



WATERSHED TALK

NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

2017 FRASER SALMON UPDATE

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Continuing poor test fishery and hydroacoustic sockeye abundances do not show much good news for Fraser sockeye to date. Most Fraser sockeye stocks are tracking around the P25 to P10 forecast, which means restricted FSC fishing for First Nations, and no commercial or recreational directed Fraser sockeye fisheries. There has been a slight increase in marine test fishery catches yesterday, but we will need to see the catches increase substantially over the weekend for this to influence management and fisheries. We are all hoping to see test fishery catch increase over the next few days as Chilko and other Summer sockeye begin to show up in the test fisheries, and hopefully provide enough fish for sockeye directed fisheries in the next few weeks.

To date there have been extremely limited FSC Fraser sockeye directed fisheries in terminal areas, and no recreational or commercial fisheries for Fraser sockeye. There have been some small chinook directed fisheries that have taken a few sockeye, but these are all managed for a LAER. The only directed mixed stock sockeye fisheries are the Fraser River Panel run test fisheries, which are used to develop run size estimates and species/stock composition. These test fisheries catch a minimal amount of sockeye, and are justified by DFO as a conservation requirement for Fraser sockeye.

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	166,000	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 have begun to increase again at Hope. Discharge Flows have stayed low, and are tracking near the lowest discharge in the range from 1981-2010. 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, which is forecasted to increase over the next few days (hot days can move the river temperature quickly).

Early Stuarts

The Fraser River Panel made no change to the in-season run size of 50,000 with July 3rd timing at today's Panel meeting. Early Stuarts are being managed to a 10% LAER (Low Abundance Exploitation Rate) of 5,000 fish allowable mortality (although only 4500 of that is set aside for First Nations food fisheries, with 500 designated for test fisheries).

To date 44,070 Early Stuarts have been accounted past Mission, with a couple thousand estimated seaward. The Fraser River Panel decided to hold off on adopting an adjusted MA (Management Adjustment) until more environmental data is verified next week.

Early Summers

Early Summer abundance was downgraded to the P25 forecast level of 166,000 at the Tuesday July 25th Fraser River Panel meeting. To date, the Chilliwack sockeye run has not appeared anywhere close to the P50 forecast (tracking a little more than the P10 level), which make up nearly a quarter of the Early Summer aggregate and the early part of the Early Summer migration.

The other major stocks in the Early Summer aggregate have yet to reach their average run-timing in-river but the observed marine run-timing appears to be tracking close to average. The Early Summer aggregates (without Chilliwack) are tracking at the P10 level. The latest stock identification information has showed a shift from Early Summer to Summer, which could mean that the Early Summer aggregate is on time (or nearly on time) and low. We will track the stock identification closely over the weekend, and there is a possibility the Early Summers will be further downgraded at next Tuesday's Panel meeting.

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, but Summer run sockeye are not showing up to date near the P50 level, and PSC reminded the Panel of DFO Science's pre-season recommendation of emphasis on the P25 forecast level.

Due to the observed shift in stock identification in the last few days from Early Summer to Summer, this could indicate the start of the Summer run. Hopefully we will see Chilko show up in the stock identification, as they are the majority of the Summer run aggregate.

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 some parts the Fraser River. The window closure is lifted in the marine area and starting to lift in the river starting July 27th (however due to low Fraser sockeye abundance, sockeye fisheries will be extremely restricted) onward as Early Stuarts make their way up the river. 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
Steveston-Mission Bridge	26-Jun Noon	27-Jul 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	
Kelly Cr-Deadman	03-Jul 6:00 PM	31-Jul 6:00 PM	
Deadman-Chilcotin	06-Jul 6:00 PM	03-Aug 6:00 PM	FNs FSC: Open to selective fishing for chinook (dip net, angling) and open in trib for sox and chinook.
Chilcotin-Quesnel	06-Jul 6:00 PM	03-Aug 6:00 PM	
Quesnel-Hixon	06-Jul 6:00 PM	03-Aug 6:00 PM	
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: some allowable harvest in terminal areas.

¹ Gear restrictions remain in place to protect Sakanaw 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.

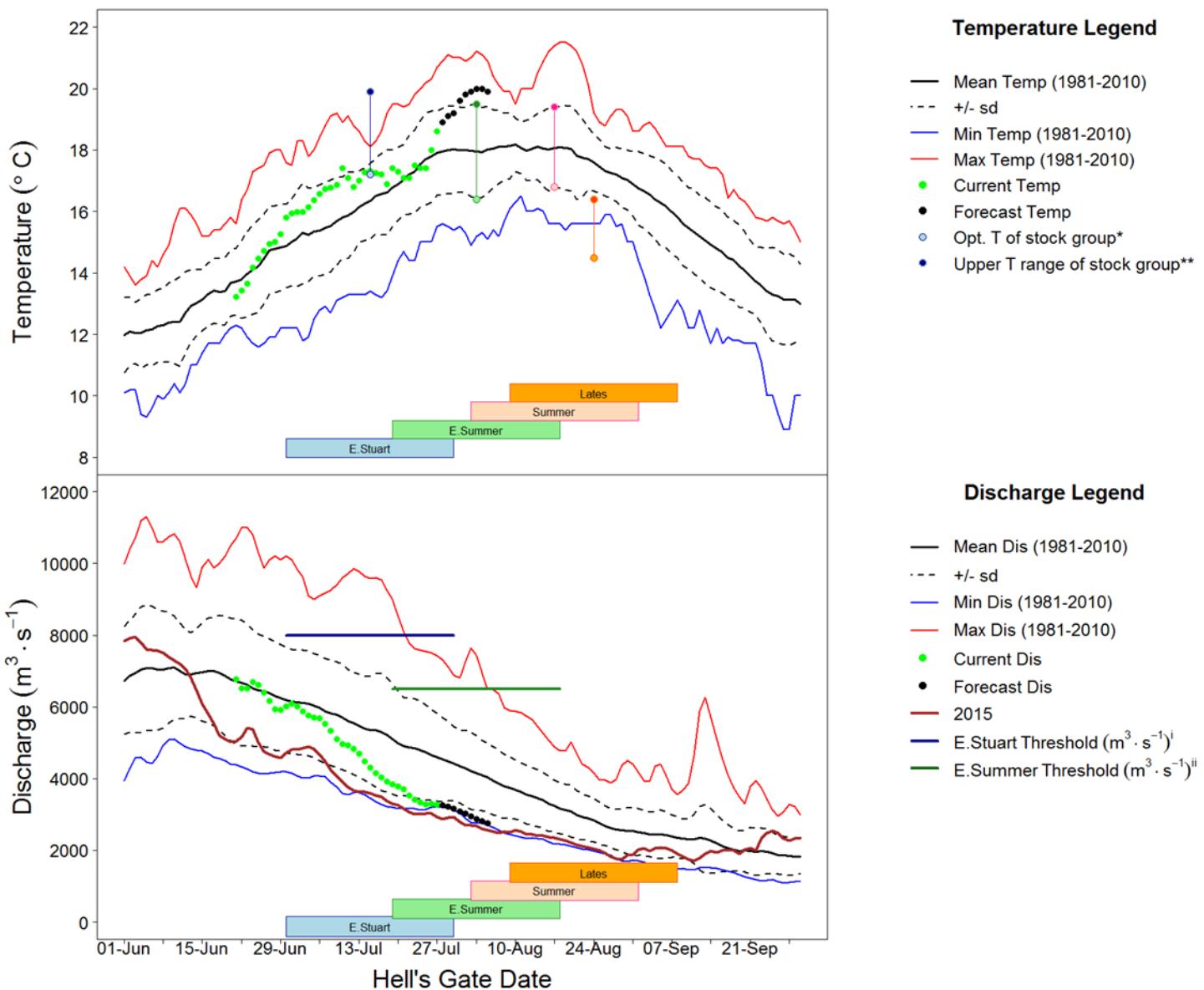
Fraser River Conditions

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 28th, 2017):



The Fraser River water temperature at Hope is currently 18.6 degrees Celsius (0.7 degrees Celsius above average for this time of year), and is forecast to increase to 19.9 degrees Celsius by August 2nd. The Fraser River discharge continues to track at low levels for this time of year with a flow of 3,280 m^3 /sec at the Qualark water station on July 27th (29% below average for this time of year). The discharge is predicted to continue tracking below average, with a forecast discharge of 2,947 m^3 /s on August 2nd.

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 5 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

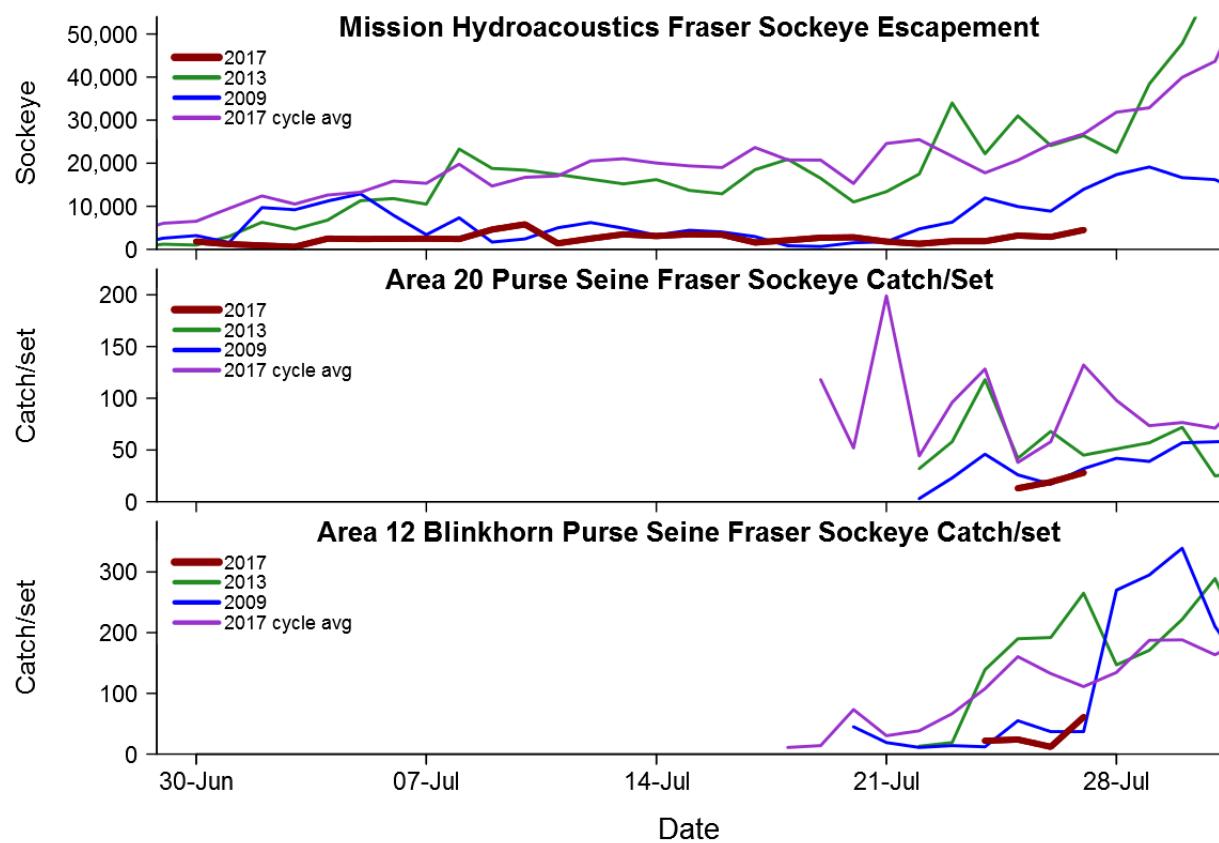
The Pacific Salmon Commission (PSC) distributes the Fraser River Panel meeting agenda and technical information for Panel members and observers to the process. The following information is a summary of key information from that document (July 28th, 2017) and the Fraser River Panel meeting from the same day.

The Fraser River Panel adopted an in-season run size for the Early Summer run sockeye aggregate at the P25 level of 166,000 on Tuesday. Although the Early Summer aggregate continues to track closer to the P10 forecast, the Fraser Panel decided to hold off on a second update to the in-season run size until next Tuesday. Fraser sockeye fisheries are being managed to the current adopted in-season run size of 166,000, which does not provide for International TAC (Total Allowable Catch) and no directed fisheries on Early Summers (with some exceptions).

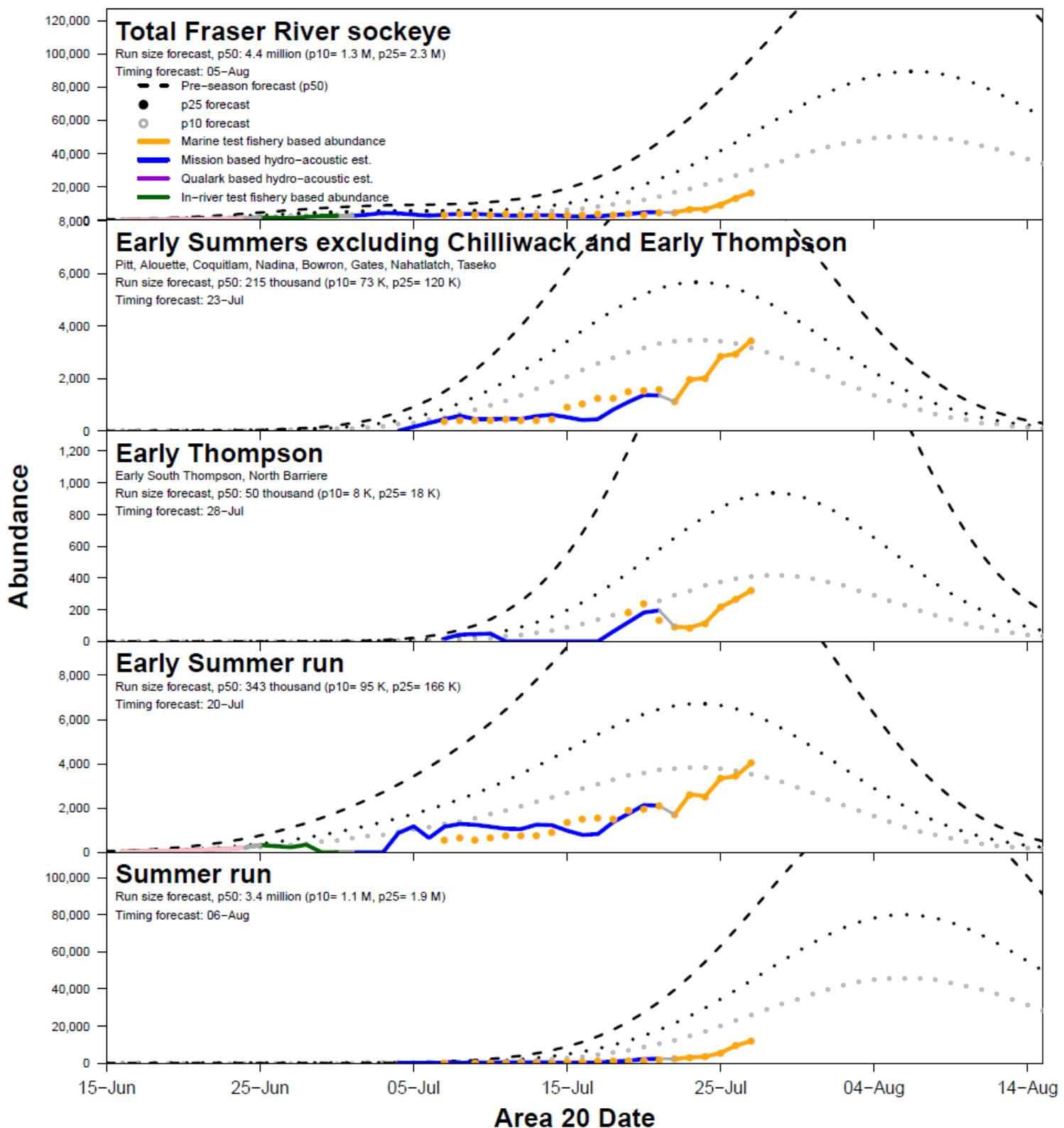
A total of 80,500 Fraser sockeye have been accounted-to-date past Mission, comprised of almost 43,900 Early Stuart sockeye, 25,200 Early Summer run sockeye and 11,400 Summers. There are an estimated 58,500 en route in the marine area. The marine test fisheries have began to increase slightly in catch, but are still tracking well below what would be expected to date. Stock Identification analysis continue to have issues with small sample sizes in-river, but some marine test fisheries are seeing catches sufficient to provide reasonable estimates.

Based on the low marine test fishery abundance thus far, the Panel decided to delay the start up of the Area 13 Purse Seine test fishery by three days (start Monday July 31).

Test fishing graphs, Mission hydro-acoustics and Daily Migration information from the PSC distribution package are below, please note that the daily migration run timing curves show P10, P25 and P50 **not** P25, P50 and P75:



2017 Fraser River sockeye daily migration abundance



The next Fraser River Panel meeting is scheduled for 10:30AM Tuesday August 1st.

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>

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