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WEST KITIKMEOT / SLAVE STUDY SOCIETY

Priorities for Cumulative Effects Research and Monitoring in the Slave Geological Province

The following tables explain the factors/criteria that can be used to set priorities for WKSS over the interim period (Table 1), and the themes/questions that WKSS may pursue for research and monitoring activities (Table 2). The tables are based on earlier work conducted by WKSS in 2001-2002, updated to reflect discussions at the Strategic Planning Workshop on October 27 and 28, 2004, and a WKSS Board meeting December 9, 2004.

Table 1: Themes, Criteria and Factors for Prioritization of Research and Monitoring Activities

Theme	Factors/Criteria
Value to Management and Decision Making	• Responding to multiple identified management and decision-making needs
Priority Needs and Gaps	• Responds to identified questions/priorities • Focus on location of activities contributing to CE • CE 'hotspot'-oriented
Sensitive Indicators of Change	• Valued Ecosystem Components (VECs) • Vulnerable species/those sensitive to disturbance • Provides capacity for the identification of the resilience and carrying capacity of populations, and for the establishment of thresholds.
Ecosystem-Based/ Regional Approach	• Focus on relationships and links between species and habitat • Interdisciplinary • Long-term view / account for natural variability • Contribution to understanding function of complex systems • Geographical scope based on natural boundaries (e.g., watersheds, range) • Transboundary
Social, Cultural, Economic Dimensions	• Contributes to understanding the social, cultural and economic changes occurring in the region
Traditional Knowledge/ Inuit Qaujimajatuqangit	• To identify means to ensure that TK and IQ holders are effectively involved in decision-making, and that their knowledge is integrated into the process of making decisions • Reporting / recording local and traditional knowledge • Continuous observation, not periodic
Community-based	• Practical value / relevant for communities • Community involvement – design, implement, report
Coordination and Collaboration	• Links to other initiatives (e.g., NWT CIMP, NGMP, Bathurst Caribou management planning, SGP Regional Plan of Action) • Developing partnerships • Bringing different perspectives together (e.g., science and TK)
Quantitative, Analytical	• Predictive orientation, testable monitoring components • Support use of analytical and predictive tools / models (e.g., ALCES)
Operational / Methodological Considerations	• Realistic, in terms of financial and human resources, and what can in fact be achieved • Cost-effective (priorities, avoid duplication) • Methodologically rigorous (science and TK) • Peer-reviewed • Ensure that the information collected is shared and used effectively

Source: Discussions at the October 27 & 28, 2004 Strategic Planning Session; Synthesis Paper, February 2002; Technical Workshop Summary Report November 2001

Table 2: Priority Research and Monitoring Themes and Example Questions

Type of Project	Theme	Example Questions
Fieldwork and Research	**Caribou**[1]	• Are there investigations to be done that will contribute to the ongoing development of caribou protection? • What are the effects of mining and related development on the behaviour, health and population of the Bathurst Caribou Herd? • In relation to calving and post-calving behaviour and needs of caribou, are there critical areas and/or habitat that that can be identified? • What is natural variability in caribou distribution, abundance and behaviour?
	Carnivores	• What does tracking or indexing of populations indicate about large carnivore response to development? • How can carnivore-human interactions (+ associated wildlife mortality) be reduced? • What are the effects of new roads and increased road traffic on the behaviour and movements of carnivore species?
Mapping Project	**Human Land Use (Non-Industrial)**	• What are the human uses of the land, and where are particularly important or sensitive areas located?
	Conservation Planning	• What are the significant habitat/critical areas/biodiversity 'hotspots' in the SGP? • What are the areas of the SGP most likely to experience cumulative effects from development? • Complete regional vegetation classification information for the entire study area • How can habitat affected by human activity be effectively remediated?
	Watershed Mapping	• Complete detailed watershed mapping (primary, secondary, tertiary) for the entire study area
Research Paper/ Issue Identification	**Transportation/ Access**	• What are the effects of increasing transportation/access in the study area (e.g., existing and new all-season and winter roads, marine and air transport, on-site industrial transportation infrastructure)?
	Social, Cultural, Economic	• What is the current state of knowledge with respect to social, cultural and economic indicators, thresholds and limits of acceptable change in the study area? • What are the institutional or political challenges to examination of the social and cultural effects of development, and the application of the information that is available? What are the opportunities available to do so? • What are the cumulative social, cultural and economic effects (negative/positive) of development in the study area on families and communities? • What are the impacts of a two-week-in, two-week-out work schedule on families and communities?
	Thresholds and Carrying Capacity	• What is the current state of knowledge with respect to the concepts of resilience, carrying capacity, thresholds and limits of acceptable change, and how can this knowledge be applied in the study area? • How can water quality data be standardized and tracked (information management) to detect changes? When do changes become significant or unacceptable? Do we know enough about "end use" to decide this?

[1] The Bathurst Caribou Management Planning Committee and Nunavut Wildlife Management Board will be consulted to identify/confirm the priority research and monitoring questions for caribou in the region.

Table 2: Priority Research and Monitoring Themes and Example Questions

Type of Project	Theme	Example Questions
	Traditional Knowledge and Inuit Qaujimajatuqangit	• How do we ensure that traditional knowledge and IQ holders are at the decision- making table, and that TK and IQ are considered fully? What opportunities exist to make this happen? • How do we design and implement a comprehensive monitoring program that fully considers traditional knowledge, IQ, and western science?

Source: Discussions at the October 27 & 28, 2004 Strategic Planning Session; Synthesis Paper, February 2002; Technical Workshop Summary Report November 2001