

SFNTC's Skeena Chinook update – June 22, 2020

Over the last two years, the Skeena First Nations Technical Committee (SFNTC) has developed an in-season model to forecast Skeena Chinook returns based on the Tye Test fishery. A retrospective analysis has demonstrated that this Chinook model is as accurate as the sockeye model currently used to manage Skeena sockeye fisheries. The SFNTC will distribute weekly Skeena Chinook updates throughout the 2020 season.

2020 Skeena Chinook summary to June 22nd

Aggregate Skeena Chinook Smsy (extrapolated from Korman & English, 2013): **47,453**

2020 pre-season Skeena Chinook forecast: **38,754** (Naïve-3 model)

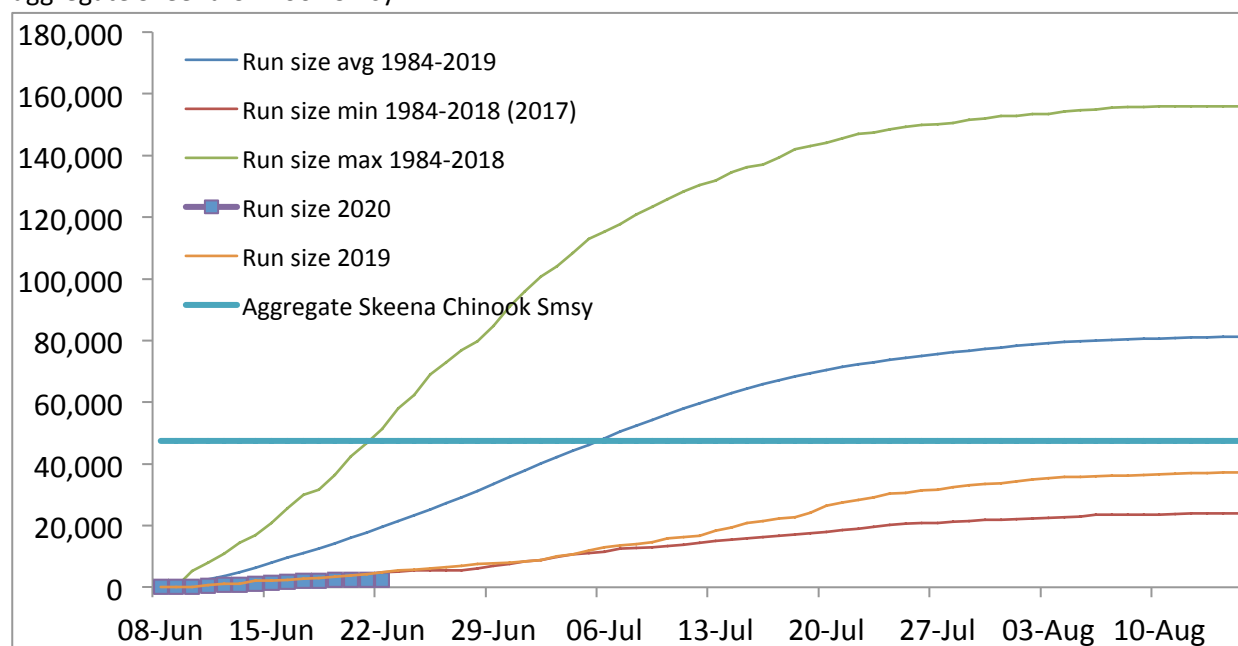
1984-2019 average run timing to Tye to date: **22.7%**

2011-2019 average run timing to Tye to date: **15.4%**

Table 1. 2019 Skeena Chinook Tye Test fishery summary

	Tye index to date	Run size to date
2020	6.28 (worst since 1971)	2,582 (worst since 1971)
2019	11.82	4,859
1984-2019 average	47.58	19,562
1984-2019 minimum	11.82	4,859
1984-2019 maximum	125.09	51,428

Graph 1. 2019 Skeena Chinook cumulative run size to Tye versus 1984-2019 avg, min, max returns and aggregate Skeena Chinook Smsy.



Graph 2. Chinook Tyee index to date for 1984 to 2020

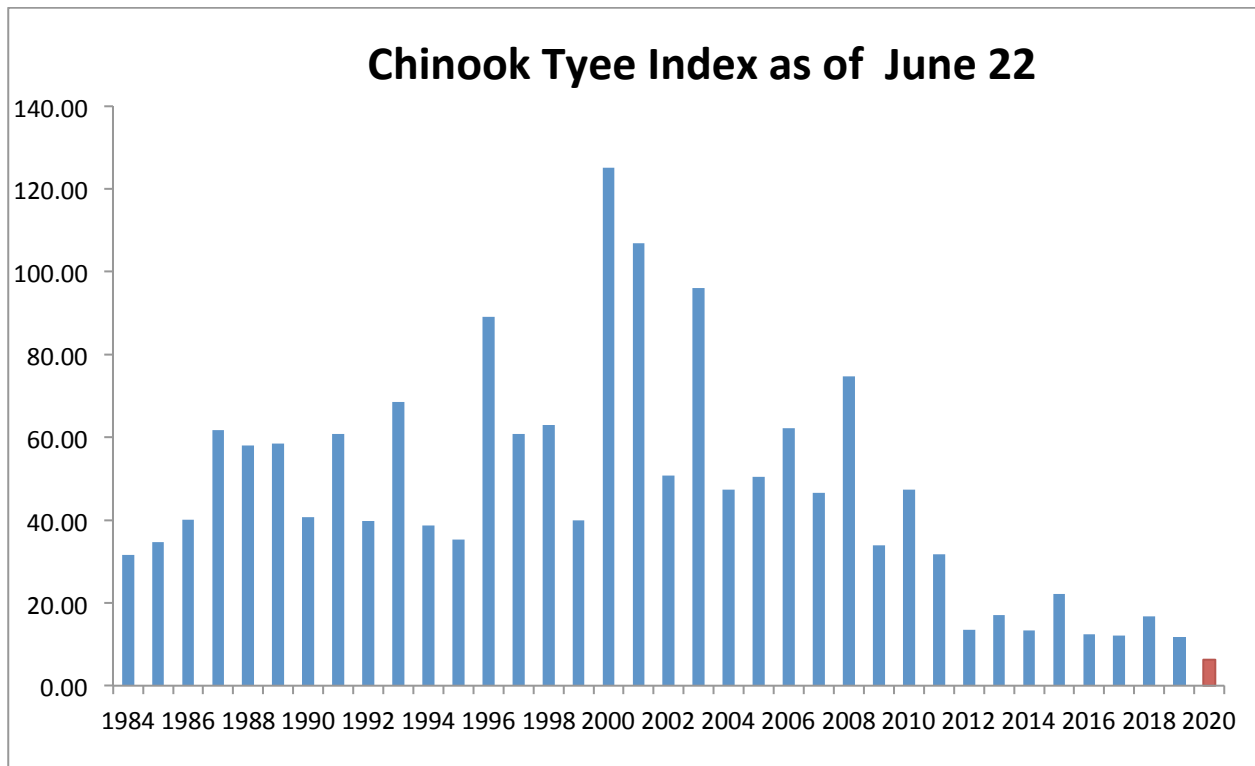
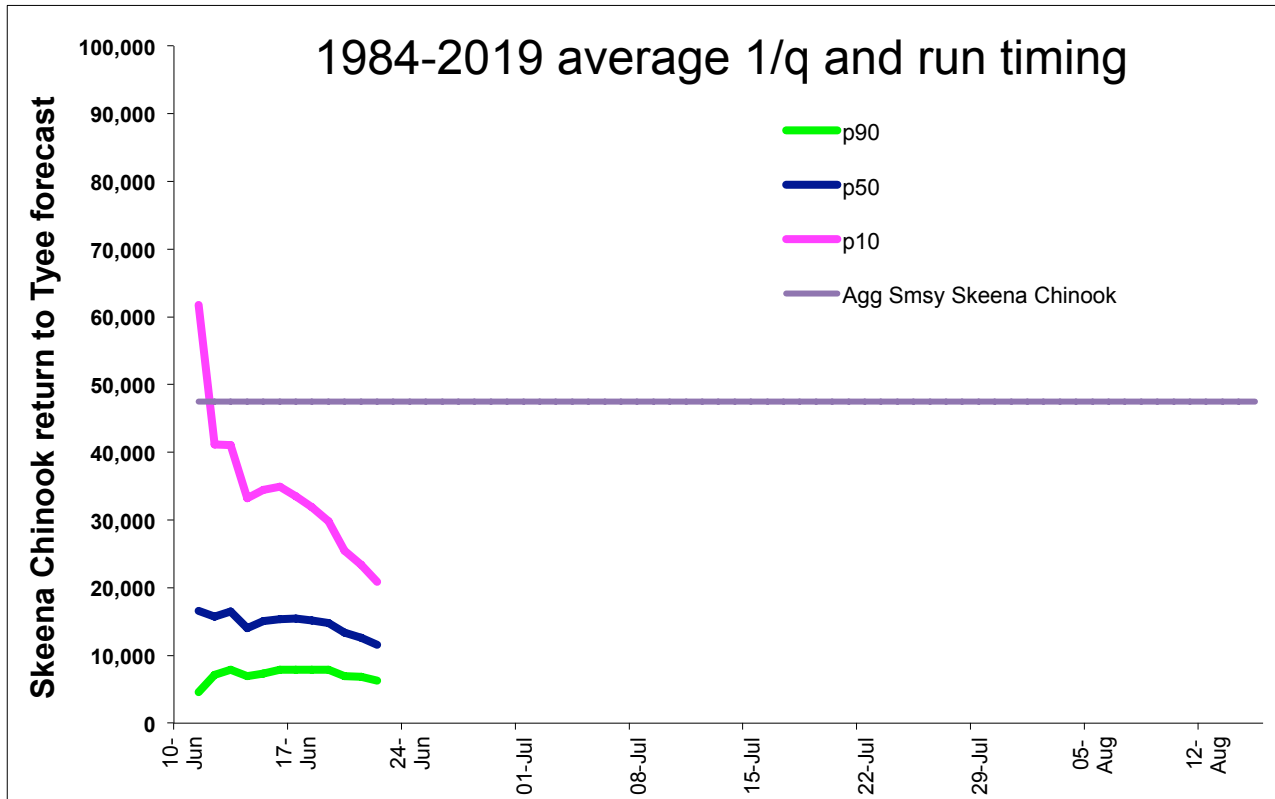


Table 2. 2020 Skeena Chinook in-season run size estimate to Tyee using two data time series

Time series	p90	p75	p50	p25	p10
1984-2019	6,133	8,357	11,349	15,198	20,240
2011-2019	12,032	13,625	15,831	18,301	21,146

Graph 3. 2020 Skeena Chinook forecast to Tyee (average 1/q and run timing – 1984-2019)



Graph 4. 2020 Skeena Chinook forecast to Tyee (average 1/q and run timing – 2011-2019)

