NWT Cumulative Impact Monitoring Program

GWICH'IN REGION 2017 SUMMARY

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

2017 NWT CIMP-FUNDED PROJECTS IN THE GWICH'IN SETTLEMENT AREA

NWT CIMP projects in the Gwich'in area address the key regional cumulative impact questions of regulators, governments and communities.

Last year, NWT CIMP provided **$94,000** to support **eight projects in the Gwich'in Settlement Area** that overlapped with other regions. This year, two projects will be supported directly in the region in addition to four multi-region projects.

HIGHLIGHTED PROJECTS

Community-based long-term monitoring of the Peel River near Fort McPherson: pilot study

CIMP195 – NEW, YEAR 1 OF 2

LEAD

Emma Hodgson, Simon Fraser University
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PURPOSE

To develop a community-based fish and water monitoring program in Fort McPherson focusing on the ecology and composition of whitefish harvest.

WHY?

To provide a better understanding of how future development projects and multiple changes related to climate warming may impact broad whitefish populations. It will also increase community capacity and provide information for better decision-making.

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*.

Government of Northwest Territories

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

CIMP197 – NEW, YEAR 1 OF 3

LEAD

Derek Gray, Wilfrid Laurier University
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PURPOSE

To collect baseline information on fish species presence and abundance in small lakes in the Gwich'in and Inuvialuit Settlement Areas in response to climate change.

WHY?

To provide information that can be used for effective fish management and management of water withdrawals.

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.

Tracking landscape change and cumulative environmental impacts using remote sensing

CIMP164 – YEAR 4 OF 6

LEAD

Steve Kokelj, NWT Geological Survey
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PURPOSE

Working with the Tetlit Gwich'in, to track and understand the cumulative impacts of broad-scale landscape changes, such as thaw slumps and drained lakes, in the zone of continuous permafrost of the NWT and particularly in the Peel Plateau.

WHY?

To help local resource managers make decisions based on a better understanding of the effect of landscape changes on aquatic health and the integrity of infrastructure.

Thaw slump in Gwich'in Settlement Area.

Developing environmental DNA as a tool to monitor fish distributions in the NWT

CIMP181 – YEAR 2 OF 3

LEAD

Karen Dunmall, Department of Fisheries and Oceans Canada
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PURPOSE

To develop environmental DNA as an inexpensive and simple tool to monitor distributions of northern fish using a community-based monitoring approach. Work is underway with the Gwich'in Renewable Resources Board to test the method along the Rat River.

WHY?

To provide critical information on fish distribution and critical habitat for decision-makers to use in assessment of cumulative impacts of environmental change.

Karen Dunmall and Freddie Furlong (Aklavik) electrofishing in Rat River.

CONTACT INFORMATION

NWT CIMP is guided by a Steering Committee of Aboriginal, territorial and federal government representatives.

GWICH'IN SETTLEMENT AREA REPRESENTATIVE

Tsatsiye Catholique (Gwich'in Tribal Council)
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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