinook (retained for subsistence purposes); 13,092 sockeye; 108,849 chum; and 4,777 coho.

COMMENTS:
Holly Carroll (ADF&G) asked how commercial chum catches compare to the historical average years. Chuck Brazil replied that that they have fished the same amount of hours but chum catches are above average for commercial fishing.

**PROCESSOR REPORT:** none

**SPORT FISH REPORT:**
Lamont Albertson (Sport Fish) reported 3 and 4-year-old Chinook mixed with char and pike. He was concerned about guides keeping Chinook out of the water for photographing, because he doubts that many of these Chinook survive.

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John Chythlook (ADF&G) commented that the Chinook salmon sport fishing season on the Kuskokwim ended on July 25th. The area of this state regulation is defined as ¼ mile upstream from the confluence of the Kuskokwim River with the Holitna River, and all waters draining into Kuskokwim Bay south of the Kuskokwim River.

In reference to Lamont's request for more research on pike in the Aniak River at the last meeting, John mentioned that the current radio telemetry project for pike and burbot on the middle river could be expanded to include the Aniak River in the future.

**WEATHER FORECAST:**
The Kuskokwim Delta will be cloudy or mostly cloudy with scattered showers all week. Highs will be 40 to 60 degrees F.

**RECOMMENDATION:**
ADF&G did not make a formal recommendation at this time. BTF indices and commercial catch statistics from the 4-hour commercial opener in Subdistrict 1-B on July 27, 2011 (today), will be evaluated to determine when the next commercial fishing period will be announced.

The coho salmon fishery will be managed conservatively, as in the previous season, and commercial fishing periods will be based on BTF indices and commercial catch statistics.

COMMENTS:
Dan Gillikin asked if low chum escapement on lower river tributaries and the low commercial fishing CPUE of coho were the reasons for managing the coho fishery conservatively. Chuck Brazil replied that we are near the end of the chum run and are at 10% of the coho run. Moving into coho management is at the discretion of the manager so he wants to look at the numbers daily in order to make decisions.

Greg Roczicka commented that the coho run seems to have a slow start but it is early still. People need to supplement their lower Chinook catches with coho because of the federal closures this year.

**WORKING GROUP MOTIONS:** none

**OLD BUSINESS:** none

**NEW BUSINESS:** none

**GENERAL COMMENTS FROM WORKING GROUP MEMBERS:**
Mike Williams commented that at the meeting in Tuntutuliak this weekend they will discuss issues from the interagency meeting and these meetings. He would like the interagency meeting and spring KRSMWG to be held in Bethel instead of Anchorage because these meetings are very important and need to be more accessible to people in the region. If more people from the villages can attend fisheries information could be distributed more clearly and earlier in the season. Doug Molyneaux commented that he understands Mike's concern but thinks that having the meeting in Bethel would be logistically difficult because of the diverse audience it draws. He pointed out that though funding was available for KRSMWG members to attend, there were many agency staff that attend or work on the meeting and there is no extra funding for putting on the meeting that would include any travel. Doug added that AVCP has been working on putting together a regional fisheries meeting in Bethel. Greg Roczicka commented that they are trying to find funding to have the meeting this winter.

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Mike Williams wanted to thank everyone who said farewell to Calvin Simeon at his funeral in Aniak last weekend.

**WORKING GROUP ATTENDANCE:**

| **MEMBER SEAT:** | **NAME:** |
|---|---|
| UPRIVER ELDER | *Vacant* |
| DOWNRIVER ELDER | *Absent* |
| COMMERCIAL FISHER | *Absent* |
| LOWER RIVER SUBSISTENCE | Mike Williams |
| MIDDLE RIVER SUBSTENCE | *Absent* |
| UPPER RIVER SUBSISTENCE | *Absent* |
| HEADWATERS SUBSISTENCE | *Absent* |
| PROCESSOR | Stuart Currie |
| MEMBER AT LARGE | *Absent* |
| SPORT FISHER | Lamont Albertson |
| WESTERN INTERIOR RAC | Ray Collins |
| Y-K DELTA RAC | Bob Aloysius |
| ADF&G | Chuck Brazil |
| CHAIR | Greg Roczicka |

| **Other Participants:** | |
|---|---|
| ADF&G Comm. Fish : Zach Liller, Kevin Schaberg, Scott Ayers, Alice Bailey, Holly Carroll<br>Sport Fish : John Chythlook, Tom Taube<br>Subsistence Division: Hiroko Ikuta | |
| USFWS: Dan Gillikin, Steve Miller, Aaron Moses, Dara Friday<br>OSM: Rod Campbell | |
| Doug Molyneaux<br>Fran Reich<br>Alyssa Joseph, ONC<br>Dave Cannon, Aniak | Maridon Boario (Senator Hoffman's office)<br>Mike Thalhauser, KNA<br>La Donn Robbins, KNA |

**GLOSSARY OF ACRONYMS:**

Alaska Department of Fish and Game (**ADF&G**), Orutsararmiut Native Council (**ONC**), Kuskokwim Native Association (**KNA**), Association of Village Council Presidents (**AVCP**), U.S. Fish and Wildlife Service (**USFWS**), Bethel Test Fishery project (**BTF**), Catch Per Unit Effort (**CPUE**), Coastal Village Seafoods (**CVS**), ADF&G Commercial Fisheries Division (**CF**), ADF&G Sport Fisheries Division (**SF**), Regional Advisory Council (**RAC**), Kuskokwim River Salmon Management Working Group (**KRSMWG or Working Group, WG**), Sustainable Escapement Goal (**SEG**), Biological Escapement Goal (**BEG**).

# APPENDIX D: 2011 PRELIMINARY KUSKOKWIM AREA SALMON SEASON SUMMARY

Appendix D1.–Kuskokwim area season summary, 2011.

**ALASKA DEPARTMENT OF FISH AND GAME**
**DIVISION OF COMMERCIAL FISHERIES**
NEWS RELEASE

*Cora Campbell, Commissioner*
*Jeff Regnart, Director*


Contact:
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Date Issued: October 12, 2011
Time: 2:00 p.m.

## 2011 Preliminary Kuskokwim Area Salmon Season Summary

### Kuskokwim Area Management

The 2011 Kuskokwim River salmon fisheries were managed according to the Kuskokwim River Salmon Management Plan (5 AAC 07.365). The Kuskokwim Bay salmon fisheries were managed according to the District 4 Salmon Management Plan (5 AAC 07.367).

#### Kuskokwim Area Commercial Harvest

A total of 450,456 salmon were commercially harvested from the Kuskokwim Area in 2011 (Table 1). A total of 510 individual permit holders (making at least one recorded landing) participated in area commercial fisheries with an estimated exvessel value of $2,287,202 (Table 2)

### Kuskokwim River

#### 2011 Outlook and Commercial Harvest

| | Chinook | Sockeye | Chum | Coho |
|---|---|---|---|---|
| 2011 Outlook | 0 | 20,000 – 30,000 | 200,000 – 300,000 | 60,000 – 150,000 |
| 2011 Harvest | 49 | 13,482 | 118,256 | 74,108 |

Harvest in numbers of fish current as of October 3, 2011

#### District W-1 Commercial Harvest

The 2011 District W-1 commercial fishing season began on July 5 and ended on August 22. There were 19 commercial fishing periods in District W-1. A total of 49 Chinook salmon; 13,482 sockeye salmon; 118,256 chum salmon and 74,108 coho salmon were commercially harvested

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(Table 1). A total of 748 Chinook were harvested during the commercial fishery, but 699 of those were retained for personal use as the buyers agreed not to purchase Chinook salmon because of the poor return. Chinook salmon catch rates were below average. Catch rates for chum salmon were above average and sockeye salmon were average. Coho salmon catch rates ranged from above average to below average. A total of 413 individual permit holders (making at least one recorded landing) participated in the District W-1 commercial fishery. Chum and sockeye salmon harvests were above the most recent 10-year average, while Chinook and coho salmon harvest was below the most recent 10-year average. The chum salmon harvest was the highest since 1998. Total exvessel value of the fishery in District W-1 was $764,358; approximately 150% above the most recent 10-year average value (Table 2).

**Run Timing and Escapement**

Salmon run timing at Bethel based on the Bethel Test Fishery indicated Chinook and sockeye salmon run timing was near average, while chum salmon were three days later than average, and coho salmon run timing was three days earlier than average. Run timing at the spawning grounds was characterized as late for Chinook and chum salmon, while sockeye salmon ranged from early to late, and coho salmon appeared to be average to late.

Based on escapements at weirs and through aerial surveys, preliminary Chinook and sockeye salmon abundance in 2011 in the Kuskokwim River was below average, chum salmon abundance was above average, and coho salmon abundance was average.

**Chinook salmon**

Overall, preliminary data indicated in 2011 Chinook salmon abundance was below average. When compared to 2010 escapements three tributaries monitored by weir had higher escapements and three were similar. Seven Kuskokwim River tributaries have aerial survey escapement goals. Of the five tributaries that were assessed, two (Kisaralik and Salmon (Pitka Fork) rivers) achieved their respective goals and three (Cheeneetnuk, Gagaryah, and Salmon (Aniak) rivers) did not.

| | Chinook Salmon Escapement | | | | | |
|---|---|---|---|---|---|---|
| Year | Kwethluk | Tuluksak | George | Kogrukluk | Tatlawiksuk | Takotna |
| 2000 | 3,547 | a | 2,960 | 3,310 | 810 | 345 |
| 2001 | a | 997 | 3,309 | 9,298 | 2,010 | 721 |
| 2002 | 8,502 | 1,346 | 2,444 | 10,104 | 2,237 | 316 |
| 2003 | 14,474 | 1,064 | 4,693 | 11,771 | 1,683 | 378 |
| 2004 | 28,605 | 1,475 | 5,207 | 19,651 | 2,833 | 461 |
| 2005 | a | 2,653 | 3,845 | 22,000 | 2,918 | 499 |
| 2006 | 17,619 | 1,044 | 4,357 | 19,414 | 1,700 | 539 |
| 2007 | 13,267 | 374 | 4,883 | 13,029 | 2,061 | 418 |
| 2008 | 5,312 | 665 | 2,698 | 9,730 | 1,071 | 413 |
| 2009 | 5,710 | 404 | 3,663 | 9,702 | 1,071 | 311 |
| 2010 | 1,693 | 239 | 1,500 | 5,690 | 567 | 178 |
| 2011 | 4,076 | 286 | 1,571 | 6,891 | 1,012 | 134 |

[a] Weir did not operate or counts were incomplete

-continued-

Six tributaries were monitored by weir and four have escapement goals. Only the Kogrukluk River achieved the escapement goal with a preliminary count of 6,891 Chinook salmon passing the weir.

**Sockeye salmon**

Overall, preliminary 2011 sockeye salmon abundance was considered below average.

Seven tributaries were monitored by weir for sockeye salmon escapement. The Kogrukluk River escapement goal (range 5,300-14,000) was achieved with an estimated 8,132 sockeye salmon passing the weir.

| | Sockeye Salmon Escapement | | | | | | |
|---|---|---|---|---|---|---|---|
| Year | Kwethluk | Tuluksak | George | Kogrukluk | Tatlawiksuk | Takotna | Telaquana |
| 2000 | 358 | a | 22 | 2,865 | 0 | 4 | a |
| 2001 | a | 137 | 24 | 8,776 | 3 | 1 | a |
| 2002 | 272 | 82 | 17 | 4,050 | 1 | 1 | a |
| 2003 | 2,928 | 288 | 16 | 9,164 | a | 4 | a |
| 2004 | 3,490 | 136 | 177 | 6,775 | 10 | 17 | a |
| 2005 | a | 642 | 276 | 37,939 | 77 | 35 | a |
| 2006 | 6,732 | 985 | 164 | 60,807 | 41 | 60 | a |
| 2007 | 5,262 | 352 | 74 | 16,525 | 27 | 14 | a |
| 2008 | 2,451 | 185 | 94 | 19,675 | 39 | 13 | a |
| 2009 | 4,385 | 708 | 54 | 23,785 | 39 | 4 | a |
| 2010 | 4,264 | 476 | 115 | 13,995 | 33 | a | 72,021 |
| 2011 | 2,028 | 123 | 43 | 8,132 | 23 | 2 | 35,105 |

[a] Weir did not operate or counts were incomplete

**Chum salmon**

Overall, preliminary 2011 data indicates chum salmon abundance was above average.

Seven tributaries were monitored for chum salmon escapement, six weirs and one sonar project, of which only two, Aniak and Kogrukluk rivers, have escapement goals. The Aniak River escapement goal (range 220,000-480,000) was achieved with an estimated 345,630 chum salmon passing the sonar. The Kogrukluk River escapement goal (range 15,000-49,000) was exceeded with an estimated 76,384 chum salmon passing the weir.

| | Chum Salmon Escapement | | | | | | |
|---|---|---|---|---|---|---|---|
| Year | Kwethluk | Tuluksak | George | Kogrukluk | Tatlawiksuk | Takotna | Aniak |
| 2000 | 11,691 | a | 3,492 | 11,491 | 6,965 | 1,254 | 177,384 |
| 2001 | a | 19,321 | 11,601 | 30,570 | 23,718 | 5,414 | 408,830 |
| 2002 | 35,854 | 9,958 | 6,543 | 51,570 | 24,542 | 4,377 | 472,346 |
| 2003 | 41,812 | 11,724 | 33,666 | 23,413 | a | 3,393 | 477,544 |
| 2004 | 38,646 | 11,796 | 14,409 | 24,201 | 21,245 | 1,630 | 672,931 |
| 2005 | a | 35,696 | 14,828 | 197,723 | 55,720 | 6,467 | 1,151,505 |
| 2006 | 47,490 | 25,648 | 41,467 | 180,594 | 32,301 | 12,598 | 1,108,626 |

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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2007 | 57,230 | 17,286 | 55,842 | 49,505 | 83,246 | 8,900 | 696,801 |
| 2008 | 20,048 | 12,518 | 29,978 | 44,978 | 30,896 | 5,691 | 427,911 |
| 2009 | 32,028 | 13,658 | 7,941 | 84,940 | 19,975 | 2,487 | 479,531 |
| 2010 | 18,835 | 13,424 | 26,154 | 63,583 | 36,701 | 4,062 | 429,643 |
| 2011 | 18,261 | 9,948 | 44,640 | 76,384 | 84,202 | 8,414 | 345,630 |

[a] Weir did not operate or counts were incomplete

**Coho salmon**

Overall, preliminary 2011 data indicates coho salmon abundance appears to be about average.

Six tributaries were monitored by weir for coho salmon escapement of which only two, Kwethluk and Kogrukluk rivers, have escapement goals. The Kwethluk River escapement goal, (>19,000) was not assessed due to high water. The Kogrukluk River escapement goal (range 13,000-28,000) was achieved with an estimated 24,174 coho salmon passing the weir.

| | Coho Salmon Escapement | | | | | |
|---|---|---|---|---|---|---|
| Year | Kwethluk | Tuluksak | George | Kogrukluk | Tatlawiksuk | Takotna |
| 2000 | 25,610 | a | 11,262 | 33,135 | a | 3,957 |
| 2001 | 21,596 | 23,768 | 14,398 | 19,387 | 10,539 | 2,606 |
| 2002 | 23,298 | 11,487 | 6,759 | 14,516 | 11,345 | 3,984 |
| 2003 | 107,789 | 41,071 | 33,280 | 74,604 | a | 7,171 |
| 2004 | 64,216 | 20,336 | 12,499 | 27,041 | 16,410 | 3,207 |
| 2005 | a | 11,324 | 8,200 | 24,116 | 7,495 | 2,216 |
| 2006 | 25,664 | 5,438 | 11,296 | 17,011 | 9,453 | 5,548 |
| 2007 | 19,473 | 2,807 | 29,317 | 27,033 | 8,685 | 2,853 |
| 2008 | 49,973 | 7,457 | 21,931 | 29,661 | 11,065 | 2,817 |
| 2009 | 21,911 | 8,137 | 12,573 | 22,981 | 10,148 | 2,708 |
| 2010 | a | 1,478 | 12,961 | 13,971 | 3,520 | 3,217 |
| 2011 | a | a | 30,028 | 24,174 | 12,928 | 4,019 |

[a] Weir did not operate or counts were incomplete

**Subsistence**

The 2011 preseason outlook for Chinook salmon was similar to 2010 when the Kuskokwim River Drainage experienced the lowest estimated total run and spawning escapement on record and not achieving escapement goals for several years in Kuskokwim River tributaries was cause for conservation concern.

The following preseason management actions were taken effective from June 1 until July 25, 2011 in an effort to achieve escapement goals.

Subsistence Chinook salmon fishing with hook and line gear was closed and subsistence fishing was restricted to the use of gillnets with 4-inch or less mesh not to exceed 60-feet in the following waters of the Kuskokwim River Drainage:

- Kuskokuak Slough between ADF&G regulatory markers located at the upstream and downstream mouth of the slough, including all waters of the Old Kuskokuak Slough, the

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Kisaralik, Kasigluk, and the Kwethluk river drainages to their confluence with Kuskokuak Slough,

- The Tuluksak River drainage including its confluence with the Kuskokwim River and the Kuskokwim River mainstem downstream to the upstream side of Mishevik Slough.

Subsistence fishing was closed in District 1 from June 16-19 as Bethel Test Fish abundance indices of Chinook salmon continued to indicate low abundance of Chinook salmon and escapement goals were unlikely to be met. This action was supported by the Kuskokwim River Salmon Management Working Group.

Subsistence fishing was closed in District 1 from June 23-28 as Bethel Test Fish continued to indicate lower than adequate abundance of Chinook salmon and that escapement goals were unlikely to be met. This action was supported by the Kuskokwim River Salmon Management Working Group.

On June 29 through July 7, 2011, ADF&G restricted subsistence salmon fishing to 6-inch or smaller mesh gillnets in District 1 of the Kuskokwim River drainage. This action was taken for conservation of Chinook salmon while still providing opportunity to harvest more abundant sockeye and chum salmon. This conservation measure was unanimously supported by the Kuskokwim River Salmon Management Working Group.

Federal Management special actions contained in 3-KS-01-11 and 3-KS-02-11 preempted state management emergency orders from June 30 until July 2, 2011:

- That area of the Kuskokwim River within the Federal Conservation Unit were closed to subsistence fishing using gillnets with mesh greater than 4-inches, exceeding 45 meshes in depth and longer than 60 feet from 12:01 a.m. Thursday, June 30 until 11:59 p.m. Saturday, July 2, 2011. The area closed extended from the mouth of the Kuskokwim River upstream to the confluence of the Aniak and Kuskokwim Rivers, including all tributary rivers in between.

Subsistence salmon fishing was also closed by emergency order adjacent to periods of commercial salmon fishing on the Kuskokwim River 6 hours before, during, and 3 hours after commercial fishing.

Post season subsistence harvest surveys are presently being conducted. Inseason reports during Kuskokwim River Salmon Management Working meetings suggested that many subsistence fishermen met their harvest needs.

## Kuskokwim Bay

**2011 Outlook and Commercial Harvest, Districts W-4 and W-5**

| | Chinook | Sockeye | Chum | Coho |
|---|---|---|---|---|
| 2011 Outlook | 10,000 – 17,000 | 80,000 – 160,000 | 90,000 – 140,000 | 20,000 – 60,000 |
| 2011 Harvest | 17,479 | 63,116 | 118,150 | 45,815 |

**District W-4 (Quinhagak) Commercial Harvest**

The 2011 District W-4 commercial fishing season began on June 20 and ended on August 26. There were 26 commercial fishing periods in District W-4. A total of 15,387 Chinook salmon; 38,543 sockeye salmon; 104,959 chum salmon and 30,457 coho salmon were commercially harvested (Table 1). Chinook salmon catch rates were above average to below average. Catch

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rates for chum salmon were above average. Sockeye and coho salmon catch rates were below average. A total of 219 individual permit holders (making at least one recorded landing) participated in the District W-4 commercial fishery. Chum salmon harvest was the second highest on record, just below the 106,610 harvested in 2010. Chinook, sockeye and coho salmon harvests were below the most recent 10-year average. Total exvessel value of the fishery in District W-4 was $1,176,435; approximately 195% above the most recent 10-year average value (Table 2).

**Run Timing and Escapement**

Based on commercial harvests and escapements at the Kanektok River weir; Chinook, chum, and coho salmon run timing were average, while sockeye salmon run timing was about three days earlier than average.

Aerial surveys were not flown on the Kanektok River because of poor weather conditions. Chinook salmon escapement at the Kanektok River weir was 5,032 and it was the lowest recorded escapement since the weir started enumerating Chinook salmon in 2002. The sockeye salmon escapement of 84,805 was the second lowest recorded at the weir. The chum salmon escapement of 50,908 was a little below average. Coho salmon were not enumerated at the Kanektok River weir.

Kanektok River Weir Escapement

| Year | Chinook | Sockeye | Chum | Coho |
|---|---|---|---|---|
| 2002 | 5,343 | 58,326 | 42,009 | 24,840 |
| 2003 | 8,231 | 127,471 | 40,066 | 72,448 |
| 2004 | 19,528 | 102,867 | 46,444 | 87,828 |
| 2005 | 14,331 | 242,208 | 53,580 | 26,343 |
| 2006 | a | a | a | a |
| 2007 | 14,120 | 307,750 | 133,215 | 30,471 |
| 2008 | 6,578 | 141,388 | 54,024 | 24,490 |
| 2009 | 6,841 | 272,483 | 51,652 | a |
| 2010 | 5,800 | 202,634 | 62,567 | a |
| 2011 | 5,032 | 84,805 | 50,908 | a |

[a] Weir did not operate or counts were incomplete

**Subsistence**

Subsistence fishing in the Quinhagak area was allowed 7 days per week throughout the season with the exception of closed periods 8 hours before, during, and 6 hours after commercial fishing periods.

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**District W-5 (Goodnews Bay) Commercial Harvest**

The 2011 District W-5 commercial fishing season began on June 27 and ended on August 26. There were 21 commercial fishing periods in District W-5. A total of 2,092 Chinook salmon; 24,573 sockeye salmon; 13,191 chum salmon and 15,358 coho salmon were commercially harvested (Table 1). Chinook salmon catch rates were average. Catch rates for chum salmon were above average and sockeye salmon were below average. Coho salmon catch rates ranged from above average to below average. A total of 48 individual permit holders (making at least one recorded landing) participated in the District W-5 commercial fishery. Chinook and coho salmon harvest was above the most recent 10-year average. Sockeye and chum salmon harvest was below the most recent 10-year average. Total exvessel value of the fishery in District W-5 was $346,022; approximately 197% above the most recent 10-year average value (Table 2).

**Run Timing and Escapement**

Based on commercial harvests and escapements at the Goodnews River weir; Chinook salmon run timing was about nine days later than average and chum salmon run timing was about six days later than average. Sockeye salmon run timing was about four days earlier than average. Coho salmon run timing was average.

Chinook salmon escapement was below average. The Goodnews River (North Fork) aerial Chinook salmon survey goal (range 640-3,300) was achieved with 853 fish observed. The Middle Fork Goodnews River weir Chinook salmon biological escapement goal (range 1,500-2,900) was achieved with an estimated escapement of 1,861 fish. Sockeye salmon escapement was below average. The Goodnews River (North Fork) sockeye salmon aerial survey goal (range 5,500-19,500) was achieved with 14,130 fish observed. The Middle Fork Goodnews River weir sockeye salmon biological escapement goal (range 18,000-40,000) was not achieved with an estimated escapement of 17,946 fish, which was the lowest in the past decade. The weir escapement goals for chum and coho salmon (greater than 12,000) were achieved with an estimated escapement of 19,974 and 23,826 fish respectively.

| | Middle Fork Goodnews River Weir Escapement | | | |
|---|---|---|---|---|
| Year | Chinook | Sockeye | Chum | Coho |
| 2001 | 5,351 | 21,024 | 26,820 | 19,626 |
| 2002 | 3,085 | 22,101 | 30,300 | 27,364 |
| 2003 | 2,389 | 44,387 | 21,637 | 52,810 |
| 2004 | 4,388 | 55,926 | 31,616 | 47,917 |
| 2005 | 4,633 | 113,809 | 26,690 | 15,683 |
| 2006 | 4,559 | 126,772 | 54,699 | 15,969 |
| 2007 | 3,852 | 72,282 | 49,285 | 20,767 |
| 2008 | 2,158 | 51,763 | 44,310 | 36,663 |
| 2009 | 1,630 | 25,465 | 19,715 | 20,000 |
| 2010 | 2,244 | 35,762 | 26,687 | 23,839 |
| 2011 | 1,861 | 17,946 | 19,974 | 23,826 |

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**Subsistence**

Subsistence fishing in the Goodnews Bay area was allowed 7 days per week throughout the season with the exception of closed periods 8 hours before, during, and 6 hours after commercial fishing periods.

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Table 1.–Commercial salmon harvest and exvessel value by District, Kuskokwim Area, 2011.

| | Chinook | Sockeye | Coho | Pink | Chum | Total |
|---|---|---|---|---|---|---|
| **Lower Kuskokwim River, District W-1** | | | | | | |
| Fish | 49 | 13,482 | 74,108 | 1 | 118,256 | 205,896 |
| Pounds | 484 | 89,093 | 496,922 | 4 | 712,880 | 1,299,383 |
| Price | $0.85 | $0.89 | $0.67 | $0.00 | $0.49 | |
| Value | $411 | $79,370 | $334,452 | $0 | $350,124 | $764,357 |
| **Recent 10-yr Average 2001-2010** | | | | | | |
| Fish | 2,863 | 11,365 | 177,034 | 4 | 35,051 | 226,316 |
| Value | $24,382 | $50,298 | $398,756 | $0 | $30,100 | $504,155 |
| **Quinhagak, District W-4** | | | | | | |
| Fish | 15,387 | 38,543 | 30,457 | 0 | 104,959 | 189,346 |
| Pounds | 196,009 | 244,296 | 233,333 | 0 | 710,420 | 1,384,058 |
| Price | $0.85 | $0.85 | $0.85 | $0.00 | $0.85 | |
| Value | $166,606 | $207,642 | $198,333 | $0 | $603,855 | $1,176,436 |
| **Recent 10-yr Average 2001-2010** | | | | | | |
| Fish | 16,899 | 72,489 | 44,708 | 2 | 46,996 | 181,093 |
| Value | $142,516 | $296,381 | $122,805 | $0 | $42,662 | $604,365 |
| **Goodnews Bay, District W-5** | | | | | | |
| Fish | 2,092 | 24,573 | 15,358 | 0 | 13,191 | 55,214 |
| Pounds | 22,617 | 166,290 | 125,260 | 0 | 92,918 | 407,085 |
| Price | $0.85 | $0.85 | $0.85 | $0.00 | $0.85 | |
| Value | $19,224 | $141,347 | $106,471 | $0 | $78,980 | $346,022 |
| **Recent 10-yr Average 2001-2010** | | | | | | |
| Fish | 1,907 | 28,032 | 12,278 | 1 | 9,507 | 51,724 |
| Value | $16,154 | $113,892 | $36,031 | $0 | $9,488 | $175,566 |
| **Kuskokwim Area Total** | | | | | | |
| Fish | 17,528 | 76,598 | 119,923 | 1 | 236,406 | 450,456 |
| Pounds | 219,110 | 499,679 | 855,515 | 4 | 1,516,218 | 3,090,526 |
| Price | $0.85 | $0.86 | $0.75 | $0.00 | $0.68 | |
| Value | $186,241 | $428,359 | $639,256 | $0 | $1,032,959 | $2,286,815 |
| **Recent 10-yr Average 2001-2010** | | | | | | |
| Fish | 21,677 | 112,064 | 233,789 | 4 | 91,577 | 459,111 |
| Value | $183,052 | $460,571 | $557,592 | $1 | $82,250 | $1,284,085 |

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Table 2.– Commercial salmon fishing estimated exvessel value and permits fished by district, Kuskokwim Area, 1990–2011.

| | District 1 | | District 2 | | District 4 | | District 5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Value of Catch | Permits Fished [a] | Value of Catch | Permits Fished [a] | Value of Catch | Permits Fished [a] | Value of Catch | Permits Fished [a] | Total Value | Total Permits |
| 1990 | $3,385,636 | 742 | $121,329 | 22 | $1,013,472 | 390 | $361,203 | 82 | $4,881,640 | 823 |
| 1991 | $2,971,767 | 749 | $111,651 | 23 | $592,436 | 346 | $273,795 | 72 | $3,949,649 | 819 |
| 1992 | $3,764,804 | 741 | $147,992 | 22 | $993,664 | 349 | $439,331 | 111 | $5,345,791 | 814 |
| 1993 | $2,533,895 | 737 | $90,906 | 20 | $898,255 | 408 | $440,955 | 114 | $3,964,011 | 804 |
| 1994 | $3,559,114 | 706 | $129,555 | 17 | $837,157 | 307 | $591,903 | 116 | $5,117,729 | 793 |
| 1995 | $2,776,677 | 712 | $107,913 | 21 | $1,047,188 | 382 | $287,599 | 87 | $4,219,377 | 798 |
| 1996 | $2,108,418 | 620 | $11,015 | 8 | $534,726 | 218 | $222,388 | 54 | $2,876,547 | 714 |
| 1997 | $430,614 | 604 | $2,944 | 4 | $497,071 | 289 | $121,973 | 53 | $1,052,602 | 702 |
| 1998 | $982,791 | 615 | $617 | 3 | $467,843 | 203 | $184,060 | 50 | $1,635,311 | 707 |
| 1999 | $170,278 | 509 | $0 | 0 | $279,092 | 218 | $102,803 | 73 | $552,173 | 604 |
| 2000 | $509,594 | 532 | $3,039 | 4 | $466,560 | 230 | $212,336 | 46 | $1,191,529 | 623 |
| 2001 | $429,534 | 412 | $0 | 0 | $228,615 | 159 | $98,458 | 32 | $756,607 | 514 |
| 2002 | $127,208 | 318 | $0 | 0 | $167,748 | 114 | $28,703 | 30 | $323,659 | 407 |
| 2003 | $453,187 | 359 | $0 | 0 | $304,553 | 114 | $135,287 | 34 | $893,027 | 438 |
| 2004 | $943,767 | 390 | $0 | 0 | $405,344 | 116 | $135,246 | 29 | $1,484,357 | 467 |
| 2005 | $448,853 | 403 | $0 | 0 | $571,965 | 145 | $134,295 | 29 | $1,155,113 | 484 |
| 2006 | $451,390 | 373 | $0 | 0 | $551,182 | 132 | $141,235 | 24 | $1,143,807 | 453 |
| 2007 | $380,842 | 366 | $0 | 0 | $660,865 | 125 | $223,329 | 28 | $1,265,036 | 456 |
| 2008 | $538,310 | 374 | $0 | 0 | $750,731 | 146 | $198,070 | 25 | $1,487,111 | 462 |
| 2009 | $502,848 | 342 | $0 | 0 | $747,325 | 179 | $192,031 | 39 | $1,442,204 | 434 |
| 2010 | $765,606 | 433 | $0 | 0 | $1,655,321 | 241 | $473,661 | 48 | $2,894,749 | 530 |
| 2011 | $764,358 | 413 | $0 | 0 | $1,176,435 | 219 | $346,022 | 48 | $2,287,202 | 510 |
| **10 Yr Ave** | **$504,155** | **377** | **$0** | **0** | **$604,365** | **147** | **$176,032** | **32** | **$1,284,567** | **465** |

[a] Number of permits that made at least one delivery