



WATERSHED TALK

NEWSLETTER

Produced by the Fraser River Aboriginal Fisheries Secretariat

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Introducing Dwayne Martin



Dwayne Martin is the Natural Resources Coordinator for the Nak'azdli Band. He's also the new fisheries rep.

Dwayne's previous fisheries experience includes working for Tl'atz'en. Just a month into his new responsibilities, he's already completed the catch monitoring agreement.

You can learn more about Nak'azdli at their website:

www.nakazdli.ca

Tl'atz'en Communities



Peggy Felix (Tache) has a smoke house, garden and a kitchen table surrounded with relatives bagging freshly picked huckleberries. Thanks to Melissa Pierre for taking me to visit Peggy.

This week I visited the communities of Tache and Binche on Stuart Lake. I was also given a tour of three spawning creeks by Darren Haskell (Tl'atz'en Fisheries Manager) and Thomas Alexis.

You can see the photos from my visit at the following two links:

[Community visits along Stuart Lake](#)

[Protecting the Redd](#)

FRASER RIVER ABORIGINAL FISHERIES SECRETARIAT

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Fraser Salmon In-season Update

By **Pete Nicklin**,
Fraser Fisheries Biologist

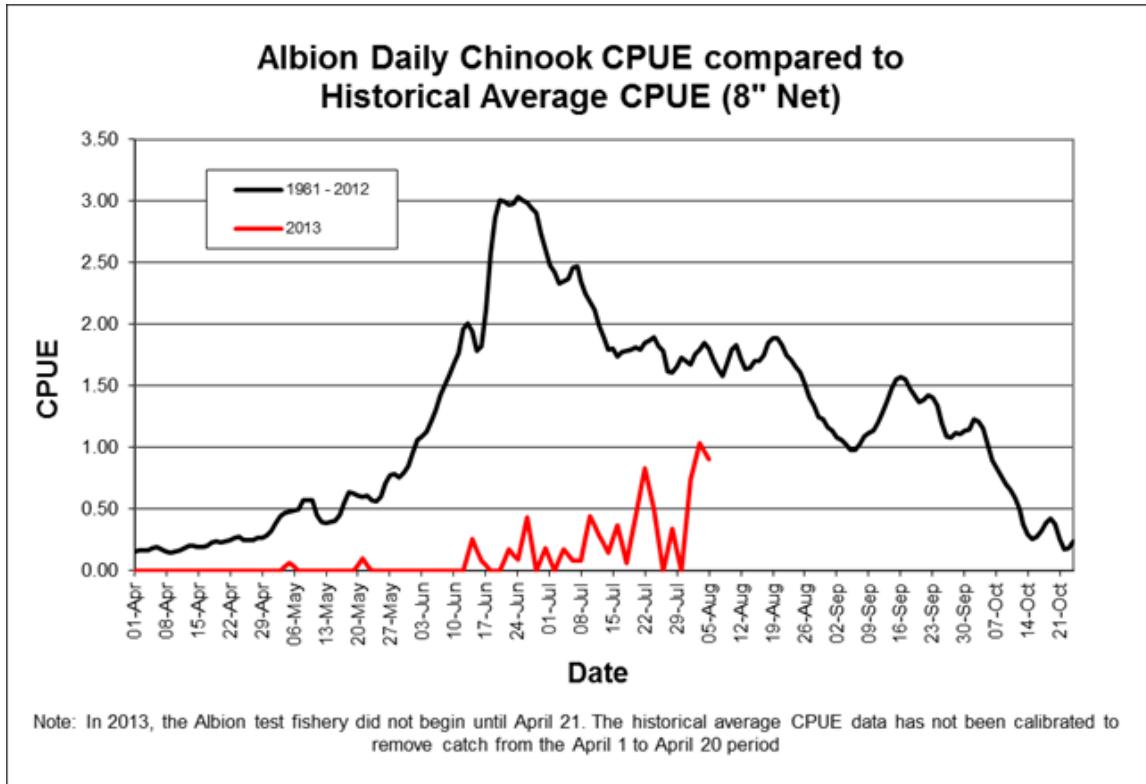
General

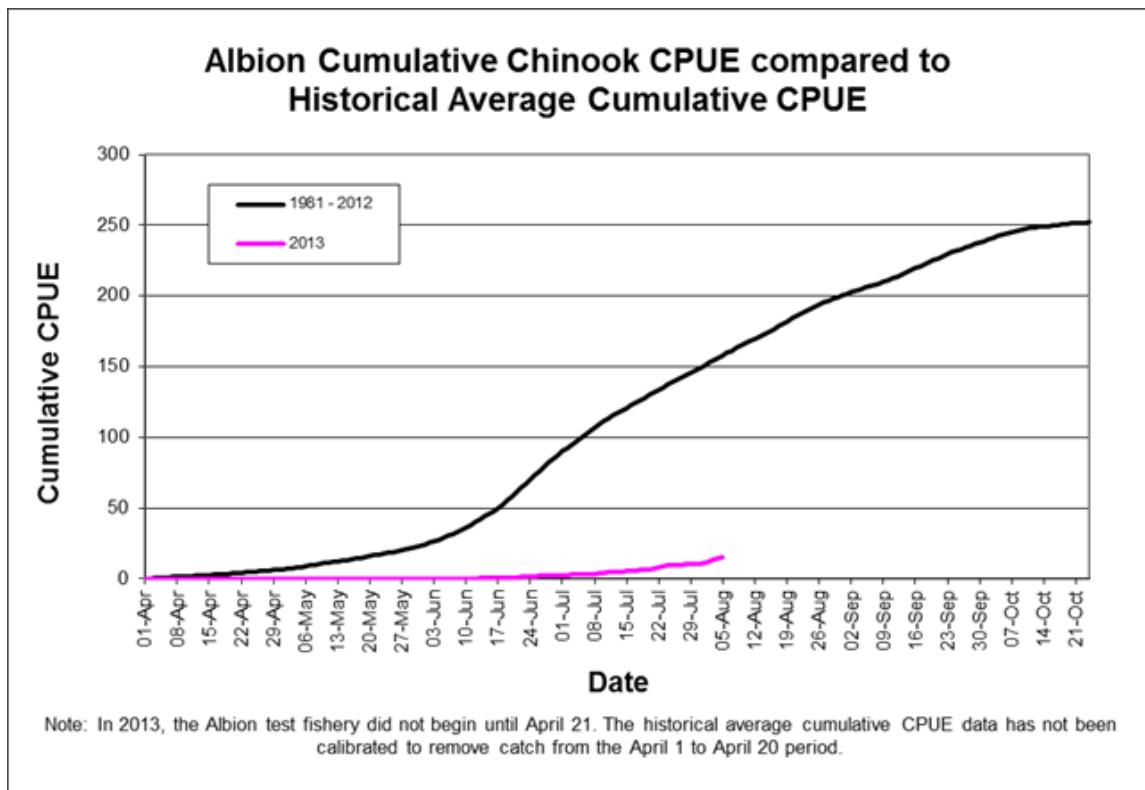
This update summarizes the information from:

- FRAFS August 8th Thursday in-season teleconference call;
- Fraser River Panel information distribution August 9th, and
- Albion Chinook test fishery grpahs from the DFO website.

Note that the Thursday in-season updates (presented by Mike Staley) will continue weekly throughout the sockeye season.

Fraser Chinook Albion Test Fishery (Graphs from DFO website: Albion Chinook Test Fishery)





Water Conditions

Fraser River discharge and temperature information is updated and distributed by the Pacific Salmon Commission. The graphs in this section are taken directly from that update.

Current Fraser River temperatures at Hope are above average for this time of year, **and are at record levels for this time of year**. These water temperatures are very stressful to migrating salmon and are currently above the upper temperature range for Early Summer and Summer sockeye. Water discharge in the Fraser continues to track below average for this time of year and forecast to continue this trend. **These high temperatures are driving the major increase to the Summer Run Management Adjustment.**



Fraser River Temperature at Qualark

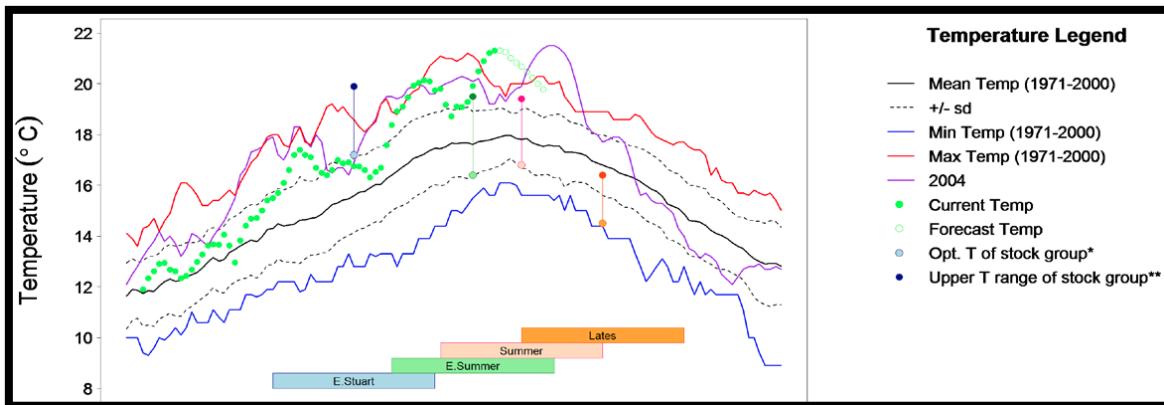


Figure 1: This graph shows the Fraser River temperatures at Qualark Creek (Lower Fraser). The line with the solid green circles shows the 2013 observed temperatures. The unfilled green circle portion of the line shows the forecast temperatures. The current temperature is approximately 21.3 degrees Celsius and forecast to decrease to 20.5 degrees Celsius by August 14th. The current temperature is above average by 3.5 degrees, and at record levels. The vertical lines connected by circles show the Optimal and Upper temperature range of the sockeye aggregates. Current temperatures are far above the Upper Temperature range for Early Summer and Summer sockeye.

Fraser River Discharge at Hope

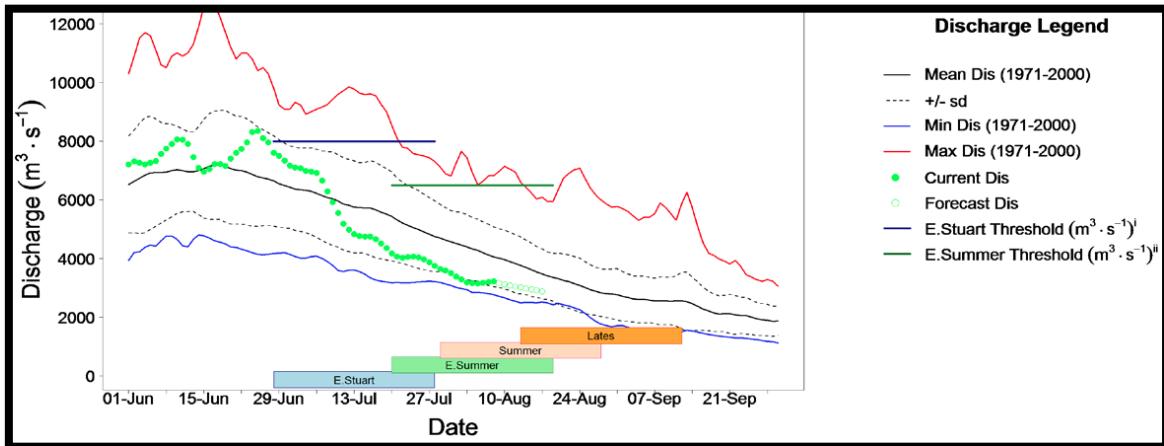


Figure 2: This graph shows the 2013 Fraser River discharge at Hope. The line with the solid green circles is the 2013 observed discharge values, and the forecast discharge shows as unfilled green circles. Fraser River discharge is below average for this time of year. The August 8th discharge was 3227 m³/sec (approximately 20% lower than average for the date), and forecast to decrease to approximately 2981 m³/sec by August 14th.



Fraser Sockeye

Fraser sockeye are in marine approach areas, migrating in the Fraser River and arriving on spawning grounds.

The estimated diversion rate through Johnstone Strait continues to be higher than expected pre-season thus far (35% expected pre-season & current estimate of >60%). Test fisheries in the marine area have remained flat and have not experienced the increase that was associated with an expected build in Summer Run sockeye abundance. Pink salmon are abundant in marine test fisheries, but a major proportion of those pinks are destined for Washington and Canada South Coast, with the Fraser component still comprising less than 20% of pinks caught in test fisheries.

An estimated 181,000 Early Stuarts, 400,000 Early Summers, 533,000 Summers and 27,000 Lates have been estimated through the Mission hydroacoustics station to date (August 8th).

The Early Stuart migration is complete in marine areas and these sockeye are on the spawning grounds, and just past the peak of spawn in surveyed tributaries. Spawners are reported to be in good condition. Water levels are reported as low in surveyed creeks, with temperatures ranging from 9 to 20 degrees.

Early Summer sockeye continue to decline in proportion to Summer sockeye in the mix of Fraser sockeye in both marine approaches, but not as much as was expected pre-season, due to a continued low abundance of Summer sockeye. The pre-season 50% date for Early Summers is estimated at July 22nd and the in-season run size estimate adopted by the Fraser Panel is 452,000. The Early Summers are estimated above forecast in aggregate, mainly due to a much stronger than expected abundance of Pitt sockeye. As of August 8th (yesterday) the PSC estimates a total of 400,000 Early Summers for Mission passage with an accounted run of approximately 428,000. Model estimates for Chilliwack and Nadina group (Nadina, Bowron, Gates, Nahatlatch and Taseko) are a little less than forecast and at or near forecast respectively. The Early Thompson group is estimated to be significantly above forecast. Very high temperatures in the Fraser river remain a significant concern for Early Summer stocks migrating to the mid and Upper Fraser (Nadina and Early Thompson groups).

Summer Run sockeye are the dominant management group in test fisheries, but are estimated in abundances significantly lower than expected pre-season. **Between the lower than expected Summer sockeye return and the higher than expected river temperatures: we are facing a major issue with respect to Fraser sockeye conservation and harvest.**

Model estimates estimate a total Summer Run in the range of 1 to 2 million with August 4th timing. Today, the Fraser Panel adopted an in-season run size of 2 million based on August 8th timing. Based on test fisheries, it appears the Quesnel component of the Summer runs is returning at very low abundances.

This is a major concern because the 2013 cycle line has been the dominant cycle line for Quesnel in the past, but has been on a declining trend for the past 2 generations (2005 and 2009).



Fraser Sockeye (continued)

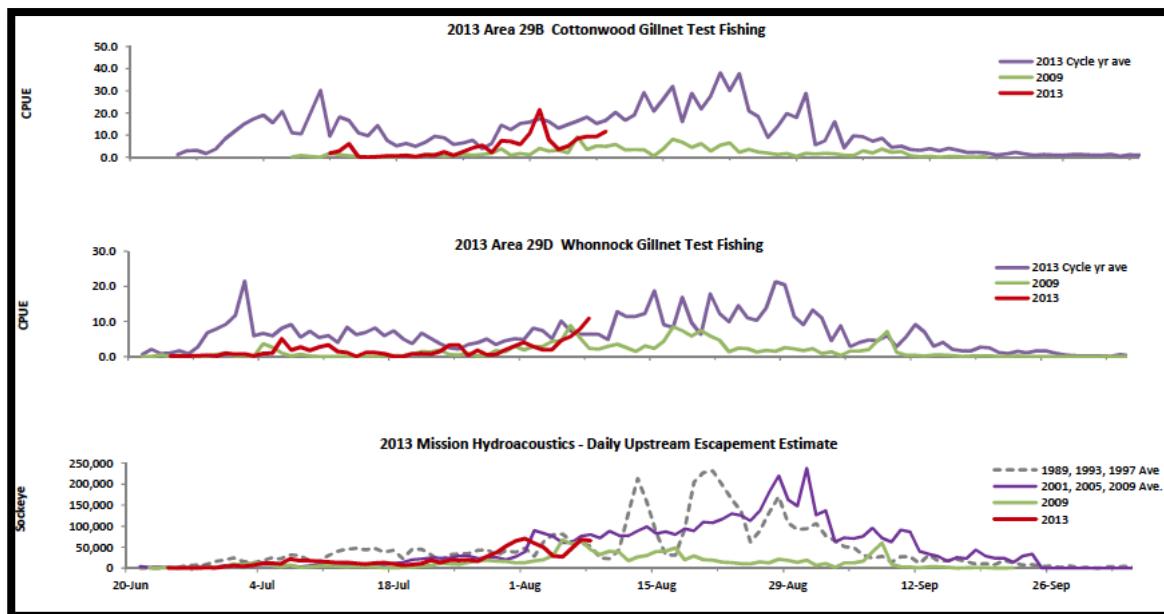
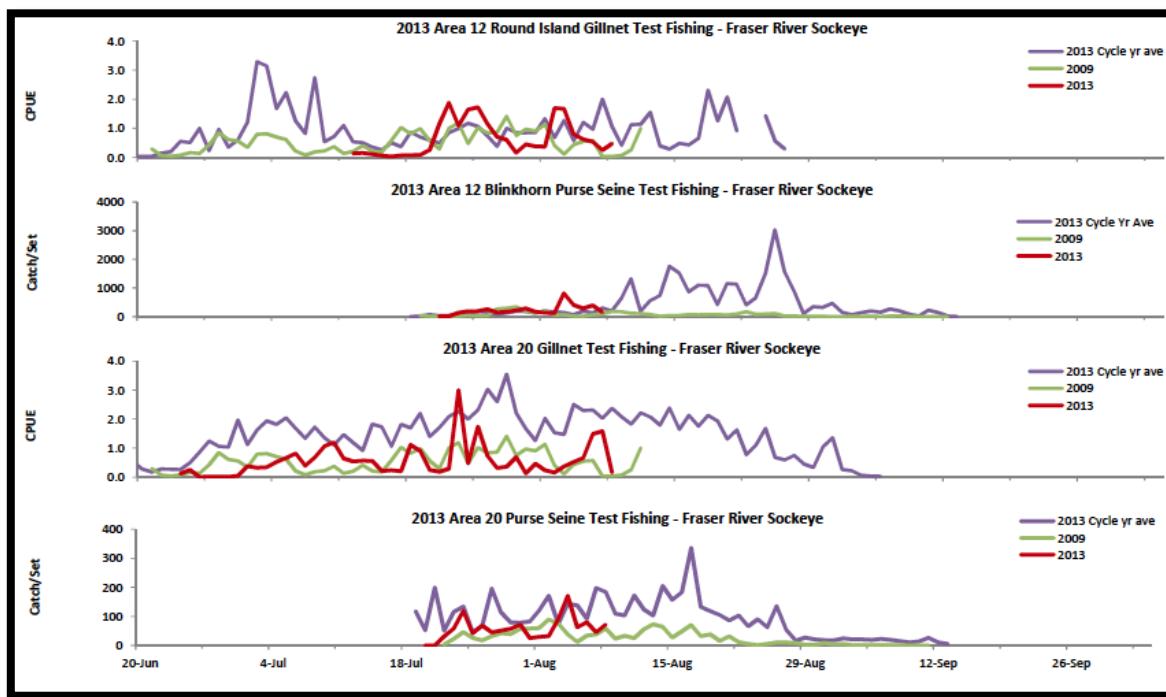
The Chilko component is also estimated to be returning at abundance significantly lower than forecast, and the combined impact of these lower abundances has reduced the overall estimated abundance of the Summer group by approximately half of the pre-season forecast.

The other major issue facing the return of the Summer sockeye is the extremely high river temperatures in the Fraser. Temperatures are at record levels for this time of year, and models are estimating proportional Management Adjustments in the range of 1.5 to 1.8 based on the average and forecast temperatures for 19 days. The Fraser Panel adopted a pMA of 1.76 associated with August 8th timing and a 2 million aggregate in-season estimate (P25 forecast level). With a pMA of 1.76 and an escapement target of approximately 1.2 million there would have to be a Mission passage of 3.3 million sockeye to meet the escapement target. **Therefore, at this time there is no TAC (harvestable surplus) for Summer sockeye.**

The next scheduled Fraser River Panel meeting is Tuesday August 13th at 1:30PM.



Fraser Sockeye & Pink Test Fishery Summary (Provided by Pacific Salmon Commission)



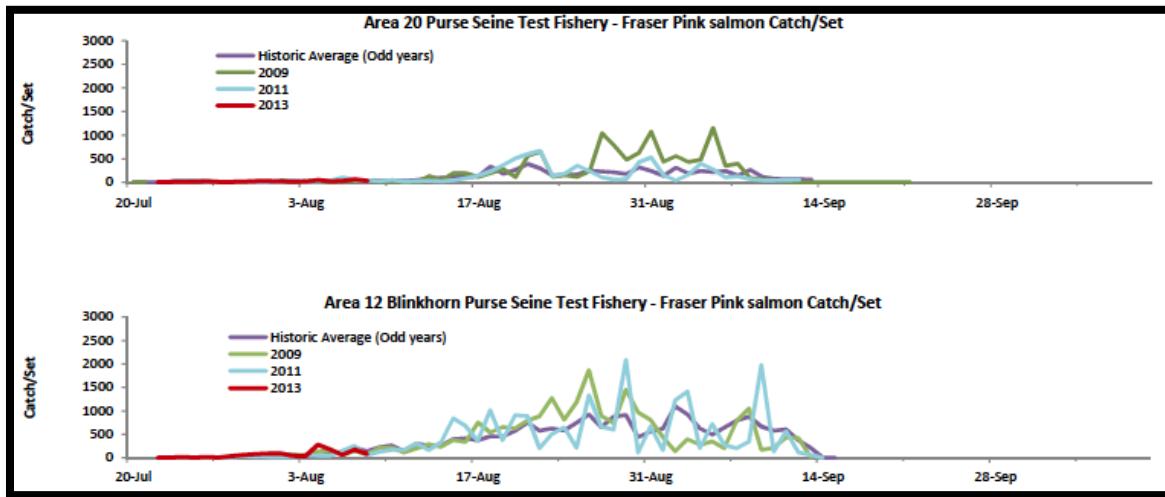
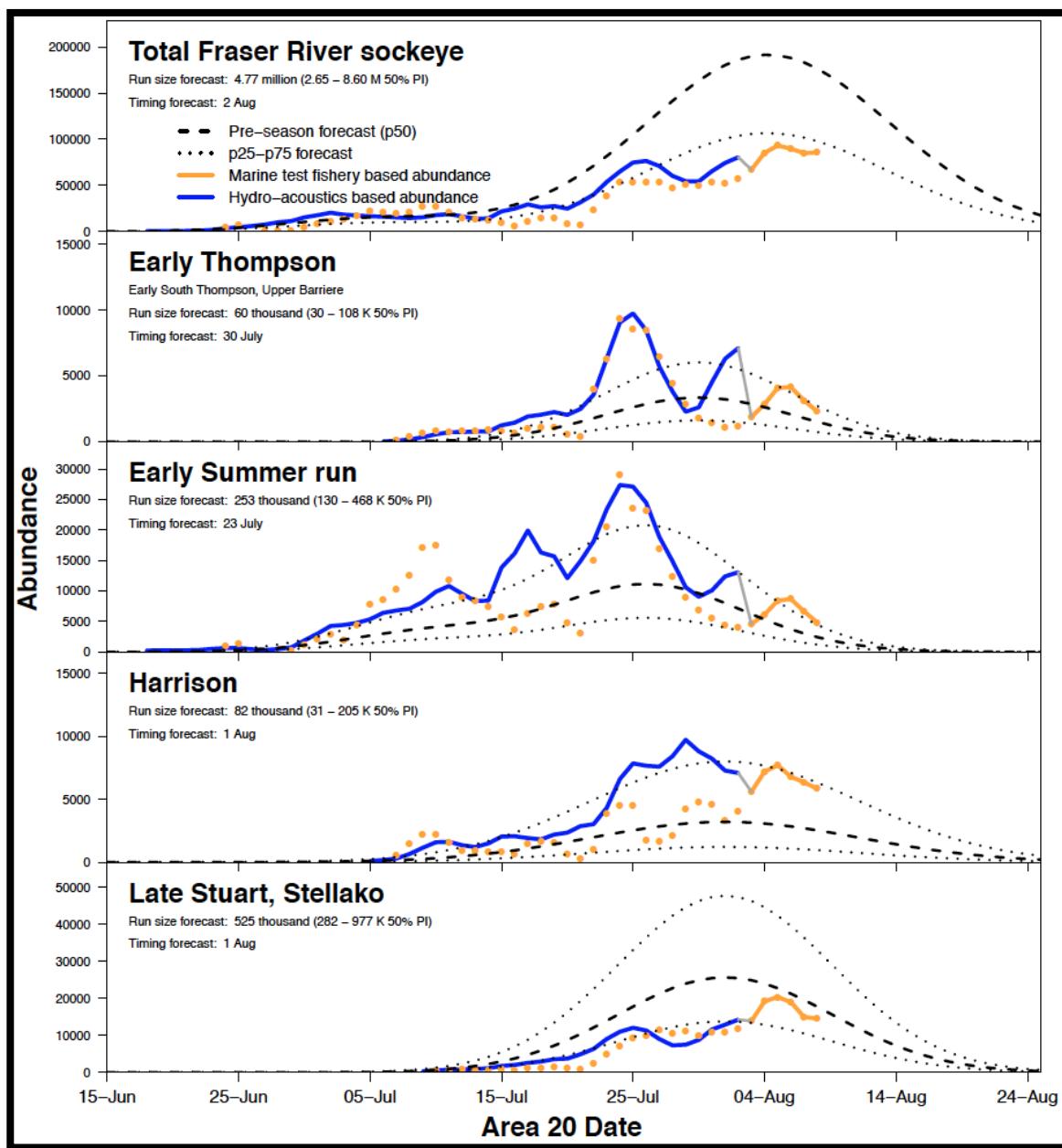


Figure 3: Pacific Salmon Commission 2013 test fisheries summary (to Aug 9th)



Fraser Sockeye Area 20 sockeye passage Graphs (Provided by Pacific Salmon Commission)





Fraser Sockeye Area 20 sockeye passage Graphs
(Provided by Pacific Salmon Commission)

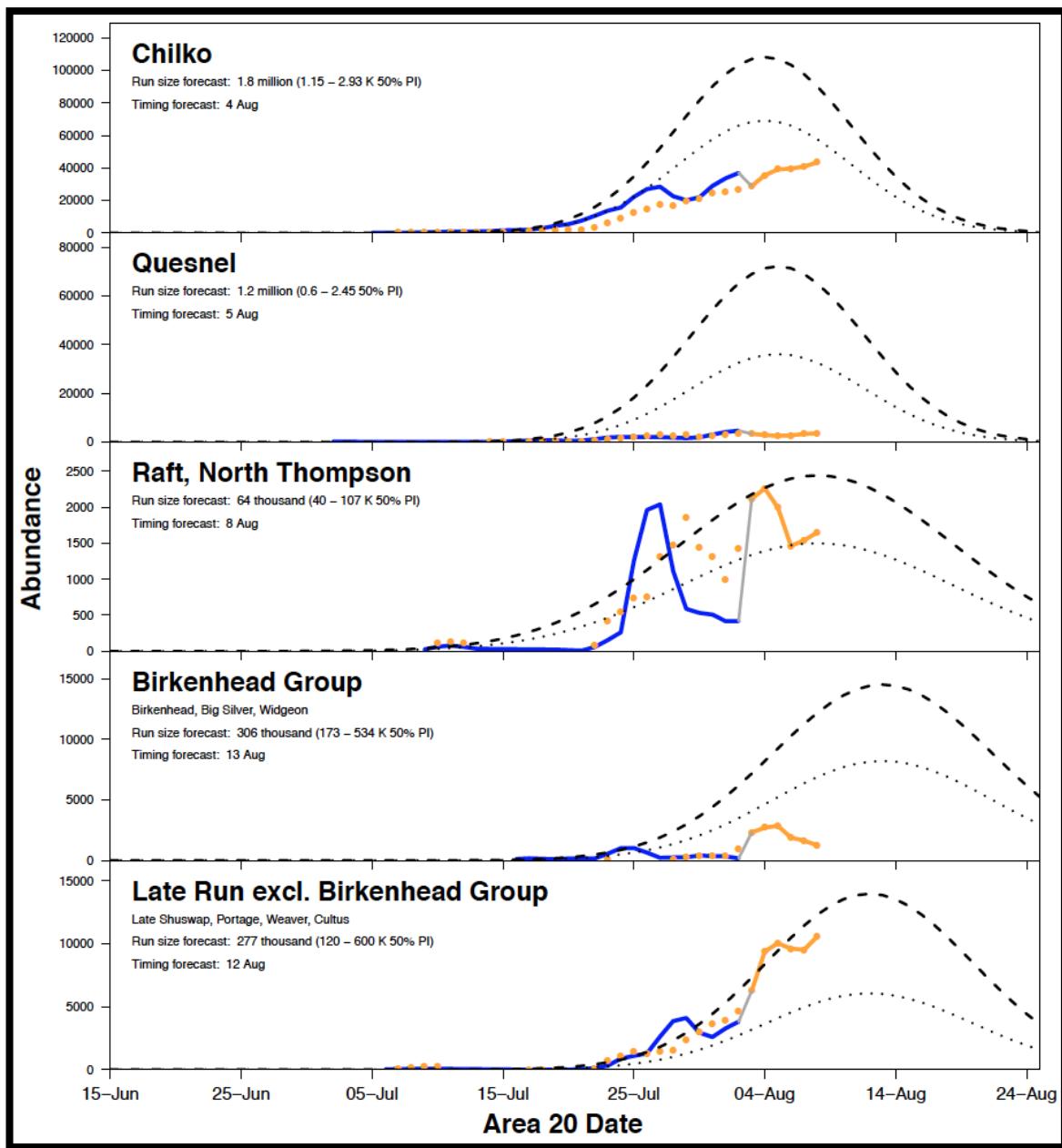


Figure 4: These graphs show the current (Aug 9th) information for the 2013 Fraser, Early Stuart, Early Summer and Summer sockeye migration

For more information contact Pete Nicklin by email: pnicklin@telus.net



FRAFS First Nations In-Season Technical Conference Calls

Thursdays at 4PM unless otherwise noted

Hosted by FRAFS Biologist Mike Staley

Dial in numbers:

Toll-free: 1-866-512-0904

Passcode/conference number: 4954972#

General Information

With Chinook and sockeye approaching and in the Fraser, these links may be of interest:

Albion Test Fishery – Chinook Gill Net:

<http://www.pac.dfo-mpo.gc.ca/fm-gp/fraser/docs/commercial/albionchinook-quinnat-eng.htm>

Pacific Salmon Commission Website: www.psc.org

Fraser River Fisheries Information : <http://www.pac.dfo-mpo.gc.ca/fm-gp/fraser/index-eng.htm>

Pacific Salmon Commission Test Fisheries: http://www.psc.org/info_testfishing.htm

Pacific Salmon Commission News and Regulatory announcements: http://www.psc.org/news_frpnews.htm

Fraser River Mission Escapement Reports: http://www.psc.org/info_inseasonfraserescapement.htm

Fraser River Environmental Watch Reports: <http://www.pac.dfo-mpo.gc.ca/science/habitat/frw-rfo/index-eng.html>