Skeena Salmon In-Season Update

June 11, 2025

Summary

- Pre-season forecast
 - The pre-season forecast for the Total Return of Skeena sockeye in 2025 ranges from 1.3 to 5.8 million (90% confidence range) with a point estimate (p50) of 2.7 million
- Tyee Test Fishery
 - The Tyee test fishery started operations on Jun 10.
- Babine
 - The Babine fence typically starts operations in mid-July. This section will be updated once Babine counts start.
 - Babine vs Tyee comparison
 - Babine jack sockeye
 - Babine other salmon
- Kitwanga Fence
 - The Kitwanga fence typically starts operations by July 10.
- First Nations Food Fisheries
 - First Nations food fisheries have started on the coast and in the approach waters.
- Commercial Fisheries
 - Commercial fisheries targetting sockeye have not started yet, but are anticipated given the pre-season sockeye forecast.

- Recreational Fisheries
 - Recreational fisheries for sockeye have not started
 - Early recreational fisheries for Chinook occured in Areas 3/4 however effort was lower in 2025 than in previous years, bag limits were reduced, and as of June 22 there is non-retention of Chinook in the Area 3/4 fishery.
- Appendix A shows the daily and cumulative run-timing of Tyee since 2000 versus 2024.
- Appendix B will include information on the other species caught in the Area 4 commercial fishery and CPUEs and will be updated shortly.
- Appendix C includes information on run-timing of specific Skeena Conservation Units/stocks.

Pre-Season Forecasts

Sockeye

The pre-season forecast for the Total Return of Skeena sockeye in 2025 ranges from 1.3 to 5.8 million (90% confidence range) with a point estimate (p50) of 2.7 million.

2025 Sockeye Total Return Forecast. Source: DFO 2024 Post Season Review Sockeye Presentation.

Chinook

• The pre-season forecast for Chinook is $\sim 26,000$ large Chinook.

Tide information at Port Edward

Tides influence the movement of sockeye and other salmon migrating into the Skeena. The following image shows the tides at Port Edward for a period of ~ 2 weeks.

Tides at Port Edward

Tide data from: https://www.tide-forecast.com/locations/Port-Edward-British-Columbia/tides/latest

Tyee Test Fishery-Index and Escapement Estimates

The section below shows index data (and escapement data for sockeye) from 2025 compared to historical index values through Tyee. Data is uploaded from the DFO Tyee test fishery website (index and expanded estimates) almost daily.

The DFO Tyee test fishery website can be found here: Tyee test fishery website

Sockeye Salmon

Sockeye index

The 2025 sockeye index is shown below and compared to historical index data from the Tyee test fishery (Figure 1).

Escapement estimates at Tyee

Escapement estimates for sockeye are generated using the Tyee index and a catchability coefficient based on the average of the last 3 years catchability.

The 2025 sockeye escapement estimate at Tyee is shown below and compared to historical escapement data (not including catch as we do not have the historical daily escapement estimate plus catch) (Figure 2)

In-season abundance estimate

Sockeye in-season abundance (TRTC) is estimated through the Tyee test fishery using the cumulative run-to Tyee (escapement past Tyee plus adjusted marine catch estimates) and run-timing. The following table and figure (Figure 3) shows estimates of the final forecasted TRTC for average, one-week late, and one-week early run-timing. This does not incorporate variability in the catchability of the Tyee test fishery (which is confirmed post-season).

Table 1: % of run past Tyee and the associated TRTC estimate for average, one-week early, and one-week late run-timing.

Run-timing	% of Run Through	TRTC Estimate
Early	4.6%	438853
Average	1.7%	1145278
Late	0.5%	4082918

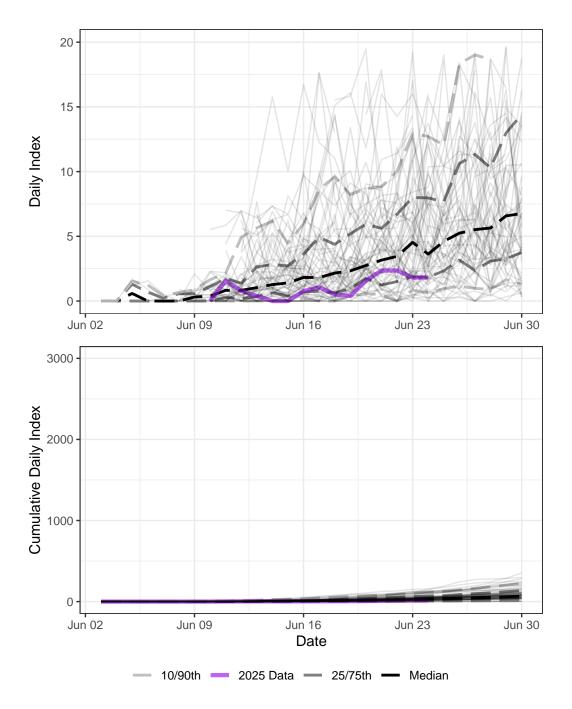


Figure 1: Daily (top) and cumulative (bottom) index values for sockeye salmon from 1956-2024 (grey lines). 2025 values are shown in purple, and various percentiles are shown by the grey dashed lines.

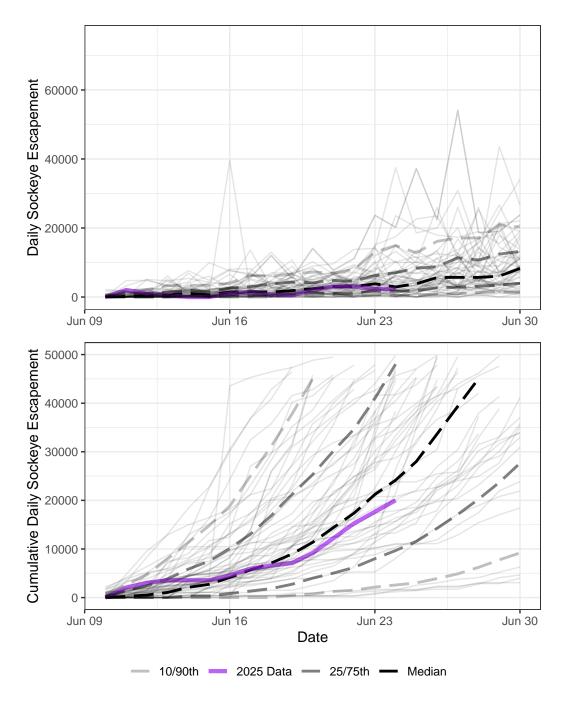


Figure 2: Daily (top) and cumulative (bottom) escapement estimates at Tyee for sockeye salmon from 1970-2024 (grey lines). 2025 values are shown in purple, and various percentiles are shown by the grey dashed lines.

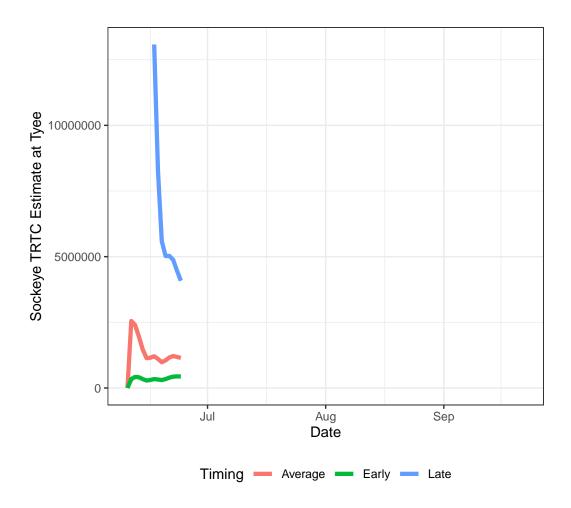


Figure 3: Final estimated TRTC from the simple sockeye in-season abundance estimator for early (green line), average (red line) and late (blue line) run-timing.

Chinook Salmon

The 2025 Chinook index is shown below and compared to historical index data from the Tyee test fishery (Figure 4) in the text.

Chum Salmon

Pink Salmon

Odd years

Even years

• Will be updated next year!

Coho Salmon

Steelhead

Babine Fence

Babine Sockeye

Babine comparison with Tyee

Jack sockeye

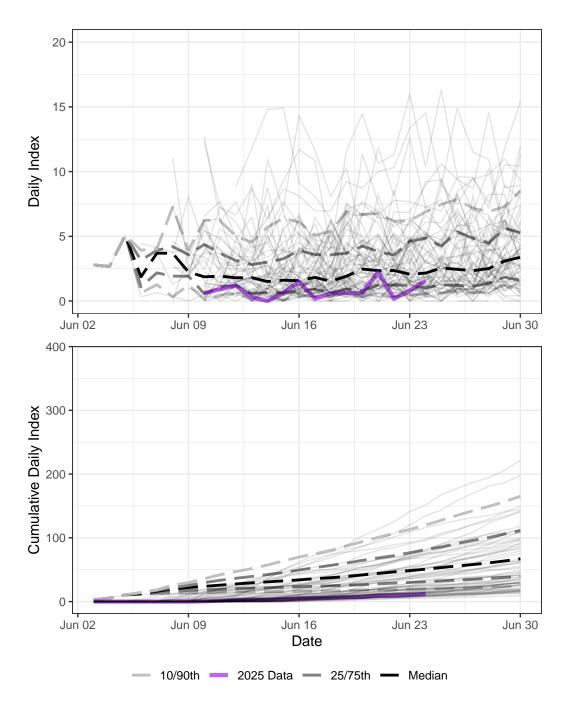


Figure 4: Daily (top) and cumulative (bottom) index values for Chinook salmon from 1956-2024 (grey lines). 2025 values are shown in purple, and various percentiles are shown by the grey dashed lines.

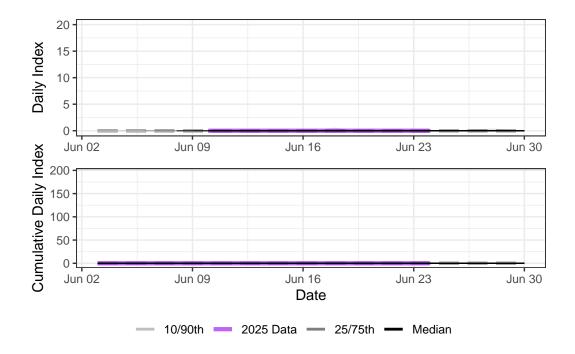


Figure 5

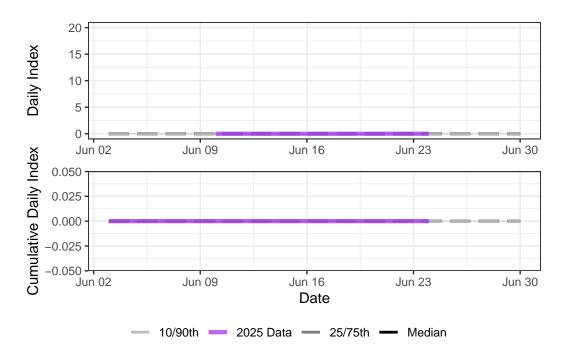


Figure 6

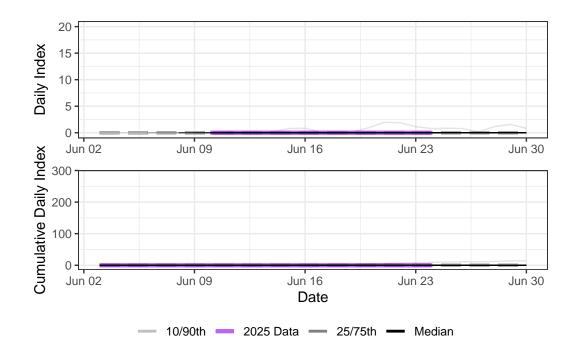


Figure 7

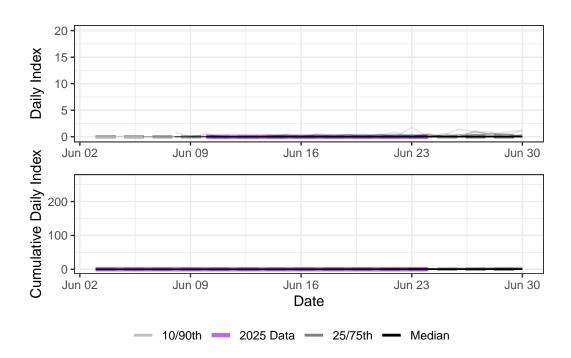


Figure 8

Babine Adult Chinook

Babine Jack Chinook

Babine Pink

Babine Coho

Babine Steelhead

Kitwanga Fence

Fisheries

Area 4 Fishery Openings

Commercial Fisheries

Area C Gillnet and Area A Seine

First Nations Demonstration and Economic Opportunity

Recreational Fisheries

Appendix A - Tyee daily and cumulative sockeye escapement for each year since 2000 vs 2024 data

Appendix B - Catch of pink, chum, coho, chinook and steelhead

Appendix C - Population specific run-timing through Tyee