Division of Commercial Fisheries
Forrest Bowers, Director

Headquarters Office
PO Box 115526
Juneau, AK 99811-5526

Alaska Department of Fish and Game
Doug Vincent-Lang, Commissioner

PO Box 115526
Juneau, AK 99811-5526
www.adfg.alaska.gov

Advisory Announcement

CONTACT:
Deena Jallen, Area Management Biologist
Fairbanks ADF&G Office: 907-459-7274
Toll free fishing schedule and counts: 866-479-7387

Released: **December 20, 2024**

2024 Yukon River Salmon Summer Fishery Announcement #25
2024 Yukon River Preliminary Summer Season Summary
Districts Affected: Yukon Area

The following is a summary of the 2024 Yukon River Chinook and summer chum salmon fisheries. All data reported here are considered preliminary. For management purposes, the Yukon River is divided into several fishing districts and subdistricts (Figure 1). The "summer season" refers to management of Chinook and summer chum salmon runs (May through July 15 in District 1). Management converts to "fall season" in District 1 on July 16, and the transition continues upriver as the fall chum salmon arrive in each District. Data presented in this summary apply to "summer season" species only.

Preseason Forecast and Management Strategy

The 2024 preseason run size outlook for Chinook salmon was 45,000 to 68,000 fish, and 550,000 to 1,800,000 for summer chum salmon. These potential run sizes were below average and warranted a cautious management approach. The management team met preseason to form the strategy based on outlooks and public input. The Yukon River Panel and Yukon River Drainage Fisheries Association (YRDFA) hosted preseason meetings in April and May. The Canadian-origin Yukon River Chinook salmon agreement (7-Year Agreement) was released on April 1, just prior to the Yukon River Panel preseason meeting[1]. The run size outlooks, border passage objectives, management strategies and research project plans were presented with time for discussion and questions. Fishermen from throughout the drainage discussed management options and concerns about environmental factors, bycatch, fish diseases, food security, and project operations. Additionally, there was discussion about the temporary Federal Special Action Requests proposing federal management of federal waters on the Yukon River for 2024 salmon season.

The preseason salmon management plan, including harvest strategies, was distributed in early May as Advisory Announcement #1 and mailed as a 4-page Outlook Flier to households. Due to the poor projected salmon run sizes, the summer season started with all salmon fishing closed, including subsistence, commercial, sport and personal use. Closures began in the lower river districts and were announced upriver based on Chinook salmon travel time. When salmon fishing was closed, subsistence fishing for nonsalmon species remained open, however 4-inch or smaller mesh gillnets were limited to 60 feet maximum length and were required to be operated as set gillnets.

Inseason Assessment Overview

Some communities experienced flooding during spring break-up. High water affected operations of projects in tributaries but caused little impact to mainstem project operations.

[1] www.adfg.alaska.gov/static/home/news/hottopics/pdfs/yukon_river_chinook_salmon_7_year_management_2024_2030.pdf

Lower Yukon Test Fishery (LYTF)/ADF&G and YDFDA

Ice-out occurred on May 24 on the Yukon River near Emmonak, which is 7 days later than average (2002–2023). The LYTF program is designed to assess salmon run timing and strength as Catch Per Unit Effort (CPUE), which gives an index of abundance and indicates the presence of large groups of fish or "pulses" entering the mouths of the river. The two established locations are Middle Mouth (upstream from the confluence of Middle Mouth and North Mouth) and Big Eddy (on South Mouth). To reduce Chinook salmon mortalities, LYTF operations for Chinook salmon did not occur in 2024 and only summer chum salmon were targeted with 5.5-inch drift gillnets. Operations were conducted by Yukon Delta Fishery Development Association (YDFDA) crew.

Crews began drifting snag nets to clear the drift zones on May 29, and summer chum salmon drifts with 5.5-inch gillnets began on June 4 for both the Big Eddy and Middle Mouth sites. The first summer chum salmon were caught in Big Eddy on the morning of June 10.

Water temperatures were collected throughout the summer season and were near or above average from mid-June to early-July. Temperatures were below average for much of July (Figure 2).

Salmon caught in the test fishery were donated mostly within District 1 communities in coordination with village Tribal Councils and with the assistance of YDFDA. Summer chum salmon were primarily distributed in a tote near the ADF&G dock that was available to the public.

Summer Chum

The combined cumulative CPUE from Big Eddy-Middle Mouth was 2,223, which was below the historical median of 2,799. A total of 1,616 summer chum salmon were caught, of which 1,595 fish were retained for sampling. The number retained in 2024 was less than the recent 5-year average of 2,818 summer chum salmon retained at this project.

The summer chum salmon age composition, estimated from 893 samples collected from the drift gillnet test fishery was 30.3% age-4, 66.7% age-5, and 3.0% age-6. The age composition for age-5 fish was above the recent 10-year average of 46.1%, and the percentage of age-4 fish was below the recent 10-year average of 51.3%. The average length of summer chum salmon by age was below the recent 10-year average but above the record small size at age observed in 2022. The average length of all summer chum salmon was 552 mm, which was slightly below the recent 10-year average of 557 mm. The proportion of females was 54.6% and was similar to the recent 10-year average of 55.9%.

Pilot Station Sonar (ADF&G)

Pilot Station Sonar is located at river mile 123 and provides abundance estimates and run timing information for Chinook and summer chum salmon and a variety of nonsalmon species. The test fishery at the sonar project is used to apportion the daily sonar counts by species and is also used to sample the salmon runs for age, sex, length, (ASL) and genetic data. The project uses a wide range of mesh sizes (2.75, 4.0, 5.0, 5.25, 6.5, 7.5, and 8.5 inches) and likely captures a representative sample across sizes and age classes. A total of 210 Chinook salmon were encountered in the test fishery and approximately 177 were retained, sampled, and distributed to households. A total of 1,114 summer chum salmon were caught and sampled. Of these, 726 were released alive and 388 were retained and distributed locally.

The Pilot Station sonar project estimated that the first Chinook salmon passed the sonar site on June 12, which was about 7 days later than average for years 1995–2023. The midpoint of the run occurred on July 2 and was 7 days later than average. The cumulative passage estimate at the Pilot Station sonar was 64,198 Chinook salmon (with a 90% confidence interval of 50,105 to 78,291 fish). This passage was the fourth lowest recorded at the project (2000, 2022 and 2023 were lower) and about 39% of the average annual passage of 163,443 fish (2004–2023; Figure 3).

The Chinook salmon age composition, estimated from 175 samples collected from the drift gillnet test fishery at the Pilot Station sonar project (all mesh sizes combined), was 2.3% age-3, 10.3% age-4, 38.3% age-5, 45.7% age-6, and 3.4% age-7. The age composition for age-6 fish was above the recent 10-year average of 35%, and the percent of age-5 fish was below average (51%). Other age classes were similar to average. The average length of all Chinook salmon encountered at Pilot Station sonar was 723 mm and below the historical average (732 mm). The proportion of females was 49.5% and slightly above the recent 10-year average of 46% at this project. Females were primarily age-6 and males were primarily age-5.

Genetic mixed stock analysis (MSA) at the Pilot Station sonar site typically indicates a declining percentage of Canadian-origin Chinook salmon through the run, and 2024 followed this pattern. Sampling indicated that the early group and first pulse of Chinook salmon (June 7 to June 27) were 49% Canadian-origin. The second pulse of Chinook salmon at the sonar (June 28 to July 6) was made up of 46% Canadian-origin fish. Genetic MSA of the third pulse and remaining groups of Chinook salmon observed at the sonar (July 7 to July 25) indicated that 48% of the fish were Canadian-origin. Overall, Canadian-origin fish represented a weighted season total of 45% of all Chinook salmon detected at Pilot Station, with an estimated season total of 28,600 fish. In comparison to previous years, the percentage of Canadian-origin fish observed at Pilot Station was above average; however, because sonar results indicate a small total run, this proportion does not accurately reflect the strength of the Canadian run of Chinook salmon. For more background information on genetic MSA for Yukon River Chinook salmon, please refer to the department's Gene Conservation Laboratory webpage[2].

Three pulses of summer chum salmon passed the sonar project; the largest group consisted of approximately 256,500 fish between July 5 and July 10. The first quarter point, midpoint, and third quarter point of the summer chum salmon run at the Pilot Station sonar were June 26, July 2, and July 7, respectively. This indicated that the summer chum salmon run was likely 4 days later than average based on the midpoint at the sonar project.

An estimated 758,260 summer chum salmon were counted at the Pilot Station sonar project as of July 18 (with a 90% confidence interval of 719,012 to 797,508 fish). The preliminary summer chum salmon passage was similar to the 5-year average of 711,808 fish (2019–2023), and well below the 10-year and 20-year averages (Figure 4).

The 2024 total summer chum salmon passage estimated at Pilot Station sonar through July 18 is a conservative estimate consistent with historical data; however, due to summer chum salmon continuing to arrive late in the season, the total run size in 2024 was likely somewhat larger. Genetic MSA in 2024 indicated that some summer chum salmon continued to pass the Pilot Station sonar beyond the administrative summer season cutoff date of July 18. In 2024, 89% of the chum salmon arriving from July 19 to July 28 at Pilot Station sonar were genetically summer chum salmon. The next group of chum salmon, from July 29 to August 6 was 15.2% summer chum salmon. Overall, an estimated 45,000 summer chum salmon came in during the fall season (after July 18).

Eagle Sonar (ADF&G and DFO)

The Eagle sonar operated from June 28 to October 6, with an estimated passage of 24,183 Chinook salmon, which is approximately 49% lower than the historical average and the third lowest season total estimate (2022 and 2023 were lower). A small amount of harvest occurred incidentally in nonsalmon gear between the sonar project and border. The final border passage estimate will not be available until later this winter after all harvest permits have been returned. The test fishery encountered 155 Chinook salmon, all of which were released alive.

[2] www.adfg.alaska.gov/index.cfm?adfg=fishinggeneconservationlab.main

The Chinook salmon age composition, from 212 samples that were aged from the test fishery at the Eagle sonar project, was 12% age-4, 46% age-5, 40% age-6, and 2% age-7, fish. The age composition was below average for age-6 fish, above average for age-4 fish and similar to average for age-5 and age-7 fish. The proportion of female fish was 34%, which was below the recent 10-year average of 43%. Average length of all Chinook salmon encountered at the Eagle sonar was 733 mm, which is the smallest on record. Length at age for all age classes was also below average. The average length for females (807 mm) was below the recent 10-year average.

Numerous research and assessment projects are seeking to understand factors affecting the success of Chinook salmon migration in-river. In some years, there are more Canadian-origin Chinook salmon estimated passing Pilot Station Sonar compared to the number that are accounted for postseason by Eagle Sonar and harvest. A large Difference Between Estimates (DBE) during seasons of little to no harvest suggest that Canadian-origin Chinook salmon may have experienced undetected natural mortality during migration from Pilot Station to Eagle. From 2019 to 2023, the numbers of Canadian-origin Chinook salmon accounted for postseason were 33%–52% fewer than what was estimated at the Pilot Station sonar project. Undetected large-scale natural mortality is the leading hypothesis to explain the observed DBE over the past 5 years. In 2024, the DBE was much lower than observed since 2019. The DBE in 2024 was approximately 3,800 fish, representing 13% of the 28,600 Canadian-origin Chinook salmon estimated at Pilot Station sonar. The estimated passage at Eagle sonar, plus the preliminary harvest estimated between the two sonar projects, is a value of 24,800 fish, which lies within the sonars' confidence intervals of the genetics-based estimate, suggesting that very little natural mortality occurred in 2024. There continues to be the need for further investigation into the potential sources of natural mortality and to develop tools to better account for variability in survival of fish as they migrate to their spawning grounds in Alaska and Canada.

Escapement Projects

Most assessment projects operated in 2024; however, the Gisasa and Henshaw weirs (Tanana Chiefs Conference) were not deployed due to lack of funding. Many projects were hampered by high water conditions affecting complete counts, yet there was evidence of poor escapement through aerial surveys and local reports. There were no escapement goals met this year for Chinook salmon (Table 1).

Three escapement goals exist for summer chum salmon: a drainage-wide goal of 500,000–1,200,000 fish and goals at the East Fork Andreafsky River and the Anvik River (Table 2). The drainagewide summer chum salmon goal is assessed postseason by incorporating information from harvest, escapement, and Pilot Station sonar estimates into a run reconstruction model. Subsistence harvest estimates will be available later this winter. Based on preliminary information, the lower end of the drainagewide goal was met. Summer chum salmon counts at the other projects (Chena and Salcha River sonars) were well below the historic medians (Table 2).

Andreafsky River weir (USFWS) installation was delayed due to high water and counts started on June 21, but it did not appear large numbers of fish had been missed. Due to high water, the weir was not fish tight from July 13 to July 20. Operations ended July 23. Cumulative passage was 24 Chinook salmon, which is below the cumulative average of 3,953 fish; and 190 summer chum salmon, which is below the cumulative median of 53,336 fish. Counts at this project should be considered a minimum estimate, however aerial surveys also confirmed very poor escapement of Chinook and summer chum into the Andreafsky drainage. see notes in Table 1 and Table 2. Additionally, an estimated 100,000–300,000 pink salmon were observed in the East Fork Andreafsky and 400,000–600,000 pink salmon were observed in the West Fork Andreafsky during the aerial surveys. While pink salmon are typically noted during the aerial surveys, they are usually not counted.

Anvik Sonar (ADF&G) operated from June 16 to July 26 and counted 99,648 summer chum salmon with a 90% confidence interval of 94,915 to 104,381 fish. Passage is well below the historic cumulative median of

450,229 fish and below the escapement goal range of 350,000–700,000 fish. The project was unable to count from July 15 to July 20 due to high water conditions and the total count at this project should be considered an underestimate (Figure 5).

The Chena and Salcha River escapement projects are operated by ADF&G Sport Fish Division. The Chena River escapement project operated from June 26 to July 30. Due to high water, the sonar equipment was pulled from July 6 to July 16. Based on historic average run timing, the project stopped counting summer chum salmon before most fish would have arrived (Figure 6). The tower was unable to count from July 17 to July 21 and only sonar counts were used. The preliminary estimates are 336 Chinook salmon and 289 chum salmon. Carcass surveys were conducted in August and a total of 18 Chinook salmon were sampled. However, no chum salmon were sampled.

The Salcha River escapement project operated from June 27 to July 28. The preliminary estimates are 719 Chinook salmon and 997 chum salmon. Due to high water, the tower counts were unavailable and only sonar counts were used from July 6 to July 12. Sonars were pulled and no counts were available on July 13 and July 14. Based on historic average run timing, the project stopped counting summer chum salmon before most fish would have arrived (Figure 7). Carcass surveys were conducted in August and 45 Chinook and 15 chum salmon were sampled. Various samples were collected for research partners during the 2024 season. During carcass surveys, retained eggs and muscle tissue were collected from female Chinook salmon on both rivers for ADF&G Division of Commercial Fisheries and United States Geological Survey.

Aerial surveys of the East and West Forks of the Andreafsky River, Anvik River, and Nulato River were conducted under various conditions. Counts were below average for Chinook and summer chum salmon.

Fish Health

Subsistence fishers reported increasing presence of *Ichthyophonus* disease in 2020, prompting concerns for the survival of upriver migrating Chinook salmon. Beginning in 2021, ADF&G and partner organizations began coordinating efforts to evaluate the biological impacts of *Ichthyophonus* disease and determine if pre-spawn *en route* mortality of adult Yukon River Chinook salmon was occurring. Those efforts culminated in multi-year funding to support an *Ichthyophonus* study and a drainagewide tagging study. The 2024 season was the last of a three-year (2022–2024) inriver sampling period by ADF&G and USFWS. Results from these collections will be used to develop an annual *Ichthyophonus* monitoring program, build support to increase community based *Ichthyophonus* monitoring, and build new tools capable of estimating annual disease-associated mortality. The 2024 season was also the second year of a three-year (2023–2025) drainagewide Chinook salmon tagging project operated by ADF&G and the YDFDA, which aims to determine if large-scale *en route* mortality is occurring and, if so, where. Data analysis for both programs is ongoing, and results will be shared in the future. Preliminary findings, however, support the current hypothesis that *Ichthyophonus*-associated *en route* mortality may be contributing to low numbers of Yukon River Chinook salmon reaching spawning grounds in Alaska and Canada. These two projects are part of a broader collaborative effort to better understand the health of Yukon River Chinook salmon and determine what actions can be taken in the future to improve fish health and incorporate these concerns into fishery management decision making.

Subsistence Fishery Overview

Subsistence fishery closures began on June 1 in the Coastal District and District 1 and progressed upriver based on run timing (Table 3). During the salmon fishing closures, fishermen could use nonsalmon gear, including hand line, longline, fyke net, dip net, and spear. Gillnets of 4-inch or smaller mesh were restricted to set nets 60 feet in length. Hook and line gear could be used for subsistence throughout the Yukon Area, except for the Tanana River drainage, the Dall River drainage, and some closed waters adjacent to the Dalton and Steese highways.

Nonsalmon subsistence fishing opportunities remained open 24 hours a day, 7 days a week throughout most of the entire summer season. Fishermen were asked to release all Chinook salmon alive from selective and nonsalmon gear whenever possible, and to avoid fishing in areas where salmon could be caught. Pink and sockeye salmon could be retained all season. Despite full closures for Chinook salmon, a small number are known to be harvested incidentally in 4-inch mesh subsistence gear. To reduce the amount of incidental harvest, all gillnet opportunity was closed in each district for a two-week period that roughly coincided with the first quarter point to the third quarter point of the Chinook salmon run (Table 3).

At the historic first quarter point of the summer chum salmon run at Pilot Station Sonar (June 22), in-season projections indicated that the summer chum salmon run would be above the lower end of the drainagewide escapement goal. Openings with selective gear types to target summer chum salmon (while releasing all Chinook salmon alive) were announced up through Subdistrict 5-C based on summer chum salmon travel timing (Table 1).

Fishing opportunity for summer chum salmon was extended past the traditional start date of fall season management up through Subdistrict 5-C and in the Tanana River because summer chum run timing appeared many days late, similar to recent years. For example, District 1 transitions to fall season management on July 16, but remained open with selective gear types for chum, sockeye, and pink salmon until July 26 (Table 1).

The post season subsistence salmon harvest survey was conducted via in person household visits and phone calls in September, October, and November. Surveys take place in 32 communities. Additional follow-up contacts by phone and mail are ongoing. During the survey, households are asked about salmon and nonsalmon harvests. Harvest estimates will be available in January.

Commercial Fishery

No commercial salmon fishing periods occurred in 2024 due to Chinook and summer chum salmon abundance and subsistence fishery restrictions. The average summer chum salmon commercial harvest from 2014–2020 was 398,512 fish (Appendix A1). For the sixteenth consecutive year, no commercial periods targeting Chinook salmon were allowed in the Yukon Management Area.

Canadian Fisheries

The preseason outlook was for a run size of approximately 19,000 to 28,000 Canadian-origin Chinook salmon. Fisheries and Oceans Canada (DFO) implemented fishery management measures consistent with the recently signed agreement between Canada and Alaska on Canadian-origin Chinook salmon and in accordance with international (i.e. Pacific Salmon Treaty; Yukon River Salmon Agreement) obligations.

Preseason information and in-season estimates at the Pilot Station sonar project suggested a run below the rebuilding target of 71,000 fish at the Canada/U.S. border. As per the agreement (Canadian-origin Chinook salmon), all fisheries in the Canadian portion of the Yukon River were closed in 2024. The closure included the Yukon First Nation subsistence fishery as the Chinook salmon run size into Canada was projected to be below the rebuilding target of 71,000 fish.

As the season progressed, it was confirmed that the passage at the Eagle sonar project was well below the rebuilding target. DFO shared the in-season information with Yukon First Nations who managed their fisheries accordingly. While not all information is currently available, due to low numbers of Chinook salmon and the conservation measures taken by First Nations, there was no directed Chinook salmon harvest in 2024 and any incidental harvest in First Nation freshwater subsistence fisheries will be minimal.

Federal Special Action

The Alaska Department of Fish and Game (ADF&G) and the U.S. Fish and Wildlife Service (USFWS) have coordinated on this season summary announcement. The Federal manager issued emergency special actions to restrict the selective gear opportunities for summer chum salmon to federally-qualified subsistence users

only in federal public waters. For information regarding Federal subsistence fishing regulations contact the USFWS Yukon River Subsistence Fishery Manager Holly Carroll at 907-351-3029.

This is an announcement by the ADF&G and the USFWS. Federal Special Actions will be posted on www.doi.gov/subsistence/fisheries-special-actions.

ADF&G Advisory Announcements will be posted on www.cfnews.adfg.alaska.gov/ and shared on Facebook at www.facebook.com/YukonRiverFishingADFG.

Table 1.–Escapement goals and passage estimates for Chinook salmon at selected Yukon River tributaries, 2024.

Project	Current Goal	Type of Goal	Historical Average [a]	Estimate
East Fork Andreafsky Weir	2,100–4,900	SEG	3,953	– [b]
Pilot Station Sonar	–	–	132,779	64,198
Chena River Tower	2,800–5,700	BEG	5,039	– [c]
Salcha River Tower	3,300–6,500	BEG	7,528	719
Eagle Sonar	71,000 [d]	–	49,762	24,183 [e]

Note: En dash indicates no goal at the project. Gisasa and Henshaw projects did not operate.

[a] Historical average includes all years the projects operated fully; years excluded have incomplete datasets due to weather and technical difficulties.

[b] Weir was in operation from June 21 through July 23. High water levels hindered counts for a portion of the season and the weir was not fully fish tight between July 13 and July 20. An estimated 24 Chinook were observed passing the weir. However, 70 Chinook were observed during an aerial survey in late July on the East Fork Andreafsky and 101 fish in the West Fork Andreafsky.

[c] The tower and sonar operated between June 26 and July 27 with no counts between July 7 and July 16 because of high water. The total observed preliminary count of 336 Chinook salmon is a mix of visual and sonar methods and should be considered a minimum estimate.

[d] The border passage objective of 71,000 fish was adopted as part of the Yukon River Panel 7-Year Agreement for Chinook salmon.

[e] The passage estimate at Eagle Sonar is not an escapement estimate. Some harvest (US and Canada) occurs between the project location and spawning habitats.

Table 2. –Escapement goals and passage estimates for summer chum salmon at selected Yukon River tributaries, 2024.

Project	Current Goal	Type of Goal	Historical Median [a]	Estimate
Drainage-wide [b]	500,000–1,200,000	BEG	1,014,499	758,260
East Fork Andreafsky Weir	>40,000	SEG	53,336	– [c]
Anvik Sonar	350,000 - 700,000	BEG	450,229	99,648 [d]
Chena River Tower	–	–	7,561	– [e]
Salcha River Tower	–	–	22,185	997 [f]

Note: En dash indicates no escapement goal at the project.

[a] Historical median includes all years the projects operated with the exclusion of years the projects operated poorly.

[b] Estimate of abundance at the Pilot Station sonar. Fishing for summer chum salmon was open with selective gear types above and below the sonar, and harvest will likely be below average. After accounting for harvest and escapements below the sonar, the lower end of the drainagewide goal will be met.

[c] The passage estimate at East Fork Andreafsky weir was 190 summer chum salmon. Aerial surveys counted 1,265 summer chum salmon in the East Fork Andreafsky and 2,596 fish in the West Fork Andreafsky. An additional 100,000–300,000 pink salmon were counted in the East Fork Andreafsky and 400,000–600,000 pink salmon were counted in the West Fork Andreafsky.

[d] Water levels rose, and the crew had to pull the sonar on July 15. Sonar was redeployed on July 19 and pulled on July 26. The project missed 4 days of counts and most likely missed the peak of the run. The sonar passage should be considered a minimum estimate.

[e] The tower and sonar operated between June 26 and July 27 with no counts between July 7 and July 16 because of high water. The total observed preliminary count of 289 summer chum salmon is a mix of visual and sonar methods and should be considered a minimum estimate.

[f] Incomplete estimate. Project stopped operating before most of the summer chum salmon run was expected to arrive. Operations were affected by high water.

Table 3.–Subsistence salmon management actions, 2024.

District or Subdistrict	Closure date [a]	Two-week closure all gillnets	Selective gear open [b]	Selective gear closed for chum salmon [c]
Coastal District	June 1	June 19 to July 3	June 22	July 26
District 1	June 1	June 19 to July 3	June 22	July 26
District 2	June 3	June 21 to July 5	June 22	July 29
District 3	June 7	June 24 to July 8	June 26	July 31
Innoko River	June 9	June 26 to July 10	June 28	July 31
4-A Lower	June 11	June 26 to July 10	June 30	August 3
4-A Upper	June 14	June 30 to July 14	July 5	August 7
4-B and 4-C	June 16	July 2 to July 16	July 8	August 9
Koyukuk River	June 18	July 2 to July 16	July 8	August 7
5-A, 5-B, 5-C	June 23	July 5 to July 19	July 19	August 14
5-D Lower	June 27	July 9 to July 23	n/a	n/a [d]
5-D Middle	June 30	July 12 to July 26	n/a	n/a [d]
5-D Upper	July 2	July 14 to July 28	n/a	n/a [d]
6-A and Kantishna	June 25	July 7 to July 21	July 21	August 16
6-B and Old Minto	June 27	July 9 to July 23	July 23	August 16
6-C (Personal Use)	June 26	n/a [e]	July 26 [e]	August 16
Upper Tanana	July 1	4-inch mesh remained open	July 30	August 16
Lake Minchumina	June 25 [f]	n/a	n/a	n/a
Tolovana River and Minto Flats	June 27 [f]	n/a	n/a	n/a

[a] Also the start date for 4-inch or smaller mesh gillnets restricted to 60 feet or less and required to be operated as a set net. This restriction remained in place during the summer and fall seasons.

[b] Summer season openings with selective gear allowed retention of summer chum, pink, and sockeye salmon. Chinook salmon were required to be released alive. Fishing open 24 hours a day, 7 days a week

[c] Fishing with selective gear remained open for summer chum salmon, pink, and sockeye salmon at the start of the fall season. After the closure date chum salmon were required to be released alive.

[d] Selective gear open for coho salmon and nonsalmon on August 17 in 5-D Lower and Middle, and August 24 in 5-D Upper.

[e] Open for selective gear for summer chum, pink, and sockeye salmon on regulatory schedule of two 42-hour periods per week. By regulation, only dip nets and live release fish wheels were allowed in the personal use fishery.

[f] Fishing with 7.5 inch or less mesh closed for salmon but remained open with 6-inch or smaller mesh for nonsalmon (pike and whitefish) all season.

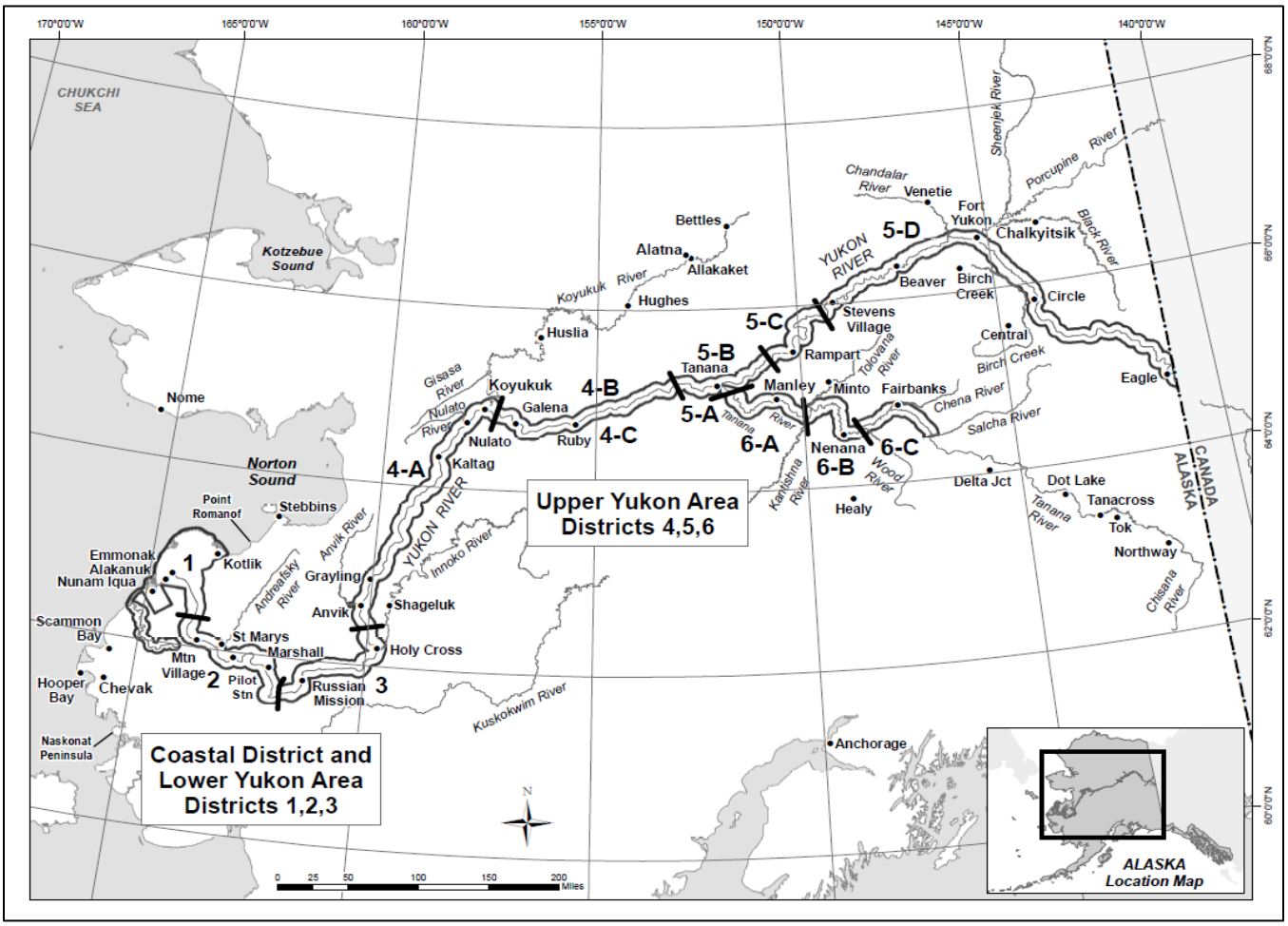

Figure 1.–Yukon Area communities and fishing districts.

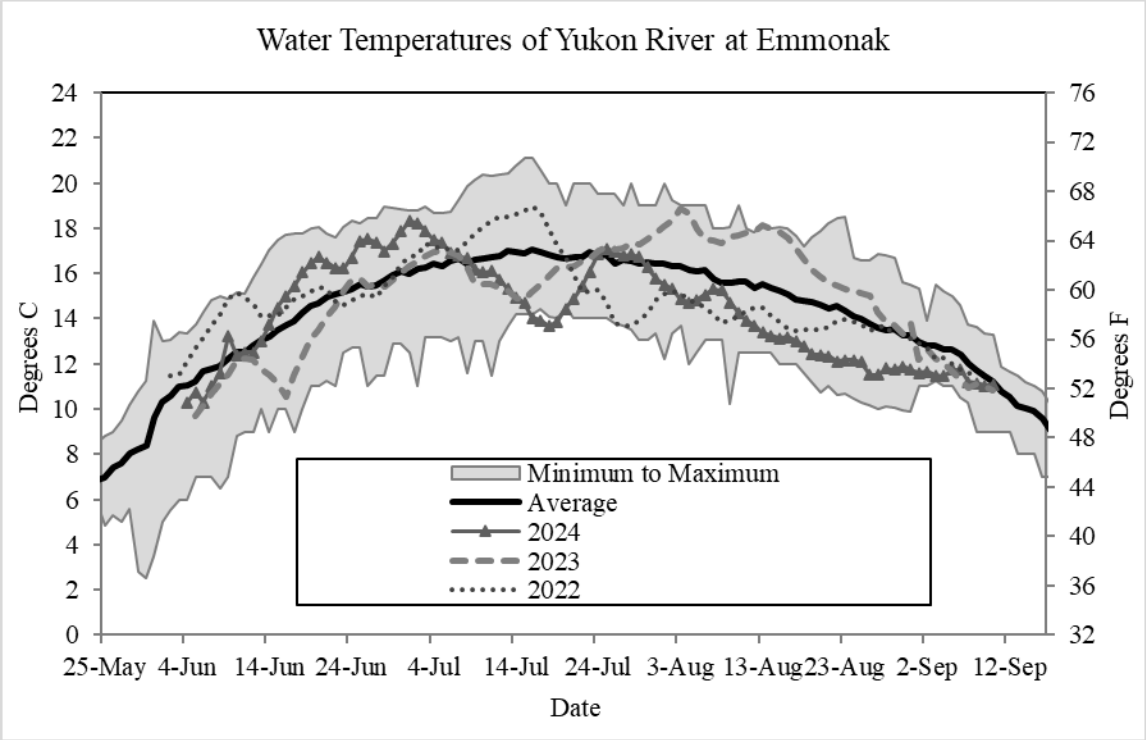

Figure 2.– Average daily water temperatures collected (from hand-held thermometers 1984–present and loggers 2004–2023) in the Yukon River near Emmonak, comparing 2024 and select years to historical minimum, maximum, and average temperatures.

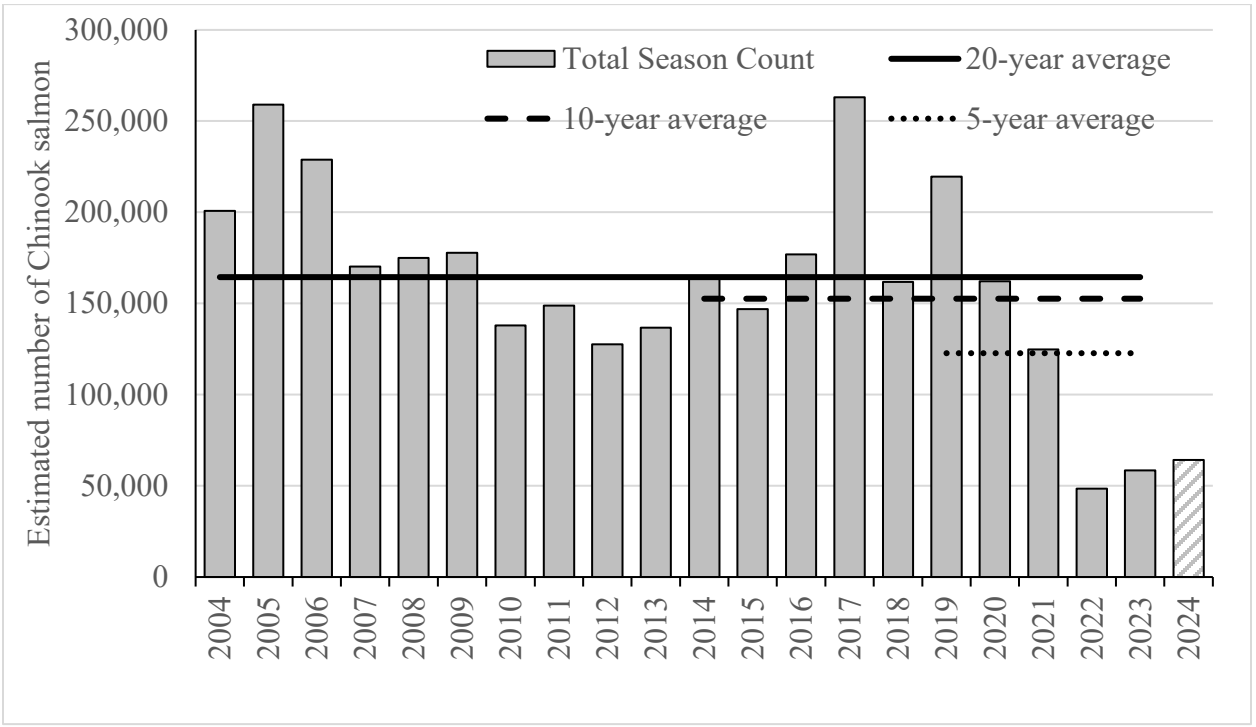

Figure 3.–Estimated Chinook salmon passage at Pilot Station sonar.

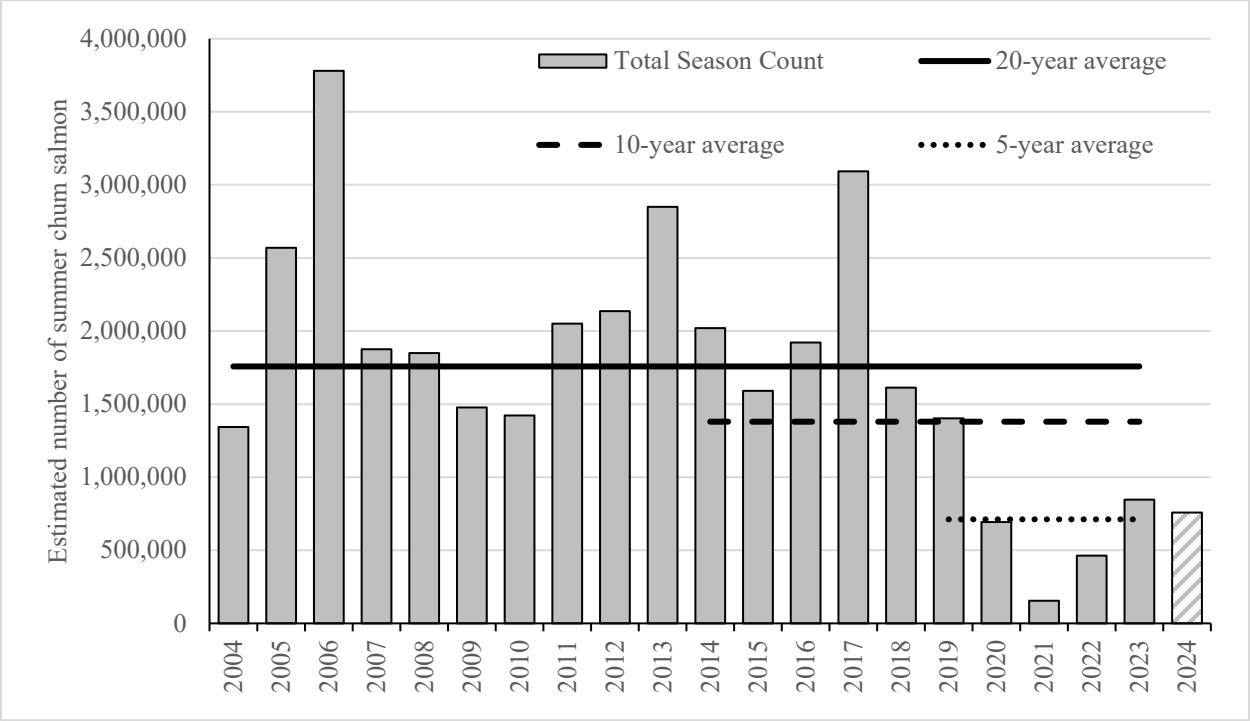

Figure 4.–Estimated summer chum passage at Pilot Station sonar.

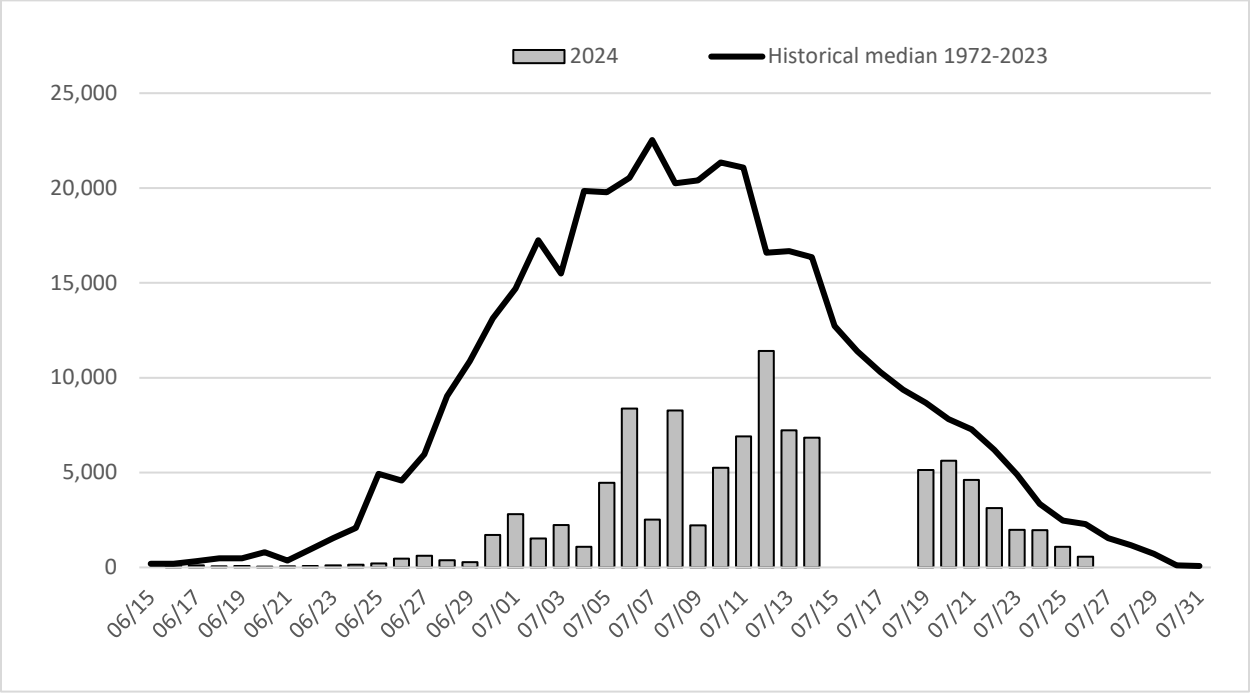

Figure 5.– Anvik River daily sonar passage counts attributed to summer chum salmon.
Note: Historical median does not include 2020. In 2024, the project did not operate from July 15 to July 19 due to high water.

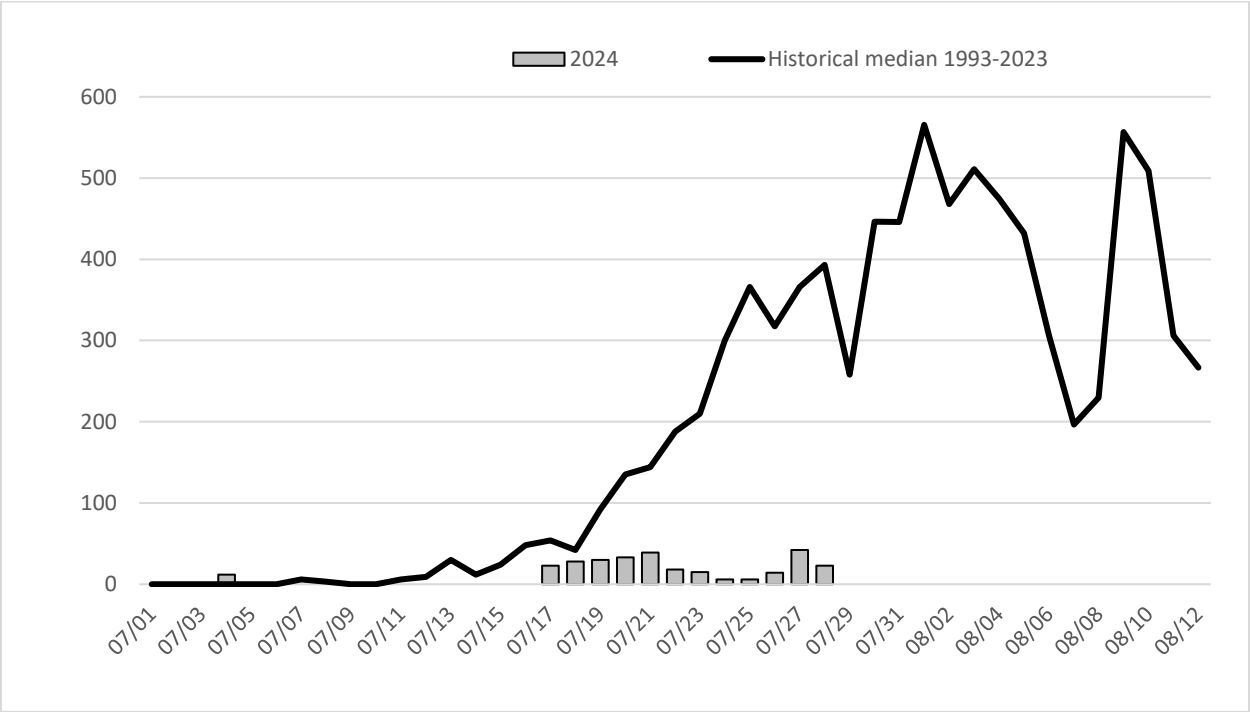

Figure 6.– Chena River daily sonar passage counts attributed to summer chum salmon.
Note: Historical median excludes years 1995-1996, 2000, 2002-2003, 2005, 2011, and 2020.

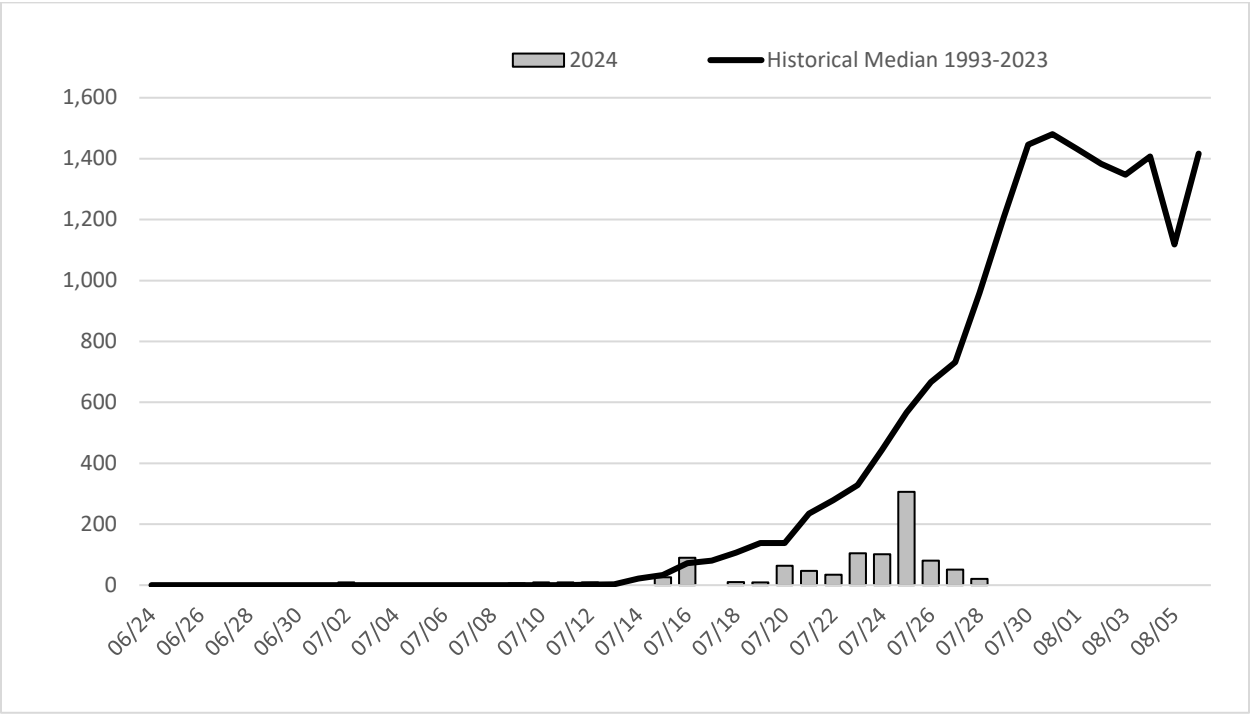

Figure 7.– Salcha River daily sonar passage counts attributed to summer chum salmon.
Note: Historical median excludes years 1996, 2003, 2008, 2011, 2014, and 2020.

Appendix A1.–Summer chum salmon commercial harvests by district for 2014–2024 and guideline harvest ranges.

	Guideline Harvest for Districts 1 and 2: 251,000–755,000			113,000–338,000	13,000–38,000	400,000–1,200,000
	District 1	District 2	Districts 1 and 2	Subdistrict 4-A	District 6	Total Districts 1–6
2014	198,240	229,107	427,347	96,385	6,912	530,644
2015	172,639	181,447	354,086	–	4,770	358,856
2016	293,522	228,267	521789	–	4,020	525,809
2017	345,395	47,770	393165	159,051	4,300	556,516
2018	250,958	195,423	446,381	126,892	3,427	576,700
2019	183,658	41,835	225,493	–	1,596	227,089
2020	9,613	4,355	13,968	–	–	13,968
2021	–	–	–	–	–	–
2022	–	–	–	–	–	–
2023	–	–	–	–	–	–
2024	–	–	–	–	–	–
2014–2020 Average						
	207,718	132,601	340,318	127,443	4,171	398,512

Note: Commercial harvest only includes summer chum salmon sold in the round. Averages do not include 2021–2024 when no commercial fisheries occurred.