

FURTHER TO WATERSHED MANAGEMENT ADVISORY BOARD #4/05
to be held Friday, September 23, 2005

Pages

7. SECTION I - ITEMS FOR AUTHORITY ACTION

NEW ITEM - ITEM 7.5

7.5 INTEGRATION OF CLIMATE CHANGE IMPACTS AND ADAPTATION INTO
MUNICIPAL POLICY AND PROGRAMS: A FOCUS ON WATER
MANAGEMENT

42-44

TO: Chair and Members of the Watershed Management Advisory Board
Meeting #4/05, September 23, 2005

FROM: Brian Denney, Chief Administrative Officer

RE: **INTEGRATION OF CLIMATE CHANGE IMPACTS AND ADAPTATION INTO
MUNICIPAL POLICY AND PROGRAMS: A FOCUS ON WATER
MANAGEMENT**

KEY ISSUE

A workshop to share information and identify key areas of future research to assist with climate change adaptation and risk management related to water management.

RECOMMENDATION

WHEREAS reducing the impacts and adaptation to global climate change within the Toronto and Region Conservation Authority (TRCA) watersheds is key to The Living City draft strategic plan;

WHEREAS TRCA is committed to integrating climate change needs in all aspects of its operations;

WHEREAS the recent storms which occurred in July and August 2005 have served as an indicator as to how severe weather can impact municipal infrastructure including parks, roads and water management and illustrated the need for integration of climate change issues in all aspects of municipal planning and operations;

AND WHEREAS TRCA has recently initiated, through our watershed planning work within the Rouge watershed, an assessment of anticipated hydrologic and meteorological changes related to climate change to assist with management options related to emergency preparedness, land use planning and infrastructure design at a local watershed scale;

THEREFORE LET IT BE RESOLVED THAT the November 3, 2005 workshop on “Integration of Climate Change Impacts and Adaptation into Municipal Policy and Programs: A Focus on Water Management”, hosted by TRCA in partnership with Canadian Climate Impacts and Adaption Research Network (C-CIARN), be supported;

THAT senior staff from the Works and Emergency Services and Planning Departments from the City of Toronto, regional municipalities of York, Peel and Durham and all local municipalities within TRCA’s jurisdiction be invited to participate in the workshop;

THAT TRCA be directed to invite other representatives, as appropriate, including staff from the ministries of Environment, Infrastructure and Renewal, Municipal Affairs & Housing and Environment Canada;

THAT TRCA staff be directed to report back to the Watershed Management Advisory Board on the outcomes and key actions resulting from the November 3, 2005 workshop;

AND FURTHER THAT Conservation Ontario be so advised.

BACKGROUND

TRCA is committed to integrating climate change needs in all aspects of operations through The Living City program and to serve as a resource for partner municipalities. TRCA work on climate change issues is currently focused in three areas: developing sound science, mitigating human impacts through various partnership initiatives and developing adaptation strategies. In November 1999, TRCA hosted the Climate Change and Watershed Management symposium in partnership with Environment Canada and the Ontario Ministry of Environment. Some of the key recommendations from the symposium included:

- an increased focus on the development of local climate change scenarios;
- substantial changes to federal and provincial strategies and guidelines for groundwater, surface water, water conservation, land use planning, energy conservation and transportation to help society reduce emissions and adapt to the expected impacts of climate change;
- improved communication and coordination within municipalities between those departments dealing with policy and planning issues and those dealing with water, stormwater, sewage, energy, transportation and the natural landscape; and
- extensive social marketing for all levels of government as well as from all professional organizations, about the need for new expectations, changed behaviors and improved technologies for both mitigation and adaptation strategies to deal with climate change.

Work on some of the above recommendations is currently underway with various partners and government agencies. Canadian Climate Impacts and Adaptation Research Network is one of our key partners in the area of climate change adaptation research. C-CIARN is a national network that facilitates the generation of new climate change knowledge by bringing researchers together with decision-makers from industry, government, and non-government organizations, promotes new research techniques and methodologies, disseminates information and provides a voice for an emerging impact and adaptation research community.

In the area of water management, TRCA has recently initiated assessment and integration of anticipated hydrologic and meteorological changes at a watershed scale related to future climate scenarios through our work in the Rouge watershed. Development of an understanding of the impacts that climate change have on the hydrologic response on a watershed scale allows for the assessment of impacts to develop programs, policies and management options at a local level. Following the detailed watershed scale modeling, the trends that can be defined in watershed response will be assessed and management opportunities defined which can be integrated into the business of the local municipality, including both operational and land use planning. Typical areas where this assessment may drive change include emergency preparedness, land use planning and infrastructure design, as well as updates such as at bridges and culvert crossings.

To share information and to further understanding of municipal needs and gaps related to climate change adaptation and risk management, TRCA, in collaboration with C-CIARN, is proposing to host a workshop entitled "Integration of Climate Change Impacts and Adaptation into Municipal Policy and Programs: A Focus on Water Management" on November 3, 2005 at Black Creek Pioneer Village. It is anticipated that a key deliverable from this workshop will be the identification of key areas of further research which will in turn inform the policies and programs of local municipal needs.

The workshop sessions will be focused around discussion of regional risks and water management vulnerabilities including source protection, infrastructure management and financial implications. A facilitated session on Risk Management and Adaptation Strategies will be incorporated to:

- identify adaptive capacity, incentives or barriers to integrating climate change issues; and
- familiarize participants with a risk management approach to understanding and managing climate change related risks from a municipal institutional perspective.

Senior staff and representatives of TRCA's local and regional municipalities representing works and emergency services and planning departments will be invited to attend. In addition, federal and provincial officials, conservation authority staff and representatives from organizations/academic institutions working in this field will also be invited to participate in the workshop on November 3, 2005.

FINANCIAL DETAILS

Cost of the workshop will be shared jointly by TRCA and C-CIARN. Funding for this initiative has been secured through the Remedial Action Plan Memorandum of Understanding and is available in account 120-90.

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