



# WATERSHED TALK

## NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

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### 2019 FRASER SALMON UPDATE

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Hope for a late sockeye run that is closer to the preseason forecast abundance is quickly disappearing. To date there has been no indication of a substantial amount of sockeye seaward of the marine test fisheries that would make up for the extremely low returns observed so far in 2019. Marine test fisheries will continue to track the remainder of the sockeye return and will also provide information on Fraser pinks, but it is starting to become apparent that this will be a very bad year for Fraser sockeye. There is no information to date that has indicated any abundance of Fraser sockeye. Some marine gillnet test fisheries have been closed due to low amounts of sockeye being caught. The high diversion rate through Johnstone Strait seems to be holding with very few sockeye having been caught in Juan de Fuca. To date the only retention of sockeye has been in some Chinook directed FSC fisheries in the Lower Fraser and in test fisheries.

The panel decided to adopt an in-season run size of 85,000 for Early Summers, 224,000 for Summers and 111,000 for Lates. Based on these in-season run sizes there is no TAC available for any Management Unit, and no sockeye directed fisheries have been licenced. These in-season run sizes are nowhere close to even the p10 forecast for total Fraser sockeye.

Pinks are showing up in abundance in some of the marine test fisheries. To date the catches are tracking similar to years of substantial abundance. It should be noted that there have been previous years with similarly high catches at this time, but the in-season abundance was low due to an early run timing. Over the next week if test fishery catches continue to rise, there will likely be an abundant return of Fraser pinks. On the other hand, if the catches start to plateau at current levels the run size will likely not be as abundant. Next week's test fishery catch will be critical to estimation of the Fraser pink return. We will also need to see verification of abundance from the high marine test fishery catches at the Mission hydroacoustic site.

It should be noted that sockeye will be caught in pink directed fisheries, and management will have to consider all potential impacts to Fraser sockeye from pink directed fisheries, consistent with the LAER approach. It has also been noted that domestically Canada will manage to a 10% LAER for the Early Summers, Summers and Lates, but internationally the agreement is for up to 20% LAER on those MUs.

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

Sockeye Management Group	Pre-Season Planning Forecast (P50)	Run Accounted to Date	In-Season Adopted Run Size	Area 20 Timing (for 50% of run)
Early Stuart	41,000	25,900	27,000	July 8
Early Summer	465,000	72,400	85,000	July 26

Summer	3,393,000	73,900	<b>224,000</b>	<b>August 17</b>
Lates	359,000	3,600	<b>117,000</b>	<b>August 25</b>
<b>TOTAL</b>	<b>4,795,000</b>	<b>175,800</b>	<b>453,000</b>	Preseason (Aug 9)

### Big Bar Slide

Crews continue working on the Big Bar slide site. Crews have been working on building an access and staging site for future work at the slide site.

As of August 16, 232 salmon have been radio tagged downstream of the landslide with 80 of those having been transferred above the slide. There is now evidence that two radio-tagged salmon, transported past the landslide by helicopter, have made it to the northern portion of the province. Preliminary results show that some of the fish transported via helicopter have successfully continued their upstream migration (52%). An average of 3.6% of the salmon at Big Bar have been transported over the slide.

To date 14,442 chinook and sockeye have been transported over the slide site via helicopter.

### Sockeye Closures

The Early Stuart window closure is up for all areas of the Fraser River and the marine approach. However, to date no sockeye directed fisheries have yet been licenced due to extremely low abundances observed.

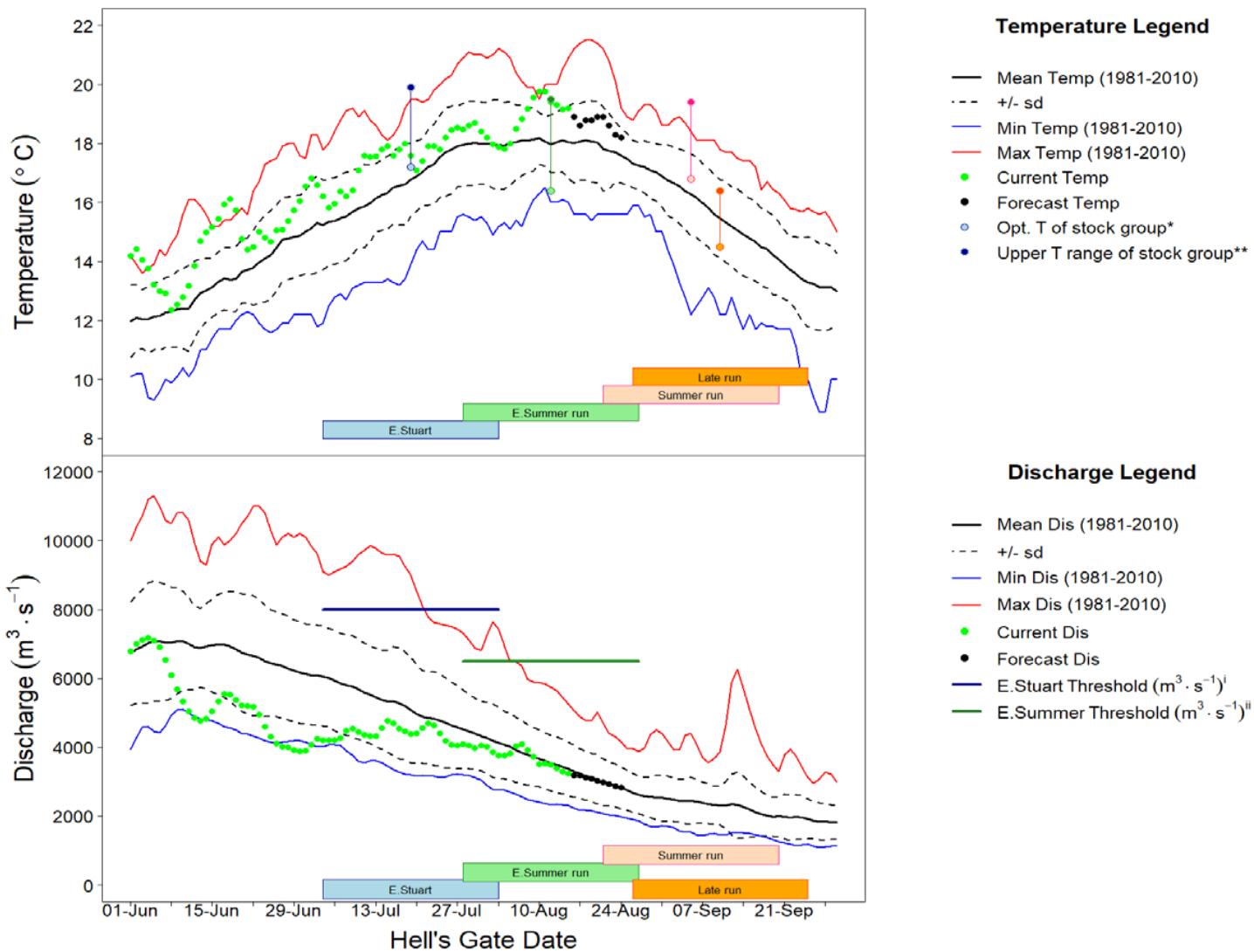
### Fraser River Conditions

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 15<sup>th</sup>, 2019):



The Fraser River water temperature at Hope is currently 19.2 degrees Celsius (1.2 degrees Celsius above average for this time of year), and is forecast to decrease to 18.9 degrees Celsius by August 21<sup>st</sup>. The Fraser River discharge is within the usual annual differences at 3,237 m<sup>3</sup>/sec at the Qualark water station on August 15<sup>th</sup> (4% below average for this time of year). The discharge is continue to tracking at the average discharge, with a forecast discharge of 2,980 m<sup>3</sup>/sec by August 21<sup>st</sup>.

Environmental data and observations are critical in identifying Management Adjustments (MA) in-season. Currently, the flow and temperature data are sitting within the historic range for preseason MA forecasts, we are currently not expecting a major change in MAs compared to preseason forecasts. The panel may announce a change in MAs for each sockeye MU in-season, based on changing environmental conditions or other factors (ie Big Bar slide).

## 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 9<sup>th</sup>, 2019) and the Fraser River Panel meeting from the same day.

### *Stock Identification*

To date the stock proportions are showing a relatively normal distribution of stocks, based on expected run timings. This is further confirmation that it is unlikely that there are a substantial abundance of sockeye seaward of the test fisheries. Summer run sockeye are dominating the stock proportions, as expected for mid-August. Sockeye are simply missing abundance based on pre-season expectations.

It has also been noted that stocks that are usually swamped out in the samples at this time by large proportions of Chilko/Quesnel are being identified (ie. Weaver/Cultus, Raft/North Thompson).

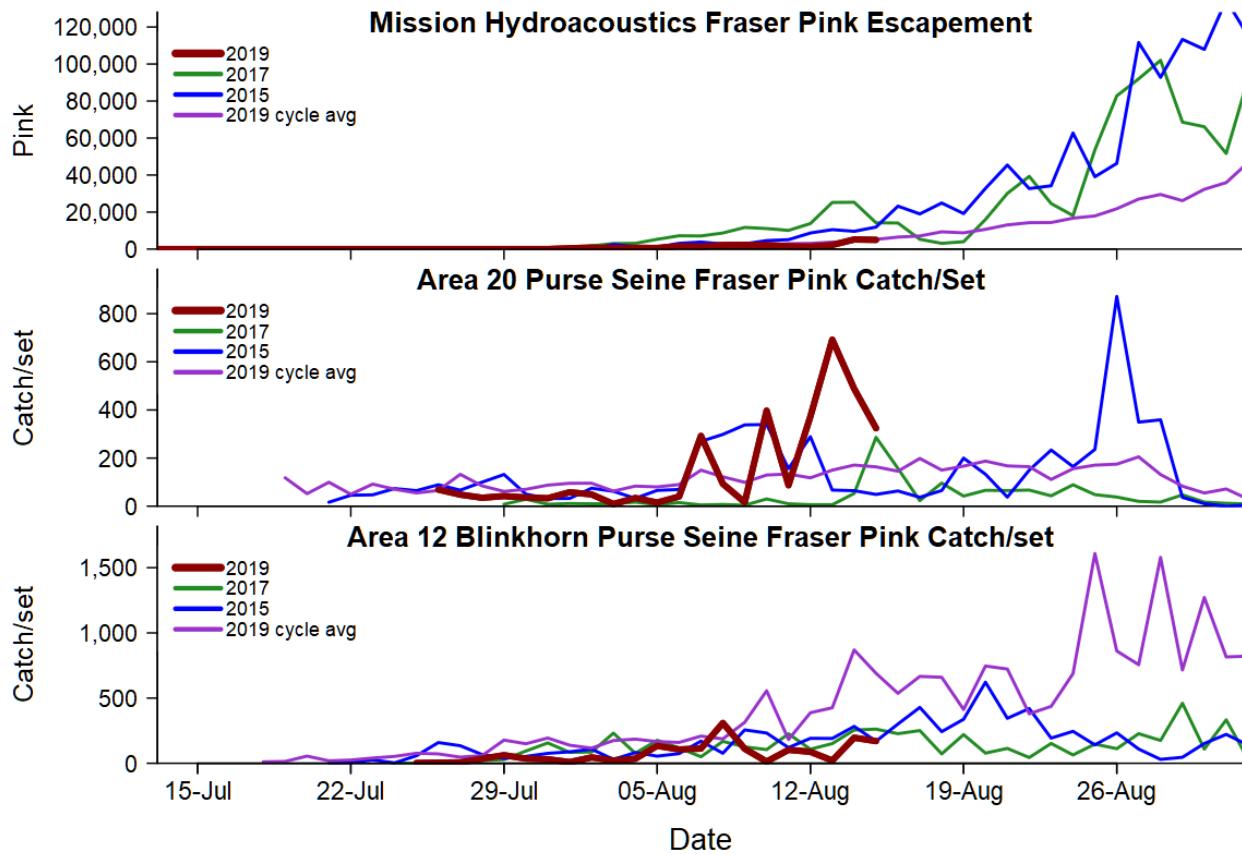
### *Test Fisheries*

Test fishery sockeye catch across the south coast and in-river is continuing to be low. Pinks have started to show up in notable abundance. The panel has decided to close a few marine gillnet test fisheries.

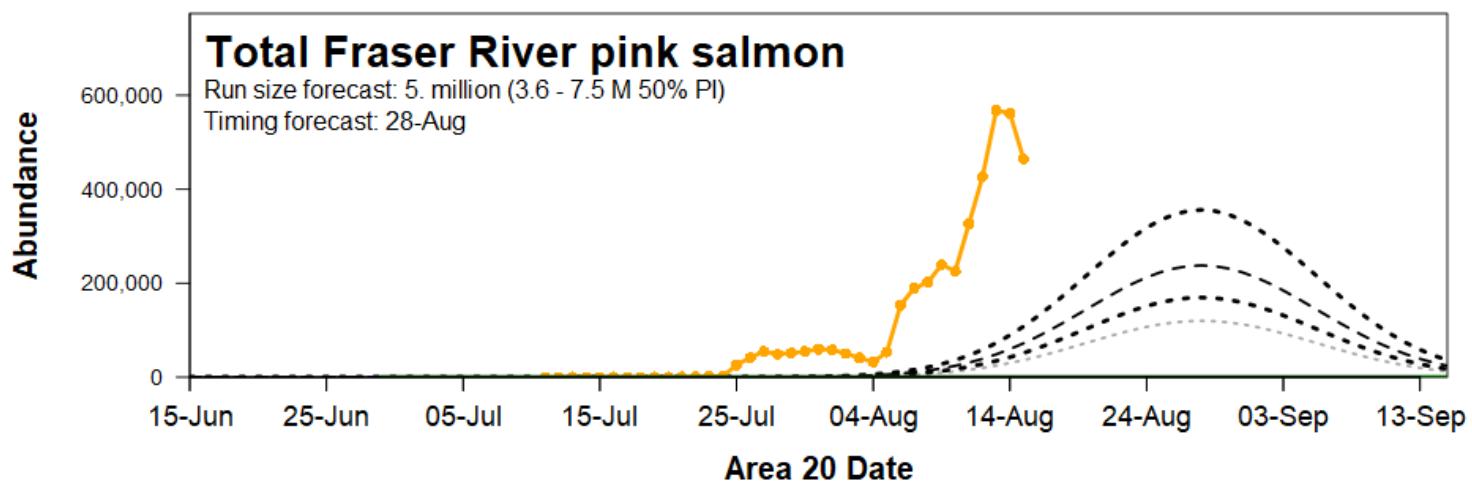
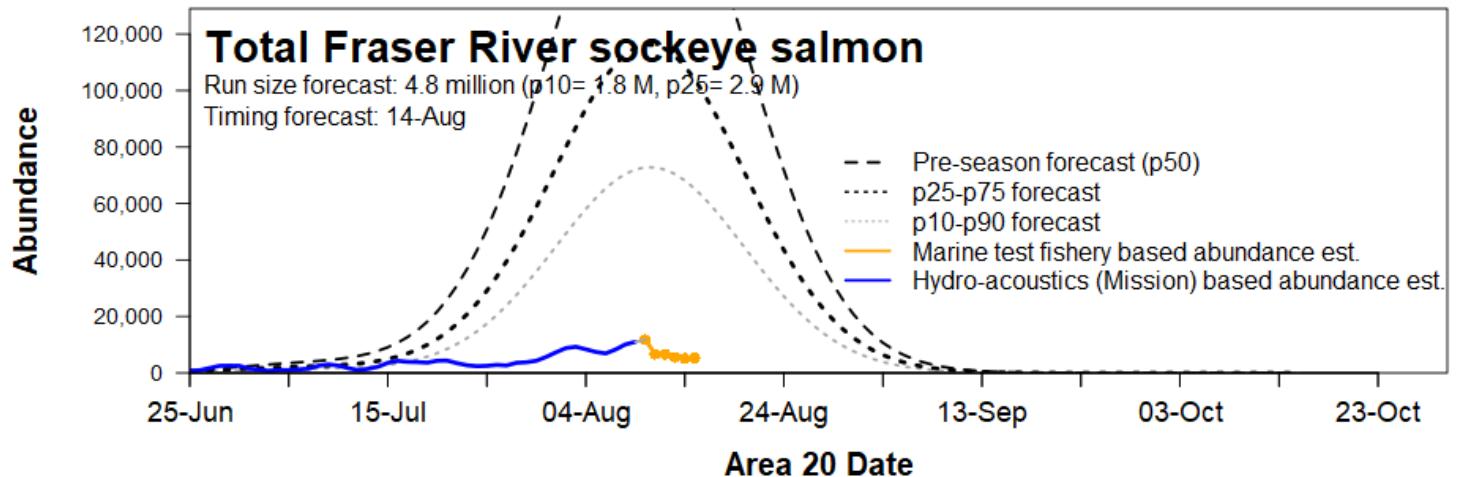
In-river test fisheries continue to predominantly catch very few sockeye, but pinks are starting to show up in some abundance. Soon the high marine catches of Fraser pinks should be arriving in-river, and a verification of abundance will be available.

Diversion rate based on test fishery catch is showing high diversion through JST, projected at 86%.

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 10:30AM Tuesday August 20<sup>th</sup>.

Fraser River Panel Schedule:

**Tuesday and Friday 11am.**

**Canada dial-in: 1-888-299-2873**

(USA dial-in: 1-888-585-9008)

**Conference ID: 287-053-397**

## Links

Big Bar Slide Updates are available: <https://www2.gov.bc.ca/gov/content/safety/emergency-preparedness-response-recovery/emergency-response-and-recovery/incident-summaries/big-bar-landslide-incident>

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

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

Environment Canada's Water Office Website: [http://www.wateroffice.ec.gc.ca/index\\_e.html](http://www.wateroffice.ec.gc.ca/index_e.html)

Pacific Salmon Commission Website: [www.psc.org](http://www.psc.org)

Pacific Salmon Commission Test Fisheries: [http://www.psc.org/info\\_testfishing.htm](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>

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