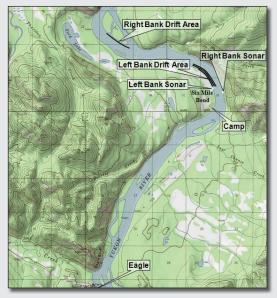


At the Yukon Eagle River sonar site, the Alaska Department of Fish and Game estimates the escapement of king salmon and fall chum salmon.

Where the site is located



The sonar site is located at approximately River Mile 1,210 of the Yukon River at a place known as Six Mile Bend.

The site is also about seven miles downstream of the town of Eagle and 18 miles downstream from Alaska's border with Canada.



An international fishery

In the Yukon River, about 50 percent of king and 25 percent of fall chum salmon come from Canadianorigin



stocks. These salmon are managed under an agreement between the US and Canada to ensure enough of them cross the border to spawn and provide fishing opportunities on both sides of the border. Eagle sonar site estimates are key to ensuring the terms of the agreement are met.

Eagle sonar operations



DIDSON transducer

ADF&G has been detecting fish using sonar at the Eagle Yukon River site since 2005. The sonar site deploys two types of sonar transducers into the river to detect fish-Dual frequency **IDentification** SONar (DIDSON) and splitbeam sonar

transducers. Both use sound waves to detect fish, but at different frequencies.

Sonar site gillnet project

King salmon arrive at the Eagle sonar site early in the season and chum salmon arrive late. At the tail end of the king salmon run and beginning of fall chum run, some overlap occurs. Sonar cannot be used to distinguish fish



by species. To determine the best time to begin classifying the sonar counts as chum salmon ADF&G relies on observations of fish caught in a test gillnet project at the site.

Gillnet catches also provide an opportunity to collect length, gender, age and genetic data from a sample of the king and fall chum salmon migration.



Captured fish are handled carefully to minimize mortalities. Most are returned to the river and any mortalities that occur are distributed to local residents.