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## **2024 WATERSHED TALK NEWSLETTER UPDATE**

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Today's issue of the WST contains a briefing on the Chilcotin slide, including links to keep at hand so you can stay informed of the situation, the Fraser River Panel summary data and notices of critical engagements pertaining to Fraser Salmon and First Nations management.

This issue of Watershed Talk was prepared with heavy hearts. We are holding the Tśilqot'in people and the ts'eman (salmon) in our hearts and prayers. We are grateful and appreciative of the communities who are praying and drumming for the Tśilqot'in people and the salmon.

At the time of writing, the priority concern associated with Chilcotin River landslide is the safety of the people who live alongside and who utilize the Chilcotin and Fraser Rivers. The landslide site is considered highly unstable, and the area is under mandatory evacuation order. Emergency management measures have been enacted by the Tśilqot'in National Government, the Province, and relevant Federal agencies. The FSMC is working with the Upper Fraser Fisheries Conservation Alliance (UFFCA) and Fisheries and Oceans Canada (DFO) to gather and share information on the situation as it unfolds. You will find links to information sources in the Chilcotin Slide section below.

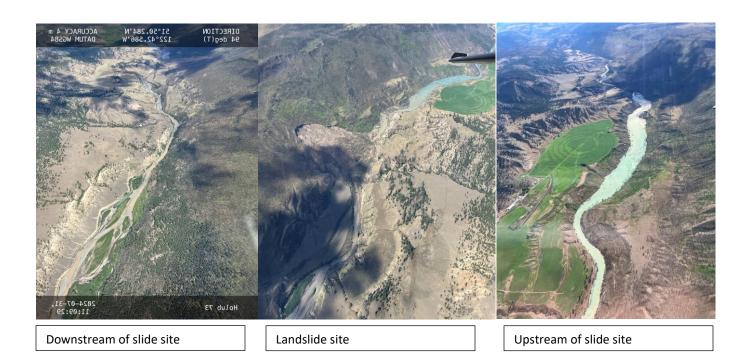
The conservation, protection, and restoration of Pacific salmon in the upper Fraser River watershed are a priority for everyone, however, at this point in time, the slide site is not safe to access, and it is too early to state with certainty what measures may be required or possible. Salmon will become the priority as soon as it is safe!

You might get situational briefings, on Zoom, over the weekend. Briefings are likely to be held on very short notice so please monitor your email and Facebook feeds (@FraserSalmon) for notice of these briefings. If you are not signed

up to be included in all the updates and events happening with the FSMC please click on the link to be added <u>Fraser</u> Salmon distribution list.

#### CHILCOTIN RIVER LANDSLIDE

On July 31 a significant landslide event occurred in the lower Chilcotin River, approximately 28 km upstream from the confluence with the Fraser River. The slide site is located approximately 65 km southwest of Williams Lake and on Tsilhqot'in National Government title land. The landslide resulted in a deposit of a large volume of debris which has blocked the entire width of the Chilcotin River for several hundred meters and is impounding water upstream.



The Chilcotin River supports several important populations of Pacific salmon and all major spawning sites for Chinook, sockeye, and coho salmon are located upstream of the site. Specific stocks originating from the Chilcotin watershed include:

- Taseko Chinook (Summer 5,2 Chinook)
- Elkin Chinook (Summer 5,2 Chinook)
- Upper Chilcotin Chinook (Spring 5,2 Chinook) Enhanced/hatchery
- Lower Chilcotin Chinook (Spring 5,2 Chinook) Enhanced/hatchery
- Chilko Chinook (Summer 5,2 Chinook) Enhanced/hatchery
- Chilko Sockeye (South end, north end and river populations)(Summer run)
- Yohetta Sockeye (Early Summer run)
- Chilcotin Sockeye
- Taseko Sockeye (Early Summer run) Enhanced/hatchery

- Chilko Coho
- Chilcotin Coho
- Chilcotin Steelhead (Summers)

At today's Fraser River Panel meeting the Panel discussed the impact of the landslide event on Chilko and Taseko sockeye migration and survival and management considerations as both Chilko and Taseko sockeye have spawning grounds above the slide location. The impact of the slide may be two-fold: 1) there may be warmer temperatures in the Fraser main stem and, 2) there may be increased mortality of for Chilko and Taseko stocks due to delays in reaching the spawning grounds.

The Panel reported that the creation of a dam from the recent landslide in the lower Chilcotin River is preventing Chilko and Taseko sockeye from reaching the spawning grounds. On-site monitors report water is slowly leaking through the dam. Until the breach of the dam, it is anticipated that the reduced downstream flow of glacier-fed Chilcotin waters may increase the water temperatures. A flash flood is possible once the river breaches the landslide. In addition to high water velocity, it is anticipated that a flash flood would bring along debris and silt, providing challenging migration conditions for sockeye<sup>1</sup>.

Management Adjustments (MA) are the traditional way to account for challenging migrations conditions when managing Fraser River sockeye stocks. In the case of warmer water temperatures in the Fraser mainstem, the current observed water temperatures are accounted for in the existing management approach and will allow for management adjustments if the 19-day water temperature averages exceed 19.4°C.

In the event of delays for Taseko/Chilko sockeye reaching the spawning grounds and dependent on the number of days before the dam at the landslide area is breached, increased mortality (en route losses) can be accounted for based on the predicted upstream migration that occurred before the slide.

Due to the low expected Taseko sockeye return (median preseason forecast of 67 sockeye), it is not possible to provide in-season updates of run size and timing for this stock. Based on historic observations the peak migration of Taseko past the Mission site is July 26. It is estimated that it takes about 12-13 days to migrate from Mission to the landslide area which means that peak migration past the slide area is anticipated to occur August 7-8<sup>1</sup>.

The median pre-season forecast for Chilko sockeye was 176,000 and as of August 1, only 8,100 Chilko sockeye have migrated past Mission. The first 1,000 Chilko sockeye are expected to reach the landslide area in the next 4 days. Based on marine test fishing information, it is anticipated another 17,000 sockeye will reach Mission in the next 6 days<sup>1</sup>.

### CHILCOTIN RIVER LANDSLIDE - CRITICAL LINKS TO HELP YOU STAY INFORMED

BC River Forecast Centre Chilcotin River Monitoring Update presented by Gord Sterritt August 2, 2024

newsletter from October 1964

## Fraser Panel Weekly Summary for August 2, 2024

See the full version of the Panel report here - Fraser Panel Weekly Report #4

The Panel met to receive an update on the migration of Fraser River sockeye and to review the status of migration conditions in the Fraser River watershed including an update on the Chilcotin River landslide (see above section).

It is currently estimated that 194,900 sockeye have passed the Mission hydroacoustics site. At today's meeting the panel adopted an Early Summer-run size of 136,000. This is a downgrade from the preseason estimate of 159,000. Note it is too early for an in season run size estimate for the Summer – run.

On August 1 Fraser River discharge at Hope was 2,610m<sup>3</sup>/s which is 38% below average for this date. Fraser River Water temperature at Qualark on August 1 was 20°C which is 1.7°C above average for this date. Discharge and water temperatures will be monitored closely to determine if specific management actions are required to help achieve sockeye escapement goals.

All Panel Area Waters remain closed to sockeye salmon fishing.

The next in-season meeting of the Panel is scheduled for August 6, 2024.

Test Fisheries and Stock Identification<sup>1</sup> - Marine test fishing catches have remained low throughout the past week and below preseason expectations. The majority of sockeye en route to the Fraser River are currently migrating through Johnstone Strait route rather than through Juan de Fuca with 68% observed on the northern route. DNA analysis of the most recent fish sample collected from the Area 12 purse seine test fishery indicated Fraser River sockeye contributions of 21% Early Summer, 75% Summer run and 4% Late run. Marine test fisheries in Area 12 and 20 will be terminated on August 4 and 5, respectively.

Assessment Results<sup>1</sup> – The estimated escapement plus catch of Early Summer-run sockeye through August 1 is 121,700. Proportions of the Early Summer run stocks are declining in marine areas. Early Summer run abundances are tracking below pre-season expectations (median preseason forecast of 159,000). The Nadina stock is returning in abundances greater than forecast. Due to the proportionately larger abundances of the early component of this management group, the overall timing for this group, July 13, is earlier than expected preseason. The Panel adopted an in-season run size estimate of 136,000, with an associated Area 20 timing of July 13.

Summer-run sockeye make up most of the observed sockeye in the marine test fisheries. The estimated escapement plus catch of Summer-run sockeye through August 1 is 75,600. Based on these in-season observations, the Summer run seems to be smaller than preseason expectations (median preseason forecast of 379,000). Late Stuart, Stellako, and Harrison, early-timed stock components, are the most abundant part of this management group. Chilko and Harrison are tracking below preseason expectations. More precise run size estimates for this management group and Chilko in particular are expected to be available in the next two weeks.

Similarly for Late run, few fish have been observed in the marine and in-river test fisheries. The estimated escapement plus catch of Late-run sockeye through August 1 is 400.

Migration conditions in the Fraser River<sup>1</sup> - On August 1, the Fraser River water discharge at Hope was about 2,610 cms, which is 3 8 % below the historical mean discharge level for this date while the temperature was 20°C, which is 1.7°C higher than average for this date. DFO's Environmental Watch program projects that river temperature will increase to 21.3°C by August 7 and discharge is forecast to decrease. These quantitative predictions do not consider the impact of the recent landslide. Observers at Hells Gate continue to see sockeye salmon migrating into the fishways. Current reports from Big Bar similarly indicate no concern with salmon passage. A total of 30,192 sockeye thus far has made it past the Churn Creek sonar site, upstream of Big Bar. The Big Bar program has been decommissioned for the season so there will be no further updates on this program.

The creation of a dam from the recent landslide in the lower Chilcotin Riveris preventing Chilko and Taseko sockeye from reaching the spawning grounds. On-site monitors report water is slowly leaking through the dam. Until the breach of the dam, it is anticipated that the reduced downstream flow of glacier-fed Chilcotin waters may increase the water temperatures. A flash flood is anticipated once the river breaches the landslide. In addition to high water velocity, it is anticipated that the flash flood would bring along debris and silt, providing challenging migration conditions for sockeye.

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**Escapement update**<sup>1</sup> - Visual surveys for Early Stuart began July 20, but no sockeye have been observed in the system. The Upper Chilliwack River hydroacoustic site has been operational since July 10 and a total of 2,681 sockeye have been estimated into the river through July 30. Water temperature in the upper Chilliwack River is 11°C. The Stellako River hydroacoustic site became operational July 25, and 4,452 sockeye have been counted as of July 27. Most of the sockeye salmon counted at the Stellako site are assumed to be Nadina River sockeye. The counting fence at Sweltzer Creek (Cultus Lake) began operations July 29 but no sockeye have been counted through the fence to date

**Regulatory Announcements & Resources**<sup>1</sup> – Commercial fisheries in Canadian and United States Fraser River Panel area waters remain closed.

## FISHERIES AND OCEANS CANADA – FRASER RIVER SOCKEYE IN-SEASON UPDATE FOR AUGUST 2, 2024

In season fishing information from DFO – please click the following link to review DFO's Fraser Salmon Bulletin

Fraser Salmon Bulletin 2024 No. 4

# Salmon Allocation Policy Assessment Rubric Review & Feedback – COMMENTS ACCEPTED UNTIL AUGUST 19, 2024

On June 17, 2024, a First Nations Fisheries Council and Mitaccs Acclerate Fellowship funded research team hosted a workshop to inform the development of indicators and metrics that could be used to assess the current and future Salmon Allocation Policy objectives related to "Conservation" and "First Nations Priority Access". The development of indicators and metrics could be used to evaluate the effectiveness of the SAP and help identify areas where reforms in policy, process or management could improve long-term outcomes for the conservation of wild salmon and support for First Nations FSC access.

The workshop included participants from regional First Nations organizations and First Nations technical staff and included those already involved in DFO Salmon Allocation Policy Review Process. The indicators and metrics that were developed at the workshop are presented in the linked draft assessment rubric and guide. A workshop report has also been provided.

- 1. Draft SAP Assessment Rubric
- 2. SAP Assessment Rubric Guide
- 3. SAP Workshop Summary Report

If you have any questions or would like to reach out to the project lead, Jade Steel, at <a href="mailto:jaderyansteel@gmail.com">jaderyansteel@gmail.com</a>.

Feedback will be accepted until Monday, August 19!

Follow us on Facebook here: <a href="https://www.facebook.com/profile.php?id=100009897519200">https://www.facebook.com/profile.php?id=100009897519200</a>

Sign up for all the FSMC distributions here: <a href="https://frasersalmon.us3.list-manage.com/subscribe?u=52b75e17647b0b4460687b60d&id=d5bde22f9a">https://frasersalmon.us3.list-manage.com/subscribe?u=52b75e17647b0b4460687b60d&id=d5bde22f9a</a>

Subscribe to the FSMC calendar by clicking the subscribe to calendar button found at the bottom, right under the calendar by clicking here: <a href="https://frasersalmon.ca/events/">https://frasersalmon.ca/events/</a>

The next Fraser River Panel meeting is scheduled for **11AM Tuesday**, **July 30**<sup>th</sup> (**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/89632608507

One tap mobile:

8887880099,89632608507# US Toll Free

Telephone:

Dial In:

855 703 8985 Canada Toll Free Webinar ID: 896 3260 8507

Mid- Fraser River attendees please text your questions during FRP calls to Greg Witzky at 778-694-9154. Can also email them to <a href="mailto:executivedirector@frasersalmon.ca">executivedirector@frasersalmon.ca</a>

## Links

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

BC River Forecast Centre Website: <a href="http://bcrfc.env.gov.bc.ca">http://bcrfc.env.gov.bc.ca</a>

Environment Canada's Water Office Website: <a href="http://www.wateroffice.ec.gc.ca/index\_e.html">http://www.wateroffice.ec.gc.ca/index\_e.html</a>

Pacific Salmon Commission Website: www.psc.org

Pacific Salmon Commission Test Fisheries: <a href="http://www.psc.org/info">http://www.psc.org/info</a> testfishing.htm

Pacific Salmon Commission News and Regulatory announcements: <a href="http://www.psc.org/publications/fraser-panel-in-season-">http://www.psc.org/publications/fraser-panel-in-season-</a>

information/fraser-river-panel-regulatory-announcements/

Fraser River Mission Escapement Reports: <a href="http://www.psc.org/publications/fraser-panel-in-season-information/fish-passage-panel-in-season-in

past-the-psc-hydroacoustic-counting-station-near-mission-bc/

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

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