### **Overview - Cumulative Impact Monitoring Program (CIMP)**

INAC recognizes that high-quality, robust data sets are the foundation for environmental impact assessments and management decisions in the North. When analyzed, this information can help identify environmental trends and provide the background information necessary to plan and assess the impacts of northern development. In an effort to ensure environmental information is collected and available to Northerners, decision-makers and industry, CIMP's goal is to coordinate, support and conduct both monitoring and science-related initiatives in the NWT. It is important that information collected through CIMP is relevant to Northerners, therefore the program is largely guided by the expertise and efforts of northern residents. An update on the main components of CIMP is provided below for 2009-2010 fiscal year.



## **NWT Environmental Audit**

- The NWT Environmental Audit is meant to:
- 1) review information about the environment and determine whether the quality of the environment is improving, deteriorating or staying the same, and determine what is causing any changes;
- 2) determine the effectiveness of methods for monitoring cumulative impacts on the environment;
- 3) review the effectiveness of regulations in protecting the environment; and
- 4) review the response to recommendations to the previous audit.

- The NWT Environmental Audit, which is to be conducted once every five years, is currently underway. Proposals for an independent auditor were thoroughly reviewed by the Audit Sub-Committee prior to the contract being awarded in September 2009.
- The Audit is expected to be completed by December 2010.

## **Building Partnerships with Communities**

- Implementing community-based monitoring activities provides capacity building opportunities, engages communities in environmental dialogue, encourages discussion of local concerns and strengthens relationships between partners.
- Community or regionally-focused monitoring and research initiatives produce results that are relevant to local land management agencies.
- In 2009, CIMP staff focused their efforts in the Mackenzie Delta region and Norman Wells. However, the immediate need to expand efforts to other parts of the NWT is recognized.

initiatives in

the NWT.

• CIMP staff will promote and, to the maximum extent possible, facilitate the establishment of community-based monitoring sites across the NWT.

- CIMP's goal is to coordinate, support and conduct
- both monitoring
- and science-related







- In April 2009, 19 projects received funding (based on an RFP process) for the 2009-2010 fiscal year totalling \$357,500.
- The CIMP Working Group funded projects with strong community components and/or an emphasis on partnerships.
- Projects funded cover a range of topics including: traditional knowledge (5), aquatic systems (7), monitoring and on the land training (2), monitoring and science related to large mammals (6), and climate change (1).

• Project reports are available on the CIMP website at www.nwtcimp.ca.

Example of a CIMP-funded project:

• The Wek'eezhii Renewable Resource Board's "Policy and Guidelines: Initial Steps Toward Managing a Community-based Thcho Knowledge Program for Wek'eezhii" project aims to create realistic policy, guidelines and methods for a regional monitoring program.

### **Promoting Collaboration and Partnerships**

- Implementing CIMP requires the capacity to direct high-level scientific research and monitoring activities in the interest of Northerners, and to liaise between northern agencies and communities, and southern researchers.
- Partners involved in CIMP projects include: federal government departments; the Government of the Northwest Territories; Aboriginal governments and organizations; and academic institutions.
- Working collaboratively strengthens linkages with partners, as well as yields studies with broader applicability and results which are relevant to Northerners.

### **Community Capacity Building**

• CIMP-funded projects support community capacity building in monitoring.

Examples of CIMP-funded projects:

- The Little Buffalo River Water Quality Program assists Fort Resolution and Fort Smith to train local monitors to conduct field-monitoring programs.
- A Community Monitor Environmental Training Course focused on monitoring protocols (including snow, ice, permafrost and animal tracking) was delivered to Inuvialuit participants by INAC staff in partnership with the Joint Secretariat Inuvialuit Settlement Region. Discussions are underway to hold a similar course in winter 2010 in partnership with the Gwich'in Tribal Council.



## Accessible Environmental Information

 CIMP staff are working with government departments to improve environmental information management availability and practices. This includes identifying both existing databases and ways to report and manage data collected through CIMP projects and other NWT-based monitoring initiatives in the future.

#### For example:

• Environment Canada developed the Canadian Aquatic Biomonitoring Network (CABIN) protocol for assessing aquatic health of small streams. CIMP can promote the use of this protocol and support the population of the CABIN database enhancing the network of information on aquatic systems.

## **Enhancing Data Collection and Reporting in NWT**

- · CIMP staff are working with other government departments and academic experts to formalize data collection and reporting protocols.
- When fully implemented, the use of CIMP-supported protocols will be part of the request for proposals funding criteria: vegetation protocol - University of Victoria with input from NRCan; permafrost protocol - INAC and NRCan; snow and ice protocol - INAC and EC; aquatic health - CABIN protocol; standard meteorological station - INAC; animal track transect protocol - Golder and Associates.
- Enhanced data collection and reporting allows for the publication of scientific research, e.g. The Environment and Permafrost of the Mackenzie Delta Area – Permafrost and Periglacial Processes.

# Mackenzie Delta Community-based Monitoring

- The goal of this project is to enhance the network of baseline environmental information available so that climate change and/or impacts from development can be determined.
- Inuvialuit community members participated in training sessions on national standard data collection methods for permafrost, climate, vegetation and aquatic health.
- Community-based monitoring sites have been setup near Aklavik, Inuvik and Tuktovaktuk. These sites will be monitored to detect changes in permafrost conditions, vegetation, shrub growth and climate.
- This is a partnership effort between the Joint Secretariat Inuvialuit Settlement Region, Indian and Northern Affairs Canada and the University of Victoria.
- This project may provide a template for programs in other regions.



### **On the Land Monitoring and Traditional Knowledge Camp: Detecting Environmental Change**

• In March 2009, a traditional knowledge workshop was held in Aklavik to discuss changes to an area of salt-killed vegetation in the outer Mackenzie Delta – an area termed the "dead zone".

• In August 2009, a traditional knowledge and science camp was held on Harry Channel in the outer Mackenzie Delta, Youth, elders, land-users and scientists attended.

• Scientific monitoring and the sharing of traditional knowledge between scientists and land-users have led to the recognition of large scale environmental change in the Mackenzie Delta and has increased the understanding of environmental changes.

### **Regulatory Monitoring and Industry Footprint**

 INAC staff are conducting investigations to support guidelines development and improve industry best practices. Baseline data on proposed Mackenzie Gas Pipeline stream crossings have been collected; specifically in the Mackenzie Delta region. Collaborative studies evaluating the stability of drilling mud sumps and sensitivity of different terrain types to overland travel have been initiated.

• An 'industry footprint' database showing locations of land use permits, human activity and development has been completed for the North Slave region. There is potential to include the Mackenzie Valley region in this database in order to further map locations of human activity and potential impacts to the environment.

OS-Y341-000-EE-A1







### Indian and Northern Affaires indiennes

Activities for 2009-2010 NWT Cumulative Impact Monitoring Program

Canada