NECHAKO WHITE STURGEON

## **LOOKING AHEAD TO 2025**

## 2025 JUVENILE STURGEON RELEASE

#### On June 6, 2025, the NWSRI along with School District 91, Freshwater Fisheries Society of BC, and the District of Vanderhoof, will host the Juvenile Sturgeon Release.

This much anticipated school and community event will be held on Friday, June 6 at Riverside Park in Vanderhoof. The community is invited to come down and watch the large 2 year old sturgeon be released by students from across the Nechako Watershed. In total, 63 sturgeon will be released into the Nechako River in an effort to support the recovery the population.

Along with releasing their sturgeon, students will spend their time visiting educational and interactive booths to learn about fish, river habitat, the watershed, and stewardship. It is always a fun day, full of learning, community and hot dogs!

The businesses, agencies, and folks that make this event possible include School District 91, District of Vanderhoof, Rio Tinto, Integris Credit Union, Spruce City Wildlife Association, Department of Fisheries and Oceans, Carrier Sekani Tribal Council, Avison Management Services Ltd., FireSmart, UNBC Watershed Research Team, Conservation Officer Team, Wildfire BC, Saik'uz First Nation, Nechako Valley Secondary School students and Enviro-Vikes Club.

If you are interested in helping with this event, please reach out to the NWSRI Coordinator at: info@nechakowhitesturgeon.org

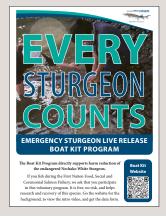


TOP: SAIK'UZ FIRST NATION COUNCILOR RODNEY TEED SHARES HIS THOUGHTS DURING THE 10TH ANNIVERSARY CELEBRATION OF THE OPENING OF THE NECHAKO WHITE STURGEON CONSERVATION CENTRE IN 2024. LEFT: STUDENTS LOOK AT THE OVER 1000 NAMES GIVEN TO STURGEON OVER THE 10 YEARS OF RELEASES. RIGHT: VOLUNTEERS FROM THE SPRUCE CITY WILDLIFE SOCIETY, ONE OF THE MANY PARTNER ORGANISATIONS THAT HELP AT THE RELEASE EVENT, STAND IN FRONT OF THE CUPS HOLDING CHINOOK SALMON FRY FOR STUDENTS TO RELEASE.

### **EVERY STURGEON COUNTS**

There are approximately 553 adults left in the wild and it is critical that no adults are lost from the population accidentally!

The Emergency Boat Kit Program promotes the safe release of sturgeon from gill nets used during the First Nation Food, Social and Ceremonial Fishery. Anyone active in the fishery is encouraged to participate in this program, where fishers receive a **free kit** that contains the tools needed to safely release an entangled sturgeon. Net mending supplies are also available, with the hope to offer net mending classes in the future.



This program is in partnership with Carrier Sekani Tribal Council. It is an effective harm reduction program to keep adult and juvenile sturgeon in the population to breed in the future.

We are hoping to increase participation in the Boat Kit Program, so please contact info@nechakowhitesturgeon.org to learn more and to get your FREE KIT!

## **RESEARCH, EDUCATION & OUTREACH**

## TWG Research & Monitoring Programs

The **Technical Working Group** is made up of representatives, experts and managers from the provincial and federal governments, the University of British Columbia, University of Northern BC, Simon Fraser University, and Carrier Sekani Tribal Council. The TWG conducts a variety of ecological and habitat focused projects on Nechako White Sturgeon. The information gathered is used to help inform recovery recommendations the NWSRI provides the provincial decision makers for this species. Here is a snapshot of some of the different programs and research that will be happening this year...

**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.

Research boats will be out on the river from May to June 2025 placing egg mats and drift nets to sample and collect eggs and larvae. Any eggs or larvae will be brought back to the hatchery to rear there, to increase genetic diversity in juveniles for release in 2027. Buoys will mark locations of these sampling tools - please be mindful and stay clear when on the river!

**Juvenile Sturgeon Indexing:** This program is conducted using set lines and angling to gain insight into hatchery-origin juvenile survival and growth rates, to monitor the presence of wild-origin juveniles, and to refine our knowledge of juvenile habitat use.

Monitoring happens in the mainstem Nechako River as well as Fraser and Stuart lakes and in portions of the Upper Fraser River by both Freshwater Fisheries Society and Carrier Sekani Tribal Council fisheries staff. These crews will deploy set-lines - long lines with multiple hooks - during the summer and fall in an effort to capture juvenile sturgeon. Every juvenile sturgeon that is captured is entered into a database, and this extensive dataset is being used to model future sturgeon abundance in the watershed. This computer modeling work will be done in 2025!

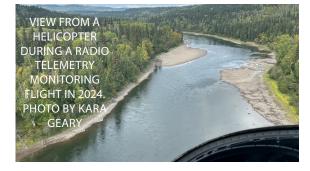
# To learn a bit more about how the NWSRI keeps track of individual sturgeon information, watch this <u>short video</u> <u>about how we use PIT tags</u> in indexing programs.



**Juvenile Telemetry:** *Provides information on distribution, movement, and habitat use.* 

In 2025 crews from the Ministry of Water, Lands and Resource Stewardship will use radio-telemetry tracking methods to locate radio-tagged sturgeon in the Nechako River, Fraser Lake and parts of the Fraser River near Prince George.

## Watch the <u>video about radio telemetry</u> and how it aids in sturgeon monitoring.



**UNBC Student Research Projects:** Multiyear research programs looking at sturgeon movements, survival and habitat needs.

Data collection will continue into the spring on Fraser Lake where this research is exploring the habitat use (location and depth) of juvenile sturgeon to understand their positioning and movement based on temperature and oxygen levels in the lake, as well as possible food sources.

Another study that is exploring the change in behaviour/depth of sturgeon in the river based on body and water temperature, will continue for a second year of data collection. *More on these projects in the next newsletter!* 

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Habitat Restoration in the Nechako River - Spawning Bed Cleaning Project 2025

In April and May, folks travelling over the Burrard bridge in Vanderhoof will see some curious activity just upstream of the bridge. A team of researchers with the NWSRI Technical Working Group will begin a long planned project to 'clean' or 'reorganize' the substrate in the spawning reach of the Nechako River so that it is better quality habitat for wild sturgeon eggs and larvae. **The goal is to increase the chance of survival of this year's wild spawned eggs and larvae.** 

What will be happening? Using a specialized "rake," crews will carefully scrape the riverbed to lift the substrate, sift it, and return it to its location. The rake is designed to allow finer sediments to settle first, with larger rocks and cobbles placed over the sand. This method will undergo full testing in mid-April in a small section of the river. Then, in mid-May, the entire spawning area will be raked just before adult sturgeon arrive to begin spawning.

Why does this need to happen? Female sturgeon spawn by releasing their eggs into the water column, where they eventually settle onto the riverbed. Sturgeon eggs are sticky and if they land on sandy substrate, fine particles can cling to them, posing a risk of suffocation. Ideally, the substrate for spawning should consist of clean gravel and cobble. Once the eggs hatch, the small and vulnerable larvae can seek refuge in the crevices of the gravel and cobble substrate, providing them with protection from predators and helping prevent them from being swept downstream into unsuitable habitats.



In May the NWSRI will be hosting a **Question & Answer open house event** about this project, where members of the team will be able to speak about this project and answer questions folks may have. Check the website for details! The NWSRI is excited to share about this next step in sturgeon research and recovery.



BE SURE TO CHECK THE 'WALL OF FAME' STURGEON SHOWCASED OUTSIDE THE CONSERVATION CENTRE.

#### NECHAKO WHITE STURGEON CONSERVATION CENTRE - YEAR AT A GLANCE -

#### **APRIL-MAY:**

Catch mature sturgeon for brood program.

#### END MAY - EARLY JUNE:

Fertilize eggs in hatchery. Adult sturgeon returned to the river. Wild eggs collected from river.

#### **EARLY JUNE:**

Release 2-year old juvenile sturgeon at various locations in the watershed.

MID-JUNE:

Eggs hatch to yolk-sac larvae. 🐲 🐠

**LATE-JUNE:** Larvae enter free-swimming stage.



MID-JULY:

Larvae grow into juvenile form.

JULY - APRIL:

Juvenile reared for next two years.

#### - HATCHERY TOURS -

Tours are available year-round by appointment, and at regular tour times starting in the spring (check the NWSRI website and Facebook for tour times). Whether you're a local, visitor, tourist, or simply looking for a unique afternoon adventure, it's an experience you won't want to miss! Also check-out the newly updated interpretive signs!

## Nechako White Sturgeon Recovery Initiative



## **NWSRI ONLINE!**

Questions about the NWSRI or sturgeon recovery? Email us at **info@nechakowhitesturgeon.org** 

The NWSRI offers many resources, information, and activities for everyone—from parents and teachers to researchers, learners, and the general public—providing everything you need to know about the Nechako White Sturgeon. **Here are quick links to find us online:** 



**YOUTUBE** • The NWSRI YouTube Channel is where you will find all the videos related to the Sturgeon Curriculum program, tours of the hatchery, animated videos about sturgeon life cycle and the watershed and more! Be sure to subscribe!



**FACEBOOK** • The NWSRI has a Facebook page where we share upcoming events, tour times at the Conservation Centre, fun facts about sturgeon, news about research and outreach, photos of our programs, and more. Be sure to follow us @NWSRI.



**WEBSITE** • The NWSRI website has a wealth of information about the history of the NWSRI, biology and status of Nechako White Sturgeon, links to our reports and news coverage, and information about all our recovery programs.



WHERE IS MY FISH • Probably the funnest part of the NWSRI website is the Where is My Fish page. Here you can search for sturgeon that have been named and released by learners and the public since the start of the release program.



NWSRI CURRICULUM • For educators,

homeschoolers, learners and anyone interested in getting into the details about sturgeon and the Nechako Watershed to learn about biology, riparian zones, habitats, and conservation.

## NWSRI IN THE WATERSHED!

When you are out and about in the watershed - from Fraser Lake to Fort St. James, Vanderhoof and Prince George - you may see one of the over 15 interpretive signs created by the NWSRI! These signs offer details specific to sturgeon and the location. For example, at the White Swan Park boat launch in Fraser Lake, learn about sturgeon facts, distribution, lake details and research programs in the lake.



#### **DID YOU KNOW...**

The Dakelh word for sturgeon differs slightly depending on the dialect. Go to the <u>Dakelh</u> <u>language website</u> created by Bill Poser to hear the pronunciations in the dialects as shared on the website.

Saik'uz First Nation, Lheidli T'enneh, Nadleh Whut'en and Stellat'en Whut'en dialects

lhkw'encho • <sup>ຩ</sup>v≽ን∰

Nak'albun (Stuart Lake) dialect Ihehcho • ጋካዉ