

Canadian Climate Change Impacts and Adaptation Assessment

Northern Regions Chapter

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National Assessment Outline

Synthesis Report

- A concise overview of what climate change means for Canada. The report will highlight key findings, and discuss commonalities and differences among the regions. It will serve as both an executive summary and a value-added synthesis of the entire Assessment.

Main Report

Section 1: Introduction/Overview

- An introduction to the Assessment, emphasizing its goals and purposes, as well as the importance of understanding vulnerability.

Section 2: Climate and Climate Change in Canada

- An overview of the importance of climate and climate change to Canada, with discussion of climatic, social and economic trends that affect exposure to climate. Will also outline future projections for Canada.

Assessment Outline (cont'd)

Section 3: Regional Chapters

- The main content of the Assessment, these chapters will focus on current regional sensitivities and future vulnerabilities to climate and climate change. Case studies will be an important component of these chapters.

The regional chapters are:

- Atlantic Canada
- Quebec
- Ontario
- Prairies
- British Columbia
- **The North (*Territorial North)**

Assessment Outline (cont'd)

Section 4: Canada in an International Context

- A broader perspective on climate change impacts and adaptation, which discusses climate change impacts and adaptation with respect to continental effects, oceans, global issues, and Canada's international obligations.

Section 5: Addressing Climate Change at the Local Level

- An examination of climate change impacts and adaptation at the smaller scale- the local level, where adaptation actions often take place. Potential themes include community health, infrastructure, planning, and water resources.

Section 6: Impacts and Adaptation Research- Capacity, Tools and Moving Forward

- An examination of the present state of impacts and adaptation research in Canada, future directions and needs, and moving research to action.

Northern Regions Chapter Outline

1. Introduction

- Region, population, current conditions in climate, demographics and socio-economy

2. Current and future conditions

Climate change assessment data

- Analysis of best models for Canadian Arctic
- Ensemble run and projections for the North

Socio-economic conditions and trends

- To include information on sector specific conditions

Northern Regions Chapter (cont'd)

3. Implications of climate change for the Arctic environment

- Vegetation, Water, Permafrost, Lake and Sea Ice etc



Northern Regions Chapter (cont'd)

4. Implications and Adaptation for Arctic Sectors

**Each sector to address:*

- A. Current status and sector vulnerabilities*
- B. Projected changes and changes in relation to climate*
- C. Sensitivity, Adaptive Capacity, Options for adaptation*

- Hydroelectric development
- Oil and Gas
- Mining
- Shipping and Transport
- Forestry
- Fisheries



Northern Regions Chapter (cont'd)

4. Implications and Adaptation for Arctic Sectors (cont'd)

- Wildlife
- Tourism
- Health
- Regional Centres
- Small Communities in the North –
Indigenous Cultures and Livelihoods

Perspectives from Inuit Communities

Perspectives from Dene Communities

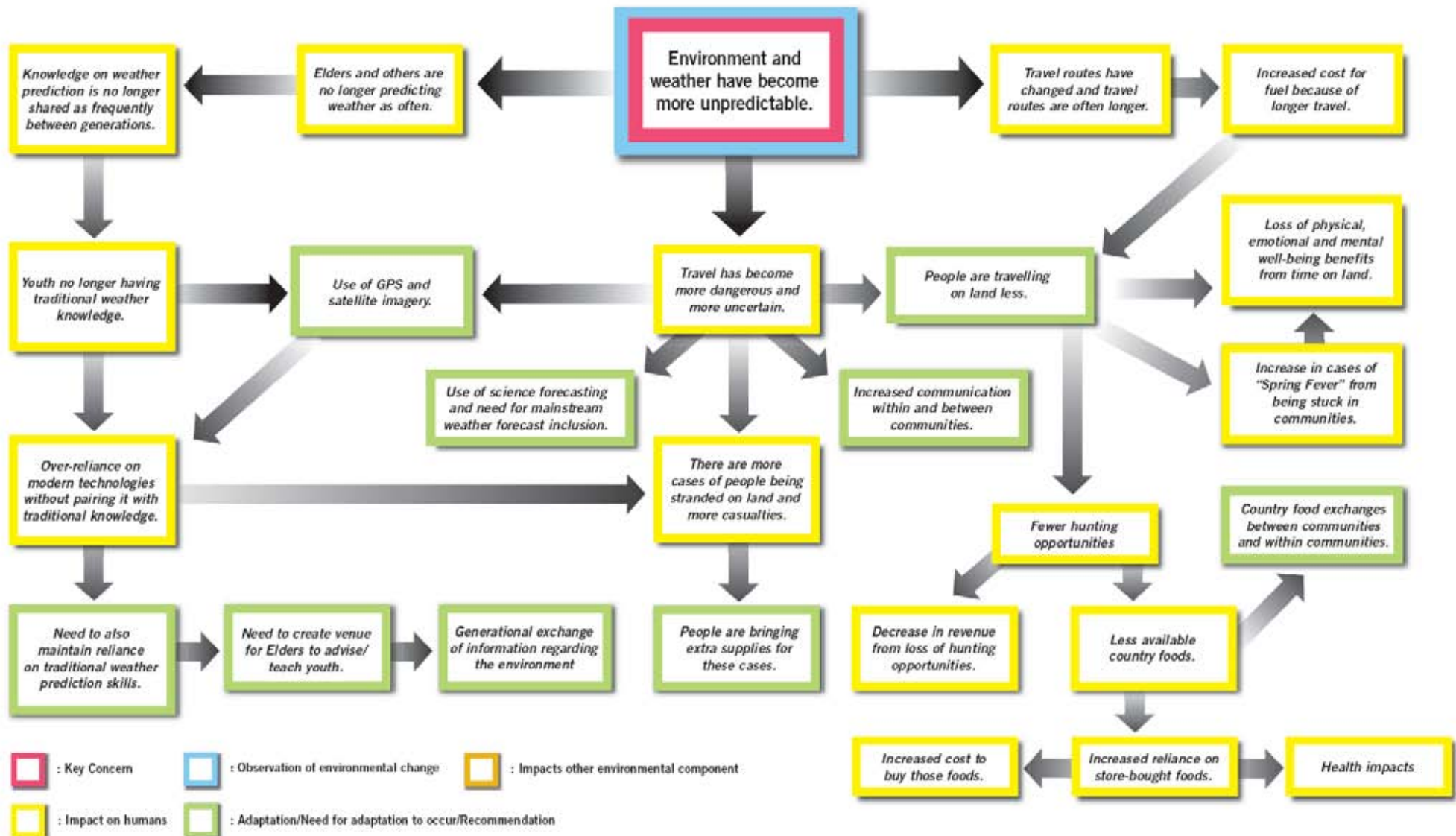
Perspectives from Council of Yukon First Nation
Communities



Northern Regions Chapter (cont'd)

Local Observations / Knowledge

OBSERVATION, IMPACT & ADAPTATION DIAGRAM FOR ALL REGIONS - UNPREDICTABLE WEATHER



Northern Regions Chapter (cont'd)

5. Conclusions

- Key vulnerabilities
- Implications for northern adaptive capacity
- Key gaps and needs for research and action

Chapter Group

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TBC

TBC

TBC

LA and Water resources

LA and Health

Oil and gas, mining, hydroelectricity

Fisheries

Marine and Terrestrial Wildlife

Forestry

Climate models

Infrastructure and engineering

Hunting, harvesting, adapt cap/vuln.

Small communities, Inuit perspectives

Yukon First Nations perspectives

Dene perspectives

Economies (tbc)

Shipping and Transport

Transportation – ice roads, land and air

Timeline

- | | |
|-------------------------------|------------------------|
| ■ First Drafting | Ongoing |
| ■ LAs meeting | Dec 12-13, Calgary |
| ■ Northern Chapter meeting | End of Jan |
| ■ Nrthrn Stakeholder Rndtbles | Jan-Feb 2006 |
| ■ Submission of Draft | March 31 st |
| ■ External review | Summer 2006 |
| ■ Respond to reviews | Sept-Oct 2006 |
| ■ Final version | Dec 2006 |
| ■ Release | Spring 2007 |

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<http://www.adaptation.nrcan.gc.ca/> follow links to *National Assessment*