

# ALASKA DEPARTMENT OF FISH AND GAME

## DIVISION OF COMMERCIAL FISHERIES

### NEWS RELEASE



*Sam Cotten, Commissioner*  
*Jeff Regnart, Director*



---

Contact:

Aaron Poetter, Area Management Biologist  
Aaron Tiernan, Asst. Area Management Biologist  
Phone: (907) 543-2433  
Toll Free: (855) 933-2433  
Fax: (907) 543-2021

Anchorage Area Office  
333 Raspberry Rd  
Anchorage, AK 99518

Date Issued: July 8, 2015  
Time: 4:00 p.m.

#### **2015 Kuskokwim River Salmon Fisheries Update #5**

The Alaska Department of Fish and Game (ADF&G) works cooperatively with U.S. Fish and Wildlife Service (USFWS) and various Tribal or community groups to monitor the health of Kuskokwim Area salmon stocks and provide data for inseason management.

ADF&G ensures that all assessment data are publicly available inseason. Detailed project summaries are prepared each week and presented to the Kuskokwim River Salmon Management Working Group. Management meetings are held each Wednesday at the ADF&G office in Bethel. Working Group meetings are open to the public, in person or via teleconference. Project summaries and associated meeting materials are available online by 5:00 PM Tuesday during the salmon season. In addition, select data are available daily by 10:00 AM.

Working Group Information Packets:

<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.kswg>

Inseason Bethel Test Fish and Escapement Monitoring Data:

<http://www.adfg.alaska.gov/index.cfm?adfg=commercialbyareakuskokwim.salmon#fishcounts>

#### **Assessment Overview**

The 2015 Chinook salmon forecast is 96,000–163,000 fish. A run size within this range is well below the historical average of 240,000 fish. A run size near the lower end of the forecast range would be one of the lowest run sizes on record. As a result substantial fishing restrictions have been enacted to conserve Chinook salmon and provide for drainage-wide and tributary escapement goals. ADF&G has determined that a drainage-wide escapement of 65,000–120,000 Chinook salmon is needed to ensure the long-term health of Kuskokwim River Chinook salmon, sustain the subsistence fishery, and provide opportunity for other sources of harvest.

The Chinook salmon run is nearing completion in the lower portion of the Kuskokwim River and is progressing upriver. Aniak Test Fishery and telemetry tracking data indicate that the peak of

the Chinook salmon run has likely passed the Aniak area and is beginning to show up throughout the headwaters. Telemetry tracking data confirm that Chinook salmon are entering spawning tributaries throughout the drainage. Chum and sockeye salmon abundance has exceeded Chinook salmon throughout much of the lower and middle portions of the Kuskokwim River, although the observed ratios are low for this time of year.

Mounting evidence suggests that the 2015 Chinook salmon run was early and weak. Inseason assessment data has only limited utility for estimating total run size; however, our best estimate is that the run will be near the lower bound of the forecasted range. As a result, continued conservation measures are warranted. It is too early to determine the effects of the conservation measures on drainage-wide escapement. Tributary escapement observations to date are mixed. In particular, escapement at Kwethluk River weir appears strong, while escapement at Kogruklu River weir appears weak.

The sockeye salmon run started out very slow in the Bethel Area, but abundance has increased considerably in the past week. The 2015 sockeye salmon run appears to be late and strong compared to prior years. Bethel Test Fishery indicates that the peak of the sockeye salmon run has passed the Bethel Area. Aniak Test Fishery indicates that the peak of the run has arrived in the middle river.

The chum salmon run continues to be of concern. Bethel Test Fishery indicates the 2015 chum run may be one of the lowest on record. Similarly, Aniak Test Fishery indicates low numbers of chum salmon in the middle river relative to other species. Chum salmon escapement at all monitoring locations are well below average. The likelihood of achieving the established escapement goal on the Kogruklu River is uncertain. Conservation for chum salmon is warranted.

### **Chinook Salmon Tagging**

ADF&G is tagging Chinook salmon downstream of Bethel near Fowler Island. The purpose of this study is to estimate the total number of Chinook salmon that return to the Kuskokwim River in 2015 and monitor the migration timing and speed of fish as they travel through the primary harvest areas towards their spawning grounds. Abundance estimation will be completed post season. Migration timing will be assessed inseason and preliminary results presented weekly.

As of July 6, ADF&G has caught 1,087 Chinook salmon of which 562 have been radiotagged. Peak daily catches ranging from 60–80 fish per day were observed at the tag site between June 17 and June 20. Since that time, daily catches have declined slowly to 15–20 Chinook salmon per day. Our best estimate is that 95%–99% of the Chinook salmon run has passed the tag site. We expect catches of Chinook salmon to decline over the coming days as the final few Chinook salmon pass through the Bethel area.

Radio tagged fish are being monitored as they migrate upriver using aerial surveys and tracking towers located between Bethel and McGrath. On average, tagged fish are swimming 21.7 miles per day, and fish tagged later in the season are swimming faster than fish that were tagged at the beginning of the run. Tagged fish continue to move upriver towards their spawning grounds. Approximately 64% of the tagged fish are upriver from Tuluksak, 47% are upriver from Chuathbaluk, and 28% are upriver from Sleetmute. Of the tagged fish located downriver of Tuluksak, 30% have been detected in the Kwethluk and Kisaralik Rivers combined. Tagged fish have begun to enter spawning tributaries in the middle and headwaters portions of the

Kuskokwim River. However, the majority of tagged fish that have passed upriver of Tuluksak are still in the mainstem Kuskokwim River.

ADF&G is conducting a Salmon Tag Lottery. Tagged fish are identifiable by a brightly colored plastic tag attached to their back, and a metal antennae coming out of their mouth. It is okay if you harvest one of these tagged fish. If you do, please call 1-800-267-2104 and return the radio tag to the ADF&G office in Bethel. In appreciation, you will be entered into the monthly Lottery and eligible for a cash prize of \$200 and a seasonal cash prize of \$500. So far, 64 tagged fish have been reported harvested in the subsistence fishery – 11% of all tags deployed. Thank you to all who reported catching a tagged fish – you have been entered into the monthly lottery.

### **Bethel Test Fishery**

Bethel Test Fishery (BTF) is the primary inseason run assessment tool for Kuskokwim River salmon and is operated the same way each year. The daily Catch Per Unit Effort (CPUE) is used to index run timing and relative abundance of Chinook, chum, sockeye, and coho salmon. These data have only limited utility for estimating total run size or escapement. The 2015 data is not directly comparable to prior years due to subsistence fishing restrictions. The Bethel Test Fishery continues to operate on schedule.

Chinook salmon cumulative CPUE as of July 6 is 504. The cumulative CPUE is below the 10-yr average for this date. The cumulative CPUE is above the recent 5-yr average; however, those years include some of the lowest run sizes on record. The historical mid-point of the Chinook salmon run is June 22. On average, 89% of the Chinook salmon run has passed Bethel as of July 6. It appears that the Chinook salmon run was early compared to past years, and our best estimate is that 94%–98% of the run has passed the test site. We expect BTF catches of Chinook salmon to decline over the coming days as the final few Chinook salmon pass through the Bethel area. Inseason projections suggest that the end of season CPUE for Chinook salmon will most likely be between 516 and 535, which corresponds to a below average run size, similar to what has been observed in recent years.

Bethel Test Fish observed a considerable increase in sockeye salmon catches over the past week. As of July 6, cumulative CPUE is 1,352, which is above the 5 and 10-yr averages for this date. The historical mid-point of the sockeye salmon run is June 28. On average, 85% of the sockeye salmon run has passed Bethel as of July 6. The 2015 run appears to be late compared to past years, and our best estimate is that 76%–86% of the run has passed the test site. There is considerable uncertainty in our inseason projections of season total CPUE; however, the 2015 sockeye salmon run is shaping up to be relatively strong.

The chum salmon run past the BTF site continues to be weak. Chum salmon cumulative CPUE as of July 6 is 1,041. The cumulative CPUE is the fifth lowest on record for this date and is well below the 5- and 10-yr averages. The historical mid-point of the chum salmon run is July 4. On average 58% of the chum salmon run has passed Bethel, as of July 6. We have begun to rule out the possibility of late run timing. The 2015 chum salmon run appears to be early and weak. Our best estimate is that 58%–76% of the run has passed the test site. Although there is uncertainty in our inseason projections of season total CPUE, the 2015 chum salmon run is shaping up to be one of the weakest on record.

### **Aniak Test Fishery**

The Aniak Test Fishery is operated cooperatively by the Native Village of Napaimute and ADF&G. The 2015 data is not directly comparable to CPUE observed at the Bethel Test Fishery.

As of July 6, the Aniak Test Fishery has caught 317 Chinook salmon, 247 chum salmon, and 71 sockeye salmon. Cumulative CPUE is 2,585 Chinook salmon, 2,045 chum salmon, and 585 sockeye salmon. Over the past week, the Chinook salmon CPUE has remained relatively low and consistent; indicating the final third of the run is likely passing the Aniak area. Chum and sockeye salmon abundance continued to build over the past week. Beginning on July 3, the ratio of chum and sockeye salmon to Chinook salmon has averaged 8:1. The observed species ratios are low for this time of year based on past fishing efforts by ADF&G downriver from Aniak.

### **Kwethluk River Weir**

The Kwethluk River weir is operated by USFWS and used to index salmon escapement to the lower Kuskokwim River tributaries. As of July 6, a total of 2,710 Chinook salmon, 1,293 chum salmon, and 2,168 sockeye salmon have been counted past the weir. On average, the mid-point of the escapement past the weir is July 8 for sockeye salmon, July 14 for Chinook salmon, and July 19 for chum salmon. It is too early to accurately project the end of season escapement for any species. However, the Chinook salmon escapement is shaping up to be much larger than in recent years and there is considerable evidence that the escapement goal could be achieved. Chum salmon escapement is well below the historical average for this date. Sockeye salmon escapement to date is the third largest on record for this location.

A sustainable escapement goal of 4,100–7,500 Chinook salmon has been established by ADF&G for this river. The escapement goal has not been achieved since 2009.

### **Tuluksak River Weir**

The Tuluksak River weir is operated by USFWS. As of July 6, 50 Chinook salmon, 138 chum salmon, and 7 sockeye salmon have been counted past the weir. On average, the mid-point of the escapement past the weir is July 14 for Chinook salmon and July 21 for chum salmon. No salmon escapement goals have been established by ADF&G for this river.

### **Salmon River (Aniak River) Weir**

The Salmon River (Aniak) weir is operated by ADF&G and used to index salmon escapement to the Aniak River drainage. The weir was successfully installed on June 19. Over the past week, the project has been fully staffed and operational. As of July 6, a total of 126 Chinook salmon and 82 chum salmon have been counted past the weir. No sockeye salmon have been observed to date. On average, the mid-point of the escapement past the weir is July 21 for Chinook salmon, July 22 for chum salmon, and August 6 for sockeye salmon. It is too early to accurately project the end of season escapement for any species. Cumulative Chinook salmon escapement to date is similar to the average escapement for the 6 prior years of this project. Chum salmon escapement is the second lowest on record.

No weir-based salmon escapement goals have been established by ADF&G for this river.

### **George River Weir**

The George River weir is operated by ADF&G and used to index salmon escapement to middle Kuskokwim River tributaries. The weir was successfully installed on June 15. As of July 6, a total of 959 Chinook salmon and 1,309 chum salmon have been counted past the weir. On average, the mid-point of the escapement past the weir is July 9 for Chinook salmon and July 16 for chum salmon. It is too early to accurately project the end of season escapement for any species. Chinook salmon escapement to date is below the historical average for this location. At this point, Chinook salmon escapement relative to the established goal is uncertain. Chum salmon escapement to date is well below the historical average, and is the fifth lowest escapement on record at this location.

A sustainable escapement goal of 1,800–3,300 Chinook salmon has been established by ADF&G for this river. The escapement goal was achieved in 2014.

### **Tatlawiksuk River Weir**

The Tatlawiksuk River weir is operated by ADF&G and used to index salmon escapement to middle Kuskokwim River tributaries. The weir was successfully installed on June 13. As of July 6, a total of 756 Chinook salmon and 1,709 chum salmon have been counted past the weir. On average, the mid-point of the escapement past the weir is July 10 for Chinook salmon and July 16 for chum salmon. It is too early to accurately project the end of season escapement for either species. Chinook salmon escapement to date is near average for this location. Chum salmon escapement is well below average, and is the fifth lowest on record for this location.

No salmon escapement goals have been established by ADF&G for this river.

### **Kogrukluk River Weir**

The Kogrukluk River weir is operated by ADF&G and used to index salmon escapement to the Holitna River drainage. The weir was successfully installed on June 21. As of July 6, a total of 555 Chinook salmon, 615 chum salmon, and 8 sockeye salmon were counted past the weir. On average, the mid-point of the escapement past the weir is July 13 for Chinook salmon, July 15 for chum salmon, and July 16 for sockeye salmon. It is too early to accurately project the end of season escapement for any species. Chinook salmon escapement to date is well below the historical average for this location, and there is considerable evidence that the end of season escapement could be below the established goal. Chum salmon escapement is well below average and is the fifth lowest on record for this location. Sockeye salmon escapement is well below average, but within the range of observations for years with average to late run timing.

Sustainable escapement goals have been established by ADF&G for Chinook salmon (4,800–8,800), chum salmon (15,000–49,000), sockeye salmon (4,400–17,000), and coho salmon (13,000–28,000). Goals were achieved for all species except Chinook salmon in 2014.

### **Telaquana Lake Weir**

The Telaquana Lake weir is operated cooperatively by ADF&G and National Park Service. The weir is used to index escapement for lake-spawning sockeye salmon. Staff arrived on site to install the weir on June 18, but was evacuated due to numerous wildfires in the area. Staff will be redeployed to the lake on July 8 to resume installation of the weir. We hope to begin counting fish by July 10. In prior years, the weir was operational by July 3. On average <1% of the escapement would have passed by July 6.

### **Salmon River (Pitka Fork) Weir**

The Salmon River (Pitka Fork) weir is operated by ADF&G and MTNT (McGrath, Takotna, Nikolai, Telida) and used to index Chinook salmon escapement to the headwaters upriver from McGrath. The weir was successfully installed on June 1. The very early installation date was in response to local area residents who reported seeing Chinook salmon historically in early June. The first Chinook salmon passed the weir on June 27. Chinook salmon escapement has increased considerably over the past week with a peak passage of 520 fish in one day. As of July 6, a total of 1,157 Chinook salmon have passed the weir. No other salmon species have been counted. This is the first year that this weir has operated since 1981, and no comparable data exists at this time.

### **Inseason Subsistence Harvest Monitoring**

Orutsararmiut Native Council (ONC) in coordination with ADF&G collect subsistence fishing reports from Bethel area fish camps in an attempt to understand salmon harvest timing and success. ONC staff visit area fish camps each week during the salmon season, share fisheries updates, and answer questions about research and management. In addition, this project provides an opportunity for subsistence fishermen to share information and feedback with managers. Project updates will be provided every Wednesday by ONC to the Kuskokwim River Salmon Management Working Group.

### **Lower Kuskokwim River Chinook Age, Sex, Length Sampling**

Since 2001, ADF&G and ONC have partnered to recruit lower river residents to sample age, sex, and length (ASL) from Chinook salmon harvested for subsistence. Sampling is easy, you get paid for your time, all information is confidential, and you get to keep your fish. All lower river communities have been notified of this sampling opportunity by phone, mail, and Delta Discovery newspaper. The first sampling workshop was held in Bethel on June 6 and another on June 9. If you would like to participate in this program, contact Zachary Liller with ADF&G (907)-717-3419 or Dustin Wagner with ONC (907)-543-0523.

### **Kuskokwim River Sonar Feasibility**

ADF&G is assessing the feasibility of operating sonar on the mainstem Kuskokwim River to count the total number of salmon by species. If the project proves viable, it could provide daily counts of salmon and greatly strengthen inseason management capabilities. The feasibility efforts began in 2014 and are continuing in 2015.

Two potential sonar sites have been identified. One is located near the upper confluence of the Kuskokwim River and Church Slough and the other is located downriver from the community of Akiak. Staff has completed 1–2 weeks of feasibility work at the both sites – including testing sonar equipment and drift gillnet fishing. All fish harvested were donated to the communities of Kwethluk and Akiak. Over the next week staff will review data collected to date and consider if additional data collection is needed this season.

### **Tributary Escapement Monitoring – Aerial Surveys**

Aerial surveys are flown throughout 15 Kuskokwim River tributaries for Chinook salmon and 3 Kuskokwim Bay tributaries for Chinook salmon and sockeye salmon. Aerial surveys are an index of escapement to a very broad geographic area – meaning not all fish are counted, but the number of fish observed is related to the number of fish that escaped. Aerial surveys will be

flown between July 17 and August 5 starting with headwater tributaries and ending in the lower Kuskokwim River and Bay.

-end-