

And Now for Something Completely Different: A New Approach to Water Management in Canada

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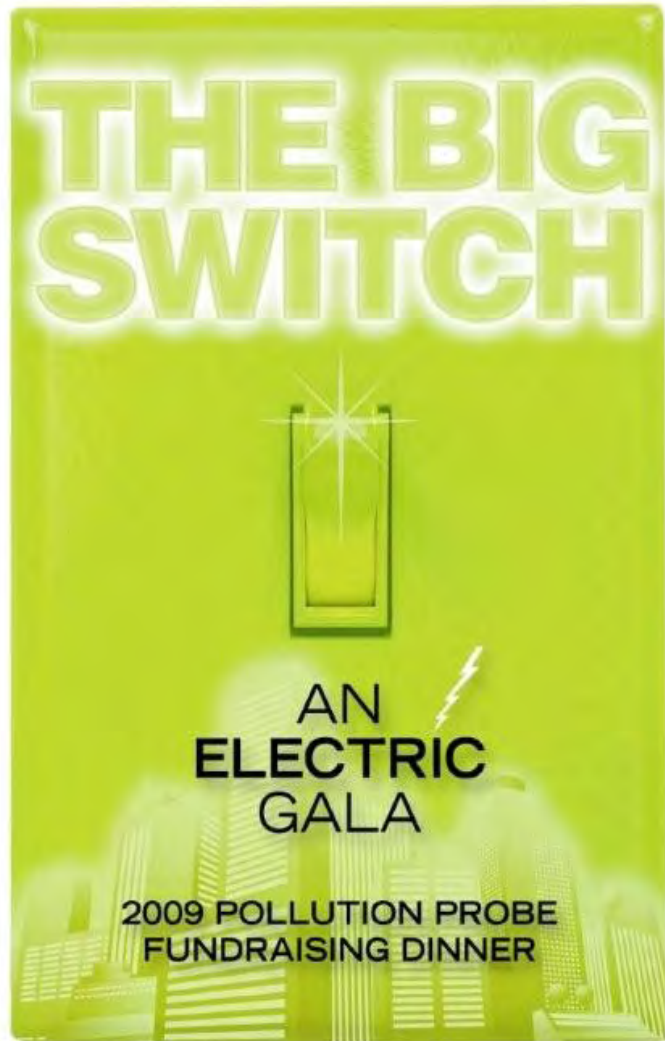
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Pollution Probe

- An established Canadian environmental NGO – donor based
- Celebrating our 40th year – U of T (1969)
- Based in Ontario with a National focus
- Achieve positive environmental change through The Probe Approach
- Main programme areas include;
 - Water, Air, Climate Change, Energy, Transportation
 - Special initiatives, e.g., toxics (mercury)



Fairmont Royal York
Hotel

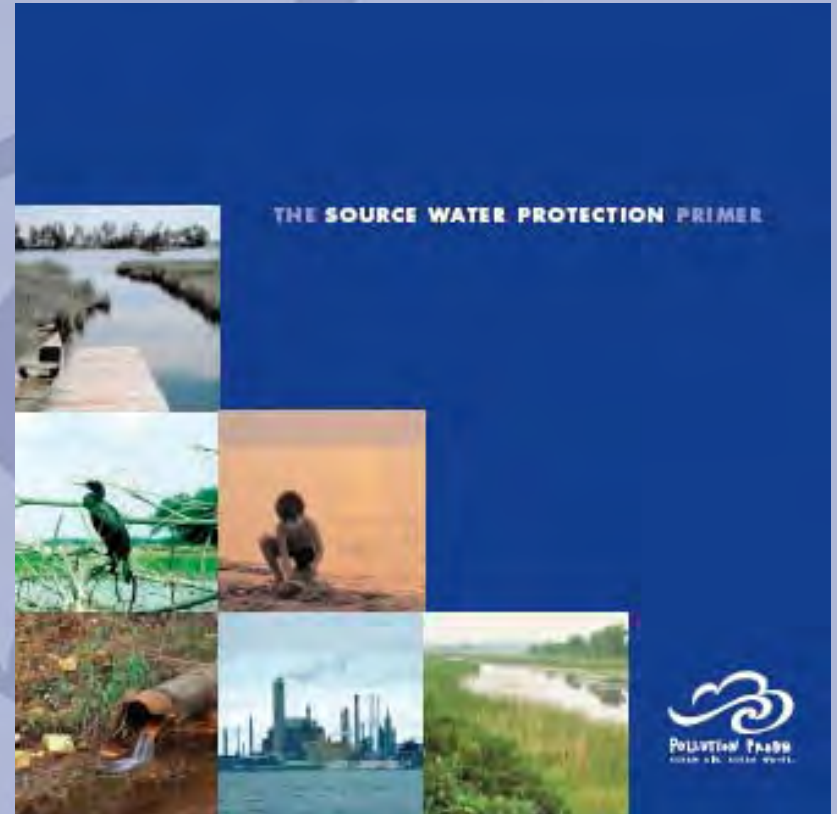
Tuesday November
24th, 2009

Green electricity is the
theme

Keynote speakers:
Monte Hummel

George Smitherman,
Ontario Minister of
Energy and
Infrastructure

Primer Series



Outline

- New Approach to Water Management in Canada
 - Reporting on a National Workshop Series on Water Policy in Canada
- Ottawa-Gatineau Watershed Atlas
- Adapting to Climate Change in Ontario
 - Regional Adaptation Collaborative
 - Proposed Weather-Water Information Gateway



Towards a Vision and Strategy for Water Management in Canada

**Final Report of the Water Policy in Canada:
National Workshop Series**

April 2007



A New Approach to Water Management in Canada

Vision and Strategy

March 2008

Why This, Why Now?

- Escalating concerns about water across Canada
- Federally, 1987 is the most recent omnibus statement about water – has it stood the test of time?
- Concerns about water increasingly deal with real scarcity issues, in addition to pollution-related concerns
- Water sustainability is the question of the 21st century
- What are the policy gaps and how can they best be closed?

The Issues

- Climate change impacts
- Pollution
- Loss of ecosystem services
- Population growth and urban development
- Competing demands
- Water diversion threats
- Inadequate drinking water treatment

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The Challenges

Elements of a New Approach to Water Management

Vision:

*A broadly shared ethic of stewardship and
responsibility for sustainable watershed
management in Canada.*

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The Challenges

- Multiple water issues are being addressed at multiple levels of government inadequately; interrelationships are complex and water is often poorly managed.
- Managing our waters requires a more inclusive, watershed-based approach to decision making; watershed boundaries rarely align with political boundaries, so challenges in terms of governance.
- An inclusive **watershed-based approach** to governance.

The Challenge

- The need exists for new institutions that manage both the human and ecological dimensions of the watershed.
- The concept of Place, the restructuring of decision making that offers more robust and distributed governance, and the development of a broadly shared stewardship ethic.
- A **stewardship ethic** that motivates Canadians in all walks of life to contribute to sustainable watershed management.

A Sense of Place

- A person's Sense of Place emerges from a mix of the natural and social features of their surrounding landscapes. Fostering a strong identify, or Sense of Place, within a watershed can help create an ethic of stewardship and shared responsibility for its protection.
- Black Creek, St. Lawrence, Thames, Grand, Rideau, Old Man, Great Lakes, Lake Scugog

The Challenge

- A widely shared knowledge base fueled by appropriate, useful and timely data is needed. Common standards are required to ensure that databases are accessible and can be shared.
- Effective watershed management requires coordinated monitoring and research agendas that are responsive to the needs of communities.
- A **knowledge base** that informs effective decision making.

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The Challenge

- Sound financial decisions will need to take a long-term, asset management approach that views water resources as natural capital that must be sustained for future generations.
- **Financial investment** to ensure full implementation of the New Approach.

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Principles

- Eight fundamental principles guide the New Approach to Water Management
 - **Precaution**
 - **Shared Responsibility**
 - **Living off the Interest**
 - **Right to Know**
 - **Net Gain**
 - **Jurisdiction Best-Placed**
 - **Pollution Prevention**
 - **Polluter Pays**

“Leave our planet’s water in better shape than we found it”

Water Management

Approaches to water management are shifting:

- From process to outcomes;
- **From water management to watershed management;**
- From regulating to shared responsibility; and
- From government to governance



Water Topics

- Water Basics
- Water Quality
- Water Flow
- Land Use
- Wildlife
- Climate Change
- Community Activities
- Policy and Regulations
- What Can We Do Locally?

My Watershed

- Gatineau
- Lièvre
- Mississippi
- Ottawa
- Rideau
- South Nation

Administration

Ottawa Gatineau Watershed Atlas

<http://www.ogwa-hydrog.ca/>

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Objective

- We believe that providing common access to data will help better manage watersheds
 - Public Engagement will facilitate science based decisions
 - Having more information available will enable more informed decision making
 - Cost effective management of data



What is the OGWA?

- Free, **bilingual**, interactive watershed information tool
- Built using free **open source** software
- Designed by watershed community and stakeholder representatives
- Uses **standardized** geospatial data and metadata
- Where possible linking to data through distributed networks i.e. data that is “closest to source”
- Uses free web 2.0 technology to improve communication and engage local communities



Who is Involved in OGWA?

- 3 Conservation Authorities (in Ontario)
- 2 Comités des Bassins Versants (au Québec)
- 1 Academic Institution
- 2 Environmental NGOs
- 1 Industry Group
- 1 Regional Office for the Ministry of Natural Resources
- 2 Watershed Authority Umbrella Organizations
- Local Community Representatives





OGWA Summary

OGWA is a one stop watershed information tool designed by the community and watershed stakeholder representatives

Through OGWA we hope to :

- Improve local communities watershed **awareness and engagement**
- Encourage the use of 'Distributed Networks' for more transparent, **efficient data sharing**
- **Increase the value** of regional watershed data; and
- Improve inter-watershed **communication**, and data awareness and sharing

CHAPTER 6
Ontario

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Ontario, G. and Lavender, B. (Eds.). (2013). Ontario: A Clean Water Probe in a Degrading Lake. This volume is a Chapter of Ontario 2013, edited by Ed. Lavender, F.J. Harvie, A. Laczko and S. Biele, Government of Ontario, Ottawa, ON, p. 2-6.

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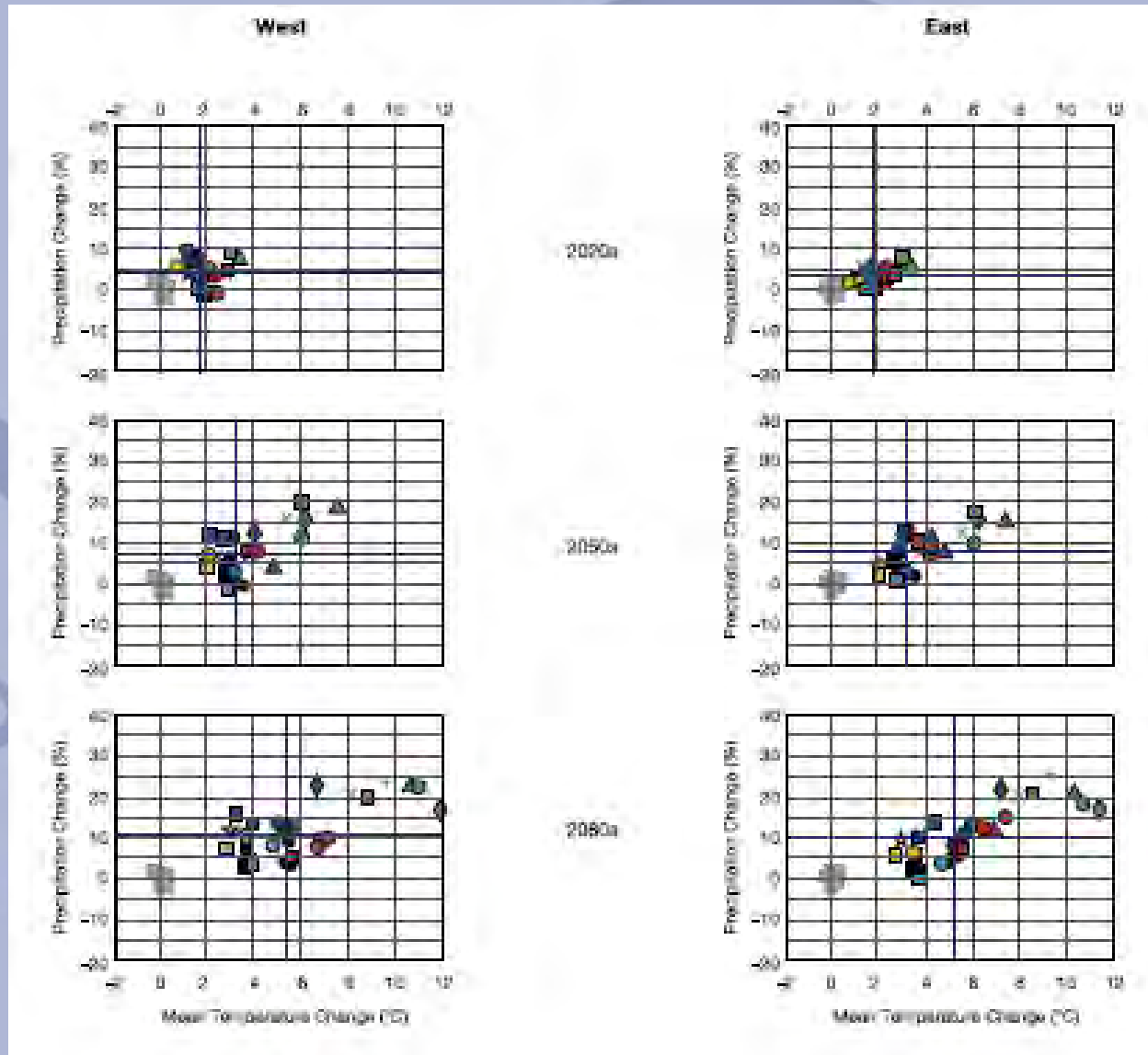
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Annual Change: Mean Temperature and Precipitation



Trends and Projections for Ontario

- Increase in annual temperature since 1948 – 1.4°C
 - Warmer nights; fewer cold days
 - More rain but more variable and higher intensity storms
-
- Warming larger than global average, more in winter than summer
 - Projections of 2°C increase by 2020, 3.5°C by 2050 and 5.5°C by 2080
 - Number of hot days doubling by 2050, tripling by 2080
 - Precipitation: slight decrease to moderate increase
 - More intense and frequent storms

Government Support

- **In December 2007, the Government of Canada announced a federal investment of \$85.9M for programming to help Canadians increase their capacity to adapt to a changing climate. This investment includes \$35M for Natural Resources Canada (NRCan) to establish the Regional Adaptation Collaboratives program (\$30M) and to develop Tools for Adaptation (\$5M).**

OGWA-WWIG (proposed)

- 4-5 Local Adaptation Pilots
- Source Water Protection Planning
- Low Water Response/Drought Management
- Flood Management
- Municipal Infrastructure Management including Stormwater Management

Areas expressing interest:

Ottawa-Gatineau, Lake Simcoe, Lake Winnipeg



Thank You

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Kawartha Region Conservation
Authority