NWT Cumulative Impact Monitoring Program

INUVIALUIT REGION 2020/21 SUMMARY



To watch and understand the land so it can be used respectfully forever.

2020/21 NWT CIMP-FUNDED PROJECTS IN THE **INUVIALUIT SETTLEMENT REGION**

NWT CIMP projects in the Inuvialuit Settlement Region address the key regional cumulative impact questions of regulators, governments and communities.

In 2019/20 NWT CIMP provided \$279,000 to support four projects that included work in the Inuvialuit Settlement Region. This year (2020/21), three continuing projects and one new project are being supported in the region.

HIGHLIGHTED PROJECTS

How will fish communities in Gwich'in and Inuvialuit lakes respond to climate change?

CIMP197 - YEAR 4 OF 4

LEAD

Derek Gray, Wilfrid Laurier University dgray@wlu.ca

To better understand how dust from roadways may impact aquatic invertebrates in northern lakes of the Beaufort-Delta region, and to compare lakes in this region to inform predictions about how small northern lakes may respond to climate change.

This information will provide a better understanding of potential impacts to benthic invertebrates, water quality and fish habitat from the development of roads. Project results can be used for effective fish management, including management of water withdrawals from local lakes. The Northwest Territories **Cumulative Impact Monitoring** Program (NWT CIMP) provides important environmental information about cumulative impacts and environmental trends to decision-makers and communities. Cumulative impact monitoring is a requirement of settled land claim agreements in the NWT, and the Mackenzie Valley Resource Management Act.



Development of a biological monitoring program to detect change in stream health along the Dempster-Inuvik-Tuktoyaktuk-Corridor

CIMP210 - YEAR 2 OF 3

LEAD

Joseph Culp, Wilfred Laurier University *jculp@wlu.ca*

PURPOSE

To establish a stream biomonitoring program along the Dempster-Inuvik-Tuktoyaktuk-Corridor to understand the current environmental conditions associated with past and newly developed road infrastructure.

WHY?

Project results will produce important information on the severity of ecological impacts in streams associated with road development. This can be used by resource boards to develop management plans.

Changes in water within the Mackenzie Delta/Beaufort Region as indicators of aquatic health

CIMP200 - YEAR 3 OF 3

LEAD

Phillip Marsh, Wilfred Laurier University pmarsh@wlu.ca

PURPOSE

To assess changes in water quality, quantity and size of lakes in the Beaufort-Delta region using remote sensing, climate and past water monitoring data.

WHY?

This information will provide a better understanding of changes to the aquatic ecosystem that can be used in decision-making.

GNWT

Tundra lakes of the Tuktoyaktuk Coastlands region

NWT Permafrost Mapping Collective

CIMP186 - YEAR 4 OF 6

LEAD

Steve Kokelj, NWT Geological Survey steve_kokelj@gov.nt.ca

PURPOSE

To develop a NWT ground temperature database, including protocols and data reporting templates. This project builds on existing research collaborations such as developing observation-based permafrost monitoring systems and training Inuvialuit monitors.

WHY?

Project results will assist in determining future impacts to water quality, the environment, and assessing risks to existing or planned infrastructure. This information will inform cumulative impact monitoring and infrastructure such as the Inuvik-Tuktoyaktuk Highway, and support community climate change adaptation.

Cumulative impacts are changes in the environment caused by human activities and natural processes that accumulate over space and time. It is important to understand both the environmental impacts of individual developments and the cumulative impacts of many developments in a region.

CONTACT INFORMATION

NWT CIMP is guided by a Steering Committee of Indigenous, territorial and federal government and co-management representatives.

INUVIALUIT SETTLEMENT REGION REPRESENTATIVE

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FOR MORE PROJECT RESULTS, VISIT

nwtcimp.ca or search for the CIMP project number at nwtdiscoveryportal.enr.gov.ca

FOR GENERAL PROGRAM INQUIRIES, CONTACT

(867) 767-9233 or nwtcimp@gov.nt.ca