



Decision-Makers' Priorities

Analysis of Survey Responses
Marc Lange
AANDC




Context

- CIMP goal to foster collection, analysis, and reporting of information to support resource management decision-making
- Over 220 projects funded since 1999
 - Yet decision-makers report not using these
- CIMP 5-Year Strategic plan
- Increase relevance of monitoring
 - align monitoring questions to the most pressing issues facing decision-makers
- What are priorities for decision-makers?




Needs Assessment

- Identify decision-makers' priorities on monitoring
- Analyze all priorities & validate findings at a workshop
- Identify gaps
- Produce a NWT-specific monitoring needs assessment report
- Repeat frequently (every 1-2 yrs)
- Goal:
 - Focus CIMP projects & funding on identified priorities



Needs Assessment - Methods

- Interview 'decision-makers'
 - Representative aboriginal organizations in NWT
 - Boards (land & water, land-use, wildlife/resource, national energy)
 - Governments (Aboriginal, Territorial, Federal)
 - Representative industry organizations
- Three questions related to environmental management
 1. What information gaps hinder decision-making?
 - Why? Urgency? Where?
 2. Which of these information gaps are you working on?
 3. Which of these information gaps are about cumulative effects?
 - Which valued component?



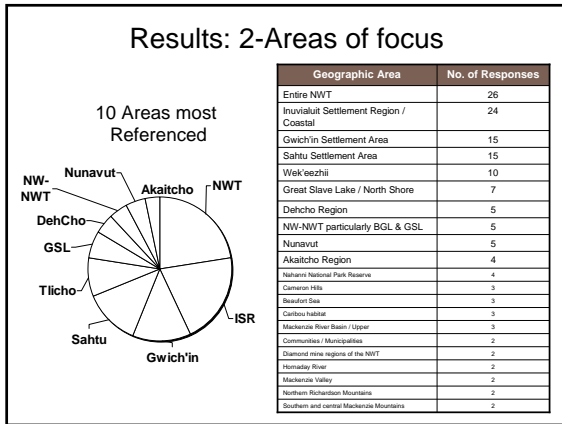
Interview Results

- Questionnaires sent to 33 decision-makers
- 21 responses at time of analysis
 - Aboriginal: 5/6
 - Boards: 11/16
 - Government: 5/9
 - Industry: 0/2
 - High quality, thorough, and thoughtful responses
- Areas of data summary
 1. Valued components (cited & urgent)
 2. Priority geographic areas (biased by location of respondents)
 3. Question/gaps themes
 4. Type of decision affected by gaps
 5. Reason for Priority

Results: 1-Valued Component & Urgency

VC / Issue	Times Referenced	Rating (%)		
		High	Medium	Low
Water & Sediment Quality	47	26	67	7
Fish Habitat, Pop., Harvst.	38	35	59	5
Caribou	35	45	45	9
Water Quantity	30	32	66	
Fish Quality	27	22	78	
Land Mammals	24	33	46	21
Vegetation	21	48	33	19
Human Health & Wellness	19	42	53	5
Climate and Climate Change	17	31	56	13
Snow, Ground Ice, Permafrost	10	30	50	20
Moose	6	50	50	
Air Quality	6	50	33	17
Birds (and and marine)	5		80	20
Marine Life	2		100	
Other Issues				
Other wildlife	11	45	36	18
Species at Risk	3	100		
Contaminated sites	1		No rating	
Hunting/trapping activities	1	100		
Culturally significant areas	1	100		
Insects	1	100		
Job creation	1	100		

- Unique times VC mentioned
- Urgency, address within:
 - High (<1 yrs)
 - Med (<5 yrs)
 - Low (<10 yrs)
- Top 10 most referenced VCs not necessarily the most urgent



Results: 3-Information Gaps

- 3.1 Baseline Information
- 3.2 Thresholds
- 3.3 Impacts of Development
- 3.4 Methods & Approaches to Assessment
- 3.5 Climate Change
- 3.6 Community Well-being
- 3.7 Geospatial Information

Results: 4-Decisions Affected

- Regulatory Decision-making
 - Environmental assessment
 - Permitting, licensing
- Planning
 - Land-use, climate change adaptation planning
- Implementation
 - Wildlife & fisheries management plans
- Other
 - Country food advisories
 - Transboundary water negotiations

Results: 5-Reason for Priority

- Regulatory requirement
- Community concern & capacity
- Environmental change
- Economic development
- Insufficient information
- 90% believe questions/gaps could be addressed by CE monitoring/assessment
 - Options: yes, no, maybe, don't know

Summary


- Many priorities identified
 - Select a few every 5 yrs w/ annual review
- Some themes in monitoring, regulation, administration, & planning ESF
- Validate results & analysis at workshop
- Needs assessment report
- Align CIMP call for proposal with top priorities

Environmental Stewardship Framework

Results: Themes



3.1 Baseline Information

- Population status / distribution:** caribou, grizzly bear, black bear, polar bear, wolverine, fish (including Dolly Varden), marine mammals, birds, moose, beaver, muskrat, Dall's sheep
- Presence/absence:** sensitive fish species
- General biological information:** Boreal Woodland caribou, black bears, species at risk (wolverine and grizzly bear)
- Water quality and quantity**
- Contaminated sites**
- Environmental contaminants** (air, water, land)
- Fish ecology, ecosystem interactions and total sustainable yield**
- Habitat conditions** (caribou)
- Critical habitat areas** (fish)
- Caribou herd status,** including body condition and health, sex ratios, recruitment, population size
- Musk-ox status,** including population trend, reproductive rates, range, interactions with other species, disease and parasite loads
- Impacts of predation**
- Range of natural variation** for: mercury levels in fish in northern lakes; water quality, quantity and aquatic life close to current or future developments
- Rate of change in landscape conditions** and environmental drivers over time



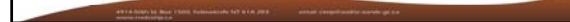

Results: Themes
3.2 Thresholds

- Thresholds for **harvest** (caribou)
- **Disturbance** thresholds for species at risk / fish; linear disturbance thresholds
- **Noise** thresholds
- Population thresholds to **sustain populations** (Bluenose West Caribou; Peary Caribou)



Results: Themes
3.3 Impacts of Development

- Impacts of development on specific VCs:
 - *Types of development:* micro hydro projects; energy development and associated infrastructure, such as roads and transmission lines; etc
- Impacts of development on watersheds
- Effects of contaminants on wildlife/fish
- Impacts of wildlife harvests (e.g., black bears, wolverine, grizzly bear)
- Identification and implementation of best practices (e.g., for flaring and venting of oil and gas)
- Impacts of noise
- Rate of recovery from linear disturbance
- Impacts of activities that are below the threshold for requiring a land-use permit or water license
- Benefits of a project to a region



Results: Themes
3.4 Methods / Assessment Approach

- Methods employed to assess cumulative effects
- Methodologies to determine water use thresholds and monitor changes in quality/quantity over time
- Long-term scenarios of future developments
- Development of indicators (caribou habitat; bear habitat; wolverine; musk ox; fish)
- Fire risk analysis
- Community-based monitoring
- Integration of local/traditional ecological knowledge
- Development of a risk assessment tool (for fish populations)



Results: Themes
3.5 Climate Change

- Environmental changes due to climate change (e.g., to the hydrologic cycle and water quality); impacts of climate change on wildlife/fish
- Climate projections / tools
- Climate change impacts on culture and community well-being
- Climate change impacts on the closure of mines

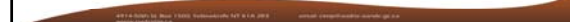
Results: Themes
3.6 Community Well-being

- Impact of language loss/recovery (Michif language)
- Impact of the *Indian Act* on the sustainability of the Métis community
- Impact of emergency caribou management actions on North Slave Métis population, culture socioeconomic status and community wellness
- Effect of Tlicho and Akaitcho claims on Métis perceptions
- Impact of lifestyle changes (diet and employment) to community well-being





Results: Themes
3.7 Geospatial Information

- Geospatial information on critical habitats
- Spatial database of all development (footprint)



Appendix C




NWT CIMP
Northwest Territories Cumulative Impacts Monitoring Program

Canada

- What are the main emergent cumulative impacts?
 - Impact source? Area? Question? VC? What cumulative effects?
- Answer with your organization's hat on
- Choose only ONE

© 2014 Crown In Right of Canada, Northwest Territories & Yukon. All rights reserved. www.nwtcimpro.com



NWT CIMP
Northwest Territories Cumulative Impacts Monitoring Program

Canada

- Now we will go through what everyone said and pick the top 5 priorities
- Do this part with your hat off...

© 2014 Crown In Right of Canada, Northwest Territories & Yukon. All rights reserved. www.nwtcimpro.com