



## **Emergency Salmon Task Force Situation Report – October 23, 2024**

*A major landslide occurred on the Chilcotin River the night of July 30, 2024, which dramatically impacted 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 Tsilhqot'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](http://www.tsilhqotin.ca/our-territory/fisheries/communications) and on the TNG Facebook page at [www.facebook.com/Tsilhqotin](http://www.facebook.com/Tsilhqotin). For questions please email [tngsalmontaskforce@tsilhqotin.ca](mailto:tngsalmontaskforce@tsilhqotin.ca).*

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### **Chinook And Sockeye Passage Monitoring Wrapped Up**

- The final in-season estimate of sockeye past the slide at the Chilko sonar was approx. 49,000 as of October 9, 2024.
- Standard annual post-season stock assessment and analysis specific to assessing slide impacts will be conducted in coming months

#### Chilko Sockeye:

- In 2024, Chilko sockeye had the lowest pre-season forecast in history at approx. 170,000. This was considered a conservation concern, along with all other Fraser sockeye stocks returning this year.
- The Chilcotin slide posed additional cumulative stressors on an already low cycle line and low ocean return, as well as extreme environmental conditions in the Fraser River over an extended period.
- In-season monitoring has shown that a notable proportion of Chilko sockeye that were able to return to the Chilcotin Watershed **were able to make it successfully pass the slide area to spawning grounds**, despite extreme environmental conditions in the Fraser (extended high heat), and multiple stressors from the initial Chilcotin Landslide and subsequent slides (including very high turbidity).
- While the overall situation for Chilko sockeye this year is a conservation concern, the successful passage of sockeye past the slide is considered very good news – i.e., slide impacts could have been a lot worse in an already tough year.

#### Chilko Chinook:

- Aerial counts demonstrate that returns have exceeded the primary brood year (approx. 2500 in 2019) – this is initial good news.





- Post-season analysis is being conducted to assess the 2024 return (integrating multiple stock assessment programs).
- Chinook are the largest bodied salmon species, very strong swimmers, and are particularly resilient to delayed migration (like those caused by Chilcotin slide events). **In-season monitoring indicates that a high proportion of Chinook populations that returned to the Chilcotin Watershed were able to successfully pass the slide area.** This would include the latter portion of the earlier-timed Little Chilcotin and Taseko Watershed Chinook populations, and the later timed Chilko Chinook population.
- Prior to the slide, these populations were all of conservation concern this year, with low anticipated returns, in part due to Big Bar impacts on the primary brood year (2019). The successful passage of Chinook past the slide area is considered very good news – i.e., slide impacts on Chinook could have been much worse in an already tough year.

### **Environmental Monitoring Status Update**

- The TNG Emergency Salmon Task Force removed the sonar at Hanceville on October 10, coincident with the removal of the Chilko sonar at Lingfield on October 11. This concluded our real-time assessment of fish passage past the Chilcotin landslide for the 2024 salmon migration period.
- Turbidity monitoring stations will be serviced and winterized in November and left installed through the winter. Data feeds will be monitored in real-time through the winter and a plan will be developed to service the stations prior to freshet 2025.
- Water level and camera monitoring stations at the slide will also be serviced and maintained through the winter.

### **Coho and Steelhead Passage Assessments**

The Task force is now focused on assessing impacts of the slide on later timed species – Interior Fraser Coho and Chilcotin River Steelhead.

- **Coho:** Moving forward the Task Force will be monitoring coho passage past the slide based on fish counts at the TNG-DFO Lower Little Chilcotin sonar that is scheduled to remain in place into early November, and TNG-DFO aerial assessments and enumeration of the Chilko coho spawn occurring in the first two weeks of November.
- **Steelhead:** The Task Force is currently in the process of confirming specific assessments to better understand the potential effects from the slide on Chilcotin River Steelhead.

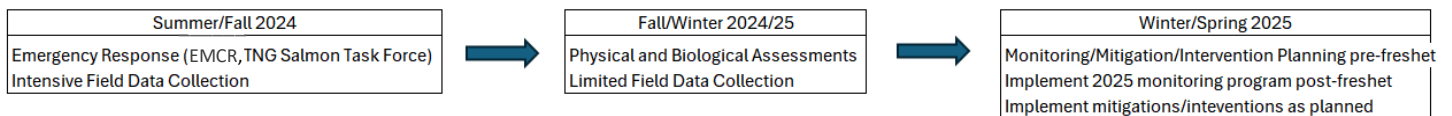




## Preparing for Monitoring and Mitigation Beyond 2024

It is critical that we have a fulsome understanding of the ongoing risk presented by the slide, to ensure that the Chilcotin watershed remains a salmon strong-hold. While monitoring for Coho and Steelhead will continue through the fall, the Task Force is also currently in the process of identifying and advancing key assessments to inform mitigation plans and monitoring program requirements beyond 2024. Assessments being considered by the Task Force and its Technical Sub-Committee include: geomorphology and slope stability, hydrology, sediment transport, fish passage rates and delay, enroute mortality, and physiological effects to spawning salmon. These assessments will be critical to planning mitigations or interventions to manage the risk to fish and life stages that are dependent on this habitat through the winter and spring, and to be prepared to mitigate risks to migrating salmon in 2025 (see Fig 1, below).

Figure 1. Overview of Task Force Phases



## Communications Update

This report concludes in-season communications as the Task Force shifts focus to post-season data analysis and priority assessments to inform planning for 2025. Situation reports will be produced when new information arises. We anticipate an update on coho migration in late November or early December.

