

2018 Kitwanga River Salmon Enumeration Facility Update #15 - FINAL

The Gitanyow Fisheries Authority (GFA) is pleased to announce that the Kitwanga River Adult Salmon Enumeration Facility (KSEF) is operational for 2018. Like in other years GFA will be providing weekly updates on salmon escapement to the Kitwanga River (middle Skeena index) from July through to October. This year marks the 16th consecutive year that GFA has implemented the program, which collects important in-season pacific salmon stock assessment and biological information. GFA would like to thank their 2018 funders and supporters, specifically the Gitanyow Chiefs (Gitanyow Huwilp Sustainability Fund), the Pacific Salmon Commission and Fisheries and Oceans Canada. GFA would also like to acknowledge and thank the Gitwangak Wilp Simadeeks for allowing GFA to continue to work within their traditional territory, as set out by our 2002 agreement.

As in other years, weekly updates will be distributed and posted on our website: www.gitanyowfisheries.com

GFA staff installed the in-river KSEF components from July 4-9, under lower than normal water levels. The fence was rendered fish tight during the evening of July 9 and operational (diverting fish through sample boxes) on the afternoon of July 10, which is the usual starting date for the project. Water levels at the KSEF had dropped since November 3, and were at 0.58m prior to the fence being removed on **November 13, 2018**.

Upper daily water temperatures in the Kitwanga River fluctuated between $3 - 5^{\circ}C^{*}$ over the last week of operation. *The fence was in operation approximately two weeks longer to capture coho which had been delayed due to low water; which extended beyond our historical shut-down period (end of October).

The KSEF was dismantled on November 13, with final salmon counts to the morning of November 13, 2018 as follows:

Sockeye = 1434 Chinook = 618 Pink = 2,736 Chum = 273 Coho = 551

A total of **1,434** sockeye were counted through the KSEF and the KsF (see update #1 for explanation why both facilities were used for this year's counts). Based on average run timing for sockeye to November 13 (2003-2017), it is predicted that **all** of the run should have passed the KSEF. For more information on cumulative Kitwanga sockeye salmon abundance by date, refer to the sockeye graph below.

Like last year, GFA tracked radio tagged sockeye throughout the Kitwanga Watershed to learn more about their freshwater habits and identify key spawning areas for 2018. A total of 59 sockeye were tagged for 2018.

A total of **618 Chinook** were counted through the KSEF. Based on average run timing for Kitwanga Chinook to November 13 (2003-2017) it is predicted that **all** of the run should have passed the KSEF. For more information on cumulative Kitwanga Chinook salmon abundance by date, refer to the Chinook graph below.

As a pilot project for this year we installed and operated a digital video camera recorder (DVR) to the KSEF project (Thank you DFO and Rob Dams for loaning us the equipment). The DVR was in place and operational from July 24, 2018 to November 13, and had been passing both sockeye and chinook successfully.

A total of **2,736 pink salmon** were counted through the KSEF. Based on average run timing for pink salmon to November 13 (2003-2017), it is predicted that **all** of the run should have passed the KSEF. For more information on cumulative Kitwanga even year pink salmon abundance by date, refer to the pink salmon graph below.

A total of **273 chum salmon** were counted through the KSEF. Based on average run timing for chum salmon to November 13 (2003-2017,) it is predicted that **all** of the run should have passed the KSEF. For more information on cumulative Kitwanga chum salmon abundance by date, refer to the chum salmon graph below.

A total of **551 coho salmon** were counted through the KSEF. This being an extremely low water year, we were getting a pulse later than in previous years. A stream walk was conducted downstream from the fence to the Skeena River, prior to the fence being pulled, with 35 additional coho added to the total. Based on average run timing for Kitwanga coho to November 13 (2003-2017), we have historically had **all** of the run passed the KSEF at this point. For more information on cumulative Kitwanga coho salmon abundance by date, refer to the coho salmon graph below.













