



# United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE  
Fairbanks Fish and Wildlife Conservation Office  
101 12<sup>th</sup> Ave  
Fairbanks, Alaska 99701



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Report # B-7: U.S. Fish and Wildlife Service Report to the North Pacific Fisheries Management Council, October 2021.

## **Preliminary Federal Subsistence Salmon Management Post Season Summary as of September 15, 2021**

### *Yukon River:*

At time of writing, fall Chum and Coho salmon continue to migrate up the Yukon River, and salmon fishing restrictions remain in place. Summary data is considered preliminary. The Yukon River Chinook, Chum and Coho runs were some of the smallest on record, with no projected harvestable surplus above what was needed for escapement. Subsistence Salmon fishing for Chinook as well as summer and fall Chum salmon was therefore closed throughout the 2021 fishing season. Managers allowed as much opportunity to harvest non-salmon species as possible. Because subsistence fishing was closed, all types of salmon harvest were also closed such as commercial, personal use and sport fishing throughout the drainage.

Subsistence harvest estimates will not be available until after household surveys are completed and results finalized, typically in December. While there may be some incidental harvest of salmon from 4-inch and smaller mesh gear, it is likely that Yukon households will report record-low harvests for salmon. This represents the potential loss of over 190,000 salmon (based on historical harvest averages of Chinook and Chum combined) to Yukon River families. Despite salmon fishing closures, run sizes were so low that escapement goals throughout the drainage for Chinook and Chum salmon will likely not be met. While preseason forecasts accurately predicted the resulting run size for Chinook salmon, the Chum and Coho outlooks did not indicate the very poor runs that occurred, despite very poor fall Chum runs in 2020.

In-season assessment data and management actions were discussed weekly on the Tuesday Yukon River Drainage Fisheries Association teleconferences which were widely attended this season, and often allowed for up to 2 1/2 hours of discussion each week. Fishers at each of these meetings expressed concerns for any Yukon-bound salmon that may be intercepted as bycatch in NPFMC managed Bering Sea fisheries, as well as State-managed Alaska Peninsula and Aleutian Islands Management Area, "Area M" fisheries. Questions arose about how these fisheries are managed, how bycatch is used or distributed, and how bycatch in these other areas relates to poor abundance seen in recent years in Yukon fisheries. These concerns have triggered increased collaboration of agency and stakeholder group staff to create more outreach materials and to help address these questions and direct fishers to appropriate management agencies or bodies.

### *Kuskokwim River:*

The 2021 preseason run abundance forecast for Kuskokwim River Chinook Salmon was 94,000–155,000 fish. Based on the preseason forecast, the depressed runs in recent years, and the historical Chinook Salmon harvest (67,200–109,800 for years 1990–2009), it was evident that restrictions would be necessary to meet tributary and drainage-wide escapement goals. The Yukon Delta National Wildlife Refuge Manager closed the Federal public waters of the Kuskokwim River mainstem, selected salmon tributaries, and non-salmon spawning tributaries within 100 yards of their confluence with the mainstem to the harvest of all salmon using gillnets by all users effective June 1, 2021. This action was based on the provisions of Title VIII of the Alaska National Interest Lands Conservation Act and delegation of authority letter from the Federal Subsistence Board.

The Federal in-season manager provided subsistence fishing opportunities for Federally qualified subsistence users with 6” mesh or smaller set gillnets in Federal public waters of the Kuskokwim River mainstem on June 2, June 5, June 9, July 10, and July 17. Additionally, the Federal in-season manager provided opportunities for Federally qualified subsistence users with 6” mesh or smaller gillnets (set or drift) in Federal public waters of the Kuskokwim River mainstem on June 12, June 15, June 19, July 2, July 9, and July 16. As reported by the Alaska Department of Fish and Game across these opportunities, an estimated 21,560 Chinook Salmon, 4,060 Chum Salmon, and 22,910 Sockeye Salmon were harvested within the Yukon Delta National Wildlife Refuge (excluding the section between Akiak and Aniak). As of July 21, 2021, the Kuskokwim in-season manager relinquished authority back to the Alaska Department of Fish and Game. Under the Alaska Department of Fish and Game, the Kuskokwim River remained closed to the use of gillnets due to the low abundance of Chum Salmon during the 2021 season.

### *Chignik River:*

The 2021 Sockeye Salmon forecasted total-run size for the Chignik River Management Area was 875,000 fish. Based on concern that early-run Sockeye Salmon would not make their biological escapement goal (BEG) of 350,000–450,000 fish, the Federal in-season manager issued an Emergency Special Action on July 8, 2021, (8-SS-01-21), restricting harvest of Sockeye Salmon to Federally qualified subsistence users who were in possession of a Federal Subsistence Harvest Permit. This action was deemed necessary to ensure the conservation of healthy populations of Chignik River Sockeye Salmon and the continuation of subsistence uses. The Federal in-season manager issued an Emergency Special Action on July 21, 8-SS-02-21, rescinding Emergency Special Action 8-SS-01-21 and opened the Federal public waters of the Chignik River drainage to the harvest of Sockeye Salmon by all users. At that time the escapement was primarily composed of late-run Sockeye Salmon and the late-run was tracking within the established escapement objectives. The late-run Sockeye Salmon made the escapement goal of 220,000–400,000 fish.

The BEG for Chinook Salmon in the Chignik River drainage is 1,300 to 2,700 fish. Low rates of escapement indicated that the lower range (1,300) of the escapement goal of Chignik River

Chinook Salmon was unlikely to be achieved. In an effort to conserve the lower than expected Chinook Salmon run, both State and Federal fisheries were closed concurrently to maintain viability of the Chignik River Chinook Salmon population on July 14, 2021, as stated in Emergency Special Action, 8-KS-01-21. This Emergency Special Action was extended through August 31, 2021, due to continued poor escapement of Chinook Salmon into the Chignik River.

*Copper River:*

The 2021 preseason forecast for Copper River Chinook Salmon was 37,000 fish. Relative to recent 10-year averages, this forecast was 22 percent below average for Chinook Salmon. The Federal subsistence fisheries in the Chitina Subdistrict, the Glennallen Subdistrict, and the Batzulnetas area opened on May 15 and 192 Chitina Subdistrict permits, 357 Glennallen Subdistrict permits, and one Batzulnetas area permits were issued. In river assessments indicated a weak return and suggested that the Chinook Salmon sustainable escapement goal was unlikely to be achieved. In response to this assessment of a weak Chinook Salmon return, the Alaska Department of Fish and Game closed all State fisheries of the Upper Copper River drainage to the retention of Chinook Salmon; including the personal use fishery of the Chitina Subdistrict, the sport fisheries, and the subsistence fishery of the Glennallen Subdistrict. Although no Federal Special Actions were issued, the Wrangell-St. Elias National Park and Preserve (WRST) prepared and distributed an advisory announcement intended to inform all subsistence users of the present concerns for Copper River Chinook Salmon. This announcement was sent to all Upper Copper River District Federal subsistence fishing permit holders with email addresses on record. In the announcement, the WRST requested that users consider voluntarily releasing healthy Chinook Salmon that may be beyond their subsistence needs.

*Buskin and Afognak Rivers:*

The 2021 Sockeye Salmon returns to the Buskin River in the Kodiak Archipelago was a record low return of 2,326 (BEG 4,800–8,400) through September 15, 2021. Concurrent closures to the State Sport and Subsistence fisheries and the Federal subsistence fishery targeting Buskin River Sockeye Salmon were enacted in June. The 2021 Sockeye Salmon escapements into the Buskin watershed did not provide enough fish for both escapement and subsistence needs.

The Karluk River Sockeye Salmon early-run escapement counts did not meet the lower escapement goal with 128,423 fish passing the weir (escapement goal range 150,000–250,000 fish). To protect this run, all fishing activities were restricted. Many subsistence users have continued to travel to other systems within the area of Kodiak to meet their needs, i.e. Port Lions and Pasagshak.

The Chinook Salmon runs on the Karluk and Ayakulik rivers failed to meet their respective escapement goals. The Karluk River had 2,796 fish pass through the weir (goal 3,000–6,000 fish) and the Ayakulik River had 2,961 fish pass the weir (goal 4,800–8,400 fish).

*Situk River:*

The BEG for the Situk River drainage is 450–1,050 large (>28 inches) Chinook Salmon. The return of large Chinook Salmon to the Situk River has been below the goal in 5 of the last 10 years. The goal was achieved in 2013, 2014, 2017, 2019, and 2020 after restrictive management measures were implemented. The 2021 Situk River Chinook Salmon pre-season forecast was for a total run of 1,550 with a standard error of 950 large fish. Even though the 2021 forecast was within the escapement goal, the wide margin of error in the estimated run and chronic low returns required a conservative approach to ensure the BEG was achieved and allow as many Chinook Salmon as possible to reach the spawning grounds. The Federal Subsistence Chinook Salmon fishery was closed during June and July due to conservation concerns. The Chinook Salmon escapement eventually did meet the minimum goal and the Federal subsistence fishery was partially reopened to retention of fish on July 16 with gear restricted to rod and reel only.

#### *Stikine River:*

The 2021 pre-season forecast for the Stikine River was 9,900 large Chinook Salmon (greater than 28 inches total length). A run forecast of this size does not provide an Allowable Catch for either the U.S. or Canada as the forecast is below the lower end of the Escapement Goal Range of 14,000 to 28,000 fish. The Federal Subsistence Chinook Salmon fishery in the Stikine River was restricted for the entire Chinook Salmon season (May 15–June 20). The closure was based on conservation concerns and to meet obligations of the Pacific Salmon Treaty.

### **Migratory Bird Management Update as of September 20, 2021**

The U.S. Fish and Wildlife Service (Service) Migratory Bird Management field season was impacted in 2021 due to efforts to reduce employee and community exposure to COVID-19, although more field work was completed than in 2020. Surveys specific to kittiwakes and pigeon guillemots were conducted in Prince William Sound. Three offshore seabird surveys were conducted in the Bering and Chukchi seas in conjunction with fisheries surveys and other collaborations. Three surveys were conducted as part of the Northern Gulf of Alaska Long-term Ecological Research project, in cooperation with the University of Alaska Fairbanks.

#### *Seabird Mortality Events:*

In late May 2021, the Service received multiple reports of dead and dying seabirds from the Bering Strait region. Dead seabirds included shearwaters, kittiwakes, murrelets, puffins, auklets, cormorants, and loons. In addition to the on-going event in the Bering and Chukchi seas, in late July the Service received reports of dead and sickly shearwaters and murrelets from the Aleutian Islands, and a localized die-off at Middleton Island in the Gulf of Alaska. Results to date are summarized in a 2021 Seabird Die-off Factsheet (<https://www.fws.gov/alaska/stories/2021-alaska-seabird-die-update>).

Historically, seabird die-offs are not uncommon in Alaska, but since 2015 these events have occurred annually. These die-off events are unusual due to the number and variety of dead birds, broad geographic area affected, and the extended duration. In 2021 statewide, approximately 2,200 dead seabirds have been reported to date. The Service coordinates with Federal, State, Tribal governments, researchers, and community members to obtain reports and collect carcasses

for examination and testing by the U.S. Geological Survey National Wildlife Health Center (NWHC) and other researchers. The die-offs remain a concern for rural communities that rely on the marine ecosystem for subsistence.

*Bering and Chukchi seas.* Based on initial results of 12 carcasses submitted, starvation is the suspected cause of death, possibly due to lack food availability. Results from avian influenza testing were negative, and results from harmful algal biotoxins will be shared once available.

*Aleutian Islands.* Reports of dead shearwaters and several fulmars were received from Unalaska and dead shearwaters from Cold Bay in late July and early August. Collected carcasses will be sent to the NWHC for examination and testing. Results will be shared once available.

*Gulf of Alaska, Middleton Island.* University researchers associated with the Institute for Seabird Research and Conservation at Middleton Island collected and coordinated submitting black-legged kittiwake carcasses to the NWHC during a localized die-off event. After other potential causes of death had been eliminated, avian botulism testing was conducted and two kittiwakes in suitable post-mortem condition were positive for avian botulism type C. This form of botulism is specific to birds and does not affect humans, although it is recommended that birds be well cooked for human consumption. The NWHC and other researchers continue to investigate the source of avian botulism, which requires very specific environmental conditions for the bacteria to grow. This is the first recorded case of avian botulism in the State of Alaska and has rarely been documented in seabirds.

If the Council has questions about the fisheries section of the B-report, please contact the Yukon River Subsistence Fishery Manager, Holly Carroll at [holly\\_carroll@fws.gov](mailto:holly_carroll@fws.gov) or at 907-351-3029. For questions about seabirds please contact Kathy Kuletz at [kathy\\_kuletz@fws.gov](mailto:kathy_kuletz@fws.gov) or at 907-786-3453.