OUTREACH PROGRAMS

Outreach is an important part of the NWSRI's mission to support sturgeon recovery.

Annual Release Event: The Sturgeon Release Event was held on June 7, 2024 at Riverside Park in Vanderhoof. Nearly 1,200 learners, educators, volunteers, community members and leaders, attended this event that marked the 10th anniversary of the opening of the Nechako White Sturgeon Conservation Centre. In total, 63 70cm+ juvenile sturgeon and nearly 1000 Chinook salmon fry were released into the river. Participants also learned about the watershed, fish biology and conservation, and more from the numerous booths at the park!

Curriculum: The NWSRI focused on creating new videos to add to the online curriculum. When asked, educators prefer using hands-on and video materials with their students, so we hope the new videos targeted for older learners - will be a hit.

Interpretive Signs: The signs at the Conservation Centre got a re-fresh to reflect the learning that has happened over the past decade of research by the Technical Working Group.

Storm Drains: Seeing sturgeon and salmon images at storm drains reminds us all to keep chemicals out of our waterways. Learners from Fort St. James repainted storm drains to help remind their community to be fish-friendly.

Boat Kit Program: Over the years of the Boat Kit Program 89% of sturgeon caught as by-catch in the First Nation Food, Social and Ceremonial fishery have been released live - a huge success!



A high-school student gaining hands on experience removing scutes from a juvenile sturgeon at the **Conservation Centre.** Scute removal is used as a quick visual reference to identity brood year.

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NECHAKO WHITE STURGEON

RECOVERY INITIAT

Nechako White Sturgeon Recovery Initiative

YEAR IN REVIEW 2024-2025

Staff and volunteers mix sturgeon eggs and milt to start the new brood year cycle in May 2024 at the Conservation Centre.

The Nechako White Sturgeon Recovery Initiative thanks the organizations, individuals and agencies that have contributed to recovery initiatives in 2024-2025. Contact us for more information or to book a tour inside the Conservation Centre:

HANC

info@nechakowhitesturgeon.org www.nechakowhitesturgeon.org This brochure provides a brief overview of the work done by the Working Groups of the Nechako White Sturgeon Recovery Initiative in 2024-2025.

Find more reports at: www. nechakowhitesturgeon. org/publications/annualreports







Pêches et Océans

TECHNICAL PROGRAMS

The Technical Working Group (TWG) partners with several agencies to carry out research and monitoring programs in the Nechako Watershed. The TWG provides recommendations on recovery for Nechako White Sturgeon based on this research.

- Adult Spawn Monitoring: Looks at timing of spawning, incubation success, larval drift, and the physical parameters of the river that occur during spawning. The goal is to inform habitat restoration decisions. In 2024, the first eggs were detected in the spawning reach May 18, and a total of 497 eggs were recovered from egg mats. Eggs were transported to the hatchery for rearing for increased genetic diversity.
- Juvenile Indexing: Uses set lines and angling to gain insight into hatchery-juvenile survival and growth rates, to monitor the presence of wild-origin juveniles, and to refine our knowledge of juvenile habitat use. In 2024, monitoring efforts were in core areas of the Nechako River as well as Fraser Lake and portions of the Upper Fraser River by both FFSBC and CSTC staff. A total of 135 fish were caught, including the notable capture of 5 wild, never-before-caught juvenile sturgeon!

Watch the <u>PIT tag educational video</u> that explains how it is used in indexing programs.

The extensive database of juvenile indexing data is being used to model the survival and future abundance of sturgeon in the Nechako River. This information will be available in 2025.

Tours at the Conservation Centre

In 2024, over **2,700 people toured** the Conservation Centre! The summer students and Conservation Centre staff attended the Vanderhoof Farmers' Market, Pumpkin Walk, Merry Madness Parade, and the UNBC Career Fair, as well as presented at libraries and Exploration Place!

Visit the NWSRI website for up-to-date tour times.

• Juvenile Telemetry: *This program provides information on distribution, movement, and habitat use.* In 2024, 50 radio-tagged juveniles were released into the Nechako River and Fraser Lake. Using aerial methods, all 30 of the river releases were detected.

Watch the <u>educational video about radio</u> <u>telemetry</u> that explains how it aids in sturgeon monitoring.

- Habitat Restoration: Studies explore the substrate needs of sturgeon to improve survival in the wild. In 2024, the TWG started on a larger-scale, multilevel project to do in-river habitat restoration within the spawning reach of the Nechako River. The goal is to redistribute/clean the substrate right before spawning (proposed for early May 2025) with the outcome of having a clean bed of substrate ready for wild spawning to improve the likelihood of wild egg and larvae survival. Local contractors have been instrumental to help prepare the appropriate equipment and method to clean the substrate. Keep an eye out during the spring in 2025 for more information.
- Fraser Lake Studies: This is a multi-year research program looking at hatchery raised sturgeon and their survival in lake versus river habitats. Data collection continued in 2024 on the habitat use (location and depth) of juvenile sturgeon in Fraser Lake. Researchers are interested in understanding the local and movement of sturgeon based on temperature & oxygen levels in the lake, as well as possible food sources.

Visiting medical students get a winter-

time tour of the Conservation Centre.

 » Here... One-year old sturgeon at the Conservation Centre.
» Pictured on the cover... a juvenile sturgeon caught during the indexing program in 2024.

• Nechako White Sturgeon Conservation Centre The NWSCC continues to aid in the recovery of Nechako White Sturgeon by hatching eggs and rearing juvenile sturgeon to two years old.

In 2024, 133 sturgeon were caught between April 15 and May 14 as part of the brood capture program. Of those, 7 females and 6 males were used for spawning at the hatchery. The sturgeon produced from these adults, along with the surviving wild-captured eggs, will be released in the spring of 2026 when they will be 70cm long.

In May and June 2024, 300 juvenile sturgeon were released into the watershed (63 as part of the sturgeon release event). Of those, 220 were released into the Nechako River and 80 into Fraser Lake.

• Other interesting research on sturgeon that happened in 2024 that adds to the understanding of Nechako White Sturgeon includes:

- 'Climate Change Impacts' looking at how environmental stressors from climate change impact the health of sturgeon

- 'Sturgeon Forensics' understanding decomposition rates of sturgeon, and what that can tell us about when and how they died.

Be a part of recovery!

Report sturgeon mortalities to the 'Sturgeon Mortalities' online reporting tool.



SCAN THE QR CODE TO GET THE FORM