



WATERSHED TALK

NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

2016 FRASER SALMON UPDATE

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This is the first official 2017 Fraser Salmon Update in Watershed Talk. It is still early in the season, and the overall flow of information and picture will change rapidly over the next few weeks.

For 2017, we will be summarizing the Fraser sockeye forecasts and the Fraser River Panel in-season adopted run sizes at the beginning of each update. This summary had good feedback from readers last year, so we have opted to continue with the format. The table will be updated throughout the in-season as information and decisions become available.

Sockeye Management Group	Pre-Season Planning Forecast (P50)	In-Season Adopted Run Size	Area 20 Timing (for 50% of run)
Early Stuart	99,000	50,000	July 3
Early Summer	343,000	N/A (too early for run size update)	July 24
Summer	3,407,000	N/A (too early for run size update)	Aug 6
Lates	583,000	N/A (too early for run size update)	Aug 14
TOTAL	4,432,000	N/A (too early for run size update)	Aug 5

On the environmental conditions side of things, current Fraser River temperatures are above average but below 18 degrees Celsius (when temperature begins to noticeably affect sockeye). Discharge Flows are slightly low for the time of year but within the range of expected flows. This is good for upstream migration, although very low flows can also be a hindrance to migration in some areas if they continue to drop. The downside to the low flow is the river is more sensitive to daily air temperatures (hot days can move the river temperature quickly).

Compared to last year, there is more snowpack available in the Upper Fraser, and Thompson to keep water temperatures from heating quickly. Although there is some uncertainty with the effect of large wildfires in the Cariboo and how they may affect stream temperatures.

Early Stuarts

The P50 pre-season forecast for Early Stuarts is 99,000. At today's Panel meeting and based on current assessment information, PSC staff recommended that Early Stuart are not expected to meet the pre-season forecast, and appear to be tracking later than forecasted run timing. Yesterday was the first day of matching information from the marine test fishery, and the in-river test fishery, neither of which are catching many fish.

Based on in-season information and the PSC recommendation, the Fraser River Panel adopted an in-season run size of 50,000 with July 3rd timing. This is below the preseason forecast of p25 (64,000) and above the p10 forecast (42,000). Early Stuarts will be managed to a 10% LAER (Low Abundance Exploitation Rate) of 5,000 fish allowable mortality.

Early Summers

Early Summers are forecasted at 343,000 (P50). It is still too early for an in-season run size estimate for this management group. Based on model information presented at the Panel, the run is either late or low (or both), it is still too early to make a formal decision.

Summer Run

Summers are forecasted at 3,407,000 (P50). It is still too early for an in-season run size estimate for this management group, as the first of these sockeye have only just started to show in the stock identification test fisheries.

Late Sockeye

Lates are forecasted at 583,000 (P50). It is still too early for an in-season run size estimate for this management group.

Sockeye Closures

The Early Stuart 3 week and partial Early Summer 1 week window closures are still in place for the Fraser River and parts of the marine approach area. The dates for each region are in the table below, from the 2017-2018 Southern Salmon IFMP (p. 387):

Area	Start (date, time)	End (date, time)	Management Action
Areas 24 to 27, 111, 121, 123 to 127	Open 21-Jul, 7 days/week		Earliest potential opening to FN FSC fishing for Fraser sockeye = July 21 (Sn, Gn, Tr)
Area 11	Open 21-Jul, 7 days/week		Earliest potential opening to FN FSC fishing for Fraser sockeye = July 21 (Gn, Tr); July 25 (Sn) ^{1,2}
Area 12	Open 21-Jul, 7 days/week		Earliest potential opening to FN FSC fishing for Fraser sockeye = July 21 (Gn, Tr); July 25 (Sn) ^{1,2}
Area 13	Open 21-Jul, 7 days/week		Earliest potential opening to FN FSC fishing for Fraser sockeye = July 21 (Gn, Tr); July 25 (Sn) ^{1,2}
Areas 14 to 16	Open 21-Jul, 7 days/week		Earliest potential opening to FN FSC fishing for Fraser sockeye = July 21 (Gn, Tr); Aug 15 (Sn) ¹
Areas 17, 19, 20 and 21	Open 21-Jul, 7 days/week		Earliest potential opening to FN FSC fishing for Fraser sockeye = July 21 (Sn, Gn, Tr)
Areas 18 and 29	26-Jun Noon	27-Jul Noon	Earliest potential opening to FNs FSC fishing for Fraser sockeye = July 27, noon
Mission Bridge-Sawmill Cr	27-Jun 6:00 AM	29-Jul 6:00 AM	Earliest potential opening to FNs FSC fishing for Fraser sockeye = July 29, noon
Sawmill Cr-Texas Cr	03-Jul 6:00 PM	31-Jul 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net, angling and potential for 8" mesh gill net) and open in trib for sox and chinook.
Texas Cr-Kelly Cr	03-Jul 6:00 PM	31-Jul 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net, angling and potential for 8" mesh gill net) and open in trib for sox and chinook.
Kelly Cr-Deadman	03-Jul 6:00 PM	31-Jul 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net, angling and potential for 8" mesh gill net) and open in trib for sox and chinook.
Deadman-Chilcotin	06-Jul 6:00 PM	03-Aug 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net, angling and potential for 8" mesh gill net) and open in trib for sox and chinook.
Chilcotin-Quesnel	06-Jul 6:00 PM	03-Aug 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net, angling and potential for 8" mesh gill net) and open in trib for sox and chinook.
Quesnel-Hixon	06-Jul 6:00 PM	03-Aug 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net, angling and potential for 8" mesh gill net) and open in trib for sox and chinook.
Hixon-Prince George	10-Jul 6:00 PM	07-Aug 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net and 8" mesh gill net) and open in trib for sox and chinook.
Prince George-Stuart R	10-Jul 6:00 PM	07-Aug 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net and 8" mesh gill net) and open in trib for sox and chinook.

¹ Gear restrictions remain in place to protect Siskinaw sockeye until July 25 (Queen Charlotte and Johnstone Straits) and August 15 (northern Strait of Georgia).

² Additional sockeye closures may remain in place in portions of Areas 11 and 12 until late July in waters north of Lewis Point to protect Nimpkish sockeye.

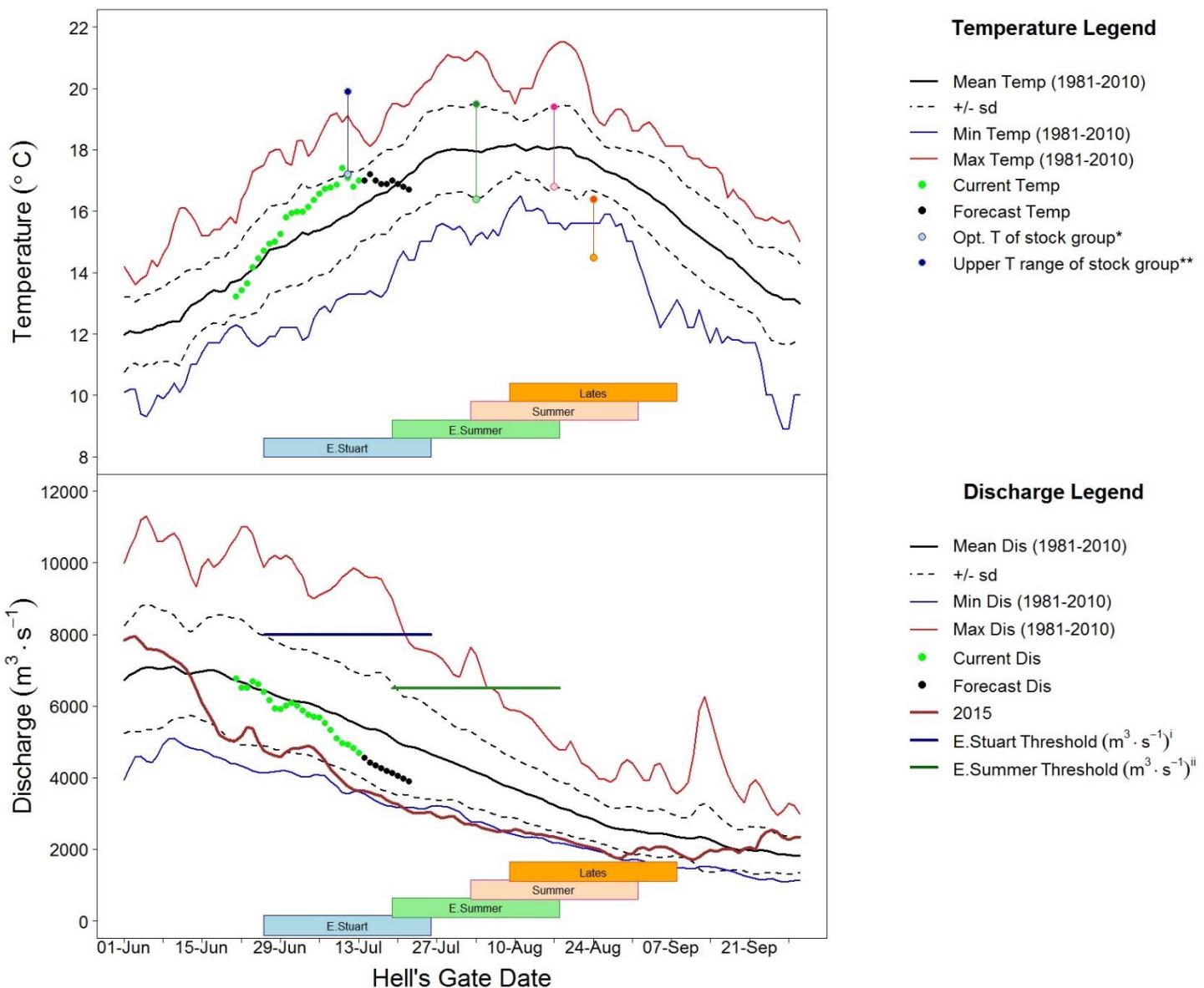
Fraser River Conditions

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 14th, 2017):



The Fraser River water temperature at Hope is currently 17.0 degrees Celsius (0.9 degrees Celsius above average for this time of year), and is forecast to decrease to just less than 17.0 degrees Celsius by July 19th. The Fraser River discharge continues to track at low levels for this time of year with a flow of 4,693 m³/sec at the Qualark water station on July 13th (14% below average for this time of year). The discharge is predicted to continue tracking below average, with a forecast discharge of 4,125 m³/sec by July 19th.

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>

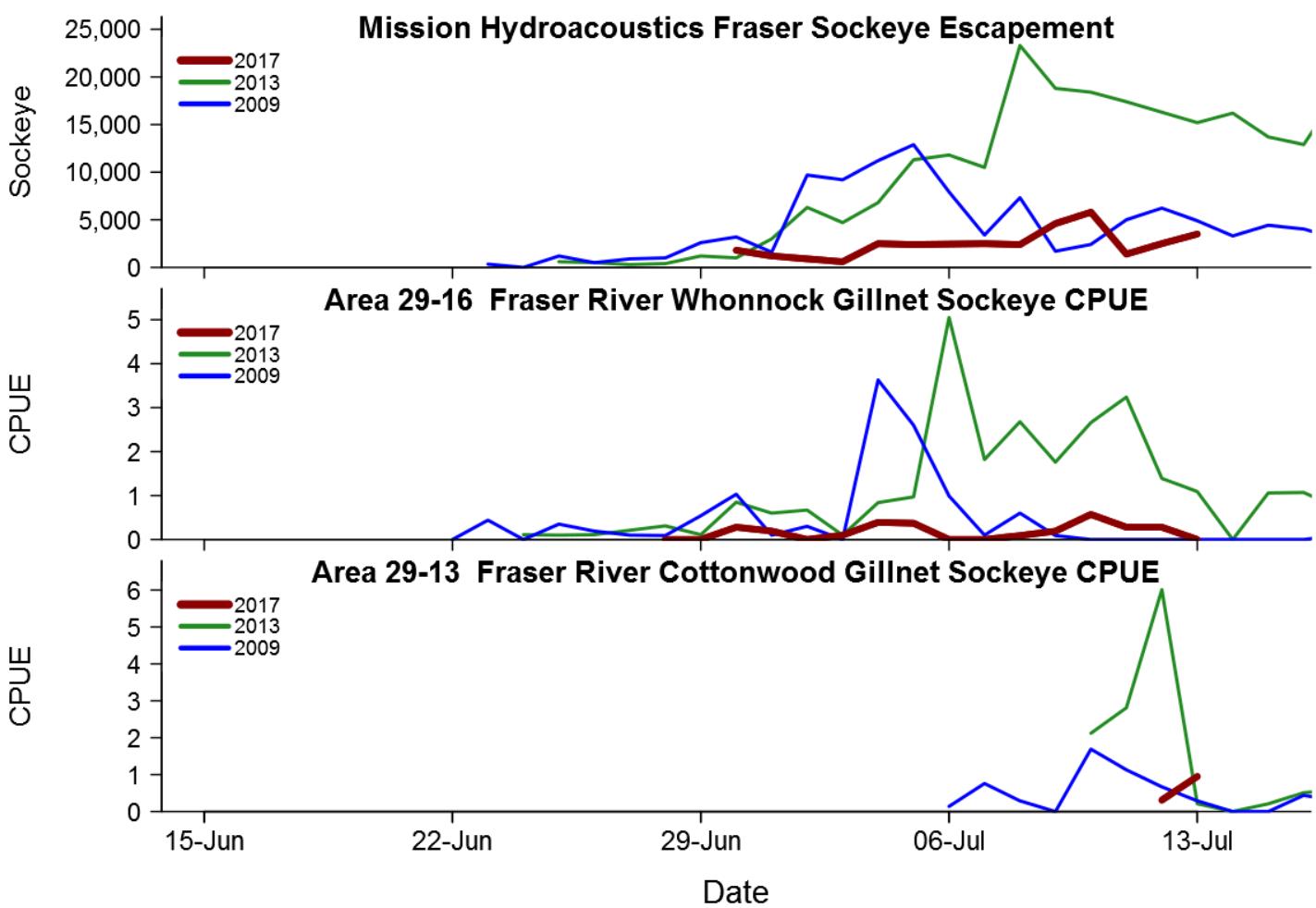
DFO staff have distributed 3 Fraser Salmon Bulletins, and we strongly encourage people to review and comment on the DFO bulletin if time and resources permit. Contact your local DFO Resource Manager for a copy, and addition to the distribution list.

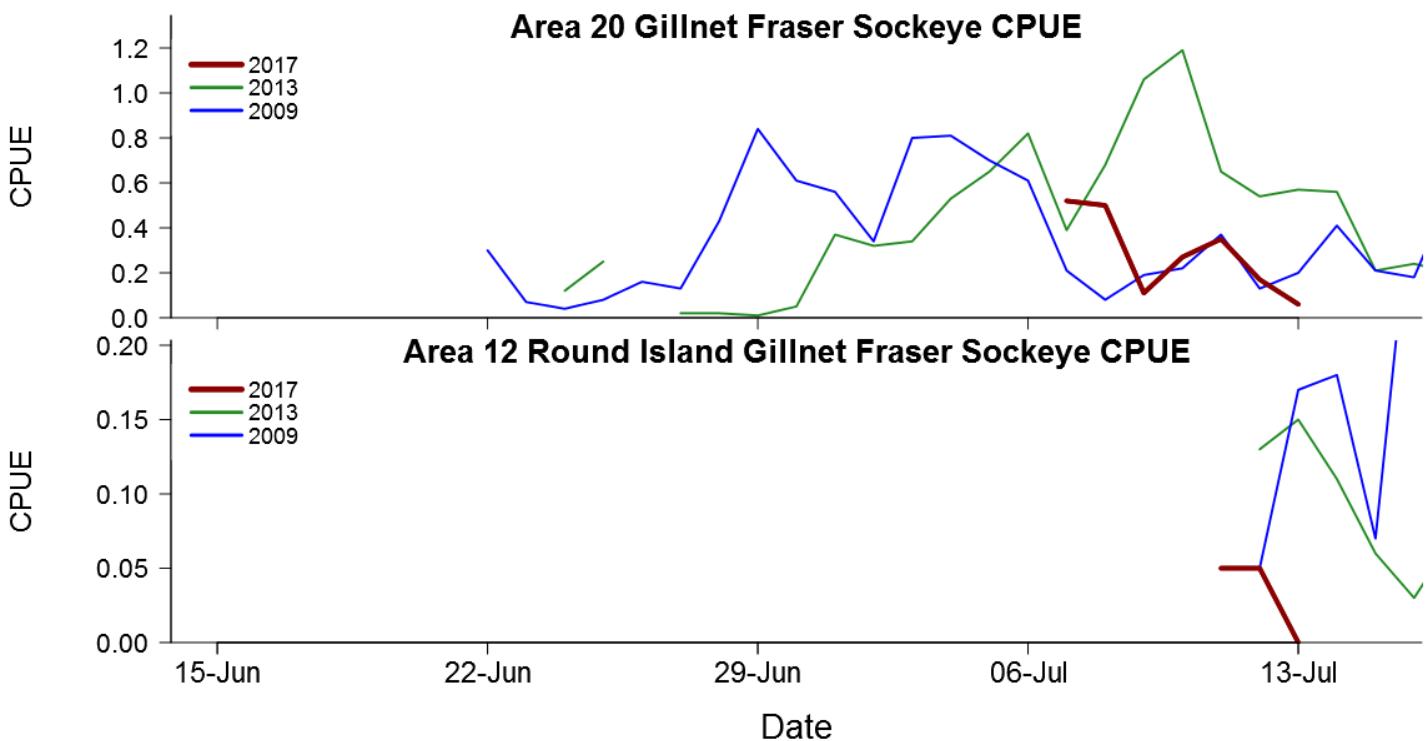
Fraser Sockeye & Pink Salmon

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 (July 14th, 2017) and the Fraser River Panel meeting from the same day.

Test fisheries (gillnet) 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), but high flows have made some days unusable at Qualark. A total of 34,800 Fraser sockeye have been accounted-to-date, comprised of almost 27,400 Early Stuart sockeye, 6,600 Early Summer run sockeye and 800 Summers. Stock Identification analysis from the marine and river test fisheries shows Early Stuart, Early Summers, and the beginning of the Summer migration, the proportion of fish in the DNA samples (variety of stock proportions) is due to low overall returns for all stocks and corresponding low sample sizes.

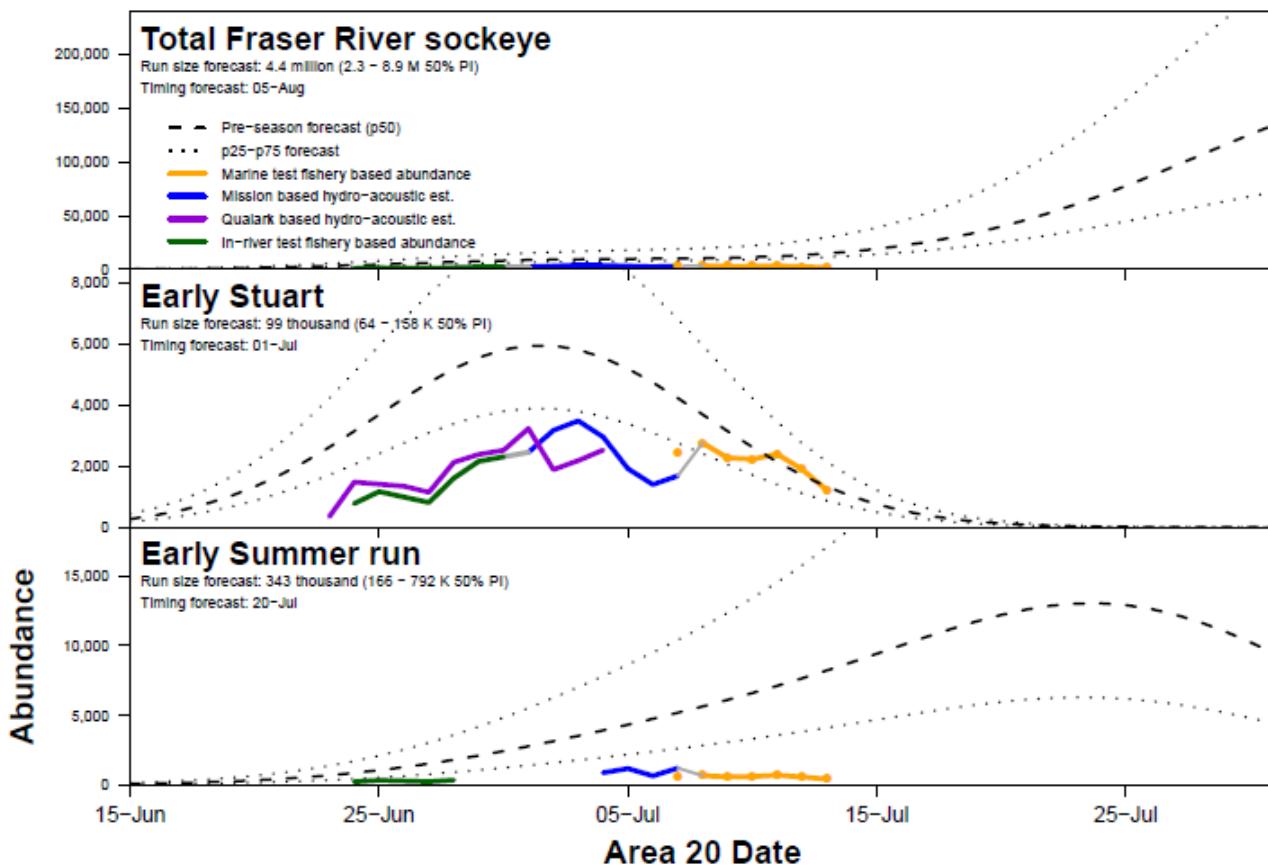
Test fishing graphs and Mission hydro-acoustics information from the PSC distribution package look like this:





Estimated Abundance and In-Season Timing Compared to Forecast

2017 Fraser River sockeye daily migration abundance



The next Fraser River Panel meeting is scheduled for 11AM Tuesday July 18th.

Links

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

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>

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