



# WATERSHED TALK

## NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

Volume XV, Issue 9

### 2018 FRASER SALMON UPDATE

By: Aidan Fisher, FRAFS Biologist

The picture of Fraser sockeye doesn't look like it will meet the p50 total run size at this time. To date, accounting of Fraser sockeye is tracking closer to the p25 forecast, this is mostly driven by a reduced amount of Late run compared to forecast. Test fishery catches in both marine approaches have declined over the past week, likely an indication of the end of the seaward migration of Late run sockeye. Current estimates of Late run sockeye holding in the gulf are 1.6-2.2 million. In the DNA samples there is presence of some small stocks, further evidence of a lower than forecast late run. If Late run sockeye were returning in larger abundance they would flood out some of the smaller stocks that have been identified in the DNA sampling. There is still a chance of some sockeye seaward of the marine test fisheries, but there is no indication at this time of substantial abundance seaward of Fraser sockeye.

PSC staff recommended a reduced run size for Early Summers at 1.7 million (from 1.8 million earlier this week) and median run timing date of August 6, Summers at 4.344 million and median run timing date August 11. There has not been an official in-season run size adopted for Lates, but the Panel will be managing to 5.8 million Lates for interim management. PSC Staff also noting that there may be more fish delaying in the Strait than expected based on current test fishing numbers.

The Fraser Panel adopted 1.7 million Early summers with a median run timing of August 6. No change was adopted for Summers, and 5.8 million Lates with a median run timing of August 18. No panel fisheries were put forward for Canadian and US fisheries.

Canadian catch in commercial fisheries is 2,468,100, predominantly in the Area B purse seine (1,246,100) and gillnet fisheries (in-river Area E: 601,800, marine Area D: 483,000). The commercial troll fishery has also been ongoing, total catch of 107,200. For First Nations, FSC fisheries have been ongoing throughout the marine approach and in-river (682,210), and EO fisheries (226,900) have been occurring. Recreational fisheries in the marine approach and in-river are ongoing. Catch reports from the recreational fishery are only reported after multiple weeks of fishing and are currently unavailable.

US catch in commercial fisheries of Fraser sockeye (All citizens and Treaty Indian) is 975,600. There is likely no more Fraser Panel approved fisheries for the US, they do have some small ongoing fisheries.

Sockeye Management Group	Pre-Season Planning Forecast (P50)	In-Season Adopted Run Size	pMA (preseason / in-season)	Area 20 Timing (for 50% of run)
Early Stuart	84,000	<b>125,000</b>	0.69	<b>July 5</b>
Early Summer	2,155,000	<b>1,800,000</b>	0.23	<b>August 6</b>
Summer	4,344,000	<b>4,344,000</b>	0.10	<b>August 11</b>
Lates	7,398,000	<b>5,800,000</b>	0.43	<b>August 16</b>
<b>TOTAL</b>	13,981,000	<b>12,069,000</b>		<b>Preseason (Aug 14)</b>

### Early Stuarts

To date, 123,100 Early Stuart sockeye have been accounted for in catch and escapement. This is below the in-season adopted run size of 125,000. The Fraser River Panel has not adjusted the in-season run size for Early Stuarts.

### Early Summers

**Early Summers** were forecasted at 2,155,000 (P50). To date the Mission hydroacoustic passage has accounted for 1,079,900 sockeye and a downstream catch of 637,900. The Fraser Panel has adopted an in-season run size of 1,700,000 and a median run-timing date of August 6<sup>th</sup>. The majority of Early Summers have migrated through the marine and Lower Fraser, the remaining Early Summers in the marine and Lower Fraser are Early Thompson.

### Summer Run

**Summers** are forecasted at 4,344,000 (P50). To date the Mission hydroacoustic passage has accounted for 1,924,500 sockeye with a catch downstream of 1,947,100. On the Panel call on Tuesday, the Fraser Panel adopted an in-season run size of 4,344,000. The majority of the Summer run are Chilko and Quesnel.

### Late Sockeye

**Lates** are forecasted at 7,398,000 (P50). To date the Mission hydroacoustic passage has accounted for 434,100 sockeye with a downstream catch of 1,494,300. There has not been an increase in catch in marine test fisheries, likely indicating the end of the Late run migration.

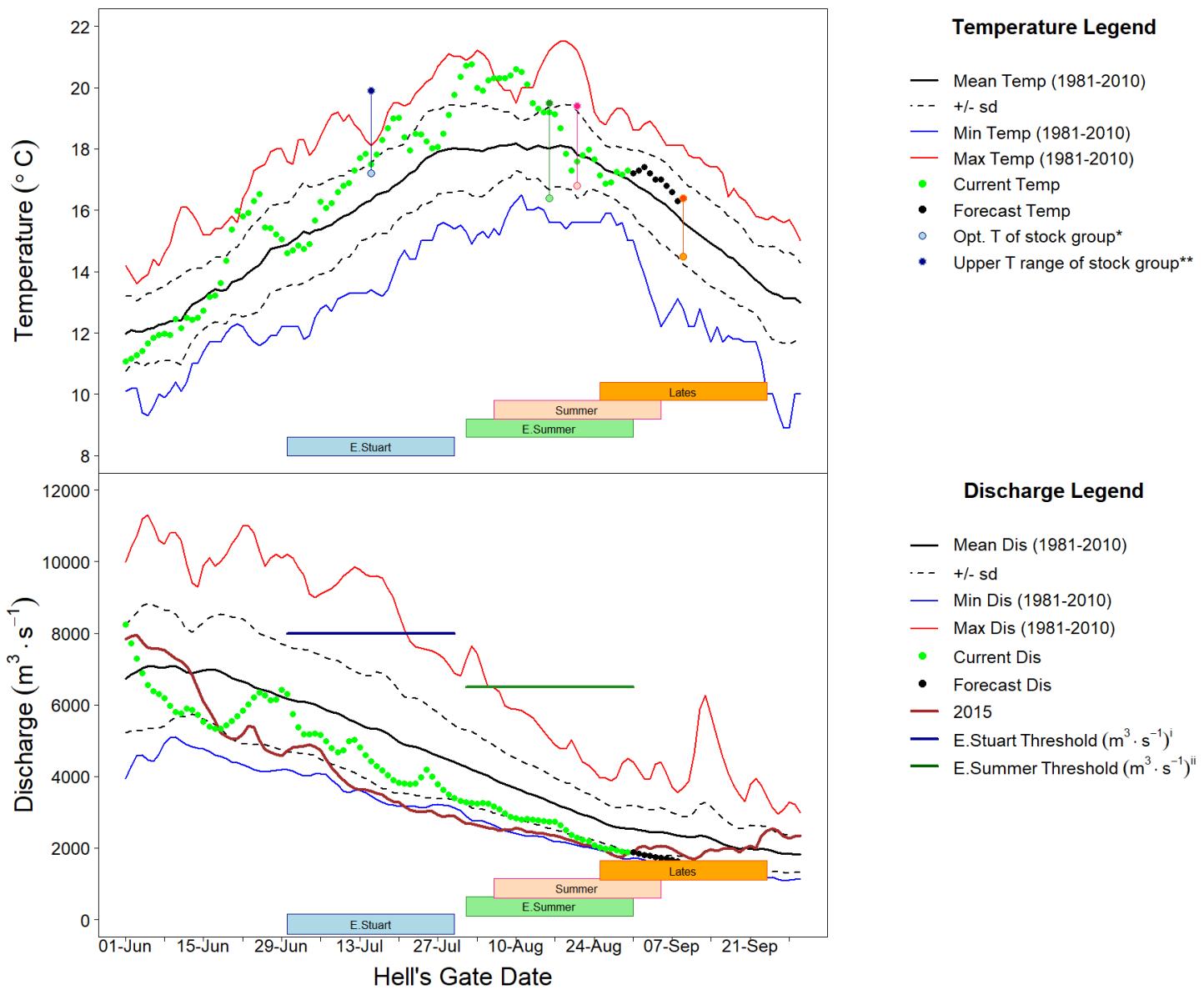
### Fraser River Conditions

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 31<sup>st</sup>, 2018):



The Fraser River water temperature at Hope has decreased to 17.3 on August 30<sup>th</sup> nearly equivalent to the historical median (0.3 degrees Celsius above average for this time of year) and is forecast to decrease to 17.0 degrees Celsius by September 5<sup>th</sup>. The Fraser River discharge is very low at 1,879 m<sup>3</sup>/sec at the Qualark water station on August 30<sup>th</sup> (26% below average for this time of year). The discharge is predicted to continue tracking well below average with a forecast discharge of 1,728 m<sup>3</sup>/sec by September 5<sup>th</sup>.

### 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 have distributed 15 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

31-Aug-18

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 31<sup>st</sup>, 2018) and the Fraser River Panel meeting from the same day.

#### *Diversion Rate*

Diversion rate through Johnstone Strait has started to shift, now 58%, from a strong migration rate seen over the past few weeks through Juan de Fuca. Diversion rate will likely continue to increase for the remainder of the Fraser migration.

#### *Stock Identification*

In marine test fishery catches have declined over the past week. Approach (JST and JdF test fisheries) test fisheries are showing a distinct picture from the Gulf test fisheries. Both approaches are showing a split of Summers and Lates. Meanwhile, gulf fisheries are dominated by Lates. This is another indication of holding off the mouth of the Fraser.

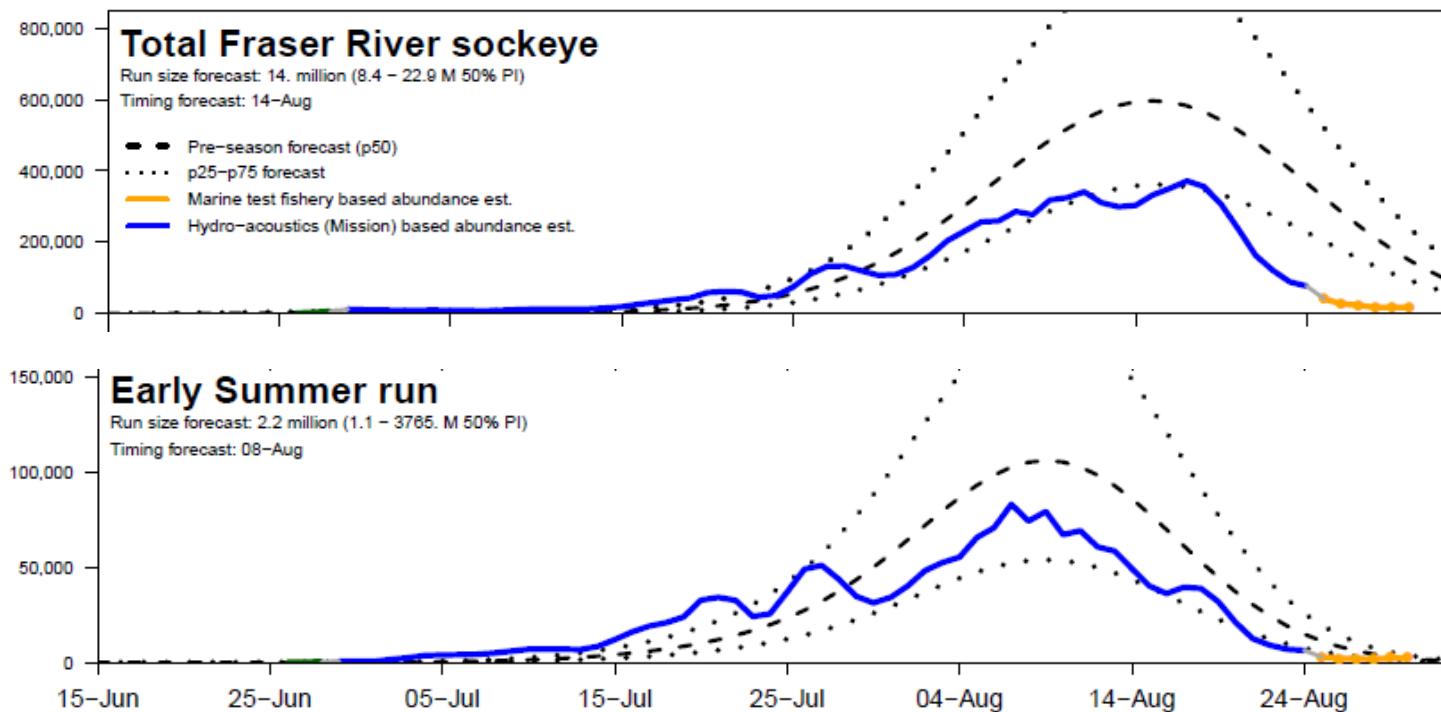
In-river test fisheries, Early Thompson are still showing up in small abundance. The majority of the samples are Summer run, Quesnel/Chilko. There are also some Late run fish showing up in greater abundance, likely an indication of the beginning of in-river migration of Late run sockeye.

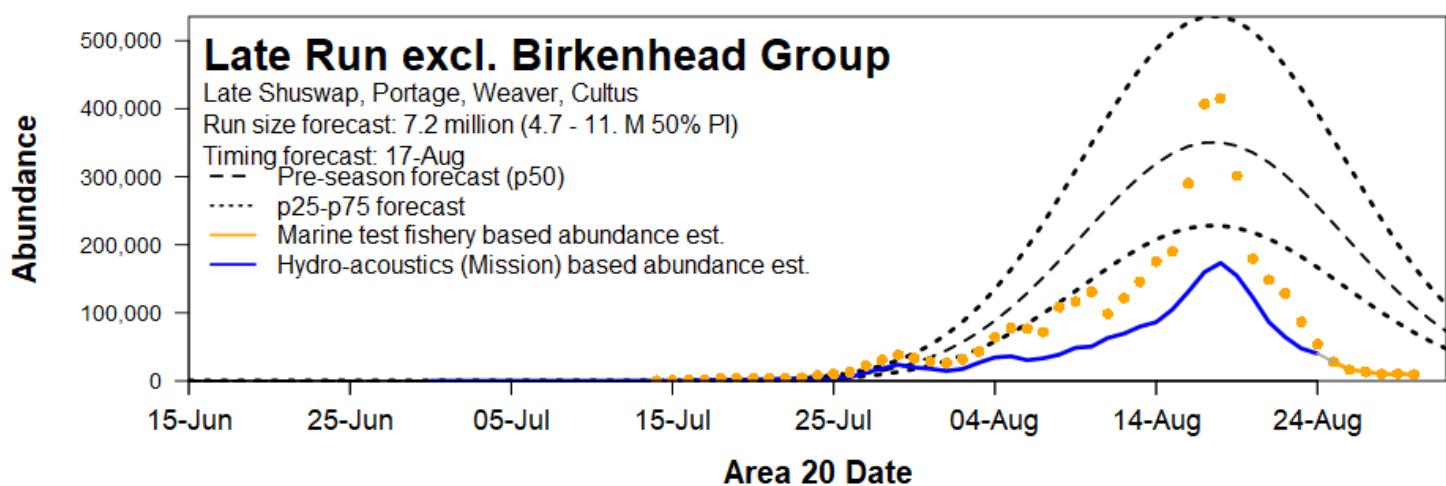
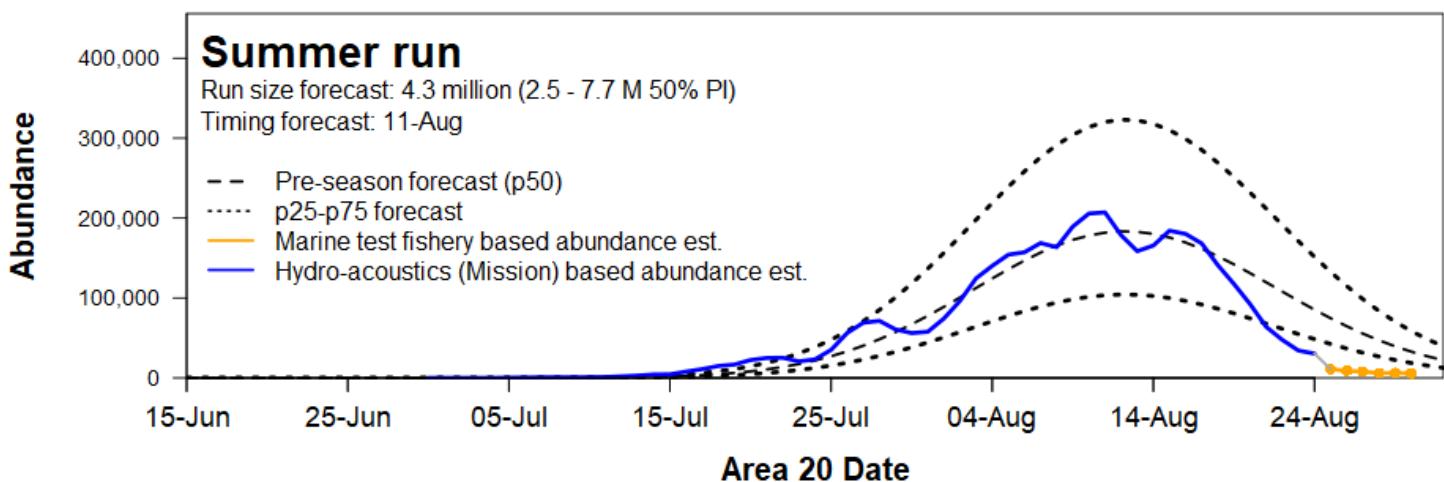
#### *Test Fisheries*

A total of 7,640,900 Fraser sockeye have been accounted-to-date. The run comprises of 123,100 Early Stuart sockeye, 1,717,800 Early Summer run sockeye, 3,871,600 Summer run sockeye, and 1,928,400 Late run sockeye. Fishery catch to date downstream of Mission is 4,081,000 sockeye (1,700 Early Stuart, 637,900 Early Summer, 1,947,100 Summer, 1,494,300 Late).

Test fishing graphs information from the PSC distribution package:

#### **Estimated Abundance and In-Season Timing Compared to Forecast**





The next Fraser River Panel meeting is scheduled for 11:00AM Tuesday September 4<sup>th</sup>.

Fraser River Panel Schedule:

**July 6, 10, 13, 17, 20, 24, 27 (Tuesdays and Fridays) 11am**

**July 31 (Tuesday), August 7, 14, 21, 28 (all Tuesdays) 10:30am**

**August 3, 10, 17, 24, 31 (all Fridays) 11 am**

**September 4, 7, 11, 14 (Tuesdays and Fridays) 11am (TBC)**

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

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

**Conference ID: 902-802-337**

## Links

With Chinook and sockeye approaching and in the Fraser, these links may be of interest:  
31-Aug-18

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](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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