

NEEF PROJECT REPORT

1. Project Title Page.

Project Title: Nechako White Sturgeon Recovery

Name of Recipient: Ministry of Water, Land and Resource Stewardship

Society Incorporation Number (if applicable): _____

Contact Person & Title: Steven McAdam, Sturgeon Recovery Lead

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Date: November 30th, 2025

2. Report Introduction

The Nechako white sturgeon population has been in decline for over five decades and has been listed as Endangered under Canada's Species At Risk Act since 2006. Investigations into the cause of population decline identified poor survival during the early life history stages (egg and larvae) due to degraded conditions in spawning habitat. The Nechako White Sturgeon Recovery Initiative (NWSRI) has used a two-pronged approach to conserve the species: 1) a hatchery program to produce juvenile white sturgeon and preserve the genetic diversity of a declining population and 2) spawning habitat restoration. We built upon NEEF-funded habitat restoration trials in 2022 to develop and test substrate restoration methods suitable for large scale implementation in the core spawning habitat in Vanderhoof, British Columbia.

3. Summary of Project Goals and Deliverables

Habitat restoration – substrate cleaning

Goals:

- Identify measures to restore substrate conditions capable of supporting juvenile recruitment sufficient to achieve recovery.

Deliverables:

- Establishment of an interdisciplinary substrate restoration planning group.

The Nechako White Sturgeon-Restoration Advisory Group (NWS-RAG) was formed in winter 2023 to plan for the 2024-2025 habitat restoration season. The group continues to meet to evaluate the outcomes of 2025 and plan for the 2026 restoration season.

- Local development of equipment and expertise related to substrate cleaning methods.

M4 Enterprises Ltd. of Vanderhoof, BC was an integral partner in the planning and execution of the habitat restoration work in 2025. M4 Enterprises designed and built the two substrate sorting tools tested and conducted the in-river habitat restoration work under the guidance of WLRS biologists and NHC geomorphologists.

- Main channel tests of substrate cleaning in spring 2025.
- Monitoring to evaluate effectiveness of substrate cleaning, particularly infilling rate.
- A report documenting the outcomes of substrate cleaning.
- The outcomes of the habitat restoration components will be evaluated using photographs of the surface of the substrate before and after treatment.

These deliverables are detailed in the two reports resulting from the 2024-2025 habitat restoration work:

Coulter and McAdam 2025. 2024-2025 Nechako White Sturgeon Habitat Restoration. Prepared by BC Ministry of Water, Land and Resource Stewardship. 15 pp.

NHC 2025. 2024-2025 Nechako River Substrate Monitoring. Prepared by Northwest Hydraulic Consultants Ltd. for British Columbia Conservation Foundation on behalf of BC Ministry of Water, Land and Resource Stewardship. 25 pp.

Community outreach

Goals:

- Community outreach to increase public knowledge of sturgeon biology and conservation.

Deliverables:

- Community outreach event with question-and-answer session regarding planned habitat restoration work. This session provides an opportunity to educate the community on habitat restoration in general and specifically what this work means for sturgeon recovery.

The public engagement and outreach event was held on May 6, 2025, in Vanderhoof. The event was advertised on social media and with posters. Five members of the public attended, and despite that being fewer people than we had hoped, the conversation and information sharing was successful. Participants appreciated having the one-on-one opportunity to ask questions about the project, but also about the Nechako River and sturgeon in general.

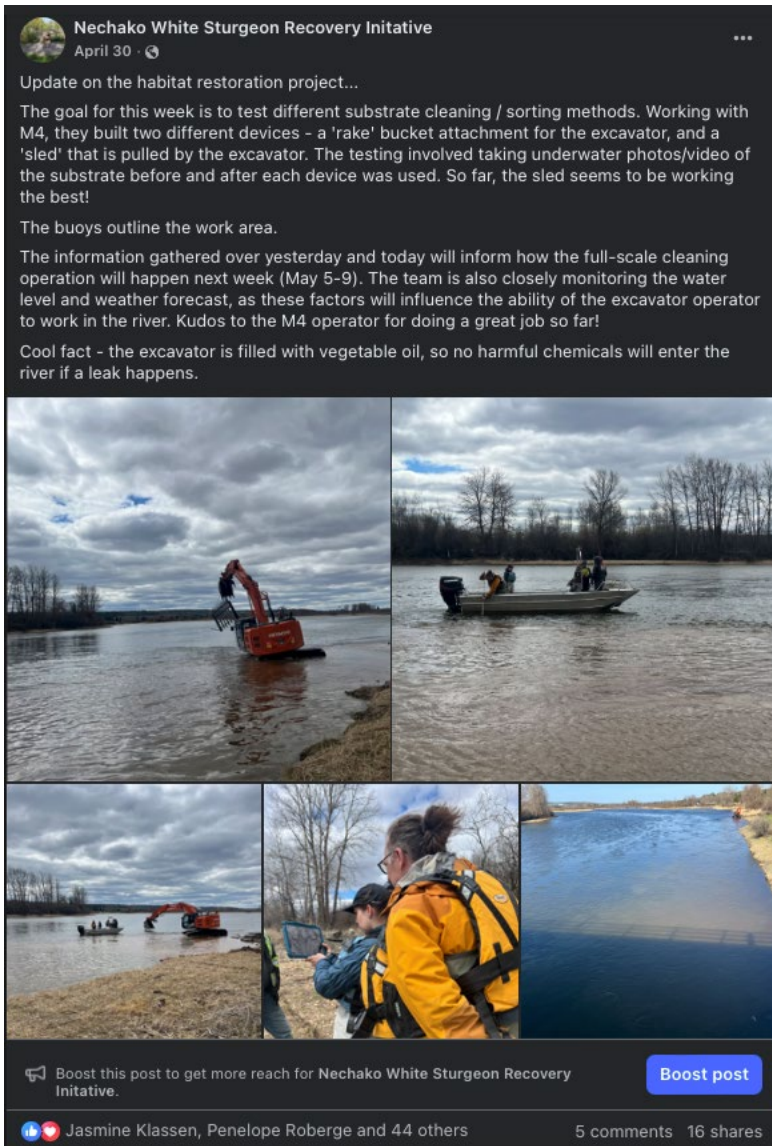


Invite that was circulated on social media ahead of the Open House.



Set-up of the Habitat Restoration Project Open House on May 6, 2025, in Vanderhoof.

In addition to the public engagement event, the project was showcased on the Nechako White Sturgeon Recovery Initiative's (NWSRI) Facebook page (<https://www.facebook.com/NWSRI>). In total, six posts were created and shared on the NWSRI Facebook page. The posts provided images and information about the different stages of the project.



Screenshot of one of the Facebook posts during the Habitat Restoration Project. Note the post was shared 16 times!

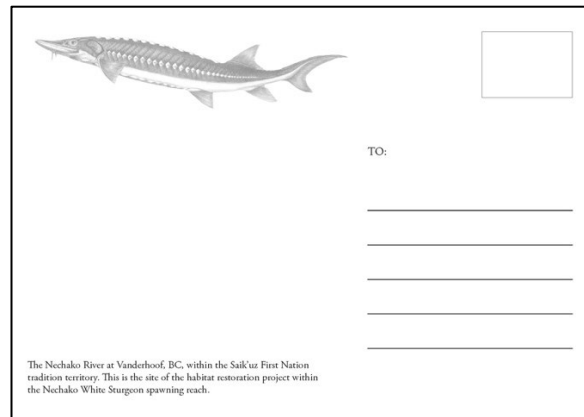
- Video regarding habitat restoration to be used as part of the Nechako White Sturgeon Curriculum for grades 7-12 students, as well as a social media piece for the community in general.

A 7-minute video was produced about this Habitat Restoration project. The video, which highlights key aspects of the project, includes a plain language explanation of why habitat restoration is needed in this section of the Nechako River, followed by how the work is unfolding, and ending with a simple message of the importance of community and partnership in carrying out these larger-scale projects. The film is beautifully filmed and edited by local filmmaker Evan Dux (Prince George). In addition, there is a short 'trailer' for use in advertising the video on social media and with educators in the region.

The video is available on the NWSRI YouTube channel at <https://www.youtube.com/watch?v=q8MCbd2mOF4>.

A link to the video is available from the NWSRI Sturgeon Curriculum section of the website (<https://nechakowhitesturgeon.org/education/NWSRI-Videos>). NEEFS is recognized in the video as a partner.

The video was shown at the North American Sturgeon & Paddlefish Society Conference (NASPS) in Nelson, BC on September 23, 2025. The video was shown to a large room of sturgeon researchers, government policy makers and managers from across North America. That showing has created a 'buzz' within the sturgeon community, and the NWSRI was praised for its focus on community outreach. To help promote the video, a postcard with a QR Code to the video was created and 150 copies were printed. The postcards were handed out at the NASPS conference, and the remaining cards were brought to the Nechako White Sturgeon Conversation Centre where staff have been handing out the cards to tour visitors. The video was also profiled by WLRs Minister Randene Neill in conjunction with World Fisheries Day on November 21, 2025 (<https://www.facebook.com/RandeneNeill>).



The front and back of the Habitat Restoration postcard.



Randene Neill

November 21 at 10:51 AM · 🌐

On World Fisheries Day, I reflect on people and efforts that are restoring fish habitats in B.C. In the Nechako River near Vanderhoof, the Nechako White Sturgeon Recovery Initiative used specialized equipment and crews to carefully clean and restore selected sections of the riverbed to increase egg and larval survival of White Sturgeon spawning habitat. White Sturgeon in Canada are unique to B.C. and live beyond 100 years, growing up to 6 metres in length. Watch the team's video of the work done to give these dinosaur fish the best chance to survive and come back home to spawn. <https://www.youtube.com/watch?v=g8MCbd2mOF4> (video credit: NWSRI) #HappyWorldFisheriesDay



Screenshot of Randene Neill's Facebook post highlighting the Nechako habitat restoration

- Coordination/ management of the outreach aspects of the white sturgeon recovery initiative, including social media engagement, production of materials and organizing community outreach.

This funding provided support for the time to have a Coordinator organize the outreach activities for this project. The Coordinator created the materials and organized the logistics for the community engagement and created all of the social media posts. The Coordinator worked closely with the filmmaker to create the video and trailer. And the Coordinator helped produce materials that were shared about the project, including some interpretive signs that are currently in production. The interpretive signs will be placed at Riverside Park in Vanderhoof to speak to the habitat restoration work at the spawning site.

4. Changes, Setbacks, Variances.

Financially, the project was largely implemented as expected. As indicated in the agreement, the project was implemented with Freshwater Fisheries Society of BC (FFSBC), which is the main collaborator on project contracting and delivery. That approach provided substantial benefits to the project, primarily by anchoring project delivery within the Nechako watershed, which supported the overall goal of supporting local involvement in project delivery. One shift that did occur was the delivery of the monitoring contract through the British Columbia Conservation Foundation (BCCF). The monitoring component was still implemented by Northwest Hydraulic Consultants (NHC) as originally planned; however, FFSBC and NHC could not find mutually suitable wording with regard to liability clauses in FFSBC's contract template. Therefore, we utilized the services of BCCF as they were able to use contract wording that they had previously established with NHC. The cost of the work was not affected. The administration fee charged by BCCF is slightly higher than FFSBC (15% vs 12%), however, overall administration costs over the whole project were lower than originally budgeted.

5. Benefits.

a. Project Complete

The execution of the project is detailed in the attached reports:

Coulter and McAdam 2025. 2024-2025 Nechako White Sturgeon Habitat Restoration. Prepared by BC Ministry of Water, Land and Resource Stewardship. 15 pp.

NHC 2025. 2024-2025 Nechako River Substrate Monitoring. Prepared by Northwest Hydraulic Consultants Ltd. for British Columbia Conservation Foundation on behalf of BC Ministry of Water, Land and Resource Stewardship. 25 pp.

b. Total Dollars Expended

The budget details are provided in the tables below. The total project budget was \$357,067.90 with NEEFS providing \$170,000. That leads to a leverage ratio of 47.6. Notably, this does not include any in-kind contributions from WLRS or other parties. If \$30,000 of in-kind contributions are assumed for the costs associated with the extensive input of two WLRS employees, then the leverage ratio would fall to 43.6. Substantial funding was also provided by WLRS (\$182,067.90 – cash, excluding in-kind).

c. Leveraging Ratio

The funding provided by NEEFS leads to a leverage ratio of 47.6. Notably this does not include any in-kind contributions from WLRS or other parties. If \$30,000 of in-kind contributions are assumed for the costs associated with the extensive input of two WLRS employees, then the leverage ratio would fall to 43.6.

d. Environmental Benefits Created

The work completed in our projects aligns with NEEF Objective 2 and Decision 3, aiming to improve the spawning habitat for white sturgeon in the Nechako River. Despite not creating a physical benefit for white sturgeon spawning in 2025, the habitat restoration work conducted created a substantial knowledge benefit for future implementation of habitat restoration. The knowledge gained in this work is directly informing white sturgeon habitat restoration for 2026 and beyond. The community outreach components also created a social benefit with the development of content for the NWSRI educational resources.

6. Financial Report – Income and Expense

The expenses incurred during the project matched the proposed budget reasonably well, with only minor deviations. The project was implemented through an MOU with FFSBC, a critical recovery partner that supported a 'within the Nechako basin' implementation focus. Using local contractors for the restoration work was important to this project both to support the local community, but also to retain restoration knowledge within the community and to build on community interest in white sturgeon recovery. The project had anticipated the purchase of some larger equipment (winches, cables). However, initial project work highlighted the need to develop a suitable substrate cleaning tool prior to focusing on the equipment required to deploy substrate cleaning tools. This change led to some cost savings in the spring 2025 deployment which were used to continue the development and testing of substrate cleaning tools in the fall of 2025. An additional minor change in the project administration model is that the monitoring component of the project was administered through the BC Conservation Foundation (BCCF). This change occurred because FFSBC and Northwest Hydraulics Consultants could not settle on suitable contract wording (re: liability clauses). Due to time constraints in project implementation we agreed that FFSBC would transfer funds to BCCF to administer that part of the project. BCCF had previously developed an appropriate contract

template with NHC which facilitated the rapid implementation of the monitoring component of this project.

The budget has been provided based on the key activities within three periods of the project timeline. This option was chosen because payments to FFSBC were done in two larger payments in January and April of 2025. However, those payments didn't reflect the project budget structure, so what we have provided below is the closest reflection of the budget structure that was included in the project proposal.

This project allowed the Nechako white sturgeon restoration work to reach the important milestone of testing large scale substrate restoration in natural spawning habitat. This project also created substantial learning to improve the method for substrate cleaning, and further planning is already underway to continue this work in subsequent years.

Project Income			
Contributor	Budgeted	Actual	Details
WLRS	\$161,000.00	\$182,067.90	
NEEF	\$170,000.00	\$170,000.00	
CWG	\$20,000.00	\$5,000.00	
Total Income	\$351,000.00	\$357,067.90	

Project Expenses					
Category	Budgeted	Actual Cost	Actual Cost Net GST	Paid To	Receipt / Invoice #
Fall 2024 – equipment/materials	\$11,000.00	\$5,271.66	\$0.00	FFSBC	WLRS-FFSBC MOU
Fall 2024 – Restoration implementation	\$20,000.00	\$42,997.50	\$0.00	FFSBC	WLRS-FFSBC MOU
Fall 2024 – Monitoring	\$35,000.00	\$34,846.20	\$0.00	BCCF	BCCF project # 28416009
Spring 2025 – equipment/materials	\$35,000.00	\$4,073.42	\$0.00	FFSBC	WLRS-FFSBC MOU
Spring 2025 – Restoration implementation	\$55,000	\$53,361.13		FFSBC	WLRS-FFSBC MOU
Spring 2025 – Monitoring	\$70,000.00	\$104,538.60	\$0.00	BCCF	BCCF project # 28416009
Fall 2024 – Restoration implementation	\$40,000	\$41,000		FFSBC	WLRS-FFSBC MOU
Travel	\$5,000	\$9,555.9		WLRS (internal)	
Coordination	\$40,000	\$36,423.52		FFSBC, BCCF	WLRS-FFSBC MOU, BCCF

					project # 28416009
Outreach	\$40,000	\$25,000		NWSRI	Transfer payment TP25AE0055

7. Public Recognition.

NEEFS was publicly recognized in the acknowledgement sections of both reports generated for this project and in WLRS presentations on this work. NEEFS was also recognized as a partner in the credits of the habitat restoration video produced for community outreach and in the communication materials at the public open house. NEEFS is also mentioned in presentations that discuss this work. Currently that includes 2 lectures per year to upper level fisheries courses at the University of British Columbia.

8. Feedback.

Interactions with the NEEFS staff have been excellent. Janis Bilau has been very responsive in our communications. We particularly appreciated the extension that allowed the project to undertake work during the fall 2025 work window. Additionally, the flexibility in reporting and application deadlines during the September-October BC government job action period was very much appreciated.

9. Attachments.

The following deliverable reports are attached:

- Coulter and McAdam 2025. 2024-2025 Nechako White Sturgeon Habitat Restoration. Prepared by BC Ministry of Water, Land and Resource Stewardship. 15 pp.
- NHC 2025. 2024-2025 Nechako River Substrate Monitoring. Prepared by Northwest Hydraulic Consultants Ltd. for British Columbia Conservation Foundation on behalf of BC Ministry of Water, Land and Resource Stewardship. 25 pp.

REPORT CHECKLIST

Is your report complete?

Have you clearly provided / identified:	Yes	No
1. A cover page, including the project title and contact information?	✓	
2. A summary, including the total project cost and grant amount due?	✓	
3. A list of project activities and results (use table if appropriate)?	✓	
4. A description of economic and/or social benefits arising from completion of your project (use table if appropriate)?	✓	
5. A financial report for the full project, including receipts or proof of payment for all project expenditures?	✓	
6. An income and expense report for all project expenditures?	✓	
7. Any variances from the project budget or from the planned activities?	✓	
8. A list of all partners or contributors to the project funding?	✓	

9. A description of the ways NEEF was publicly recognized for the funding assistance?	✓	
10. Photos to verify completions, where appropriate?	✓	
11. Any comments or feedback arising from your experience with NEEF Staff or Directors while completing this project?	✓	