

Fraser River Sockeye In-season Update #9 – August 9, 2024

The below is a summary of the August 9 Fraser Panel Meeting. For specific details, please refer to the attached Fraser Panel distribution from the call. Today, the Fraser Panel adopted an Early Summer run size of 140,000 with run timing of July 14 and no further changes to management adjustments. The Fraser Panel also adopted a Summer run size of 300,000 with run timing of August 2 and pDBE of -0.36 (pMA of 0.56). All MUs remain in a LAER. If you have any questions or notice any errors in the summary, please contact Maxime.Veilleux@dfo-mpo.gc.ca so I can make adjustments.

2024 Run status of Fraser sockeye and pink salmon

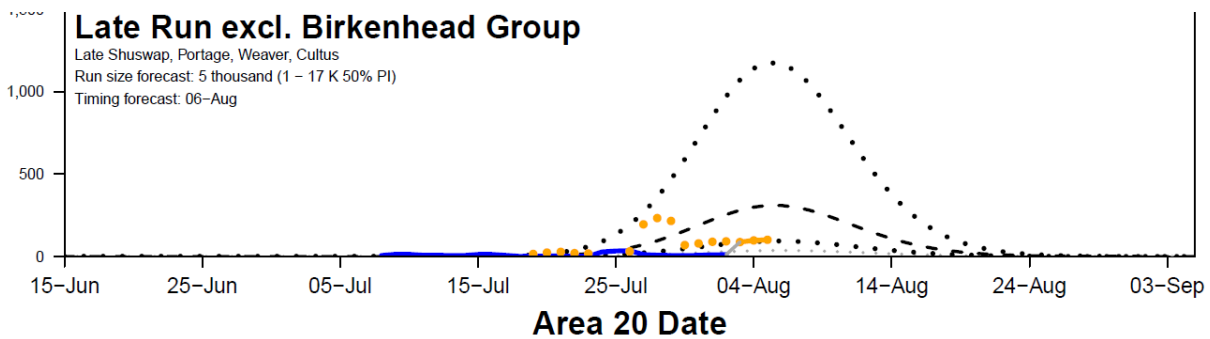
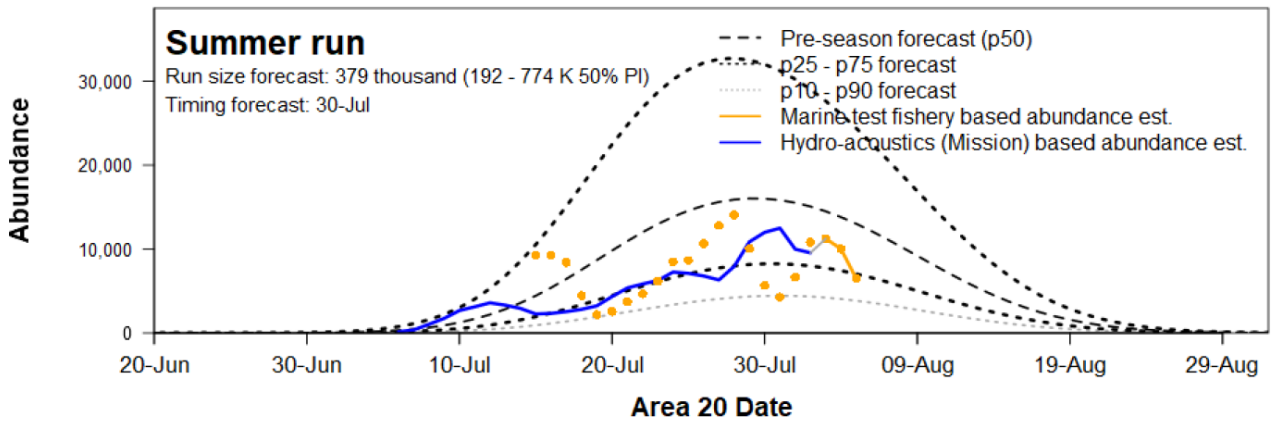
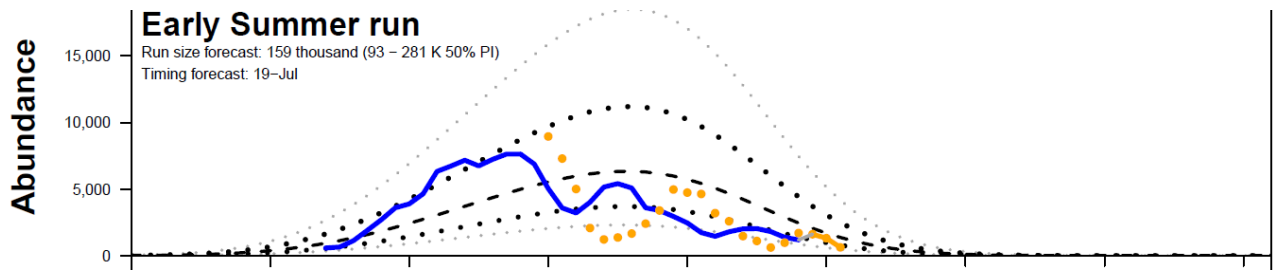
Date: Aug. 9, 2024

The information presented in this distribution has been prepared by PSC Secretariat staff and should be considered preliminary until reviewed by the Fraser River Panel

Week of: Aug. 4 - Aug. 10, 2024	Sockeye				Total Fraser
	Management Group				
	E.Stuart	E.Summer	Summer	Late	
Mission passage (inclds Pitt, Alouette, Coquitlam)	200	131,300	141,700	3,000	276,200
Catch downstream of Mission	0	1,300	2,600	100	4,000
Accounted Run To Date	200	132,600	144,300	3,100	280,200
Run size adopted in-season ¹	na	136,000	na	na	na
Run size forecasted pre-season	180	159,000	379,000	29,000	567,000
Area 20 timing adopted in-season	na	13-Jul	na	na	na
Area 20 timing expected pre-season	7-Jul	19-Jul	30-Jul	7-Aug	28-Jul
Johnstone Str. Diversion Rate	Annual average to date				42%
	Preseason forecast of annual rate:				33%

¹ Run sizes are usually not adopted until after the peak of the run has passed through marine test fishery areas in Juan de Fuca and Johnstone straits.

- Total run accounted to date is 280,200 Fraser Sockeye of which 200 are Early Stuart, 132,600 are Early Summer, 114,300 are Summer, and 3,100 are Late run.
- Early Summers are tailing off.
- Harrison is substantially below pre-season expectations. It is assumed that about 9,000 are delaying in the Gulf.
- Chilko is tracking the p25.
- Summers are tracking below the p50.
- Birkenhead group is tracking the p25.
- Late run excluding Birkenhead group run size will be challenging to assess, especially with marine test fisheries now terminated, but is currently tracking near the p25.
- Annual average diversion rate for Sockeye through Johnston Straight is 42%.



In-season Data Flow Acoustics

- **Qualark:** On the evening of August 5, the right bank was removed as a precautionary measure for the anticipated increase in discharge and debris as a result of the Chilcotin landslide breach. It was restored on August 7 and the estimate was much lower than recent days at only 125 compared to 9,762 on August 5. The gillnet test fishery did not fish on August 6 because of large debris, and did not catch any Sockeye on August 7. This is likely a result of fish not migrating through the area because of turbidity.
- **Mission:** The mobile and right-bank ARIS systems were halted the evening of August 5 in anticipation of debris arrival overnight from the Chilcotin slide breach. Because not all systems were operational from August 5 to 8, missing data were imputed for the daily estimates. Estimates were 12,900 on August 6, 13,500 on August 7, and reduced to 8,500 on August 8 (preliminary at this time). Escapement has been below the cycle line average, and is now higher than the 2020 brood year.

Test fishing catch

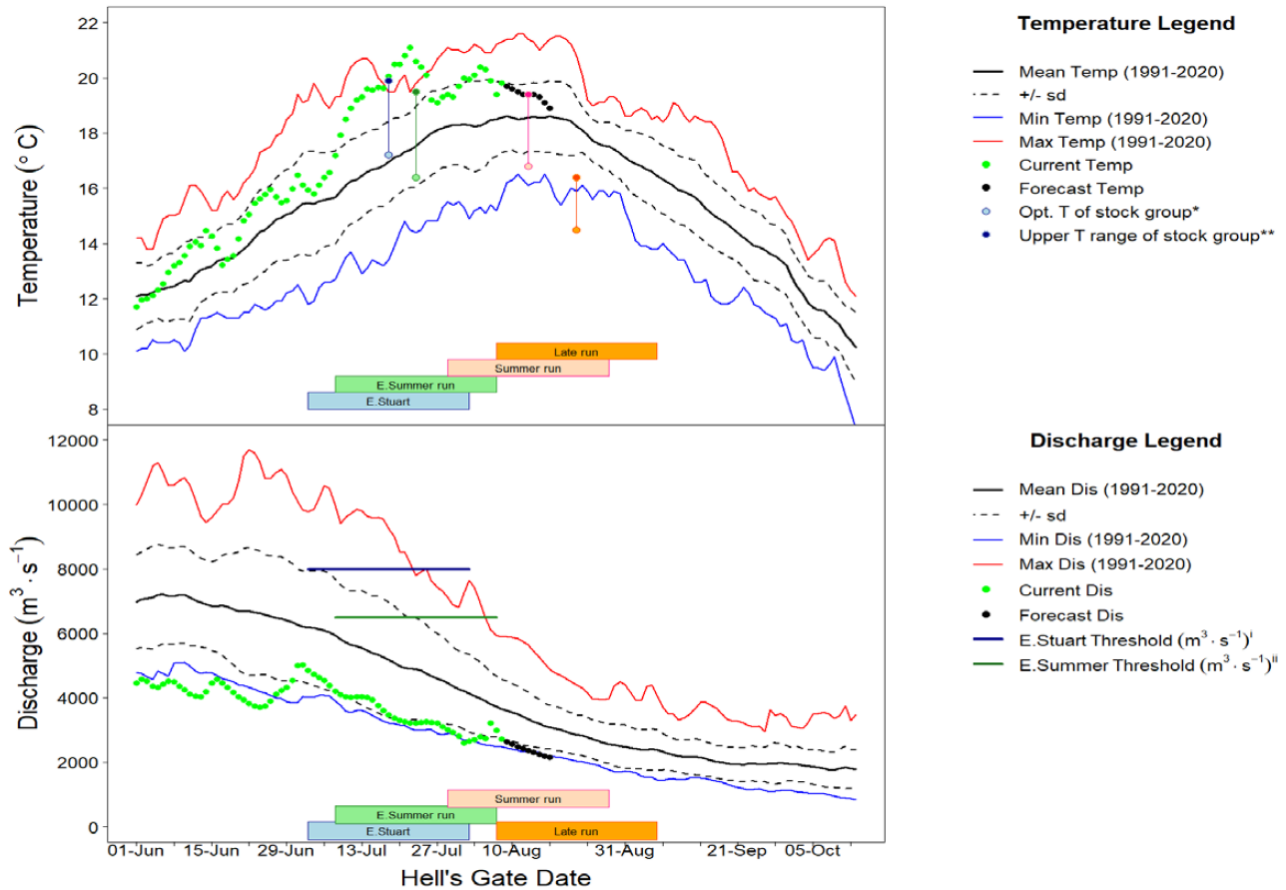
- **Marine Area:** The Area 12 purse seine test fishery terminated on August 4 and the Area 20 purse seine test fishery terminated on August 3.
- **Fraser River:** The Whonnock gillnet test fishery was unable to fish on August 7 because of large debris and caught 46 Sockeye on August 8. The CPUE has recently been tracking above the cycle line average. Brownsville Bar has seen a decrease in daily catches in the past three days, ranging from 35 down to 3 Sockeye per day.

Stock Proportions

- **Marine Area:** Marine samples in Area 12 indicate catches continue to be dominated by Summers (90%), primarily Late Stuart/Stellako and Chilko. Early Summers appear to be tapering off (4%) and Late run Sockeye are starting to show up (6%).
- **Fraser River:** Recent samples indicate catches are dominated by Summers (82%-89%), primarily Late Stuart and Chilko. Early Summers appear to be tapering off (10%-16%), and Late run Sockeye are starting to show up (1%-5%). Aging samples continue to indicate majority are 4 year olds.

Environmental Conditions and Management Adjustments

- The temperature of the Fraser River at Qualark was recorded at 19.8°C on August 8, which is 1.2°C higher than the historical average.
- Temperature is forecast to decrease to near the historical average.
- The Fraser River water discharge at Hope was 2,711 m³/s on August 8, which is 26% lower than the historical average. A slight increase in discharge was observed as a result of the Chilcotin landslide breach. However, discharge will remain below average and no passage issues are anticipated.
- Temperatures from the Fraser tributaries are about 1°C above or below the historical mean.



Assessments and Recommendations

Early Stuarts

- Due to extremely low forecast, no in-season run size updates are expected until spawning escapements begin.
- Due to increase water temperatures, an increase in the pMA was adopted at a previous meeting; however, given the low run size, this decision does not affect any management decisions.

Early Summers

- Due to high water temperatures, the Panel adopted an in-season pMA of 0.56 at a previous meeting.
- On August 9, the Panel adopted a run size of 140,000 with July 14 run timing and no further changes to management adjustments.

Summers

- On August 9, the Panel adopted a run size of 300,000 with August 2 run timing and pDBE of -0.36 (pMA of 0.56).

Lates

- No changes to pre-season estimates.

Management Group	Run Size	Timing A20 50%date	Proportional Mngt. Adjust.a	Available Harvest b	Allowable Incidental Harvest c
Early Stuart (Pre-Season)	180	7 July	1.17	0	9
Early Stuart (Adopted In Season)	No Change	No Change	1.94	0	No Change
Early Summers (Pre-Season)	159,000	19 July	0.56	0	11,100
Early Summers (Adopted In Season)	140,000	14 July	0.56	No Change	No Change
Summer (Pre-Season)	379,000	30 July	0.28	0	37,900
Summer (Adopted In Season)	300,000	2 August	0.56	0	No Change
Late (Pre-Season)	29,000	7 August	0.49	0	2,900
Lates (Adopted In Season)	No Change	No Change	No Change	0	No Change

a Proportional Management Adjustment is multiplied by the escapement target to calculate the numerical management adjustment.

b Available harvest after deductions. Harvest includes all catch in all fisheries in Canada the United States and test fisheries. CTAC will be assessed in-season.

c Incidental allowable harvest in a LAER scenario. Incidental harvest is not a target and would be considered a maximum, includes test fishery catch and may include fishery induced mortalities.

Fishery Recommendations

- Due to the extremely low forecast, no fishery recommendations are expected in Panel waters in 2024.

Other Business

Next Meetings

- Next Panel meeting is August 13, 2024.
- Next Panel Tech meeting is August 15, 2024.