

Executive Summary

The Mackenzie Valley Cumulative Monitoring Program (MVCIMP) Working Group commissioned the Gwich'in Tribal Council and Map Insight to complete a study that compiled and mapped monitoring data related to water quality in the Gwich'in Settlement Region and presented this information to representatives of the four Gwich'in communities. This report describes the georeferencing portion of the project, as completed by Map Insight.

Sources of monitoring data were identified through consultation with the MVCIMP Metadatabase, the Gwich'in Land and Water Board, and staff from Environment Canada and Indian and Northern Affairs Canada. Data was acquired, organized, imported into MapInfo geographic information software (GIS) software, and edited. Sample map products were produced for use in community meetings conducted by the Gwich'in Tribal Council. Suggestions were made as to how to provide more geospatial functionality within the MVCIMP Metadatabase.

The MVCIMP requires an information management system (IMS) to facilitate its operations and to support environmental audits. A discussion is included that identifies options and issues related to implementation of an IMS that have been identified through the execution of the Georeferencing Project. Options for using a GIS within the IMS include: using GIS as an interface to the MVCIMP Metadatabase; using GIS as a monitoring data repository; and using GIS for modeling and analysis. Issues that were identified include scale, data exchange, data interpretation and summary, and application of the methods used in this project to the Mackenzie Valley and to other monitoring themes. Finally, a brief description of a Functional Requirements Study and its benefits are provided.