



TNG FISHERIES

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

2024 T̓silhqot̓'in Nation Fisheries Plan

On July 19, 2024 TNG shared the 2024 T̓silhqot̓'in Fisheries Plan on behalf of the T̓silhqot̓'in Council of Chiefs (see attached on page 5). The plan schedules **harvest opportunity** when the stronger Chilko populations of Ja̓s (Chinook) and Ts'eman (sockeye) return to the Territory.

- A **Ja̓s** opening is scheduled from **Friday, August 16 through to the end of the fishing season.**
- A **Ts'eman** opening is scheduled from **Friday, August 23 until Sunday, September 1.**

The plan **supports T̓silhqot̓'in Nation conservation goals** and asks fishers to follow voluntary measures to protect early timed Chilcotin Ja̓s and Taseko Ts'eman populations that are at **high risk of extinction**, and this year's weaker 2024 Chilko Ts'eman population. This year, our returning Ja̓s and Ts'eman are the babies from 2019 and 2020 parents; those years had consecutive record-low salmon returns to the Fraser River, which were further impacted by the Big Bar landslide. Our critically endangered earliest timed stocks were hit hardest by Big Bar. TNG is leading emergency conservation enhancement (hatchery) efforts to rebuild these stocks.

Voluntary Protection Measures:

#1. Please do not fish for Ja̓s (Chinook) in the Little Chilcotin system above the Chilko/Chilcotin junction for the full fishing season.

- Please protect these Ja̓s stocks that are at **high risk of extinction** as they return to their spawning grounds.

#2. Scheduled openings for Ja̓s and Ts'eman (sockeye):

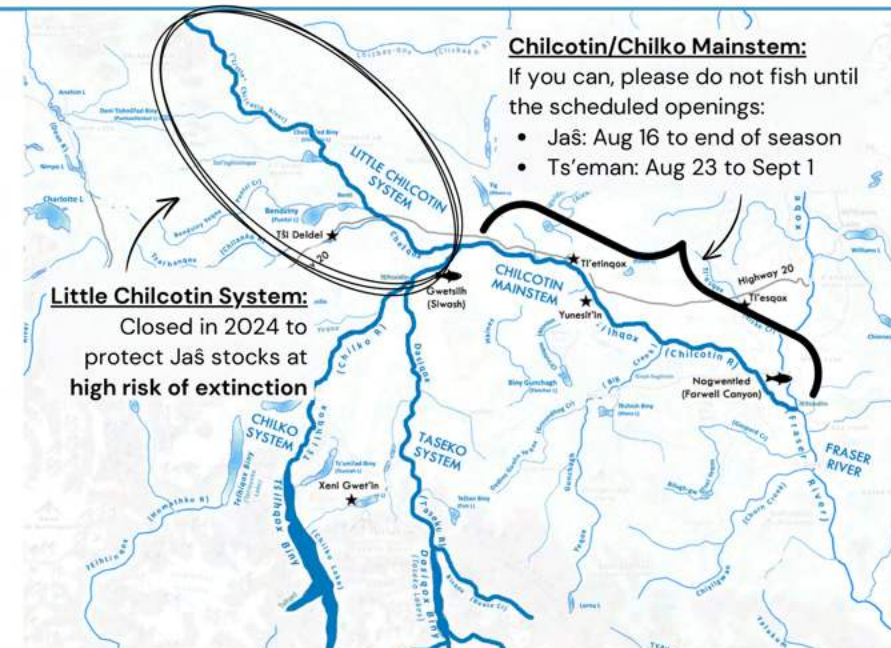
a) JA̓S: If you can, please delay fishing for Ja̓s in the Chilko/Chilcotin mainstem until the scheduled opening **Fri, Aug 16** (midnight, Thurs night) **through to the end of the season**, when the stronger Chilko Ja̓s population will be in the Territory.

b) TS'EMAN: If you can, please do not harvest Ts'eman until the scheduled opening **Fri, Aug 23** (midnight, Thurs night) **to Sun, Sept 1** (end of day).

- Allow early-timed Ja̓s and Ts'eman that are at high risk of extinction to pass through the mainstem and return to their spawning grounds.
- In this very difficult year for Ts'eman, please take only what you need and support the rebuilding/replenishment of this weaker 2024 population.

PLEASE NOTE: We expect stronger returns of T̓silhqox Ts'eman (Chilko sockeye) in the next 3 years (2025, 2026, 2027) based on currently available information.

Because very low Ja̓s and Ts'eman returns are expected this year, fishers are encouraged to fish other resident fish, e.g., Dek'any (rainbow trout), Sabay (bull trout), Lhagh Sisich'el (suckers).



2024 Salmon Season Context:

- The pre-season forecast indicates that all Fraser River Ts'eman and all Upper Fraser Jaš populations are expected to return in **record low numbers** this year. This includes all stocks that return to Tšilhqot'in Territory and that migrate through the Fraser mainstem.
- 2024 salmon returns are the "echo" of consecutive record low returns in 2019 and 2020, which were the parents of this year's salmon returns. In those years, not enough spawners returned to sustain these stocks for the future.
- 2019 and 2020 returns were also severely impacted by the Big Bar landslide – especially our critically endangered earliest-timed stocks, which are now at high risk of extinction.
- 2024 is part of the lowest 4 year "cycle line" for Ts'eman (i.e., 2004, 2008, 2012, 2016, 2020, and 2024 are relatively weaker years). Based on currently available information, we expect stronger returns of Chilko Ts'eman in the next 3 years (2025, 2026, 2027).
- In addition to very low predicted returns, **extreme environmental conditions** including high river temperatures are anticipated to cause stress and mortality to returning stocks.

Salmon Health Report Card for Tšilhqot'in Stocks:



High risk of extinction for Upper Chezqox Jaš (Upper Chilcotin Chinook) and Dasiqox Ts'eman (Taseko sockeye). These are early timed stocks that return to the Little Chilcotin and Taseko systems to spawn, and migrate through the Chilcotin mainstem from early July to mid August.



High conservation concern for later-timed Tšilhqot'in Jaš stocks that return to the Territory from early August to mid September.



Expecting the lowest year for Tšilhqox Ts'eman (Chilko sockeye) – this is the "echo" of the worst disaster we've had (2020)

What is the Salmon Forecast?

The forecast is a prediction of salmon returns in the upcoming season based on information that includes:

- Overall health of the stock (long-term and more recent trends)
- Brood (parent year) – how many fish came back to spawn that were the parents for this year's generation
- How many fish are we expecting back from the ocean this year
- Environmental conditions in the river that impact migration (temperature and flow).



TNG FISHERIES TEAM

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From the ocean to the spawning grounds: Monitoring and analyzing in-season fisheries data

From late June to the end of September, TNG Fisheries is conducting detailed monitoring and analysis of in-season fisheries information from the ocean to the spawning grounds. We report out on current information through these weekly in-season fisheries bulletins.

- This week, almost all the ocean and Fraser in-river test fisheries and SONAR systems were mobilized and operational, most of them focused on counting the returning Fraser River Ts'eman stocks.

Ts'eman (Sockeye):

- Taseko Ts'eman travel in an early timed group of Ts'eman from all over the Fraser River watershed; they are now on their way up the Fraser River to their natal spawning streams.
- Taseko Ts'eman are critically endangered/at risk of extinction, and returning in very low numbers.
- Chilko Ts'eman were not present in the ocean test fisheries this week. Chilko Ts'eman travel with a later timed group that includes Ts'eman that spawn in the Quesnel River watershed and 2 ts'eman populations that spawn in the Nechako River watershed in the Upper Fraser. We are watching for the first signs of the Chilko ts'eman in the ocean test fisheries over the next couple of weeks, and will report on their journey as we track them.
- Chilko Ts'eman are forecast to return in much lower numbers than the past 3 years because of the record low numbers of parent spawners in 2020.

Aquatic Habitat Monitoring:

- We also collect critical information on salmon habitat through our TNG-led Aquatic Habitat Monitoring Program, which provides real time information on water quality and quantity in all 3 key natal systems (Chilcotin, Chilko, Taseko).
- We are currently monitoring water temperatures in the Little Chilcotin river, which have been climbing steadily since early July. Temperatures this week are averaging 19–21 degrees Celsius, which is very warm for salmon; this can cause stress and impact their migration and spawning success.

What are ocean test fisheries?

Ocean test fisheries are conducted with specialized fishing boats by expert crews trained to catch and count returning Ts'eman without harming them. Crews collect scales and DNA samples from a small number of Ts'eman caught in large nets shaped like big mesh bags called purse seines. A small opening (only large enough to let one fish swim free at a time) is made at the top of the net, and the Ts'eman are counted as they swim out. They are then free to continue their migration back to their spawning grounds. DNA samples are analyzed to identify which population (spawning area) each fish is from, and counts are verified through SONAR counts in the lower Fraser River.

Ocean test fisheries at the northeast corner of Vancouver Island and the southern tip of Vancouver Island provide an estimate of the ocean adult spawner return for Chilko and Taseko Ts'eman. The T̓ilhqot'in Ts'eman travel in groups stretched out over a long distance in the ocean for about a month; test fisheries operate for several hours each day of the season, counting the entire run.



Photo: Test fishery crew (contracted by the Pacific Salmon Commission) counting sockeye as they leave the test fishery net.

Update on salmon monitoring in T̓ilhqot̓in Territory:

This week, members of the TNG Fisheries field crew (Leonard English, Gerald William, and Hayden Grinder) are analyzing SONAR files from the TNG-led Fraser/Chilcotin Junction SONAR (installed June 29) and the Lower Little Chilcotin SONAR (in partnership with DFO; installed July 10). This information helps us prepare for emergency conservation enhancement activities for our critically endangered early timed Taseko Ts'eman and Upper Chilcotin Jaš, which are at high risk of extinction.

They report seeing very low numbers of these early timed populations to date – an indication that there are still very few salmon in the Chilcotin watershed, and the ones that are here are the ones we're most concerned about.

Next week will be a very important week for TNG Fisheries. We'll install 2 **TNG-led SONARs** in systems that are home to our 2 most critically endangered salmon populations. These SONARs will provide critical information to inform our emergency conservation enhancement activities.

- On July 22 we will install the **TNG-led Upper Chilcotin SONAR**, which will provide a real-time spawner estimate for **Upper Chilcotin Jaš**, which are at high risk of extinction.
- On July 24 we will install the **TNG-led Taseko SONAR** which will provide critical population information about **Taseko Ts'eman**, which are at high risk of extinction.

Photos: Leonard English, Gerald William, and Hayden Grinder of TNG Fisheries worked with DFO technicians to install the Lower Chilcotin SONAR (a TNG-DFO partnership) on July 10 to assess critically endangered early timed Chilcotin Jaš as they enter the Little Chilcotin nursery area.



TNG FISHERIES WEEKLY BULLETINS

For weekly updates on the status of T̓ilhqot̓in 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 and on the TNG Facebook page.

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



Tsilhqot'in Fisheries Plan 2024 Salmon Season

The Tsilhqot'in Council of Chiefs requests voluntary compliance with limited measures to protect early timed Jaš (Chinook) and Ts'eman (sockeye) populations at high risk of extinction, and this year's weaker 2024 Chilko sockeye population.

Requested Voluntary Protection Measures:

#1. Please do not fish for Jaš (Chinook) in the Little Chilcotin system above the Chilko/Chilcotin junction for the full fishing season.

- Please protect these Jaš stocks that are at **high risk of extinction** as they return to their spawning grounds.

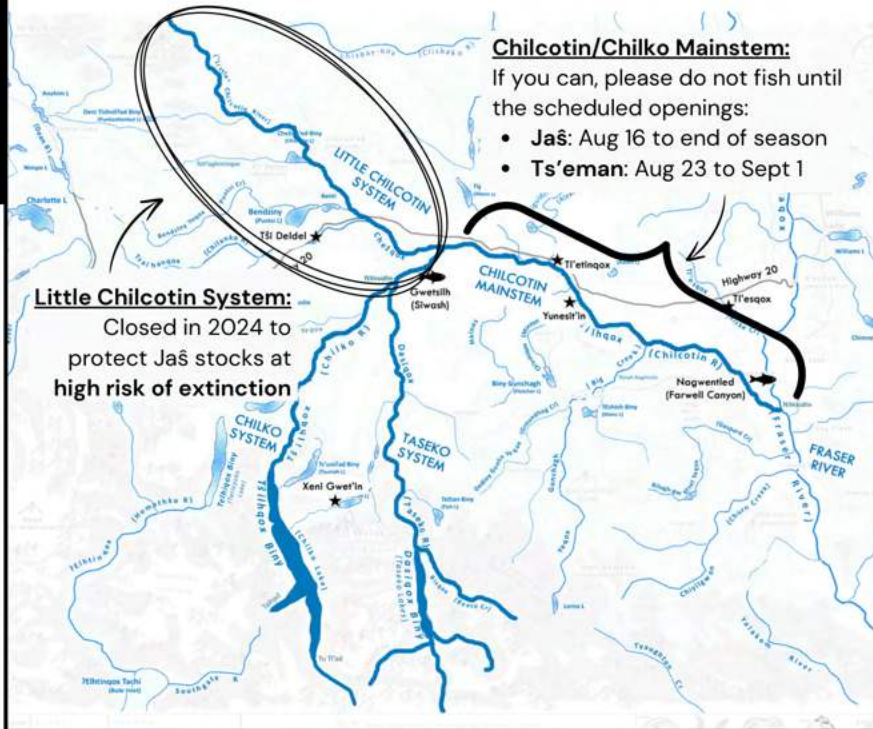
#2. Scheduled openings for Jaš and Ts'eman (sockeye):

a) JAŠ: If you can, please delay fishing for Jaš in the Chilko/Chilcotin mainstem until the scheduled opening **Fri, Aug 16** (midnight, Thurs night) **through to the end of the season**, when the stronger Chilko Jaš population will be in the Territory.

b) TS'EMAN: If you can, please do not harvest Ts'eman until the scheduled opening **Fri, Aug 23** (midnight, Thurs night) to **Sun, Sept 1** (end of day).

- Allow early-timed Jaš and Ts'eman that are at **high risk of extinction** to pass through the mainstem and return to their spawning grounds.
- In this very difficult year for Ts'eman, **please take only what you need** and support the rebuilding/replenishment of this weaker 2024 population.

PLEASE NOTE: We expect stronger returns of Tsilhqox Ts'eman (Chilko sockeye) in the next 3 years (2025, 2026, 2027) based on currently available information.



Little Chilcotin System:
Closed in 2024 to protect Jaš stocks at high risk of extinction

Chilcotin/Chilko Mainstem:
If you can, please do not fish until the scheduled openings:
• Jaš: Aug 16 to end of season
• Ts'eman: Aug 23 to Sept 1

We can all help protect our at-risk Jaš and Ts'eman populations for the future by allowing them to safely return to their spawning grounds.

The scheduled openings allow early-timed Jaš and Ts'eman that are at high risk of extinction to pass through the mainstem and return to their spawning grounds.

Jaš and Ts'eman are expected to return in very low numbers this year. Please consider fishing for other resident fish — e.g., Dek'any (rainbow trout), Sabay (bull trout), Lhagh Sisich'el (suckers).

Please note: Fishery opening dates may be adjusted in-season as more information becomes available. Under extreme circumstances, emergency conservation measures may be implemented.

