



The Climate Change Impacts and Adaptation Division: Facilitating Coordinated, Targeted and Sustained Adaptation



Brian Horton

Climate Change Impacts
and Adaptation Division

9 February 2011



Natural Resources
Canada

Ressources naturelles
Canada

Canada

Tools for Adaptation: ensuring that tools used in decision-making are suitable for use in a changing climate



- Work with national organizations
- Assess current tools, amend if required, create new tools where gaps exist, pilot, disseminate, and train
- Work with engineers and planners to increase their readiness to address adaptation in their daily work

Members of national organizations develop, test and refine tools before they are disseminated



- ICLEI
 - Adaptation Guidebook for Communities
<<http://www.iclei.org/index.php?id=11710>>
- Canadian Institute of Planners
 - Tools/training for planners
- Canadian Standards Association
 - Standardised Risk Management Guidance
- Engineers Canada
 - Engineering Protocol and modules, for engineers and infrastructure owners assessing risks from changing climate
- Climate Change Central
 - Guidance on Economics of Impacts and Adaptation
- Insurance Bureau of Canada
 - Storm water and sanitary sewer vulnerability tool
- Marsh
 - Climate Change Preparedness in Toronto
- Bruce/Egener
 - Regional summaries of climate change information

Regional Adaptation Collaboratives: catalyzing coordinated, sustained planning, decision-making and action



- Six large-scale, regional projects that focus on a specific regional adaptation issues (e.g. water, communities, coasts, forestry)
- Encourage multi-jurisdictional collaboration - decision-makers from 3 or 4 levels of government, industry, academia, practitioners, NGO
- Activities include: economic analysis, consultation, data mining, targeted research, policy analysis

Outputs from all RACs address a large spectrum of cross-cutting issues and appeal to many audiences

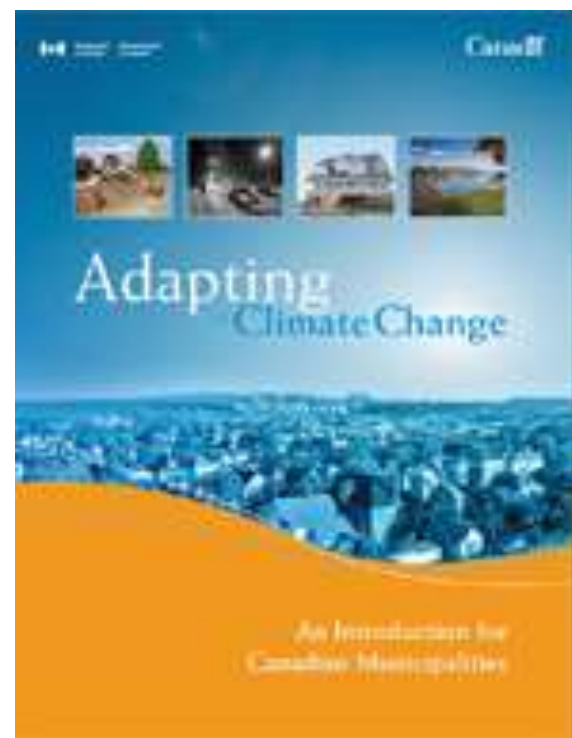


- British Columbia
 - Guidelines for sea dike elevations, flood construction levels, and professional flood hazard and risk assessment
 - Revision of provincial floodplain maps and tools for local governments to evaluate runoff
- Prairies
 - Drought and excessive moisture planning
- Ontario
 - Collaborating with ICLR to revise Ontario Building Code
- Quebec
 - Storm-water management and climate change
 - Determination of probable maximum floods to evaluate dam safety
- Atlantic
 - Reviewing policy and regulation to reduce coastal and inland flood risk.

Many communities are planning adaptation to deal with a locally relevant extreme conditions



- Clyde River's Community Climate Change Adaptation Plan
- City of Kamloops' Wildfire Protection Plan
- Metro Vancouver's Stormwater Management Program
- Edmonton's Urban Forest Management Plan
- Regina's Water Conservation Program
- London, Ontario's, Climate Change Adaptation Strategy
- Toronto's Heat Health Alert System
- Québec City's Environmental Services Adaptation Plan
- Le Goulet's Climate Change Adaptation Plan
- Planning for Sea-level Rise in Halifax Harbour
- Preparing for Storm Surges in Annapolis Royal, Nova Scotia



The benchmark survey established the baseline of decision-makers' understanding of and work on adaptation.



- Conducted between October 7 and November 13, 2009
- Interviewed 503 municipal (174), provincial, territorial officials (27) and business representatives (302)
- Focus on immediate and intermediate outcomes:
 - awareness and understanding of impacts
 - understanding of adaptation as a response to CC
 - state of implementation of adaptation
 - barriers/information sources
- Study, summary and data are available at www.porr-rrop.gc.ca, search POR # 075-08

Decision-makers are knowledgeable about CC, but not so much about adaptation



- > 80% respondents believe CC is significant, happening now, but not the most serious challenge facing their organization
 - Most can name major impacts for the next 20 years
- Changes in the severity and frequency of extreme conditions figure strongly in municipal (23%) and business (16%) responses
- Over 2 in 5 state that adaptation is “responsive action, accepting change and learning to work with it”

We anticipate



- Growing institutional capacity as a result of current initiatives
 - Push to retain capacity, building on resources created through current efforts, accomplishments, lessons learned
 - Increasing number of partnerships as part of capacity retention
- Business and industry linking CC impacts to competitiveness
 - Neither avoiding adaptation, nor seeking to defer the responsibility to adapt.
 - Working with new partners as demand for information, assistance grows
- Institutionalizing CC considerations as cost-efficient approach to adaptation
 - CC impacts as part of normal risk management process

To conclude



- Network created by RACs will play a role in shaping adaptation both regionally and across Canada
- Several jurisdictions are taking opportunities to pilot, modify and support the testing of tools for adaptation
- Increased demand for a broad suite of general and specific climate information