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# **A Blueprint for Implementing the Cumulative Effects Assessment and Management Strategy and Framework in the NWT and its Regions**

**- Final Draft -**

Prepared by the  
NWT CEAM Steering  
Committee

March, 2002

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## **Executive Summary**

The recent increase in resource exploration and development in the NWT has resulted in new opportunities and significant challenges for all stakeholders involved in the use and management of natural resources and the environment. Among the challenges, the assessment and management of potentially adverse cumulative effects<sup>1</sup> has emerged as a high priority. Following the comprehensive study for the Diavik diamonds project, the Ministers of Indian Affairs and Northern Development and the Environment initiated a process to develop the NWT Cumulative Effects Assessment and Management (CEAM) Strategy and Framework. That process has been led by a Steering Committee made up of representatives from Aboriginal organizations, industry, environmental non-governmental organizations, the federal and territorial governments and the Mackenzie Valley Environmental Impact Review Board. After two years of intensive effort, the Steering Committee is now in a position to set out its detailed Blueprint for implementing the CEAM Strategy and Framework in the NWT as a whole and throughout its regions.

The significant accomplishments and progress to date of the Steering Committee provide the foundation for the CEAM Blueprint. The centrepiece is the CEAM Framework for the NWT. This framework consists of nine components that capture the key functions necessary for CEAM and the principal linkages among them. These components are:

- Vision and Objectives;
- Land Use Planning;
- Baseline Studies and Monitoring;
- Research;
- Audit and Reporting;
- Project-Specific Screening, Environmental Assessment and Review;
- Regulation and Enforcement;
- Information Management; and
- Coordination.

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<sup>1</sup> 'Cumulative effects' can be defined as changes to the environment caused by the combination of past, present, and 'reasonably foreseeable' future actions. 'Environment' is broadly defined to include not only the natural or biophysical environment, but also the social, economic and cultural aspects. Not all cumulative effects are necessarily negative.

The Steering Committee also commissioned a detailed study to compare the CEAM Framework with the existing regime for environmental and resource management in the NWT and to identify gaps in that regime.

The CEAM Blueprint is based on the Steering Committee's assessment of the current state of the nine components of the CEAM Framework in the NWT. It is designed to ensure that:

- the NWT's regime for environmental and resource management is able to implement each component of the CEAM Framework;
- the institutions and decision-making processes responsible for each component of the CEAM Framework can complete their respective tasks effectively and efficiently; and
- the components of the CEAM Framework function as an integrated system.

The Steering Committee's Blueprint addresses each of the nine components of the CEAM Framework. In addition, it includes 'regional plans of action' and 'traditional knowledge' as elements that are essential for the implementation of the CEAM Framework as a whole. For each of the eleven elements of the Blueprint, the Steering Committee describes the need for action, the toolkit that is currently available, and the objectives that should guide implementation of the Blueprint over the medium and long term. The Steering Committee also identifies priority initiatives for immediate action in the short term. The objectives and short term recommendations are itemized at the end of the paper in Table 1. The Steering Committee's general approach to each element of the Blueprint can be summarized as follows:

- **Vision and Objectives** – The Steering Committee's objective is the continued development and refinement of a common vision and set of objectives to guide CEAM in the NWT and its regions. This ongoing process will occur at the territorial, regional and community levels. Land claim and self government agreements are important means of defining regional visions and objectives. The Steering Committee also sees land use plans and regional plans of action as useful mechanisms for articulating vision and objectives at the regional level.
- **Land Use Planning** – Land use planning processes should be established in each region of the NWT and plans that meet the needs of decision makers and other parties involved in CEAM should be prepared, approved and implemented. Approved land use plans should be legally binding. Land use planning may involve comprehensive regional processes or smaller scale integrated resource management plans. It may also include initiatives such as the Protected Areas Strategy and activities funded through the Interim Resource Management Assistance (IRMA) Program. The Steering Committee has identified a set of medium and long term objectives to promote land use planning in the NWT and its regions. In the short term, it is recommending the timely approval and implementation of the Gwich'in Land Use Plan and the completion, approval and implementation of the Sahtu Land Use Plan. The Steering Committee is also recommending the initiation of land use planning in the Deh Cho Region pursuant to the Deh Cho Interim Measures Agreement and the Deh Cho Framework Agreement. Finally,

the Steering Committee sees a need for land use planning in the North Slave Region and is recommending, in particular, that options be explored for implementing comprehensive land use planning in the Dogrib Settlement Area pursuant to provisions in the Dogrib Agreement-in-Principle.

- **Baseline Studies and Monitoring** – The Steering Committee’s objective is to ensure that the baseline studies and monitoring programs needed by decision makers involved in CEAM are identified and implemented. Its short term recommendation in this area is that the Minister of Indian Affairs and Northern Development adopt a policy framework, establish a coordination mechanism, and provide the necessary funding to launch the Cumulative Impact Monitoring Program (CIMP) in the 2002-2003 fiscal year. This initiative should at a minimum meet the requirements of Part 6 of the *Mackenzie Valley Resource Management Act* (MVRMA) and should be extended to the Inuvialuit Settlement Region.
- **Research** – Applied research should be undertaken on key issues for CEAM, notably the identification of indicators, thresholds, carrying capacity and limits of acceptable change. Other areas where research is needed include the development of linear and non-linear disturbance models and other predictive tools, and the determination of best practices for CEAM. The Steering Committee believes that mechanisms should be developed to define and deliver a coordinated and applied research program for CEAM. Progress in this area will require cooperation among the numerous organizations in the NWT with an interest in research relating to CEAM. In the short term, priority research initiatives in support of CEAM should be identified and funded.
- **Audit and Reporting** – Independent audits are an important feedback and accountability mechanism to ensure that the CEAM Strategy and Framework meets its intended objectives and continues to adapt to new challenges. The Steering Committee’s first short term recommendation is that the Minister of Indian Affairs and Northern Development should implement the environmental audit process pursuant Part 6 of the MVRMA. The first step is to adopt, in consultation with Aboriginal governments and organizations and with the public, a policy framework for environmental audits. The Minister should also set the terms of reference for the first audit, appoint an independent auditor, and allocate the funds required to complete the audit. Since the deadline for completion of this audit is December 2003, these steps should be taken by December 2002. The second recommendation is that the first audit should include a review of the implementation of the MVRMA. Finally, the Steering Committee recommends that the Minister, in consultation with Inuvialuit representatives, should explore options to extend the audit function to the Inuvialuit Settlement Region. The Steering Committee believes that an NWT-wide audit should be conducted in accordance with the time frame and process established pursuant to Part 6 of the MVRMA.
- **Project-Specific Screening, Environmental Assessment and Review** – The Steering Committee believes that ongoing efforts are required to ensure that cumulative effects are adequately addressed through project-specific review processes. Its objectives in this area are: improved guidance for project proponents and other participants in these processes;

increased capacity on the part of agencies responsible for these processes to address cumulative effects through the terms and conditions that are set out in their decision reports; and improved linkages among the components of the CEAM Framework that support project-specific decision making.

- **Regulation and Enforcement** – Regulatory decision making is the principal means to control directly the extent to which individual projects and activities contribute to cumulative environmental effects. The Steering Committee's objective is the enhanced capacity of regulators in this area, notably through the development of procedures and specific tools for cumulative effects management.
- **Information Management** – The Steering Committee sees a pressing need for a coordinated information management system in the NWT. The development of this system will be an incremental process that will involve many organizations. The Steering Committee has identified a series of objectives to guide this process over the medium and long term. In the short term, it is recommending immediate action to develop a strategy and identify the initial steps that should be taken to establish a coordinated information management system.
- **Coordination** – A mechanism should be established to facilitate a coordinated approach to aspects of CEAM that are most effectively implemented on a territory-wide basis and to improve linkages among components of the CEAM Framework. This mechanism should also provide the leadership required to maintain momentum around CEAM and to oversee the ongoing implementation of the CEAM Strategy and Framework. The Steering Committee has identified a number of objectives that could guide the establishment and operation of the CEAM Forum over the medium and long term. The Steering Committee's short term recommendations are that consultations be initiated immediately regarding the establishment of the CEAM Forum and that the first annual CEAM Summit be convened by the spring of 2003.
- **Regional Plans of Action** – Regional plans of action are needed because important aspects of CEAM Strategy and Framework will be implemented on a regional basis in the NWT. Regional plans of action are means of customizing CEAM to regional priorities and circumstances. The Steering Committee's objective is the completion of regional plans of action in all regions of the NWT where there is support for these initiatives. In the short term, it recommends the preparation of a discussion paper and a generic template for regional plans of action. The Steering Committee also recommends the completion and implementation of the Regional Plan of Action for the Slave Geological Province and the development of regional plans of action for other priority areas in the NWT, notably the Deh Cho Region and the Beaufort Sea-Mackenzie Delta area. Finally, it recommends a review of the implementation of Chapter 24 of the Gwich'in Comprehensive Land Claim Agreement as a regional plan of action.

- **Traditional Knowledge** – The Steering Committee sees an important role for traditional knowledge (TK) within all components of the CEAM Framework. It has identified a series of objectives to guide initiatives over the medium and long term. These objectives are aimed at supporting the inclusion of TK in CEAM and clarifying the procedures and methods to be used when incorporating TK into decision making. The Steering Committee's short term recommendation in this area is the initiation of pilot projects directed, for example, to the training of TK interpreters, the establishment of Elders' Councils as filters and screening mechanisms for TK, and the identification and listing of entry points for TK in communities.

The CEAM Blueprint is a comprehensive approach to the assessment and management of cumulative effects within the NWT. The Steering Committee strongly urges the Ministers of Indian Affairs and Northern Development and the Environment, along with all other interested parties, to take immediate action, using this Blueprint, to implement the CEAM Strategy and Framework.

## **1. Introduction**

The past decade has seen a resurgence of resource exploration and development in the NWT. Diamond mining in the Slave Geological Province, oil and gas activity in the Deh Cho and Inuvialuit Regions, and the possibility of a major pipeline corridor along the Mackenzie Valley are all evidence that resource-based activity will continue to be a significant driver of the NWT's economy for the foreseeable future. While many northerners welcome renewed economic growth, the issues that it raises for environmental and resource management are also widely recognized. Resource development and economic activity of this scale can lead to significant social, cultural and environmental changes. As exploration and development intensify, these changes will often be the result of the combined impacts of multiple projects and activities. The assessment and management of potentially adverse cumulative effects<sup>2</sup> are therefore important priorities for residents of the NWT and major challenges for decision makers within the NWT's rapidly evolving institutions.

Figure 1 shows the NWT, the Inuvialuit Settlement Region (ISR) and the Mackenzie Valley settlement areas.

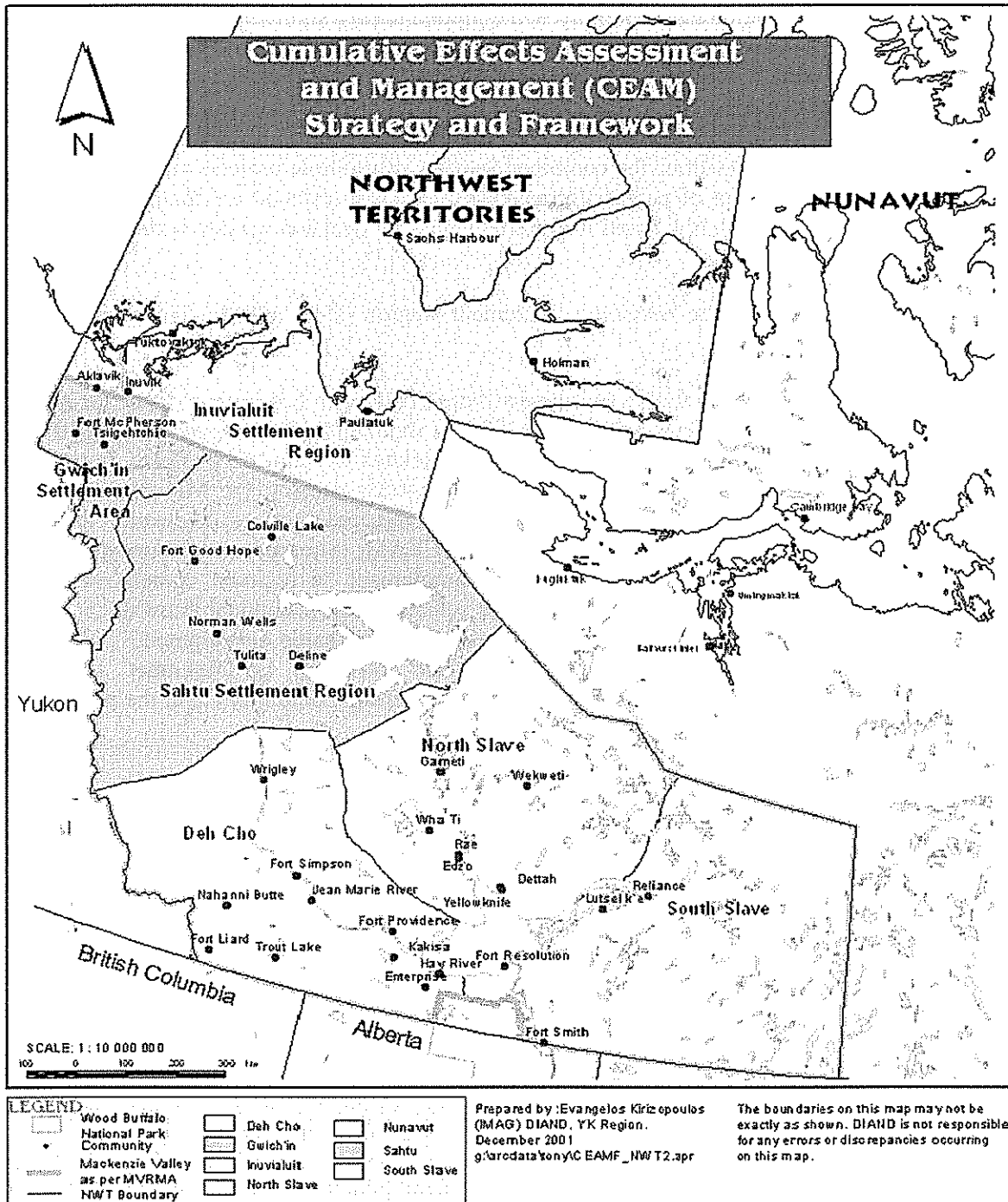
The need for a major new initiative to address these challenges has been evident for several years. The environmental impact assessments for the diamond mines proposed by BHP and Diavik were focal points for a broad range of concerns related to cumulative effects. In response to the comprehensive study report for the Diavik diamonds project, the Ministers of Indian Affairs and Northern Development and the Environment initiated a process to develop the NWT Cumulative Effects Assessment and Management (CEAM) Strategy and Framework. This process reflected the commitment to design and implement "a regional cumulative effects management framework" that "must consider both scientific and traditional knowledge, and be used in conjunction with adaptive management to ensure sustainable development."<sup>3</sup> The early stages in this process included a multi-stakeholder workshop in December 1999, the establishment of the CEAM Working Group (now the Steering Committee), and the preparation of an initial work plan (April 13, 2000).

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<sup>2</sup> 'Cumulative effects' can be defined as changes to the environment caused by the combination of past, present, and 'reasonably foreseeable' future actions. 'Environment' is broadly defined to include not only the natural or biophysical environment, but also the social, economic and cultural aspects. Not all cumulative effects are necessarily negative.

<sup>3</sup> News Release – Minister of the Environment Sends Diavik Diamonds Project to Regulatory Phase (Ottawa, November 3, 1999).

Figure 1: NWT, Inuvialuit Settlement Region (ISR) and Mackenzie Valley Settlement Areas



The development of the CEAM Strategy and Framework has been led by a Steering Committee made up of representatives from Aboriginal organizations, industry, environmental non-governmental organizations, the federal and territorial governments, and the Mackenzie Valley Environmental Impact Review Board.<sup>4</sup> After two years of intensive effort, the CEAM Steering Committee has completed important elements of its work plan and is now in a position to set out its detailed Blueprint for CEAM in the NWT as a whole and throughout its regions. This Blueprint builds on the significant work completed to date and charts a clear course for the future. It consists of eleven elements, each of which includes a discussion of the need for action, the available toolkit, and the objectives that the Steering Committee believes should guide implementation of the CEAM Strategy and Framework over the medium and long term. The Blueprint also sets out specific recommendations for initiatives that should be taken in the short term.

The foundation for the Blueprint is described in Section 2, followed in Section 3 by an outline of the nine components of the Steering Committee's CEAM Framework. The elements of the Blueprint are then discussed in Section 4. The risks of not implementing the Blueprint are highlighted in Section 5. Brief concluding comments are found in Section 6.

## **2. Foundation for the Blueprint**

This section outlines the vision, purposes and principles that have guided the work of the Steering Committee and highlights the key accomplishments that lay the groundwork for the CEAM Blueprint.<sup>5</sup>

### **2.1 Vision, Purpose and Principles**

The Steering Committee's vision statement is clear and concise: "The NWT CEAM Strategy and Framework will facilitate the protection of ecological integrity, while promoting the building of sustainable communities (including social and economic dimensions) and improved decision-making with respect to economic development." To make this vision a reality, the purposes identified by the Steering Committee for the CEAM Strategy and Framework are to facilitate:

- mechanisms to make well-informed decisions about the environment and human activities;
- systematic and coordinated approaches to CEAM;

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<sup>4</sup> A list of Steering Committee members is included as Appendix 1.

<sup>5</sup> A more detailed description of the work undertaken and commissioned by the Steering Committee over the past two years can be found in NWT CEAM Secretariat, '*NWT CEAM Strategy and Framework Progress Report 1999 – 2002*' (March 28, 2002).

- common principles and links between environmental management processes including land use planning, land and water management, cumulative impact monitoring, and environmental audit; and
- improved certainty, clarity, efficiency, transparency and accountability of processes at all levels.

The Steering Committee also set out six fundamental principles to govern its operations and guide its overall approach to CEAM. These principles are:

1. The Strategy and Framework cannot supersede Aboriginal/inherent and treaty rights, existing or future land claims and self-government agreements (including implementation obligations and commitments) or legislation.
2. Where possible and practical the Strategy and Framework will build on existing structures, policies, legislation, initiatives and tools (including Aboriginal/inherent and treaty rights, land claim and self-government agreements).
3. Development of the Strategy and Framework will be led by a multi-stakeholder Steering Committee, with information made available to all interested parties.
4. Partnership is crucial for consultation, communication and education, and for the effective use of resources (funding, staff, expertise) in developing and implementing the Strategy and Framework.
5. The Strategy and Framework will take into account environmental, societal and economic considerations in decision making.
6. The Strategy and Framework will respect and apply western science and traditional knowledge, the "precautionary principle" and the adaptive management approach.

Building on the vision, purposes and principles, the Steering Committee identified specific objectives and developed a detailed work plan to achieve them. The CEAM Blueprint is a direct outcome of the initiatives undertaken by the Steering Committee pursuant to that work plan.

## **2.2 Accomplishments and Progress of the CEAM Steering Committee**

The initial work plan for the CEAM Strategy and Framework was released in April 2000. Some subsequent modifications to the plan were made to reflect available funding and emerging priorities. Despite the complexity of its tasks and the significant resource constraints and scheduling issues that it had to address, the Steering Committee has completed or made substantial progress on most of the key elements of its work plan. Its principal accomplishments include:

- agreement on the vision, purposes, principles and objectives to guide the CEAM Strategy and Framework (noted above);

- interviews with over thirty organizations to gain insight into the current context for CEAM in the NWT and to identify priorities, gaps and challenges to be addressed;
- preparation of the CEAM Framework (including an audio-visual presentation and discussion paper);
- preliminary research into potential CEAM education initiatives;
- three community-based and community-led studies examining the linkages between traditional knowledge and CEAM.<sup>6</sup>
- a workshop in January 2001 on information management, held jointly with the Mackenzie Valley Cumulative Impact Monitoring Program (CIMP);<sup>7</sup>
- preparation of discussion papers on the coordination options for CEAM and on the precautionary principle;<sup>8</sup>
- preparation of discussion papers on Regional Plans of Action<sup>9</sup> and the development of a draft Regional Plan of Action for the Slave Geological Province;<sup>10</sup>

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<sup>6</sup> These studies were conducted by the Dogrib Treaty 11 Council, the Lutsel K'e Dene First Nation, and a partnership of the Gwich'in Tribal Council, the Gwich'in Renewable Resources Board and the Gwich'in Social and Cultural Institute. The results of these studies are reported in: Whaèhdoò Nàowo Ko, Dogrib Treaty 11 Council, *Developing a Plan to Include Indigenous Knowledge in the NWT Cumulative Effects Assessment and Management Framework* (November 2000); Lutsel K'e Dene First Nation, *Nñ hat'nî - Watching the Land: Cumulative Effects Assessment and Management in the Denesoline Territory*, Final Report (August 2001); Peter Clarkson and Donald Andre for Gwich'in Renewable Resource Board and Gwich'in Tribal Council, *Community-Land Relationship Project Final Report: CEAM and MVCIMP Task 9/6* (March 2002).

<sup>7</sup> IER Planning, Research and Management Services and Terriplan Consultants Ltd., *Information Management Workshop in Support of the NWT Cumulative Effects Assessment & Management Framework and the Mackenzie Valley Cumulative Impact Monitoring Program* (Draft report March 12, 2001).

<sup>8</sup> CEAM Secretariat, *Responsibilities & Institutional Options for the NWT CEAMF Coordinating Body: A Discussion Paper (DRAFT)* (January 24, 2001); CEAM Secretariat, *NWT CEAMF and the Precautionary Principle: A Discussion Paper (DRAFT)* (January 24, 2001).

<sup>9</sup> CEAM Secretariat, *CEAMF Regional Action Plans: A Draft Discussion Paper* (January 22, 2001); CEAM Secretariat, *CEAMF Regional Action Plan – Slave Geological Province: A Draft Discussion Paper* (July 25, 2001).

<sup>10</sup> SGP Project Group, *Cumulative Effects Assessment and Management: Regional Plan of Action for the Slave Geological Province. REVISED WORKING DRAFT*. (March 28, 2002).

- preparation of a comprehensive report documenting the current context for CEAM in the NWT and identifying the priorities, gaps and challenges to be addressed;<sup>11</sup>
- a workshop in December 2001 on incorporating traditional knowledge into all components of the CEAM Strategy and Framework;<sup>12</sup>
- support for initiatives by the Canadian Arctic Resources Committee to commission a discussion paper on carrying capacity and thresholds<sup>13</sup> and prepare a cumulative effects poster;
- presentation of the CEAM Framework and Strategy at numerous public forums and information sessions;<sup>14</sup>
- a stakeholder workshop in January 2002 to review the 'working draft' NWT CEAM Strategy and Framework;
- ongoing communication and consultation with Steering Committee member organizations, co-management bodies and other interested parties;
- 26 Steering Committee meetings/teleconferences; 2 CEAM public open houses/information sessions.

These initiatives have yielded a substantial body of knowledge, shared experience and policy options and have enabled the Steering Committee to formulate the CEAM Blueprint. This

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<sup>11</sup> CEAM Steering Committee, *Current Context, 'Lessons Learned', Gaps and Challenges, Discussion Paper: Tasks 2 and 3* (October 2001).

<sup>12</sup> Joanne Barnaby and Alan Emery, *Traditional Knowledge and the NWT CEAM Strategy and Framework*, Report Prepared for the CEAM Steering Committee, Draft, January 3, 2002; Joanne Barnaby, *Traditional Knowledge and the Cumulative Effects Assessment Management Strategy and Framework: Summary of Findings and Recommendations*. Presentation to Workshop to Review the 'Working Draft' NWT Cumulative Effects Assessment and Management Strategy and Framework. (January 30, 2002).

<sup>13</sup> Macleod Institute, *Carrying Capacity and Thresholds: Theory and Practice in Environmental Management*, prepared for the Canadian Arctic Resources Committee, Draft – October 2001.

<sup>14</sup> As described in the March 2002 progress report, presentations were made to a number of organizations at various events, including the National Round Table on the Environment and the Economy, the Yellowknife GeoScience Forum; the Mackenzie Valley Land and Water Boards joint meeting; the Mackenzie River Basin Board Water Forum; the Workshop on the Assessment and Management of Cumulative Environmental Effects in the Yukon; the Workshop on the CEAM Framework for NWT Environmental Non-Governmental Organizations, the Northern Impact Assessment Seminar, the board meeting of the Independent Environmental Monitoring Agency.

Blueprint is built around the nine components of the CEAM Framework developed by the Steering Committee (discussed below in section 3).

### **3. Components of the CEAM Framework**

The Steering Committee recognized from the outset that individual decision makers, agencies, departments, organizations, and communities cannot, by themselves, assume responsibility for the assessment and management of cumulative effects. CEAM consists of a series of discrete functions and decision-making processes that must be linked together to form an integrated system. In order to identify the key components of that system and the relationships between them, the Steering Committee developed a CEAM Framework for the NWT (see Figure 2). It also commissioned a detailed study to compare that framework with the existing regime for environmental and resource management and to identify any significant gaps in that regime.<sup>15</sup> This section briefly describes the nine components of the CEAM Framework.

#### **3.1 Vision and Objectives**

The decisions about economic development and environmental management that will shape the future of the NWT should reflect a broad vision and a set of specific objectives for the territory and its people. The vision and objectives to guide CEAM may be articulated directly or indirectly by residents of the NWT and by their organizations and governments through political, policy and planning processes.

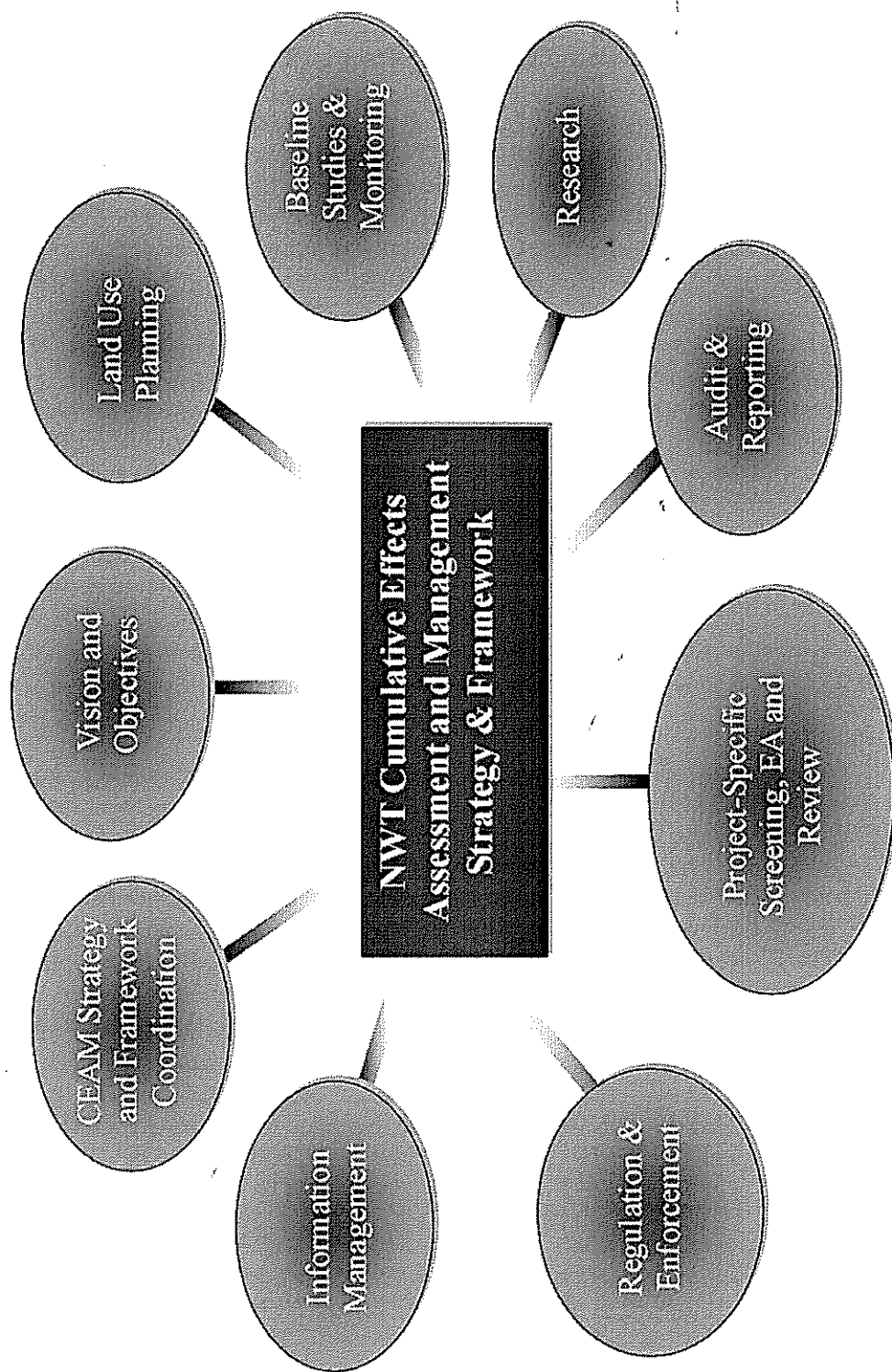
#### **3.2 Land Use Planning**

Land use plans define a broad vision for the landscape that attempts to integrate social, cultural, economic and environmental values and set the context for subsequent decision making with respect to rights issuance, project review, and regulation. The result should be a strategy and set of parameters for the orderly development of land uses. Land use plans may also identify specific tools such as thresholds or carrying capacities to guide decision making.

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<sup>15</sup> NWT CEAM Steering Committee, *NWT Cumulative Effects Assessment & Management Framework - Current Context, 'Lessons Learned', Gaps and Challenges*, Discussion Paper: Tasks 2 and 3 (October 2001). See also the tables summarizing the status of CEAM components in the regions of the NWT (March 28, 2002).

Figure 2: CEAM Framework for the NWT



### **3.3 Baseline Studies and Monitoring**

CEAM depends on the collection and analysis of information relating to historic or current 'baseline' conditions, trends in environmental quality, and the uses of land and water over time. Studies and monitoring may be territory-wide, regional or project-specific and may focus on factors such as the characteristics of environmental components and the effects of stressors.

### **3.4 Research**

Applied research provides a specialized knowledge base to support and enhance decision making relating to CEAM (e.g., determining thresholds, carrying capacity, cause and effect relationships, synergistic effects, etc.).

### **3.5 Audit and Reporting**

The audit component is an accountability mechanism that provides periodic and systematic evaluations of the effectiveness of CEAM in the NWT. Cumulative effects audits should assess the overall state of the environment and examine environmental trends, the factors contributing to these trends, and their significance. Audits should focus as well on the effectiveness of cumulative impact monitoring and the ability of the regulatory regime to assess and manage cumulative effects. Responses to recommendations from previous audits should also be evaluated. The results of audits should be available to all interested parties.

### **3.6 Project-Specific Screening, Environmental Assessment and Review**

Environmental impact assessment (EIA) processes established by the *Mackenzie Valley Resource Management Act* (MVRMA), the *Inuvialuit Final Agreement* and the *Canadian Environmental Assessment Act* apply within the NWT. The National Energy Board is also involved in EIA for projects within its jurisdiction. When projects or activities trigger EIA, cumulative effects issues may be identified at any stage of the review process. EIA reports often address cumulative effects when recommending the approval or rejection of projects or activities. They may include recommendations or requirements for measures to mitigate adverse cumulative effects.

### **3.7 Regulation and Enforcement**

Regulation encompasses a broad spectrum of activities such as the issuance of resource rights (e.g., for minerals, oil and gas, and forestry), land-use permits, water licences and harvest quotas. Terms and conditions for project operations, monitoring requirements, and the standards and procedures for abandonment and reclamation may also be established through regulatory processes. All significant projects and activities in the NWT are subject to some form of regulation. The setting and enforcement of regulatory requirements are important practical means for managing cumulative effects.

### **3.8 Information Management**

Information management in support of CEAM includes the collection, processing, storage and sharing of diverse types of information (quantitative and qualitative, including traditional knowledge) from a wide variety of sources. Analysis and reporting of information occurs in the context of other framework components (e.g., audit and reporting; project-specific assessment; regulation and enforcement). Information from these sources is essential for the feed-back and decision support functions throughout the CEAM Framework. Information users may include communities, project proponents, regulators, and non-government organizations.

### **3.9 Coordination**

No one organization has the broad mandate for cumulative effects assessment and management. A mechanism to provide leadership and facilitate coordination at the territorial level would identify opportunities to take advantage of economies of scale in CEAM, reduce duplication of effort and process, and provide a mechanism for addressing transboundary aspects of CEAM.

## **4. The CEAM Blueprint**

The Blueprint sets out the Steering Committee's objectives and specific recommendations for implementing the CEAM Strategy and Framework in the NWT. It reflects the Steering Committee's findings and conclusions regarding the NWT's current regime for environmental and resource management when measured against the CEAM Framework. The Blueprint addresses each of the nine components of the CEAM Framework and two additional elements: regional plans of action and traditional knowledge. The Steering Committee included these two elements in the Blueprint because initiatives in these areas are essential to implementing the CEAM Strategy and Framework as a whole across the NWT and within its regions. The Steering Committee notes that key elements of the CEAM Framework are already in place and, in many instances, are working very well.

The Blueprint is designed to achieve the purposes that have guided the Steering Committee from the beginning (see above, Section 2.1). In particular, the Steering Committee's intention is to ensure that:

- the NWT's regime for environmental and resource management is able to implement each component of the CEAM Framework;
- the institutions and decision-making processes responsible for each component of the CEAM Framework can complete their respective tasks effectively and efficiently; and
- the components of the CEAM Framework function as an integrated system.

The Steering Committee has focused on initiatives that it believes will make the most practical difference to CEAM in the NWT and its regions and that are achievable within a reasonable time frame and budget. The elements of the Blueprint are mutually reinforcing. They build, to the extent possible, on the existing legal regime and institutional arrangements for environmental and resource management and on the policy work relating to CEAM that has been completed or is in progress. The CEAM Blueprint attempts to strike the appropriate balance between territory-wide, regional and community-based initiatives. It is also intended to provide tools that are of immediate use to decision makers and other parties involved in CEAM, while at the same time furthering the longer term goal of establishing a robust and comprehensive regime for integrated resource management that is capable of addressing a broad range of issues relating to cumulative effects.

The Steering Committee recognizes that full implementation of the CEAM Strategy and Framework will not occur immediately. It believes, however, that meaningful progress can be made by identifying priorities and taking incremental steps. The Blueprint is intended to support this process by focusing on eleven key areas where initiatives to support CEAM are required. For each element of the Blueprint, the Steering Committee summarizes the need for action and identifies the toolkit of legislation, policy and practical experience that is currently available. It then identifies the objectives that should guide initiatives relating to each of the eleven elements of the Blueprint over the medium and long term (i.e., 3 years or longer). Finally, for eight elements of the Blueprint the Steering Committee is recommending initiatives that should be undertaken in the short term (i.e., 1-2 years). For each of these short term recommendations, the Steering Committee indicates who should be responsible for taking action and providing funding. It also sets out the time frame for completing the recommended tasks.

The Steering Committee wishes to emphasize that implementation of the CEAM Strategy and Framework requires not only territory-wide and regional initiatives, but also significant contributions to CEAM at the community level. Community participation in CEAM is an important theme that runs throughout the Blueprint. Communities have an essential role to play in achieving many of the objectives identified by the Steering Committee. Measures to include communities directly in CEAM and to increase their capacity to participate effectively should be promoted in relation to all elements of the Blueprint.

## **4.1 Vision and Objectives**

### **4.1.1 Need for Action**

A common vision and set of objectives provide the overall direction for implementing the CEAM Strategy and Framework. The Steering Committee recognizes that they will not be captured in a single document, nor will they remain static over time. The development and refinement of a vision and objectives are ongoing processes at the territorial, regional and community levels. Several recent initiatives have identified broad visions for the NWT and specific objectives that are relevant to CEAM.<sup>16</sup> Similar initiatives will be required in the future to renew and reaffirm the vision and objectives of the people of the NWT. Mechanisms will also be needed to formulate regional and community visions and objectives to guide CEAM.

### **4.1.2 Toolkit**

Land claim and self government agreements, legislation, economic development and environmental management strategies, environmental guidelines, standards and regulations, and regional and community plans are among the sources from which an overall vision and specific objectives for CEAM could be assembled.

### **4.1.3 Objectives and Short Term Recommendations**

The Steering Committee's objective for the medium and long term is the continued development and refinement of a common vision and set of objectives to guide CEAM in the NWT and its regions. Since the CEAM Strategy and Framework will in large measure be implemented at the regional level, regional visions and objectives are particularly important. Land claim and self government agreements are key means of defining regional visions and objectives. The Steering Committee therefore looks forward to the signing of these agreements in all regions of the NWT. The Steering Committee also sees regional land use planning and the development of regional plans of action as important mechanisms for defining regional visions and objectives in ways that contribute directly to decision making on CEAM. Both of these mechanisms are discussed later in the Blueprint. The Steering Committee is not making any short term recommendations regarding the vision and objectives for CEAM.

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<sup>16</sup> Examples of recent documents setting out broad visions and more specific policy objectives for the NWT include: GNWT, *Towards a Better Tomorrow: A Non-renewable Resource Development Strategy for the Northwest Territories*; Economic Strategy Panel, *Common Ground: NWT Economic Strategy* (2000); GNWT, *Securing Our Future*, Response to the Economic Strategy Panel (2000); DIAND, *Toward Sustainable Development: A Strategy for the Department of Indian Affairs and Northern Development* (1997); National Round Table on the Environment and the Economy (NRTEE), *Aboriginal Communities and Non-Renewable Resource Development: State of the Debate* (2001).

## **4.2 Land Use Planning**

### **4.2.1 Need for Action**

The Steering Committee sees land use planning as a particularly important component of the CEAM Framework. Planning is a means of crystallizing an overall vision for the land, identifying broad values and policy objectives, and translating the vision, values and objectives into specific parameters to guide decision making on land and resource uses. In particular, planning is a mechanism for identifying valued ecosystem components (VECs) and valued socio-economic components (VSCs). Planning can also be used to define the thresholds, limits of carrying capacity, limits of acceptable change and other similar tools that are necessary to ensure that multiple projects and activities yield acceptable cumulative effects. Land use planning may involve comprehensive regional processes or smaller scale integrated resource management plans. It also includes a range of activities that are not implemented under formal land use planning processes (e.g., Protected Areas Strategy, activities funded by the Interim Resource Management Assistance (IRMA) Program, etc.).

The up-front investment of time, money and effort in planning yields significant long term benefits for CEAM. By providing the context for subsequent decisions at the rights issuance, project review and regulatory stages, planning can increase the efficiency and predictability of these processes. The guidance provided by land use plans should assist proponents, decision makers and other interested parties as they address issues relating to cumulative effects.

The Steering Committee is convinced that the development, approval and implementation of land use plans throughout the NWT are important priorities for CEAM. Action is needed to overcome obstacles to achieving these objectives. Delays in approving the Gwich'in Land Use Plan and advancing further with the Protected Areas Strategy show the difficulty of developing and implementing acceptable land use plans, even when planning processes are in place. In all regions of the NWT except the Inuvialuit Settlement Region and the Gwich'in and Sahtu Settlement Areas, land use planning processes are non-existent, incomplete, or have yet to be effectively implemented. In areas where ongoing development is occurring, such as the North Slave Region, the need for land use planning is particularly acute. Implementing planning processes is especially challenging in the absence of land claim and self government agreements or where the land use planning processes that are established pursuant to these agreements may not be comprehensive.

### **4.2.2 Toolkit**

The NWT can draw upon a considerable range of formal requirements and practical experience when moving forward with this component of the CEAM Framework. Land use planning is specifically provided for in Part 2 of the MVRMA<sup>17</sup> and is referred to in the *Inuvialuit Final Agreement*. Several planning processes currently exist or are proposed for the NWT. A draft land use plan for the Gwich'in Settlement Area has been prepared and is being reviewed by the federal government. A land use plan is also being developed for the Sahtu Settlement Area.

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<sup>17</sup> Part 2 of the MVRMA implements provisions contained in the Sahtu Dene and Metis Comprehensive Land Claim Agreement and Gwich'in Comprehensive Land Claim Agreement.

Community conservation plans for six communities in the Inuvialuit Settlement Region were recently updated. Land use planning is in the very early stages for Dogrib-owned lands and there are provisions dealing with planning for the entire settlement area in the Dogrib Agreement-in-Principle.<sup>18</sup> The Deh Cho First Nations Interim Measures Agreement specifically requires a land use plan for the Deh Cho territory and includes draft guidelines for the development of this plan.<sup>19</sup> This process will be initiated in the near future. In the unsettled claim areas, community-based land use planning activities have been conducted as part of the Interim Resource Management Assistance initiative. The NWT Protected Areas Strategy and the Department of Fisheries and Oceans' Marine Protected Areas Strategy are also part of the broader land-use planning picture in the NWT. Coordination with planning initiatives in adjacent jurisdictions can also contribute to CEAM.<sup>20</sup>

#### **4.2.3 Objectives and Short Term Recommendations**

The Steering Committee's overall objectives are the establishment of land use planning processes in each region of the NWT and the preparation, approval and implementation of plans that meet the needs of decision makers and others involved in CEAM. Approved land-use plans should be legally binding.

##### **Medium and Long Term Objectives**

Initiatives to promote land use planning over the medium and long term should be directed towards:

- the development of guidelines and a generic template for land use plans, showing how they can be designed to contribute most effectively to CEAM;
- the establishment of mechanisms to improve linkages between regional land use planning and broader initiatives such as the NWT Protected Areas Strategy;
- the establishment of mechanisms to ensure the full involvement of government as regional land use plans are being developed;
- the establishment of an expedited process with clear time lines to facilitate the approval and implementation of these plans;
- the provision of information and planning tools to support regional land use planning, notably through research on tools such as indicators, thresholds, measures of carrying capacity and limits of acceptable change for the principal VECs and VSCs in the NWT (see the research component of the Blueprint discussed below);

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<sup>18</sup> Dogrib Agreement-in-Principle, article 22.5 (January 7, 2000).

<sup>19</sup> The Deh Cho First Nations Interim Measures Agreement, articles 2-11, Appendix II.

<sup>20</sup> See, for example, Nunavut Planning Commission, *West Kitikmeot Regional Land Use Plan*, Revised Draft (February 2002).

- the enhancement of the ability of land use planning boards to follow up on the implementation of approved land use plans by determining the conformity of development activity to these plans;
- the development of interim planning processes for regions of the NWT that are subject to unsettled or overlapping land claims; and
- the provision of funding and expertise to ensure that planning processes operate efficiently and that interested parties can participate effectively in these processes.

The Steering Committee encourages all those involved in land use planning throughout the NWT to seek opportunities for moving forward in these areas over the coming years.

### **Short Term Recommendations**

Given the priority that it attaches to land use planning, the Steering Committee is making short term recommendations in this area. At the present time, one of the most effective ways of promoting the development of land use planning as a component of CEAM is through a 'learning-by-doing' approach. The Steering Committee therefore proposes targeted initiatives to improve the capacity of regional land use planning to contribute to CEAM. Based on its assessment of the current state of land use planning throughout the NWT, the Steering Committee is recommending four specific initiatives.

**Recommendation #1 – The Gwich'in Land Use Plan should be approved and implemented.**

**Recommendation #2 – The Sahtu Land Use Plan should be completed, approved and implemented.**

**Recommendation #3 – Steps should be taken to implement the land use planning provisions set out in the Deh Cho Interim Measures Agreement and Framework Agreement.**

**Recommendation #4 – Options should be explored for implementing comprehensive land-use planning in the Dogrib Settlement Area pursuant to the terms of the Dogrib Agreement-in-Principle.**

These recommendations are intended to encourage the development, approval and implementation of regional land use plans that meet the needs of decision makers involved in CEAM. The specific measures that are required should be negotiated with relevant agencies. The Steering Committee recommends that the Minister of Indian Affairs and Northern Development take the lead in each of these areas, with actions beginning in 2002.

## **4.3 Baseline Studies and Monitoring**

### **4.3.1 Need for Action**

Baseline studies and monitoring are critically important sources of information for decision makers involved in CEAM. Monitoring is essential for adaptive management and is an important accountability mechanism. The Steering Committee notes, however, that there is currently no overall framework in the NWT to ensure that baseline studies and monitoring address the key priorities and needs of the decision makers responsible for assessing and managing adverse cumulative effects.<sup>21</sup> In particular, the delay in establishing the cumulative impact monitoring program mandated by Part 6 of the MVRMA constitutes a major gap in the implementation of the CEAM Framework within the Mackenzie Valley portion of the NWT. Cumulative impact monitoring in support of CEAM is also needed in the Inuvialuit Settlement Region (ISR).

### **4.3.2 Toolkit**

As noted above, Part 6 of the MVRMA provides a statutory basis for cumulative impact monitoring in the Mackenzie Valley portion of the NWT. Policy and technical work undertaken by the CIMP Working Group is directly relevant to this component of the CEAM Framework.<sup>22</sup> A range of government departments, Aboriginal organizations, private sector companies, project-specific agencies, and environmental non-governmental organizations in the NWT are involved, directly or indirectly, in baseline studies and monitoring. The development of this component of the CEAM Framework thus has a considerable body of experience on which to build.

### **4.3.3 Objectives and Short Term Recommendations**

#### **Medium and Long Term Objectives**

The Steering Committee's objective is the implementation of the baseline studies and monitoring programs that are needed by decision makers involved in CEAM throughout the NWT. Achieving this objective will require mechanisms to identify these studies and programs and to ensure that they are implemented. Part of this task involves improved coordination among

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<sup>21</sup> Other reports supporting this view include National Round Table on the Environment and the Economy (NRTEE), *Aboriginal Communities and Non-Renewable Resource Development: State of the Debate* (2001); CEAM Steering Committee, *Current Context, 'Lessons Learned', Gaps and Challenges*, Discussion Paper: Tasks 2 and 3 (October 2001); Terriplan Consultants Ltd., IER Planning, Research and Management Services, and North-South Environmental Inc. *Development of an Interim Plan for Cumulative Effects Research and Monitoring in the SGP: Technical Workshop Summary Report*. Prepared for the West Kitikmeot/Slave Study Society. (November 26-27, 2001).

<sup>22</sup> Notably the development of a draft implementation framework for Part 6, the development of a preliminary 'state of knowledge report' for VECs, preparation of work plans by a number of VEC teams, and the refinement/updating of the CIMP and Tariuq metadatabases.

government departments, agencies and other organizations that are currently involved in baseline studies and monitoring. Significant work in this area is currently being undertaken by the CIMP Working Group. The Steering Committee endorses this work and recognizes that the development of the CIMP is an ongoing process that will require continuing effort from participants and funding from government.

### **Short Term Recommendation**

In addition to these efforts over the medium and long term, the Steering Committee believes that there is an opportunity for significant progress in this area in the short term. It is therefore making a specific recommendation

**Recommendation #5 – The Minister of Indian Affairs and Northern Development should adopt, fund, and begin implementation of a policy framework and coordination mechanism for the CIMP during the 2002-2003 fiscal year.**

This policy framework should, at a minimum, meet the requirements of Part 6 of the MVRMA and should also be extended to the ISR, assuming that Inuvialuit institutions are interested in participating.

Part 6 provides for the designation of a Responsible Authority charged with the cumulative impact monitoring function. Until such a designation is made, the Minister of Indian Affairs and Northern Development is the Responsible Authority. The CIMP Working Group is currently considering the eventual designation of a partnership entity consisting of representatives from federal and territorial government departments, Aboriginal organizations, and selected boards (i.e., the Mackenzie Valley Environmental Impact Review Board and the Mackenzie Valley Land and Water Board). An interim arrangement may be required, pending formal designation of the Responsible Authority under regulations pursuant to the *Mackenzie Valley Resource Management Act*. One option is the establishment of an interim coordinating committee to advise Minister of Indian Affairs and Northern Development in his capacity as the Responsible Authority for CIMP. The Steering Committee is content to leave the details regarding interim arrangements, the designation of the Responsible Authority, and the operation of the cumulative impact monitoring program to be determined through the process currently being led by the CIMP Working Group.

## **4.4 Research**

### **4.4.1 Need for Action**

The Steering Committee sees an ongoing need for applied research involving both science and traditional knowledge to support decision making relating to CEAM. An investment in the development and application of the tools needed for CEAM will increase certainty and improve decision making within all components of the CEAM Framework. Despite widespread

recognition of the importance of these tools,<sup>23</sup> the Steering Committee notes that considerable effort will be required to develop and refine them for use in the NWT.

#### **4.4.2 Toolkit**

Research relevant to environmental and resource management has traditionally been carried out largely by federal and territorial government departments and by academic institutions. Aboriginal organizations, industry, non-governmental environmental organizations and partnership entities have also assumed important roles in research. Both traditional knowledge and conventional science are contributing to these research efforts. Research in support of CEAM can build on:

- specific research and monitoring initiatives in the NWT relating to CEAM (e.g., studies sponsored by the West Kitikneot/Slave Study and the CIMP Working Group);
- scientific research and monitoring programs undertaken by government, academic institutions, Aboriginal organizations, private companies, environmental non-governmental organizations, and others;<sup>24</sup>
- recent research that focuses specifically on the development and application of tools for CEAM, notably studies commissioned by DIAND<sup>25</sup> and by the Canadian Arctic Resources Committee;<sup>26</sup> and
- studies supported by the CEAM Steering Committee and other organizations that have

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<sup>23</sup> See, for example, NRTEE, *Aboriginal Communities and Non-Renewable Resource Development: State of the Debate* (2001), page 42. The NRTEE recommends that: "A principal objective of cumulative effects management in the NWT should ... be the identification of objectives, benchmarks and thresholds that can be used to guide baseline research, monitoring and development decisions."

<sup>24</sup> For example, the GNWT Department of Resources, Wildlife and Economic Development is undertaking work on the utility of cumulative effects assessment tools in managing the Bathurst caribou herd. Research on cumulative effects management has also been conducted by Environment Canada under the Northern Ecosystem Initiative. A number of relevant research initiatives are summarized in Appendix E of *'NWT Cumulative Effects Assessment & Management Framework - Current Context, Lessons Learned', Gaps and Challenges*, Discussion Paper: Tasks 2 and 3' (NWT CEAM Steering Committee, October 2001).

<sup>25</sup> AXYS Environmental Consulting Ltd., *Thresholds for Addressing Cumulative Effects on Terrestrial and Avian Wildlife in the Yukon* (March 2001); AXYS Environmental Consulting Ltd., *Wildlife CEA Thresholds: Phase II Workshop Summary* (March 2001).

<sup>26</sup> Macleod Institute, *Carrying Capacity and Thresholds: Theory and Practice in Environmental Management*, prepared for the Canadian Arctic Resources Committee, Draft – October 2001.

examined the role of traditional knowledge in monitoring cumulative effects;<sup>27</sup>

#### **4.4.3 Objectives and Short Term Recommendations**

The Steering Committee recognizes that considerable research on issues relating to CEAM has been conducted and is ongoing in the NWT. It has concluded, however, that significant gaps in knowledge remain to be filled.

##### **Medium and Long Term Objectives**

The Steering Committee sees a need for research in a number of areas. The identification of indicators, thresholds, carrying capacities and limits of acceptable change for the principal VECs and VSCs in the NWT is a top priority. Linear and non-linear disturbance models and other predictive tools could be developed and adapted for use in the NWT. Cause and effect relationships for many cumulative effects are not well understood. Information on 'best practices' for cumulative effect management (e.g., techniques for reducing footprints) could be gained from an examination of the experience with resource development in the NWT and other jurisdictions. Research could be directed to distinguishing the relative effects of different stressors on VECs and distinguishing between 'natural' and 'un-natural' changes. There is also a need to direct research to a 'holistic' or ecosystem level, as opposed to conventional single-species studies.<sup>28</sup> Focused research in areas such as these would help to meet the specific needs of decision makers, project proponents, Aboriginal organizations and other interested parties in the NWT as they address cumulative effects issues.

The Steering Committee also sees a need for an improved process to direct and support research relating to CEAM. Its objective for the medium to long term is the establishment of mechanisms for defining and delivering a coordinated and applied research program for CEAM. These mechanisms should:

- identify and confirm CEAM research priorities;
- identify the specific study questions and baseline levels of available knowledge for priority areas of research;
- design and implement a program of scientific and traditional knowledge studies; and
- develop an implementation strategy to bring decision makers and other interested parties together with experts in science and traditional knowledge for the purpose of translating

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<sup>27</sup> The CEAM Steering Committee contributed funding to the three projects on the roles of traditional knowledge in cumulative effects assessment and management that are referred to above in Section 2.2.

<sup>28</sup> See, for example, Terriplan Consultants Ltd., IER Planning, Research and Management Services, and North-South Environmental Inc. *Development of an Interim Plan for Cumulative Effects Research and Monitoring in the SGP: Technical Workshop Summary Report*. Prepared for the West Kitikmeot/Slave Study Society. (November 26-27, 2001).

research findings into practical tools for use in CEAM.

The Steering Committee urges all parties in the NWT with an interest in research relating to CEAM to work together to advance research in priority areas and to develop a research strategy that achieves the objectives noted above.

### **Short Term Recommendation**

The Steering Committee recognizes that the complete research agenda for CEAM will be addressed over the medium and long term. It also notes, however, that research has been undertaken or is ongoing in a number of the priority areas identified above. The Steering Committee recognizes that there is an urgent need for research on key issues relating to CEAM and that specific research initiatives can and should be undertaken in the short term. It is therefore making a short term recommendation.

**Recommendation #6 – The federal Ministers of Indian Affairs and Northern Development, the Environment and Fisheries and Oceans and the territorial Minister of Resources, Wildlife and Economic Development should, in consultation with Aboriginal governments and organizations, co-management and regulatory boards, industry, environmental non-governmental organizations and the public, identify and fund priority research initiatives in support of CEAM (e.g., research on the identification of thresholds, measures of carrying capacity and limits of acceptable change).**

## **4.5 Audit and Reporting**

### **4.5.1 Need for Action**

The Steering Committee believes that independent audits constitute an important feedback mechanism to ensure that the CEAM Strategy and Framework meets its intended objectives and continues to adapt to new challenges. Audits must therefore be linked to policy development and decision making. The audit function under Part 6 of the MVRMA provides for this type of evaluation and reporting, but has yet to be implemented. The CEAM Strategy and Framework will also require a broader audit function in order to evaluate CEAM in the ISR and assess the effectiveness of any CEAM initiatives that are beyond the scope of the Part 6 environmental audit.

### **4.5.2 Toolkit**

Part 6 of the MVRMA provides a legislative basis for environmental audits in the Mackenzie Valley portion of the NWT. A policy framework that meets the requirements of Part 6 could be adapted for use in the ISR and on a territory-wide basis. The CIMP Working Group is examining options for a policy framework of this type. Audit and reporting could build on the experience of the project-specific Independent Environmental Monitoring Agency and the Environmental Monitoring Advisory Board that were established pursuant to the BHP and Diavik environmental agreements. Finally, audit processes such as that conducted by the federal Commissioner of the

Environment and Sustainable Development (Office of the Auditor General) could provide models for the audit component of the CEAM Framework.

#### **4.5.3 Objectives and Short Term Recommendations**

##### **Medium and Long Term Objective**

The Steering Committee's objective is a fully functioning audit and reporting process for CEAM in the NWT. This process will undoubtedly evolve over time on the basis of experience with environmental audits and in response to changing needs, issues and circumstances.

##### **Short Term Recommendations**

The Steering Committee is making three short term recommendations for specific actions to implement the audit and reporting process. These recommendations reflect the fact that the deadline for completion of the first environmental audit required by Part 6 of the MVRMA is December 2003.

**Recommendation #7 – The Minister of Indian Affairs and Northern Development should, in consultation with Aboriginal governments and organizations and with the public, adopt a policy framework for environmental audits, establish terms of reference for the first audit, appoint an independent auditor, and allocate the funding required to complete the audit by December 31, 2002.**

**Recommendation #8 – The terms of reference for the first audit should direct the auditor to examine the implementation of the MVRMA, pursuant to the requirement that the audit review the effectiveness of the regulatory regime (MVRMA, section 148(3)(c)).**

**Recommendation #9 – The Minister of Indian Affairs and Northern Development, along with Inuvialuit representatives, should explore options for extending the audit framework and terms of reference to the ISR, thereby implementing the 'Audit and Reporting' component of the CEAM Framework on a territory-wide basis.**

The Steering Committee believes that a territory-wide audit should be conducted in accordance with the time frame established pursuant to Part 6 of the MVRMA. Specific options relating to the implementation of Part 6 and an environmental audit for the entire NWT are being developed by the CIMP Working Group. The Steering Committee will not comment further on these options at this time, leaving the details of the audit process and terms of reference to that Working Group.

## **4.6 Project-Specific Screening, Environmental Assessment and Review**

### **4.6.1 Need for Action**

Environmental impact assessment (EIA) is a key component of the CEAM Framework and has, for some recent projects, become the focal point for concerns about cumulative effects. Improvements in the ability of EIA processes to address cumulative effects will yield direct benefits for project proponents, interveners and decision makers. While some of these improvements can be achieved through enhancements to other components of the CEAM Framework that support EIA in various ways, there is also a need for ongoing modifications to EIA processes themselves and to the tools available to decision makers who must take cumulative effects into account when determining the acceptability of proposed projects and the terms and conditions to be attached to projects that are approved or recommended for approval.

### **4.6.2 Toolkit**

The basic tools for the EIA component of the CEAM Framework are provided by the land claim agreements, statutes and regulations that define EIA requirements. Guidance on the treatment of cumulative effects within EIA processes is available from the agencies responsible for these processes. Methods for addressing cumulative effects at the project review stage are also discussed in publications and reports. The agencies and co-management bodies responsible for EIA may also have memoranda-of-understanding and other arrangements in place to address issues such as transboundary effects, the coordination and harmonization of EIA processes, information sharing, joint meetings, and staff training.

### **4.6.3 Objectives and Short Term Recommendations**

The Steering Committee believes that ongoing efforts are required to ensure that cumulative effects are adequately addressed in EIA processes and that EIA, in turn, contributes to the implementation of CEAM as a whole. The Steering Committee has identified three general objectives for improving the operation of the EIA component of the CEAM Framework in the NWT.

#### **Medium and Long Term Objectives**

First, project proponents and other interested parties would benefit from clearer guidance regarding key aspects of cumulative effects assessment in the context of project-specific EIA. The Steering Committee recognizes that important progress in this area has already been achieved and that work is ongoing.<sup>29</sup> It fully supports the agencies undertaking this work and

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<sup>29</sup> Efforts to address this issue are ongoing in both the Mackenzie Valley and the ISR. The Mackenzie Valley Environmental Impact Review Board has released an Interim Guide entitled *Addressing Cumulative Environmental Effects in Environmental Assessments under the Mackenzie Valley Resource Management Act* (September 2000). The Environmental Impact Screening Committee (EISC) and the Environmental Impact Review Board (EIRB) have released a draft report prepared by KAVIK-AXYS Inc. entitled *Cumulative Effects Assessments*

urges them to continue to refine guidelines and procedures. In particular, guidance should address issues such as scoping, the identification of VECs and VSCs, the level of effort required by proponents, and the roles and responsibilities of the different parties. Government leadership and interagency coordination in cumulative effects assessment are necessary, since cumulative effects issues are often beyond the control of project proponents and involve the mandates of multiple agencies. Policy guidance regarding the determination of the significance of cumulative effects is also required.

The Steering Committee's second objective is increased capacity to address cumulative effects through the terms and conditions for project approval that are set out in the decision reports from EIA processes. To this end, the agencies responsible for these processes could identify and further refine the tools that are available to them when they conclude that cumulative effects management is an important issue for projects under review.

Finally, improved linkages among all of the components of the CEAM Framework – notably through monitoring, environmental auditing, research and information management – could ensure that the results from previous project reviews, baseline studies, monitoring programs and other sources of information are available for use in project-specific cumulative effects assessments. The Steering Committee's objectives and recommendations in the sections of the Blueprint dealing with these topics are intended, among other things, to enhance the ability of EIA processes to address cumulative effects.

The Steering Committee recognizes that responsibility for project-specific screening, environmental assessment and review lies primarily with the specialized agencies that conduct EIA processes. Beyond the general objectives set out above, it is not making any short term recommendations regarding this component of the CEAM Framework.

## **4.7 Regulation and Enforcement**

### **4.7.1 Need for Action**

Regulatory decision making is the principal means to control directly the extent to which individual projects and activities contribute to cumulative environmental effects. Cumulative effects management therefore depends on the capacity within the regulatory regime to establish and enforce general regulatory requirements and specific conditions of approval.

The NWT has a full suite of regulatory agencies, but many of their decision-making processes and environmental management systems are relatively new and untested. The Steering Committee also notes concerns regarding the adequacy of resources and the number of personnel that are available for inspection and enforcement activities within the NWT. The Steering

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*in the Inuvialuit Settlement Region: A Guide for Proponents* (November 2001). A Reviewer's Guide (January 2002) and a report on the current and potential capability for cumulative effects assessments (January 2002) have also been prepared by KAVIK-AXYS Inc. for the EISC and EIRB.

Committee believes that there is an ongoing need to improve the capacity of regulatory and enforcement processes in the NWT to address cumulative effects.

#### **4.7.2 Toolkit**

Regulation and enforcement in the NWT is undertaken pursuant to a range of legislation and regulations. The primary regulatory tools for cumulative effects management are the terms and conditions attached to project approvals, permits and licences. The effectiveness of these tools depends on the ability of regulators to monitor compliance and take enforcement action when required.

#### **4.7.3 Objectives and Short Term Recommendations**

The Steering Committee recognizes that CEAM constitutes a challenge for agencies that are, in some cases, already hard pressed to carry out other aspects of their mandates. Strengthening the components of the CEAM Framework and improving the linkages among these components will assist these agencies in several ways. Land use planning, baseline studies and monitoring, research, the audit and reporting functions, and improved information management can all increase the ability of regulators to address cumulative effects. A fully functioning CEAM Framework should also reduce the burden on regulators by shifting the focus somewhat from the assessment and management of cumulative effects to the proactive policy and planning measures that can prevent adverse cumulative effects from occurring in the first place.

#### **Medium and Long Term Objectives**

The Steering Committee's principal objective for the medium to long term is the enhanced capacity of regulators to address cumulative environmental effects. One significant step in this direction would be for regulatory boards and agencies to develop procedures and specific tools for cumulative effects management. A clearer understanding of the types of terms and conditions that can be attached to individual project approvals in response to cumulative effects issues would be useful, as would guidance on the monitoring requirements that can most usefully ensure compliance and support adaptive management in relation to cumulative effects. The Steering Committee encourages regulatory boards and agencies to establish procedures and tools in support of cumulative effects management. It also encourages these boards and agencies to make available their inspection and enforcement policies, their organizational charts showing staff assigned to these tasks (including contact information), and annual statistics on the number of land use permits and water licences in place, new permits and licences, inspections undertaken, enforcement measures, and any legal actions that related to enforcement. This information would be useful in tracking activity levels and ensuring accountability. It is leaving the details of how to proceed in this area to be determined by the respective boards and agencies and therefore is not making any short term recommendations on this topic.

## **4.8 Information Management**

### **4.8.1 Need for Action**

The collection, processing, storage and sharing of diverse types of information is essential for CEAM. Qualitative and quantitative information, including traditional knowledge, is produced by the organizations responsible for implementing all of the components of the CEAM Framework. The users of information on cumulative effects include communities, project proponents, environmental non-governmental organizations, interveners in regulatory and project review processes, Aboriginal governments and organizations, and federal and territorial government departments and agencies. The challenge for information management is to connect these users with the information that they need in order to participate effectively in CEAM.

The importance of information management is increasingly recognized in the NWT. The Steering Committee notes, however, that there is currently no comprehensive information management system (IMS) in place to collect, catalogue, manage and distribute the substantial quantities of information relevant to CEAM. While parts of such a system may exist or be under development within various organizations, there is significant potential for gaps, duplication of effort, and a failure to take advantage of economies of scale. A fragmented approach to information management also raises specific challenges relating to system compatibility, standards for data and metadata, confidentiality requirements and the accessibility of information, diverse user needs and capabilities, and limitations in organizational capacity relating to human and financial resources.

### **4.8.2 Toolkit**

The establishment of an IMS in the NWT can build on:

- the conclusions and recommendations of the workshop on information management that was convened jointly by the CEAM Steering Committee and the Mackenzie Valley CIMP Working Group in January, 2001;<sup>30</sup>
- other work relating to the development of an IMS that is occurring under the auspices of the CIMP Working Group;<sup>31</sup> and

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<sup>30</sup> IER Planning, Research and Management Services and Terriplan Consultants Ltd., *Information Management Workshop in Support of the NWT Cumulative Effects Assessment & Management Framework and the Mackenzie Valley Cumulative Impact Monitoring Program* (Draft report March 12, 2001).

<sup>31</sup> The CIMP Working Group has retained the Gwich'in Tribal Council/Map Insight to review options for the development of an IMS for the monitoring program. The extent to which this study will contribute to the establishment of a broader IMS for CEAM remains to be seen at this time. Map Insight, Inuvialuit Environmental and Geotechnical, Northern Research and Evaluation, and the Gwich'in Tribal Council *Identification of Options for an Information*

- the IMS expertise that is available within government departments, Aboriginal organizations and the private sector in the NWT.

#### **4.8.3 Objectives and Short Term Recommendations**

##### **Medium and Long Term Objectives**

The Steering Committee has identified a number of medium and long term objectives for an IMS in the NWT. In particular, the development of an IMS system should include:

- the identification of means to address information management needs relating to cumulative impact monitoring and to project applications (perhaps using a publicly accessible tool with capabilities similar to the Nunavut PLANNER<sup>32</sup> system);
- the establishment of terms of reference that describe the key components of the system, the roles and responsibilities of the parties involved in its operation, and the procedures for cataloguing and distributing information;
- the establishment of a mechanism for decision makers and other interested parties to identify the key data and information needs that must be met by the IMS, so that it will effectively support decision making relating to CEAM;
- the preparation of specific protocols dealing with standards for data and metadata and with confidentiality issues relating to commercially sensitive information and intellectual property rights;
- agreement on a set of principles and guidelines regarding the incorporation of traditional knowledge within the IMS;
- the establishment of formal linkages with cumulative impact monitoring and

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*Management System (IMS) for the Mackenzie Valley Cumulative Impact Monitoring Program (MVCIMP). Draft Report, Mar. 13, 2002.*

<sup>32</sup> The Nunavut Planning Commission has developed a 'one-window' approach for land use applications that is linked to its GIS. PLANNER (Public Land-use Application, Network, Notification and Environmental Reporter) allows proponents to complete applications over the Internet. The project location can then be compared with over 150 layers of information in the GIS (e.g., wildlife ranges, harvest areas, archaeological sites, contaminated sites etc.) – which provides assistance in evaluating potential cumulative effects. This report is sent to the project proponent, and is also available for use by the regulatory agencies. The PLANNER system also provides for an automatic notification of the appropriate agencies based on the specific characteristics of the application; similarly, PLANNER allows the project proponent and agencies to track the regulatory progress of an application over the Internet. PLANNER is a valuable tool for project proponents and regulators, but access to information on the system is restricted. It does not provide information on project applications, project review and regulatory processes, or regional land use to the public.

environmental auditing;

- the signing of a data sharing agreement among the principal government departments and agencies, Aboriginal organizations, private companies, academic institutions, environmental non-governmental organizations and other parties that generate and use data relevant to CEAM in the NWT;
- an assessment of overall needs for technical expertise, hardware and software, so that economies of scale in these areas can be realized across the NWT;
- a systematic identification and cataloguing of existing baseline and monitoring data, and other information relevant to CEAM in the NWT; and
- the preparation and implementation of a communication and information dissemination strategy to insure that information relevant to CEAM is available to the full range of users, including individuals and organizations in communities who may not have easy access to specialized expertise or equipment.

The Steering Committee recognizes that the development of an IMS for the NWT will occur through a series of incremental steps over a number of years. This process will require considerable coordination among existing organizations that generate and use information. It will also involve a process of 'learning-by-doing'.

#### **Short Term Recommendation**

The Steering Committee believes that concrete steps can and should be taken in the short term to support the development of an IMS for the NWT. It is therefore making a specific recommendation in this area.

**Recommendation #10 – The Ministers of Indian and Northern Affairs and the Environment should, by March 2003, identify specific short term measures that can be taken to develop and implement an IMS for the NWT.**

The Steering Committee suggests that the identification of these measures should include a systematic evaluation of the findings of the CIMP IMS options study in light of broader application for CEAM in the NWT. Consideration should also be given to the findings of the information management workshop that was held in January 2001. The Steering Committee believes that a review of options by independent experts, a stakeholder workshop, and specific consultations should be included in this process. The result should be a clearly defined overall strategy and a set of specific steps to be taken in the short term in the area of information management.

## **4.9 Coordination**

### **4.9.1 Need for Action**

The effectiveness of the CEAM Framework depends not only on the strength of each individual component, but also on the ability of the components to work together. Weaving these components into an integrated system is a challenge because many organizations have mandates, responsibilities and initiatives related to CEAM. The roles and responsibilities of these organizations and their relationships to one another are not always clearly defined. No single organization or regulatory process has overall authority for the full range of components in the CEAM Framework. At the same time, no organization or regulatory process is without some responsibility for the assessment or management of cumulative effects. Coordination is further complicated because important aspects of the CEAM Strategy and Framework will likely be implemented at the regional level. While a regional approach to CEAM is essential in the NWT, reliance on regional delivery mechanisms may not be appropriate for all functions. In some cases, coordination at the territorial level can achieve economies of scale and may reduce duplication of effort. Transboundary issues may also require an overarching approach to CEAM.

The Steering Committee recognizes the need to avoid creating a new institution or layer of bureaucracy to oversee implementation of the CEAM Strategy and Framework. Coordination and leadership at the territorial level may, however, be the most effective and efficient way of delivering some functions relating to CEAM and ensuring that the CEAM Framework operates as an integrated system to the greatest extent possible. The Steering Committee is also convinced that there is a need to sustain momentum around CEAM and to ensure implementation of the CEAM Strategy and Framework over the long term (including periodic review and amendment as necessary).

### **4.9.2 Toolkit**

An initiative to establish a coordination mechanism for CEAM in the NWT could build on the experience of other cooperative and multi-stakeholder initiatives, notably the CEAM Steering Committee, the CIMP Working Group, the West Kitikmeot/Slave Study Society, the Mackenzie River Basin Board, and project-specific agencies (i.e., the Independent Environmental Monitoring Agency and the Environmental Monitoring Advisory Board).

### **4.9.3 Objectives and Short Term Recommendations**

#### **Medium and Long Term Objectives**

The Steering Committee's general objective for the coordination function over the medium to long term is the establishment of a CEAM Forum to bring together the key organizations involved in each of the components of the CEAM Framework.<sup>33</sup> The CEAM Forum would

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<sup>33</sup> The proposed CEAM Forum is not the same as the Responsible Authority under Part 6 of the MVRMA, although there may of course be some overlap in membership.

provide leadership and strategic direction regarding the implementation of the CEAM Strategy and Framework. It could facilitate formal linkages and informal communication among the various government departments, agencies and other organizations with responsibilities for different aspects of CEAM. It could also identify which CEAM functions would benefit from a coordinated or territory-wide approach and which can be accomplished most effectively at the regional level.

The Steering Committee believes that an effective coordination mechanism is essential for the implementation of the CEAM Strategy and Framework. The CEAM Forum could have the following characteristics:

- The nucleus of the CEAM Forum could be a 'board of boards', consisting of the Chairs of the principle co-management boards and representatives from agencies responsible for environmental and resource management in the NWT. Membership in the CEAM Forum could also be expanded to include other government departments and agencies, Aboriginal governments and organizations, environmental non-government organizations, industry associations and others with an interest in CEAM.
- An important initial task of the CEAM Forum would be to prepare terms of reference that clearly define the its objectives, roles and operating procedures. The CEAM Forum would also identify the principal areas where it could provide leadership and contribute to fostering improved communication and collaboration on matters relating to CEAM. It is recognized that an important principle is that the CEAM Forum must be accessible to the public.
- The CEAM Forum could convene an annual CEAM Summit to undertake a systematic review of the implementation of the CEAM Strategy and Framework, suggest changes that may be required, set specific objectives for the short, medium and long terms, and facilitate communication among the departments, agencies and organizations responsible for different components of the CEAM Framework.
- A multi-stakeholder advisory group and a secretariat could provide administrative and organizational support to the CEAM Forum. The CEAM Steering Committee and Secretariat could undertake this role, at least through the transitional period when the CEAM Forum is being established. Modifications to the membership of the CEAM Steering Committee may be appropriate if it undertakes this role over a longer term.

### **Short Term Recommendations**

The Steering Committee recognizes that further consultation is required before a final model for the CEAM Forum can be developed, approved and implemented. Since it believes that there is a need for immediate action to promote CEAM coordination, it is making two short term recommendations in this area.

**Recommendation #11 – The Ministers of Indian Affairs and Northern Development and the Environment should initiate discussions regarding the establishment of the CEAM Forum immediately and convene a meeting of**

**Board Chairs and other interested parties by December 2002 in order to explore specific options for CEAM coordination.**

**Recommendation #12 – The first CEAM Summit should be convened no later than the spring of 2003 in order to assess progress on implementing the CEAM Strategy and Framework and identify opportunities for action to improve CEAM in the NWT.**

## **4.10 Regional Plans of Action**

### **4.10.1 Need for Action**

The Steering Committee recognizes that the institutions and decision-making processes for many of the nine components of the CEAM Framework will differ among regions in the NWT, as will the working relationships among these components. It therefore sees a need for regional plans of action to customize the CEAM Framework in light of these regional differences and to develop implementation strategies that will deliver CEAM effectively within each region. In particular, regional plans of action are needed to identify regional gaps and priorities, establish who is responsible for addressing them, and set out time frames for action.

### **4.10.2 Toolkit**

The preparation of regional plans of action throughout the NWT can build on the policy work of the CEAM Steering Committee and the experience with developing a draft plan for the Slave Geological Province. Since regional plans of action are intended to strengthen linkages among the components of the CEAM Framework, they would build on the legal mandates and policy frameworks that guide the institutions and decision-making processes within each component. In some regions, the principles (e.g., integrated resource management) and the institutional arrangements created pursuant to land claim agreements and the plans, policies and procedures for land and resource management that have been established by regional institutions may provide most or all of the key components of a regional plan of action.

### **4.10.3 Objectives and Short Term Recommendations**

#### **Medium and Long Term Objective**

The Steering Committee's objective for the medium to long term is to see the completion and implementation of regional plans of action in all regions of the NWT where there is support for this type of initiative.

#### **Short Term Recommendations**

The Steering Committee is making four short term recommendations relating to regional plans of action. The first recommendation is intended to facilitate the development and implementation of regional plans of action throughout the NWT.

**Recommendation #13 – The Ministers of Indian and Northern Affairs and the Environment should complete, by March 2003, a discussion paper and a generic template to provide assistance and guidance in the preparation of regional plans of actions throughout the NWT.**

The Steering Committee suggests that the discussion paper and generic template should address, at a minimum, the role of regional plans of action in implementing the CEAM Strategy and Framework, the elements that could be included in these plans, and the processes that could be used for developing them.<sup>34</sup> The Steering Committee recognizes that any template should be flexible enough to accommodate differing circumstances among regions and that there is considerable value in ‘learning-by-doing’ when developing regional plans of action.

The Steering Committee’s second recommendation focuses on the Slave Geological Province, an area of the NWT where there has been considerable attention to CEAM as a result of ongoing resource development.

**Recommendation #14 – The Ministers of Indian Affairs and Northern Development and the Environment should provide the support and funding needed to complete the Slave Geological Province Regional Plan of Action by March 2003 and begin implementation of this plan.**

The Steering Committee is pleased to report that a significant amount of work on this regional plan of action has already been accomplished pursuant to the specific direction from the Ministers of Indian Affairs and Northern Development and the Environment when the CEAM Strategy and Framework was initiated. It also notes that the Slave Geological Province Regional Plan of Action is an important pilot project for the use of regional plans of action throughout the NWT. The Steering Committee recognizes, however, that extensive consultations are needed with organizations in both Nunavut and the NWT before the ‘working draft’ plan can be finalized.

The third recommendation is to focus efforts to develop regional plans of action on priority areas.

**Recommendation #15 – The Ministers of Indian Affairs and Northern Development and the Environment should support the completion on a priority basis of regional plans of action in areas of the NWT where development pressures are particularly acute, notably the Deh Cho Region and the Beaufort Sea-Mackenzie Delta area.**

The Steering Committee estimates that a realistic target date for the completion of regional plans of action in these regions is March 2004.

The Steering Committee’s fourth recommendation relating to regional plans of action is directed to the establishment of regional plans of action through the implementation of land and resource

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<sup>34</sup> The CEAM Secretariat’s discussion papers on regional plans of action address these issues and provide a solid basis for the development of this policy document.

management provisions in land claim agreements. The Steering Committee recognizes that the functions of regional plans of action in relation to CEAM may, in some regions, be largely or completely carried out through the plans and procedures for land and resource management that are established pursuant to land claim agreements. An evaluation of the implementation of land claim agreements is necessary to determine the extent to which they have been successful in establishing regional plans of action for CEAM. This type of evaluation should also identify the measures that are required to ensure that claims-based institutions and processes are able to develop the regional plans of action that are required for CEAM. The Steering Committee suggests that these issues be examined in relation to the implementation of the Gwich'in Comprehensive Land Claim Agreement.

**Recommendation #16 – The Minister of Indian Affairs and Northern Development, in partnership with the Gwich'in Tribal Council, should review the implementation of Chapter 24 of the Gwich'in Comprehensive Land Claim Agreement and, in particular, should evaluate the regional plan of action that is the result of the principles, institutional arrangements, plans, policies and procedures established pursuant to Chapter 24.**

#### **4.11 Traditional Knowledge**

##### **4.11.1 Need For Action**

The Steering Committee sees an important role for traditional knowledge (TK) throughout all components of the CEAM Framework. The vast base of knowledge and understanding that Aboriginal people possess can make a major contribution to decision making. Incorporation of traditional knowledge in CEAM is also an effective way of empowering Aboriginal people and showing respect for their values, culture and ways of life. As a practical matter, government policies increasingly require the inclusion of traditional knowledge in decision making and ignoring traditional knowledge may result in legal actions to oppose development projects.

##### **4.11.2 Toolkit**

Initiatives to support the use of traditional knowledge in CEAM can build on:

- the requirements for the inclusion of traditional knowledge in environmental and resource management activities that are found in settled and pending land claim and self-government agreements across the NWT, in the *Mackenzie Valley Resource Management Act*, and in recent revisions to the *Canadian Environmental Assessment Act*;
- existing policies and procedures related to the use of traditional knowledge (e.g., GNWT Traditional Knowledge Policy, Gwich'in Traditional Knowledge Policy, WKSS Guidelines for Traditional Knowledge Research);

- the three community research programs and the TK workshop supported by the CEAM Steering Committee;<sup>35</sup>
- experience with community and regional research and monitoring programs and institutions throughout the NWT;<sup>36</sup>
- experience with indirect program support for TK, such as harvesters' compensation programs, outpost programs, language centres and interpreter programs;
- recent Aboriginal involvement in environmental assessment and management of specific projects in the NWT, including work supported by the Interim Resource Management Assistance (IRMA) Program; and
- research, management, and co-management experience in other jurisdictions that is related to the use of TK in CEAM.

#### **4.11.3 Objectives and Short Term Recommendations**

##### **Medium and Long Term Objectives**

The Steering Committee recognizes that considerable effort will be required over the medium and long term to support the inclusion of TK in CEAM and to clarify the procedures and methods to be used when incorporating TK into decision making. The full and effective participation of Aboriginal people and their communities in decision making is perhaps the most important means of increasing the use of TK in environmental and resource management. The principal objectives for TK that the Steering Committee wishes to highlight are:

- the establishment of identified prerequisites for including TK in CEAM (e.g., Elders' Councils or other appropriate coordinating bodies);
- the development of a TK acquisition process that relies on both Elders and current harvesters as experts to manage and verify the collection and interpretation of TK through trained TK researchers and TK interpreters;
- long term education, training and capacity-building for Aboriginal and non-Aboriginal people, communities, and organizations to improve the collection, interpretation, and use of TK
- agreement on protocols and standards for the use of TK;

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<sup>35</sup> These reports are noted above in Section 2.2.

<sup>36</sup> A partial list includes the Dene Nation, Dene Cultural Institute, West Kitikmeot/Slave Study, the Arctic Borderlands Ecological Knowledge Cooperative, Northern Contaminants Program, NWT Protected Areas Strategy, Gwich'in Social and Cultural Institute, community land and environment committees, Gwich'in, Sahtu and Inuvialuit co-management institutions.

- long term research programs for the collection, transfer and understanding of 'baseline' TK (e.g., use of GIS, databases);
- policy and procedural guidance for the inclusion of TK in each of the components of the CEAM Framework (e.g., through the identification of points of entry at the community level for identifying TK holders and interpreters);
- mechanisms for improving accountability and transparency in the use of TK, including the use of Elders' Councils as TK 'filters' and the development of specific guidelines and protocols supported by policy or legislation; and
- the development of regional and territorial mechanisms, where appropriate, to support work at the community level (e.g., in developing formats for the transfer of information).

Support for TK is another area of the CEAM Blueprint where the Steering Committee sees considerable advantage in adopting an incremental and 'learning-by-doing' approach when moving towards medium term and long term objectives. However, it also sees an opportunity for initiatives in the short term to promote the use of TK in CEAM.

#### **Short Term Recommendation**

The Steering Committee is making one short term recommendation relating to TK.

**Recommendation #17 – The Ministers of Indian and Northern Affairs and the Environment, in consultation with appropriate Aboriginal governments, organizations and communities, should identify and fund a series of TK pilot projects, focusing particularly on the training of TK 'interpreters', the development of Elders' Councils as filters or screening mechanisms for TK, and the identification and listing of points of entry for TK in communities.**

The Steering Committee suggests that the development of a process to identify and fund these projects should be completed by March 2003

#### **4.12 Overview of the Blueprint**

The Blueprint for implementing the CEAM Strategy and Framework contains eleven elements for which the Steering Committee has identified the need for action, the toolkit, and the objectives for the medium and long term. The Steering Committee has also made seventeen recommendations for immediate action in relation to eight elements of the Blueprint. The Blueprint is presented as a call for action and as a clear set of directions for moving forward with CEAM in the NWT. The objectives and short term recommendations contained in the Blueprint are summarized below in Table 1.

**Table 1: Summary Table of Objectives and Short Term Recommendations**

Elements of the Blueprint	Medium and Long Term Objectives	Short Term Recommendations			
		Recommendation(s)	Lead Agency	Time Line(s)	Funding
Vision and Objectives (4.1)	<ul style="list-style-type: none"> <li>ongoing development and refinement of the vision and objectives for CEAM at the territorial, regional and community levels – notably through land claim and self government agreements, land use planning, and regional strategies</li> </ul>	None	N/A	N/A	N/A
Land Use Planning (4.2)	<ul style="list-style-type: none"> <li>establishment of land use planning processes throughout the NWT and the preparation, approval and implementation of plans that meet the needs of decision makers and others involved in CEAM;</li> <li>guidelines and template for land use plans;</li> <li>improved linkages with broader initiatives (e.g., PAS);</li> <li>mechanisms to involve government and to facilitate approval and implementation of plans;</li> <li>provision of information and planning tools;</li> <li>interim planning in regions with unsettled or overlapping land claims;</li> <li>provision of funding and expertise.</li> </ul>	1. Approval and implementation of the Gwich'in Land Use Plan; 2. Completion, approval and implementation of the Sahtu Land Use Plan; 3. Implementation of land use planning in the Deh Cho Region pursuant to the Deh Cho Interim Measures and Framework Agreements; 4. Exploration of options for comprehensive land-use planning in the Dogrib Settlement Area;	DIAND	2002-2004	To be determined

<b>Elements of the Blueprint</b>	<b>Medium and Long Term Objectives</b>	<b>Short Term Recommendations</b>			
		<b>Recommendation(s)</b>	<b>Lead Agency</b>	<b>Time Line(s)</b>	<b>Funding</b>
Baseline Studies and Monitoring (4.3)	<ul style="list-style-type: none"> <li>• implementation of baseline studies and monitoring programs to support decision makers involved in CEAM throughout the NWT.</li> </ul>	5. Adopt a policy framework and establish a coordination mechanism for the Cumulative Impact Monitoring Program (CIMP);	DIAND	2002-2003	To be determined
Research (4.4)	<ul style="list-style-type: none"> <li>• mechanisms to define and deliver a coordinated and applied research program to support decision making relating to CEAM;</li> <li>• identify and confirm CEAM research priorities;</li> <li>• identify study questions and baseline knowledge for research;</li> <li>• establish program of scientific and traditional knowledge studies;</li> <li>• implementation strategy for research products.</li> </ul>	6. Identify and fund priority research initiatives, (e.g., relating to thresholds, carrying capacity, and limits of acceptable change);	DIAND, EC, DFO, RWED	Starting in 2002-2003	To be determined.
Audit and Reporting (4.5)	<ul style="list-style-type: none"> <li>• establish a fully functioning audit and reporting process for CEAM in the NWT.</li> </ul>	7. Adopt a policy framework, establish terms of reference and appoint the auditor for the first audit under MVRMA Part 6; 8. Review the implementation of the MVRMA as part of the first audit; 9. Explore options for extending the audit framework and terms of reference to the ISR;	DIAND	December 31, 2002	To be determined.

Elements of the Blueprint	Medium and Long Term Objectives	Short Term Recommendations			
		Recommendation(s)	Lead Agency	Time Line(s)	Funding
Project-Specific Screening, Environmental Assessment and Review (4.6)	<ul style="list-style-type: none"> <li>• guidance to project proponents and other interested parties regarding cumulative effects assessment in project review processes</li> <li>• increased capacity of agencies responsible for project-specific processes to contribute to cumulative effects management through their decision reports (e.g., terms and conditions for project approval)</li> <li>• improved linkages between project review processes and other components of the CEAM Framework</li> </ul>	None	N/A	N/A	N/A
Regulation and Enforcement (4.7)	<ul style="list-style-type: none"> <li>• enhanced capacity of regulators to address cumulative effects</li> <li>• development of procedures and tools for cumulative effects management (e.g., terms and conditions, monitoring requirements)</li> </ul>	None	N/A	N/A	N/A
Information Management (4.8)	<ul style="list-style-type: none"> <li>• establish components for cumulative impact monitoring and for information relating to project applications (e.g., Nunavut PLANNER)</li> <li>• terms of reference</li> <li>• mechanism to identify data and information needs</li> <li>• protocols for data and metadata, and confidentiality (commercially sensitive information and intellectual property)</li> <li>• principles and guidelines for incorporating traditional knowledge</li> <li>• links with cumulative impact monitoring and auditing functions of the CEAM Framework</li> <li>• data sharing agreement</li> <li>• needs assessment (technical expertise, hardware, software)</li> <li>• identification and cataloguing of existing baseline and monitoring data, and other information relevant to CEAM</li> <li>• communication and information dissemination strategy</li> </ul>	10. Identification of strategy and short term steps to begin development and implementation of a coordinated information management system;	DIAND, EC	March 2003	To be determined

Elements of the Blueprint	Medium and Long Term Objectives	Short Term Recommendations			
		Recommendation(s)	Lead Agency	Time Line(s)	Funding
Coordination (4.9)	<ul style="list-style-type: none"> <li>• effective leadership and coordination for implementation of the CEAM Strategy and Framework</li> <li>• establish a CEAM Forum for the NWT;</li> <li>• identify participating organizations (e.g., 'board of boards' and others);</li> <li>• prepare terms of reference;</li> <li>• convene annual CEAM Summits;</li> <li>• administrative and organizational support</li> </ul>	11. Initiate discussions regarding the establishment of a CEAM Forum; 12. Convene the first CEAM Summit;	DIAND, EC	2002-2003	To be determined
Regional Plans of Action (4.10)	<ul style="list-style-type: none"> <li>• completion and implementation of regional plans of action throughout the NWT</li> </ul>	13. Prepare a discussion paper and a generic template for regional plans of action; 14. Complete and implement the Slave Geological Province Regional Plan of Action; 15. Complete regional plans of action in priority areas (Deh Cho Region and Beaufort Sea-Mackenzie Delta area); 16. Evaluate the implementation of Chapter 24 of the Gwich'in Comprehensive Land Claim Agreement as a regional plan of action;	DIAND, EC	2002-2004	To be determined

Elements of the Blueprint	Medium and Long Term Objectives	Short Term Recommendations			
		Recommendation(s)	Lead Agency	Time Line(s)	Funding
Traditional Knowledge (4.11)	<ul style="list-style-type: none"> <li>the establishment of identified prerequisites for including TK in CEAM (e.g., Elders' Councils or other appropriate coordinating bodies);</li> <li>TK acquisition process involving Elders' Councils and other appropriate coordinating bodies;</li> <li>long term education, training, capacity-building for Aboriginal and non-Aboriginal people, communities, and organizations;</li> <li>long term research programs;</li> <li>policy and procedural guidance for the inclusion of TK in each of the components of the Framework;</li> <li>mechanisms for improving accountability and transparency; and</li> <li>development of regional and territorial mechanisms, where appropriate, to support work at the community level.</li> </ul>	17. Pilot projects in areas such as the training of TK 'interpreters', development of Elders' Councils as filters and screening mechanisms for TK, and the identification and listing of points of entry for TK in communities;	DIAND, EC	Starting in 2002-2003	To be determined.

## **5. Risks of Not Proceeding with the Implementation of the CEAM Blueprint**

The Steering Committee wishes to underline the significant risks of a failure to implement the CEAM Blueprint that it is proposing. As the NWT's resource base becomes increasingly well delineated, new opportunities and pressures for development will continue to emerge. Responsibility for managing this development in the interests of NWT residents and other Canadians lies with a multitude of rapidly evolving institutions and decision-making processes. The maturing of this regulatory regime involves the development of expertise, the clarification of mandates, and the building of partnerships – all issues that have been examined by the Steering Committee over the past two years. If these institutions are unable to address the challenges of CEAM, potentially undesirable social, economic, cultural and environmental changes may occur in the NWT. Furthermore, failure to fully implement an effective framework for CEAM will increase the risk that future proposals for resource development in the NWT will result in conflict, protracted project review and regulatory processes, and litigation. Cumulative effects have already emerged as a source of legal and regulatory uncertainty for major projects in the NWT and other jurisdictions in Canada.

The Steering Committee believes that the CEAM Blueprint will help to ensure that issues relating to the cumulative effects of development can be anticipated and properly addressed in the NWT. If this Blueprint is not implemented, NWT residents may find themselves unable to exercise meaningful control over important aspects of the resource development and related activities that will shape the future for their children and grandchildren. In addition to the potential environmental implications, there may be lost opportunities for sustainable economic development and for community capacity-building.

## **6. Conclusion**

The CEAM Steering Committee has addressed a complex and critically important set of issues since the release of its initial work plan in April, 2000. Through the development of the CEAM Strategy and Framework and the detailed investigation of how it can be implemented across the NWT and in its regions, the Steering Committee has identified a number of priority issues for CEAM and proposed a set of specific actions to address these issues. The objectives and recommendations outlined above constitute a comprehensive Blueprint to establish an integrated approach to CEAM at the territory-wide and regional levels in the NWT. The Steering Committee strongly urges the Ministers of Indian Affairs and Northern Development and the Environment, along with all other interested parties, to take immediate action to implement this Blueprint.

## **Appendix 1: NWT CEAM Steering Committee (as of March 7, 2002)**

### **CEAM SC MEMBERS<sup>37</sup>**

1.	Gwich'in Tribal Council	Alex Benitah
2.	Inuvialuit Settlement Region Inuvialuit Game Council	Richard Binder
3.	North Slave Metis Alliance	Bob Turner
4.	South Slave Metis Tribal Council	Danny Beck
5.	Akaiicho Territory Government	Maurice Boucher
6.	Dogrib Treaty 11 Council	Johnny Weyallon for Violet Camsell-Blondin
7.	Deh Cho First Nations	No representative currently named
8.	Environmental Non-Governmental Organizations Canadian Arctic Resources Committee	Kevin O'Reilly
9.	Mining Industry (NWT and Nunavut Chamber of Mines) BHP Diamonds Inc.	Derek Chubb
10.	Oil and Gas Industry Canadian Association of Petroleum Producers	Shira Mulloy
11.	Government of the Northwest Territories Resources, Wildlife and Economic Development	To be announced
13.	Government of the Northwest Territories Resources, Wildlife and Economic Development	Steven Matthews
14.	Canada Department of Indian Affairs and Northern Development	David Livingstone
15.	Canada Environment Canada	Laura Johnston

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<sup>37</sup> The Sahtu Secretariat Inc. (SSI) advised the CEAM Secretariat January 30, 2001 that it will not be participating in CEAM SC meetings until further notice. SSI continues to receive copies of all SC materials.

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| 16. | Mackenzie Valley Environmental Impact Review Board | Louie Azzolini for<br>Vern Christensen |
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**CEAM SC OBSERVERS (3)**

- |    |   |                |
|----|---|----------------|
| 1. | Government of Nunavut<br>Department of Sustainable Development            | Paul Partridge |
| 2. | Kitikmeot Inuit Association<br>Kitikmeot Hunters and Trappers Association | Philip Kadlun  |
| 3. | Kivalliq Inuit Association  | Luis Manzo     |

**REGULAR ALTERNATES (3)<sup>38</sup>**

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|----|--|-------------------|
| 1. | MINING ALTERNATE:<br>Diavik Diamond Mines Inc.   | Brenda Kuzyk      |
| 2. | OIL AND GAS ALTERNATE:<br>TransCanada Pipelines Ltd.<br>for Canadian Energy Pipeline Association | Karen Etherington |
| 3. | ENGO ALTERNATE:<br>Canadian Parks and Wilderness Society   | Shelly Johnson    |

**SUPPORT:**

**CEAM SC FACILITATOR:**

- |    |  |                 |
|----|--|-----------------|
| 1. | Terriplan Consultants                          | Andy Swiderski  |
| 2. | IER Planning, Research and Management Services | Vicki McCulloch |

**SECRETARIAT:**

- |    |                    |                   |
|----|--------------------|-------------------|
| 3. | DIAND              | Lorraine Seale    |
| 4. | DIAND              | Katherine Silcock |
| 5. | DIAND              | Meredith Seabrook |
| 6. | Environment Canada | Paula Pacholek    |

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<sup>38</sup> All CEAM SC member and observer organizations are free to name alternate representatives. Those listed here are alternates who regularly attend SC meetings.