

Tower escapement was expanded to the total Unalakleet River, based on the average⁴ contribution of the North River to the total escapement. The expansion methods used in 2020 were consistent with those used to develop the 3-system index.


Upper Yukon River

The preliminary postseason run size estimate of Upper Yukon River Chinook salmon is **52,005**, based on the preliminary assessment of total passage into Canada and expectations of the total harvest in Alaska. Chinook salmon passage into Canada was based on a sonar project operated near the U.S./Canada border, downriver from Eagle, Alaska. The preliminary sonar count is 33,005 (90% CI⁵: 32,649–33,361). The preliminary sonar count does not include one day of right-bank passage estimates. The total harvest of Upper Yukon River Chinook salmon in Alaska is expected to be about 19,000, based on the 2018 harvest (i.e., 19,266) which resulted from similar conservative management strategies. Nearly all harvest occurred in the Alaskan subsistence fishery, and minimal harvest occurred in test fisheries operated by the department. Subsistence fishing restrictions were implemented throughout the Chinook salmon run in 2020, and high-water conditions likely further reduced subsistence harvest relative to the opportunities provided. There was no sale of Chinook salmon harvested incidentally in summer chum salmon commercial fisheries, and all commercially harvested Chinook salmon were retained for subsistence uses. The preliminary total run size of Upper Yukon River Chinook salmon was smaller than expected but generally consistent with the lower end of the preseason run forecast (i.e., 59,000) and the lower end of the inseason run projections (i.e., 63,000).

Kuskokwim River

The preliminary postseason run size estimate of Kuskokwim River Chinook salmon is **116,196** fish (95% CI: 95,000–143,000), based on preliminary results of a maximum likelihood model. The total run estimate was informed by direct observations of escapement and an expectation of drainagewide harvest. Escapement was successfully monitored at 15 locations, and there were no operational issues. The total harvest of Kuskokwim River Chinook salmon is expected to be 28,315. No commercial harvest of Kuskokwim River Chinook salmon occurred during the 2020 season. Nearly all harvest occurred in the subsistence fishery, and minimal harvest occurred in test fisheries operated by the department and collaborators. Subsistence fishing restrictions were implemented throughout the Chinook salmon run in 2020. U.S. Fish and Wildlife Service (USFWS) estimated that approximately 23,000 Chinook salmon were harvested within a portion of the Yukon Delta National Wildlife refuge during subsistence fishing openers announced by Federal Special Actions. A preliminary estimate of drainagewide subsistence harvest was generated using a four-year relationship between partial harvest estimates developed inseason by USFWS and drainagewide estimates developed postseason by the department. The preliminary total run size of Kuskokwim River Chinook salmon was smaller than expected given the preseason run forecast of 193,000–261,000. However, the preliminary model estimate is consistent with an independent partial run estimate of 106,152 (90% CI: 90,231–122,073) Chinook salmon, based on a sonar project operated near Bethel, Alaska.

Sincerely,



Sam Rabung
Director, Division of Commercial Fisheries

cc: Anne Marie Eich, NMFS AKR
David Witherell, NPFMC

⁴ The average contribution of the North River escapement to the total Unalakleet River escapement was based on years 2015, 2017, and 2019, which were the most recent three years with complete escapement assessment. The contribution of North River in prior years was not used, because there is evidence that the proportional contribution of the North River to the total Unalakleet River escapement has declined modestly over time.

⁵ CI: confidence interval