

Lake Clark Sockeye Salmon Escapement and Population Monitoring, 2009 and 2010

The Lake Clark sockeye salmon run, an important component of the Kvichak River run, supports important Federal subsistence fisheries. This report describes escapement and population monitoring results for the 2009 and 2010 field seasons. Escapement estimates were made at river kilometer 36 on the Newhalen River using the same tower site and protocols used in previous years. Age and size composition estimates were made using samples of pre-spawning sockeye salmon obtained from the Sixmile Lake subsistence fishery and post-spawning sockeye salmon collected from Lake Clark spawning areas. In 2009, turbid water conditions compromised counts after July 22 and escapement after this date was assumed to represent the historic mean proportion of the total escapement observed after this date (0.38). Estimated Lake Clark escapements were 210,372 sockeye salmon in 2009 and 327,930 sockeye salmon in 2010. These escapements represented 9% of the total Kvichak River escapement in 2009 and 8% in 2010. Both years had substantially lower escapements (43-63% less) than the 2004-2008 mean escapement of 568,240 sockeye salmon. The estimated run mid-point was 5 days earlier than average in 2009 and 10 days later than average in 2010. Age 1.3 sockeye salmon were most abundant in all samples during both years.

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