



# WATERSHED TALK

## NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

### FRAFS COMMUNICATIONS COORDINATOR

FRAFS would like to welcome **Allison James** from the Xwisten First Nation (Bridge River) as the newly hired Communications Coordinator. The next edition of Watershed Talk will include Allison's bio as an introduction and background. Congratulations Allison!

### 2017 FRASER SALMON UPDATE

*By: Pete Nicklin and Aidan Neill, FRAFS Biologists*

Unfortunately, not much has changed since last week's Watershed Talk. There were no changes made to the Early Summer Run size, but it appears a Summer Run size in-season update could happen within the next week. **All information indicates an overall much lower than expected Fraser sockeye return.**

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 was an increase in Area 12 marine test fishery catches yesterday, but catches will need to increase substantially over the next couple of weeks for this to indicate a Summer Run abundance at the P50 forecast level. Summer Run stocks are now the dominant management group identified in marine and in-river test fisheries.

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	N/A
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
<b>TOTAL</b>	<b>4,432,000</b>	N/A (too early for run size update)	Aug 5

On the environmental conditions side of things, current Fraser River temperatures are slightly above average, but appear to have been moderated by the wildfire smoke covering a significant part of the Fraser watershed. 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

As the last of the Early Stuart window closures come off the upper Fraser (August 7<sup>th</sup>), the management of this stock group is moving to the enumeration phase on the spawning grounds. The accounted run to date is 45,480, and no changes were made to the in-season adopted run size of 50,000 at the Friday August 4<sup>th</sup> Fraser River Panel meeting.

### Early Summers

**No further downgrades have been made to the Early Summers since the 166,000 (P25 forecast) was adopted last week.** The Early Summers in total are tracking between the P10 and P25 forecast abundance levels, with the Pitt stock appearing to be the strongest component of the Early Summers relative to pre-season expectations, and making up the vast majority of the estimated abundance. **Pitt sockeye leave the mainstem Fraser downstream from Mission, which means there are very few Early Summer sockeye expected to return to the Thompson system and the Upper Fraser.** At this current run size there is no international TAC available.

### Summer Run

**Summers** are forecasted at 3,407,000 (P50). It is still a little 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. Current abundances are tracking below the P10 forecast level based on expected pre-season timing at Area 20. A Summer Run in-season update could happen within the next week.

### 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. All components of this management group have been identified in marine test fisheries, but it is still early in the return of this 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 (areas within the Nechako system and north of Hixon). The window closure is lifted in the marine area and most of the Fraser, (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) <sup>1,2</sup>
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) <sup>1,2</sup>
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) <sup>1</sup>
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) <sup>1</sup>
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 FN's 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 FN's FSC fishing for Fraser sockeye = July 29, noon
Sawmill Cr-Texas Cr	03-Jul 6:00 PM	31-Jul 6:00 PM	FN's FSC: Open to selective fishing for chinook (dip net, angling and potential for 8" mesh gill net) and open in tribs 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	FN's FSC: Open to selective fishing for chinook (dip net, angling) and open in tribs 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	FN's FSC: Open to selective fishing for chinook (dip net and 8" mesh gill net) and open in tribs for sox and chinook.
Prince George-Stuart R	10-Jul 6:00 PM	07-Aug 6:00 PM	

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

<sup>2</sup> 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.

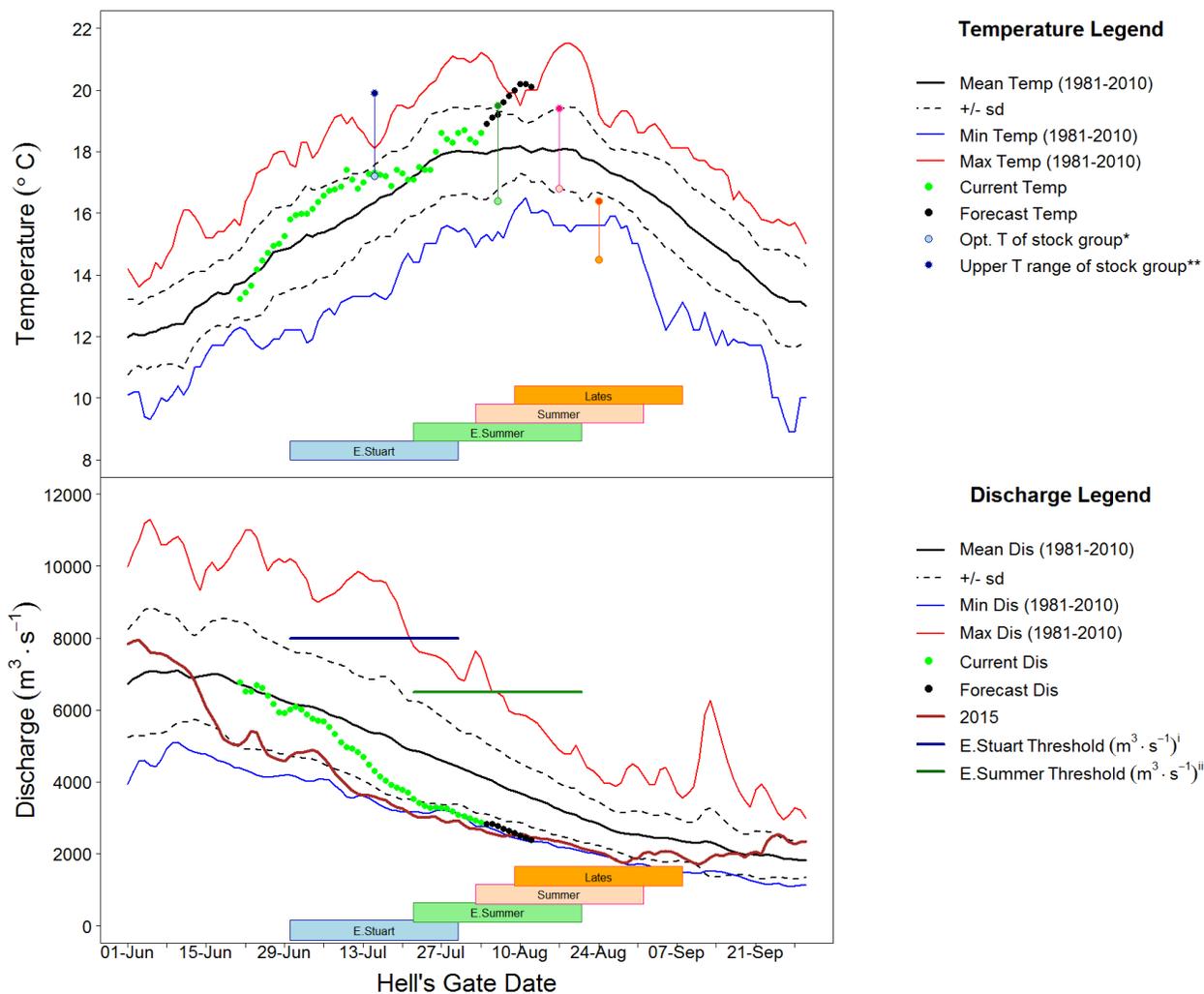
## Fraser River Conditions

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 August 4<sup>th</sup>, 2017):



The Fraser River water temperature at Hope is currently 18.6 degrees Celsius (0.6 degrees Celsius above average for this time of year), and is forecast to increase to 20 degrees Celsius by August 9<sup>th</sup>. The Fraser River discharge continues to track at low levels for this time of year with a flow of 2,870 m<sup>3</sup>/sec at the Qualark water station on August 3<sup>rd</sup> (31% below average for this time of year). The discharge is predicted to continue tracking below average, with a forecast discharge of 2,574 m<sup>3</sup>/s on August 9<sup>th</sup>.

## **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 6 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**

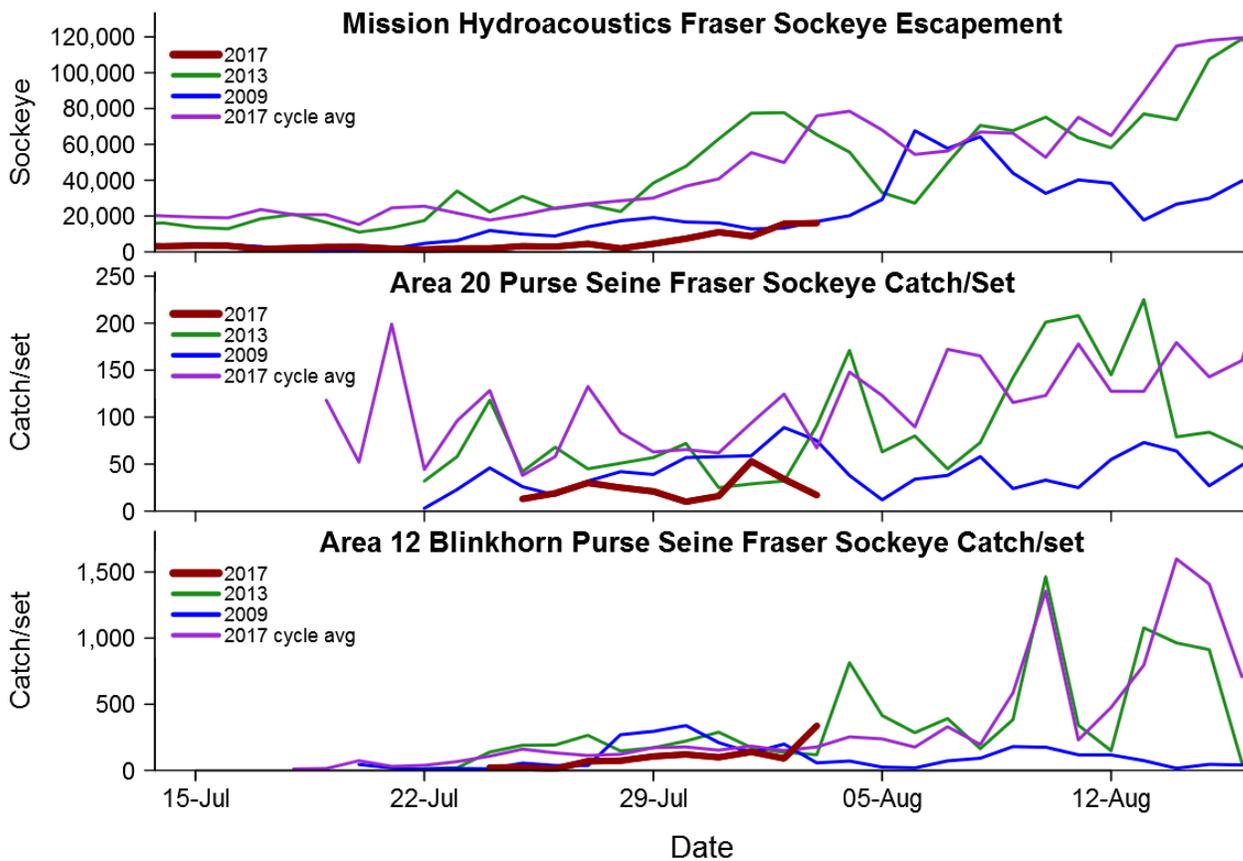
The Pacific Salmon Commission (PSC) distributes the Fraser River Panel meeting agenda and technical information for Panel members and observers to the process. The following information is a summary of key information from that document (August 4<sup>th</sup>, 2017) and the Fraser River Panel meeting 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 July 25<sup>th</sup>. There were no further changes to the run size this week, and the run appears to be tracking between the P10 and P25 forecast, mainly on the relative strength of the Pitt component. 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 171,250 Fraser sockeye have been accounted-to-date past Mission, comprised of almost 45,480 Early Stuart sockeye, 53,740 Early Summer run sockeye, 71,530 Summers and 500 Lates. The marine test fisheries have begun to increase slightly in catch, but are still tracking well below what would be expected to date. Stock identification in the marine area shows the Summer Run dominating the recent samples.

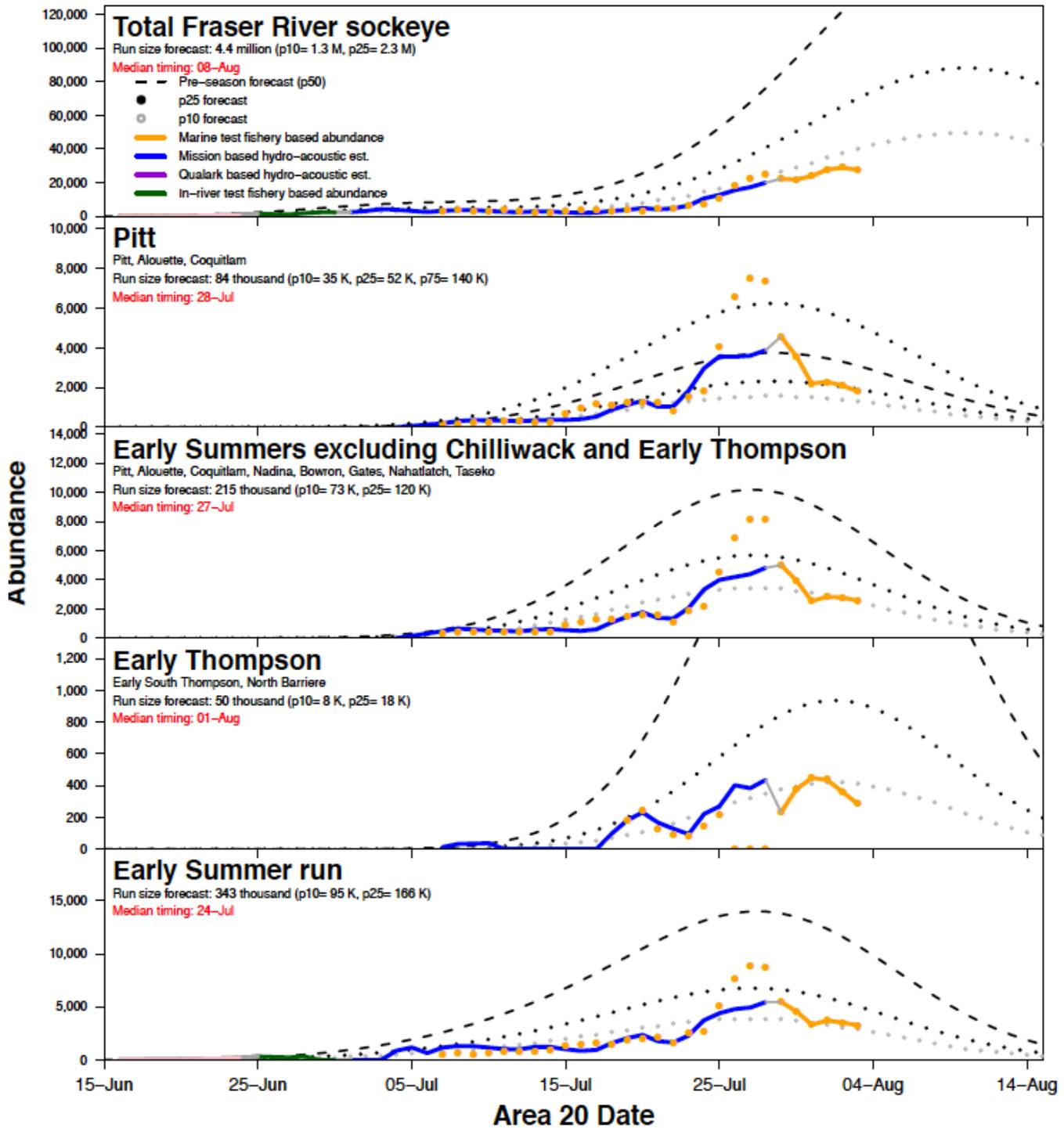
All Canadian marine test fisheries are now in operation through both the northern and southern approach routes.

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:



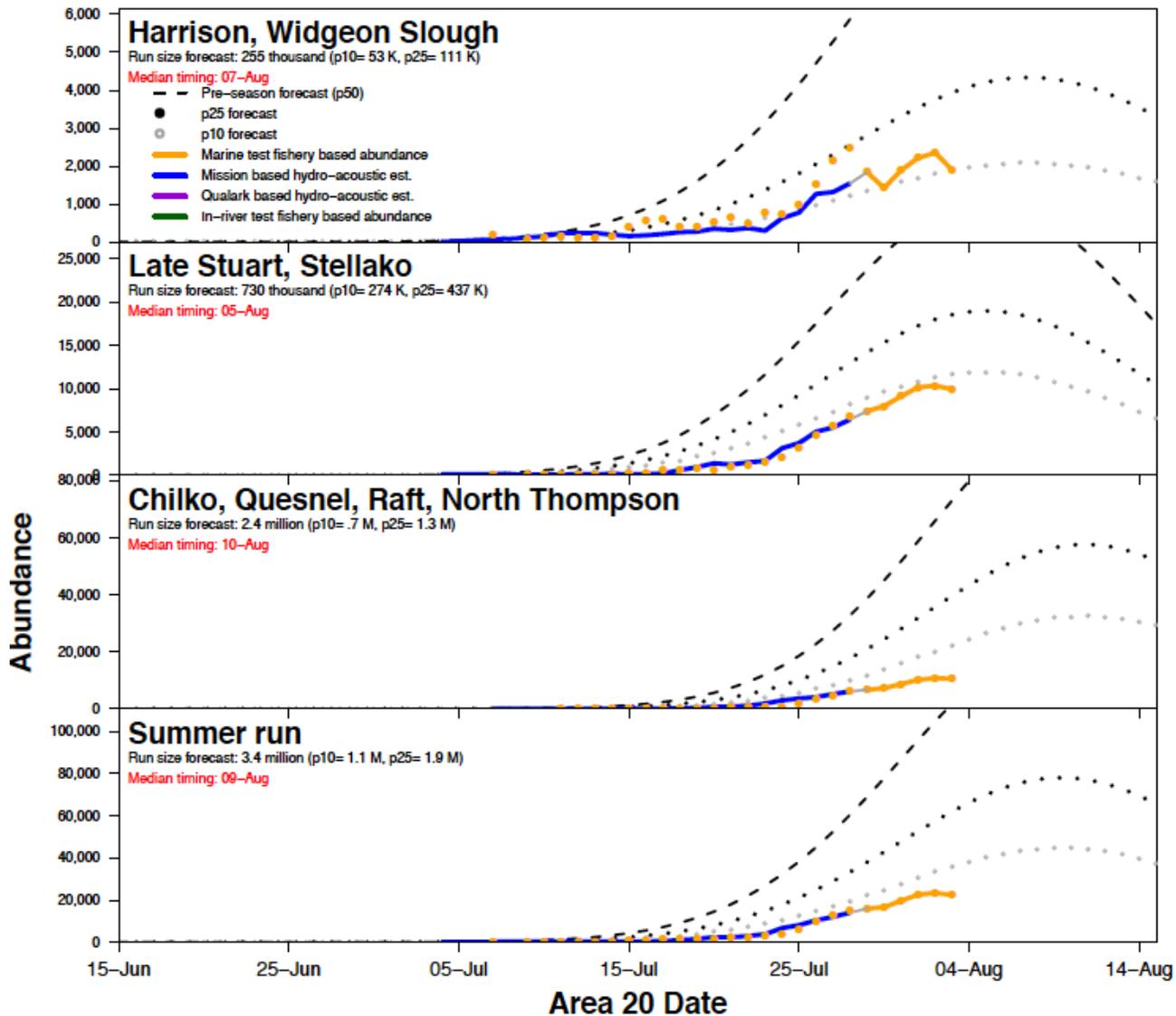
# 2017 Fraser River sockeye daily migration abundance

## Using median timing estimates



# 2017 Fraser River sockeye daily migration abundance

## Using median timing estimates



The next Fraser River Panel meeting is scheduled for 10:30AM Tuesday August 8<sup>th</sup>.

### 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](http://www.wateroffice.ec.gc.ca/index_e.html)

Pacific Salmon Commission Website: [www.psc.org](http://www.psc.org)

Pacific Salmon Commission Test Fisheries: [http://www.psc.org/info\\_testfishing.htm](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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