



WATERSHED TALK

NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

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2018 FRASER SALMON UPDATE

By: Aidan Fisher, FRAFS Biologist

Unfortunately, since last week the signs of a strong Late run seem to have dissipated. Marine test fishery catches have stagnated over the past week, which has resulting in in-season tracking of the Late run MU near the p25 forecast. It is however, still too early to make any definitive statements about the Late run in-season run size. There is still potential for an abundance of Late run to be seaward of the test fisheries, and by early next week it should be clear if there is a pulse of Late run migration to come. Total Fraser sockeye abundance estimates are currently tracking close to the p25 forecast, mostly due to the decline in observed Late run abundance.

Today, US fisheries reported much less than expected catch in the last opening, indicating a similar trend to the declining test fishery catches in the marine approach. PSC staff communicated that the decline in test fishery catches are likely a lull in migration, with additional fish seaward of the test fisheries. PSC staff recommend no in-season management changes for Summer run-size and maintain the preseason forecast of 4,344,000 and run timing (August 11), but adopting an increase in DBE to -23 and pMA of 0.30. This was not agreed to by the Fraser Panel. No recommendation was put forward for a Early Summers, as any change to Early Summer management will not affect fisheries management decisions for the remainder of the season.

For Panel water fisheries, US proposing a Treaty Indian fishery extension in order to get close to completing the US TAC. The Canadian side did not agree with the proposed US extension. Their hesitance to agree to licencing an extension was based on the potential for a substantially lower than p50 run size in Late run, which would result in a decrease in the US TAC. In addition, the Canadian side communicated that there would still be time next week to finish up the TAC if more Late run sockeye show up over the next few days. After some deliberation and multiple caucus sessions, the US withdrew their fishery recommendation acknowledging the concern that Canada had brought forward. The US withdrawal of their fishery recommendation was contingent that next week they will be revisiting fishery recommendations. Canada did not put forward any fisheries in Panel waters.

Canadian catch in commercial fisheries is 2,316,500, predominantly in the Area B purse seine (1,214,500) and gillnet fisheries (in-river Area E: 601,800, marine Area D: 400,100). For First Nations, FSC fisheries have been ongoing throughout the marine approach and in-river (529,480), and a few EO fisheries (133,000) 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 908,500. This catch is broken up into management groups for accounting purposes by the PSC, but the US fisheries are not strictly held to allocations by MU. US fishery allocation is only held to a total Fraser sockeye TAC aggregating the 4 MUs.

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	125,000	0.69	July 5
Early Summer	2,155,000	N/A	0.23	Preseason (August 8)
Summer	4,344,000	N/A (too early for run size update)	0.10	Preseason (Aug 11)
Lates	7,398,000	N/A (too early for run size update)	0.43	Preseason (Aug 17)
TOTAL	13,981,000	N/A (too early for run size update)		Preseason (Aug 14)

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 are forecasted at 2,155,000 (P50). To date the Mission hydroacoustic passage has accounted for 1,002,000 sockeye and a downstream catch of 602,300. The Fraser Panel has not adjusted the in-season run size from the forecast.

Summer Run

Summers are forecasted at 4,344,000 (P50). To date the Mission hydroacoustic passage has accounted for 1,646,800 sockeye with a catch downstream of 1,807,400. Today, PSC staff recommended maintaining the preseason run-size and run timing, but adjusting the DBE to -23 and pMA to 0.30.

Late Sockeye

Lates are forecasted at 7,398,000 (P50). To date the Mission hydroacoustic passage has accounted for 301,900 sockeye with a downstream catch of 1,335,300. It is still too early for an in-season run size estimate for this management group. Today the Fraser Panel was informed that if the test fishery catches over the weekend don't improve then it is likely that the Late run group is returning below the p50 forecast.

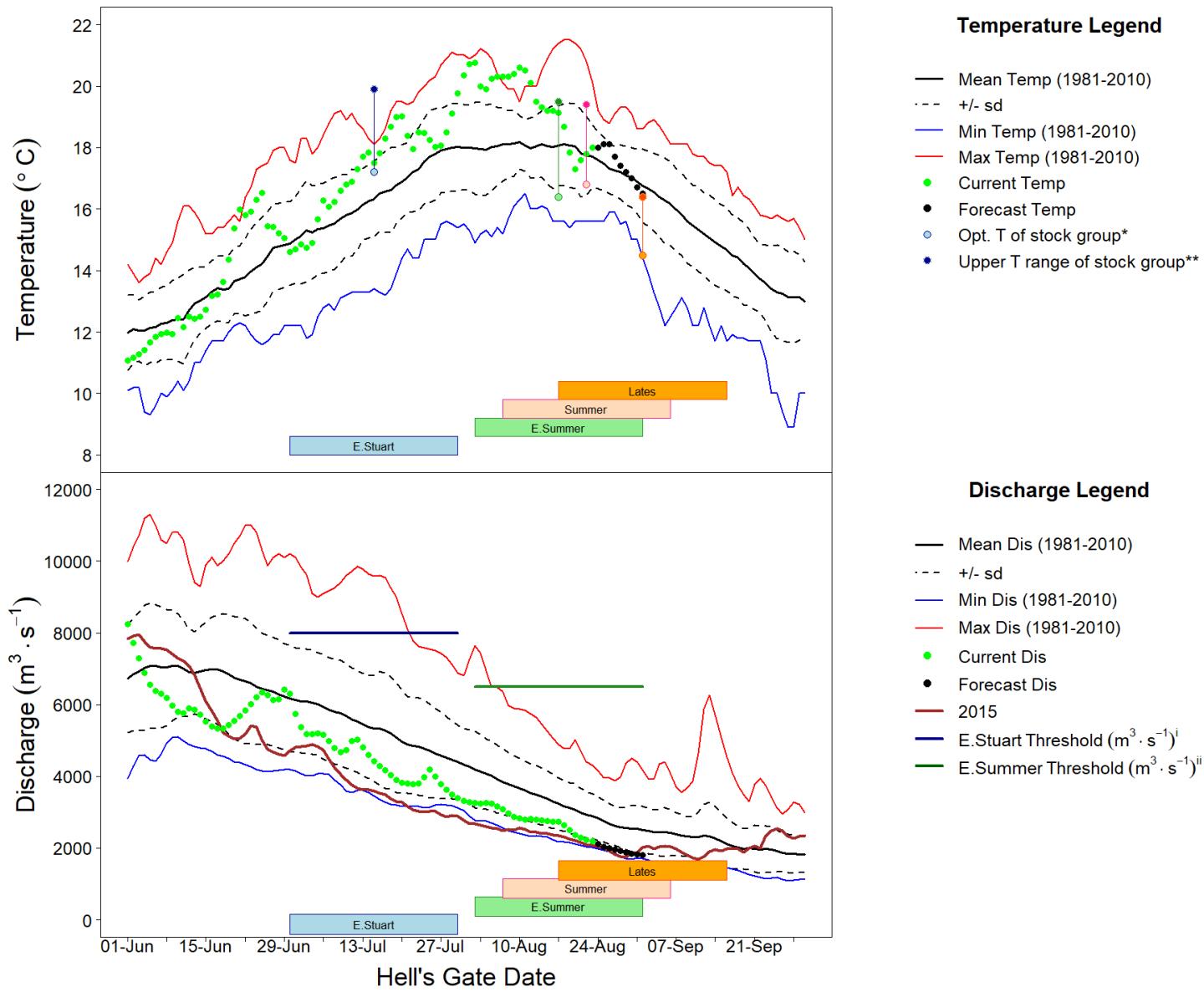
Fraser River Conditions

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 24th, 2018):



The Fraser River water temperature at Hope has decreased to 18.0 on August 23rd nearly equivalent to the historical median (0.3 degrees Celsius above average for this time of year) and is forecast to decrease to 17.2 degrees Celsius by August 29th. The Fraser River discharge is very low at 2,187 m^3/sec at the Qualark water station on August 23rd (24% below average for this time of year). The discharge is predicted to continue tracking well below average with a forecast discharge of 1,883 m^3/sec by August 29th.

River temperature has continued to decrease, and is now tracking along the average temperature for this time of year. River flows are still very low compared to average. The combination of high temperatures and low flows over the past few weeks still produces model outputs at above the pre-season DBE and pMA, leading to the recommendation put forward by PSC staff.

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

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 24th, 2018) and the Fraser River Panel meeting from the same day.

Diversion Rate

Diversion rate through Johnstone Strait has maintained the trend seen over the past few weeks (5-day average = 29%) and is indicative of greater than expected (forecast = 63%) migration around Vancouver Island and through Juan de Fuca. There was indications of a shift in diversion rates last week, but it has not materialized and diversion is still well below the prediction and diversion rates of other cycle years.

Stock Identification

In marine test fisheries, Early Summers are falling below 5% in most samples indicating the end of the Early Summer run. Almost all the remaining Early Summer DNA identified samples are from the Early Thompson run, as expected due to their later than average run timing in the Early Summer MU. The majority of fish in marine test fishery samples are Late Shuswap, as high as 81%. The remainder of the samples are Chilko/Quensel and a few Late Stuart/Stellako. The inversion of Chilko and Quesnel abundance has continued since last week, indicating a higher than forecast abundance for Quesnel (near p75) which is offset by the lower than forecast abundance of Chilko (near p25).

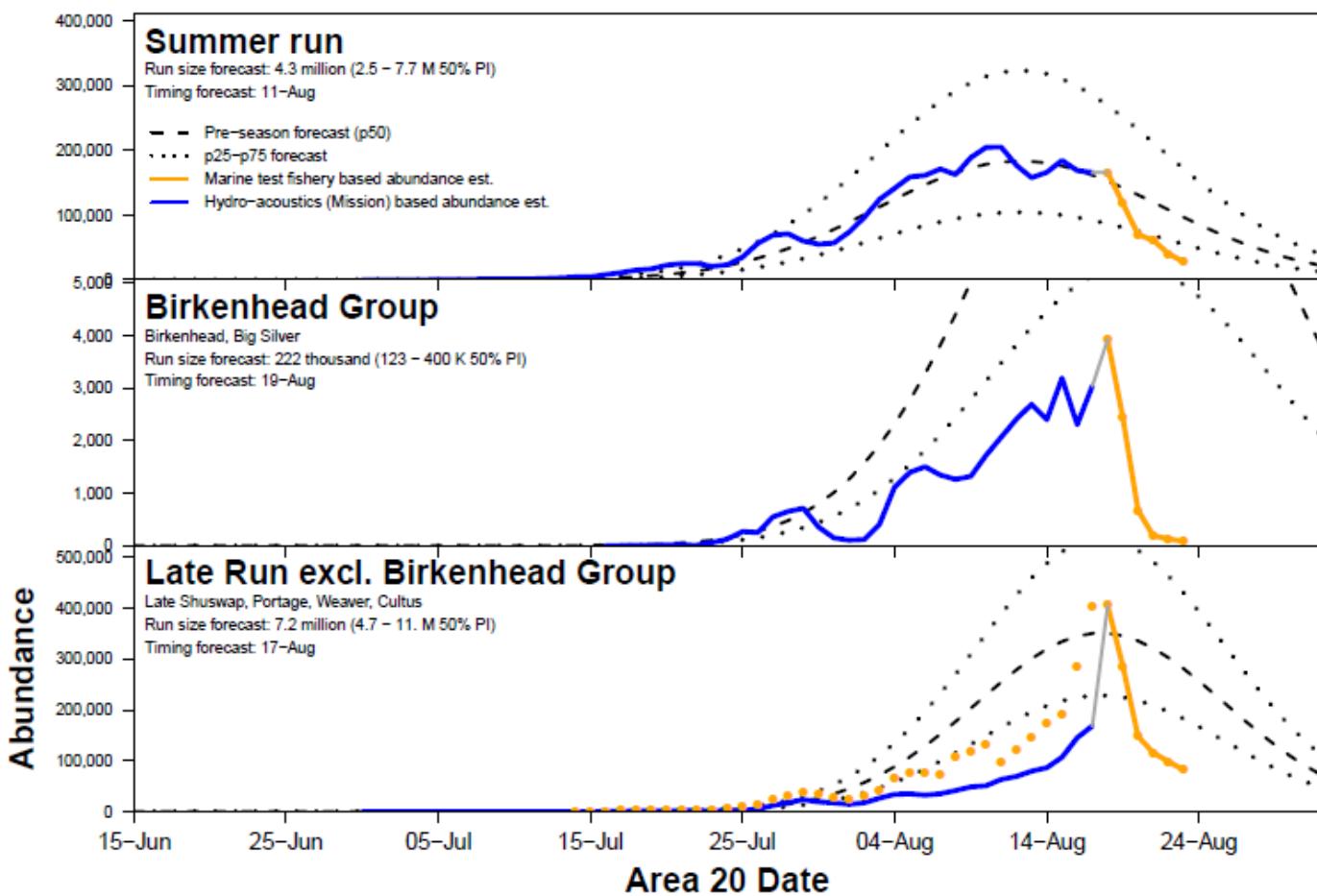
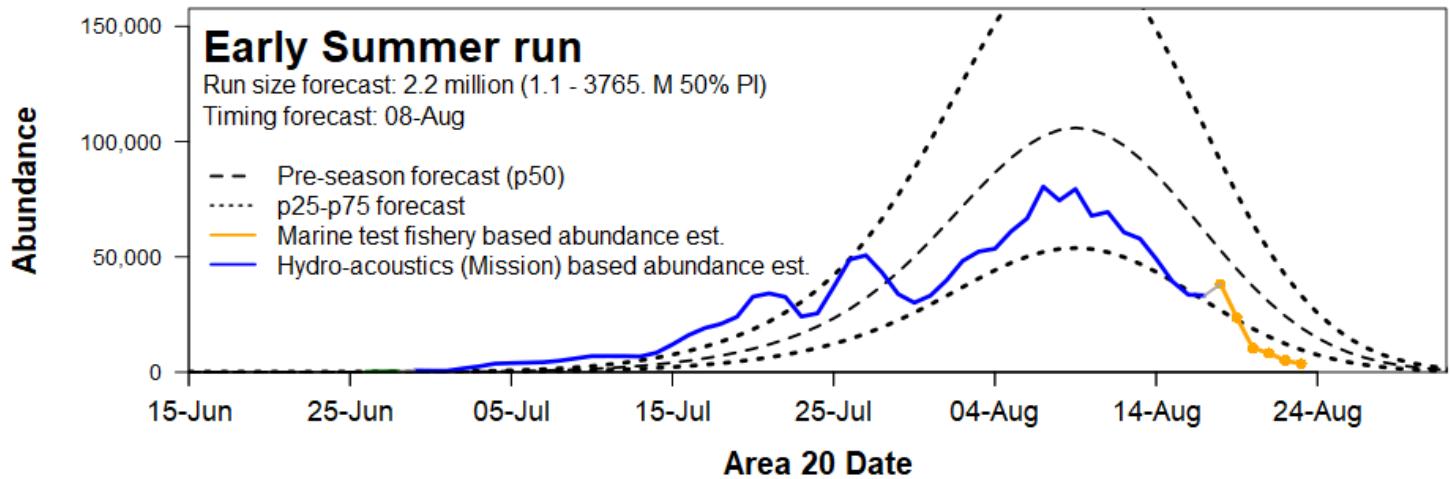
In-river test fisheries are still showing a similar picture to last week. A substantial portion of Early Summers (11%-25%) which are predominantly Early Thompson Summer run are still present in the majority (59%-79%), mostly Quesnel and Chilko. Late runs have started to increase in some samples (6% - 21%), indicating the start of the Late run migration into the river after holding off the mouth.

Test Fisheries

A total of 6,826,000 Fraser sockeye have been accounted-to-date. The run comprises of 123,100 Early Stuart sockeye, 1,605,300 Early Summer run sockeye, 3,454,200 Summer run sockeye, and 1,637,200 Late run sockeye. Fishery catch to date downstream of Mission has been 3,746,700 sockeye (1,700 Early Stuart, 602,300 Early Summer, 1,807,200 Summer, 1,335,300 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 10:30AM Tuesday August 28th.

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

24-Aug-18

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:

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 and/or Pete Nicklin by email: pnicklin@telus.net, Aidan.Fisher@lffa.ca