Subsistence harvests of Kuskokwim chum salmon are a fundamental part of local culture. Subsistence fishermen in the Kuskokwim drainage harvest more chum salmon than in any Alaska drainage other than the Yukon River drainage.

Kuskokwim chum salmon escapements are evaluated based on Aniak sonar site estimates and on the number of chum salmon counted at weirs located in six tributary streams.
The Aniak River is a tributary of the Kuskokwim River and major chum spawning ground within the Kuskokwim drainage. At the Aniak River sonar site, the Alaska Department of Fish and Game estimates chum salmon passage as an indicator of Kuskokwim chum salmon run strength.

Where the site is located

The sonar site is 12 river miles upstream of the Aniak River’s confluence with the Kuskokwim River and 201 river miles from the mouth of the Kuskokwim River.

Aniak sonar operations

ADF&G has been detecting fish using sonar at the Aniak River site for most years since 1980. The sonar site uses Dual frequency IDentification SONar (DIDSON). DIDSON detects fish using sound waves and produces ultrasound-like video images.

Sonar site technicians deploy two DIDSON transducers into the river each spring. The Aniak sonar site operates from June 26 through July 31. Data received from the sonar transducers is processed on computers in a tent at the site.

Sonar site beach seine net project

At the Aniak sonar site, ADF&G also uses a beach seine net to collect length, gender and age data from a sample of the chum salmon migration. After the data are collected, captured fish are released back into the river. Biologists use gender, length and age information to identify long-term trends in chum runs.

Sonar site technicians install a partial weir extending from the submerged sonar transducer to shore to prevent fish from swimming behind the transducer where they cannot be detected.