



WATERSHED TALK NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

July 17, 2015

Volume XII, Issue 5

Fraser Salmon Update

By Pete Nicklin,
FRAFS Fraser Fisheries Biologist

Welcome to 2015's first in-season salmon update!

After a grueling pre-season planning and meeting "season," it's nice to start dealing with actual fish rather than "paper" fish. My weekly updates in *Watershed Talk* will include a summary of in-season information provided by the Pacific Salmon Commission, the Fraser River Panel, DFO and First Nations.

We're starting the season with record high water temperatures and record low water levels in the Fraser. Chinook and sockeye are already in the Fraser and marine-approach areas.

Have a safe and successful fishing season!

(Continued next page)

Mike Staley's Fraser Sockeye Updates

Weekly in-season technical updates with Mike Staley (Fisheries Biologist, FRAFS) will be held every Thursday at 4:00 p.m.

The dial-in number is [1.866.512.0904](tel:18665120904) and the participant code is 4954972#.

A reminder will be sent out each week.

First "Spring" salmon of the season.



Tina Donald (Simpchw) with the first "Spring" salmon of the season. This fish was "caught" by the shop class at Clearwater Secondary School.

In today's paper

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Pete Nicklin's Fraser Salmon Update

FRASER RIVER ABORIGINAL FISHERIES SECRETARIAT

c/o Nicola Tribal Association • PO Box 188 • Merritt, BC • V1K 1B8

Tel: 250-378-4235 • Fax: 250-378-9119 | frafs15@gmail.ca • www.frafs.ca



Fraser Salmon Update

By Pete Nicklin, FRAFS Fraser Fisheries Biologist

The Fraser environmental and sockeye update is a summary of information from the July 17th Fraser River Panel distribution, FRAFS in-season update call (July 16th), and July 17th Fraser River Panel teleconference.

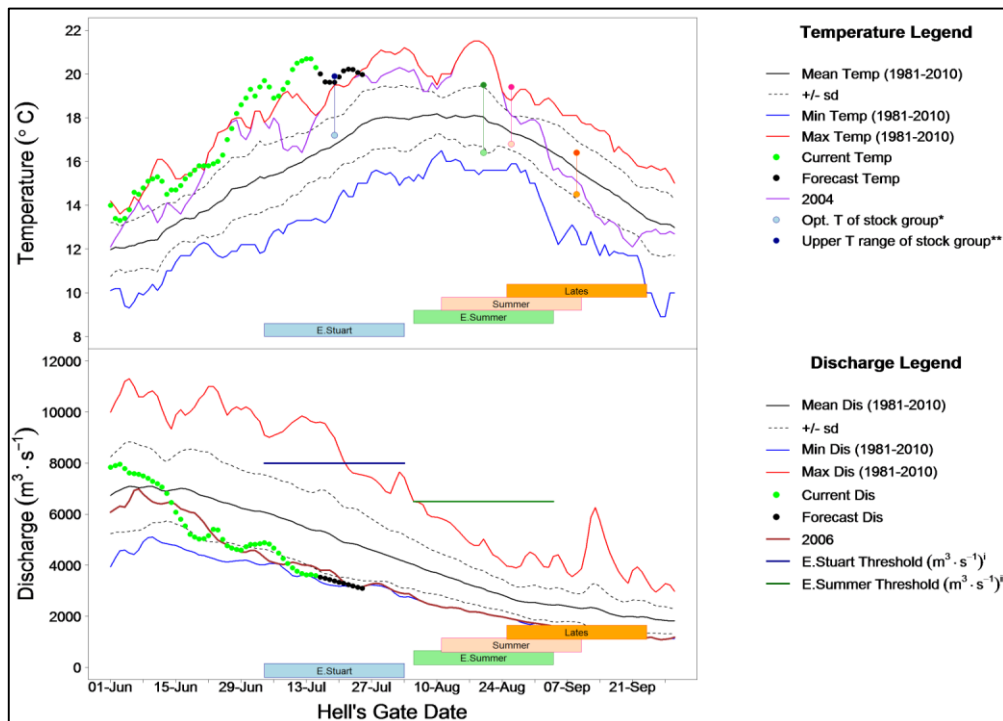
Fraser River Conditions

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 July 17th, 2015):



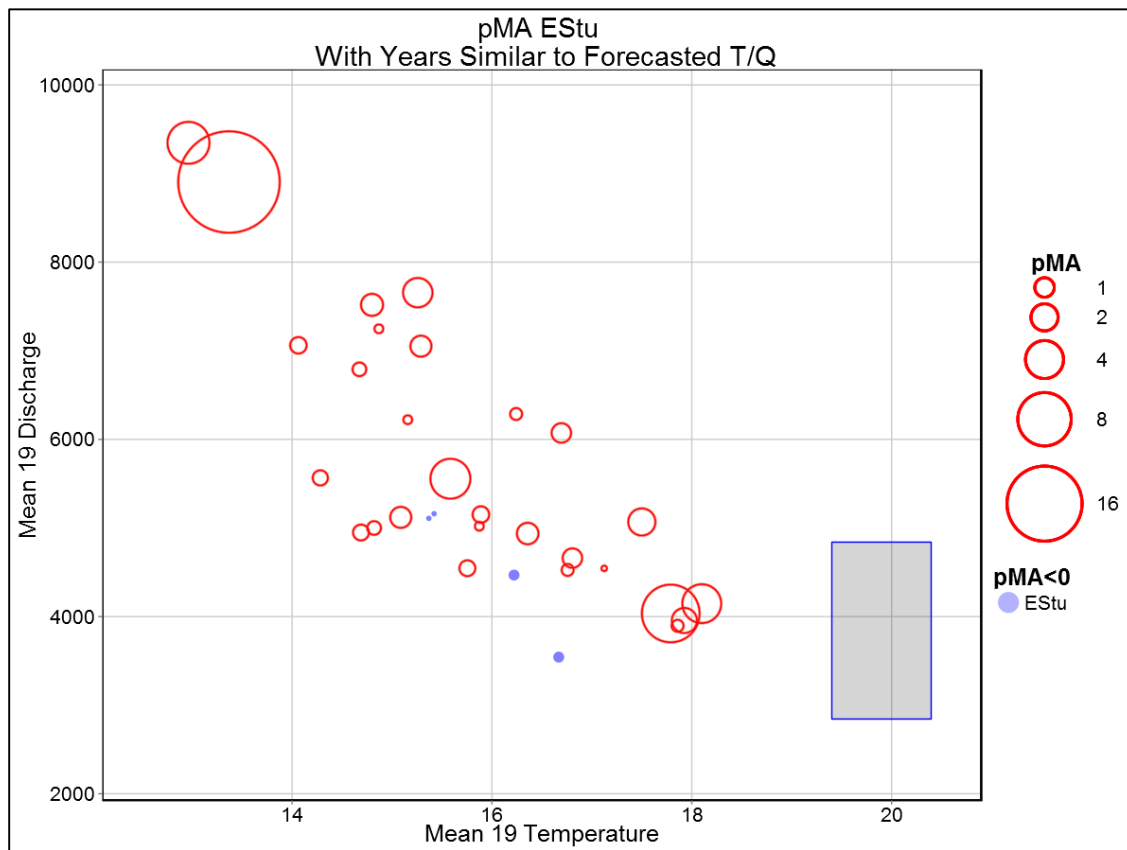


Fraser River Conditions (continued)

The Fraser River water temperature is currently 20.0 degrees Celsius (3.5 degrees Celsius above average for this time of year), and is forecast to increase slightly to 20.2 degrees Celsius by the 22nd of July. These temperatures are at record levels, and have been for the past two weeks. There is no doubt these are extremely high temperatures for migrating sockeye. The Fraser River discharge is also at record low levels for this time of year with a flow of 3,532 m³/sec at the Qualark water station on July 16th (34% below average for this time of year). The discharge is predicted to continue tracking at the minimum observed values, with a forecast discharge of 3,237 m³/sec by July 22nd.

How Hot and How Low is the Fraser?

There is no doubt the Fraser temperatures and the discharge are pushing into a record combination for this time of year. As a result, it is difficult to say how the Early Stuarts (and other sockeye) may be affected during the migration. To give an idea of just how extreme the conditions are, the PSC has developed a “bubble plot” to show how the current Fraser conditions compare to the range of data used to inform the Management Adjustment model. The grey box shows in general where the temperatures and Fraser discharges sit compared to prior years data used to inform the Management Adjustment model.





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>

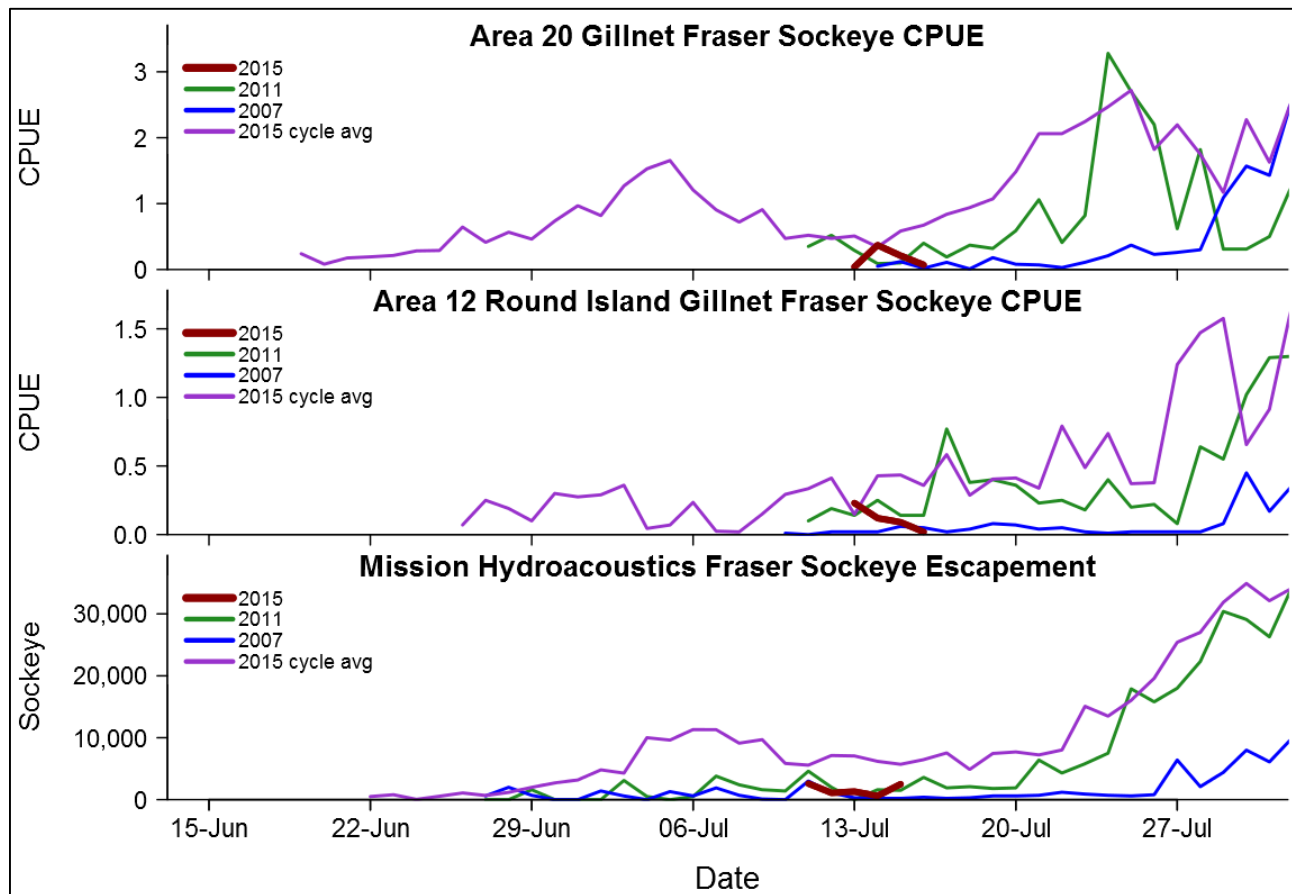
Fraser Sockeye

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 17th, 2015) and the Fraser River Panel meeting from the same day.

It is very early in the sockeye season and information and data flow will be increasing substantially over the next several weeks.

Test fisheries are in place in the Fraser River and both marine-approach areas (Strait of Juan de Fuca and Johnstone Strait). Hydroacoustics programs are in operation at Mission and Qualark (Yale). 8,300 Early Stuart sockeye and 4,800 Early Summer run sockeye have been accounted-to-date. This compares to a pre-season adopted run size of 16,000 (P25 forecast) for the Early Stuarts.

Please go to the next page to see what test fishing graphs and Mission hydro-acoustics information from the PSC distribution package looks like.



Early Stuart Sockeye

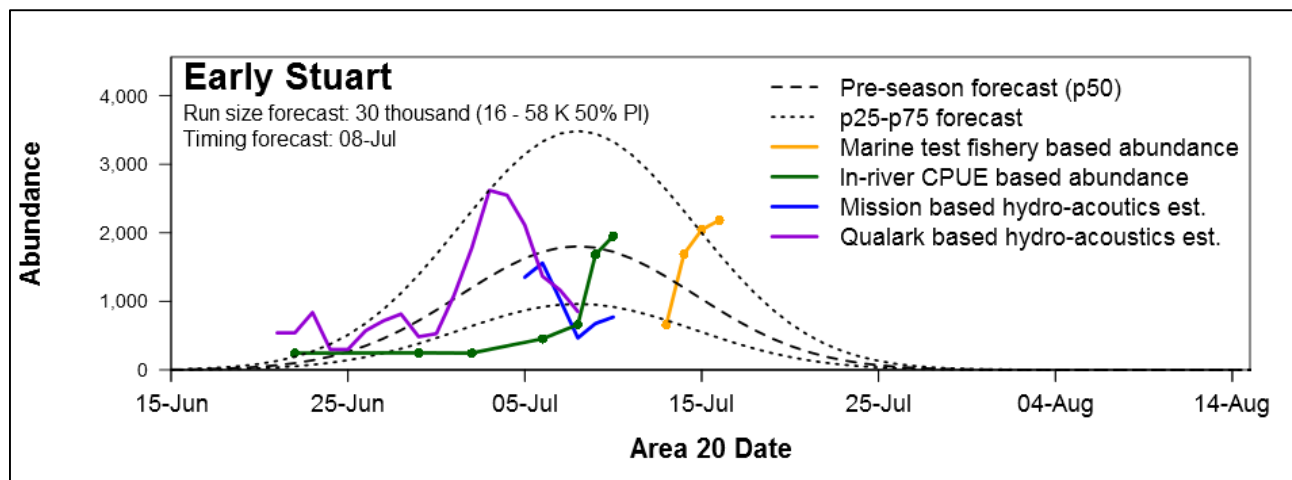
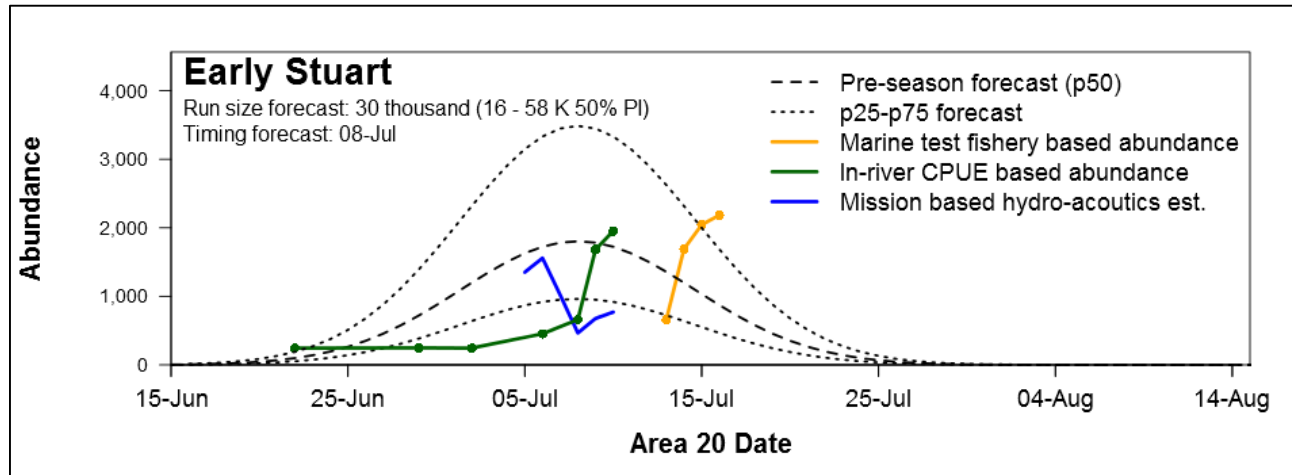
The following graphs show the 2015 Early Stuart estimated abundance and updated in-season timing based on Marine and in-river test fisheries, Mission and Qualark hydro-acoustics compared to forecast. The second graph includes Qualark in-season abundance, but it has not been adjusted according to in-season stock identification. The Qualark line shows the total sockeye passage, which may include stocks other than Early Stuart. The in-river CPUE based abundance is from the Whonnock test fishery, and the marine test fishery abundances are from the Area 12 and Area 20 Gillnet test fisheries. Next week should provide a little more clarity with respect to timing and estimated abundance for the Early Stuarts.

Based on the indications thus far, it looks like the Early Stuarts are falling within the P25 to P75 forecast ranges (16,000 to 58,000). The Early Stuart proportional Management Adjustment (pMA) was not changed from pre-season (0.68) at today's meeting, although based on river conditions it is likely to be increased from the pre-season value at a future Fraser River Panel meeting. Current model predictions for the pMA are much higher than the pre-season value based on current temperature and discharge.

The marine purse seine test fisheries will begin on July 21st, which will provide additional information.



Estimated Abundance and In-Season Timing Compared to Forecast



The next Fraser River Panel meeting is scheduled for **Tuesday, July 21st**.

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



More Links

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>

For more information contact Pete Nicklin by email: pnicklin@telus.net