



Nechako Environmental Enhancement Fund

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\$50,000,000

to enhance the environment of the Nechako River watershed.



The Nechako River at Vanderhoof. The Nechako River is home to over 20 species of fish, including the endangered Nechako white sturgeon.



Skins Lake Spillway releases water from the Nechako Reservoir into the Cheslatta system, which flows into the Nechako River.



NEEF PROJECTS IN THE NECHAKO VALLEY

To date three projects have received funding and are successfully being implemented. Read more about these projects at www.neef.ca.

Integrated Watershed Research in the Nechako River Basin - NEEF Funding: \$500,000



The University of Northern BC houses the Integrated Watershed Research Group (IWRG) comprising: Stephen Déry (Environmental Science Program), Philip Owens (Forest Renewal BC Chair in Landscape Ecology), Ellen Petticrew (Forest Renewal BC Chair in Landscape Ecology), and Margot Parkes (Canada Research Chair in Health, Ecosystems and Society). This project will enhance the environment in the Nechako River Basin by investigating sediment sources and dynamics; variability and trends in snowpack and streamflow; and, tools for integration in watershed management and governance.

LEFT TOP: UNBC researchers take river bank sediment samples to help identify downstream sources of sediment in the Nechako River. In other words they are taking sediment fingerprints!

Nechako River Sustainability - NEEF Funding: \$1,000,000



Nechako Environment and Water Stewardship Society (NEWSS) has been operating in the Nechako Valley since 2006, and was officially formed as a society in 2013. NEWSS aspires to maintain sustainable water in the Nechako watershed and to create a cleaner, healthier environment for all residents and visitors to the area. The vision of NEWSS is to act in an advisory capacity for both landowners and government, to inspire people, landowners and industry to demonstrate land and water stewardship.

Utilizing funding from NEEF and other funders, NEWSS will carry out stream restoration works on 30 streams within the Nechako watershed. Projects will include stream bank stabilization, fencing (keeping livestock out of streams), 'hardening' livestock stream crossings, re-establishing riparian zones, and ensuring fish passage by replacing impassible culverts. NEWSS will further its role of stewardship by creating resources and educational tools for stakeholders in the watershed to further their understanding of water stewardship. As well, NEWSS will build relationships with rural communities and all users of the Nechako watershed and facilitate ongoing conversation to exchange knowledge, share perspective and explore opportunities for cooperative learning with First Nations, community residents, landowners, industry leaders, grade schools, universities and government agencies.

LEFT MIDDLE: Shown here is a new culvert at a road crossing on Murray Creek. The old culvert prevented fish from moving upstream during certain times of the year when the flow was low or very high. The new culvert now allows for fish passage. This is one example of a stream rehabilitation project that NEWSS undertakes to improve fish habitat.

White Sturgeon Conservation Fish Culture Program



NEEF Funding: \$4,000,000

The Nechako River population of white sturgeon is genetically distinct from white sturgeon in the Fraser River. Since the 1960's there has been a noticeable decline in young Nechako white sturgeon. Currently there are roughly 600 fish, compared to historical estimates of several thousand. Through research, it is believed that the majority of sturgeon are dying in the first weeks or month after hatching. The lack of young sturgeon surviving to maturity has led to the high chance the population will go extinct within a few decades without immediate intervention. The Nechako White Sturgeon Recovery Initiative (NWSRI) works toward solutions for restoring a naturally producing sturgeon population. The NWSRI has developed a fish culture program that can act immediately to help preserve genetic diversity and rebuild the population.

The fish culture program is run by Freshwater Fisheries Society of BC at the Nechako White Sturgeon Conservation Centre in Vanderhoof. Young sturgeon are raised through their first year of life and then released back into the river each May. The conservation centre will be able to produce up to 12,000 juvenile sturgeon per year helping to secure the genetic diversity of this imperiled population for future generations.

Other NWSRI initiatives include the development of a Nechako white sturgeon school curriculum, as well as guided and self-guided tours at the Conservation Centre.

LEFT BOTTOM: A roughly 60 year old Nechako white sturgeon caught during brood capture for the Fish Culture Program.



OBJECTIVES AND FUNDING OPTIONS

Since the 1997 Agreement is primarily concerned with water, NEEF MC concluded that NEEF funding for environmental enhancement in the Nechako River watershed should be related to water. As such four options were identified:

- 1 Changes in flow in the Cheslatta and Nechako rivers. This includes changes related to Skins Lake Spillway discharges and changes in flow achieved through other enhancement initiatives;
- 2 Rehabilitation of fish habitat and fish populations in the Cheslatta and Nechako rivers;
- 3 Promotion, education and stewardship of water in the Nechako and Cheslatta watersheds; and
- 4 Improvements to how water flow regulation decisions are made in consideration of all environmental aspects.

By 2012, the NEEF MC had completed a second public consultation process designed to identify options for environmental enhancement. Overall the NEEF MC held four public meetings, eleven meetings with specific stakeholders, and a further four meetings with scientists and subject matter experts. In the end a total of six potential options for downstream enhancement of the Nechako watershed were identified.

- 1 A Water Release Facility at Kenney Dam remains a key interest to stakeholders. Up to 80% of the total potential NEEF will continue to be available for construction of a Water Release Facility at Kenney Dam. The NEEF MC remains hopeful this will eventually be built;
- 2 \$1M to prepare for an Environmental Assessment for a Water Release Facility;
- 3 \$2M for tributary watershed restoration and water stewardship;
- 4 \$1M for Cheslatta Watershed Restoration;
- 5 \$1M for integrated watershed research;
- 6 \$4M for operation of a Nechako White Sturgeon Conservation Hatchery.

ABOUT NEEF

As part of the BC/Alcan 1997 Agreement between the Province of British Columbia and Rio Tinto (Alcan), two funds were established: the Nechako Kitamaat Development Fund (\$15M), which is directed towards economic development; and, the Nechako Environmental Enhancement Fund (NEEF). A NEEF Management Committee (NEEF MC) was assigned to review, assess and report on options for the downstream enhancement of the Nechako River watershed area. It was agreed that the fund would be granted on a matching dollar basis with Rio Tinto contributing 50% or a total of \$50 million dollars. As a result, the potential for a minimum \$100 million dollars could be spent on projects that enhance the Nechako watershed.

The NEEF MC manages the fund on behalf of Rio Tinto and the Province of BC. In 2015, the NEEF MC formed the NEEF Society. The NEEF Society is responsible for reviewing proposals and deciding on which projects to fund. Preference is given to proposals that support the objectives of the fund and have a detailed project budget, have clear deliverables, and incorporate measures to ensure financial accountability. For more information on the funding, please contact the NEEF Administrator by email or phone. Also visit www.neef.ca for more details about NEEF history and current projects.

To learn more about NEEF and to discuss your idea for a project, contact:

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