Advisory Announcement

Released: September 9, 2021

2021 Yukon River Salmon Fall Fishery Announcement # 19
Fall Update # 7, Yukon Area Salmon Fishery
Districts Affected: Yukon Area

The Yukon River fall chum and coho salmon runs are projecting to be the lowest on record (1974–2020), see Figures 1 and 2. The fall chum salmon run is projected to be 99,000 fish compared to a historical run size of 870,000 fish based on median timing. The coho salmon run size is projected to be near 37,000 fish and run timing is late. Both the fall chum and coho salmon runs are nearly complete entering the Yukon River. According to the Fall Chum Salmon Management Plan, the inseason projections did not meet the threshold of 300,000 fish needed to allow subsistence, personal use or commercial fishing. A run of this size did not meet the drainagewide escapement goal of 300,000-600,000 fall chum salmon, tributary escapement goals and Canadian treaty objectives are not expected to be achieved as well.

Fall chum salmon typically take 39 days to migrate from the mouth of the Yukon River to the U.S./Canada border, with estimated travel rates of 35 miles per day. The last identified fall chum salmon group that entered the Yukon River on September 3 should be approaching the U.S./Canada border around October 12. Monitored lower Yukon River and tributary water levels and water temperatures are near average most of the season and should not adversely affect the migration of fall chum and coho salmon. Some of the upper Yukon River water levels in Canada are still above average for this time of year but are dropping at this time. As the waters flow into Alaska the Eagle area water levels on the mainstem Yukon River are only slightly above average currently.

The coho salmon run came in late and was extremely weak (Figure 2). Coho salmon are smaller fish than fall chum salmon and typically travel about 30 miles per day. Coho salmon continue to enter the Yukon River in September.

Fall Assessment Projects

All projects that handle fish (LYTF; Mt. Village Drift Test Fishery; Pilot Station and Eagle sonars) are making efforts to reduce salmon mortality and distribute test fish catches to community members. Any salmon healthy enough will be released alive from the test nets. Injured salmon and mortalities will be distributed to community members by Tribal councils or on a first come first-served basis from a public dock.
Lower Yukon Test Fishery / ADF&G, Yukon Delta Fisheries Development Association

Fall season operations began on July 16 using 6-inch mesh drift gillnets to target fall chum and coho salmon. As of September 8, the fall chum salmon cumulative catch per unit effort (CPUE) was 123.38 which is well below the average of 1,582.47 for this date. The coho salmon cumulative CPUE was 14.09 which is well below the average of 408.60 for this date. This year’s run timing for both fall chum and coho salmon are late compared to median timing at this project.

Mountain Village Drift Test Fishery / Asacarsarmiut Tribal Council

Fall season operations began on July 18, and as of September 8, the fall chum salmon cumulative CPUE was 438.29 which is well below the average of 2,022.38 for that date. The coho salmon cumulative CPUE was 108.00 which is well below the average of 1,068.35 for this date. This year’s run timing for both fall chum and coho salmon are late compared to median timing at this project.

Sonar Project near Pilot Station / ADF&G

The sonar project operated near Pilot Station transitioned to fall season counts on July 19. As of September 7, the final date of project operations, the cumulative passage estimate is 146,172 chum salmon. This is well below the median cumulative passage of 723,413 chum salmon for this date. The estimated fall chum salmon component of this count is approximately 99,000 fish after the application of genetic stock proportions. On average, the run is nearly complete by this time of year and the run timing was near median. The cumulative passage estimate of coho salmon is 37,257 fish as of September 7, which compares to the median cumulative passage of 147,000 coho salmon for this date. This year’s run timing for coho salmon is 5 days late compared to median timing at this project.

Figure 1. Cumulative passage of fall chum salmon at the mainstem Yukon River sonar project (Pilot Station) compared to median and 2020–2021. The dashed line is the passage required to meet the minimum management requirement of 300,000 fish to allow subsistence fishing.
Figure 2. Cumulative passage of coho salmon at the mainstem Yukon River sonar project (Pilot Station) compared to median, 2018, and 2020–2021.

**Teedrinjik (Chandalar River) sonar / United States Fish and Wildlife Service**

The sonar project began counting fall chum salmon on August 22. As of September 7, the cumulative passage estimate is 6,863 fish which is well below the historical median of 74,050 fish for this date. This estimate includes a preseason expansion from the normal start date of August 8 through August 21. This expansion plus the sonar passage estimates is used to compare the historical cumulative for the same date. The midpoint of the fall chum salmon run at this project is September 14 based on median timing.

**Eagle Sonar / Alaska Department of Fish and Game and Department of Fisheries and Oceans**

The transition from counting Chinook to fall chum salmon occurred on September 1. As of September 8, the cumulative passage is 1,9396 fall chum salmon which is well below the median of 17,084 fish for this date. The first quarter point of the fall chum salmon run at this project is September 16 based on median timing. The Interim Management Escapement Goal for Canadian-origin fall chum salmon is 70,000-104,000 fish. The goal is assessed post-season using the Eagle sonar count minus the estimated U.S. and Canadian harvest of fall chum salmon above the sonar. Based on overall run size as determined by the sonar in the lower Yukon River mainstem operated near Pilot Station and genetics composition to date it is unlikely that the lower end of the escapement goal will be met.

**Porcupine River Sonar / Yukon Territory Canada / Department of Fisheries and Oceans**

This project transitioned to counting fall chum salmon on August 15. The cumulative passage of fall chum salmon as of September 7 is 1,214 fish, which is well below the average passage of 10,961 fish for this date. The midpoint of the fall chum salmon run at this project is September 14 based on median timing.

**Fishing Branch River Weir/Sonar / Yukon Territory Canada / Department of Fisheries and Oceans**

The project became operational on September 7 and the cumulative fall chum salmon passage estimate through September 8 is 15 fish, which is below the median passage of 2,367 for this date.
Age, Sex, and Length Composition

The preliminary chum salmon age composition of the fish sampled (n=123) from the LYTF 6-inch drift gillnets through August 24 is 86% age-4 and 10% age-5, compared to the 1983–2020 average of 66% age-4 and 31% age-5. Females represent 51% of the fish sampled (n=124), which is below the average of 58%, through August 28. The average length is 563 mm from a sample of 124 chum salmon, which is well below the 1981–2020 average of 592 mm.

Coho salmon length is based on the catches in all drift gillnet mesh sizes operated in the test fishery at the mainstem Yukon River sonar project at Pilot Station. The average length, from a sample of 411 coho salmon, was 519 mm which was well below the 1995–2020 average of 558 mm.

Stock Identification

Genetic mixed stock analysis on chum salmon that passed the mainstem sonar from July 19–August 5, indicates approximately 64% summer chum and 36% fall chum salmon. The summer chum salmon stocks were primarily Lower River stocks at 37%, while the Middle River and Tanana stocks together represented 27%. The fall chum salmon stocks consisted of 22% Border/US (Teedrinjik/Sheenjek/Draanjik), 9% Canadian, and 5% Tanana Fall stocks. For fall chum salmon this represented 76% U.S.-origin and 24% Canadian-origin stocks. The next stratum will not be analyzed until mid-September and the results will be reported once available. By September 9, on average more than 95% of the fish are fall chum salmon at this point in the run with very few summer chum salmon present.

Summer Assessment Project

Eagle Sonar (ADF&G)

As of August 31, prior to the date the project transitioned to counting fall chum salmon, the preliminary passage estimate was 31,631 Chinook salmon, which is below the average of 55,433 fish for the historical last day. The Interim Management Escapement Goal for Canadian-origin Chinook salmon is 42,500–55,000 fish which was not achieved even with fishing closures. This is the last weekly update of Chinook salmon passage at this project. Later this fall, a Yukon River summer season summary will be produced which will include all the assessment and escapement data for Chinook and summer chum salmon.

Fall Season Management Strategy

The 2021 fall chum salmon projection is critically low, and well below the 300,000 fish threshold in the Fall Chum Salmon Management Plan to allow any subsistence, personal use, sport or commercial fishing in the Yukon Area. The fall chum and coho salmon runs are projecting to be the lowest on record. Preliminary data from assessment projects indicate that both species have the smallest fish lengths observed in their respective datasets. Due to extremely weak runs of both species, the need to allow salmon passage to spawning grounds, and the higher probability of encountering small-bodied salmon in 4-inch gillnets, the nonsalmon subsistence fishing schedule was adjusted to provide additional protection for migrating salmon. In all districts, there is a reduced schedule for subsistence fishing with 4-inch gillnets to target nonsalmon. Additional manned fish wheel opportunity for nonsalmon is being provided during daylight hours for subsistence fishing in all districts. While using dip nets and manned fish wheels, all fall chum salmon must be released alive and coho salmon are also recommended to be released alive given the historic low run size. Other nonsalmon legal gears remain open, see details below.

Lower Yukon subsistence fishermen should plan for continued salmon fishing closures to conserve fall chum and coho salmon through the end of September. In the Middle and Upper Yukon, fishermen should plan for continued closures at this time.
Current Management Actions
The following management actions and gear listed apply to the lakes, sloughs and tributaries within the districts and subdistricts of the Yukon River drainage.

Fishing Gear
All districts may use the following gear for subsistence fishing on the following schedules to target nonsalmon:

Nonsalmon gear (excluding 4-inch gillnets): open 24 hours per day, 7 days per week:
Legal gear to take nonsalmon species includes hand line, longline, fyke net, dip net and spear. A hook and line with a rod or pole may only be used in the Coastal District up to the Nulato River mouth and including the Nulato River drainage (in Subdistrict 4-A Upper). Subsistence fishermen may use dip nets to target nonsalmon but all fall chum salmon must be released alive immediately. The live release of coho salmon from dip nets is also strongly recommended for conservation given the historic low run size.

Fish wheels (manned):
Subsistence fishermen may use manned fish wheels to target nonsalmon from 8 a.m. to 9 p.m., 7 days per week. All fall chum salmon must be released alive immediately and must bypass any livebox structure. The live release of coho salmon is also strongly recommended for conservation given the low run size.

Gillnets 4-inch and smaller:
Coastal District (Chevak, Hooper Bay and Scammon Bay):
Subsistence fishing with 4-inch or smaller mesh gillnets (60 feet in length or shorter) for nonsalmon is on the following schedule: Two 48-hour periods per week from Saturdays 8 p.m. to Mondays 8 p.m. and from Wednesdays 8 p.m. to Fridays 8 p.m.

Districts 1-3 (Emmonak, Nunam Iqua, Alakanuk, Kotlik, Mountain Village, Pitkas Point, St. Mary’s, Pilot Station, Marshall, Russian Mission, Shageluk and Holy Cross):
Subsistence fishing with 4-inch or smaller mesh gillnets (60 feet in length or shorter) for nonsalmon is on the following schedule: Two 36-hour periods per week from Saturdays 8 p.m. to Mondays 8 a.m. and from Wednesdays 8 p.m. to Fridays 8 a.m.

Subdistrict 4-A Lower (Grayling and Anvik):
Subsistence fishing with 4-inch or smaller mesh gillnets (60 feet in length or shorter) for nonsalmon is on the following schedule: Two 48-hour periods per week from Saturdays 8 p.m. to Mondays 8 p.m. and from Wednesdays 8 p.m. to Fridays 8 p.m.

Subdistricts 4-A Upper, 4-B and 4-C and the Koyukuk River (Kaltag, Nulato, Koyukuk, Huslia, Hughes, Alatna, Allakaket, Bettles, Wiseman, Galena and Ruby):
Subsistence fishing with 4-inch or smaller mesh gillnets, (60 feet in length or shorter) is on the following schedule: Two 48-hour periods per week from Sundays 8 p.m. to Tuesdays 8 p.m. and from Wednesdays 8 p.m. to Fridays 8 p.m.

In the subsistence permit area of South Fork and the Middle Fork of the Koyukuk River, gillnet gear may only be used from August 20 to June 30 and must be 3½ inches or smaller mesh size.

District 5 (Tanana, Rampart, Stevens Village, Beaver, Birch Creek, Arctic Village, Fort Yukon, Venetie, Chalkyitsik, Fort Yukon, Central, Circle and Eagle):
Subsistence fishing with 4-inch or smaller mesh gillnets, (60 feet in length or shorter) is reduced to the following schedule: Two 48-hour periods per week from **Sundays 8 p.m. to Tuesdays 8 p.m. and from Wednesdays 8 p.m. to Fridays 8 p.m.**

In Birch Creek and the subsistence area portion of Beaver Creek, gillnet mesh size may not exceed 3 inches.

**Subdistricts 6-A and 6-B, including the Kantishna River** (Manley, Minto, Nenana, Healy, Cantwell, and Lake Minchumina) and the **Upper Tanana Area** (the Tanana River from the confluence with the mouth of Volkmar River on the north bank and the mouth of the Johnson River on the south bank upstream to the Tanana River headwaters, which includes Dot Lake, Tanacross, Tetlin, Tok, Northway and Nabesna):

Subsistence fishing with 4-inch or smaller mesh gillnets, (60 feet in length or shorter) is on the following schedule: Two 42-hour periods per week from **Mondays 6 p.m. to Wednesdays 12 p.m. and from Fridays 6 p.m. to Sundays 12 p.m.**

**Personal Use Salmon Fishing**

**Subdistrict 6-C** (from the regulatory markers at the mouth of the Wood River upstream to the downstream mouth of the Salcha River, which includes the communities of Fairbanks, North Pole and Salcha):

Personal Use salmon fishing is currently closed.

**Personal Use Whitefish and Sucker Fishing**

**Fairbanks Nonsubsistence Area** (a portion of the Tanana River drainage from the Wood River upstream to the mouth of the Volkmar River on the north bank and the mouth of the Johnson River on the south bank, which includes Fairbanks, North Pole, Salcha and Delta Junction):

Personal Use whitefish and sucker fishing in Subdistrict 6-C with gillnets and fish wheels follows the Subdistrict 6-C salmon fishing schedule and is closed until further notice. Fishing with other gear for whitefish and suckers in the Fairbanks Nonsubsistence Area remains open 7 days per week, 24 hours per day, subject to permit stipulations.

A personal use whitefish and sucker permit is required for this area.

Subsistence harvest calendars are available from the Alaska Department of Fish and Game Fairbanks office (459-7274). Subsistence and Personal Use permits are available at [www.adfg.alaska.gov/store](http://www.adfg.alaska.gov/store).

This is an announcement by the ADF&G in cooperation with the U.S. Fish and Wildlife Service.

To reach the U.S. Fish and Wildlife Service Yukon River Subsistence Fishery Manager, Holly Carroll, please call 907-351-3029.

Announcements will be shared on Facebook at [www.facebook.com/YukonRiverFishingADFG](http://www.facebook.com/YukonRiverFishingADFG).

**COVID-19**

Under Alaska’s Health Advisories 1, 2, 3, and 4, subsistence and commercial fishing is considered essential and is part of Alaska’s Essential Services and Critical Infrastructure. Commercial fishermen should ensure that all travel and other activities in support of commercial fishing operations follow protocols in Alaska COVID-19 Health Advisories. COVID-19 Health Advisories may be found here: [https://covid19.alaska.gov/health-advisories/](https://covid19.alaska.gov/health-advisories/).