



WATERSHED TALK

NEWSLETTER

Produced by the Fraser Salmon Management Council

AUGUST 14, 2020

VOLUME 1, ISSUE 5

2020 FRASER SOCKEYE UPDATE

By: Aidan Fisher, FSMC Biologist

No sockeye have showed up in significant abundance since last week. Daily passage remains very low around 5,000-8,000 fish. River discharge has dropped and temperatures are forecasted to increase over the next week which will impact Fraser sockeye migration. Based on the observed run sizes for all Fraser sockeye MUs in 2020 access to Fraser sockeye will be extremely limited and in many cases even bycatch retention will not be licenced. Sockeye retention for FSC is dependent on region, make sure to understand the current regulations with your local DFO Resource Management staff to understand what the licence conditions are currently in your area.

The PSC staff have communicated that they will not be recommending any changes to in-season run sizes. Their rationale is any reductions to in-season run size will not impact international fishery management decisions. It is expected that the in-season run sizes decided on by the Fraser River Panel to date will be the final in-season run sizes.

For Canadian fisheries, and specifically FSC fisheries, reduction of the run size will affect the available LAER for any of the sockeye MUs. Sockeye LAER will likely be the constraining factor to fisheries access for many Fraser and Approach First Nations chinook fisheries.

This summary table will be updated throughout the season as information and decisions become available.

Sockeye Management Group	In-Season adopted run size / Pre-Season Planning Forecast (p50)	In-Season Estimate of Abundance (Catch:Escapement)	In-Season Adopted Run Size	Area 20 Timing for 50% of run (Preseason)
Early Stuart	14,000 (13,000)	13,400 (100:13,300)	July 7	(July 4)
Early Summer	72,000 (218,000)	60,200 (1,100:59,100)	July 17	Preseason (July 24)
Summer	169,000 (611,000)	108,400 (2,400:106,000)	July 27	Preseason (July 31)
Lates	28,000 (99,000)	6,500 (100:6,400)	August 15	Preseason (Aug 6)
TOTAL	275,000 (941,000)	188,500 (3,700:184,800)	July 26	Preseason (July 30)

Big Bar Slide

Fraser sockeye have made it to Big Bar, and have been identified upstream. Natural migration of Fraser sockeye has been observed past Big Bar. This is a good sign for mitigation efforts undertaken to date. There is still a substantial uncertainty about the impact of natural passage to Fraser salmon, and how it may impact their ability to successfully make it to their spawning grounds. As the spawning ground estimates are reported we will have a better understanding of the impact of Big Bar to Fraser salmon that must migrate past it in 2020.

The Whoosh™ fish passage system is still transporting salmon, and trucking fish has also started. A total of 414 sockeye have been caught for enhancement with 238 transported to the Cultus Lake hatchery.

Early Stuarts

Early Stuart are forecasted at 13,000 (P50). 13,400 Early Stuart sockeye have been observed to date. The Fraser Panel adopted an in-season run size of 14,000 Early Stuart sockeye. This is not sufficient abundance to implement directed fisheries for Early Stuart, they will be managed to the LAER of 10% of the in-season adopted run size.

There have not been any additional Early Stuart sockeye observed over the past week.

Early Summers

Early Summers are forecasted at 218,000 (P50). To date we have observed 60,200 Early Summer sockeye, and the Panel is managing for 72,000. The test fishery data shows trace amounts of Early Summer and the run is nearly finished.

Summer Run

Summers are forecasted at 611,000 (P50). To date we have observed 108,400 Summer run sockeye, and the Panel is managing to an in-season run size of 169,000. Summers are still the dominant proportion of the sockeye migration through the Lower Fraser.

Late Sockeye

Lates are forecasted at 99,000 (P50). To date we have observed 6,500 Late run sockeye, and the Panel is managing to 28,000 sockeye. The Panel is holding on an in-season run size of 28,000 despite substantially less have been observed to date.

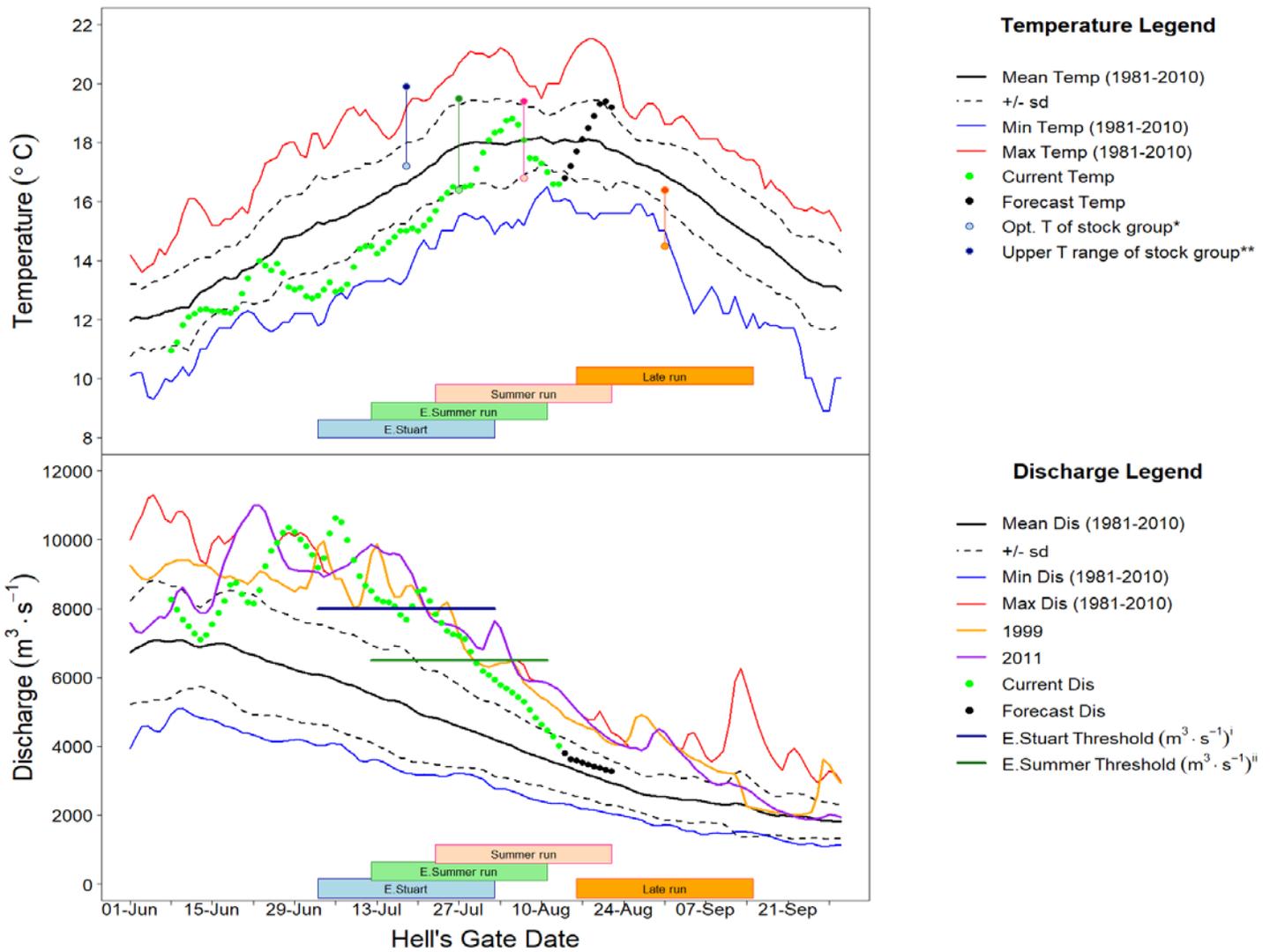
Fraser River Conditions

The main source of information for Temperature and Discharge data and forecasts is DFO's Environmental Watch Program (see link below).

The BC River Forecast Centre website (see links below) has information and links related to discharge and temperatures at various monitoring stations throughout the Fraser watershed, including snow pillow and melt updates.

Environment Canada's Water Office webpage provides access to real time hydrometric data at many locations throughout the Fraser watershed (see links below).

Fraser Discharge and temperatures at Hope and Qualark Creek (near Hope) respectively look like this (graphs from the Fraser River Panel Distribution August 14th, 2020):



Fraser River Fisheries Information

Fraser First Nations Fisheries information can be found on the DFO website at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/fraser/index-eng.html>

DFO staff will be distributing Fraser Salmon Bulletins, and we strongly encourage people to review and comment on the DFO bulletin if time and resources permit. Contact your local DFO Resource Manager for a copy, and addition to the distribution list.

Fraser Sockeye Salmon

The Pacific Salmon Commission (PSC) distributes the Fraser River Panel meeting agenda and technical information for Panel members and observers to the process. The following information is a summary of key information from that document (August 14th, 2020) and the Fraser River Panel meeting from the same day.

Diversions through Johnstone Strait for 2020 is tracking below the forecast at 24%.

Stock Identification

Stock ID samples are limited entirely to in-river test fishery catch. There are no new samples from marine test fisheries. The majority of the samples identified are in the Summer MU dominated by the stock complexes: Late Stuart Stellako / Chilko Quesnel. A few Early Summers and Lates are still identified in the samples, but in very small proportions.

Sample sizes of in-river test fisheries are also fairly low for this time of year, indicative of the lack of sockeye present in the system.

Test Fisheries

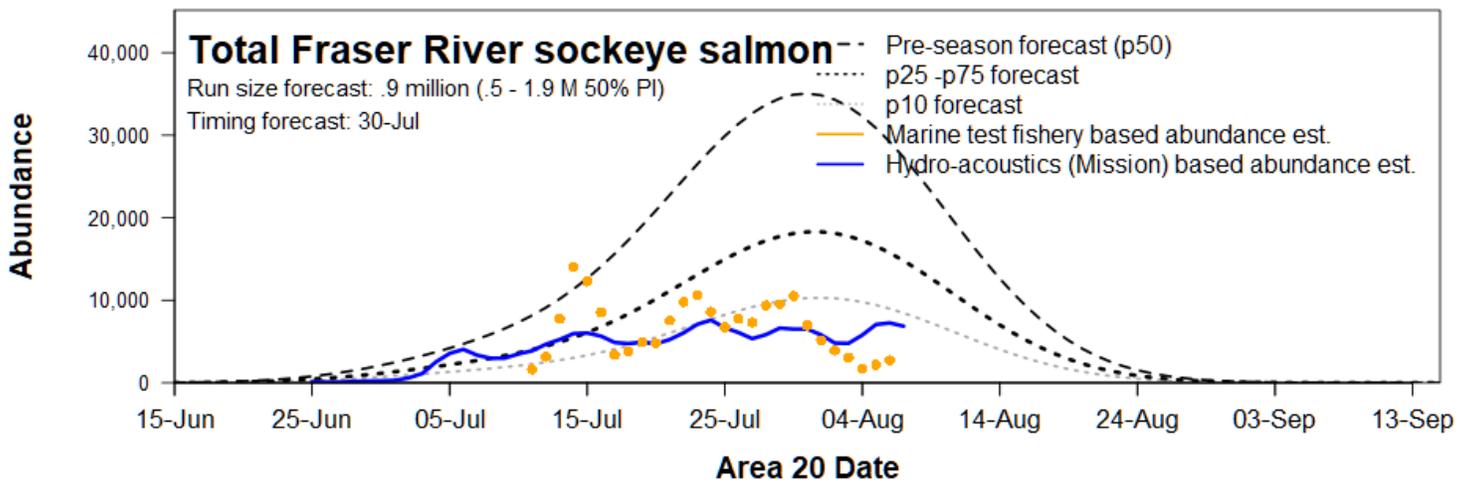
Test fishery catch is only available from Whonnock and Qualark. Catches have remained steady for both sites over the past week, and are very low for this time of year compared to historical catches.

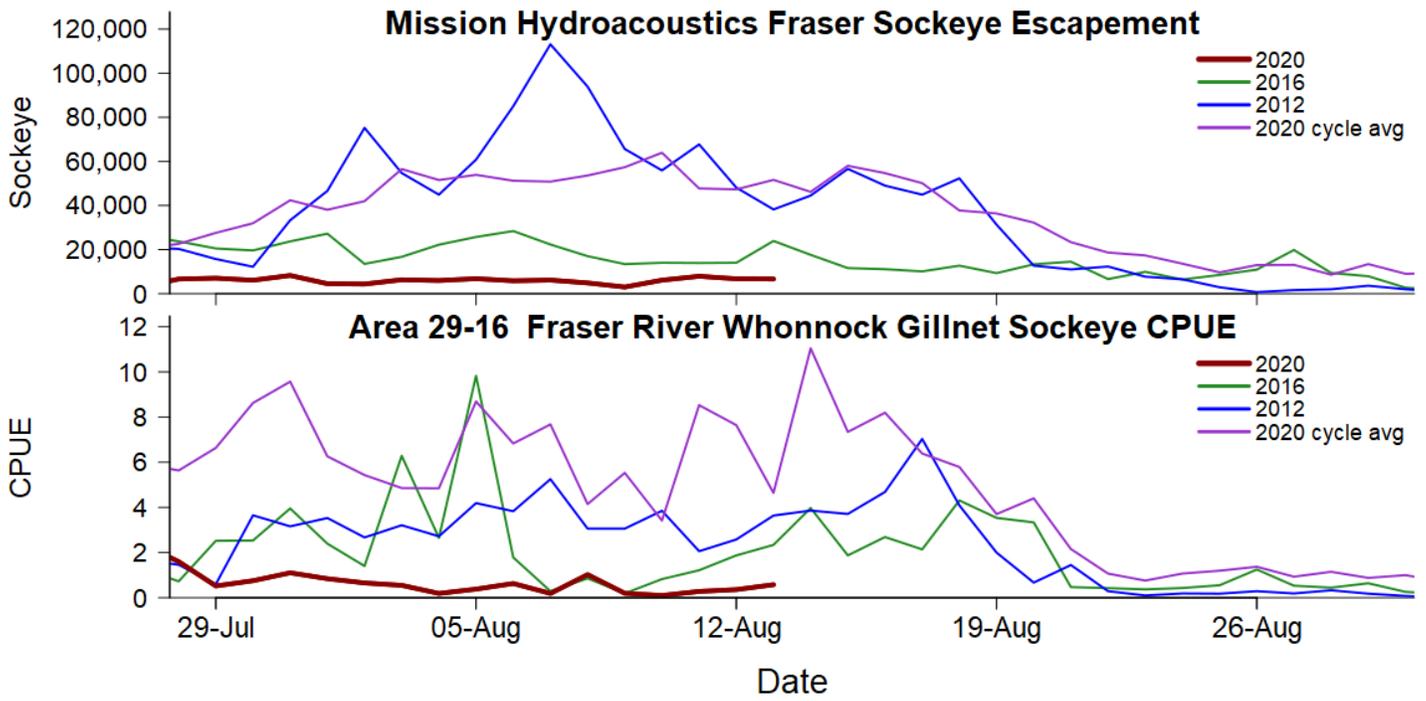
Hydroacoustics

Daily passage estimates at Mission have not increased since last week. Daily passage remains in the 6,000 to 8,000 sockeye range over the past week. The differential estimates from Mission and Qualark have converged over the past week from divergent estimates over the past few weeks. The difference in daily passage estimates will be investigated over the post season, and will not have an effect on the in-season management for the 2020 sockeye season.

Test fishing graphs and Mission hydro-acoustics information from the PSC distribution package:

Estimated Abundance and In-Season Timing Compared to Forecast





The next Fraser River Panel meeting is scheduled for 11AM Tuesday July 21st.

Fraser River Panel Schedule:
Tuesday and Friday 11am.

Please join the meeting from your computer, tablet or smartphone.
<https://global.gotomeeting.com/join/513559997>

You can also dial in using your phone.
 United States (Toll Free): [1 866 899 4679](tel:18668994679)
 United States: [+1 \(571\) 317-3117](tel:+15713173117)

Canada (Toll Free): [1 888 299 1889](tel:18882991889)
 Canada: [+1 \(647\) 497-9373](tel:+16474979373)

Access Code: 513-559-997

Links

With Chinook and sockeye approaching and in the Fraser, these links may be of interest:

BC River Forecast Centre Website: <http://bcrfc.env.gov.bc.ca>

Environment Canada's Water Office Website: http://www.wateroffice.ec.gc.ca/index_e.html

Pacific Salmon Commission Website: www.psc.org

Pacific Salmon Commission Test Fisheries: http://www.psc.org/info_testfishing.htm

Pacific Salmon Commission News and Regulatory announcements: <http://www.psc.org/publications/fraser-panel-in-season-information/fraser-river-panel-regulatory-announcements/>

Fraser River Mission Escapement Reports: <http://www.psc.org/publications/fraser-panel-in-season-information/fish-passage-past-the-psc-hydroacoustic-counting-station-near-mission-bc/>

Fraser River Environmental Watch Reports: <http://www.pac.dfo-mpo.gc.ca/science/habitat/frw-rfo/index-eng.html>

The Albion Test Fishery information can be found at:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/fraser/docs/commercial/albionchinook-quinnat-eng.html>

For more information contact Aidan Fisher by email: Aidan.Fisher@lffa.ca