



# Gitanyow *Fisheries* Authority



August 24, 2022

## **2022 Kitwanga River Salmon Enumeration Facility Update #4**

The Gitanyow Fisheries Authority (GFA) is pleased to announce that the Kitwanga River Adult Salmon Enumeration Facility (KSEF) is operational for 2022. Like in other years GFA will be providing weekly updates on salmon escapement to the Kitwanga River (middle Skeena index) from July through to September. This year marks the 20<sup>th</sup> 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 2022 funders and supporters, specifically the Gitanyow Chiefs (Gitanyow Huwilp Sustainability Fund), the Pacific Salmon Commission's Northern Endowment Fund 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. Weekly updates will be distributed and posted on our website: [www.gitanyowfisheries.com](http://www.gitanyowfisheries.com)



*Downstream view of KSEF on August 16, 2022*

High water in 2022 prevented the installation of the KSEF by the usual start date of July 10. However, GFA was able to install the in-river KSEF components between July 21-23, 2022 and the fence was rendered fish tight by the afternoon of July 23. The later than normal start will be considered when producing final estimates of salmon escapement for this year. For 2022, we once again will be operating both a manual counting box and a digital video camera recorder (DVR).

The water levels at the KSEF are currently at 0.64m, approximately 0.06m below the long-term average and water temperatures are above normal for this time of year, currently fluctuating between 13-16°C.

Like in previous years, the KsF (smolt fence) located at the outlet of Gitanyow Lake will be used again this year to count adult sockeye through a DVR camera system. The KsF DVR has been operational since July 11, 2022, and up to August 7<sup>th</sup>, 728 adult sockeye have passed through this secondary upper counting facility. Prior to July 11, the KsF was operated as a smolt fence and adult sockeye would have been prevented from swimming upstream undetected.

For 2022, the total sockeye return will be reported through both the KsF and the KSEF for comparison purposes and all other salmon counts will only be reported when they migrate past the KSEF.

Total salmon counts to the end of **August 22, 2022 through the KsF** and end of **August 22, 2022 through the KSEF**:

### **KsF**

**Sockeye= 954**

### **KSEF**

**Sockeye= 436      Chinook= 903      Pink= 4,092      Chum= 116      Coho= 136**

This year's **sockeye** escapement through the KSEF compares to a previous maximum observed to the day of 8,449 in 2010, which resulted in an overall escapement of 20,804 and the minimum observed to the day of 9 in 2020, which resulted in overall escapements of 440. Based on average run timing for Kitwanga sockeye to the day (2003-2019) it is predicted that approximately **38.7%** of the run should have passed the KSEF. For more information on cumulative Kitwanga sockeye salmon abundance through the KSEF by day, refer to the sockeye salmon graph below.



*View of a sockeye through the KsF camera box on August 7, 2022 (left photo) and view of a sockeye through the KSEF camera box on August 9, 2022 (right photo)*

To date we have counted **903 Chinook** (plus 57 jacks) through the KSEF. This year's Chinook escapement compares to a maximum observed to the day of 3,097 in 2007, which resulted in an overall escapement of 3,225 and the minimum observed to the day of 168 in 2010, which resulted in an overall escapement of 852 for the year. Based on average run timing for Kitwanga Chinook to the day (2003-2019 and 2021) it is predicted that approximately **83.6%** of the run should have passed the KSEF. Of note, because the KSEF operations started 13 days later than the usual start date of July 10, it is likely that

a small number of Chinook may have passed the site before it became fish tight. Based on average run timing between July 10-23 (2003-2019 and 2021) approximately 5.3% of the run would have been missed. The final Kitwanga Chinook escapement for 2022 will be adjusted in the post-season to account for the late start. For more information on cumulative Kitwanga Chinook salmon abundance by date, refer to the Chinook graph below.



*A sampled Chinook at the KSEF on August 5, 2022 (left photo) and a view of Chinook through the camera box at KSEF on August 9, 2022 (right photo).*

To date we have counted **4,092 pink** salmon through the KSEF. This year's even year pink escapement compares to a maximum observed to the day of 38,246 in 2004, which resulted in an overall escapement of 71,070 and the minimum observed to the day of 152 in 2010, which resulted in an overall escapement of 15,650 for the year. Based on average run timing for pink salmon to the day (2004-2018) it is predicted that **41.5%** 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.



*View of a pink salmon through the camera box at KSEF on August 8, 2022*

To date we have counted **116 chum salmon** through the KSEF. This year's chum escapement compares to a **maximum** observed to the day of 430 in 2005, which resulted in an overall escapement of 1,862 and a **minimum** observed to the day of 1 in 2010 which resulted in an overall escapement of 348 for the year. Based on average run timing for chum salmon to the day (2003-2019) it is predicted that approximately **12.3** of the run should now have passed the KSEF. For more information on cumulative Kitwanga chum salmon abundance by date, refer to the chum salmon graph below.



*View of a chum salmon through the camera box at KSEF on August 11, 2022.*

To date we have counted **136 coho salmon** through the KSEF. This year's coho escapement compares to a **maximum** observed to the day of 518 in 2009, which resulted in an overall escapement of 12,080 and a **minimum** observed to the day of 0 in 2006, which resulted in an overall escapement of 2,572 for the year. Based on average run timing for coho salmon to the day (2003-2019) it is predicted that approximately **3.5%** of the run should now have passed the KSEF. For more information on cumulative Kitwanga coho salmon abundance by date, refer to the coho salmon graph below.









