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Emergency Salmon Task Force Situation Report - September 19, 2024

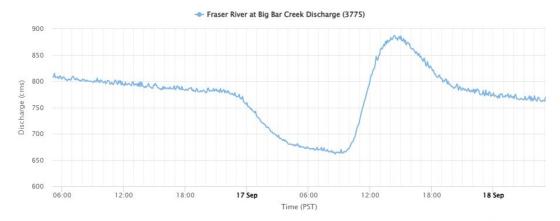
A major landslide occurred on the Chilcotin River the night of July 30, 2024, which continues to dramatically impact this year's returning sockeye and Chinook populations. In response to the slide, TNG rapidly formed a technical tripartite Emergency Salmon Task Force to assess the impacts on Tŝilhqot'in-bound salmon populations.

The task force is sharing regular situation reports to share key developments and milestones. All situation reports and landslide updates are posted on the TNG website at www.tsilhqotin.ca/our-territory/fisheries/communications and on the TNG Facebook page at www.facebook.com/Tsilhqotin. For questions please email tngsalmontaskforce@tsilhqotin.ca.

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Another smaller slide occurred early evening on September 16. This event was not unexpected; the slide area remains active and unstable. The field monitoring program and gauging network that has been implemented by the task force detected this event overnight on September 16, and the data communicated from the program has ensured that we can track and evaluate these events in near real-time. We expect further instability at the slide site in the coming weeks, which is likely to result in more flow disruptions and high turbidity. The effects of these events will continue to be assessed by the Task Force.

It appears that this slide originated on river left, where material previously deposited by the original slide had calved off and temporarily blocked flow through the slide area. A stage level increase of ~7m was observed in the channel upstream of the slide. Correspondingly, we saw our turbidity meters downstream become dewatered for approximately 12 hrs. We cannot say for certain if the river downstream was entirely dewatered during this period, but it was certainly affected. Once breached, there was a pulse of water in the Lower Chilcotin river that was still evident when Task Force members completed an overflight at 1030 am on Tuesday. The interruption to flow, and the subsequent pulse post breach, also impacted Fraser River flows downstream at Big Bar. The Fraser saw an instantaneous drop of approximately 100 cms below baseline, followed by a bump of approximately 100 cms over baseline flows (see plot below).



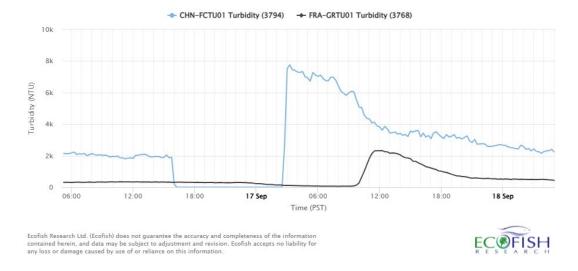
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Flows in both the Chilcotin and Fraser River had stabilized by Wednesday morning, but the turbidity remains high. Turbidity in Farwell Canyon peaked at nearly 8000 NTU and had dropped to 2200 NTU on Wednesday. Turbidity in the Fraser River at Gang Ranch bridge peaked at around 2300 NTU and dropped back to 430 NTU on Wednesday (see plot below).



The slide site itself did not appear to present any velocity barrier to fish passage when we observed it on our overflight (see photo). We did observe Sockeye for the first time holding in the clear water at Big Creek confluence downstream of the slide. The interruption in flows, the pulse of water following the breach, and the spike in suspended sediments will affect migration conditions for salmon downstream of the slide site. Sonar counts at Hanceville have been provided to midnight Wednesday, September 17 (see plot on page 3). Counts on Wednesday were lower than the previous 10 days. The sonar counts at Hanceville will continue to provide insight into migration effects and delays over the coming days.



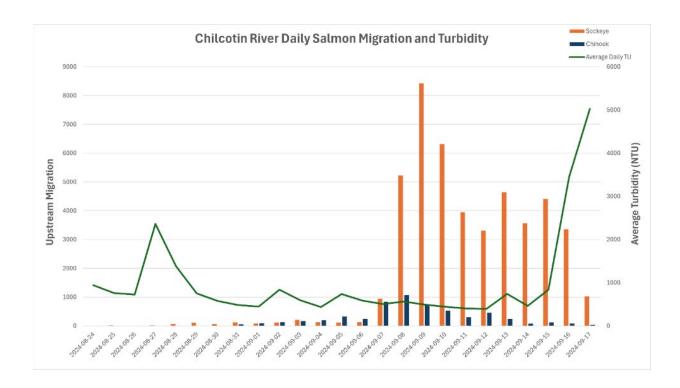
Photo: Overflight of the smaller slide that occurred Sept 16. The slide site itself did not appear to present any velocity barrier to fish passage.

Source: Emergency Salmon Task Force

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Significant increase in Chilko sockeye reaching spawning grounds

The Task Force is pleased to report the good news that from September 12th to 16th, 18,039 sockeye were detected by the Chilko sonar as they reached their spawning grounds. This is a significant increase in what we have seen on the spawning since Chilko sockeye started passing the slide area.

(See the Tŝilhqox [Chilcotin River] Landslide Monitoring Map on page 4)



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