



Gitanyow *Fisheries* Authority



September 15, 2023

2023 Kitwanga River Salmon Enumeration Update #8

The Gitanyow Fisheries Authority (GFA) is pleased to announce that the Kitwanga River Adult Salmon Enumeration program is operational for 2023. Like in other years GFA will be providing regular updates on salmon escapement to the Kitwanga River (middle Skeena index) from July through to September. This year marks the 21st 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 2023 funders and supporters, specifically the Gitanyow Chiefs (Gitanyow Huwilt Sustainability Fund), the Pacific Salmon Commission's Northern Endowment Fund and Fisheries and Oceans, Canada. GFA would also like to acknowledge and thank the Gitwagak Wilp Simadeeks for allowing GFA to continue to work within their traditional territory, as set out by our 2002 agreement. Updates will be distributed and posted on our website: www.gitanyowfisheries.com



Downstream view of KSEF on September 14, 2023

GFA staff installed the lower Kitwanga River Adult Salmon Enumeration Facility (KSEF) weir components from July 4-7, 2023 under lower than normal water level. The weir was fish tight by mid-day on July 11. For 2023, we once again will be operating both a manual counting boxes and one digital video camera box with recording capabilities (DVR).

The water levels at the KSEF are currently at 0.48m, approximately 0.22m below the long-term average. Water temperatures are slightly higher than normal for this time of year and are currently fluctuating between 10-12°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 an additional DVR camera system. The KsF DVR has been operational since June 28, 2023. Prior to June 28, the KsF was operated as a smolt fence and sockeye adults would have been prevented from swimming upstream undetected.

For 2023, 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 **September 14, 2023**:

KsF

Sockeye= 681 (September 11)

KSEF

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|----------------------|----------------------|-----------------------|-------------------|---------------------|
| Sockeye = 757 | Chinook = 766 | Pink = 642,800 | Chum = 493 | Coho = 1,064 |
|----------------------|----------------------|-----------------------|-------------------|---------------------|

This year's **sockeye** escapement through the KSEF compares to a previous **maximum** observed to the day of 17,694 in 2010, which resulted in an overall escapement of 20,804 and the **minimum** observed to the day of 78 in 2019, which resulted in an overall escapement of 125. Based on average run timing for Kitwanga sockeye to the day (2003-2019) it is predicted that that **78%** 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 sockeye through the KSEF camera box on July 19, 2023 (left) and through KsF on August 13, 2023 (right)

To date we have counted **766 Chinook** (plus 58 jacks) through the KSEF. This year's Chinook escapement compares to a **maximum** observed to the day of 3,224 in 2007, which resulted in an overall escapement of 3,225 and the **minimum** observed to the day of 544 in 2021, which resulted in an overall escapement of 544. Based on average run timing for Kitwanga Chinook to the day (2003- 2019 & 2021) 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.



View of Chinook through the camera box at KSEF on July 31, 2023

To date we have counted **642,800** pink salmon through the KSEF. This year's odd-year pink escapement is the **maximum** observed to the day and is the **maximum escapement through the KSEF since operations first began at the facility in 2003**. The escapement observed to the day also compares to a **minimum** observed to the day of 52,561 in 2019, which resulted in an overall escapement of 52,644. Based on average run timing for pink salmon to the day (2003-2019) it is predicted that **99%** of the run should have passed the KSEF. For more information on cumulative Kitwanga odd-year pink salmon abundance by date, refer to the pink salmon graph below.



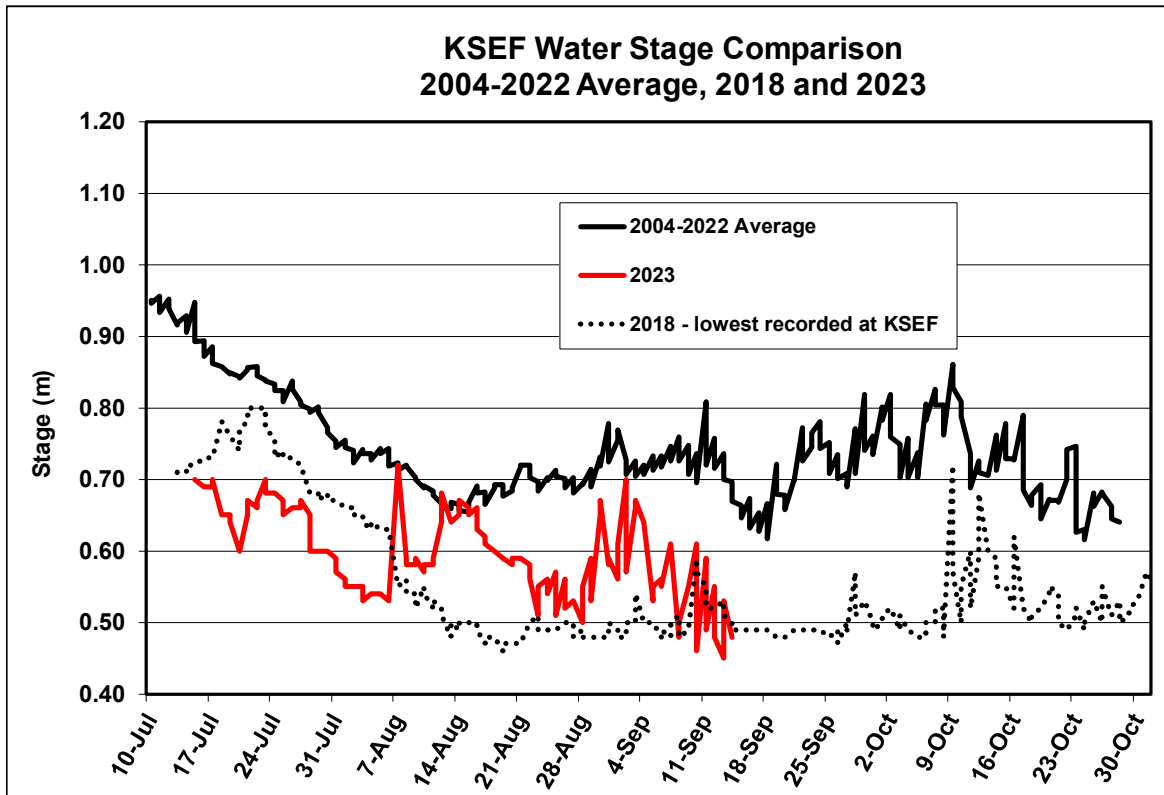
View of male pink (left) and two female pinks (right) through the KSEF camera box on August 23, 2023

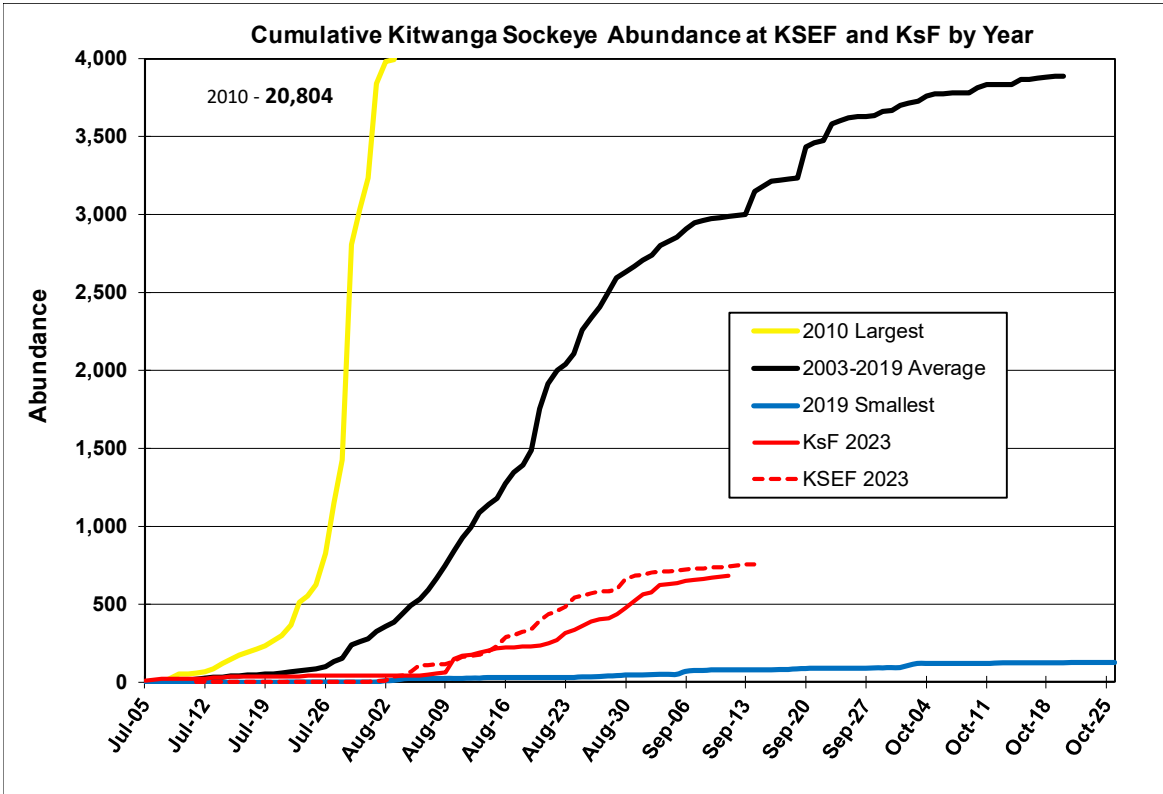
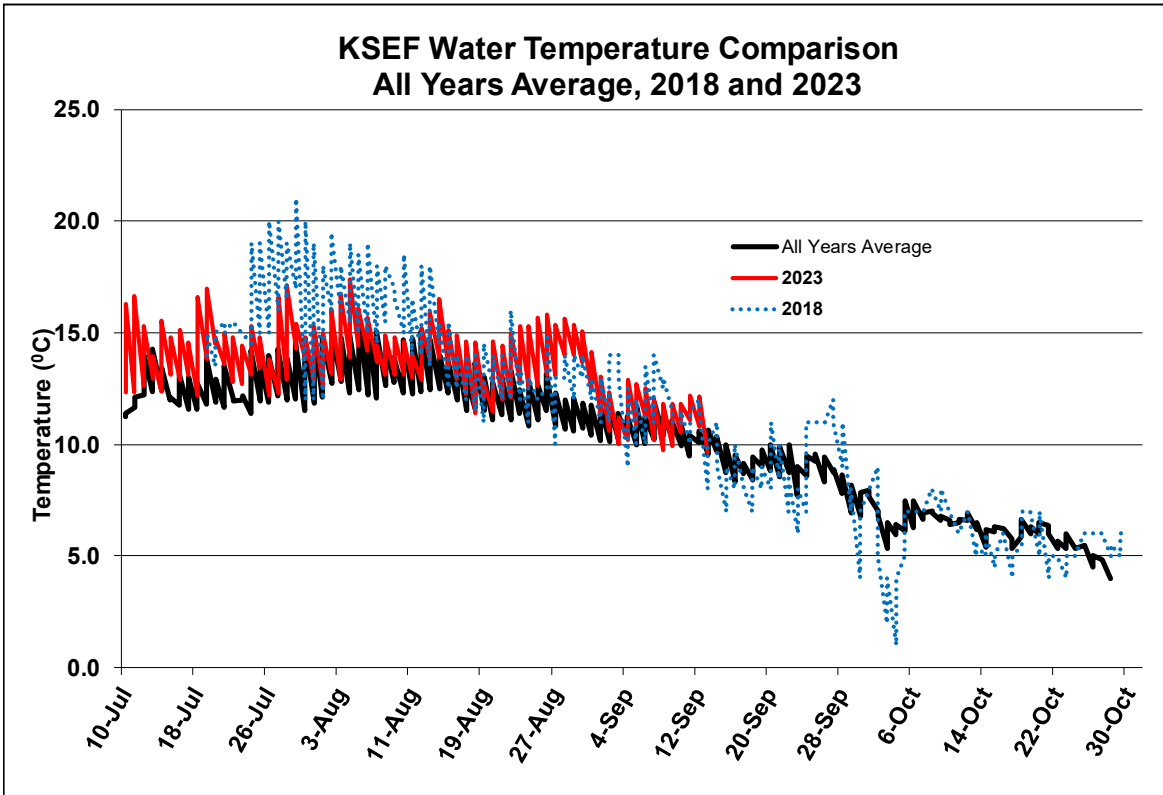
To date we have counted **493** chum salmon through the KSEF. This year's chum escapement compares to a **maximum** observed to the day of 1,747 in 2005, which resulted in an overall escapement of 1,862 and a **minimum** observed to the day of 33 in 2008, which resulted in an overall escapement of 150. Based on average run timing for chum salmon to the day (2003-2019) it is predicted that **78%** 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.

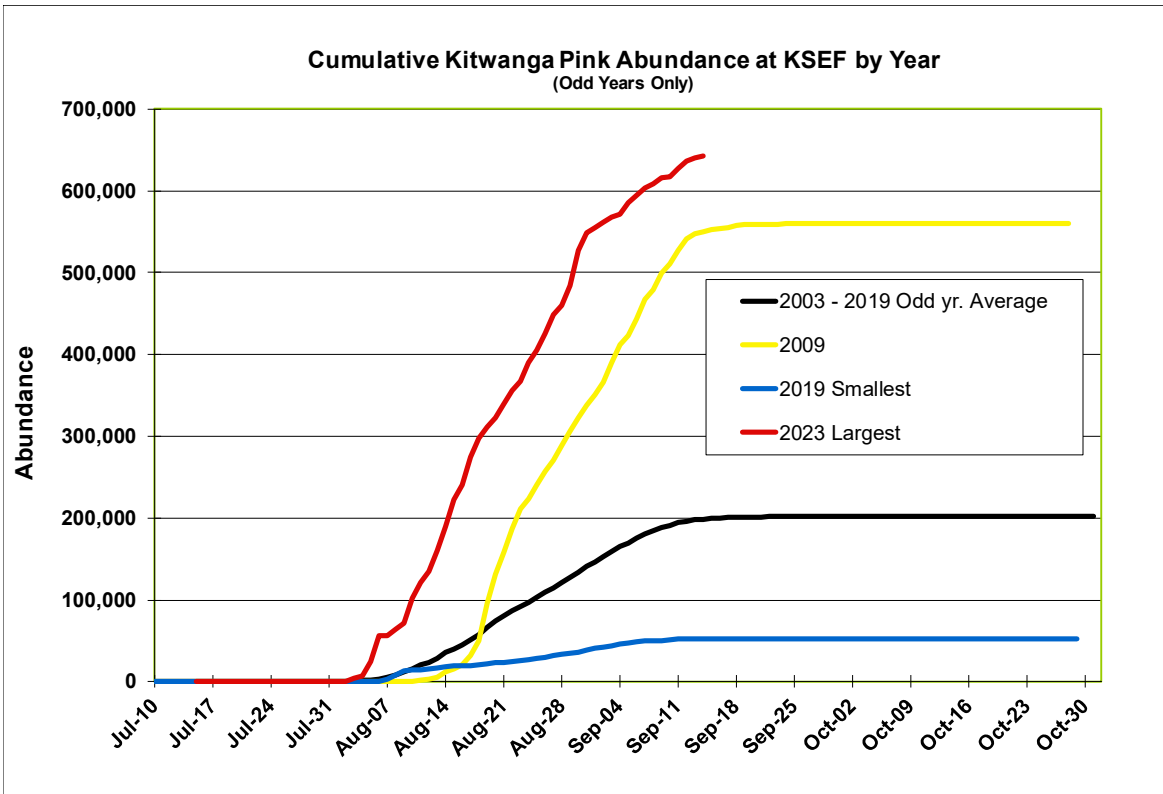
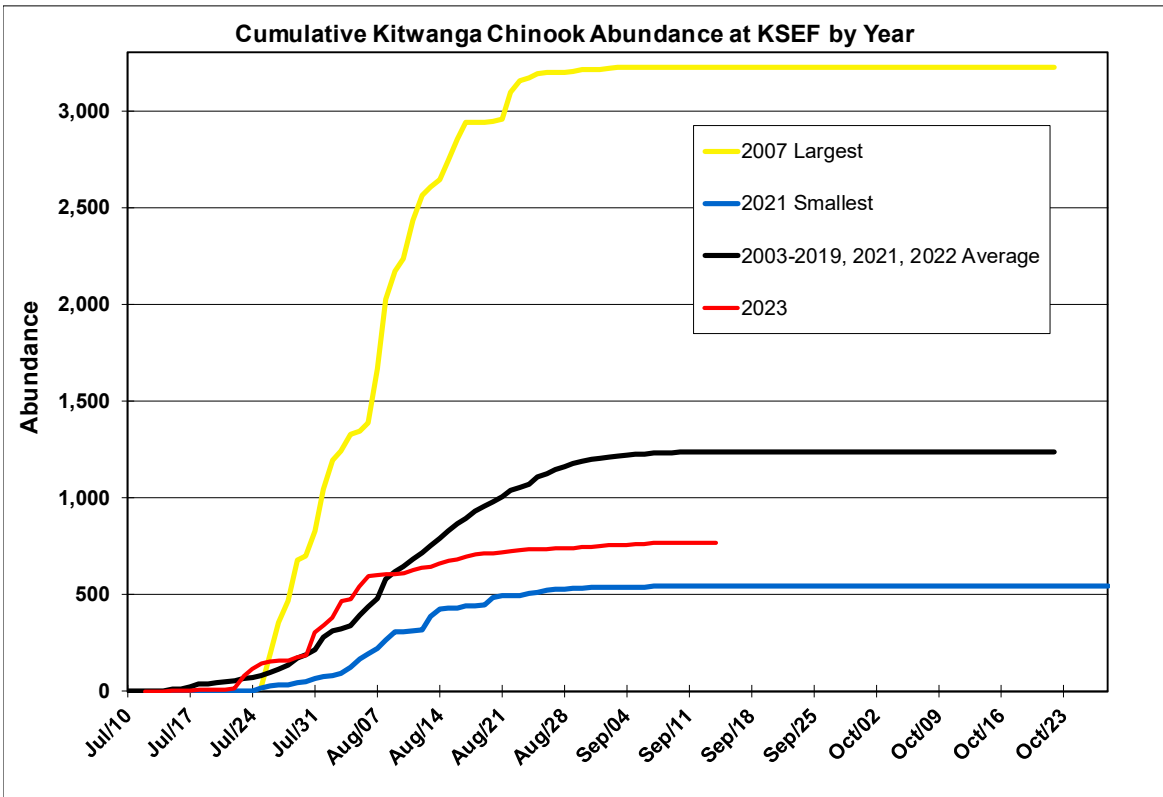


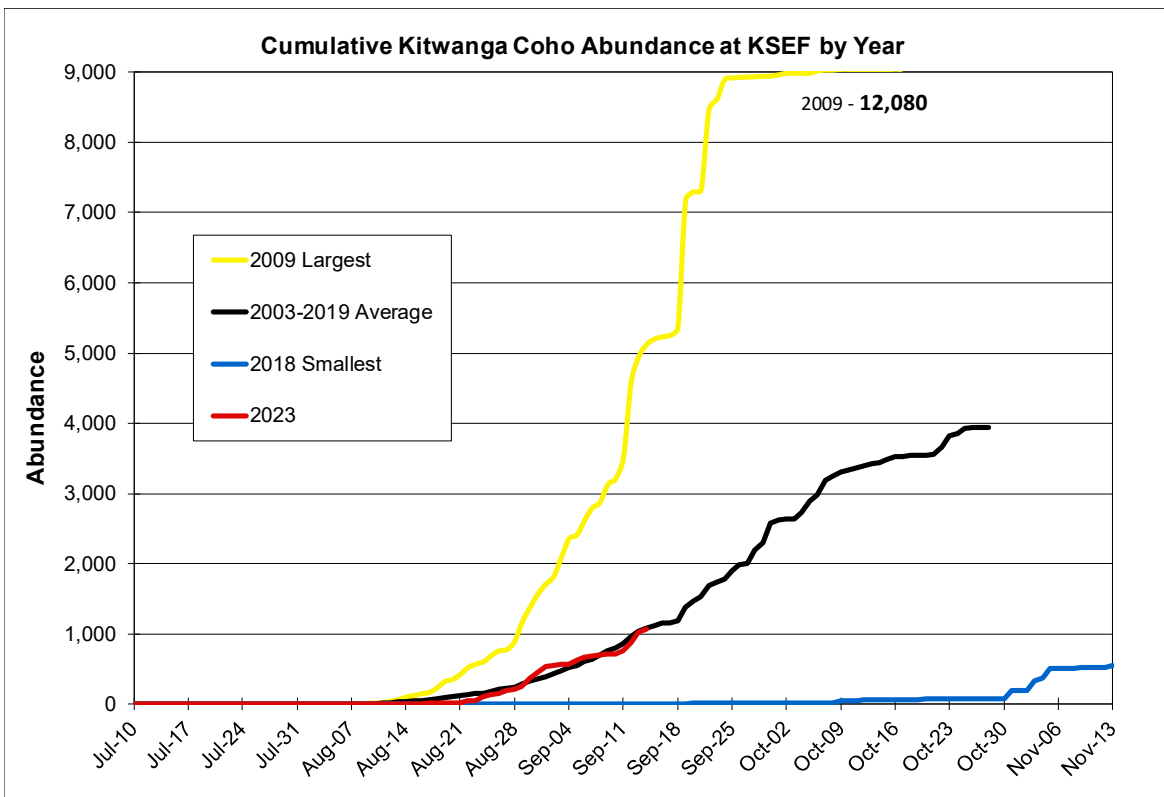
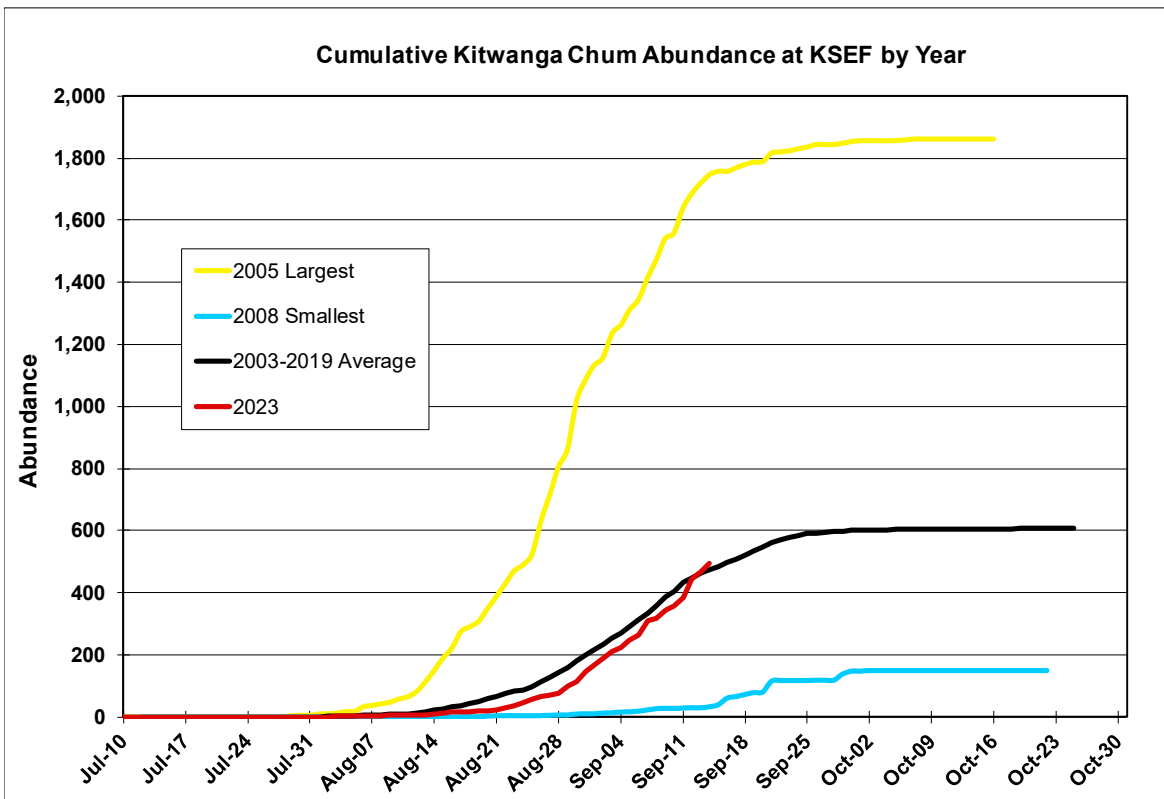
View of chum through the KSEF camera box on August 2, 2023

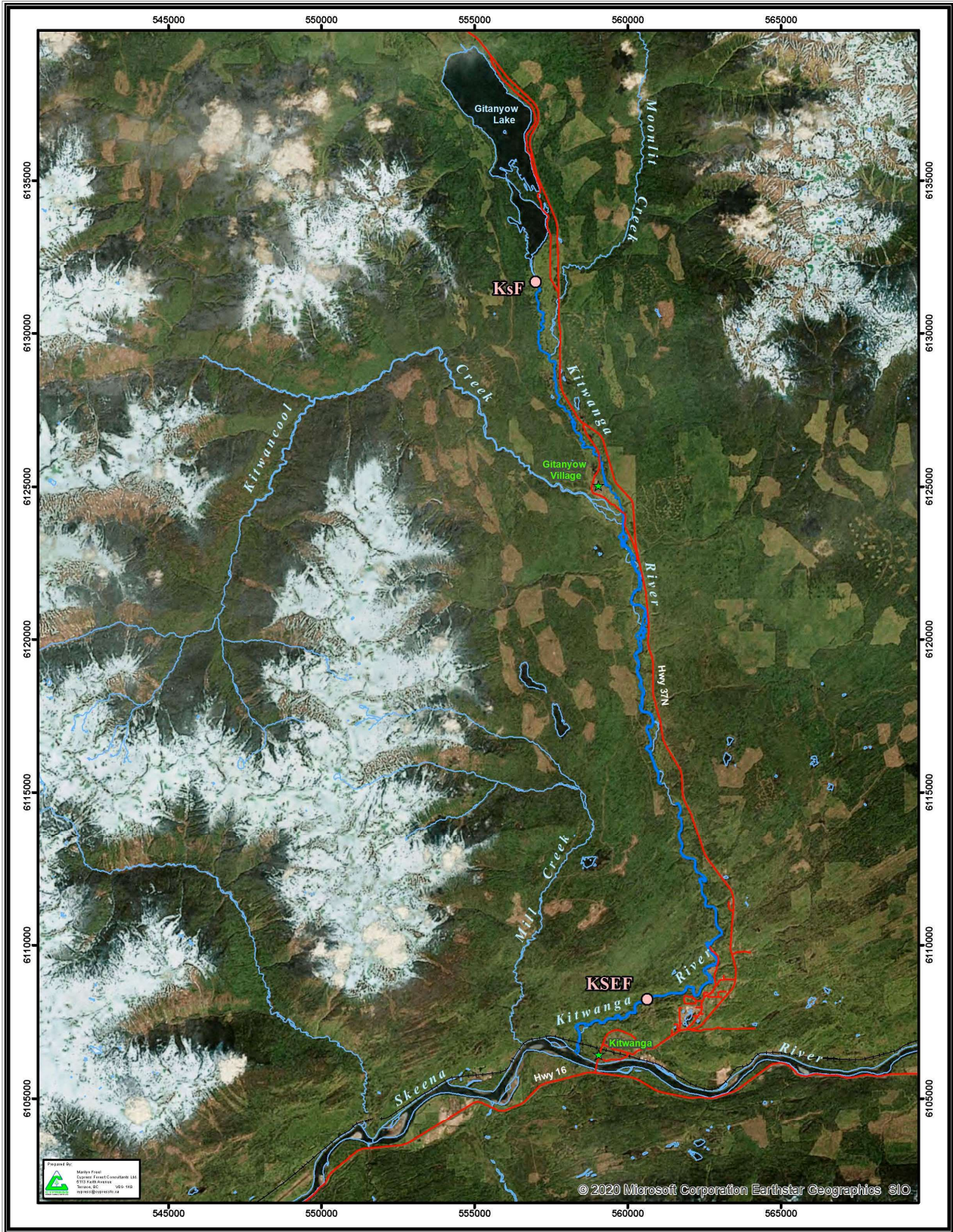
To date we have counted **1,064** coho salmon through the KSEF. This year's coho escapement compares to a **maximum** observed to the day of 5,123 in 2009, which resulted in an overall escapement of 12,080 and a **minimum** observed to the day of 10 in 2018, which resulted in an overall escapement of 551. Based on average run timing for coho salmon to the day (2003-2019) it is predicted that **28%** 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.











Map of the Kitwanga River / Watershed highlighting the locations of the KSEF and KsF.