



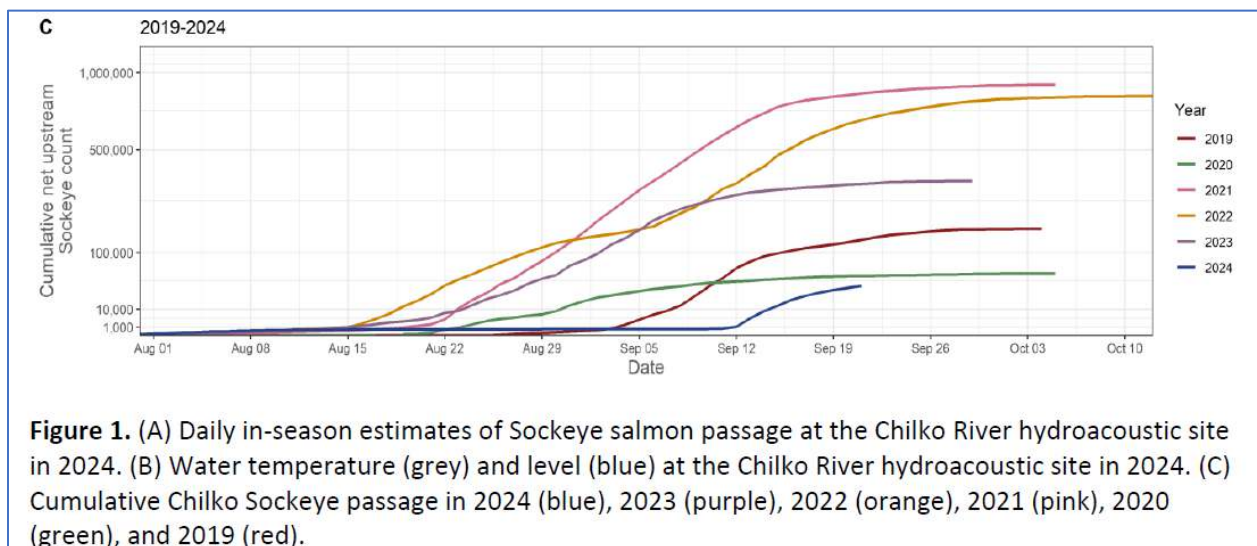
Emergency Salmon Task Force Situation Report – September 26, 2024

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 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 and on the TNG Facebook page at www.facebook.com/Tsilhqotin. For questions please email tnqsalmontaskforce@tsilhqotin.ca.

CHILKO SOCKEYE PASSAGE TO DATE

The Chilko SONAR – part of the long-term sockeye assessment program in the Chilko system, and which is installed downstream from the Chilko sockeye spawning grounds as the primary assessment tool for estimating overall Chilko sockeye spawner abundance – continues to show significant daily sockeye passage. When accounting for estimated migration time between the Hanceville and Chilko SONAR sites, the difference between estimated sockeye passage at the Hanceville SONAR and the Chilko SONAR has decreased as the Hanceville daily estimates decline towards the end of the run and the Chilko SONAR continues to observe those sockeye arriving at the spawning grounds. When comparing the sockeye passage estimates between the two SONAR sites, the estimates currently indicate successful migration of approximately 75% of the sockeye to the spawning grounds after passing the Hanceville SONAR to date, with a total count of 39,494 as of Sept. 23, 2024 (see Fig. 1, Cumulative Chilko Sockeye passage). This is significant because successful passage from the Hanceville SONAR to the Chilko SONAR requires the sockeye to navigate Lava Canyon, a portion of the Chilko river which includes kilometers of high velocity and turbulent water.



(from DFO Sockeye Stock Assessment – Chilko Sockeye Assessment Daily Update, Sept.23, 2024)





TASK FORCE AREAS OF FOCUS - FALL/WINTER 2024

Phase 1 - Summer/Fall 2024

The TNG Salmon Emergency Task Force was initiated in response to the slide and corresponding emergency in August. The Task Force has:

1. effectively implemented a comprehensive fish passage and water quality/flow monitoring program,
2. interpreted data in real-time to understand effects to migrating salmon, and
3. evaluated mitigation strategies to address effects to migration.

We remain confident in our opinion that the implementation of any mitigation action for Chinook or Sockeye would have caused more harm than non-action given the specific biological considerations and environmental conditions specific to the 2024 fisheries season context.

Phase 2 - Fall/Winter 2024

While the slide had initially stabilized post-breach, two significant slope failures occurred at the slide site the week of Sept. 16 resulting in full river blockages and water quality effects extending downstream into the Fraser River. The slide location remains unstable and there is significant material that could still be mobilized or result in future blockages.

As we get further into the fall, the emergency for Chilko Sockeye and summer Chinook will pass with those salmon having either passed the slide or expired trying. The focus of the emergency response now is in two major areas:

- Assessing slide impacts on Coho and Steelhead
- Preparing for monitoring and mitigation beyond 2024

Assessing slide impacts on Coho and Steelhead:

Two vulnerable stocks will be arriving to the Territory this fall/winter:

- Interior Fraser Coho – under the Pacific Salmon Treaty Status Framework, they remain a conservation concern, in “low” status, and
- Chilcotin Steelhead – extreme conservation concern under the BC status evaluation framework. Steelhead are of particular concern as a portion will overwinter in the mainstem Chilcotin River, while others may overwinter in the mainstem Fraser. Chilcotin Steelhead have critically low abundance.

The Task Force has recommended ongoing monitoring of fish passage and environmental conditions to help interpret slide effects to these species and to inform future recovery actions.





Monitoring includes the following:

- The Hanceville Sonar is anticipated to remain in the system until mid-October (in line with the timing for the Chilko Sonar).
- The turbidity monitoring network will remain in place as long as feasible.
- The hydrometric stations (flow) will remain in place as long as feasible.
- Coho spawning enumeration is planned for Nov. 2024.

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 2, below).

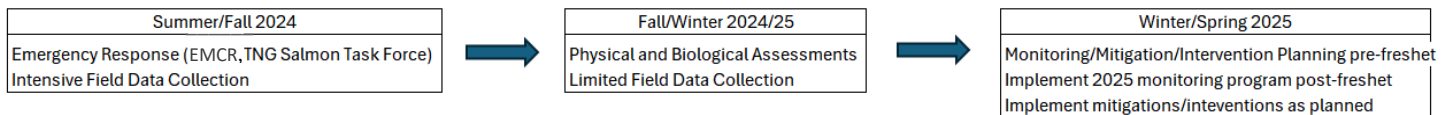


Figure 2. Overview of Task Force Phases

