



WATERSHED TALK

NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

July 22, 2016

Volume XIII, Issue 4

Fraser Salmon Report

By Pete Nicklin,
Fisheries Biologist,
Fraser River Aboriginal Fisheries Secretariat

We are in the early part of the Fraser sockeye season, but the flow of information is increasing and the overall picture of 2016 is starting to take shape.

As I described last week, I will be updating the table (see Page 2) during the season, and this week's information includes the update to Early Stuart run size, as adopted by the Fraser Panel on Tuesday July 19th.

Today's Fraser River Panel meeting was important, as a decision was made to initiate US Treaty Indian Fisheries (Areas 4b, 5 and 6c) on the weekend. The US Ceremonial & Subsistence (C & S) fisheries will continue (initiated last weekend).

On the Canadian side, Canada will be initiating small-scale First Nations Food, Social & Ceremonial (FSC) fisheries directed on Fraser sockeye over the next couple of days (areas that

are not under the Early Stuart Closure window – *refer to information later in this article*).

Today's PSC distribution contained a lot of information, including tables of Comparisons for Fishing

Decisions, In-season Model Projections for July 23rd, and Historical and Predicted Catch: Area 4b,5,6c Treaty Indian Fisheries (US). Those three tables were provided by the PSC to help the Panel make decisions on upcoming fisheries at today's Panel meeting.

On the environmental conditions side of things, current Fraser River temperatures are on the rise and now at 18.6 degrees Celsius. 18 degrees is considered the start of stressful temperatures for sockeye migration.

Discharge flows continue to track a little lower than average but have been up and down with recent rain events. Current discharge shouldn't be a problem for sockeye migration, but the downside to the lower flow is the river is more sensitive to daily air temperatures (hot days can move the river temperature quickly).

Continued next page



Fraser Salmon Report *(continued)*

Fraser Salmon Update Table

Sockeye Management Group	Pre-Season Planning Forecast (P50)	In-Season Adopted Run Size	Area 20 Timing (for 50% of run)
Early Stuart	36,000	22,000	July 3
Early Summer	447,000	N/A	July 21
Summer	1,677,000	N/A (too early for run size update)	Aug 3
Lates	111,000	N/A (too early for run size update)	Aug 12
TOTAL	2,271,000	N/A (too early for run size update)	

Early Stuarts

The P50 pre-season forecast for **Early Stuarts** is 36,000. At last Friday's (July 16th) Fraser River Panel meeting, PSC staff recommended an Early Stuart in-season abundance estimate at the P25 forecast abundance (22,000) with July 2nd timing to send a signal that it appears the Early Stuarts do not appear to be returning at the P50 forecast. The Panel chose to not adopt the recommendation at Friday's meeting, but adopted the P25 (22,000) in-season run size with July 3rd A20 timing at Tuesday's (July 19th) meeting. The marine portion of Early Stuart migration has dragged a little, but is nearing completion and most of the run is now in the Fraser River, with the first arrivals in the Stuart River system being reported last weekend.

Early Summers

Early Summers are forecasted at 447,000 (P50). The estimated A20 50% timing of the Early Summer management group is July 21 (weighted average), so an in-season run size update is not far off. Current info shows a model run size estimate of 81,000 for the Chilliwack component, which compares to a pre-season forecast of 138,000. The Early Summer run had been tracking at P25 abundances (see graphs later in article), but recent test fishery data has shown an increase to recent daily abundances closer to the P50 forecast for the group. The Panel chose to defer making an in-season run size update on Early Summers until discussion and more information at next Tuesday's Panel meeting.



Fraser Salmon Report *(continued)*

Summer Run

Summers are forecasted at 1,677,000 (P50). It is still too early for an in-season run size estimate for this management group, with an expected A20 50% timing of August 3rd. However, all stock components of the Summer management group are showing in stock identification analysis of approach test fisheries, and are building in abundance over the past couple of days.

Late Sockeye

Lates are forecasted at 111,000 (P50). It is still too early for an in-season run size estimate for this management group, but stock identification analysis of test fisheries is showing the arrival of the Birkenhead component of this management group.

Sockeye Closures

The Early Stuart window closure is still in place for most of the Fraser River but, as of today, is off in the Lower Fraser up to Sawmill Creek (Yale area). The closure will be finishing for the rest of the Fraser over the next week-and-a-half in step-wise fashion up the river.

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.

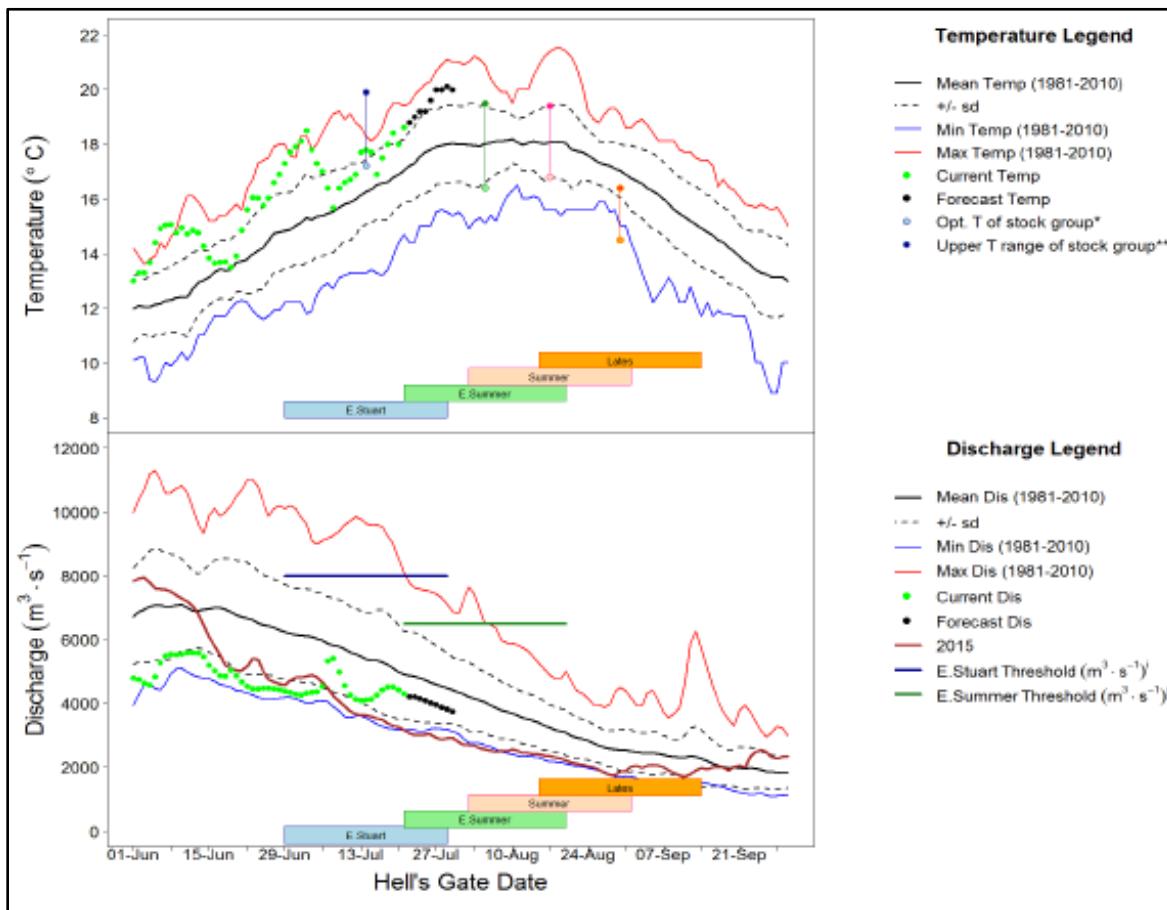
Environment Canada's Water Office webpage provides access to real time hydrometric data at many locations throughout the Fraser watershed (see links below).

Fraser Discharge and temperatures at Hope and Qualark Creek (near Hope) respectively look like the following graph (from the Fraser River Panel Distribution July 22nd, 2016):

Continued next page



Fraser Salmon Report *(continued)*



The Fraser River water temperature is currently 18.6 degrees Celsius (1.6 degrees Celsius above average for this time of year), and is forecast to increase to a temperature of 20.0 degrees Celsius by July 27th. The Fraser River discharge continues to track at low levels for this time of year with a flow of 4,302 m³/sec at the Qualark water station on July 21st (12% below average for this time of year). The discharge is predicted to continue tracking below average, with a forecast discharge of 3,952 m³/sec by July 27th.

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>



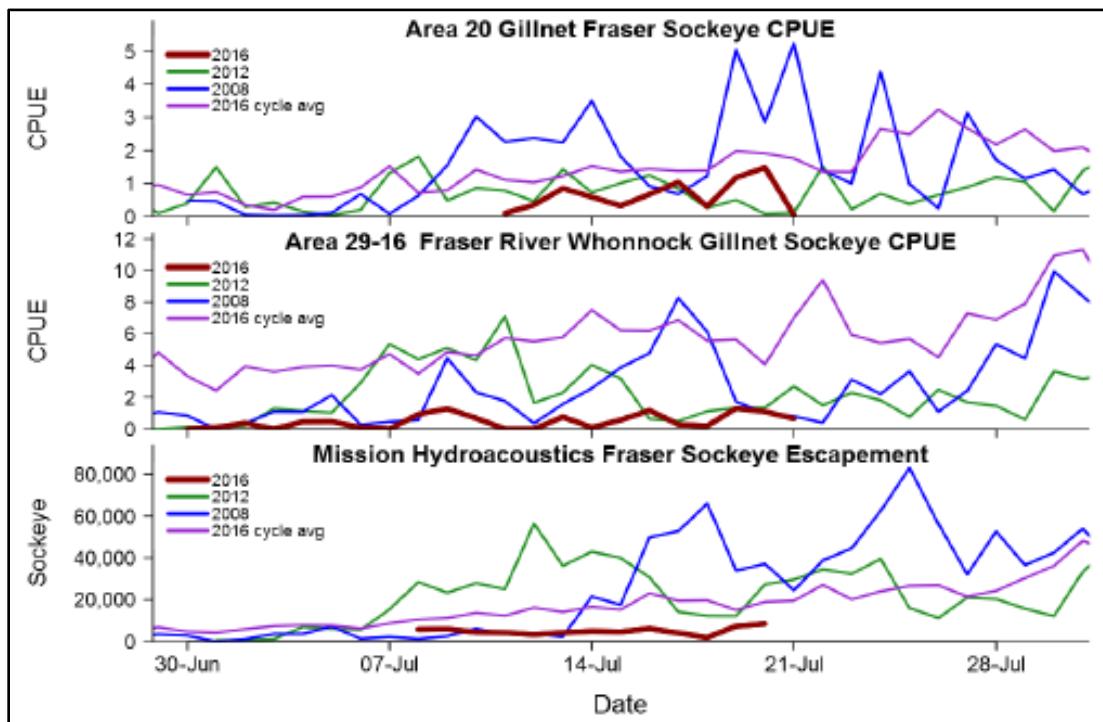
Fraser Salmon Report *(continued)*

Fraser Sockeye

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 (July 22nd, 2016) and the Fraser River Panel meeting from the same day.

Test fisheries are in place in the Fraser River (gill net) and both marine-approach areas (Strait of Juan de Fuca and Johnstone Strait – purse seine and gillnet). Hydroacoustics programs are in operation at Mission and Qualark (Yale). A total of 102,400 Fraser sockeye have been accounted-to-date, comprised of 15,300 Early Stuart sockeye, 76,900 Early Summer run sockeye, 10,100 Summers and 100 Lates. Stock Identification analysis from the marine and river test fisheries shows Early Stuart, Early Summers, Summers and the very beginning of the Late migration.

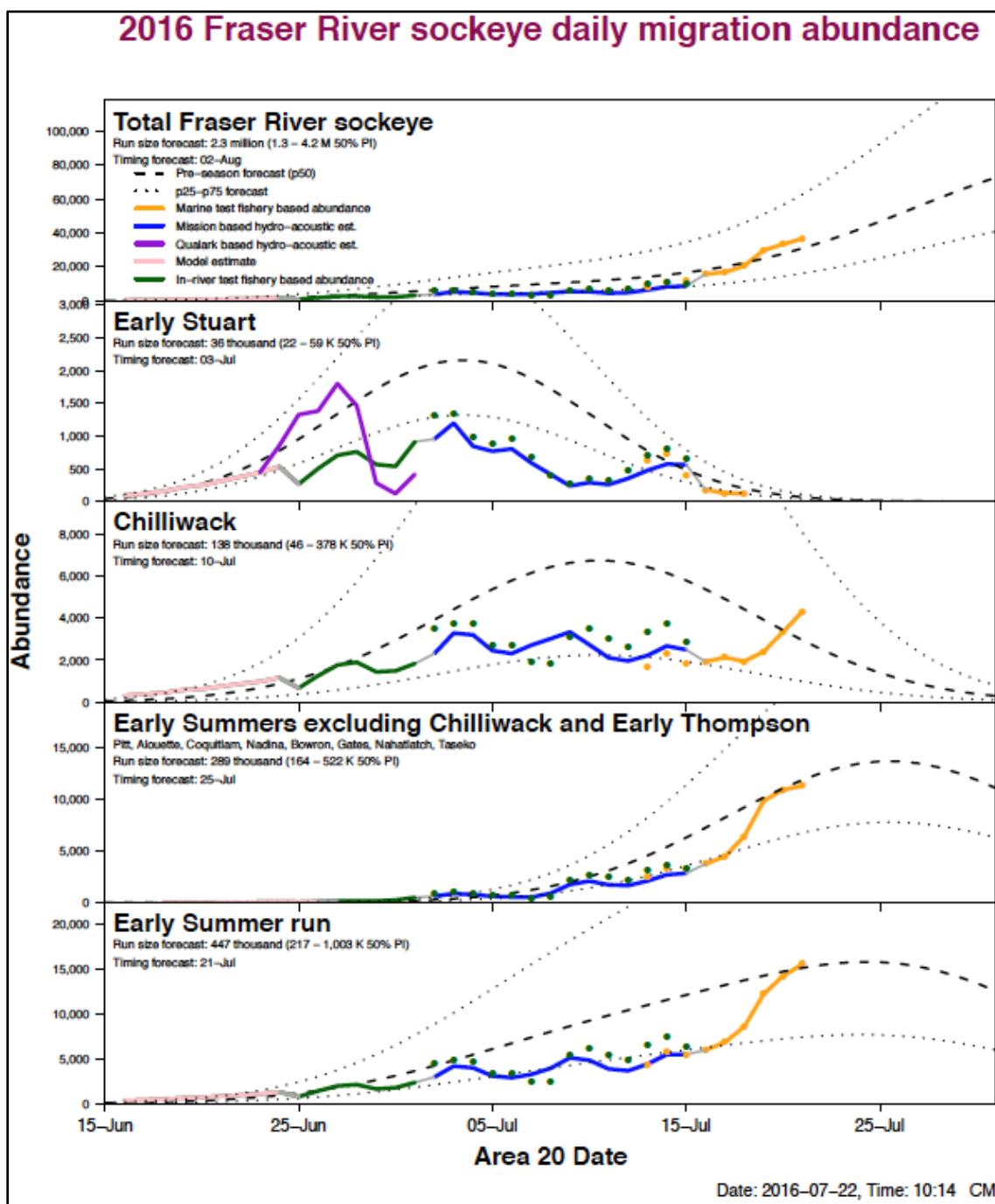
Test fishing graphs and Mission hydro-acoustics information from the PSC distribution package look like this:

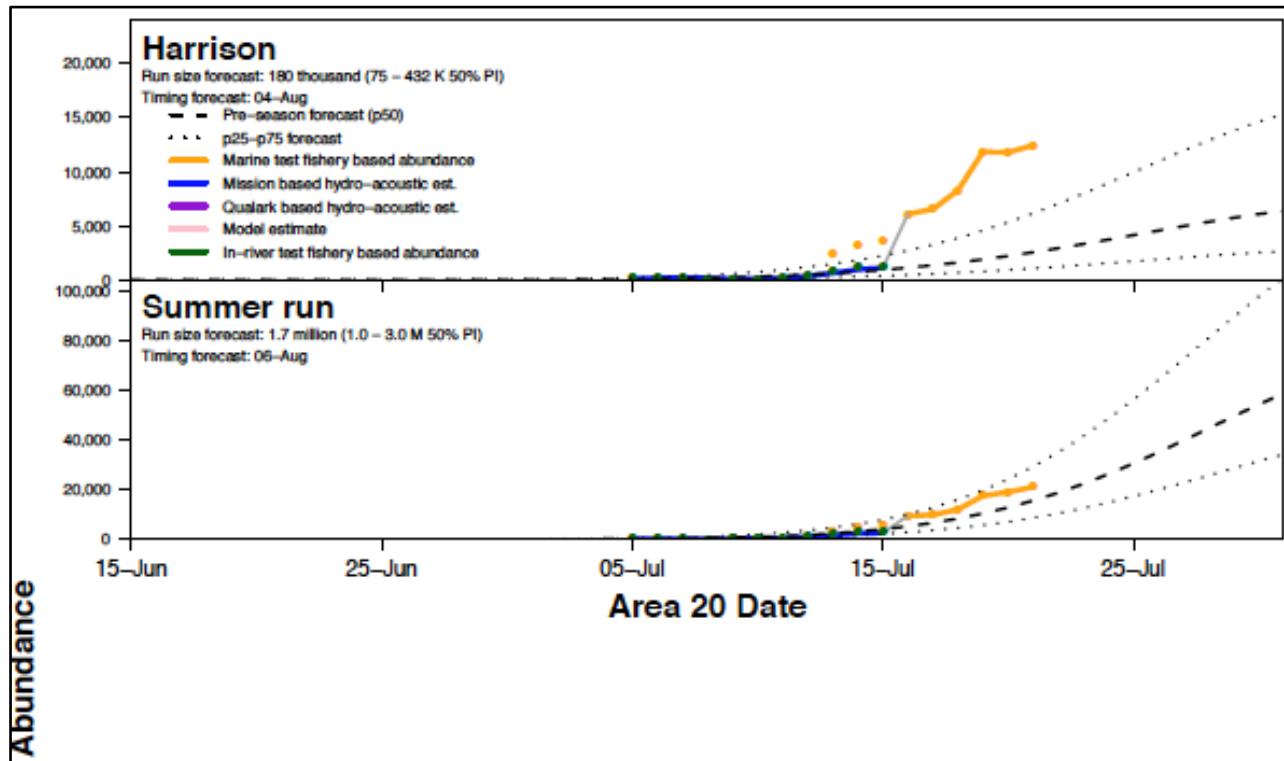


Continued next page



Fraser Salmon Report *(continued)*





- The next Fraser River Panel meeting is scheduled for 11 AM, Tuesday July 26th.

Links

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

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

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/news_frpnews.htm

Fraser River Mission Escapement Reports: http://www.psc.org/info_inseasonfraserescapement.htm

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>