

# **NWT Cumulative Impact Monitoring Program (CIMP) and Audit –**

***An Environmental Monitoring Program and Audit  
for the NWT***

## **Revised Draft Five-Year Work Plan**

**March 16, 2005**

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***Prepared by the  
NWT CIMP and Audit Working Group***

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## ***Executive Summary***

### ***1.0 Purpose of the CIMP and Audit Work Plan***

The Northwest Territories (NWT) Cumulative Impact Monitoring Program (CIMP) and Audit are initiatives designed to meet the requirements of the Gwich'in, Sahtu, and Tłı̨chō land claim agreements, and of the *Mackenzie Valley Resource Management Act* (MVRMA), to support informed resource management decisions throughout the NWT. When fully implemented, the NWT CIMP will provide resources to help fill gaps in current environmental monitoring, report on the state of the NWT environment and the cumulative impacts of land and water uses and deposits of waste, and encourage community-based monitoring and capacity-building. The NWT Environmental Audit will, at least once every five years, independently evaluate the state of the NWT environment, the effectiveness of the NWT CIMP, the effectiveness of land and water regulation in the NWT, and make recommendations to improve resource and environmental management.

The development of the NWT Cumulative Impact Monitoring Program and Audit has been guided by a Working Group since 1999, composed members or observers of regional Aboriginal, federal and territorial government representatives including the Gwich'in, Sahtu, Tłı̨chō and Deh Cho First Nations, the North Slave Metis Alliance, NWT Metis Nation, Inuvialuit, Government of the Northwest Territories and the Department of Indian Affairs and Northern Development, Environment Canada and the Department of Fisheries and Oceans. Akaitcho Treaty 8 was an active member of the WG until 2003, when it withdrew citing opposition to the MVRMA; however, they continue to receive all Working Group correspondence.

This document provides a five-year work plan for implementing the NWT CIMP and Audit in the fiscal years 2005-2006 through 2009-2010<sup>1</sup>. The Work Plan outlines the rationale and objectives for the NWT CIMP and Audit, the tasks to be undertaken to implement the objectives, and the projected costs of these tasks. Based on this Work Plan, and on behalf of the Working Group, the Department of Indian Affairs and Northern Development (DIAND) will request funding from the federal Treasury Board to implement the NWT CIMP and Audit. While this Work Plan addresses the initial five-year period, the Federal government's obligations regarding the NWT CIMP and Audit extend in perpetuity, and ongoing long-term funding will be necessary.

The NWT CIMP and Audit will apply to the entire NWT, including the Mackenzie Valley as defined in the MVRMA and the Inuvialuit Settlement Region. The sole area of exclusion is Wood Buffalo National Park, which falls under the jurisdiction of Parks Canada.

### ***2.0 What is the NWT CIMP?***

The NWT CIMP will develop and implement plans for monitoring the cumulative impact of land and water uses in the NWT. The program will support projects that fill gaps in existing monitoring, and will report on the state of the NWT biophysical and socio-economic environment. The NWT CIMP will be coordinated with existing monitoring and

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<sup>1</sup> The Work Plan reflects the outcome of consultation, review and discussion of drafts of several earlier documents prepared by the NWT CIMP Working Group, including earlier drafts of the work plan and budget (February 2002, September 2003), a draft implementation framework for the NWT CIMP and Audit (June 2002), draft terms of reference for the Audit and a background paper on the Audit process (November, 2002 and November 2003), and the final Terms of Reference for the NWT Audit (April 2004).

research activities, and will include traditional knowledge and western science. Communities will be involved throughout - in the design, implementation, interpretation, and reporting of the monitoring program.

Preliminary *objectives* for the NWT CIMP include the following:

1. To identify and monitor uses of land and water, and sources of cumulative impacts
2. To identify and fill priority monitoring gaps
3. To determine and report on trends in environmental quality
4. To coordinate with a number of organizations conducting or using cumulative impact research or monitoring in the NWT
5. To meet obligations under land claim agreements and the MVRMA
6. To provide information that will contribute to the NWT Environmental Audit
7. To provide information to co-management bodies, government and others for use in making their decisions about environmental and resource management (e.g., land use planning, research, project screening/environmental assessment, regulation and enforcement)
8. To build capacity, particularly in NWT communities and regional organizations, to better enable full and effective participation in environmental monitoring processes and activities
9. To contribute to the NWT Cumulative Effects Assessment and Management (CEAM) Strategy and Framework

The need for the NWT CIMP to be coordinated with other monitoring programs and initiatives in the NWT has emerged as a fundamental element of program design. By focusing program resources on filling priority gaps, while working with other organizations, the NWT CIMP will make the most efficient use of available human and financial resources. In order to meet this requirement, the NWT CIMP will need to establish strong linkages with other monitoring activities and initiatives, involving regular communication, consultation, and information sharing. It is expected that these linkages will be mutually beneficial; the NWT CIMP being able to provide assistance to existing monitoring activities, and in turn, existing monitoring will contribute information to the analysis and reporting conducted as part of the NWT CIMP.

## **2.1 Valued Components**

The Working Group has adopted a 'Valued Component' (VC) approach to determining what should be monitored. In plain language, the term VC refers to "elements of the environment that people think are important." The Working Group has identified the following priority VCs, based on a 1998 Inuvik workshop, regional and community consultations, and Working Group meetings:

- Caribou
- Moose
- Land Mammals
- Marine Life (mammals and fish)
- Birds (land and marine)
- Water and Sediment Quality
- Water Quantity
- Air Quality
- Snow, Ground Ice, Permafrost
- Fish Habitat, Population, Harvest
- Fish Quality

- Vegetation
- Climate and Climate Change
- Human Health and Community Wellness

The monitoring of VCs will include both traditional knowledge as well as scientific approaches. Contaminants and biodiversity are elements that will need to be considered for many of these VCs.

With the assistance of the Working Group, government and co-management board staff and some community members, DIAND prepared a draft Preliminary State of Knowledge Report<sup>2</sup> for the VCs. The report contains a draft State of Knowledge Summary for each VC<sup>3</sup> which includes:

- Status (baseline conditions) and trends
- Possible indicators
- Existing monitoring
- Gaps in knowledge and monitoring
- Recommendations to fill the gaps
- Sample monitoring projects

## ***2.2 NWT CIMP – Work Plan Tasks***

### ***Task 1: Operation of the RA/ NWT CIMP and Audit Working Group***

Until DIAND establishes a permanent Responsible Authority (RA), the Minister of DIAND, in partnership with the NWT CIMP and Audit Working Group, will continue to coordinate the activities for the NWT CIMP. The Working Group/RA will be responsible for planning and implementing the monitoring program, facilitating communications and consultations, and holding an annual general meeting of the Working Group. A Secretariat will be provided to support the Working Group, and ultimately the RA, in the implementation of the NWT CIMP.

### ***Task 2: Development of a Permanent Responsible Authority***

During the initial five-year planning period (2005-2010), DIAND, in partnership with the CIMP and Audit Working Group, will work to develop terms of reference for a permanent Responsible Authority for the program.

### ***Task 3: Establishment and Operation of Valued Component Advisory Groups***

The Working Group/RA may appoint external advisory groups and retain independent experts to help with planning and review as it relates to monitoring priority Valued Components within the regions of the NWT.

### ***Task 4: Monitoring and Research Programs***

This task consists of two components:

- Development of cumulative impact monitoring plans
- Review/support of monitoring / research projects

### ***Cumulative Impact Monitoring Plans***

The WG/RA will develop and implement Five-Year Cumulative Impact Monitoring Plans for the NWT. These plans will coordinate the effective and efficient collection, analysis and

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<sup>2</sup> The document "A Preliminary State of Knowledge of Valued Components" was originally compiled in February 2002; this document has been updated to February 2005.

<sup>3</sup> A draft state of knowledge summary for marine fish is being developed by the Department of Fisheries and Oceans and will be added to the Preliminary State of Knowledge Report when available.

dissemination of scientific data, TK, and other information for the purposes of cumulative impact monitoring. The plans will address elements of the monitoring program that can be addressed by existing monitoring activities conducted by others, as well as identify the gaps that will be filled by the NWT CIMP itself. Some flexibility will be required to accommodate changing priorities, capacities and projects of partner organizations and programs.

Throughout the development of the NWT CIMP, the Working Group has noted the importance of having community-based monitoring programs, and the need to build capacity in the communities as well as in regional organizations involved in monitoring. The implementation of the NWT CIMP will include measures to increase community and regional capacity with respect to both traditional knowledge and science. The RA will promote the inclusion of capacity-building measures in monitoring and research projects supported by the NWT CIMP, and will incorporate capacity-building as appropriate in consultation, communication, and education activities.

The draft State of Knowledge summaries (Section 2.1, above) will form the basis of the RA's first Five-Year Cumulative Impact Monitoring Plan for the NWT. The Five-Year Cumulative Impact Monitoring Plans will take into account:

- Land and water uses and deposits of waste – the sources of cumulative impacts
- The issues of concern to communities
- Priority gaps in existing monitoring information
- The need to coordinate on a continuing basis with other programs and initiatives to determine how best to fill the gaps.

### ***Review/Support of Monitoring / Research Projects***

The core activity of the WG/RA will be reviewing and supporting new or existing monitoring activities that fill the priority gaps identified in the Five-Year Cumulative Impact Monitoring Plan. In developing the Five-Year Cumulative Impact Monitoring Plan, the WG/RA will develop criteria for identifying monitoring activities eligible to receive funding from the NWT CIMP. Potential criteria identified by Working Group representatives to date include capacity-building and the meaningful involvement of community members; respect for and use of both scientific and traditional knowledge; the sharing of results with communities, resource management decision-makers, the public, and other interested parties; and the encouragement of partnership projects supported by several organizations. Although the focus of the NWT CIMP is on monitoring activities, the WG/RA may also choose to conduct or sponsor research that contributes to fulfilling the NWT CIMP objectives.

### ***Task 5: Workshops and Training***

Throughout the development of the NWT CIMP, the Working Group has noted the importance of having a community-based monitoring program, and the need to build capacity in the communities as well as in regional organizations involved in monitoring. Capacity-building measures can include but are not limited to training, education, and ensuring adequate numbers and continuity of staff.

The WG/RA will provide funding and other support to new or existing projects and programs that build capacity related to monitoring, particularly at the community and regional level. The approach to involving communities will need to reflect the unique circumstances in each region.

### ***Task 6: Information Management, Synthesis and Reporting***

#### ***Information Management and Synthesis***

The NWT CIMP will provide for information management and sharing through an NWT-wide network. A range of types of information (e.g., metadata, geospatial data, monitoring and research information, reports/publications; including both traditional knowledge and scientific

information) will contribute to the NWT CIMP. The WG/RA will maintain the NWT CIMP website (<http://www.nwtcimp.ca/>) as part of a broader strategy for communication and education and as part of the information sharing system, while accommodating the needs of those without internet access.

### ***Reporting***

The WG/RA will report on its activities and findings in a variety of formats, languages and venues to address the needs of different audiences. The WG/RA and Secretariat will communicate regularly with community and regional organizations, with advice from WG/RA members. In addition, the projects supported by the NWT CIMP will be required, at a minimum, to report results to the communities in the regions in which they operate.

## ***3.0 What is the NWT Environmental Audit?***

The independent audit is to be conducted at least once every five years; the first audit is being conducted in 2004-2005.

The independent environmental audit will evaluate and review:

- The state (health) of the environment - trends in environmental quality, contributing factors, and the significance of trends;
- The effectiveness of the NWT CIMP;
- The effectiveness of the NWT's integrated environmental and resource management systems
- The response to any recommendations of previous environmental audits.

Specific objectives identified for the Audit include:

- To report on trends in environmental quality in the NWT, the factors contributing to the trends, and their significance
- To provide a critical evaluation of the effectiveness of the NWT CIMP
- To provide a critical evaluation of the effectiveness of environmental management processes in the NWT and the organizations responsible for cumulative impact assessment and management (e.g., the co-management bodies, federal and territorial government departments)
- To assess the extent to which the recommendations of previous environmental audits have been addressed
- To meet obligations under land claim agreements and the MVRMA
- To provide independent and constructive advice to co-management bodies, government and others to support their work, based on the findings of the audit. These findings may relate to trends in environmental quality, the NWT CIMP, the evaluation of the effectiveness of environmental management processes in the NWT, or a review of responses to previous audits
- To contribute to the NWTCEAM Strategy and Framework

## ***3.1 NWT Environmental Audit – Work Plan Tasks***

### ***Task 7: Follow-up to the Initial Audit***

Following the completion of the initial audit, DIAND and the Working Group/CIMP Coordinators (subsequently the WG/RA/Secretariat) will need to follow-up on the recommendations / findings of the audit. This may include meetings with government organizations (Aboriginal, federal and territorial), co-management bodies, communities, ENGOs, industry and other stakeholders to talk about the audit, the implications of its findings, and 'lessons learned'. (Years 1 & 2)



***Task 8: Preparation for the Second Audit***

DIAND, as RA, will plan the second Audit (and subsequent audits) as per the requirements of Section 148(2) of the MVRMA. The process used for the initial audit will likely serve as the starting point for setting the Terms of Reference for the second audit.

***Task 9: Conducting the Second Audit***

The second NWT Environmental Audit will be conducted in Year 4 (2008-2009). A two-phase approach similar to that for the initial audit may be used. In this case the first phase would involve the preparation of an Audit Plan while the second phase would be the completion of the Environmental Audit following the direction and procedures outlined in the Audit Plan.

***Task 10: Follow-up to the Second Audit***

Following the completion of the second audit, the WG/RA/Secretariat will need to follow-up on the recommendations / findings of the audit. This task will be completed as per the requirements of Section 148(2) of the MVRMA.

***4.0 NWT CIMP and Audit Budgets***

Approximately \$3.1 million per year for Years 1 through 3, \$3.7 million for Year 4 (Audit Year) and \$3.1 million for Year 5 is needed for implementation of the NWT CIMP (total of \$16.2 million for the entire NWT; work to date has focused on designing the program). DIAND (and subsequently the RA) will transfer much of this budget as 'grants and contributions' to regional and community or other eligible organizations to conduct monitoring and related capacity-building programs.

A total of \$1.1 million is needed for Audit purposes during this five-year budget cycle. This total includes \$75,000 for Year 1 and \$50,000 in Year 2 for follow-up to the initial Audit; \$250,000 in Year 3 for preparatory activities for the second Audit; \$625,000 in Year 4 to conduct the second audit; and \$100,000 in Year 5 for follow-up to the second Audit.

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## **1.0 Introduction**

### **1.1 Purpose of the NWT CIMP and Audit**

The Northwest Territories (NWT) Cumulative Impact Monitoring Program (CIMP) and Audit are initiatives designed to meet the requirements of the Gwich'in, Sahtu, and Tłı̨chǫ land claim agreements, and of the Mackenzie Valley Resource Management Act (*MVRMA*), to support informed resource management decisions throughout the NWT. When implemented, the NWT CIMP will provide resources to help fill gaps in current environmental monitoring<sup>4</sup>, report on the state of the NWT environment and the cumulative impacts of land and water uses and deposits of waste, and encourage community-based monitoring and capacity-building. The NWT Environmental Audit will, at least once every five years, independently evaluate the state of the NWT environment, the effectiveness of the NWT CIMP, the effectiveness of land and water regulation in the NWT, and make recommendations to improve resource and environmental management.

The NWT CIMP and Audit fulfill land claim obligations related to integrated resource management. Each of the Gwich'in (1992), Sahtu (1994) and Tłı̨chǫ (2003) land claim agreements contains a chapter addressing land and water regulation which requires the development of a method of monitoring the cumulative impacts of land and water uses on the environment in the Mackenzie Valley, as well as a periodic environmental audit<sup>5</sup>. The *Mackenzie Valley Resource Management Act* (*MVRMA*) is one of the pieces of settlement legislation for these claims, and establishes an integrated system of land and water management including cumulative impact monitoring (section 146) and an independent environmental audit at least once every five years (section 148). The *MVRMA* (section 150) provides for the Government of Canada to develop regulations to designate the responsibility for cumulative impact monitoring to another organization; no such regulations have been drafted or promulgated to date.

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<sup>4</sup> Recently, several 'gaps analyses' have been conducted (Gartner Lee Ltd., December 2003; Kavik-Axys Inc., et. al., Summer 2002; Kavik-Axys Inc., in association with LGL Ltd., March 2001); in addition to identifying the specific types of scientific and other information that are needed for high quality and efficient environmental assessment and regulatory review, an over-riding question asked is "How can the existing and future information (scientific, traditional knowledge, and other types) available from a range of organizations be effectively collected, managed, shared by a range of users, and applied in analytical frameworks for use in decision-making? "

<sup>5</sup> Appendix A provides the relevant excerpts from the Gwich'in, Sahtu and Tłı̨chǫ agreements relating to cumulative impact monitoring and the audit, as well as Part 6 of the *MVRMA*. Sections 2.1 and 2.3 of this Work Plan describe the key requirements from the land claims and the *MVRMA* for the NWT CIMP and the Audit, respectively.

*Part 6 of the MVRMA and the Gwich'in, Sahtu and Tłı̨chǫ land claim agreements set out the minimum requirements for the NWT CIMP and Audit. The proposed approach described in the Work Plan is consistent with, and builds on, the general requirements provided in the agreements and the MVRMA, in providing for an NWT-wide program.*

In the five-year review of the Gwich'in land claim implementation agreement, lack of progress on the development and implementation of the CIMP was identified as a concern (1997). The Gwich'in review noted that "The GTC and GNWT have expressed concern with communications on CIMP to date. Delay in CIMP development from DIAND may impose costs to the regulatory regime in the GSA [Gwich'in Settlement Area] once MVRMA legislation is passed." Gwich'in and Sahtu organizations continue to express their view of the need for sufficient funding for the development and timely implementation of the NWT CIMP and Audit (e.g., in the annual reports for 2001/2002 and 2002/2003 on claims implementation).

Since early 1999, the NWT CIMP and Audit Working Group ('the Working Group'), composed of Aboriginal, territorial, and federal government representatives, has been developing the NWT CIMP and Audit. This document summarizes the work to date and provides a five-year work plan for implementing the NWT CIMP and Audit in the fiscal years 2005-2006 through 2009-2010<sup>6</sup>. The Work Plan outlines the rationale and objectives for the NWT CIMP and Audit, the tasks to be undertaken to implement the objectives, and the projected costs of these tasks. Based on this Work Plan, and on behalf of the Working Group, the Department of Indian Affairs and Northern Development (DIAND) will request funding from the federal Treasury Board to implement the NWT CIMP and Audit. While this Work Plan addresses the initial five-year period, the Federal government's obligations regarding the NWT CIMP and Audit extend in perpetuity, and ongoing long-term funding will be necessary.

## **1.2 Work Plan Organization**

Section 1.0 of the Work Plan document outlines the purpose and benefits of the NWT CIMP and Audit, explains the relationship between the NWT CIMP and Audit and describes the geographic scope. Section 2.0 summarizes the land claim and legislative requirements for the NWT CIMP and Audit, while Section 3.0 explains the relationship of the NWT CIMP and Audit to other environmental and resource management initiatives in the NWT. Section 4.0 describes the Working Group's composition, approach and activities to date in designing the NWT CIMP and Audit. This section also describes the proposed 'Responsible Authority' (RA) and outlines the RA's approach and role in the NWT CIMP. Section 5.0 addresses the principles, objectives and approach and Work Plan Tasks of the NWT CIMP; Section 6.0 addresses the principles and objectives and Work Plan Tasks of the NWT Audit. Finally, Section 7.0 summarizes the deliverables/outcomes and schedule for each of the five years for both the NWT CIMP and the NWT Environmental Audit. A series of appendices provide additional background information.

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<sup>6</sup> The Work Plan reflects the outcome of consultation, review and discussion of drafts of several earlier documents prepared by the NWT CIMP Working Group, including earlier drafts of the work plan and budget (February 2002, September 2003), a draft implementation framework for the NWT CIMP and Audit (June 2002), draft terms of reference for the Audit and a background paper on the Audit process (November, 2002 and November 2003), and the final Terms of Reference for the NWT Audit (April 2004).

### **1.3 What is the NWT CIMP?**

The NWT CIMP will develop and implement plans for monitoring the cumulative impact of land and water uses in the NWT. The program will support projects that fill gaps in existing monitoring, and will report on the state of the NWT biophysical and socio-economic environment. The NWT CIMP will be coordinated with existing monitoring and research activities, and will include traditional knowledge and western science. Communities will be involved throughout - in the design, implementation, interpretation, and reporting of the monitoring program.

### **1.4 What is the NWT Audit?**

The independent environmental audit will evaluate and review:

- The state (health) of the environment - trends in environmental quality, contributing factors, and the significance of trends;
- The effectiveness of the NWT CIMP;
- The effectiveness of the NWT's integrated environmental and resource management systems
- The response to any recommendations of previous environmental audits.

The independent audit is to be conducted at least once every five years; the first audit is being conducted in 2004-2005.

### **1.5 Why Do We Need an NWT-Wide CIMP and Audit?**

NWT residents and other interested parties have long-standing concerns about the potential cumulative effects of resource development activities within and outside the NWT on the environment in the NWT. Many of these concerns relate to uncertainties about the effectiveness of government monitoring and management of natural resources, and the lack of coordination among existing environmental research and monitoring programs. A coordinated monitoring program and regular independent audits would do much to address these concerns.

The need for cumulative impact monitoring and environmental auditing is heightened in the context of rapidly increasing development pressures throughout the NWT. In particular, interest in mining has focused on diamonds in the eastern regions; while oil and gas activities, including a proposed gas pipeline, are dominant in the west. The key human activities currently affecting the environment in the NWT include:

- population growth
- community growth and infrastructure (e.g., the construction of additional housing; waste management)
- hunting of wildlife species (both commercial, recreational, and subsistence)
- fishing (both commercial, recreational, and subsistence)
- forestry
- transportation (e.g., aviation, ferries, winter roads, all-season roads, bridges, port development)
- mineral exploration and development (including base metals and diamonds, particularly in the eastern regions of the NWT)
- oil and gas exploration and development (particularly in the western areas of the NWT)
- electrical generation, transmission/distribution, and the potential for development of additional resources

- tourism and outfitting (including activities focusing on hunting/fishing, as well as 'ecotourism')
- contaminated sites (e.g., abandoned mine sites, waste sites)
- heavy metals and other contaminants of concern (e.g., Persistent Organic Pollutants (POPs), and the Long-Range Transport of Atmospheric Pollutants (LRTAP))
- climate change

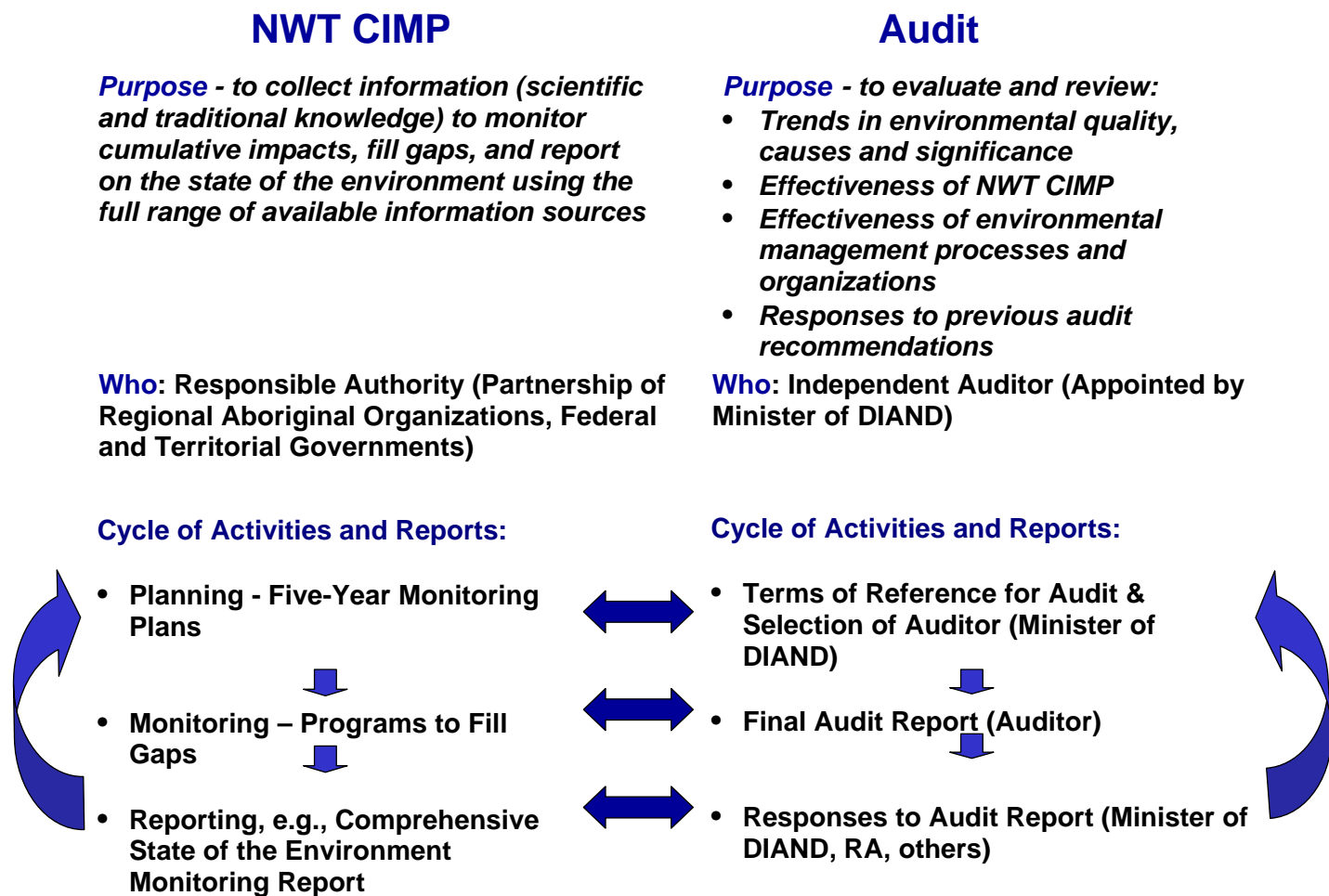
As these pressures intensify, they are increasingly likely to contribute to cumulative impacts, adding to the need to understand environmental baseline conditions against which to predict and assess change, how conditions are changing, and why.

In this context, a variety of organizations have identified specific needs related to cumulative impact monitoring and environmental auditing, and have noted that monitoring and auditing can provide information for making informed environmental and resource management decisions. Specific references include recent gaps analyses (e.g., Gartner Lee Ltd., December 2003; Kavik-Axys Inc., et. al., Summer 2002; Kavik-Axys Inc., in association with LGL Ltd., March 2001), NWT Cumulative Effects Assessment & Management (CEAM) Steering Committee (2001, 2004); Government of the Northwest Territories (GNWT) (2000); National Round Table on the Environment and Economy (2001, 2003); Department of Indian Affairs and Northern Development (DIAND) (2001); West Kitikmeot Slave Study Society (2001a, 2001b); and the Mackenzie Valley Environmental Impact Review Board (MVEIRB) (2003). The Working Group has taken these needs into account in designing the NWT CIMP and Audit.

## 1.6 Relationship between the NWT CIMP and the Audit

While related, the NWT CIMP and Audit are separate functions or activities that will be overseen by different organizations. The Auditor's task is essentially to *independently evaluate and review*, as opposed to the Responsible Authority's principal focus on *collecting and reporting* monitoring information that is primarily descriptive in nature. Figure 1 shows the relationship between the NWT CIMP and the Audit. The information generated by the NWT CIMP will be an important resource for the independent auditor, and the Responsible Authority (RA) and NWT CIMP must provide information to the auditor as requested (*MVRMA* S. 149). The auditor will likely make constructive recommendations to the RA regarding the NWT CIMP, and the RA must respond in writing to any such recommendations. While the RA will contribute actively to all elements of the audit, the RA will not have special status in the audit process. The role of the RA is detailed in Section 4.2.

Figure 1: Relationship Between the NWT CIMP and the Audit



## 1.7 Geographic Scope and Key Definitions

The NWT CIMP and Audit will apply to the entire NWT, including the Mackenzie Valley as defined in the *MVRMA*, the Inuvialuit Settlement Region, and the NWT portion of Wood Buffalo National Park. A map of the NWT and its regions is presented in Figure 1.

Although a glossary is provided in Appendix B, the key definitions adopted by the Working Group are presented here to set the context for the NWT CIMP and Audit work plan.

'Environment' is broadly defined to include biophysical, social, economic and cultural aspects of the NWT environment. The Working Group's Terms of Reference (June 1999) state "Environment means the Earth, and how land, water and air and all living and non-living things depend on each other." The *MVRMA* (section 3) defines 'environment' to mean "the components of the Earth and includes (a) land, water and air, including all layers of the atmosphere; (b) all organic and inorganic matter and living organisms; and (c) the interacting natural systems that include components referred to in paragraphs (a) and (b)."

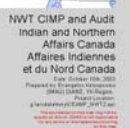
'Impact on the environment' is defined in the *MVRMA* (Section 111) to mean "any effect on land, water, air or any other component of the environment, as well as on wildlife harvesting, and includes any effect on the social and cultural environment or on heritage resources". The Working Group has defined 'cumulative impacts' as "changes to the environment caused by an activity, combined with other past, present and future activities". The terms 'cumulative impacts' and 'cumulative effects' are used interchangeably throughout this document.

'Monitoring' is a consistent method of measuring or watching something to detect changes, using scientific or traditional knowledge, in a repetitive and systematic way. Monitoring generally requires the collection and analysis of information in order to define a historic or current set of baseline conditions, followed by regular observations to determine changes in those conditions, and to identify possible sources of change. It may occur at a number of different levels (e.g., project-specific, local/community, regional, territorial, national, international) and for a number of different purposes.

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## **2.0 Land Claims, Self-Government and Legislative Requirements**

### **2.1 Unsettled Land Claims in the Mackenzie Valley**

The Working Group has developed the NWT CIMP and Audit without prejudice to land claim and self-government negotiations and discussions currently underway in the southern NWT. The Governments of Canada and the NWT are currently engaged in land claim and self-government discussions and negotiations with the Akaitcho Territory Government, the Deh Cho First Nations, the Northwest Territory Metis Nation (formerly the South Slave Metis Tribal Council), and the North Slave Metis Alliance. In developing the NWT CIMP and Audit, the Working Group has recognized that interest in community-based monitoring is generally high throughout the NWT, but that some unsettled claims areas do not accept the application of the *MVRMA*. Therefore the participation of regional or other organizations in the development and implementation of the NWT CIMP and Audit is without prejudice to their positions regarding any land claim and self-government agreements that may be negotiated. The *MVRMA*, including Part 6, may be amended to reflect the outcomes of these processes. It is possible that implementation of Part 6 of the *MVRMA* will require the amendment or development of legislation, regulations, and policy. The Deline, Tulita, and Beaufort Delta self-government negotiation processes may also have implications for the implementation of the NWT CIMP and Audit.

*The outcomes of land claim and self-government processes in the NWT are likely to have implications for the implementation of the NWT CIMP and Audit; certainly, the NWT CIMP and Audit will have to respect how the negotiated outcomes of each of these processes addresses cumulative impact monitoring and auditing on a regional basis.*

### **2.2 Inuvialuit Settlement Region**

The *Inuvialuit Final Agreement (IFA)* came into effect in 1984, and does not specifically address cumulative impact monitoring and auditing. The *MVRMA*, and its provisions relating to cumulative impact monitoring and environmental auditing, does not apply to the Inuvialuit Settlement Region. Section 4 of the *IFA* states that the Inuvialuit are entitled to the rights and benefits of other citizens under any legislation, and that “where restructuring of the public institutions of government is considered for the Western Arctic Region, the Inuvialuit shall not be treated less favourably than any other native groups or native people with respect to the governmental powers and authority conferred on them.” From an environmental management perspective, a territory-wide approach to cumulative impact monitoring and auditing is desirable.

*The Inuvialuit have participated on the Working Group from the outset; after discussions with representatives of the Inuvialuit and co-management bodies, DIAND and the Inuvialuit Game Council, with the support of the Working Group, agreed in April 2002 that the Inuvialuit Settlement Region would be included in the implementation plans for the NWT CIMP and Audit. A Memorandum of Understanding was signed in November 2003. Inuvialuit participation in the NWT CIMP and Audit shall be without prejudice to the Inuvialuit Final Agreement or the Beaufort-Delta self-government process.*

## **2.3 Requirements under the *MVRMA***

Key requirements from the land claim agreements and the *MVRMA* for the NWT CIMP and Audit are summarized below. Appendix A provides the relevant excerpts from the Gwich'in, Sahtu and Tłı̨chō agreements relating to cumulative impact monitoring and the Audit, as well as Part 6 (Sections 146-149 in particular) of the *MVRMA*. These requirements provide the *minimum* requirements for the NWT CIMP.

The land claims and the *MVRMA* establish a system of integrated land and water management; the decision-making functions (i.e., land use planning, land and water regulation, environmental assessment) within the system are to be supported by information to be provided by the NWT CIMP and Audit. The Gwich'in, Sahtu and Tłı̨chō agreements require that the implementing legislation provide for a method of monitoring the cumulative impact of land and water uses on the environment in the Mackenzie Valley.

Part 6 of the *MVRMA* outlines the cumulative impact monitoring requirements. Sections 145 and 146 state that a Responsible Authority (RA) shall collect and analyze both scientific and traditional knowledge in order to monitor the cumulative impact of land and water uses and deposits of waste on the environment in the Mackenzie Valley. The Gwich'in, Sahtu and Tłı̨chō agreements and the *MVRMA* (S. 147) require the federal government to consult with First Nations in carrying out the monitoring function; if a board or agency carries out the function, the First Nations are entitled to participate in that work (the manner of this participation will be specified in regulations).

Section 148 (3) specifies four key areas to be addressed in the Audit:

- An evaluation of the 'state of the environment',
- A review of the effectiveness of cumulative impact monitoring,
- A review of the effectiveness of the regulation of land and water uses and environmental assessment, and
- A review of the response to recommendations of any previous environmental audits.

Section 149 of the *MVRMA* states that, subject to any other federal or territorial law, federal and territorial agencies and departments and *MVRMA* boards are to provide the RA with the information it requires to monitor cumulative impacts and with information required by the auditor. Section 150 allows for the development of regulations that may be needed for the implementation of Part 6, including First Nations participation, designation of a Responsible Authority, and the collection and analysis of data and information, including scientific and traditional knowledge. As noted above, no regulations have been drafted or promulgated to date, and the members of the Working Group or its successor organization, the Responsible Authority, will re-examine the guiding principles and content of the regulations once implementation of the NWT CIMP and Audit has begun.

## **3.0 NWT CIMP and Audit in the Context of Environmental Management**

The relationships between the NWT CIMP and Audit and the integrated resource management system of the *MVRMA*, the NWT Cumulative Effects Assessment and Management (CEAM) Framework, and other programs and initiatives are described below.

### 3.1 NWT CIMP and Audit and MVRMA Integrated Resource Management System

The NWT CIMP and the Audit are essential elements of the integrated resource management system established by the *MVRMA*. This integrated resources management system establishes three groups of decision-making bodies: land use planning boards, land and water boards, and an environmental impact review board. In this system, the NWT CIMP and the Audit serve as feedback and decision-support mechanisms by providing these boards with additional information on which to base their decisions (Kennett 2001a, 2001b, 2001c). In particular:

- The Gwich'in and Sahtu Land Use Planning Boards and the Deh Cho Land Use Planning Committee will be able to consider state-of-the-environment reports and other monitoring information in the context of the principles, objectives and thresholds identified as part of the land use planning process. These can be reflected in the development and amendment of land use plans, and the consideration of individual development applications.

The Gwich'in Land Use Plan (2003) recommends that the NWT CIMP:

- i) deal with land, water, and air quality concerns of all four [Gwich'in] settlement area communities, and
- ii) involve communities in the actual monitoring of land, water, and air resources.

The Plan further states that "The Planning Board shall review the findings of the Cumulative Impact Monitoring Program with respect to land, water and air during each five year review of the Gwich'in Land Use Plan, and will integrate the Program's recommendations into the Plan."

- The Gwich'in, Sahtu, Wek'èezhii (when established), and Mackenzie Valley Land and Water Boards will be able to utilize NWT CIMP and Audit information in their screenings of applications for land use permits and water licences.
- The Mackenzie Valley Environmental Impact Review Board (MVEIRB) will have a basis upon which to make decisions with respect to the potential cumulative effects of developments undergoing screening, environmental assessment or review.
- Through the Audit, all of the co-management bodies institutionalized in the *MVRMA* will benefit from an independent evaluation of the processes they govern or participate in.

The first ten-year plan for implementing the Gwich'in Comprehensive Land Claim recognizes that "training opportunities associated with potential employment related to the monitoring and environmental audit activities" may be available to Gwich'in beneficiaries (Government of Canada, Government of the Northwest Territories and Gwich'in Tribal Council, 1992).

As other claims and self-government agreements are concluded in the Mackenzie Valley, they will likely have implications for aspects of NWT CIMP and Audit implementation. Certainly, the NWT CIMP and Audit will have to respect how the negotiated outcomes of each land claim and self-government process addresses cumulative impact monitoring and auditing on a regional basis.

### 3.2 Potential User Groups outside the *MVRMA* System

In addition to their functions within the *MVRMA* system, the NWT CIMP and Audit will be useful to all parties with an interest in resource and environmental management in the NWT. The NWT CIMP and the Audit will fulfill a number of needs and expectations for various groups, including:

- Communities – the NWT CIMP will provide information to address identified community concerns and priorities with respect to environmental monitoring, and contribute to the building of community capacity and community development. The Audit is a potential tool for examining the extent to which communities are able to and do participate in resource management processes and decisions;
- Co-management and regulatory bodies (e.g., Renewable resource boards in the Gwich'in, Sahtu, and Tłıch'ô regions, Environmental Impact Screening Committee, Environmental Impact Review Board, Fisheries Joint Management Committee, Wildlife Management Advisory Council (NWT), NWT Water Board in the Inuvialuit Settlement Region, caribou management bodies throughout the NWT) – the NWT CIMP will provide the information needed to fulfill various cumulative effects management functions (e.g., land use planning, land administration, regulation and enforcement, project-specific screening, environmental assessment and review). The Audit will provide a critical evaluation of the effectiveness of co-management bodies in fulfilling their obligations with respect to cumulative effects assessment and management and provide recommendations for improvement;
- Aboriginal governments – implementation of the NWT CIMP and the Audit will make a contribution toward the ongoing implementation of land claim agreements, and will serve the needs of the communities and co-management bodies (as described above);
- Aboriginal land and resource management organizations and research bodies (e.g. Gwich'in Social and Cultural Institute) – the NWT CIMP will provide information relevant to fulfillment of their mandates;
- Federal government departments, (e.g., DIAND, Environment Canada, Department of Fisheries and Oceans), regulatory bodies (e.g., National Energy Board), and agencies (e.g., Canadian Environmental Assessment Agency; Canadian Polar Commission) – information provided through the NWT CIMP and the Audit will assist with the fulfillment of duties with respect to environmental management and regulatory review;
- Government of the Northwest Territories departments (e.g., Resources, Wildlife and Economic Development; Municipal and Community Affairs) and agencies (e.g. Aurora Research Institute) – information provided through the NWT CIMP and the Audit will assist with the fulfillment of duties with respect to environmental management and regulatory review;
- Industry (e.g., individual companies, NWT & Nunavut Chamber of Mines, oil and gas associations such as the Canadian Association of Petroleum Producers, Canadian Energy Pipeline Association) – the baseline and monitoring information reported through the NWT CIMP will be of use to industry in the development of project-specific cumulative effects assessments, and in the identification of specific aspects of their individual operations and facilities that may require mitigation or other management strategies; as well as in the development of industry-wide guidelines and protocols;

- Other land users (e.g., tourism and outfitting operators) – the findings of the NWT CIMP and Audit can assist these users in ensuring that their activities have minimal environmental impacts;
- Project-specific ‘watch dog’ groups (i.e., the Independent Environmental Monitoring Agency for the BHP Billiton Ekati™ diamond mine and the Environmental Monitoring Advisory Board for the Diavik diamond mine) – the findings of the NWT CIMP and Audit will increase the available information concerning the regional context in which these groups operate;
- Environmental Non-Government Organizations (ENGOS) (e.g., Canadian Arctic Resources Committee, Ecology North, Canadian Parks and Wilderness Society, World Wildlife Fund) – information provided by the NWT CIMP and Audit can be used by these groups in supporting their ongoing activities to ensure protection of the environment and sustainable development, to identify gaps and needs with respect to cumulative effects assessment and management, and can contribute to the setting of priorities in this regard;
- Research and advisory organizations (e.g., West Kitikmeot Slave Study Society<sup>7</sup>, Mackenzie River Basin Board) – the findings of the NWT CIMP and the Audit can be used to identify research and policy gaps and needs with respect to cumulative effects, and can contribute to the setting of priorities; and
- Research and monitoring programs in neighbouring jurisdictions (e.g. Nunavut General Monitoring Program, Alberta Forest Biodiversity Monitoring Program) and at the international level (e.g., those of the Conservation of Arctic Flora and Fauna (CAFF) Arctic Monitoring and Assessment Program (AMAP) Working Groups of Arctic Council) - the findings of the NWT CIMP and Audit can provide information about the NWT useful to understanding and managing transboundary concerns

The specific interests, roles and responsibilities of many of these organizations with respect to monitoring have been summarized elsewhere (NWT CEAM Steering Committee, October 2001). The relationship of the NWT CIMP to other monitoring programs and initiatives is discussed below in Section 3.4.

### **3.3 Relationship of the NWT CIMP and Audit to the NWT CEAM Strategy and Framework**

In response to concerns over rapidly increasing development pressures in the NWT and changes in the environmental and resource management systems, a multi-stakeholder Steering Committee has completed a Cumulative Effects Assessment and Management (CEAM) Strategy and Framework for the NWT. The NWT CEAM Steering Committee has identified nine Framework components, or functions necessary to assess and manage cumulative effects (NWT CEAM Steering Committee, October 2001).

The Steering Committee has examined the status of each of these components and made recommendations to improve their effectiveness in their ‘Blueprint for Implementing the CEAM Strategy and Framework in the NWT and its Regions’ (NWT CEAM Steering Committee, July 2004). The Blueprint identifies ‘Baseline Studies and Monitoring’, and ‘Audit and Reporting’ as

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<sup>7</sup> Although the WKSS completed its original five-year mandate in March 2001, the WKSS Board has developed an interim plan for cumulative effects research and monitoring in the Slave Geological Province (SGP), pending the implementation of a regional approach to monitoring and research in the SGP.

essential components of cumulative effects management and recognizes the major roles the NWT CIMP and Audit can play in this regard. To this end, the Blueprint strongly recommends to the Government of Canada that the NWT CIMP and Audit be implemented in a timely manner with adequate funding, based on the planning documents developed by the NWT CIMP and Audit Working Group.

The NWT CEAM Strategy and Framework is a voluntary initiative to examine resource and environmental management in the NWT and to provide 'refusable advice' to decision-makers concerning improvements to existing programs, agencies, and processes. The NWT CEAM Strategy and Framework cannot supersede or provide direction to the NWT CIMP and Audit or any other legally and constitutionally mandated activities. The NWT CIMP and Audit may each use the NWT CEAM Strategy and Framework as one of several available sources of information and advice.

### **3.4 Coordination with Other Monitoring Activities**

Through consultations at the Working Group, government, regional, and community levels, the need for the NWT CIMP to be coordinated with other monitoring programs and initiatives in the NWT has emerged as a fundamental element of program design. The Working Group has consistently emphasized the importance of the NWT CIMP building on and complementing other initiatives, avoiding duplication, and developing partnerships to improve monitoring. The NWT CIMP will use information collected and generated by others, and as discussed above (Section 3.2), will provide information to a wide variety of other organizations. By focussing program resources on filling priority gaps, while working with other organizations, the NWT CIMP will make the most efficient use of available human and financial resources. In order to meet this requirement, the NWT CIMP will need to establish strong linkages with other monitoring activities and initiatives, involving regular communication, consultation, and information sharing. It is expected that these linkages will be mutually beneficial; the NWT CIMP being able to provide assistance to existing monitoring activities, and in turn, existing monitoring will contribute information to the analysis and reporting conducted as part of the NWT CIMP.

The bodies conducting or using cumulative impact monitoring and research in the NWT are described above in the list of potential users of the NWT CIMP and Audit (Section 3.2). Some of the monitoring activities with which the NWT CIMP will have to coordinate include:

- Regionally-based monitoring initiatives, some specifically related to cumulative effects assessment and management (e.g., Turiuq (Ocean) Monitoring Program, Coppermine River Cumulative Effects Monitoring Program, Arctic Borderlands Ecological Knowledge Co-op)
- Project-specific monitoring (for mines, oil and gas facilities, e.g., establishment of pre-project baselines; verification of impact predictions; operational compliance with land use permits and water licenses and effects monitoring)
- Baseline and trend analysis for environmental components (e.g., for air, water, vegetation, wildlife and socio-economic indicators by various GNWT and federal departments), community health (e.g., Lutsel K'e Traditional Knowledge study) or contaminants (e.g., Northern Contaminants Program); other programs include RWED's 'Western NWT Biophysical Study'; DIAND's pan-northern indicator-based reporting under its Sustainable Development Strategy; Ecological Monitoring and Assessment Network-North (EMAN-North), the Arctic Council's CAFF and AMAP monitoring initiatives and other international programs)

- Effects of specific types of stressors (e.g., Inuit Observations on Climate Change; DIAND, RWED climate change programs)
- Evaluation of cause and effect relationships (what are the factors causing changes in the environment and how do they interact with each other? for example, to what extent might changes in caribou be related to factors such as parasites, climate change, industrial activity, natural variability, or hunting?)

Some of these activities relate specifically to cumulative impact monitoring, while others have been developed primarily for other purposes. Further details are available elsewhere (NWT CEAM Steering Committee, October 2001).

### **3.5 The 'Value Added' from the NWT CIMP and the Audit**

Implementation of the NWT CIMP and the Audit will have a number of benefits, including:

- Fulfillment of land claim and statutory obligations for the Government of Canada (as described in Section 2, above);
- Better and more informed decisions with respect to environmental / resource management, development activities, land and water uses (see Section 3.1, above);
- Reduction in duplication of effort on the part of organizations (public and private) and programs (see Section 3.4, above), filling gaps in existing monitoring programs, and facilitating the focusing of resources on priority areas with respect to research and monitoring;
- Bringing together diverse information sources to determine the state of the environment in the NWT, for use by a range of groups (see Section 3.2, above);
- Through the Audit function, an evaluation of the effectiveness of regulation of land and water uses – i.e., identification of areas for improvement, and gaps to be addressed;
- Use of both traditional knowledge and scientific/technical information to address priority questions about the state of the environment in the NWT; and
- As a community-based program, the NWT CIMP will contribute to building community capacity and to community development, as youth and other individuals become interested and trained in carrying out various monitoring program functions.

## ***4.0 NWT CIMP and Audit: Working Group and Responsible Authority***

### **4.1 NWT CIMP and Audit Working Group**

Following the signing of the Gwich'in and Sahtu land claim agreements, efforts were initiated to develop the NWT CIMP and Audit. The current process began with a discussion paper (DIAND, 1998a) and a two-and-a-half day workshop in Inuvik in November 1998 attended by representatives from the Gwich'in, the Sahtu, the Inuvialuit, co-management bodies, communities, and the federal and territorial governments (DIAND 1998b). DIAND collaborated with regional organizations to hold community consultations in the Gwich'in and Sahtu regions in March and April 1999. A chronology of events in the planning and development of the NWT CIMP beginning with the Gwich'in Comprehensive Land Claim Agreement in 1992, is available as a separate document (DIAND 2004).

#### **4.1.1 Who Are the NWT CIMP and Audit Working Group?**

Participants in the 1998 Inuvik workshop recommended that a Working Group be established to develop the NWT CIMP and Audit. In February 1999, DIAND invited community and regional Aboriginal leaders throughout the NWT<sup>8</sup> to become involved in the NWT CIMP and Audit process, but no responses were received from unsettled claims areas. The Working Group (originally known as the Mackenzie Valley Cumulative Impact Monitoring Program (MVCIMP) Working Group) held its first meeting in March 1999 and initially focused on the Gwich'in and Sahtu settlement areas, with input from the Inuvialuit region.

In March 2000 the Working Group invited regional Aboriginal organizations in the unsettled claims areas of the NWT to participate in the development of the program, and at that time, all regions agreed to either join or observe the Working Group. With the broader focus to include the entire NWT, the 'Mackenzie Valley' ('MV') prefix was removed from the name in February 2002, to simply become the 'NWT CIMP and Audit.'

Participation on the NWT CIMP and Working Group is currently open to regional Aboriginal, territorial and federal governments, and includes the<sup>9</sup>:

- Inuvialuit Game Council
- Gwich'in Tribal Council
- Sahtu Secretariat Incorporated
- Deh Cho First Nations
- North Slave Metis Alliance
- Northwest Territory Metis Nation (formerly the South Slave Metis Tribal Council)
- Tłı̨ch̓ First Nation, represented by the Dogrib Treaty 11 Council
- Government of Canada (through the Department of Indian Affairs and Northern Development – DIAND)
- Government of the Northwest Territories (through the Department of Resources, Wildlife and Economic Development (RWED))

The Akaitcho Territory Government (ATG) withdrew from the Working Group in November 2001 (prior to this the ATG was a WG observer), pending resolution of issues related to the general application of the *MVRMA* and its ongoing land claim negotiation process. DIAND provides the ATG with copies of all Working Group materials.

From time to time, the Working Group may invite other organizations with technical or operational interests and expertise in cumulative impact monitoring to join the Working Group as observers. Environment Canada, the Department of Fisheries and Oceans, and the Mackenzie Valley Environmental Impact Review Board have accepted such invitations.

#### **4.1.2 What Approach Has the Working Group Taken?**

The key tasks of the Working Group have been to design the NWT CIMP and Audit, and to advise DIAND on related regional and community consultations.

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<sup>8</sup> NWT here refers to the NWT following the April 1, 1999 division of the NWT and Nunavut.

<sup>9</sup> See Section 4.2.1 for a discussion of potential future additions to the Working Group/ Responsible Authority. Aboriginal governments and organizations are free to choose observer or member status on the Working Group at any time. Participation on the Working Group in any capacity is without prejudice to the land claim or self-government discussions or negotiations of any organization. A list of Working Group representatives and contact information is provided as Appendix C.



The Working Group approved its Terms of Reference in June 1999. These Terms of Reference state that:

“The MVCIMP Working Group will through partnerships develop a method for a long-term monitoring program to assist in protecting and preserving our environment and culture for present and future generations by:

1. developing and maintaining an accessible, simple and understandable information base
2. identifying and tracking key aspects of the environment
3. building on existing monitoring programs, using local, traditional and scientific knowledge.”

The Terms of Reference define ‘environment’ as “the Earth, and how land, water and air and all living and non-living things depend on each other.”

The Working Group has recommended that the NWT CIMP and Audit take a ‘phased’, community-based approach, which builds on and links to existing initiatives in order to make the most efficient use of new and existing resources. The Working Group has reinforced the *MVRMA* requirement that traditional knowledge and western science both be analyzed in the NWT CIMP with the statement that traditional knowledge and western science must both be respected and used. Finally, the Working Group believes that the NWT CIMP must contribute to the building of capacity, particularly at the community and regional levels.

#### **4.1.3 What Has the Working Group Accomplished?**

Since its first meeting in March 1999, the Working Group has met on more than 45 occasions via teleconference or in face-to-face meetings (DIAND 2004). To date, the Working Group has focussed on the design of the NWT CIMP and Audit, and has conducted or funded a number of related activities, including<sup>10</sup>:

- Draft five-year work plan for the NWT CIMP and Audit (i.e., this document)
- Final Terms of Reference for the NWT Audit (April 2004)<sup>11</sup>
- Discussion of the principles to be addressed in drafting regulations under section 150 of the *MVRMA* and development of a draft implementation framework (NWT CIMP and Audit Working Group, June 2002)<sup>12</sup>
- Regional and community consultations on the NWT CIMP and Audit (early 1999, Fall 2002 to Summer 2003)
- Identification of priority Valued Components and development of draft state of knowledge reports in technical (DIAND 2002) and plain language (Bromley 2002) formats<sup>13</sup>
- Background research on monitoring and auditing programs (GeoNorth 2000, Donihee 2000)
- Support for monitoring and capacity-building projects
- March 2002 Stakeholder Workshop (Terriplan/IER 2002)

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<sup>10</sup> These are described in more detail in DIAND, 2003.

<sup>11</sup> The final Terms of Reference have evolved from an earlier draft implementation framework for the NWT CIMP and Audit (June 2002), and draft terms of reference for the Audit and a background paper on the Audit process (November, 2002, November 2003, December 2003).

<sup>12</sup> Much of the content of the draft implementation framework is duplicated in this draft five-year work plan and in the final Audit Terms of Reference (April 2004) and Background Document (November 2003); therefore additional revisions to the draft implementation framework document are not planned.

<sup>13</sup> The Working Group is now using the term ‘Valued Components’ (rather than the former ‘Valued Ecosystem Components’), to emphasize the broad definition of the environment being used – to include the social, cultural and economic aspects in addition to the biophysical.

- Information Management System Options Study (Boyes et al., 2002) and Information Management Workshop (IER/Terriplan 2001)
- The NWT CIMP - Tariuq (Ocean) Monitoring Inventory, in collaboration with the federal Department of Fisheries and Oceans ([http://www.geoarctic.com/apps/tariuq/WebTariuq\\_ie.php](http://www.geoarctic.com/apps/tariuq/WebTariuq_ie.php) )
- Liaison with related research and monitoring programs, including presentations and briefings
- Development of communications materials, including the NWT CIMP website at: <http://www.nwtcimp.ca>

Section 150 of the *MVRMA* provides for the development of regulations to conduct the NWT CIMP and Audit, including collection and analysis of monitoring information, designating a person or body as the Responsible Authority, and specifying how the First Nations may participate in the functions of a non-governmental Responsible Authority or in the Audit. The Working Group has addressed these questions in a general manner on several occasions, and as noted above, has drafted an implementation framework which may eventually be a resource for drafting regulations under section 150 (NWT CIMP and Audit Working Group, June 2002). The Working Group has noted that implementation of the NWT CIMP and Audit may begin without regulations being in place. Given limited time and resources, the Working Group has decided to focus its efforts on initiating the NWT CIMP and Audit. Once the members of the Working Group and its successor organization, the Responsible Authority (discussed in Section 4.2, below), have gained experience in monitoring and auditing to meet the requirements of Part 6 of the *MVRMA*, they will revisit the principles and content of the regulations.

## **4.2 What is the Responsible Authority?**

Section 145 of the *MVRMA* states that the Minister of DIAND is responsible for the designation of the Responsible Authority (RA) that will oversee and coordinate the NWT CIMP. The Minister can designate the RA through regulations under S. 150 of the *MVRMA*, after consulting with affected first nations and the GNWT. Until such regulations are developed, the Minister of DIAND is the RA. To date, the Minister has been acting as the RA in partnership with the NWT CIMP and Audit Working Group. Until DIAND establishes the permanent RA, the Minister of DIAND, in consultation with the Working Group, will take the lead role in implementing the NWT CIMP and facilitating the Audit.

The Working Group proposes that the RA be established as an independent partnership body, with a board meeting regularly to oversee the implementation of the NWT CIMP. The RA will replace the NWT CIMP and Audit Working Group. The RA board will be supported by a small staff or Secretariat, and likely by one or more advisory groups (e.g., for the valued components, including scientific and traditional knowledge experts), and independent experts as needed. Like the Working Group, the RA will operate without prejudice to existing or ongoing land claim and self-government discussions and negotiations.

The Working Group has discussed a variety of options with respect to RA's membership, decision-making processes, and structure, and recognizes that these questions require detailed evaluation. Some of the key considerations are presented below.

### **4.2.1 Membership and Representation**

The Working Group proposes that the following governments and organizations shall have the

opportunity to appoint representatives to the RA board:

- Inuvialuit Game Council
- Gwich'in Tribal Council
- Sahtu Secretariat Inc.
- Deh Cho First Nations
- North Slave Metis Alliance
- Tłı̨chō First Nation
- Northwest Territory Metis Nation
- Akaitcho Territory Government
- Government of Canada - DIAND
- The Government of the Northwest Territories (GNWT)
- Environmental Impact Review Board (Inuvialuit Settlement Region)
- Environmental Impact Screening Committee (Inuvialuit Settlement Region)
- Mackenzie Valley Environmental Impact Review Board
- Mackenzie Valley Land and Water Board

The RA may recommend to the Minister that additional organizations be added to the RA.

The RA may invite other organizations to participate in its meetings as observers. Potential observers include, but are not limited to, representatives of co-management boards, Aboriginal organizations and governments, boards established pursuant to land claims agreements, federal, provincial and territorial government departments and agencies, industry associations, and environmental non-governmental organizations.

#### **4.2.2 Regional Considerations**

The RA will need to be able to accommodate differences in regional structures and preferences in regards to monitoring, while maintaining the ability to understand the state of the environment and cumulative impacts at a territorial scale. The regional representatives on the RA will have a key role in conducting and advising on communication and consultation with their constituencies, and in bringing the concerns of their regions and communities to the attention of the RA. Individual regions may choose to coordinate their participation in the work of the RA in different ways. It will likely not be feasible to expand the RA board beyond one seat per region.

The RA will need to seek effective linkages with regional and community organizations. Committees and sub-committees may provide for a decentralized approach to reflect differences at the regional and community level. A more formal option for decentralization would be to establish a tiered structure for the RA, with an umbrella RA and regional panels (similar to the structure of the Mackenzie Valley Land and Water Board).

#### **4.2.3 Involvement of Existing and Future Co-management Bodies**

The boards established pursuant to the *MVRMA* and other organizations responsible for land-use planning, project review and regulation in the NWT shall be invited to participate as observers in the meetings of the RA. Because the NWT CIMP and Audit provide feedback and decision support functions for the integrated resource management regime established by the *MVRMA*, input from the decision-making boards established by the *MVRMA* will be essential to ensure that cumulative impact monitoring meets the needs of decision makers. While it may not be feasible to include all *MVRMA* boards and similar organizations as full members of the RA,

the RA should seek effective linkages with both existing bodies and any new bodies established pursuant to completed land claim and self-government agreements.

The remaining sections of this work plan summarize how the Working Group proposes to implement the NWT CIMP and ensure that the NWT Audit is carried out as required. These approaches are based on Working Group discussions, the March 2002 stakeholder workshop, and regional and community consultations held in 1999, 2002 and 2003.

## **5.0 The NWT CIMP**

### **5.1 What is the NWT CIMP?**

*The NWT CIMP will develop and implement plans for monitoring the cumulative impact of land and water uses in the NWT. The program will support projects that fill gaps in existing monitoring, and will report on the state of the NWT biophysical and socio-economic environment. The NWT CIMP will be coordinated with existing monitoring and research activities, and will include traditional knowledge and western science. Communities will be involved throughout - in the design, implementation, interpretation, and reporting of the monitoring program.*

This purpose statement is flexible enough for an NWT-wide approach, while remaining consistent with the Gwich'in, Sahtu, and Tłı̨chǫ land claims agreements, and the MVRMA.

Preliminary *objectives* for the NWT CIMP include the following:

10. To identify and monitor uses of land and water, and sources of cumulative impacts
11. To identify and fill priority monitoring gaps
12. To determine and report on trends in environmental quality
13. To coordinate with a number of organizations conducting or using cumulative impact research or monitoring in the NWT
14. To meet obligations under land claim agreements and the MVRMA
15. To provide information that will contribute to the NWT environmental Audit
16. To provide information to co-management bodies, government and others for use in making their decisions about environmental and resource management (e.g., land use planning, research, project screening/environmental assessment, regulation and enforcement)
17. To build capacity, particularly in NWT communities and regional organizations, to better enable full and effective participation in environmental monitoring processes and activities
18. To contribute to the NWT-wide Cumulative Effects Assessment and Management (CEAM) Strategy and Framework

The Working Group Terms of Reference (June 9, 1999) state the following guiding *principles* for the monitoring program:

- Community driven and relevant

- Balance of scientific and traditional knowledge
- Go slow
- Long-term timeframe
- Must adhere [to] and address land claims and legislation
- Communicate, educate, train
- Build on and link to existing programs and other initiatives

## 5.2 The “Valued Component” Approach

The Working Group has adopted a ‘valued component’ (VC) approach to determining what should be monitored. In plain language, the term VC refers to “elements of the environment that people think are important.” The Working Group has identified the following priority VCs, based on the 1998 Inuvik workshop, regional and community consultations, and Working Group meetings:

- Caribou
- Moose
- Land Mammals
- Marine Life
- Birds (land and marine)
- Water and Sediment Quality
- Water Quantity
- Air Quality
- Snow, Ground Ice, Permafrost
- Fish Habitat, Population, Harvest
- Fish Quality
- Vegetation
- Climate and Climate Change
- Human Health and Community Wellness

The monitoring of VCs will include both traditional knowledge as well as scientific approaches. Contaminants and biodiversity are elements that will need to be considered for many of these VCs.

With the assistance of the Working Group, government and co-management board staff and some community members, DIAND prepared a draft Preliminary State of Knowledge Report for the VCs (DIAND, 2002). The report contains a draft State of Knowledge Summary for each VC<sup>14</sup> which includes:

- Status (baseline conditions) and trends
- Possible indicators
- Existing monitoring
- Gaps in knowledge and monitoring
- Recommendations to fill the gaps
- Sample monitoring projects

Preparation of the draft Preliminary State of Knowledge Report confirmed that there is little or no scientific baseline data in many cases. While there is a great deal of traditional knowledge

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<sup>14</sup> A draft state of knowledge summary for marine life is being jointly developed by the Department of Fisheries and Oceans and the Fisheries Joint Management Committee (FJMC) and will be added to the Preliminary State of Knowledge Report when available.

about all of the VCs, much of it is not recorded, and it is not always effectively used in decision-making.

### **5.3 Community-Based Approach**

Through consultations at the Working Group, government, regional, and community levels, the need for the NWT CIMP to be community based has emerged as a fundamental element of program design. The community-based character of the NWT CIMP is a key feature differentiating the program from many existing monitoring programs and initiatives.

From the outset, the Working Group has stated that the NWT CIMP will be 'community-based'. Communities will be involved throughout - in the design, monitoring, analysis/interpretation and reporting of traditional knowledge or science-based information. Such an approach may have several aspects. Monitoring could include not only Elders' Traditional Knowledge, but also the local knowledge and experience of those currently involved in harvesting and gathering. Monitoring may also involve community members in the collection, analysis/interpretation, and reporting of traditional knowledge or science-based information. School-based monitoring may be an important component. Community-based monitoring also focuses on the questions and issues of priority to the community itself; in this sense, the monitoring undertaken to address such concerns may not always be conducted by community members, or utilize traditional/local knowledge. For example – the monitoring of water or food contamination may be largely science-based, conducted by government organizations in cooperation with community or regional organizations. As noted above (Section 3.1), the Gwich'in Land Use Planning Board (2003) has recommended a two-pronged approach to community-based monitoring in the Gwich'in Settlement Area, in which the NWT CIMP both addresses community monitoring concerns and involves community members in the actual monitoring of those concerns.

The effective participation of communities in the NWT CIMP and Audit requires that community members and organizations have sufficient capacity to participate, and the Working Group has therefore identified building capacity in environmental monitoring and management as an objective of the NWT CIMP and a work plan task for the RA.

### **5.4 NWT CIMP – Work Plan Tasks**

In order to achieve the purpose and objectives for the NWT CIMP described above, a number of tasks or actions will be necessary. This section describes each task/outcome/deliverable; lead organizations and timing for each are provided in Section 6.0.

#### ***5.4.1 Task 1: Operation of the RA/ NWT CIMP and Audit Working Group***

Until DIAND establishes the permanent RA, the Minister of DIAND, in partnership with the NWT CIMP and Audit Working Group, will continue to coordinate the activities for the NWT CIMP. The Working Group/RA will be responsible for planning and implementing the monitoring program, facilitating communications and consultations, and holding an annual general meeting of the Working Group. A Secretariat will be provided to support the Working Group, and ultimately the RA, in the implementation of the NWT CIMP. This task includes periodic meetings and teleconferences of the Working Group/RA, as well as administering financial arrangements and reporting to the public.

Representatives from the Gwich'in, Sahtu, Tłı̨chō and other regions have seats on the Working Group, enabling full participation in WG activities.

- **Key outcome/deliverable: Operation of the organizational structures to plan, implement, and report on the NWT CIMP.**

#### **5.4.2 Task 2: Development of a Permanent Responsible Authority**

During the initial five-year planning period (2005-2010), DIAND, in partnership with the CIMP and Audit Working Group, will work to develop terms of reference for the Responsible Authority for the program. Representatives from the Sahtu, Gwich'in and Tłı̨chō and other regions will have full participation in this process.

- **Key outcome/deliverable: Establishment of a permanent Responsible Authority.**

#### **5.4.3 Task 3: Establishment and Operation of Valued Component Advisory Groups**

The Working Group/RA may appoint external advisory groups and retain independent experts to help with planning as it relates to monitoring priority Valued Components within the regions of the NWT. This task includes periodic meetings and teleconferences of the external advisory groups.

- **Key outcome/deliverable: Establishment and operation of the technical advisory expertise needed to implement the NWT CIMP.**

#### **5.4.4 Task 4: Monitoring and Research Programs**

This task consists of two components:

- Development of cumulative impact monitoring plans
- Review/support of monitoring / research projects

##### **Cumulative Impact Monitoring Plans**

The RA will develop and implement Five-Year Cumulative Impact Monitoring Plans for the NWT. These plans will coordinate the effective and efficient collection, analysis and dissemination of scientific data, TK, and other information for the purposes of cumulative impact monitoring. The plans will address elements of the monitoring program that can be addressed by existing monitoring activities conducted by others, as well as identify the gaps that will be filled by the NWT CIMP itself. Some flexibility will be required to accommodate changing priorities, capacities and projects of partner organizations and programs.

Throughout the development of the NWT CIMP, the Working Group has noted the importance of having community-based monitoring programs, and the need to build capacity in the communities as well as in regional organizations involved in monitoring. Broadly defined, capacity refers to the ability of communities and regions to make and participate in informed decisions about resource management in their areas. Capacity-building measures can include but are not limited to training, education, and ensuring adequate numbers and continuity of staff. As noted above, the Gwich'in Implementation Plan (Government of Canada, Government of the

Northwest Territories and Gwich'in Tribal Council, 1992) observes that training opportunities may be associated with potential employment related to cumulative impact monitoring.

The implementation of the NWT CIMP will include measures to increase community and regional capacity with respect to both traditional knowledge and science. The RA will promote the inclusion of capacity-building measures in monitoring and research projects supported by the NWT CIMP, and will incorporate capacity-building as appropriate in consultation, communication, and education activities. In addition, the RA will provide funding and other support to new or existing projects and programs that build capacity related to monitoring, particularly at the community and regional level. The approach to involving communities will need to reflect the unique circumstances in each region.

The draft State of Knowledge summaries (see Section 5.2, above) will form the basis of the RA's first Five-Year Cumulative Impact Monitoring Plan for the NWT. The Working Group and other stakeholders have reviewed the summaries, and DIAND has presented the summaries at NWT CIMP community consultations in 2002 and 2003, but the summaries require additional regional and community input. The RA will develop the first and subsequent Five-Year Cumulative Impact Monitoring Plans in consultation with RA member organizations and communities.

In collaboration with the Tariauq (Ocean) Monitoring Program coordinated by the Department of Fisheries and Oceans, the Working Group has developed the CIMP-Tariauq Inventory. The inventory is a metadatabase of monitoring activities in the NWT and will be useful to the RA in identifying gaps in existing monitoring.

The Five-Year Cumulative Impact Monitoring Plans will take into account:

- Land and water uses and deposits of waste – the sources of cumulative impacts
- The issues of concern to communities
- Priority gaps in existing monitoring information
- The need to coordinate on a continuing basis with other programs and initiatives to determine how best to fill the gaps.

The Five-Year Cumulative Impact Monitoring Plans will also include:

#### *Description of VCs and Indicators*

- A description of the valued components (VCs) and indicators to be monitored
- The rationale for selecting each in terms of relevance to decision-makers and stakeholders involved in environmental and resource management in the NWT
- An explanation of whether each VC and indicator will be monitored across the NWT as a whole, through regional, community-based or project-specific programs, or through one or more transboundary monitoring programs

#### *Description of Monitoring Objectives and the Priority-Setting Process*

- A description of the specific monitoring objectives to be addressed through the plan
- A discussion of how priorities for cumulative impact monitoring should be established among VCs and indicators and among regions within the NWT, including a discussion of how community concerns should be addressed
- A description of existing NWT-wide, regional, project-specific, community-based and transboundary monitoring programs and initiatives that come within the ambit of the overall cumulative impact monitoring plan
- A discussion of the relationship, if any, between the plan and any other monitoring programs or initiatives within the NWT or in transboundary regions that are not formally linked to the plan



- An assessment of the availability of baseline information relating to each of the priority VCs and indicators
- A discussion of information gaps and the measures to be taken to fill those gaps
- A discussion of the criteria and priorities for monitoring programs to be supported by the RA in order to fill information gaps relating to cumulative impacts
- An explanation of how the plan achieves efficiencies, avoids duplication, and coordinates or consolidates the separate monitoring programs and initiatives of the various members of the RA so as to establish a unified cumulative impact monitoring program
- An explanation of how the plan responds to recommendations relating to cumulative impact monitoring that were made in previous environmental audits [not applicable to the Five-Year Cumulative Impact Monitoring Plan for 2005-2010]

#### *Traditional and Scientific Knowledge*

- A discussion of the roles of scientific and traditional knowledge in filling information gaps and contributing to the implementation of the plan

#### *Implementation Plan*

- A description of how responsibility for implementing the plan will be shared among the Secretariat and the members of the RA
- A discussion of how thresholds and measures of environmental carrying capacity may be relevant to cumulative impact monitoring conducted pursuant to the plan
- A discussion of reporting and information dissemination procedures for data and analysis relating to the VCs and indicators being monitored pursuant to the plan
- A discussion of how the RA will contribute to improving the collection, management and dissemination of information relating to cumulative environmental impact monitoring
- A discussion of procedures and time lines for periodic reviews and modifications of the plan, particularly relating to changes in monitoring priorities among VCs, indicators and regions
- A budget for the plan, including administrative costs and the costs of RA-supported research and monitoring

The draft plan shall be subject to consultation with RA members and the public prior to being made final.

- ***Key outcome/deliverable: Five-year monitoring plans to guide the RA/Secretariat activities during the five-year planning cycles.***

#### **Review/Support of Monitoring / Research Projects**

The core activity of the RA will be reviewing and supporting new or existing monitoring activities that fill the priority gaps identified in the Five-Year Cumulative Impact Monitoring Plan. In developing the Five-Year Cumulative Impact Monitoring Plan, the RA will develop criteria for identifying monitoring activities eligible to receive funding from the NWT CIMP. Potential criteria identified by Working Group representatives to date include capacity-building and the meaningful involvement of community members; respect for and use of both scientific and traditional knowledge; the sharing of results with communities, resource management decision-makers, the public, and other interested parties; and the encouragement of partnership projects supported by several organizations. The criteria will have particular regard to monitoring programs proposed by local, community and regional organizations. The RA will also develop processes for allocating funding, and will likely use a Request for Proposals (RFP) approach.

The frequency of the RFPs will vary, as monitoring activities and priorities change over time, and in response to changes in other organizations' monitoring activities.

Although the focus of the NWT CIMP is on monitoring activities, the RA may also choose to conduct or sponsor research that contributes to fulfilling the NWT CIMP objectives. Examples include the investigation of indicators, thresholds and measures of environmental carrying capacity. Appendix D provides additional information on how research and monitoring activities are related to and support one another.

In all stages of the funding process, the RA and Secretariat will need to maintain close liaison with other monitoring programs and initiatives to facilitate coordination of activities and avoid duplication. Members of the RA may be funding or in-kind partners in many of the monitoring and research activities funded by the NWT CIMP.

- ***Key outcome/deliverable: funding and implementation of specific cumulative impact monitoring and research projects that fill the identified gaps, according to specified criteria and priorities, using a rigorous proposal evaluation process and funding procedure.***

#### **5.4.5 Task 5: Workshops and Training**

Throughout the development of the NWT CIMP, the Working Group has noted the importance of having a community-based monitoring program, and the need to build capacity in the communities as well as in regional organizations involved in monitoring. Broadly defined, capacity refers to the ability of communities and regions to make and participate in informed decisions about resource management in their areas. Capacity-building measures can include but are not limited to training, education, and ensuring adequate numbers and continuity of staff. As noted above, the Gwich'in Implementation Plan (Government of Canada, Government of the Northwest Territories and Gwich'in Tribal Council, 1992) observes that training opportunities may be associated with potential employment related to cumulative impact monitoring.

The implementation of the NWT CIMP will include measures to increase community and regional capacity with respect to both traditional knowledge and science. The RA will promote the inclusion of capacity-building measures in monitoring and research projects supported by the NWT CIMP, and will incorporate capacity-building as appropriate in consultation, communication, and education activities. In addition, the RA will provide funding and other support to new or existing projects and programs that build capacity related to monitoring, particularly at the community and regional level. The approach to involving communities will need to reflect the unique circumstances in each region.

Throughout the program, DIAND will continue to provide opportunities for Aboriginal people and community members to participate in training and workshops related to environmental or cumulative impact monitoring. Participants will be provided the opportunity to apply for support to enrol in scheduled workshops or training courses that may be delivered by government departments or agencies, or other organizations in or outside the NWT.

- ***Key outcome/deliverable: training and workshop opportunities for Aboriginal people and community members, related to environmental or cumulative impact monitoring.***

### **5.4.6 Task 6: Information Management, Synthesis and Reporting**

#### Information Management and Synthesis

The NWT CIMP will provide for information management and sharing through an NWT-wide network. A range of types of information (e.g., metadata, geospatial data, monitoring and research information, reports/publications; including both traditional knowledge and scientific information) will contribute to the NWT CIMP. An effective information management system (IMS) will be needed<sup>15</sup>, requiring cooperation amongst government departments and agencies, co-management bodies, Aboriginal governments and organizations, and others in an effort to improve the collection, cataloguing, storage and dissemination of monitoring data and information. The Working Group funded the Gwich'in Tribal Council and Map Insight to conduct a study for the 'Identification of Options for the Development of an Information Management System for the CIMP' (April 2002). The final report provided suggestions on the options for information management that will be taken by the RA. These will need to be reviewed in terms of the state of information management in the NWT generally and within individual organizations / networks in particular. The RA will maintain the NWT CIMP website (<http://www.nwtcimp.ca/>) as part of a broader strategy for communication and education and as part of the information sharing system, while accommodating the needs of those without internet access.

- **Key outcome/deliverable: Website with links to listing of CIMP-funded projects, and links to other networks**

#### *Reporting*

The RA will report on its activities and findings in a variety of formats, languages and venues to address the needs of different audiences. RA members will consult and communicate with their constituencies, and will advise the Secretariat on approaches to communication. The RA and Secretariat will communicate regularly with community and regional organizations, with advice from RA members. In addition, the projects supported by the NWT CIMP will be required, at a minimum, to report results to the communities in the regions in which they operate.

The RA will issue periodic reports:

- Annual RA Reports
- Annual and final reports on the individual monitoring programs and capacity-building projects funded by the RA (these reports will be written by those conducting the projects)
- State-of-the-Environment (SOE) Reports:
  - Annual SOE Summary Reports
  - Periodic Comprehensive SOE Monitoring Reports

#### Annual RA Reports

The annual RA reports are intended to summarize the activities and finances of the RA, and would contain:

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<sup>15</sup> The Working Group has funded several other initiatives in this regard, e.g., Gwich'in georeferencing project (Map Insight 2000), a January 2002 workshop (IER/Terriplan March 2001), and, in collaboration with the Department of Fisheries and Oceans, the development of the CIMP-Tariuq Inventory of monitoring activities ([http://www.geoarctic.com/apps/tariuq/WebTariuq\\_ie.php](http://www.geoarctic.com/apps/tariuq/WebTariuq_ie.php)).

- A summary of the activities conducted and supported pursuant to each of the RA's functions, i.e., monitoring and research programs; workshops and training; and information management, synthesis and reporting
- A summary of NWT CIMP management and administration activities;
- A discussion of measures to address any relevant recommendations from the NWT Audit;
- A comprehensive, audited financial/budget statement; and
- Any other information the RA considers appropriate.

The content of the Annual RA Report would not duplicate the content of the Annual SOE Summary Report. Each report would be cross-referenced to the other as appropriate.

#### Annual SOE Summary Reports

Annual summary reports are intended to provide annual updates on the RA's implementation of its Five-Year Cumulative Impact Monitoring Plans, and would contain:

- A review of the implementation to date of the cumulative impact monitoring plan;
- A summary of monitoring projects supported by the RA and of the results obtained from those programs;
- A discussion of any trends or significant changes in the state of VCs or indicators that were detected through the analysis of monitoring data during the year, drawing on information generated by NWT CIMP and by other monitoring activities;
- A discussion of any indications from the monitoring program of emerging questions/issues relating to cumulative impacts within the NWT, drawing on information generated by NWT CIMP and by other monitoring activities;
- A discussion of measures to address any relevant recommendations from the NWT Audit; and
- Any other information that the RA considers appropriate.

#### Comprehensive SOE Monitoring Reports

Comprehensive SOE monitoring reports are intended to provide monitoring information for use in preparing the terms of reference for environmental audits and in conducting the audits. The comprehensive monitoring reports would be prepared by the CIMP and Audit Secretariat once every five years and would include the items addressed in the annual SOE summary report (see above) with the addition of the following discussions:

- A summary of the data and other information relating to cumulative impacts that have been collected to date pursuant to the plan;
- The results of data analysis and other information relating to cumulative impacts that has been conducted to date pursuant to the plan;
- The contribution to cumulative impact monitoring made by the monitoring programs supported by the RA;
- Any significant gaps in cumulative impact monitoring that have been identified by the RA;
- Any opportunities to improve the monitoring of cumulative impacts within the NWT that have been identified by the RA and any actions taken by the RA in this regard;
- Measures taken by the RA to address recommendations from previous environmental audits; and
- Any other information that the RA considers appropriate, for example, questions that the RA thinks the Auditor should consider in an upcoming Audit.

The comprehensive monitoring report would replace the Annual SOE Summary Report in the year it is produced (see Section 7.0 for a schedule of key outcomes and deliverables).

Drafts of these reports will be reviewed by RA members. The RA will conduct consultation and communication activities related to the final versions of these reports. These reports will be provided to the Minister of DIAND, who may table them in Parliament. The reports will be publicly available, in hard copy and via the internet on the NWT CIMP website.

- **Key outcome/deliverable: reports documenting the RA activities and the NWT CIMP findings and activities at various points in the five-year planning cycle**

## **5.5 Proposed NWT CIMP Budget**

For the purposes of discussion, the following assumptions have been made with respect to the budget for the NWT CIMP. Approximately \$3.1 million per year for Years 1 through 3, \$3.7 million for Year 4 (Audit Year) and \$3.1 million for Year 5 is needed for implementation of the NWT CIMP (total of \$16.2 million for the entire NWT; work to date has focussed on designing the program). DIAND (and subsequently the RA) will transfer much of this budget as 'grants and contributions' to regional and community or other eligible organizations to conduct monitoring and related capacity-building programs. The amount of the budget to be used for administration will be limited to a ceiling of 15% - 20% of the total NWT CIMP budget, in order that as much funding as possible may be allocated to monitoring, capacity building, and related activities. It should be noted that the budget estimate does not include 'in-kind' contributions from the organizations that will be represented on the RA, or organizations making contributions to monitoring programs.

## **5.6 Evaluation Tools and Mechanisms – NWT CIMP**

As noted above, the RA will provide its annual reports on its activities and finances to the Minister of DIAND for tabling in Parliament (this procedure is also followed by the boards established under the *MVRMA*, as directed in S. 28 of the *MVRMA*). The RA will also make these reports available to the public.

The primary evaluation tool for the CIMP will be the periodic independent, public Audit (as per S. 148 of the *MVRMA*; see also S. 4. below). The final Terms of Reference for the NWT Audit (NWT CIMP and Audit Working Group, April 2004) provide direction to the independent auditor to consider, amongst other things, "the effectiveness of methods that are used for carrying out the functions referred to in section 146 of the *MVRMA* and similar functions within the ISR and the NWT as a whole".

As noted above, the RA and Secretariat will conduct communications and consultation on its key planning documents and reports and as part of initiatives to improve coordination among monitoring activities. These consultations will provide an opportunity for stakeholders to provide their comments on the effectiveness of the NWT CIMP process, and the activities of the RA and Secretariat. Any groups established to advise the RA may also provide the RA with evaluative feedback.

## **6.0 The NWT Audit**

## 6.1 What is the Audit?

*The independent environmental audit will evaluate and review at least once every five years:*

- *The state (health) of the environment - trends in environmental quality, contributing factors, and the significance of trends;*
- *The effectiveness of the NWT CIMP;*
- *The effectiveness of the NWT's integrated environmental and resource management systems*
- *The response to any recommendations of previous environmental audits.*

This purpose statement is consistent with the Gwich'in and Sahtu land claims agreements, the MVRMA, and the Tłı̨chǫ Agreement, but flexible enough for an NWT-wide approach. The audit report is to be submitted to the Minister of DIAND, and will be available to the public. Intended to serve as a catalyst for positive change, the initial Audit (currently underway, with expected completion by May 2005) will serve as a foundation for subsequent audits.

A number of more specific *objectives* can be identified for the Audit:

1. To report on trends in environmental quality in the NWT, the factors contributing to the trends, and their significance
2. To provide a critical evaluation of the effectiveness of the NWT CIMP
3. To provide a critical evaluation of the effectiveness of environmental management processes in the NWT and the organizations responsible for cumulative impact assessment and management (e.g., the co-management bodies, federal and territorial government departments)
4. To assess the extent to which the recommendations of previous environmental audits have been addressed
5. To meet obligations under land claim agreements and the MVRMA
6. To provide independent and constructive advice to co-management bodies, government and others to support their work, based on the findings of the audit. These findings may relate to trends in environmental quality, the NWT CIMP, the evaluation of the effectiveness of environmental management processes in the NWT, or a review of responses to previous audits
7. To contribute to the NWT-wide CEAM Strategy and Framework

## 6.2 Key Requirements – Land Claims and Legislation

Key requirements from the land claim agreements and the MVRMA for the Audit are summarized below. Appendix A provides the relevant excerpts from the Gwich'in, Sahtu and Tłı̨chǫ agreements relating to cumulative impact monitoring and the audit, as well as Part 6 (Sections 148 - 149 in particular) of the MVRMA. These requirements provide the *minimum* requirements for the Audit.

The land claims and the MVRMA establish a system of integrated land and water management; the decision-making functions (e.g., land use planning, land and water regulation, environmental assessment) within the system are to be supported by information to be provided by the NWT CIMP and Audit. The Gwich'in, Sahtu and Tłı̨chǫ agreements require that the implementing legislation provide for periodic, independent, environmental audits that shall be made public, and that the First Nations shall participate in the audit process.

Part 6 of the *MVRMA* outlines the audit requirements. Section 148 (1) states that an environmental audit shall be conducted at least once every five years by an independent person or body appointed by the Minister of DIAND. Under section 148 (2), the Minister of DIAND is responsible for consulting with the GWNT and First Nations on the draft terms of reference for the Audit and for setting the final terms of reference.

As per Section 148 (3) of the *MVRMA*, four key areas to be addressed in the Audit are:

- An evaluation of the 'state of the environment',
- A review of the effectiveness of cumulative impact monitoring,
- A review of the effectiveness of the regulation of land and water uses and environmental assessment, and
- A review of the response to recommendations of any previous environmental audits.

A report of the environmental Audit, which may include recommendations, shall be prepared and submitted to the Minister of DIAND, who shall make the report available to the public. The First Nations are entitled to participate in the Audit process.

Section 149 states that, subject to any other federal or territorial law, federal and territorial agencies and departments and *MVRMA* boards are to provide information required by the auditor. Finally, section 150 allows for the development of regulations that may be needed for the implementation of Part 6, including the Audit. As noted above, no regulations have been drafted to date.

### **6.3 Who Will Conduct the Audit?**

The Minister of DIAND may appoint one of the following as the Auditor:

- An individual
- A company, partnership or other organization
- A panel

Section 148 of the *MVRMA* requires the Auditor to be independent. The Working Group has included factors for consideration in assessing the independence of the Auditor in the final Terms of Reference (ToR) for the first NWT Audit (NWT CIMP and Audit Working Group, April 2004). The auditor shall be independent of the federal and territorial governments and of the agencies that exercise jurisdiction over environmental and resource management in the NWT, boards established under the *MVRMA* and the IFA or other resource management boards with jurisdiction in the NWT, First Nations, Metis and Inuvialuit governments or organizations in the NWT, industry, and other organizations that participate in their own right in environmental and resource management processes in the NWT.

To ensure that the principle of independence is adhered to, the audit shall not be undertaken by or under the direction of any individual who has been a direct employee of a department or agency of the federal or territorial governments that has jurisdiction relating to environmental and resource management in the NWT, a board or agency established under the *MVRMA* or the IFA, other resource management boards with jurisdiction in the NWT, an Aboriginal government or organization in the NWT, or a private contractor with direct involvement in the development of cumulative effects assessment and management processes in the NWT (including the NWT CIMP or Audit), within the two-year period prior to the appointment of the auditor.

## 6.4 The Initial NWT Environmental Audit

The first NWT Environmental Audit is to be completed by May 2005, early in the first year of the five-year period (2005 through 2010) addressed in this work plan. The process to date and its current status are summarized below. The second audit is expected to be completed during the fourth year of the period addressed in this work plan (i.e., in 2008-09, if a five-year cycle is assumed). It is important to recognize, however, that the process and terms of reference for the second and subsequent audits may differ from the process and terms of reference for the initial Audit. The second and subsequent audits will benefit from the 'lessons learned' during the initial Audit, the recommendations of the initial audit, and any existing evaluations of the initial Audit process (see Section 6.6).

### 6.4.1 Terms of Reference – Initial Environmental Audit

The NWT Audit is not a traditional financial audit, and as described below, the Auditor will be focussing on environmental and management questions rather than on financial matters. Indeed, the background research conducted on behalf of the Working Group while developing the audit process has indicated that the proposed audit is without parallel in other jurisdictions (GeoNorth 2000, Donihee 2000).

The Working Group has developed and reviewed several drafts of the ToR for the first Audit. The Canadian Institute of Resources Law at the University of Calgary, and a former staff member from the federal Commissioner of the Environment and Sustainable Development (a division of the Office of the Auditor General) have assisted the Working Group with the development of the ToR and the audit process. The audit process was also discussed more generally during regional and community consultations during 2002 – 2003. In March 2003, DIAND formally provided draft ToR and background (process) documents to the Gwich'in, Sahtu, and Tłı̨ch'ı̨ First Nations and the GNWT for formal review and comment. Comments from these and other organizations were reviewed at a two-day meeting of the Working Group in December 2003. Subsequently, the Working Group prepared a final revised draft of the ToR dated December 2003. As required by the MVRMA, the ToR were subsequently finalized by the Minister of DIAND in April 2004. A 'request for proposals' was prepared for public tender in early 2004, and the independent Auditor was selected in the fall of 2004.

### 6.4.2 Process – Initial Environmental Audit

The audit shall include the three components specified by subsection 148(3) of the MVRMA (i.e., environmental trends, cumulative impact monitoring and regulatory regimes). The Auditor will conduct activities to:

- Evaluate information to determine trends in environmental quality, potential contributing factors and the significance of those trends – *how is the 'state-of-the-environment' changing? Why? What do the changes mean?*
- Review the effectiveness of methods used for carrying out the NWT CIMP – *is monitoring being done in an effective and efficient manner, with the involvement of all parties?*
- Review the effectiveness of the regulatory regime – *are environmental and resource management processes working? Are co-management bodies and government regulatory agencies doing their jobs effectively?*
- Review the response to any recommendations of previous environmental audits – *have organizations responded to the recommendations of previous audits? If yes, how? If not, why not?*



The Auditor will endeavor to involve communities in the audit process, and will consider both scientific and traditional knowledge.

The scope and level of detail of the initial audit report will be limited relative to those in subsequent monitoring and audit cycles, as the NWT CIMP will be in the early stages of implementation and is unlikely to have generated any monitoring information. The specific issues to be addressed in the second and subsequent audits will change and evolve over time.

The proposed audit process is based on standard practice for the federal Office of the Auditor General. A two-step approach (Phase 1 – Audit Planning; Phase 2 – Detailed Examination) will be used. Phase 1 of the Audit consists of the development of a plan for the examination phase of the audit (Phase 2) that is consistent with the statutory requirements and with the intent of the audit as described in the ToR. In order to maintain the Auditor's independence, the ToR does not specify issues that the Auditor *must* examine. The Auditor will use his or her discretion in focusing the Audit, based on experience and consultation. The audit plan will summarize the legal basis for the audit, the audit components and the intent of the audit as described in the ToR. The specific issues and topics that have been selected by the auditor within each component of the audit for investigation and follow-up in the examination phase of the audit will be identified, and the audit methodology described, as will the time lines, key target dates and resources to be used.

The audit plan provides the basis for the Auditor to undertake a more detailed examination of a few issues during Phase 2. The Auditor will review available information, request information to fill gaps, and conduct site visits, interviews, and meetings with various parties. The Auditor will document observations, conclusions and recommendations, supported by assembled evidence, for inclusion in final audit report. It will describe the Auditor's observations, conclusions and recommendations, and the extent to which they apply distinctly to the Mackenzie Valley, to the ISR, and to the NWT as a whole. The Auditor shall circulate drafts of all or part of the final report to parties that may be 'directly affected' by it, to ensure accuracy of statements of facts and assumptions, and to provide an opportunity to discuss the information prior to its submission to the Minister of DIAND. The Audit Sub-Committee (see below) will also have an opportunity to comment on the final draft of the final audit report. The Minister of DIAND will make the final audit report available to the public as soon as possible after it is received.

The Working Group has established an 'Audit Sub-committee'. Its' role will be to respond to requests for assistance from the auditor, and provide comments to the auditor during the course of the audit work, as outlined in Section 9 of the Terms of Reference for the NWT Environmental Audit. The development of the roles and responsibilities of the Audit Sub-Committee is ongoing (NWT CIMP and Audit Working Group, February 2004).

## **6.5 NWT Environmental Audit – Work Plan Tasks**

Tasks for the Audit process are described below. The *MVRMA* states that an audit is to be conducted "at least once every five years; this work plan advocates commencement of the second audit in 2008 with completion by March 31, 2009. This will allow recommendations and "lessons learned" to be incorporated into the planning stages of Work Plan preparation for the second 5-year period, i.e., 2010-2015.

### **6.5.1 Task 7: Follow-up to the Initial Audit**

Following the completion of the initial audit, DIAND and the Working Group/CIMP Coordinators (subsequently the RA/Secretariat) will need to follow-up on the recommendations / findings of the audit. This may include meetings with government organizations (Aboriginal, federal and territorial), co-management bodies, communities, ENGOs, industry and other stakeholders to talk about the audit, the implications of its findings, and 'lessons learned'. (Years 1 & 2)

- **Key outcome/deliverable: follow-up discussions amongst all parties on the findings of the initial audit and 'lessons learned'**

#### ***6.5.2 Task 8: Preparation for the Second Audit***

DIAND will plan the second (and subsequent) audits, including the development of Terms of Reference (ToR), in consultation with First Nations, the Inuvialuit, the GNWT, other federal agencies, co-management boards, and other interested parties, in fulfillment of the requirements of Section 148(2) of the *MVRMA*. The process used for the initial audit will likely serve as the starting point for setting the Terms of Reference for the second audit. In developing the ToR for the second audit, however, the Minister will also need to consider the 'lessons learned' from the initial Audit, any relevant recommendations from the initial Audit process, and any existing evaluations of the initial Audit process (see Section 6.6). The Minister of DIAND will select the Auditor in accordance with the process developed. (Year 3)

- **Key outcomes/deliverables:**
  - **A framework and organizational structure, including a terms of reference and budget for conducting the second independent Audit, developed in consultation with stakeholders.**
  - **Appointment of the auditor for the second Audit**

#### ***6.5.3 Task 9: Conducting the Second Audit***

This task has four components:

- Completion of the second audit
- Liaison Between the Auditor and the Working Group/CIMP Coordinators
- Consultation, Communication and Reporting
- Audit management

##### ***Completion of the Second Audit***

The second NWT Environmental Audit will be conducted in Year 4. A two-phase approach similar to that for the initial audit may be used.

- **Key outcome/deliverable: completion of the second NWT environmental audit**

##### ***Liaison Between the Auditor and the Working Group/CIMP Coordinators***

The Auditor will be independent of all bodies, including the NWT CIMP and Audit Working Group (and subsequently, the Responsible Authority). The information generated by the NWT CIMP will be an important resource for the independent auditor, and the Working Group / CIMP Coordinators (subsequently the RA and Secretariat) will provide their full support to the Auditor. The Audit Sub-Committee will have a key role in this regard. The Working Group/CIMP Coordinators (subsequently the RA and Secretariat) will follow the intent of Section 149 of the *MVRMA* in providing the Auditor with all requested information. The Working Group (RA) will not have special status in the Audit process. The auditor will likely make constructive

recommendations to the Working Group regarding the NWT CIMP, and these will need to be taken into account. The relationship between the NWT CIMP and the NWT Audit is discussed in Section 1.5, above.

- **Key outcome/deliverable: effective communication and information sharing between the Auditor and the NWT CIMP and Audit Working Group / CIMP Coordinators (RA/Secretariat), to facilitate the most effective use of the available information in the Audit process.**

#### *Consultation, Communication and Reporting*

Consultation, communication and reporting processes include reports issued by the auditor during the course of the audit, any interviews that may be conducted by the auditor, public information sessions.

- **Key outcome/deliverable: a strategy for consultation, communications, and reporting that will address the expectations of the parties with an interest in the Audit process and findings.**

#### *Audit Management*

The Auditor will be active for a period of approximately one year in the fourth year of the five-year cycle. The facilities and staff needed to support the Auditor will vary depending on the nature of the individual/ organization selected by the Minister to conduct the Audit (see Section 6.3 above).

The Auditor will be responsible for the day-to-day management of the Audit, and may sub-contract aspects of the work. DIAND will designate an official from within the department to manage the contract with the Auditor and to serve as a contact person within the Government of Canada. This official will be separate from and independent of the DIAND staff involved in the design or implementation of the NWT CIMP, and will assist the Auditor with obtaining documents, arranging interviews and meetings, and audit logistics.

- **Key outcome/deliverable: ongoing management of the Audit process by the Auditor**

#### **6.5.4 Task 10: Follow-up to the Second Audit**

Following the completion of the second audit, the RA/Secretariat will need to follow-up on the recommendations / findings of the audit. This may include meetings with government organizations (Aboriginal, federal and territorial), co-management bodies, communities, ENGOs, industry and other stakeholders to talk about the audit, the implications of its findings, and 'lessons learned' (Year 5).

- **Key outcome/deliverable: follow-up discussions amongst all parties on the findings of the second audit and 'lessons learned'**

### **6.6 Evaluation Tools and Mechanisms – NWT Audit**

Neither Section 148 of the *MVRMA* nor the final draft Terms of Reference (April 2004) explicitly describe a mechanism for independent evaluation of the effectiveness of the Audit process itself. That is, 'who will audit the audit?' It is possible that evaluation of the audit could be achieved at least in part through the review of the responses to any recommendations of

previous environmental audits (*MVRMA*, S. 148 (3)(d)). Since the audit will be a public process, consultation and comment on the auditing process and the Auditor's reports may also provide some evaluative feedback. These consultations will provide an opportunity for stakeholders to provide their comments on the effectiveness of the audit process, and the activities of the Auditor. Any groups established to advise the Auditor may also provide evaluative feedback. As noted above, the Auditor will provide their report to the Minister of DIAND for tabling in Parliament (this procedure is also followed by the boards established under the *MVRMA*, as directed in S. 28 of the *MVRMA*).

However, these options may not provide a sufficient level of 'independence' or structure for the evaluation of the Audit process itself. It may be desirable to develop a mechanism whereby an independent organization would 'audit the Audit' process.

## 6.7 NWT Audit – Proposed Budget

A total of \$1.1 million is needed during this five-year budget cycle. This total includes \$75,000 for Year 1 and \$50,000 in Year 2 for follow-up to the initial Audit; \$250,000 in Year 3 for preparatory activities for the second Audit; \$625,000 in Year 4 to conduct the second Audit; and \$100,000 in Year 5 for follow-up to the second Audit. As noted above, this work plan assumes that the second Audit will occur four years after the first, i.e., largely in the 2008-09 fiscal year.

## 7.0 Key Outcomes/Deliverables, Lead Organizations, and Schedule

Table 1 summarizes the key outcomes/deliverables, lead organization(s), schedule and timing for the NWT CIMP and the Audit in Years 1 through 5. Some of the tasks described in Sections 5.4 and 6.5 are not specifically identified, as they will be ongoing or specific details of their scope and timing are not known at this time (e.g., monitoring and research programs; workshops and training; and information management, synthesis and reporting).

Approximately \$3.2 million per year for Years 1 through 5 is needed for implementation of the NWT CIMP and Audit (total of \$16.1 million for the entire NWT; work to date has been on 'design' of the program). Through the NWT CIMP, DIAND (and subsequently the RA) will transfer much of this budget as 'grants and contributions' to regional and community or other eligible organizations to conduct monitoring and related capacity-building programs. The amount of the budget to be used for administration will be limited to a ceiling of 15% - 20% of the total NWT CIMP budget, to encourage utilization of as much funding as possible for monitoring, capacity building, and related activities.

**Table 1: Key Outcomes/Deliverables, Lead Organizations, Schedule – NWT CIMP and Audit**

<b>Table 1: Key Outcomes/Deliverables, Lead Organizations, Schedule – NWT CIMP and Audit</b>		
<b>Outcome/Deliverable</b>	<b>Lead Organization</b>	<b>Schedule/ Timing</b>
<b>Year 1: 2005/2006</b>		
<b>NWT CIMP</b>		
Establish Secretariat	Minister of DIAND	By June, 2005

<b>Table 1: Key Outcomes/Deliverables, Lead Organizations, Schedule – NWT CIMP and Audit</b>		
<b>Outcome/Deliverable</b>	<b>Lead Organization</b>	<b>Schedule/ Timing</b>
Establish Scientific and TK Advisory Groups	RA (Minister of DIAND)/ NWT CIMP and Audit Working Group/	By June, 2005
Draft Initial 5-Year Monitoring Plan ( <i>including budget, covering years 2005/6 to 2009/10</i> ) <sup>16</sup>	RA (Minister of DIAND)/ NWT CIMP and Audit Working Group/ Secretariat	By September 30, 2005
Consultation on Draft 5-Year Monitoring Plan	RA (Minister of DIAND)/ NWT CIMP and Audit Working Group/ /Secretariat	By December 2005
Final/Approved 5-Year Monitoring Plan	RA	By March 31, 2006
<b>NWT Audit</b>		
Public Release of Final Report - Initial Audit	Minister of DIAND	As soon as possible following submission of Final Audit Report (i.e., May 2005)
Response to the Report on the Initial Audit	Minister of DIAND, any other boards, departments and agencies respond to any recommendations directed to them in the Final Audit Report.	Within a reasonable period following submission of Final Audit Report to the Minister (expected to be submitted by May 31, 2005)
Follow-up Activities/'Lessons Learned' from the Initial Audit	DIAND, in consultation with stakeholders	By March 31, 2006 (ongoing into year 2)
<b>Year 2: 2006/2007</b>		
<b>NWT CIMP</b>		
Annual SOE Summary Report for 2005-2006	RA/Secretariat	By May 31, 2006
Annual RA Report for 2005-2006	RA/Secretariat	By September 30, 2006 <sup>17</sup>
Establish Permanent RA	Minister of DIAND	By March 31, 2007
<b>NWT Audit</b>		
Follow-up Activities/'Lessons Learned' from the Initial Audit	DIAND, in consultation with stakeholders	By March 31, 2007
<b>Year 3: 2007/2008</b>		
<b>NWT CIMP</b>		
Annual SOE Summary Report for 2006-2007	RA/Secretariat	By May 31, 2007
Annual RA Report for 2006-2007	RA/Secretariat	By September 30, 2007
<b>NWT Audit</b>		

<sup>16</sup> Until a Monitoring Plan is developed, the State of Knowledge Report (Updated November 2004) will fulfill the function of providing guidance concerning the monitoring needs for VCs, and identifying monitoring gaps.

<sup>17</sup> Organizations receiving grants and contributions from the RA will be required to meet financial reporting requirements by July 31 following the fiscal year in which they receive funds. This deadline is based on existing practice within DIAND. Since the RA will be unable to complete its own financial reporting until after it has received all reports from recipients, the deadline for the Annual RA Summary Report is proposed as September 30.

<b>Table 1: Key Outcomes/Deliverables, Lead Organizations, Schedule – NWT CIMP and Audit</b>		
<b>Outcome/Deliverable</b>	<b>Lead Organization</b>	<b>Schedule/ Timing</b>
Initiate Planning Discussions for the Second Audit Process	DIAND, in consultation with stakeholders	April, 2007
Draft Terms of Reference for Second Audit	DIAND/Minister	By August 31, 2007
Consultation on Draft ToR for Second Audit	DIAND/Minister	September- October 2007
Final Terms of Reference for the Second Audit	Minister of DIAND	By November 31, 2007
<b>Year 4: 2008/2009</b>		
<b>NWT CIMP</b>		
Comprehensive Monitoring Report (for use in Audit – includes Annual SOE Summary Report for 2007-2008)	RA/ Secretariat	By May 31, 2008
Draft of Second Five-Year Work Plan and Budget for NWT CIMP (2010/2015 Period)	RA/Secretariat	June 2008 (Final Work Plan and Budget to be available for use in the development of funding submissions for the second five-year cycle, to be prepared during Year 5)
Annual RA Report for 2007-2008	RA/Secretariat	By September 30, 2008
Final Five-Year Work Plan and Budget for NWT CIMP (2010/2015)	RA/Secretariat	By March 31 2009 (to be available for use in the development of funding submissions for the second five-year cycle, to be prepared during Year 5)
<b>NWT Audit</b>		
Provision of information to Auditor	RA/Secretariat	Ongoing
Implement the Second NWT Environmental Audit	Auditor	Completed by March 31, 2009
Phase 1 Audit Planning	Auditor	April –June 2008
Phase 2 Detailed Examination	Auditor	July 2008 – February 2009
<b>Year 5: 2009/2010</b>		
<b>NWT CIMP</b>		
Annual SOE Summary Report for 2008-2009	RA/Secretariat	By May 31, 2009
Annual RA Report for 2008-2009	RA/Secretariat	By September 30, 2009
<b>NWT Audit</b>		
Follow-up on Recommendations from the Second Audit	Minister of DIAND	Spring 2009 ongoing
<b>Funded /Related Activities Extending Beyond This 5-Year Work Plan Period (i.e., 2010 +)</b>		
<b>NWT CIMP</b>		

<b>Table 1: Key Outcomes/Deliverables, Lead Organizations, Schedule – NWT CIMP and Audit</b>		
<b>Outcome/Deliverable</b>	<b>Lead Organization</b>	<b>Schedule/ Timing</b>
Annual SOE Summary Report for 2009-2010	RA/Secretariat	By May 31, 2010
Annual RA Report for 2009-20010		By September 30, 2010
<b>NWT Audit</b>		
Follow-up on Recommendations from the Second Audit	Minister of DIAND, in consultation with stakeholders	ongoing
Planning for Third Audit	DIAND, in consultation with stakeholders	

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## **Appendix A: NWT CIMP and Audit - Relevant Sections of Land Claim Agreements and MVRMA Part 6**

**Note: These extracts from land claim agreements and legislation outline the requirements for cumulative impact monitoring and auditing in the Mackenzie Valley. For the full context of these requirements, please refer to the full text of the land claims agreements, their associated implementation plans, and the Mackenzie Valley Resource Management Act.**

### **A.1 Gwich'in Comprehensive Land Claim Agreement (signed and in effect 1992) Chapter 24: Land and Water Regulation**

#### **24.1 General**

##### **24.1.1 The following principles apply to this chapter:**

- a) an integrated system of land and water management should apply to the Mackenzie Valley;
- b) the regulation of land and water in the settlement area and adjacent areas should be co-ordinated; and
- c) government shall retain the ultimate jurisdiction for the regulation of land and water

##### **24.1.4 (a) The legislation implementing the provisions of this chapter shall provide for a method of monitoring the cumulative impact of land and water uses on the environment in the Mackenzie Valley, and for periodic, independent, environmental audits which shall be made public.**

- (b) If any board or similar body is established by such legislation to carry out the monitoring and audit functions referred to in (a) in the settlement area, the participants shall be entitled to a meaningful role in such board or agency to be set out in legislation, after consultation with the Gwich'in Tribal Council.

- (c) If the monitoring or environmental audit functions referred to in (a) are carried out in the settlement area by a department of government, the department shall do so in consultation with the Gwich'in Tribal Council."

### **A.2 Sahtu Dene and Metis Comprehensive Land Claim Agreement (signed 1993, in effect 1994)**

#### **Chapter 25: Land and Water Regulation**

##### **25.1 General**

##### **25.1 The following principles apply to this chapter:**

- a) an integrated system of land and water management should apply to the Mackenzie Valley;
- b) the regulation of land and water in the settlement area and adjacent areas should be co-ordinated; and

- c) government shall retain the ultimate jurisdiction for the regulation of land and water.
- 25.1.4
- (a) The legislation implementing the provisions of this chapter shall provide for a method of monitoring the cumulative impact of land and water uses on the environment in the Mackenzie Valley, and for periodic, independent, environmental audits which shall be made public.
  - (b) If any board or similar body is established by such legislation to carry out the monitoring and audit functions referred to in (a) in the settlement area, the participants shall be entitled to a meaningful role in such board or agency to be set out in legislation, after consultation with the Sahtu Tribal Council.
  - (c) If the monitoring or environmental audit functions referred to in (a) are carried out in the settlement area by a department of government, the department shall do so in consultation with the Sahtu Tribal Council.”

[Same wording as Chapter 24.1.4 of the *Gwich'in Comprehensive Land Claim Agreement*, with the substitution of “Sahtu Tribal Council” for “Gwich'in Tribal Council.”]

### **A.3 Tłı̨ch̓ Agreement: Land Claim and Self-Government Agreement (signed August 2003, in force 2005)**

## **Chapter 22: Land and Water Regulation**

### **22.1 General**

- 22.1 The following principles apply to this chapter:
- a) an integrated system of land and water management should apply to the Mackenzie Valley; and
  - b) the regulation of land and water in Wek'èezhìi and adjacent areas should be coordinated.
- 22.1.10 The legislation implementing the provisions of this chapter will provide for a method of monitoring the cumulative impact of land and water uses on the environment in the Mackenzie Valley, and for periodic, independent, environmental audits which shall be made public.
- 22.1.11 If any body is established by legislation to carry out the monitoring and audit functions under 22.2.10 in the Mackenzie Valley, the Tłı̨ch̓ Government shall be entitled to a meaningful role in such body and such role shall be set out in legislation.
- 22.1.12 If the monitoring and audit functions referred to in 22.2.10 are carried out in Wek'èezhìi by a department of government, the department shall do so in consultation with the Tłı̨ch̓ Government.

[‘Wek'èezhìi’ defines the ‘management area’ of the Tłı̨ch̓ Agreement. Further details and a map are available in Chapter 1 of the Tłı̨ch̓ Agreement.]

**A.4 Mackenzie Valley Resource Management Act (MVRMA): An Act to provide for an integrated system of land and water management in the Mackenzie Valley, to establish certain boards for that purpose and to make consequential amendments to other Acts  
(proclaimed December 22, 1998)**

***Definitions, Section 2:***

“deposit of waste” means a deposit of waste described in subsection 9(1) of the *Northwest Territories Waters Act*.

**i.e.,: 9.** (1) Except in accordance with the conditions of a licence or as authorized by regulations made under paragraph 33(1)(n), no person shall, subject to subsection (2), deposit or permit the deposit of waste

(a) in any waters in a water management area; or

(b) in any other place under conditions in which the waste, or any other waste that results from the deposit of that waste, may enter any waters in a water management area.

“environment” means the components of the Earth and includes

(a) land, water and air, including all layers of the atmosphere;

(b) all organic and inorganic matter and living organisms; and

(c) the interacting natural systems that include components referred to in paragraphs (a) and (b).”

“federal Minister” means the Minister of Indian Affairs and Northern Development.

“first nation” means the Gwich'in First Nation, the Sahtu First Nation or bodies representing other Dene or Metis of the North Slave, South Slave or Deh Cho region of the Mackenzie Valley.

“Gwich'in Agreement” means the Comprehensive Land Claim Agreement between Her Majesty the Queen in right of Canada and the Gwich'in as represented by the Gwich'in Tribal Council, signed on April 22, 1992 and approved, given effect and declared valid by the *Gwich'in Land Claim Settlement Act*, as that Agreement is amended from time to time in accordance with its provisions.

“Gwich'in First Nation” means the Gwich'in as represented by the Gwich'in Tribal Council referred to in the Gwich'in Agreement or by any successor to it.

“harvesting,” in relation to wildlife, means hunting, trapping or fishing activities carried on in conformity with a land claim agreement or, in respect of persons and places not subject to a land claim agreement, carried on pursuant to aboriginal or treaty rights.

“heritage resources” means archaeological or historic sites, burial sites, artifacts and other objects of historical, cultural or religious significance, and historical or cultural records.

“land claim agreement” means the Gwich'in Agreement or the Sahtu Agreement.

“local government” means any local government established under the laws of the Northwest Territories, including a city, town, village, hamlet, charter community or settlement, whether

incorporated or not, and includes the territorial government acting in the place of a local government pursuant to those laws.

“Mackenzie Valley” means that part of the Northwest Territories bounded on the south by the 60th parallel of latitude, on the west by the Yukon Territory, on the north by the Inuvialuit Settlement Region, as defined in the Agreement given effect by the *Western Arctic (Inuvialuit) Claims Settlement Act*, and on the east by the Nunavut Settlement Area, as defined in the *Nunavut Land Claims Agreement Act*, but does not include Wood Buffalo National Park.

“Sahtu First Nation” means the Sahtu Dene and Metis as represented by The Sahtu Secretariat Incorporated, a corporation without share capital under Part II of the *Canada Corporations Act*, chapter C-32 of the Revised Statutes of Canada, 1970, being the successor, for the purposes of this Act, to the Sahtu Tribal Council referred to in the Sahtu Agreement, or by any successor to that corporation.

“settlement area” means a portion of the Mackenzie Valley to which a land claim agreement applies.

“settlement lands” means lands referred to as settlement lands in a land claim agreement.

“territorial government” means the government of the Northwest Territories.

“territorial Minister”, in relation to any provision of this Act, means the minister of the territorial government designated by instrument of the Executive Council of the Northwest Territories for the purposes of that provision.

### **Consultation – Section 3**

3. Wherever in this Act reference is made, in relation to any matter, to a power or duty to consult, that power or duty shall be exercised

- (a) by providing, to the party to be consulted,
  - (i) notice of the matter in sufficient form and detail to allow the party to prepare its views on the matter,
  - (ii) a reasonable period for the party to prepare those views, and
  - (iii) an opportunity to present those views to the party having the power or duty to consult; and
- (b) by considering, fully and impartially, any views so presented.

### **Additional definitions – Part 5, Section 111**

“impact on the environment” means any effect on land, water, air or any other component of the environment, as well as on wildlife harvesting, and includes any effect on the social and cultural environment or on heritage resources.

## **Part 6 – Environmental Monitoring and Audit**

**145.** The definitions in this section apply in this Part.

“impact on the environment” has the same meaning as in Part 5.

“responsible authority” means the person or body designated by the regulations as the responsible authority or, in the absence of a designation, the federal Minister.

**146.** The responsible authority shall, subject to the regulations, analyze data collected by it, scientific data, traditional knowledge and other pertinent information for the purpose of monitoring the cumulative impact on the environment of concurrent and sequential uses of land and water and deposits of waste in the Mackenzie Valley.

**147.** (1) A responsible authority that is a minister of the Crown in right of Canada shall carry out the functions referred to in section 146 in consultation with the first nations.

(2) Where a responsible authority is other than a minister of the Crown in right of Canada, the Gwich'in and Sahtu First Nations are entitled to participate in the functions referred to in section 146 in the manner provided by the regulations.

**148.** (1) The federal Minister shall have an environmental audit conducted at least once every five years by a person or body that is independent.

(2) The federal Minister shall, after consulting the Gwich'in First Nation, the Sahtu First Nation and the territorial government, fix the terms of reference of an environmental audit, including the key components of the environment to be examined.

(3) An environmental audit shall include

(a) an evaluation of information, including information collected or analyzed under section 146, in order to determine trends in environmental quality, potential contributing factors to changes in the environment and the significance of those trends;

(b) a review of the effectiveness of methods used for carrying out the functions referred to in section 146;

(c) a review of the effectiveness of the regulation of uses of land and water and deposits of waste on the protection of the key components of the environment from significant adverse impact; and

(d) a review of the response to any recommendations of previous environmental audits.

(4) A report of the environmental audit, which may include recommendations, shall be prepared and submitted to the federal Minister, who shall make the report available to the public.

(5) The Gwich'in and Sahtu First Nations are entitled to participate in an environmental audit in the manner provided by the regulations.

**149.** Subject to any other federal or territorial law, a responsible authority or a person or body who performs an environmental audit may obtain, from any board established by this Act or



from any department or agency of the federal or territorial government, any information in the possession of the board, department or agency that is required for the performance of the functions of the responsible authority or person under this Part.

**150.** The Governor in Council may, after consultation by the federal Minister with affected first nations and the territorial Minister, make regulations for carrying out the purposes and provisions of this Part and, in particular, regulations

- (a) respecting the collection of data and the analysis of data so collected and scientific data, traditional knowledge and other information, for the purposes of section 146;
- (b) designating a person or body as the responsible authority for the purposes of this Part; and
- (c) respecting the manner of participation of the Gwich'in and Sahtu First Nations in the functions of a responsible authority that is not a minister of the Crown or in an environmental audit."

Note: As of December 2004, no regulations have been drafted or promulgated under Part 6 of the *MVRMA*.

## **Appendix B: Glossary and Acronyms**

**Aboriginal Organizations:** refers non-specifically / in a general way to groups or organizations representing Dene, Metis and / or Inuvialuit interests in the NWT.

**Community-based Monitoring:** A 'community-based' approach to monitoring may have several aspects. Monitoring could include not only Elders' Traditional Knowledge, but also the local knowledge and experience of those currently involved in harvesting and gathering (i.e., the collection of observations of land users). Community-based monitoring may also involve community members being involved in the collection, analysis/ interpretation, and reporting of traditional or science-based monitoring information. School-based monitoring may be an important component. Community-based monitoring also focuses on the questions and issues of priority to the community itself; in this sense, the monitoring undertaken to address such concerns may not always be conducted by community members, or utilize traditional/local knowledge. For example – the monitoring needed to address water or food contamination concerns may be science-based, conducted by government organizations.

**Cumulative Impact:** The Working Group has defined cumulative impacts as “changes to the environment caused by an activity, combined with other past, present and future activities”. The term ‘cumulative impact’ has been used interchangeably with ‘cumulative effect’ in this document. The MVRMA does not define the term ‘cumulative impact’.

**Environment:** “Environment means the Earth, and how land, water and air and all living and non-living things depend on each other.” (June 9, 1999 Working Group Terms of Reference). This definition embraces the social, cultural, economic and biophysical aspects of environment.

**First Nations:** means the Gwich'in First Nation, the Sahtu First Nation or bodies representing other Dene or Metis of the North Slave, South Slave or Deh Cho regions of the NWT.

**Indicator:** Anything that is used to measure the condition of something of interest. Indicators are often used as variables in the modeling of changes in complex environmental systems. (Canadian Environmental Assessment Agency, 1999). An indicator represents a key aspect of the environment that, when tracked over time, can provide trends in the condition of the environment beyond the properties of the indicator itself. Indicators may be used as variables in the conceptual modeling of changes in complex environmental systems, linking various stressors to indicators and ultimately to VCs. Indicators may be assessed using traditional knowledge, conventional science, or both.

**Information Management:** The system of collecting, processing, and storing diverse types of information (quantitative and qualitative, including traditional knowledge) from different sources, and sharing it with a range of users for the purpose of analysis and reporting.

**Mackenzie Valley:** as defined by the *Mackenzie Valley Resource Management Act (MVRMA)*, is the NWT not including the Inuvialuit Settlement Region (ISR) and Wood Buffalo National Park. However, it is recognized that portions of the ISR lie within the Mackenzie Valley watershed (i.e. they are located at the mouth of the Mackenzie River).

**Monitoring:** A consistent method of measuring or watching something to detect changes, using scientific or traditional knowledge; a continuing assessment of environmental indicators in a repetitive and systematic way. It may occur at a number of different levels (e.g., project-

specific, local/community, regional, territorial, national, international). Monitoring can have a number of purposes, including:

- assessment of the current state of the environment
- trend analysis over time (e.g., quality, quantity, distribution of environmental components or resources)
- 'early warning'
- diagnostic ('cause and effect')
- demonstration of linkages
- compliance with conditions of approval/environmental standards

*Traditional Knowledge (TK)*: A cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living things (including humans) with one another and with their environment. It includes the knowledge of elders, current land users, and other community members. Further, TK is an attribute of societies with historical continuity in resource use practices. Other terms include 'indigenous knowledge', 'local knowledge', traditional ecological knowledge', 'indigenous science', and 'ecological wisdom'.

*Valued Component (VC)*: The Working Group is now using the term 'Valued Components', rather than 'Valued Ecosystem Components', to emphasize the broad definition of the environment being used – to include the social, cultural and economic aspects in addition to the biophysical. VCs are aspects of the environment that are considered important, on the basis of economic, social, cultural, community, ecological, legal or political concern. They provide a focus for the collection and reporting of monitoring information. A VC is not an indicator in itself, although impacts on or trends in some characteristic of a VC may be used as an indicator. For example, caribou may be chosen as a VC, although it is not the caribou itself that is an indicator (e.g., the indicator may be caribou body fat).

## **Acronyms**

AMAP	Arctic Monitoring and Assessment Program (Working Group of Arctic Council)
ATG	Akaiicho Territory Government
CAFF	Conservation of Arctic Flora and Fauna (Working Group of Arctic Council)
CEAM	Cumulative Effects Assessment and Management
CIMP	Cumulative Impact Monitoring Program
DIAND	Department of Indian Affairs and Northern Development
EIRB	Environmental Impact Review Board (Inuvialuit Settlement Region)
EISC	Environmental Impact Screening Committee (Inuvialuit Settlement Region)
GNWT	Government of the Northwest Territories
GSA	Gwich'in Settlement Area
GTC	Gwich'in Tribal Council
IMS	Information Management System
ISR	Inuvialuit Settlement Region
MVCIMP	Mackenzie Valley Cumulative Impact Monitoring Program [now called the NWT Cumulative Impact Monitoring Program]
MVEIRB	Mackenzie Valley Environmental Impact Review Board
MVLWB	Mackenzie Valley Land and Water Board
MVRMA	Mackenzie Valley Resource Management Act
NWT	Northwest Territories
RA	Responsible Authority
RWED	Department of Resources, Wildlife and Economic Development
SOE	State of the Environment
TK	Traditional Knowledge
ToR	Terms of Reference
VC	Valued Component

## **Appendix C: NWT CIMP and Audit Working Group Participants**

### **Organizations**

#### **Gwich'in Tribal Council**

P.O. Box 1509  
Inuvik, NT X0E 0T0

#### **Inuvialuit Game Council**

c/o Joint Secretariat –  
Inuvialuit Renewable Resource  
Committees  
P.O. Box 2120  
Inuvik, NT X0E 0T0

#### **Tłı̨chō First Nation (Dogrib Treaty 11 Council)**

Tłı̨chō Lands Protection Department  
P.O. Box 349  
Rae Edzo, NT X0E 0A0

#### **North Slave Metis Alliance**

P.O. Box 340  
Yellowknife, NT X1A 2N3

#### **NWT Metis Nation (formerly South Slave Metis Tribal Council)**

Box 720  
Fort Smith, NT X0E 0P0

#### **Government of the Northwest Territories - Resources, Wildlife and Economic Development**

P.O. Box 1320  
Yellowknife, NT X1A 2L9

#### **Government of Canada - Department of Indian Affairs and Northern Development**

Renewable Resources and Environment  
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### **Deh Cho First Nations**

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### **Fort Resolution Environmental Working Committee**

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Fort Resolution, NT X0E 0M0

### **Akaiicho Territory Government**

General Delivery  
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### **Sahtu Secretariat Inc.**

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### **TBD**

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<sup>18</sup> Regional Aboriginal organizations choose whether to participate as members or as observers.

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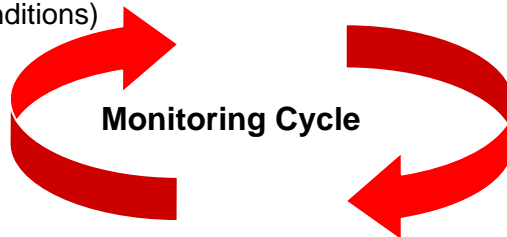
E-mail: [mceachernl@inac-ainc.gc.ca](mailto:mceachernl@inac-ainc.gc.ca)

**General E-mail:** [cimp@inac-ainc.gc.ca](mailto:cimp@inac-ainc.gc.ca)

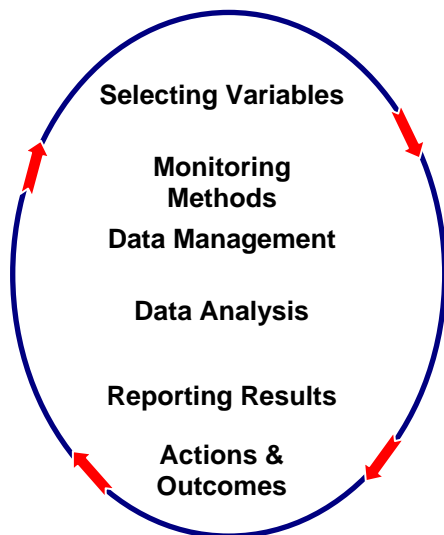
## Appendix D: The Linkages Between Monitoring and Research Activities

### Monitoring Activities

The goals and objectives of monitoring are generally broadly based, involving an assessment of multiple issues with repeated cycles of data collection, analysis and reporting (includes establishment of baseline conditions)

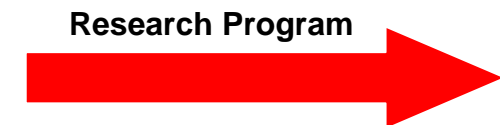


### Monitoring Cycle Events



### Research Activities

The goals and objectives of research are directed at a more focused assessment of a single issue (e.g., 'cause and effect', thresholds) with a bounded time frame for data collection, analysis and reporting



### Related Research Activities

