

ABSTRACT

The George River is a major tributary of the Kuskokwim River and produces Chinook salmon *Oncorhynchus tshawytscha*, chum salmon *O. keta*, and coho salmon *O. kisutch* that contribute to intensive subsistence and commercial salmon fisheries downstream of its confluence. The George River weir is one of several projects operated in the Kuskokwim Area that form an integrated geographic array of escapement monitoring projects. Collectively, and in accordance with the State of Alaska Sustainable Fishery Policy (5 AAC 39.222), this array of projects is a tool to ensure adequate geographic and temporal distribution of spawning salmon, and provides a means to assess trends in escapement that should be monitored and considered in harvest management decisions. Towards this end, George River weir has been operated annually since 1996 to determine daily and total salmon escapements for the target operational period of 15 June through 20 September; to estimate age, sex, and length composition of Chinook, chum, and coho salmon escapement, to monitor environmental variables that influence salmon productivity; and to provide part of an integrated platform in support of other Kuskokwim Area fisheries projects.

In 2007, a resistance board weir was operated on the George River from 14 June through 17 September. Escapements for the target operational period were estimated as 4,883 Chinook, 55,842 chum, 74 sockeye, and 29,317 coho salmon. Chinook and sockeye salmon escapements in 2007 were near average while escapements of chum and coho salmon were exceptionally high. Of the species that occur in the George River only Chinook salmon have been assigned an escapement goal and 2007 escapement was well within the escapement goal range. Age, sex, and length data indicated a relatively strong return of age-1.2 Chinook salmon and age-0.3 chum salmon. Information collect at the weir from fish tagged in the mainstem Kuskokwim River suggest that in 2007 George River Chinook salmon where an intermediate component of runs migrating past the tagging site located near the village of Kalskag.

Key words: Chinook salmon, *Oncorhynchus tshawytscha*, chum salmon, *O. keta*, coho salmon, *O. kisutch*, longnose suckers, *Catostomus catostomus*, escapement, ASL, age-sex-length, salmon age composition, salmon sex composition, salmon length composition, George River, Kuskokwim River, resistance board weir, radiotelemetry, mark-recapture, genetic stock identification, stock specific run-timing.