



WATERSHED TALK

NEWSLETTER

Produced by the Fraser Salmon Management Council

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2023 WATERSHED TALK NEWSLETTER UPDATE

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Today's issue of the WST contains the Fraser River Panel deliberations summary data below with important information to assist readers with better understanding the current fisheries management decisions made by the Fraser River Panel.

Fraser Panel Weekly Summary August 4, 2023

Test fishing and stock identification information

Recent increases in sockeye catches, especially in Johnstone Strait, indicate a shift in migration route from Juan de Fuca Strait to Johnstone Strait – currently 53% northern diversion rate. DNA analysis of a fish sample recently collected from the Area 12 purse seine test fishery indicated Fraser River sockeye contributions of 12% Early Summer, 77% Summer and 11% Late run. Pink salmon test fishing catches in marine areas continue to be dominated by non-Fraser pinks (e.g., only 12% Fraser pink salmon from a recent Area 12 sample).

Assessment results

Fraser River Sockeye Salmon

As of August 3, 181,700 Early Summer-run sockeye have passed Mission. The Early Summer run continues to be dominated by Chilliwack and Nadina which are earlier stock components of this run. While some Early South Thompson fish have been observed, the abundances to date are still indicating a run size below the median preseason forecast of 61,000 sockeye. The PSC staff recommended an in-season run size estimate for Early Summer run of 240,000, with an Area 20 timing estimate of July 20. This run size is larger than the preseason forecast of 186,000 and the timing is significantly earlier than the preseason forecasted timing of August 6. The PSC staff assessed the performance of multiple models to calculate management adjustments in the context of historically low river discharge levels. Based on this analysis PSC staff recommended an updated proportional Difference Between Estimate (pDBE) of -0.52 from -0.36, given the historically low discharge level and the implication for increased en route mortality in the Fraser River.

Both the Canadian and U.S. section of the Panel agreed to adopt the recommended run size and timing adjustments. However, the U.S. did not support the adoption of the increased management adjustment (MA), at this time, and cited the poor historical performance of the model used to support the recommendation as well

as the lack of management implications of the recommended adjustment (no implications for international TAC). In the end, the Canadian section of the Panel accepted the pDBE recommendation made by PSC staff resulting in an adoption of a proportional Management Adjustment of 1.08.

Most components of the Summer-run group are represented in samples from marine test fisheries. Currently, the most abundant stock is Chilko sockeye. The Summer run escapement past Mission, as of August 3, is 34,000 sockeye. Based on the median preseason forecast for Summer run (1,167,000), this group is managed under a Low Abundance Exploitation rate, indicating there is no available harvestable surplus. In-season run size estimates for Summer run are expected to be available near the end of next week.

Fraser River Pink Salmon

It is still very early in terms of pink salmon assessments and in-season assessment results are expected to be available in the latter half of August.

Migration conditions in the Fraser River

The extreme low discharge and high temperatures are expected to negatively impact migration conditions for Fraser River sockeye. As of August 3, the Fraser River water discharge at Hope was 2,234 cms, which is 45% lower than average for this date and below the historical minimum. The temperature of the Fraser River at Qualark was 19.7 oC, which is 1.4oC higher than average for this date. DFO's Environmental Watch program projects that river temperature will increase, and discharge is forecast to decrease to 1,952 cms over the next 10 days.

Escapement Update

Visual surveys for the Early Stuart spawning escapement assessment program began July 23 and sockeye appear to be nearing or in peak spawning in Trembleur Lake and Middle River whereas they are primarily holding in Takla Lake. Low water conditions in the Middle River are making boat passage challenging for the survey crews.

Sockeye appear to be vigorous and healthy.

Visual surveys on the Upper Chilliwack River started August 1 and water levels are characterized as being very low for this time of year. The Nadina River hydroacoustic site was operational as of July 27 and as of July 31 an estimated 132 sockeye have migrated past the Nadina hydroacoustic site.

The Chilko River and Quesnel River hydroacoustic sites have been operational since August 2 and in-season migration numbers will be available with the next update. Visual surveys started on the Nechako River tributaries August 1. The Stellako River hydroacoustic site has been operational since July 26 and as of July 31 an estimated 1,171 sockeye have been recorded at the site. Note that for the early part of this migration the majority of the sockeye are migrating to the Nadina River. The counting fence at Sweltzer Creek (Cultus Lake) has been fish tight since July 25 and night video recording started July 27. No sockeye have passed to date. The water temperature is 25.0oC.

Regulatory Announcements & Resources

The Panel announced the following regulations for commercial salmon fisheries in Panel Area waters:

CANADIANFRASER RIVER PANELAREA WATERS:

Remain closed to commercial salmon fishing.

UNITEDSTATES FRASER RIVER PANEL AREA WATERS:

Remain closed to commercial salmon fishing.

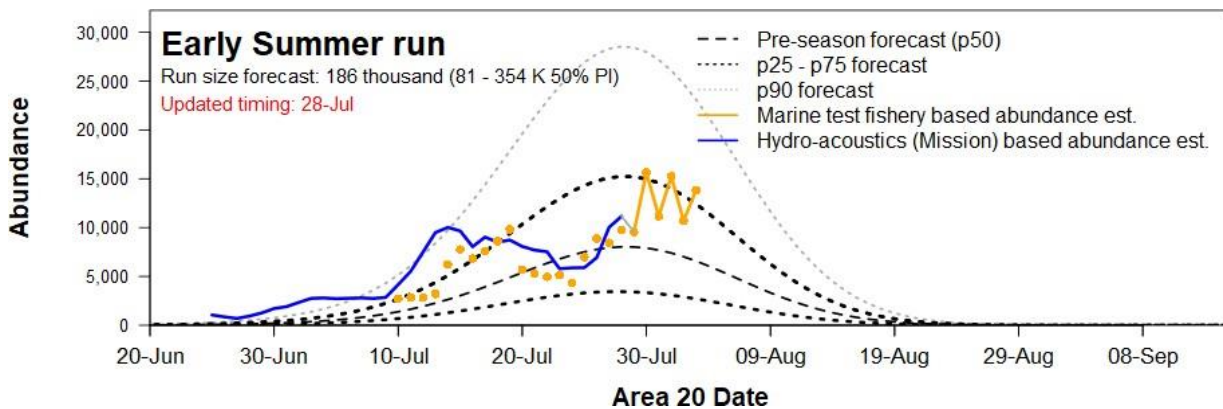
Fraser River Panel Technical Update – August 4, 2023

2023 Run Status of Fraser Sockeye & Pink Salmon

The information presented in this distribution has been prepared by PSC Secretariat staff and should be considered preliminary until reviewed by the Fraser River Panel

Week of: Jul. 30 - Aug. 5, 2023	Sockeye				Total Fraser	Pink Total Fraser
	Management Group					
	E.Stuart	E.Summer	Summer	Late		
Mission passage (incls Pitt, Alouette, Coquitlam)	40,900	181,700	34,000	700	257,300	0
Catch downstream of Mission	200	2,700	1,800	100	4,800	300
Accounted Run To Date	41,100	184,400	35,800	800	262,100	300
Run size adopted in-season ²	43,000	na	na	na	na	na
Run size forecasted pre-season	23,000	186,000	1,167,000	188,000	1,564,000	6,135,000
Area 20 timing adopted in-season	2/Jul	na	na	na	na	na
Area 20 timing expected pre-season	7/Jul	6/Aug	17/Aug	24/Aug	16/Aug	24/Aug
Johnstone Str. Diversion Rate	In-season 5-day average				53%	28%
	Preseason forecast of annual rate:				67%	53%

² Run sizes are usually not adopted until after the peak of the run has passed through marine test fishery areas in Juan de Fuca and Johnstone straits.



The narrative noted below for this week's WST is intended to provide general knowledge from the PSC website on their Special Reports. You can go to the Pacific Salmon Commission website here <https://www.psc.org/>

PACIFIC SALMON COMMISSION SPECIAL REPORTS

These are special reports produced about topics related to the Pacific Salmon Treaty, including those produced by the CSC (Committee on Scientific Cooperation).

To view the most recent report and any others, go to their web page here
<https://www.psc.org/publications/workshop-reports/psc-special-reports/>

The narrative noted below for this week's WST is intended to provide readers with a great article that tells readers the amazing work, intelligence and knowledge from our ancestors assisted in the successful rescue of our salmon. To read the article, click the link provide.

Insurmountable: The battle to bring a salmon run home

“We just knew no fish would get by. Not without our help.” Behind the scenes of the epic campaign to save a Fraser River salmon run.

PUBLISHED JAN 14, 2022 BY KATE HELMORE

<https://canadiangeographic.ca/articles/insurmountable-the-battle-to-bring-a-salmon-run-home/>



Workers seen on top of the cliff at the Big Bar landslide on the Fraser River in July 2019. Fisheries and Oceans Canada officials said that 99 per cent of early Stuart sockeye and 89 per cent of early chinook salmon were lost that year. The fish could not make it past the landslide. (Photo: Canadian Press/Darryl Dyck)

The narrative noted below for this week's WST is intended to provide general information on Fisheries & Oceans Canada's highlight to the Pacific Salmon Strategy Initiative and what the federal government is currently campaigning.

Pacific Salmon Strategy Initiative (PSSI)

Pacific salmon are in extreme danger. In recent years, climate change, habitat loss and fishing pressures have negatively affected Pacific salmon at every stage of their lifecycle. Fisheries and Oceans Canada's Pacific Salmon Strategy Initiative will guide a strategic and coordinated long term response to these issues, rooted in collaborative action, to stabilize and restore Pacific salmon and salmon habitat for the people, communities and ecosystems that depend upon their sustainability.

This webpage breaks down their 4 Pillars of the strategy, their engagement on the initiative, links to related information and updates on this initiative and their actions to save the Pacific Salmon.

To view the most recent update on Fisheries and Oceans Canada PSSI, click the link here to be taken to the March 2023 update. <https://www.dfo-mpo.gc.ca/campaign-campagne/pss-ssp/update-mise-a-jour/2023-01-eng.html>

If you are interested in finding out more on this initiative, click on the link to be taken to the PSSI webpage on the Government of Canada website. <https://www.dfo-mpo.gc.ca/campaign-campagne/pss-ssp/index-eng.html>

**Salmon Joke of The Week:
To prevent spawning issues, salmon need
to be p-roe-active.**

The next Fraser River Panel meeting is scheduled for 11AM Tuesday August 8th. In-person in Richmond, BC
Fraser River Panel Schedule:

Tuesdays and Fridays 11am.

You can also access the webinar for observing the Fraser River Panel meetings:

Please click the link below to join the webinar:

<https://psc-org.zoom.us/j/88416242194>

Mid- Fraser River attendees please text your questions during FRP calls to Greg Witzky at 778-694-9154. Can also email them to executivedirector@frasersalmon.ca

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>