

**Tuluksak River Salmon Run Timing and Abundance. Study No. 10-307, Annual 2011**

**Abstract**

The Kenai Fish and Wildlife Field Office, assisted by the Tuluksak Native Community, monitored the escapement of the five species of Pacific salmon *Oncorhynchus* spp. returning to the Tuluksak River, a tributary to the lower Kuskokwim River. From June 24 to September 10, 2011, a resistance board weir was utilized to collect abundance, run timing, age, sex, and length data from returning adult salmon. In conjunction with the weir, an underwater video system was affixed and utilized to collect abundance from July 11 to September 10, 2011. These data support in-season and post-season management of the commercial and subsistence fisheries that occur on the Yukon Delta National Wildlife Refuge and the Kuskokwim River. Estimated escapements of 10,011 chum salmon *O. keta*, 288 Chinook salmon *O. tshawytscha*, 130 sockeye salmon *O. nerka*, and partial counts of 85 pink salmon *O. gorbuscha* and 92 coho salmon *O. kisutch* passed through the Tuluksak River weir during 2011. Peak weekly passage occurred July 17–23 for chum, Chinook and sockeye salmon, and July 31 to August 6 for pink salmon. Age, sex, and length data were collected for chum, Chinook, and sockeye salmon. Dominant ages were 0.3 (49%) and 0.4 (49%) for chum, 1.3 for male and 1.4 for female Chinook, and 1.3 for sockeye salmon. Overall percentages for female salmon were chum 34%, Chinook 26%, and sockeye salmon 56%. Mean lengths varied between male and female salmon for each species sampled. The estimated Chinook salmon escapement during 2011 was the second lowest on record and below the escapement goal range of 1,000–2,100 for the fifth successive year. Special management actions were taken for Chinook salmon during 2011 directly related to low return concerns in the Kuskokwim River drainage.

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