



# TNG FISHERIES

*The latest information important to T̓silhqot̓'in fish and fishing activities*

The TNG Fisheries Team has been all-hands-on-deck with our regular in-season operations and field programs, now with an additional key priority focus on assessment and response for the T̓silhqox (Chilcotin River) landslide.

## T̓silhqox Landslide Update:

A major landslide occurred on the T̓silhqox (Chilcotin River) the night of July 30. Increased sediment, debris, and flows to the Chilcotin and Fraser Rivers have and will continue to dramatically impact this year's returning Ts'eman (sockeye) and Ja̓s (Chinook) populations to T̓silhqot̓'in Territory, which were already predicted to have record-low returns in 2024.

[Click here](#) for more information about the 2024 season context and the **state of T̓silhqot̓'in salmon populations** heading into the season.

In response to the landslide, the T̓silhqot̓'in Council of Chiefs issued a **fishery closure notice** on August 8 asking that members **do not fish for Ja̓s and Ts'eman** anywhere in T̓silhqox, Che̓qox, or Dasiqox (Chilcotin, Chilko, or Taseko) waters for the duration of the 2024 season to aid in the protection and recovery of salmon impacted by the slide, as all salmon populations returning to T̓silhqot̓'in Territory are in a state of **extreme conservation concern** due to the slide.



## TNG-led Salmon Emergency Task Force:

TNG quickly initiated the formation of a tripartite Salmon Emergency Task Force to assess the impacts of the slide on T̓silhqot̓'in-bound salmon populations. The task force includes participation from Fisheries and Oceans Canada (DFO), the Province of BC, the Upper Fraser Fisheries Conservation Alliance (UFFCA), and several external technical experts. Members were selected based on their high level of expertise and experience as members of the Big Bar landslide response. The task force has initiated a thorough investigation of the slide and its impacts on salmon, fish passage, and habitat, and is working to answer key questions and identify/advance technical priorities.

The task force is sharing regular **situation report updates**, which are publicly available 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.

[CLICK HERE FOR THE AUGUST 8 FISHERY CLOSURE NOTICE.](#)

## Stock assessment & monitoring

We're drawing on a number of sources for salmon information from the ocean to the spawning grounds to address the main question: **When will we have salmon passage through the T̓silhqot̓in slide?**

- **In T̓silhqot̓in Territory:** TNG Fisheries has an existing comprehensive network of stock assessment and monitoring programs, which are providing critical information about salmon within the Territory.
- **Outside the Territory:** We're monitoring and analyzing in-season information from outside the territory (e.g., marine and Fraser River test fisheries; DFO and PSC data) to understand (1) how many fish are returning from the ocean, (2) impacts during their migration up the Fraser River, and (3) when they are expected to arrive in T̓silhqot̓in Territory.
- **Slide response – new monitoring actions:** TNG and the Salmon Emergency Task Force are also implementing new monitoring programs to better understand fish movement and passage at the slide.

These different sources of information are critical for assessing salmon impacts, informing landslide response decision making and actions, preparing for emergency conservation enhancement for critically endangered salmon populations, and understanding fish passage past the slide.

[Click here](#) for more information about how we collect, monitor and analyze in-season information.

## Existing TNG monitoring and assessment programs currently operating include:

- **Little Chilcotin SONAR** (TNG/DFO partnership)
- **Chilko SONAR** (TNG/DFO partnership)
- **Taseko SONAR** (TNG-led)
- **Aerial assessment** helicopter flights in the Little Chilcotin, Taseko, and Chilko systems
- **TNG-led Territory-wide aquatic habitat monitoring** (water quality and quantity) focusing on critical salmon spawning areas

## New monitoring and assessment activities

*(task force slide response – TNG-led with technical support from expert partners EcoFish and NHC):*

- **Cameras** and wifi installed for 24/7 eyes on the landslide site;
- **Real-time hydrometrics** (water levels and flow) upstream and downstream of the slide;
- **Monitoring turbidity (silt/muddiness of water) and flows** upstream and downstream of the slide (note: fish don't move if turbidity is above a certain threshold, so this is important information to determine when we might expect fish movement);
- **Fish passage SONAR** installed upstream of the slide (Hanceville) to determine when fish are able to migrate past the slide – the SONAR is operating continuously and staff are reviewing and reporting on results in near-real-time (14 sockeye and 29 Chinook have been seen to date);
- Additional **helicopter assessments** upstream and downstream of the slide;
- **Drone survey** to map water velocities around the slide;
- **Terrain stability monitoring** at/around Farwell Canyon;
- **Emergency works planning** to assess safety and feasibility for access and potential earth works at the slide;
- **Mitigation planning** in case salmon are not able to migrate past the slide, including emergency enhancement and trap and transport.

See map on page 5



Above: Leonard English and Winston Bambrick of TNG Fisheries with Ecofish and DFO technicians installed a new SONAR just above the slide site (at Hanceville) Aug 8 to detect when fish start passing through the slide. The SONAR is operating continuously and staff are reviewing and reporting results in near-real-time.



Above: TNG Biologist Pete Nicklin assessed the slide site by helicopter Thurs, Aug 8 and again Mon, Aug 12. He is cautiously optimistic about changes in the site he saw on his second flight Monday: the river is evening out, flows are beginning to slow, and water clarity is starting to improve. We aren't out of the woods yet, but it appears fish passage conditions are slowly improving.



Left: Tension cracks are visible near Farwell Bridge on the Yunesit'in side, so there are still concerns about site instability and safety. It's possible that rain, increased flows from snow melt, etc. could trigger further instability.

## TNG FISHERIES TEAM

**RANDY BILLYBOY**  
Fisheries Manager

Contact for questions:  
rbillyboy@tsilhqotin.ca  
Tel: 250-392-3918

**MICHELLE TUNG**  
Fisheries Strategy Lead

**LEONARD ENGLISH**  
Fisheries Coordinator

**WINSTON BAMBRICK**  
Jr. Hatchery Manager

**GERALD WILLIAM**  
Sr. Fisheries Technician

**HAYDEN GRINDER**  
Fisheries Technician

**PETE NICKLIN**  
Biologist

**ANDREA STERLING**  
Biologist

**AIMEE ARSENAULT**  
Communications

## Salmon migration, status, and impacts:

We are putting monitoring systems in place to assess fish passage at the slide, but unrestricted fish passage seems unlikely based on observations by technical experts.

### Taseko Ts'eman (sockeye):

- Highest conservation concern right now due to their timing; severe impacts are likely.
- This is a critically endangered stock at **high risk of extinction**. Emergency conservation enhancement has been conducted since 2021 and was planned prior to the slide.
- **Good news:** a few Taseko Ts'eman were detected by the Taseko SONAR, so some have already reached their spawning system.

### Chilko Ts'eman (sockeye):

- **Critical conservation concern**, as most are still downstream of the slide (approx. 500 fish have been counted by the Chilko SONAR to date).
- The peak of the return is expected Aug 25–26 based on current information from ocean and lower Fraser test fisheries.
- Already a record low predicted ocean return in 2024 – only around 100,000 fish.

### Chilko Jaš (Chinook):

- These fish may experience less severe impacts based on their migration timing; however, information is still being collected for a more thorough assessment.

### Chilcotin Jaš (Chinook):

- Good news: Upper Chilcotin Jaš reached their spawning grounds prior to the slide.
- This is a key critically endangered stock at **high risk of extinction**; emergency conservation enhancement was conducted since 2020 and was planned prior to the slide.
- Brood stock collection was completed in July by TNG Fisheries in coordination with the UFFCA and partners, and brood stock has been transferred to the Quesnel River Research Centre (QRRC) conservation hatchery.
- Most of the Little Chilcotin Jaš population made it past the slide; approx. 1000 Jaš have been observed in the system to date.

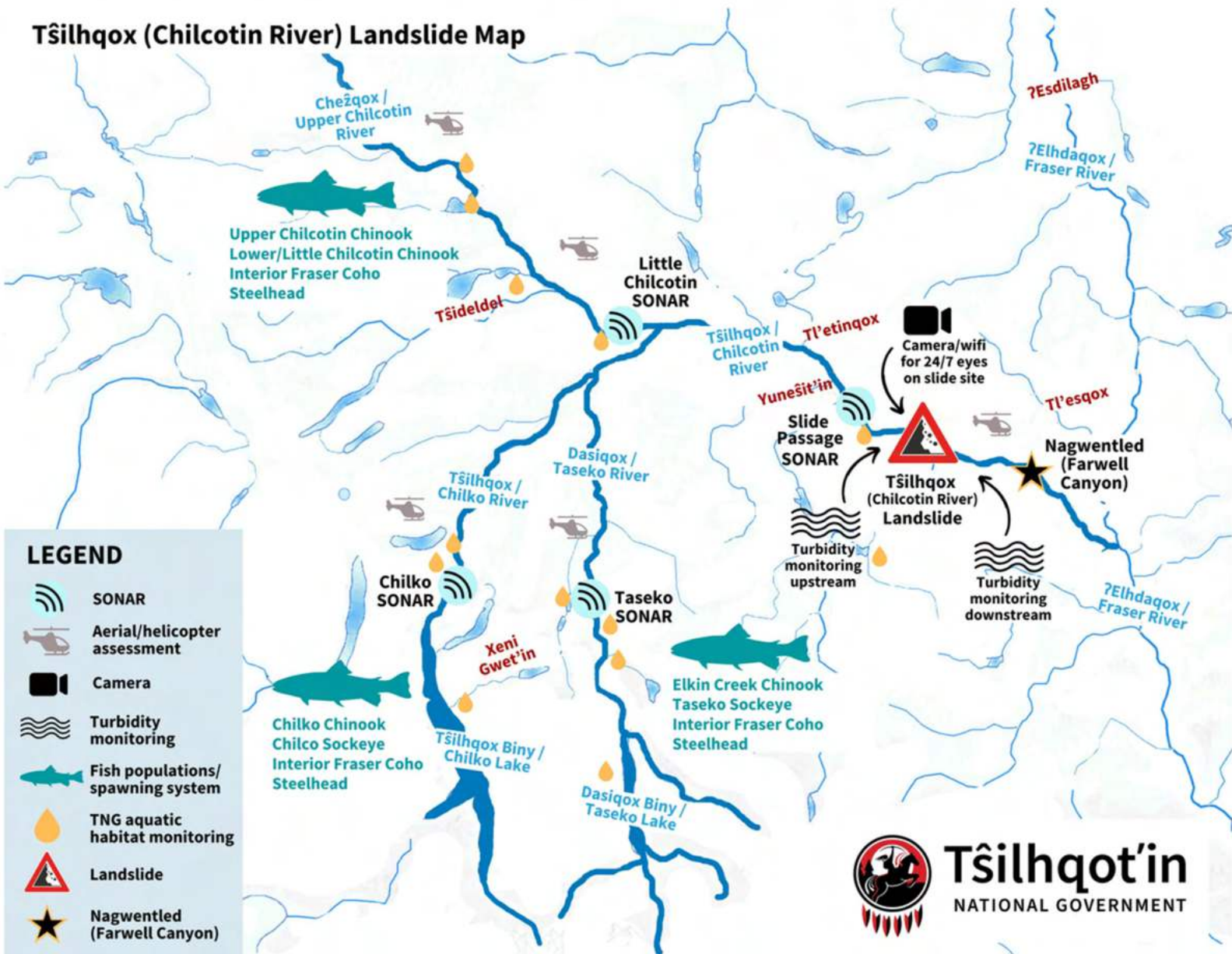
### Elkin Creek Jaš (Chinook; Taseko system):

- The spawning population is typically in the range of 100–400 fish with later timing like Chilko Jaš.
- They could be severely impacted by the slide; information is still being collected for this population.
- Emergency conservation enhancement is being considered but has not been confirmed.

### Others:

- **Interior Fraser coho** and **critically endangered Chilcotin Tislagh (steelhead)** are expected to reach Tsilhqot'in Territory in a few weeks (September).

### T̕silhqox (Chilcotin River) Landslide Map



## TNG FISHERIES WEEKLY BULLETINS

For weekly updates on the status of T̕silhqot'in salmon stocks, fisheries, and TNG Fisheries Department activities, please see our weekly fisheries bulletins, along with more information about the TNG Fisheries Program, at [www.tsilhqotin.ca/our-territory/fisheries](http://www.tsilhqotin.ca/our-territory/fisheries) and on the TNG Facebook page.

For questions please contact TNG Fisheries Manager Randy Billyboy: [rbillyboy@tsilhqotin.ca](mailto:rbillyboy@tsilhqotin.ca) / 250-392-3918