A Shared Responsibility:
Community Perspectives
on Integrating Climate Change Considerations
into Municipal Planning and Decision-making in
Newfoundland and Labrador

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Who is affected?
Who is responsible?
For anticipating and planning ahead? For responding?
A Shared Responsibility

• National Climate Change Adaptation Program/Regional Adaptation Collaborative Project (RAC)

• Atlantic Climate Adaptation Solutions Assoc. (ACASA)
Community Adaptation to Climate Change

PHASE 1 (2005 – 07)
Assess current and future vulnerabilities of rural communities

PHASE 2 (2007 - 09)
Evaluate capacity of rural communities to adapt to uncertain futures

Living with Uncertainty in Rural Canada

Brklacich et al 2010
Community Vulnerability Assessment and Adaptation Planning Workbook Pilot Project

Aims:

• Raise awareness
• Identify important climate and weather-related issues
• Support municipal decision-making
  ➢ Create workbook and information resources to help inform decision making
  ➢ Assessment of implications and adaptation options

Slope movement, Frenchmans Cove, Corner Brook, Stephenville
Key climate-related issues in NL

1. Flooding
2. Slope movement
3. Coastal vulnerability
4. Drinking water
5. Winter issues
6. Wildfire
Municipal Impacts

- Damage to infrastructure
- Required changes to infrastructure and equipment design and operation
- Water supply (quantity, quality, infrastructure)
- Emergency response capabilities
- Impacts on local industry, citizens and ecosystems - *threats + opportunities*
Key Challenges and Implications
1) Climate as one of multiple drivers of change

(Global Environmental Change)

- Change in type, frequency, magnitude, etc.

- Capacity to cope with & adapt to GEC

- Comprehensive Vulnerability/Security

- Societal Change (change in institutions, resource accessibility, economic conditions, etc.)

- GEC Exposure

(Brklacich and Bohle 2005)
Implications

- Need for holistic and integrated assessment
- Recognize adaptive capacities that do exist – strengths and opportunities along with multiple intersecting challenges

‘When considering how climate change can affect the future of the community the main concern is for the sustainability of the community rather than a concern for the impacts of climate change itself.’

Change Islands community leader
2) Municipal Capacity Constraints

• 744 settlements: 276 municipalities and ICGs - 50%+ under 500 residents, 40% of small towns without full-time staff

Planning:
• Less than ten with in-house planning staff;
• 14% have sustainability plans, 15% economic, 30% recent land use plan, 45% capital works plans, 42% EPPs

(2007 Municipal Census)
Municipal Capacity Constraints

Infrastructure deficit:

• 19% with water system less than 20 years old
• 24% have operations and preventative maintenance plans

Credit: Norm Catto

(2007 Municipal Census)
• Climate change considered low priority
• Formal risk management unfamiliar:
  – financial constraints,
  – attitudes/low awareness, and
  – nature of municipal politics

(FCM 2002)

Concern: weak local government planning and response capabilities

www.fcm.ca/home/issues/environment/climate-change-adaptation.htm
Implications

• Importance of ongoing awareness raising

• Need to integrate climate change considerations into existing processes
  – Infrastructure investment
  – Emergency planning
  – Economic development
  – ICSPs
  – Development planning and permits
3) Information gaps and mismatch

**Terminology:** change vs. variation, climate vs. weather, adaptation vs. mitigation, growing degree days
Newfoundland climate information

- Limited # of weather stations
- CC scenarios typically of limited application at community level
- Investments required for further risk mapping and analysis

= gaps, requirement for specific knowledge and interpretation

Source: J. Finnis
Implications

• Need for region-specific data and scenarios
• Need for partnerships in data generation, support services and appropriate tools to assist with information access and interpretation

Source: Govt of NL
Appropriate Tools

• Relevant, accessible

• Context appropriate case studies
  – examples of bad, incremental, and “best” practices

• Simple tools, e.g. checklists, yes/no questions

• Lists of contacts for assistance

• Sources of local information

• Varying human resources, literacy and access to technology taken into account
4) Engagement and collaboration

- Logistics and costs, differing objectives, circumstances and abilities to participate BUT

- Active community participation enhances adaptation capacities

- Issues are cross-jurisdictional - important role for policy, regulation, training and scientific and technical support

Photo credit: Kimberly Bittermann
Implications

- Need for continued awareness-raising, collaboration in monitoring and information generation and knowledge sharing
- Recognition of the value and challenges of local input and action
- Toolkit + : training, incentives and requirements, “hands-on” support and facilitation
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Thank You!

Comments? Questions?

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