



# WATERSHED TALK

## NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

### 2017 FRASER SALMON UPDATE

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

Unfortunately, this week's sockeye update is similar in tone to the previous updates. **All information indicates continuation of an overall much lower than expected Fraser sockeye return. This has been confirmed today by the Fraser Panel adoption of a 1,250,000 Summer Run in-season run size.**

Another piece of salmon news (Fraser Chinook) worth checking out is the article found here:

<http://www.ketchikandailynews.com/article/20170808/ARTICLE/170809945> .

The article summarizes Alaska's conservation measures recently implemented (this week), which includes measures to protect Fraser bound Chinook.

Fraser pink salmon have been confirmed in the river, and have been steadily increasing in the marine area test fisheries. Additional pink salmon information will be included in the salmon update starting next week, as these salmon begin to peak in the marine area (pre-season Area 20 50% date is August 28<sup>th</sup>).

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. Summer Run stocks are now the dominant management group identified in marine and in-river test fisheries, but model estimates indicate a return somewhere between the P10 and P25 forecast abundance. **This Summer run model estimate is approximately 2 million sockeye less than the P50 forecast.**

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 has been some small chinook directed fisheries that have taken a few sockeye, but these are all managed for a LAER (Low Abundance Exploitation Rate). 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)
<b>Early Stuart</b>	99,000	<b>46,000</b>	<b>July 3</b>
<b>Early Summer</b>	343,000	<b>125,000</b>	<b>July 31</b>
<b>Summer</b>	3,407,000	<b>1,250,000</b>	<b>Aug 14</b>
<b>Lates</b>	583,000	N/A (too early for run size update)	N/A
<b>TOTAL</b>	<b>4,432,000</b>	N/A (too early for run size update)	N/A

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

The last of the Early Stuarts moved from the marine area and most of the Fraser, and the management of this stock group is in the enumeration phase on the spawning grounds. The accounted run to date is almost 47,000, and no changes were made to the in-season adopted run size of 46,000 at the Friday August 11<sup>th</sup> Fraser River Panel meeting.

#### Early Summers

**The Early Summers were downgraded to 125,000 on August 8<sup>th</sup>.** No further changes were made at the Friday Panel meeting. 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 Total Allowable Catch (TAC) available.

#### Summer Run

**Summers** were forecasted at 3,407,000 (P50). **The Panel adopted an in-season run size estimate of 1,250,000 with August 14<sup>th</sup> Area 20 timing at today's meeting. There is no TAC at this run size abundance, and First Nations fisheries will be managed under the LAER.**

#### 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

Directed First Nations Fraser sockeye fisheries remain closed (with the exception of extremely limited terminal fisheries) due to the low sockeye return. Discussions for sockeye fishery management under the LAER are occurring with First Nations throughout the watershed.

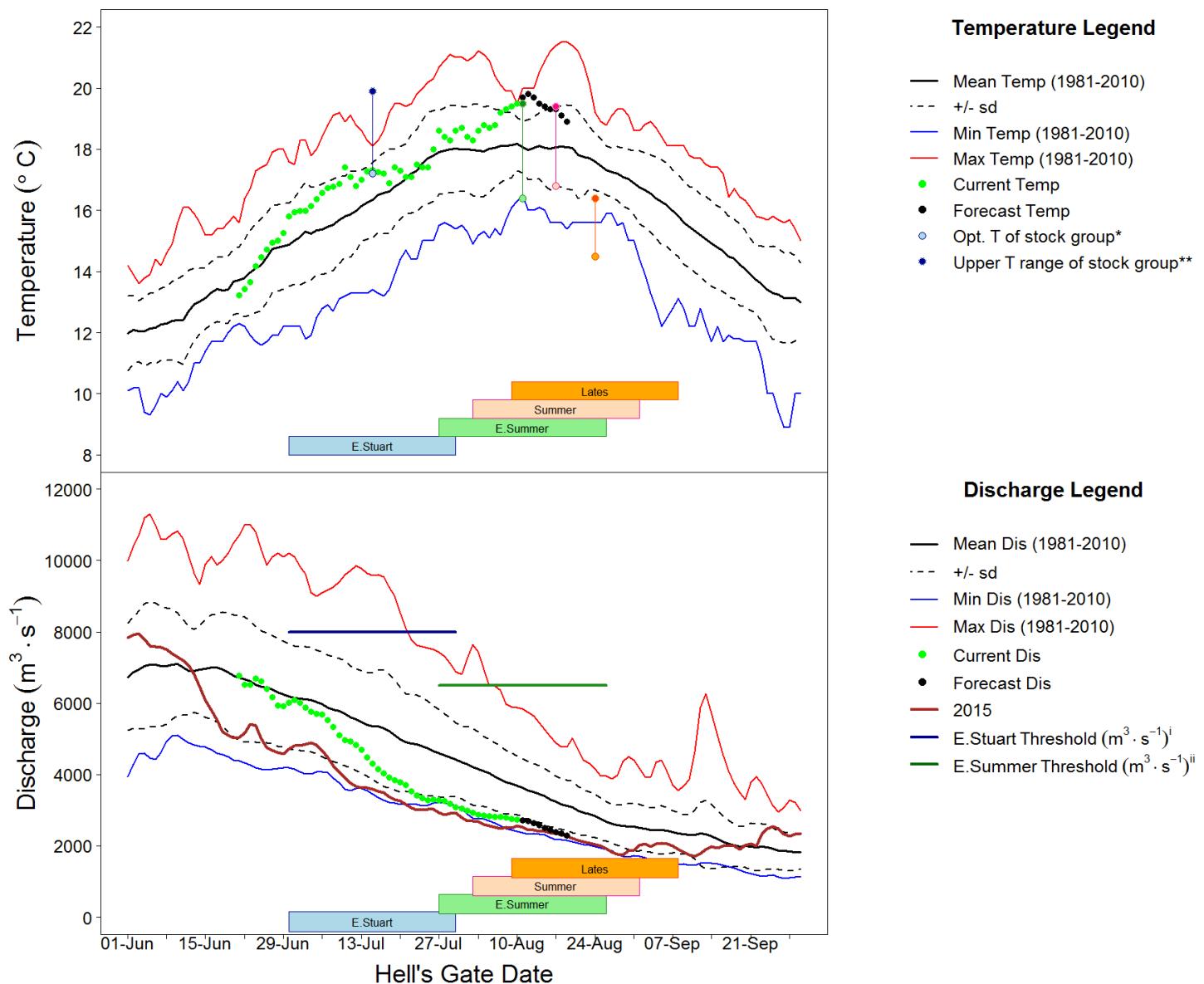
## Fraser River Conditions

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 11<sup>th</sup>, 2017):



The Fraser River water temperature at Hope is currently 19.5 degrees Celsius (1.3 degrees Celsius above average for this time of year), and is forecast to decrease to 19.3 degrees Celsius by August 16<sup>th</sup>. The Fraser River discharge continues to track near historic low levels for this time of year with a flow of 2,740 m<sup>3</sup>/sec at the Qualark water station on August 10<sup>th</sup> (26% below average for this time of year). The discharge is predicted to continue tracking below average, with a forecast discharge of 2,448 m<sup>3</sup>/s on August 16<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 7 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**

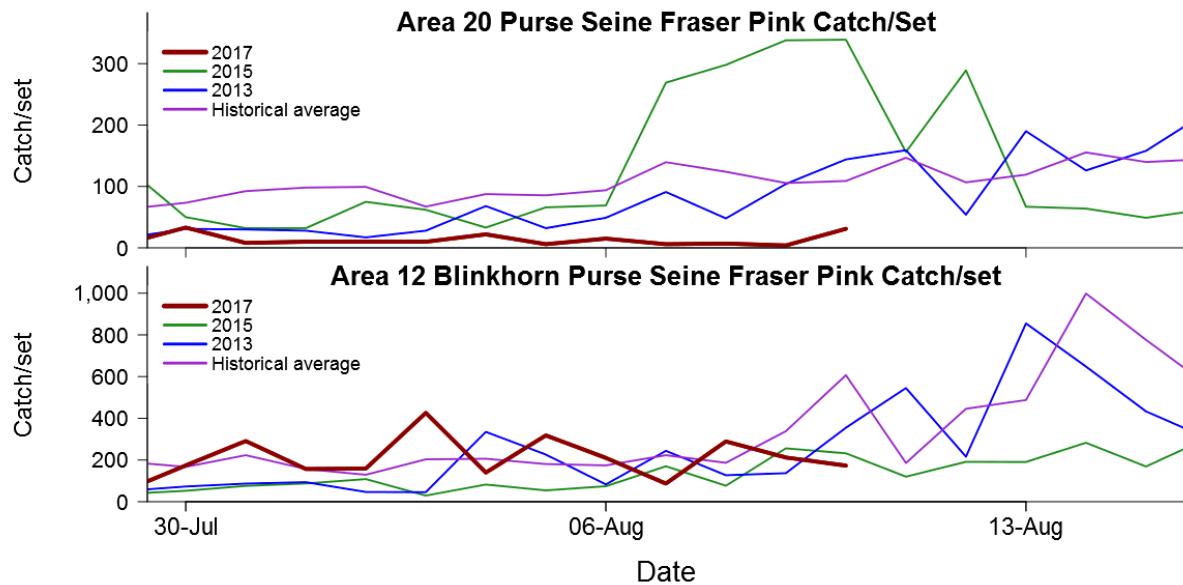
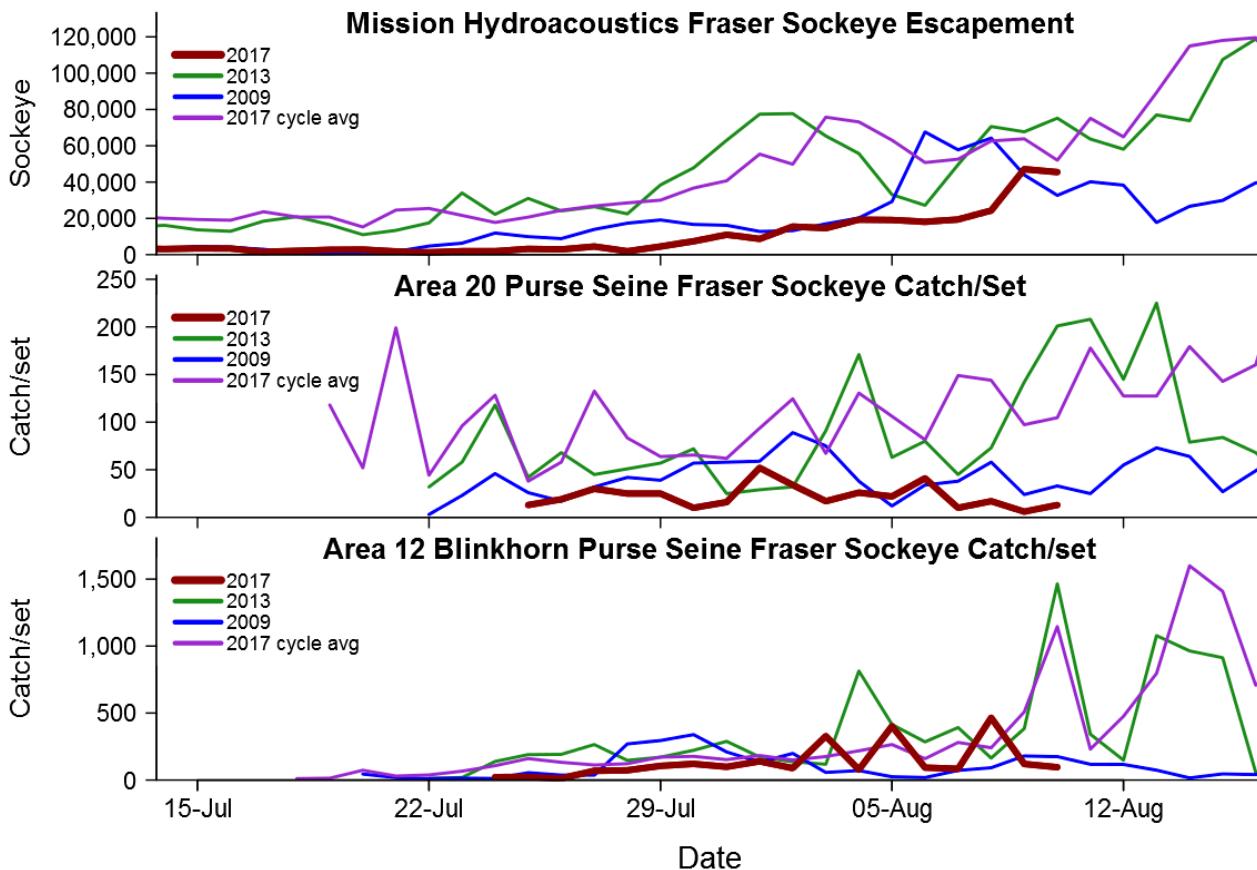
The Pacific Salmon Commission (PSC) distributes the Fraser River Panel meeting agenda and technical information for Panel members and observers to the process. The following information is a summary of key information from that document (August 11<sup>th</sup>, 2017) and the Fraser River Panel meeting from the same day.

The Fraser River Panel previously adopted an in-season run size for the Early Summer run sockeye aggregate at 125,000 on Tuesday August 8<sup>th</sup>. At Friday's Panel meeting this week, the Panel adopted an in-season run size of 1,250,000 which is between the P10 and P25 forecast abundance. There is no TAC at these abundances, and First Nations fisheries will be managed under the LAER (Low Abundance Exploitation Rate – 10%).

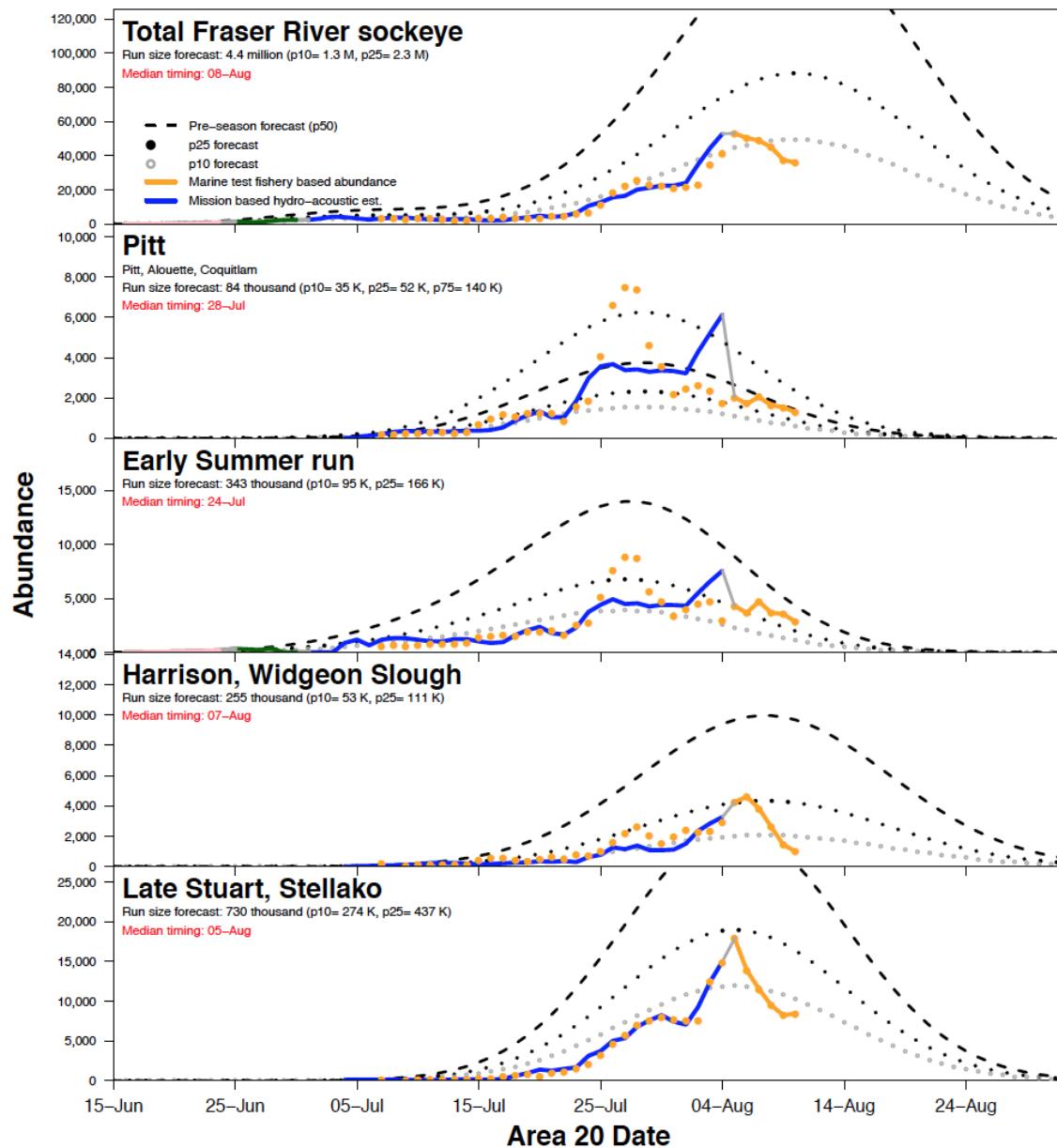
**A total of 393,320 Fraser sockeye have been accounted-to-date past Mission, comprised of almost 47,000 Early Stuart sockeye, 89,360 Early Summer run sockeye, 250,480 Summers, 6,500 Lates and 68,250 Fraser pinks.** The marine test fisheries (for sockeye) increased earlier this week, but have tapered off again and are still tracking well below pre-season expectations. Stock identification in the marine area shows the Summer Run dominating the recent samples.

The Area 20 Gillnet test fishery ended on August 10<sup>th</sup> (due to the low abundance of sockeye). All other marine test fisheries remain in operation through both the northern and southern approach routes.

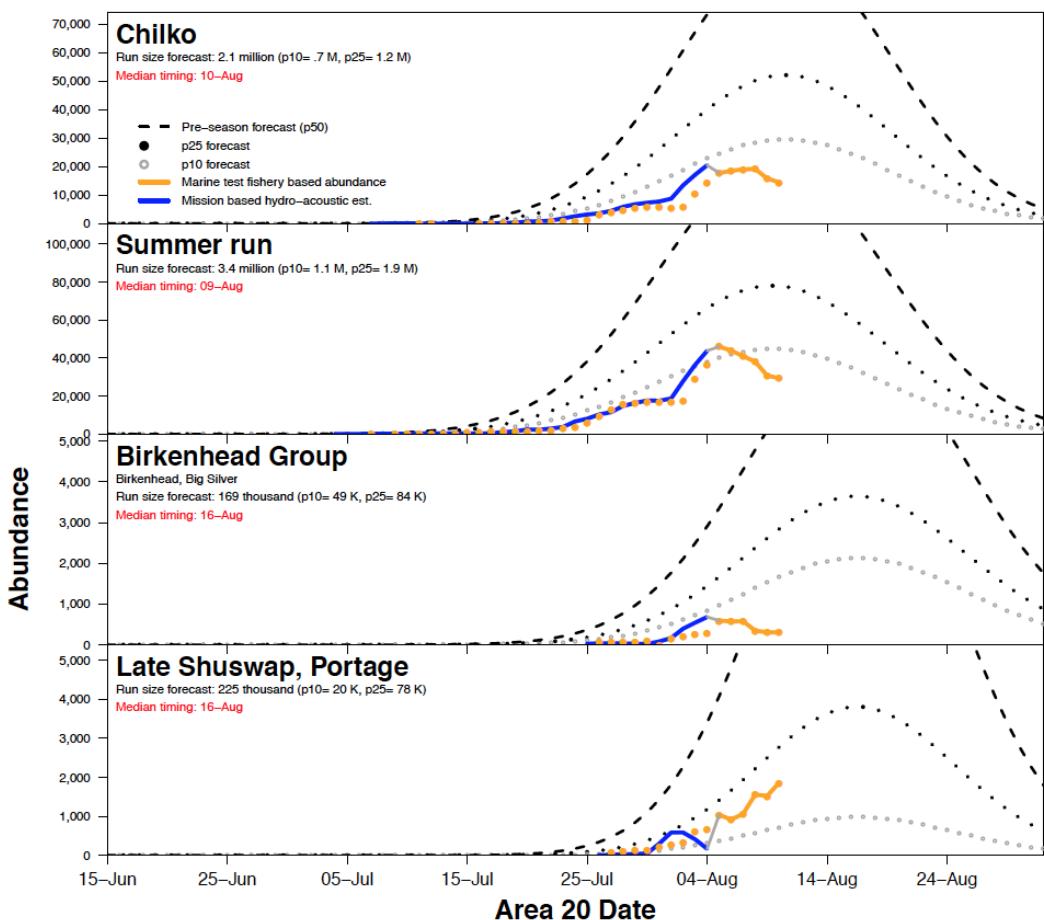
Test fishing graphs (sockeye and pink salmon), Mission hydro-acoustics and Daily Migration information from the PSC distribution package are below, please note that the daily migration run timing curves show P10, P25 and P50 **not** P25, P50 and P75:



## 2017 Fraser River sockeye daily migration abundance Using median timing estimates



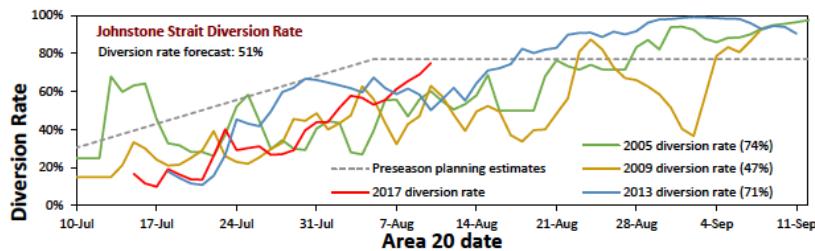
## 2017 Fraser River sockeye daily migration abundance Using median timing estimates



We've included the Johnstone Strait diversion graphs (following) to illustrate the pink salmon migration pattern. Over 80% of the Fraser Pink salmon are diverting through Johnstone Strait, which is far outside the normal data range, and a far greater proportion than was expected pre-season.

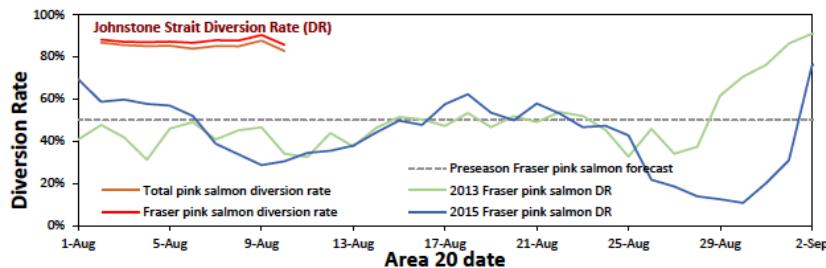
### 2017 Fraser River sockeye diversion rates through Johnstone Strait

	5-day average
Diversion rate	75%
Gillnet	61%
Purse Seine	83%



### 2017 Fraser River Pink salmon diversion rates through Johnstone Strait

	5-day-average
Total pink salmon	83%
Fraser pink salmon	86%



The next Fraser River Panel meeting is scheduled for 10:30AM Tuesday August 15<sup>th</sup>.

# Weekly Technical Updates with FRAFS Biologist Mike Staley

## Thursday afternoons at 4:00pm

Beginning Thursday, July 13th at 4:00 pm, FRAFS Biologist Mike Staley will host weekly in-season teleconferences for First Nations. Mike will provide updates on current discussions from both the Pacific Salmon Commission Fraser River Panel (FRP) and FRP Technical Committee. Participants are welcome to ask questions.

### Phone in:

**Tel: 1-866-512-0904 • Participant code: 4954972#**

**GoToMeeting Link:**

**<https://global.gotomeeting.com/join/558627029>**

### PSC FRASER PANEL SCHEDULE:

**July 11, 14, 18, 21, 25\*, 28,**

**August 1\*, 4, 8\*, 11, 15\*, 18, 22\*, 25, 29,**

**September 1, 5, 8**

**Most dates above are calls, start time 11:00am. Dates marked in red are in-person meetings and begin at 10:30am.**

**The PSC provides a listen-in line for interested First Nations:**

**Canada 1-888-299-2873 • USA: 1-888-585-9008**

**Conference ID: 902-802-337**

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## New Employee

Allison James has been hired by FRAFS to work as the Communication Coordinator for FRAFS and FSMC. She began on August 08, 2017 and will be responsible for monitoring email, social media and websites, distributing communication pieces, arranging meetings and recording minutes. She can be reached at [frafs15@gmail.com](mailto:frafs15@gmail.com) or [fsmc.comms@gmail.com](mailto:fsmc.comms@gmail.com).

### **Back Ground**

Allison is a member of the Xwísten (Bridge River) Indian Band and presently lives in Kamloops, BC. Her most recent experience is as a Project Manager/ Research Assistant for Coldstream Ecology Ltd, which is based out of Lillooet, BC. Coldstream Ecology Ltd. manages monitoring and enhancement projects on the Lower Bridge River. Allison grew up in Lillooet and developed professionally by alternating between Post-Secondary and work opportunities since she graduated high school in 2002.

### **Education**

Allison has most recently achieved a Certificate from the University of British Columbia in Project Management. She also has a Bachelor of Arts in Geography from Thompson Rivers University and a Diploma in Environmental Studies from Langara College. She has completed several environmental and field related certificates such as First Aid, Bear Awareness, Environmental Monitoring Assistant Program (Northwest Community College), and Environmental Technician Training (Vancouver Island University).

### **Experience**

Allison has been a minute taker for Xwísten Chief and Council for two and a half years now. She's written for her Community in the Monthly Newsletter in her role as an economic development planning coordinator. She is working towards a Project Management designation and is gaining experience working with an environmental consulting company that manages monitoring and enhancement projects on salmon in the Bridge River, mostly from BC Hydro. She has worked as a fisheries technician, data manager and event planner and is looking forward to bringing a broad background to her new role as Communication Coordinator at FRAFS.

## **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>

***For more information contact Pete Nicklin and/or Aidan Neill by email: [pnicklin@telus.net](mailto:pnicklin@telus.net), [Aidan.Neill@lffa.ca](mailto:Aidan.Neill@lffa.ca)***