2017 Fisheries Review

The people of the Gitksan Nation along with their neighboring Nations within the Skeena watershed prepared for a depressed return of Sockeye in 2017. The low run forecast was set by the Department of Fisheries and Oceans based on a record low return of adult Sockeye in 2013 and jacks (3-year olds) in 2016. With this, the most likely prediction was to expect a return of roughly 594,678 adult Sockeye. In a successful collaboration, the Skeena First Nations raised the minimum escapement from 400,000 to 600,000 for targeting Sockeye. This was to insure the wild populations (fish that do not spawn in the Pinkut and Fulton spawning channels) would meet their minimum escapement goal of at least 240,000. To minimize the impact on the 2017 Skeena Sockeye, all Canadian commercial fisheries that target Skeena Sockeye were closed, no sport fishing took place for Skeena Sockeye until August 22nd, no commercial fishing commenced within Lake Babine, and all First Nations agreed to use spring salmon mesh (≥7”). During this time (June 18th to August 5th) the Gitksan people harvested roughly 7,000 Sockeye. This was a success as small wild populations (e.g., Slamgeesh, Nanika, and Sustut) saw returns much higher than anticipated. The Gitksan were able to decrease their impact by up to 80% during those weeks when compared to 2016. On August 6th, the Department of Fisheries and Oceans estimated more than 600,000 Sockeye had passed by the Tyee test fishery. On August 6th, First Nations up and down the Skeena began to target Sockeye with roughly 75% of the Gitksan fishers switching over to Sockeye mesh. From August 6th to September 9th Gitksan fishers harvested an estimated 21,000 Sockeye.

In total for 2017, it was estimated that the Gitksan people harvested roughly 28,000 Sockeye. This is approximately half of what the Gitksan Nation typically harvests. Once the season came to an end, the Department of Fisheries and Oceans estimated 923,328 adult Sockeye had actually passed by the Tyee test fishery. In summary, First Nations above the Tyee test fishery harvested 35,681 adult Sockeye allowing 887,647 to spawn for future generations.

Even though the Skeena saw almost one million Sockeye return to its waters in 2017 there are still some associated concerns.

1. Only ~226,000 were wild Skeena Sockeye when the minimum goal was 240,000. This is alarming as in typical years wild Skeena Sockeye stocks comprise 40% of the total return not 24%, as seen in 2017.
2. The return of 4 year-old Sockeye was far below what was expected at only 4%. That means of the 923,328 Skeena Sockeye in 2017 only 35,364 were from the 2013 cohort.
3. Size at age indicates that the 2017 Skeena Sockeye were smaller than usual. This means that the age 5 fish were the size of age 4 fish and so on, indicating evolving ocean conditions are not providing sufficient food supplies for the salmon.

In 2017, the Skeena River saw an abnormal return of its Sockeye. With the cooperation of all First Nations within its watershed, the Skeena Sockeye were given a chance to reproduce and provide a food source for future generations of the Skeena Watershed’s inhabitants.
2018 Forecast

Sockeye

The 2018 forecast for Skeena Sockeye is very similar to what was predicted in 2017. The Department of Fisheries and Oceans estimates the run will be between 283,000 to 1.4M with the most likely return to be around 645,000. Even though the return is forecasted to exceed the newly implemented threshold of 600,000, there are serious concerns. The 2018 estimated return will still be far below the Skeena target escapement of 1.05M. This means that to maximize the output of juveniles to hopefully allow for a healthy return, and to feed its First Nations with Sockeye, the Skeena River needs a return of at least 1.05M. Also, the age structure will be highly skewed towards 4 year olds with the thought that the 2013 spawners completely failed. Size at age will be similar to 2017 as these fish will be experiencing the same ocean conditions. Expect 5-year-old fish to be the size of 4 year olds and 4 year olds to be much smaller than normal. The 2018 forecast is not a bright one but with the help of the Gitksan people, the Skeena River will be given another chance.

Chinook

In 2017, the Skeena River received its lowest return of Chinook salmon in history (~35,000) with only half making it to the spawning grounds. The Department of Fisheries and Oceans does not create a detailed forecast as seen with Sockeye but they seem to think the run will be similar to what was seen in 2017. This means that the Skeena River might see another record low return of Chinook salmon. First order of business, the GWA along with other First Nations will be demanding a full closure for all recreational fisheries (Ocean and Freshwater) that target Skeena Chinook for the First Nations are to get a fair chance at their allocation.

The Gitksan Watershed Authorities will be scheduling community meetings to present their data in order to help inform the Gitksan people so they can decide how they would like to approach the 2018 season.

Please contact the following regarding any questions:
Charlie Muldon: cmuldon@gitksanwatershed.com
Ryan Whitmore: rwhitmore@gitksanwatershed.com