



WATERSHED TALK

NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

2017 FRASER SALMON UPDATE

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So far, the Fraser sockeye return hasn't provided much good news and has yet to show up in much abundance in the marine approach routes or in-river. The earliest timed arrivals appear to be tracking at or below the P25 forecast. To date, sockeye passage past Mission is 55,500. It is still too early for any information on Summer run sockeye, but Early Stuart and Early Summers are not showing up near the P50 forecast.

To date there have not been any FSC Fraser sockeye directed fisheries, nor have there been any recreational or commercial fisheries for Fraser sockeye. The only directed fisheries for sockeye 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 | 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 have dropped to near average temperatures. Discharge Flows continue to drop, 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 (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.

Early Stuarts

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 last Friday (July 14th). 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 (although only 4500 of that is set aside for First Nations food fisheries, with 500 designated for test fisheries).

Another week's worth of information shows that the adopted 50,000 Early Stuart is close to the up-to-date catch and escapement and projected seaward Early Stuarts. 40,000 Early Stuart are accounted to date in catch and escapement, with an estimate of 4,000 projected 6-day abundance.

Early Summers

Early Summers are forecasted at 343,000 (P50). To date, the Chilliwack sockeye run has not appeared anywhere close to the P50 forecast, which make up nearly a quarter of the Early Summer aggregate. The other major stocks in the Early Summer aggregate have yet to reach their average run-timing. In case they are later than usual, there is still a chance for them to appear in some abundance. The message from the today's Fraser River Panel meeting is Early Summers are either late or low, or both. The Panel decided to make a provisional decision next Tuesday for an Early Summer aggregate in-season run-size, once more information is available for most of the Early Summer sockeye stocks.

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. The window closure is lifted in some parts of the marine area starting July 21 (however due to low Fraser sockeye abundance, First Nation fisheries won't be opened yet) 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 |
| 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 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 | FN's FSC: some allowable harvest in terminal areas. |

¹ Gear restrictions remain in place to protect Sakinaw 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.

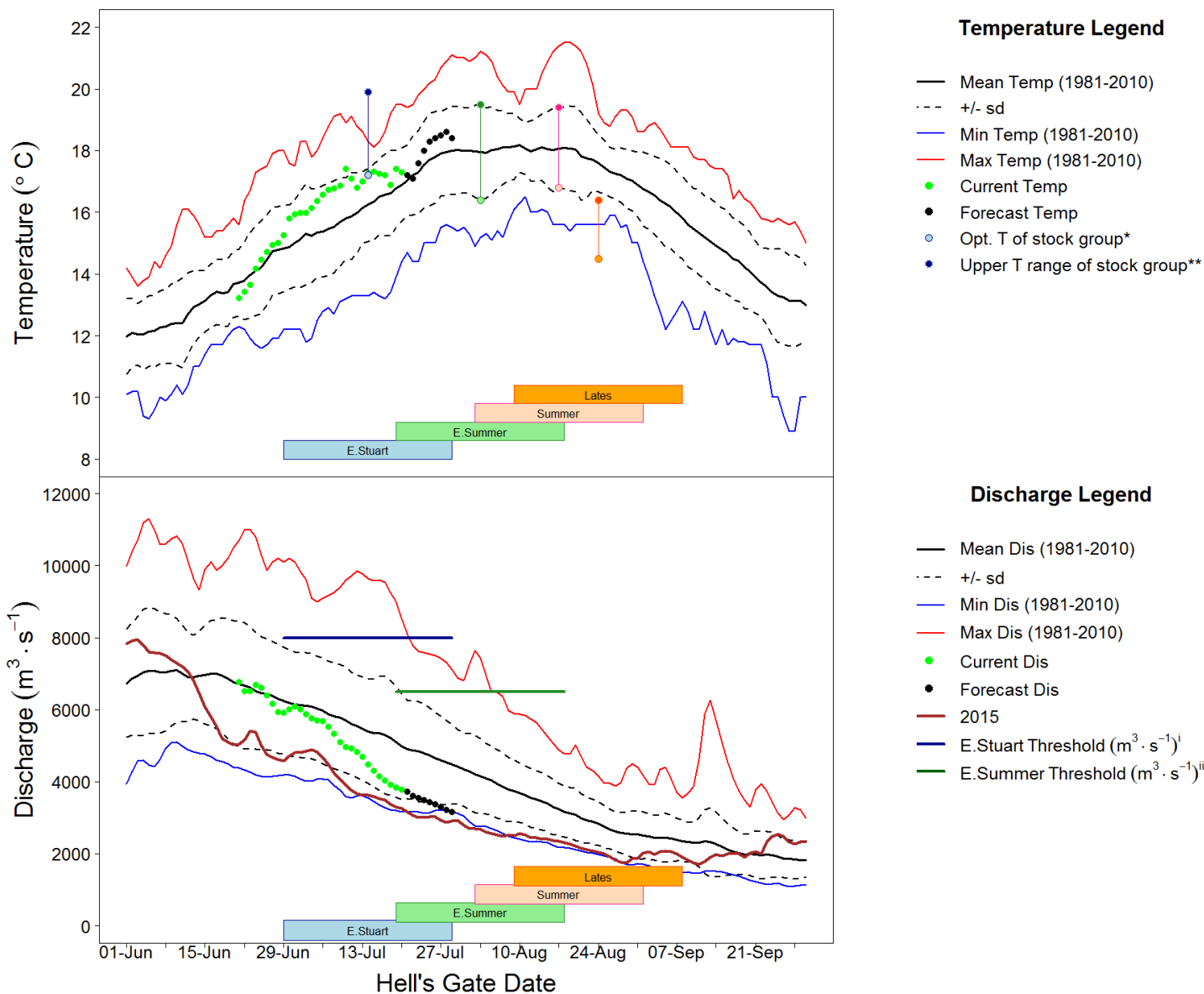
Fraser River Conditions

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 21st, 2017):



The Fraser River water temperature at Hope is currently 17.3 degrees Celsius (0.4 degrees Celsius above average for this time of year), and is forecast to increase to 18.4 degrees Celsius by July 26th. The Fraser River discharge continues to track at low levels for this time of year with a flow of 3,784 m³/sec at the Qualark water station on July 20th (25% below average for this time of year). The discharge is predicted to continue tracking below average, with a forecast discharge of 3,367 m³/sec by July 26th.

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 4 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 21st, 2017) and the Fraser River Panel meeting from the same day.

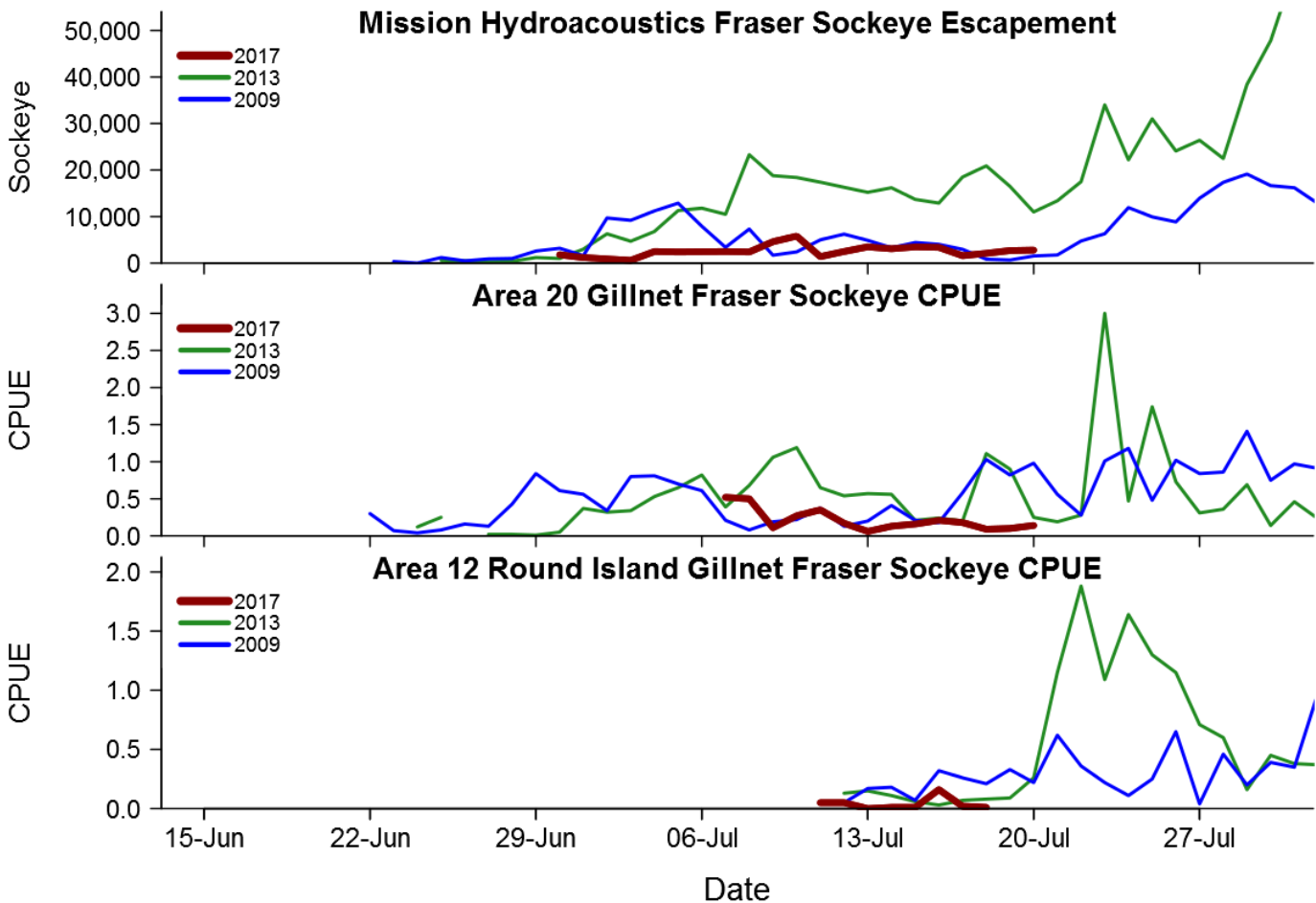
The Canadian side of the Panel clearly communicated that to date, we are in a worse place than 2016. The communication from Canada is that we should not be expecting any marine fisheries at this time. The trigger point for international TAC on Early Summers is 225,000, which to date are tracking far below that number.

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). A total of 58,700 Fraser sockeye have been accounted-to-date, comprised of almost 40,000 Early Stuart sockeye, 15,500 Early Summer run sockeye and 3,200 Summers. Stock Identification analysis from the marine and river test fisheries are still plagued by low sample sizes in the marine and in-river, making stock composition data prone to large error.

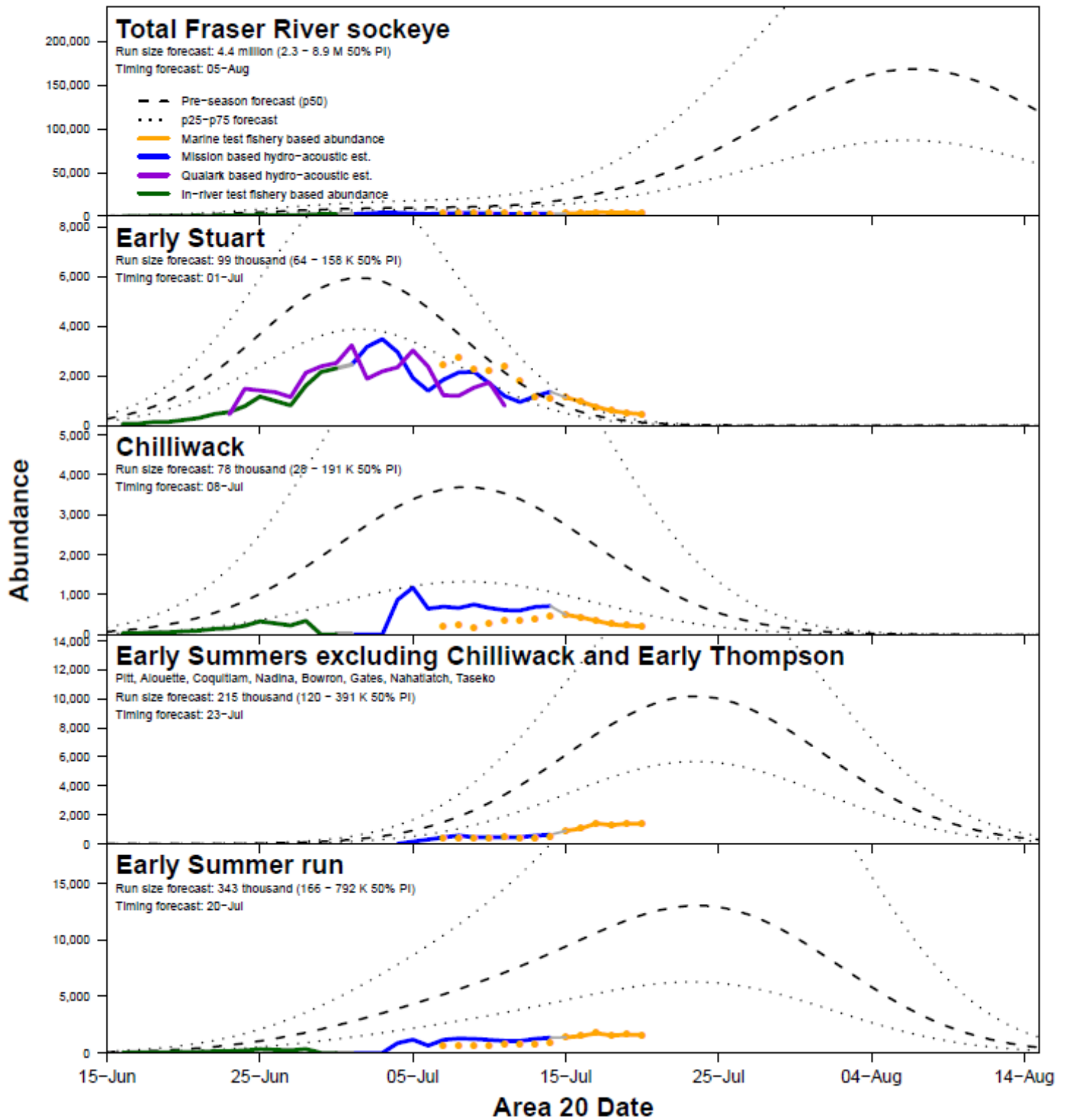
The Panel decided to delay start up the Purse Seine test fisheries until next Monday (July 24th), rather than initiate on July 25th. This decision was in light of augmenting existing information, while allowing time for the possible build up of returning sockeye. To date the low test fishery catches in the marine and in-river area have not provided sufficient sample sizes to make well informed decisions. With more test fisheries, the Panel will be able to verify the catch which provides a better idea of marine sockeye migration.

The US Reef net observation fisheries are planned to start up this weekend as non-destructive test fisheries (sockeye observed in the nets will be released); meaning the Reef net fisheries are not incorporated in the models to determine run-size but provide additional information regarding relative abundance in the marine area.

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



2017 Fraser River sockeye daily migration abundance



The next Fraser River Panel meeting is scheduled for 10:30AM Tuesday July 25th.

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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