

## 1. INTRODUCTION

The Mackenzie Valley Cumulative Impact Monitoring Program (MVCIMP) is charged with monitoring the cumulative impact of land and water uses on the environment in the Mackenzie Valley. An information management system (IMS) will be developed for the MVCIMP which addresses the need for Cumulative Impact Monitoring (CIM) information to be coordinated at the Mackenzie-Valley wide level, while respecting regional systems, governments, and institutions established under existing or pending land claim and self government agreements.

The objective of this study is to identify and evaluate options, and recommend a strategy for developing an NWT cumulative impact information management system (IMS) which meets the following requirements:

- The system will include nodes (authoritative sources) and a single territorial hub to facilitate information flow between the nodes.
- Responsibility concerning access to and quality of information will rest with the nodes.
- The information to be managed will include:
  - monitoring activities and research projects;
  - geospatial data/systems;
  - publications, studies, and reports.
- The information to be managed will include both traditional and scientific knowledge.
- The system should encourage standardization of data access and presentation.
- The system should facilitate sharing of information beyond the NWT.

The MVCIMP Working Group identified a survey as the first step in designing and evaluating options for an effective MVCIMP IMS. This paper reports on the results of that survey, uses the issues raised in the survey to inform the discussion of the options for an MVCIMP IMS, and identifies a preferred option.

## 2. BACKGROUND

The MVCIMP is being coordinated by Indian and Northern Affairs Canada as laid out in the implementation plans for the Sahtu Dene and Metis Land Claim Agreement and the Gwich'in Comprehensive Land Claim Agreement, which call for a method of monitoring the cumulative impacts of land and water uses on the environment in the Mackenzie Valley. These requirements are also reflected in Part 6 of the *Mackenzie Valley Resource Management Act* (MVRMA). The MVCIMP uses the MVRMA's definition of environmental impact, which encompasses biophysical, social, and cultural impacts.

A Working Group of regional Aboriginal, territorial and federal government representatives, in consultation with community members, is guiding the development of the MVCIMP. Although the Inuvialuit Settlement Region (ISR) lies outside the Mackenzie Valley, it is represented on the Working Group. The ISR representative supports coordinating information management

initiatives in the Inuvialuit Settlement Region with the IMS for the Mackenzie Valley.

With a wealth of scientific and traditional knowledge on the impact of resource development in the Mackenzie Valley currently being produced, a process needs to be established to coordinate such information. An IMS is the logical solution. The IMS will support the regular independent environmental audits required under s. 148 of the MVRMA. The IMS developed for the MVCIMP will also be useful in meeting some of the information management needs identified by the NWT Cumulative Effects Assessment and Management (CEAM) Steering Committee.

The IMS will be supported by a communications program (separate from this project) which will ensure the communication of the information to communities and other interested parties in formats and methods appropriate to the audience.

In January of 2001, a workshop on Information Management for the MVCIMP was held in Yellowknife, NT. Out of that workshop, a Statement of Work (SOW) for this project was developed. The process of designing and evaluating options for an effective MVCIMP IMS began in earnest in the fall of 2001, with the surveys being developed by late November of that year.