



*Nechako Environmental  
Enhancement Fund*

# 2024 Annual Report

[www.neef.ca](http://www.neef.ca)

# Report from the Chair

NEEF administers funds for projects in the Nechako watershed, and acknowledges the traditional territories of The Cheslatta Carrier Nation, Dakelh Communities, Nadut'en, Takla, Stellat'en, Wet'suwet'en Yintikh, Nadleh Whut'en, Yekooche, Nee-Tahi-Buhn Band, Skin Tyee Nation, Tl'azt'en Nation, Nak'azdli Whut'en, Lheidli T'enneh Band, and Saik'uz First Nation.

As in 2023, 2024 drought conditions continue to persist in B.C.; supporting the health of the watershed continues to be of critical importance to NEEF. This past year, long time NEEF administrator Britta Boudreau stepped down to pursue some new interests and was replaced by Janis Bilau. NEEF directors thank Britta for her dedication and stellar work since the inauguration of NEEF and wish Britta the best in her new adventures. NEEF would also like to introduce prospective applicants and watershed stakeholders to Janis Bilau. NEEF embraces a continuous improvement model to ensure administrative effectiveness, and clarity for applicants, as well as ensuring tangible outcomes that benefit Nechako Watershed. In 2024 NEEF dispersed over \$713 thousand in grant payments to active projects.

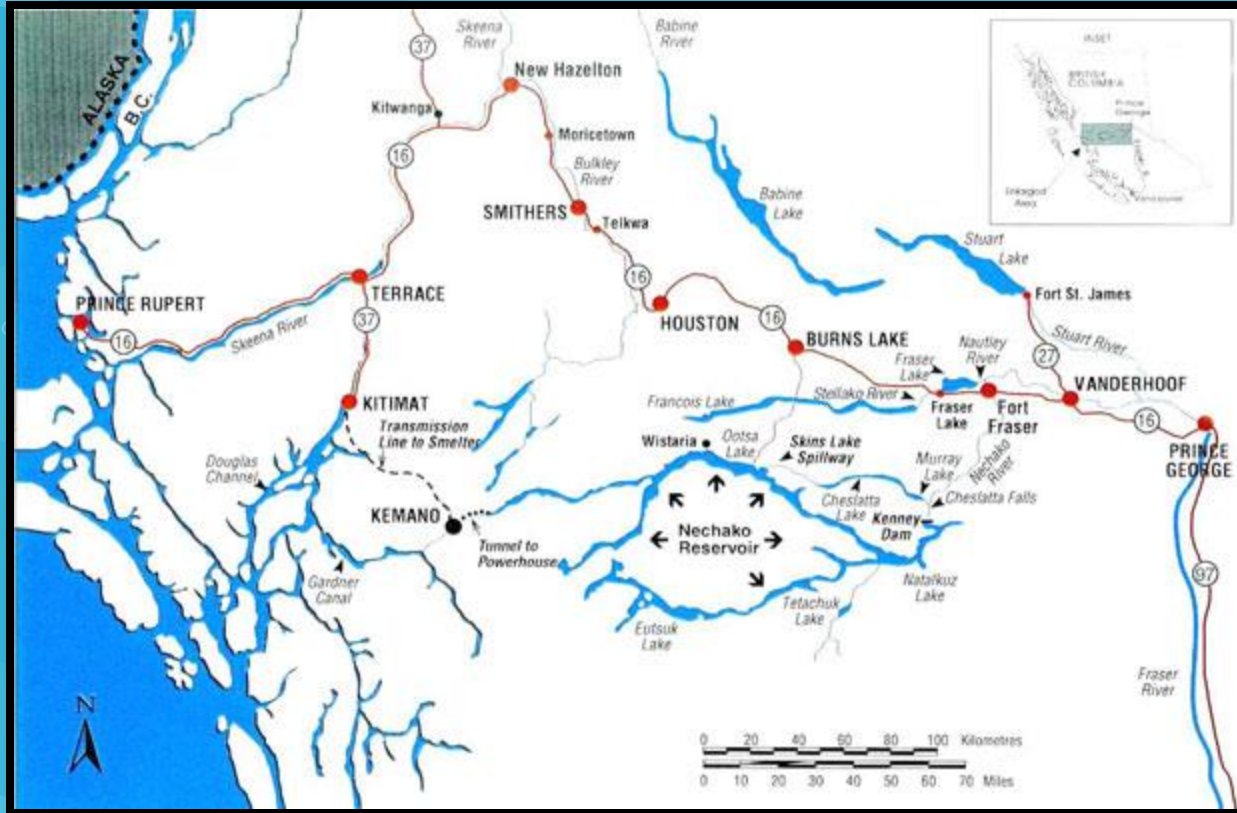
In 2024 the funding continued to support vital research and stewardship activities in the Nechako watershed including a fish stranding assessment in the Cheslatta River, UNBC Integrated Watershed Research in the Nechako River, Macrophyte Harvesting Feasibility study, and the ongoing recovery of Nechako White Sturgeon through the Nechako White Sturgeon Conservation Centre, operated by the Freshwater Fisheries Society of BC. The Beaver Dam Analogs project conducted by the Nechako Environment and Watershed Stewardship Society, along with the Cottonwoods Restoration project are helping to support the increase in fish habitat and access, increasingly important during the drought conditions.

Since inception, NEEF has dispersed \$9.3M dollars in support of projects in the Nechako Watershed. As we head into 2025, we are faced with persistent drought conditions in northern BC that may continue to negatively affect streamflow and groundwater. We look forward to continuing to support the health and enhancement of the Nechako watershed by funding enhancement, research, and stewardship activities.



Ray Pillipow, Chair

# Geographical Scope



The NEEF fund is intended for environmental enhancement of the Nechako watershed, downstream of the Nechako Reservoir.

# Objectives of the NEEF Fund

- Options that are related to changes in flow in the Cheslatta River and Nechako River. This includes changes related to Skins Lake Spillway discharges and changes in flow achieved through other enhancement initiatives.
- Options that seek to rehabilitate fish habitat and fish populations in the Cheslatta River and Nechako River.
- Options that promote education and stewardship of water in the Nechako and Cheslatta watersheds.
- Options related to improving how water flow regulation decisions are made in consideration of all environmental aspects.

# Active Projects 2024

- Nulki-Tachick Lakes Macrophyte Harvesting Program Feasibility Study
- FFSBC Nechako White Sturgeon Conservation Centre (Phase 2, Year 2)
- UNBC Integrated Watershed Research In The Nechako River Basin (Phase 3, Year 2)
- Nootsenay Cheslatta River Fish Stranding Assessment
- NEWSS Restoring Watershed Connectivity
- NEWSS Fish Rehabilitation and Data Collection
- WLRN Nechako White Sturgeon Recovery (Phase 2)
- WLNRS Cottonwood Restoration along the Nechako River Corridor



NEEF Chair Ray Pillipow (right) with UNBC's Integrated Watershed Research Group (L-R) Research Manager Bruno Sobral Dr. Phil Owens, Dr. Margot Parkes, Dr. Stephen Déry and Dr. Eduardo Martins.



# Nulki-Tachick Lakes Macrophyte Harvesting Program Feasibility Study

Total NEEF Funding \$20,000

In order to address deteriorating water quality and toxic algae in the Nulki and Tachick Lakes, a feasibility study was conducted to determine the viability of a macrophyte harvesting program for Nulki and Tachick Lakes and to develop a restoration plan.

In 2024, the study was completed, reviewed and shared with Saik'uz First Nation. Collaboration continues.

The outcome of this study was a comprehensive report including a recommended harvesting plan and implementation strategy for restoring the water quality in the Nulki-Tachick watershed.



Nulki Lake blue-green algae.

# Nechako White Sturgeon Conservation Centre (Phase 2, Year 2)

Total NEEF Funding \$319,256

The Nechako White Sturgeon Conservation Centre (NWSCC) is a facility that is operated by the Freshwater Fisheries Society of BC (FFSBC) and is dedicated to Nechako White Sturgeon recovery.

This facility operates with a three-pronged approach to recovery:

- Conservation Fish Culture as a “Stop-Gap” measure to ensure a genetically diverse population.
- Research/Actions that recover the Nechako White Sturgeon back to a self-sustaining population.
- Education and Outreach.



Sturgeon Eggs



Juvenile Nechako Sturgeon

# Integrated Watershed Research In The Nechako River Basin (Phase 3, Year 2)

Total NEEF Funding \$400,000  
over three years

Phase 3 of the Integrated Watershed Research project continued in 2024 by advancing long-term monitoring in the Nechako Watershed, focusing on climate impacts, sediment transport, and fish populations. Recent efforts include expanding hydrometeorological stations, assessing wildfire effects on erosion, and tracking fish responses to changing water conditions. Outreach remained a priority while fostering collaboration with communities, including First Nations, and sharing research through the Nechako Watershed Portal.



Dr. Margot Parkes presented the article: “Towards an integrative understanding of British Columbia’s Nechako Watershed: Connecting knowledge systems to strengthen understanding of climate change, watershed security, health and well-being.” at the Oceania Planetary Health Forum in Fiji, February 2025.



# Cheslatta River Fish Stranding Assessment

Total NEEF Funding \$106,408

A detailed stranding assessment of high-risk sections along the Cheslatta River connecting Skins Lake and Cheslatta Lake was conducted.

The key objective of the project was to qualitatively evaluate the extent of fish stranding caused by the annual periods of high discharge from the Skins Lake Spillway.

In 2024 all fieldwork for the Cheslatta River stranding surveys was completed.



Sculpin  
Cheslatta River Fish Stranding Assessment

# Cheslatta River Fish Rehabilitation and Data Collection

Total NEEF Funding \$102,000

Building on the fish stranding project of 2023, comprehensive geomorphological data from four high-risk stranding sites identified will be collected. This endeavor prioritizes the use of passive data collection devices like plot watchers and data loggers to gather detailed site-specific data to inform restoration prescriptions.

The results of this assessment offers long-term benefits by establishing a baseline dataset of confirmed stranding locations along the Cheslatta River corridor.



Cheslatta Falls  
Cheslatta River Fish Stranding Assessment

# NEWSS Restoring Watershed Connectivity

Total NEEF Funding \$330,000

The Nechako Environment and Water Stewardship Society (NEWSS) project aims to enhance stream functionality and water retention on Knight Creek, a tributary of the Nechako River, through the careful placement of Beaver Dam Analogs (BDAs). Comprehensive monitoring, erosion and sediment control measures were implemented to evaluate structural integrity, water retention and streambank stabilization.

The construction of BDA's has direct benefits to agriculture operations while providing fish habitat and access not available with the past years of drought.



Completed BDA, Knight Creek



Completed BDA, Knight Creek

# Nechako White Sturgeon Recovery (Phase 2)

Total NEEF Funding \$170,000

The Nechako White Sturgeon Recovery Initiative (NWSRI) is an interdisciplinary, collaborative effort that involves multiple recovery partners. Funding provided by NEEF supports key initiatives and allows a renewed focus on habitat restoration measures.

Restoration of white sturgeon spawning and early rearing habitats is the main focus to restore juvenile recruitment. However, there are still some significant challenges to implementing effective long term habitat restoration in the large river habitats where white sturgeon spawn. Addressing data gaps in our biological understanding of habitat needs during spawning and early life stages is critical to guide habitat recovery efforts. A thorough understanding of the geomorphology of the Nechako River, and in particular the Vanderhoof spawning reach, is also critical to ensure that restoration provides the habitat attributes required for long term recovery. NEEF funding is used to address these research priorities and fill several outstanding knowledge gaps.



Experimental plots in the south treatment patches



Larval Release Unit

# Restoring Riparian & Wildlife Values to the Nechako River Corridor by Managing Future Supply of Cottonwoods

Total NEEF Funding \$225,000

Mature cottonwood trees are among the most important streamside features for wildlife, providing food and critical cavity habitats for a diversity of mammals and birds. Mature cottonwood wildlife trees are readily found along the Nechako River, but prevalence of younger cohorts is insufficient to replace these aging trees. Recruitment is now a limiting factor, and the mature specimens present today are a legacy from a previously unaltered river ecosystem.

The purpose of this project is to plant cottonwood seedlings in valley-bottom habitats along the Nechako corridor (Fort Fraser to Prince George) to restore areas degraded by altered hydrology, or lost to forest harvest and agriculture, and to secure a sustainable supply of cotton trees in regions where recruitment is low.



Cottonwood Island Nature Park,  
Nechako River



Cottonwood Island Nature Park, Nechako River



# Availability of Funds

Funds are available on an annual basis until 2050 or longer as follows:

- \$7.4 Million (200,000 per year) is allocated to Cheslatta Watershed Restoration and Stewardship
  - \$27.2 Million (\$850,000 per year) is allocated to Nechako Watershed Restoration and Stewardship
  - \$6.4 Million (\$200,000 per year) is allocated to Post-Secondary Research
- 
- Option for BC and Rio Tinto to agree to allocate all uncommitted funds to a major project such as building a spillway at Kenney Dam.



# Grant Funding Application Process

**November 1**

Annual  
Application  
Deadline

**March 1**

Applicants  
notified of  
funding decision

**March-April**

Funding Agreements developed  
and signed.

For multi-year projects, funds must  
be utilized and matched on a  
calendar year.

# 2024 NEEF Society Board of Directors



• Ray Pillipow, Province of BC  
Chair



Andy Lecuyer, Rio Tinto



Jordan Cranmer, Independent  
Public Member

The NEEF Society was established in 2015 to act as an agent for the NEEF Management Committee which includes reviewing and making decisions on proposals, entering into agreements with grant recipients and forwarding funds. The NEEF Society is governed by a Board of Directors two of which are the NEEF MC members.

## Expenditures since Inception at December 31, 2024

Description	Detail	Total Commitment	Amount Paid to Date	Amount of Commitment Remaining	Total Remaining Uncommitted Funds
	Nechako Environmental Enhancement Fund	\$50,000,000			
NEEF Administration	Work of the Nechako Watershed Council. NEEF MC process and 2012 Report. Admin cost for legal work etc. for Society establishment. Society Administration expenses.	\$1,660,646	\$1,641,863.65	\$18,782.35	
Freshwater Fisheries Society of BC	White Sturgeon Conservation Fish Culture Program	\$4,363,454	\$4,257,962.11	\$105,491.89	
Nechako White Sturgeon Recovery Initiative	Biochronology of Wild-Recruited Nechako White Sturgeon	\$10,000	\$10,000	\$0	
University of Northern BC	Integrated Watershed Research in the Nechako River Basin	\$500,000	\$492,052	\$0 <sup>1</sup>	
Nechako Environment and Water Stewardship Society	Proposal Development	\$3,500	\$3,500	\$0	
Nechako Environment and Water Stewardship Society	Nechako River Sustainability	\$1,000,000	\$329,718	\$0 <sup>2</sup>	
Cheslatta Carrier Nation	Cheslatta LiDAR Project	\$200,000	\$200,000	\$0	

<sup>1</sup> Funds in the amount of \$7,948.00 went unused by the project and have been rolled back into the NEEF Fund and are included in the line-item Nechako Environmental Enhancement Fund Balance.

<sup>2</sup> Contract was cancelled at the request of the recipient. Unused grant funds in the amount of \$670,282 have been rolled back into the NEEF Fund and are included in the line-item Nechako Environmental Enhancement Fund Balance.

University of Northern BC	Phase 2 Integrated Watershed Research in the Nechako River Basin	\$499,950	\$499,950	\$0	
Cheslatta Carrier Nation	Umam (Pygmy Whitefish) Surveys	\$46,236	\$45,435	\$0 <sup>3</sup>	
Ministry of Environment and Climate Change Strategy	Nechako White Sturgeon Recovery Project	\$445,000	\$445,000	\$0	
Freshwater Fisheries Society of BC	Nechako White Sturgeon Conservation Centre	\$3,679,118	\$546,106.38	\$3,133,011.62	
Nulki-Tachik Stewardship Society	Macrophyte Harvesting Program Feasibility Study	\$20,000	\$20,000	\$0	
University of Northern BC	Phase 3 Integrated Watershed Research in the Nechako River Basin	\$400,000	\$263,537	\$136,463	
Noot'senay Consulting	Cheslatta River Fish Stranding	\$153,979	\$106,407.50	\$0 <sup>4</sup>	
Nechako Environment and Water Stewardship Society	Restoring Watershed Connectivity and Rehabilitating Juvenile Chinook Salmon Habitat through BDAs	\$330,000	\$55,000	\$275,000	
The Ministry of Water, Land and Resource Stewardship	Restoring Riparian & Wildlife Values to the Nechako River Corridor by Managing Future Supply of Cottonwoods	\$225,000	\$75,000	\$150,000	
TOTALS		\$13,768,883	\$9,088,156.59	\$3,954,123.91	
Nechako Environmental Enhancement Fund Balance					\$36,957,719

<sup>3</sup> Funds in the amount of \$800 went unused by the project and have been rolled back into the NEEF Fund and are included in the line-item Nechako Environmental Enhancement fund Balance.

<sup>4</sup> Funds in the amount of \$47,571.50 went unused by the project and have been rolled back into the NEEF Fund and are included in the line-item Nechako Environmental Enhancement Fund Balance.