



### NWT Cumulative Impact Monitoring Program (NWT CIMP)

A source of environmental monitoring and research in the NWT. The program coordinates, conducts and funds the collection, analysis and reporting of information related to environmental conditions in the NWT.

### NWT Environmental Research Bulletin (NERB)

A series of brief plain language summaries of various environmental research findings in the Northwest Territories. If you're conducting environmental research in the NWT, consider sharing your information with northern residents in a bulletin. These research summaries are also of use to northern resource decision-makers.

## Using Participatory-Multimedia Mapping to document environmental observations in the Inuvialuit Settlement Region

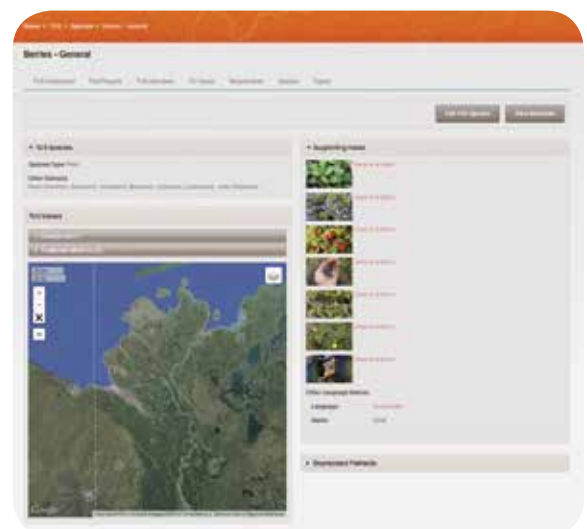
The lack of long-term observations of the Northwest Territories (NWT) environment hinders our ability to understand cumulative impacts and environmental trends. To fill this gap in the Inuvialuit Settlement Region (ISR), a method known as Participatory-Multimedia Mapping (PMM) was used to collect photos, videos and interviews to document long-term environmental observations rooted in traditional and local knowledge.

### Why is this research important?

Traditional and local knowledge were used to document recent environmental changes. The information is shared in an easy-to-use web-map, making it easier for environmental decision-makers to consider traditional and local knowledge alongside scientific information. The project provides a model of collecting traditional and local knowledge and incorporating them in decision-making that could be used in other regions of the NWT.

### What did we do?

Using a PMM protocol, community monitors helped conduct interviews and document observations at 179 sites in the ISR. This information was organized and shared in a password-protected, web-based map, called the Inuvialuit Knowledge Keeper (<http://inuvialuit.kwusen.com>), with Inuvialuit community members, researchers, technical experts and decision-makers.



Species page on the Inuvialuit Knowledge Keeper website, showing the locations where this species has been observed or photographed.

## What did we find?

PMM was an effective tool for documenting environmental observations rooted in traditional and local knowledge.

## What does this mean?

Data suggests that PMM is an effective method to document traditional and local knowledge, and make it more accessible for environmental decision-making. This method could be used in other regions of the NWT.

## What's next?

The map of information collected can be used by Inuvialuit regulators and resource managers to better understand the effects of environmental disturbances and cumulative effects on wildlife harvesting areas in the ISR. Community members can browse the map to learn about their environment and compare observations.

### What is the Participatory-Multimedia Mapping Protocol?

This protocol is a way to gather observations rooted in traditional and local knowledge in which local community monitors participated as co-researchers to map information using photography, videography and interviews.

### What is the Inuvialuit Knowledge Keeper?

The Inuvialuit Knowledge Keeper is a password-protected, web-based map that stores the data collected from this project. Visit <http://inuvialuit.kwusen.com>.



Emmanuel Adam and Cole Felix on a PMM field visit, documenting retrogressive thaw slumping west of Tuktoyaktuk, NT. 2010. (Photo: T. Bennett)

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## References and citations

Lantz T. Monitoring Environmental Change in the Mackenzie Delta Region: Inuvialuit Observations and Participatory-Multimedia Mapping. A) Annual Project Status Report B) Project Completion Report, NWT Cumulative Impact Monitoring Program, 2014-15.

Bennett, T.D. and T.C. Lantz. (2014). Participatory photomapping: A method for documenting, contextualizing and sharing Indigenous observations of environmental conditions. *Polar Geography*. 37(1): 28-47.