

# Water Opportunities Act What's on the Horizon for Water Management

Anticipated Regulatory Requirements

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# Introduction and Overview

- CELA is a specialty Ontario Legal Aid clinic whose mandate includes representation of clients who meet eligibility requirements; as well as undertaking systemic environmental law reform and providing public legal education
- Several new laws have been introduced and passed in Ontario over the last ten years which either have already included requirements relevant to water management, or which have provision for new regulations to be developed

# Existing and Expected Regulatory Requirements related to water management – a partial list

- Permits to Take Water for municipal drinking water supplies and potential conditions
- Sector specific regulations – yet to be developed for permits to take water
- Financial Plans required under Safe Drinking Water Act
- Municipal Sustainability Plans under new Water Opportunities and Water Conservation Act
- Provision of municipal drinking water supply as per the Provincial Policy Statement (Planning Act)

# Existing and Expected Regulatory Requirements related to water demand management - continued

- Provisions relating to limits arising from Great Lakes St. Lawrence River Basin Sustainable Water Resources Agreement as incorporated into Ontario Water Resources Act on bulk takings and transfers
- Changes to Building Code and water conservation provisions (impetus from both Green Energy Act and OWOWCA)
- Source water protection measures under Clean Water Act to respond to identified water quantity and water quality threats in all or part of the watershed – 2012 Plans

# What`s Been Happening

- Ontario Global Water Leadership Summit held May 17-18, 2011 to bring together leaders from the global water sector on the future of innovation in the water sector
- Attracted 300 global leaders in the water sector from 11 foreign countries, 21 states and four provinces
- The Summit was structured around a series of panel discussions among recognized world water leaders, focusing on critical issues, potential solutions and new water technologies

# The Southern Ontario Water Consortium – A Development Platform for New Water Technologies

- A \$60 million and growing project to create a platform for research and technology development, testing, and demonstration in water
- Platform includes facilities for the testing and development of drinking water solutions, wastewater purification, ecotoxicological analysis, watershed management, and sensor development
- The facilities are linked together with a large computational and data facility
- Supported by investments from universities and equipment vendors, Ontario (\$8.85 million), Fed Dev Ontario, IBM Canada, and more than \$7 million in committed activity on the part of private sector users

# Awards to Support Innovation in Water:

- Ontario Water Innovation Award:
  - A one-time award designed to recognize excellence, outstanding performance, entrepreneurship and leadership in developing a commercially successful water technology related to the conservation and/or treatment of water
  - On May 19th the government announced that Mississauga's Hennessy & Hinchcliffe Inc. had won Ontario's first-ever Water Innovation Award for creating the world's most water efficient toilet
- MOE Minister's Award for Environmental Excellence:
  - A new award recognizing local green achievement, leadership and innovation. For 2011, awards are focused on toxics reduction and water including water innovation, conservation, Lake Simcoe and drinking water protection
  - Recipients were announced on August 25; winners include Steam Whistle Brewing and Waterloo Region Green Solutions for water conservation measures among other environmental initiatives

# Agricultural Innovation Forums

- Forums bring together industry, academia, government and practitioners to discuss actions that can help the agriculture sector to meet the challenges and take advantage of the opportunities
- **Water Innovation Forum for Food Processors – June 2011**  
Delivered by Ontario Centre for Environmental Technology Advancement (OCETA) now known as the Bloom Centre for Sustainability ([www.bloomcentre.com](http://www.bloomcentre.com))
- **Water Innovation Forum for Agriculture – January 2011**  
Delivered by the Ontario Federation of Agriculture and the Lawrence National Centre for Policy and Management.

# Funding to Support Innovation:

- Ontario Budget March 2011:
  - \$30 million over 3 years announced for Showcasing Water Innovation program, support for Municipal Water Sustainability Planning and education and awareness of water conservation
    - Showcasing Water Innovation:
      - A merit-based funding program that will provide \$17 million for community demonstration projects that showcase early adoption of innovative and cost effective approaches and technologies for advancing integrated and sustainable water management in Ontario communities
      - Application deadline was June 24, 2011

**Website:**

[http://www.ene.gov.on.ca/environment/en/funding/showcasing\\_water\\_innovation/index.htm](http://www.ene.gov.on.ca/environment/en/funding/showcasing_water_innovation/index.htm)

# Funding cont`d

- Canada-Ontario First Nations Pilot to Improve Drinking Water Quality
  - Canada, Ontario and the Ontario First Nations Technical Services Corporation launched the initiative to help First Nations improve drinking water quality. The federal government is providing a total of \$5 Million. The province and the Ontario First Nations Technical Services Corporation will provide technical support and training.
  - First Nations can apply for funding from the federal government to demonstrate innovative approaches and technologies that solve drinking water challenges in their communities.
- Ontario Small Waterworks Assistance Program Phase 3:
  - On May 17<sup>th</sup> , 2011, the Ministry of Infrastructure announced that there are 85 recipients of funding through the OSWAP 3. OSWAP 3 was launched in 2010 and will provide up to \$50 million in capital assistance to help small municipalities improve water conservation and water and wastewater system efficiency

# Funding continued:

- Innovation Demonstration Fund Water Round:
  - Recipients were announced on May 27th – the government is investing \$8.3 million to support five water technology projects in Guelph, London, Ottawa and Toronto. Focused on piloting of water related technologies at the pre-commercialization stage
- Ontario Research Fund- Research Excellence Water Round:
  - Recipients were announced on May 27th – the government is investing \$8.8 million to support four water researchers in Hamilton, Toronto and Waterloo. Focused on the development of water-related solutions within academia
- New Directions Research program:
  - Focuses on five treatment technologies in greenhouse, developing industry guidelines for efficient water use in on-farm dairy systems, and finding new uses for wastewater from biodiesel production
  - Calls for letters of intent announced July 29, 2011

# What`s Expected

- Introduction of a Great Lakes Act
  - We will advocate:
    - Set priorities for Great Lakes protection
    - Integrate Great Lakes decision making
    - Profile the Great Lakes
    - Establish a responsible Minister
- Pursuit of the province`s new Long Term Infrastructure Plan including Green Infrastructure
- Five year review of the Provincial Policy Statement objectives including those related to water

# Municipal Water Sustainability Plans under the OWOWCA

- ▶ Performance indicators and performance targets may be set by the Minister
- ▶ May relate to financing, operations, maintenance or other matters
- ▶ We will advocate for performance indicators and targets related to conservation to be included
- ▶ The performance indicators and targets proposed will be posted to the Environmental Bill of Rights Registry
- ▶ Performance targets may be different for different municipal service providers or different areas of the province

# Municipal Water Sustainability Plans cont`d

- Directions by Minister regarding performance indicators and targets are not regulations
- At the Minister`s direction, Municipalities are to review and evaluate their achievement of targets; the Minister may make these evaluations public
- If targets are not reached, Minister may ask for evaluation of reasons and strategies to reach the targets

# Procurement

- Conservation was included in provisions dealing with procurement by public agencies
- Requirements to consider efficient use of water, and avoidance of negative effects on water resources may be required
- Regulations may be prescribed in this respect
- Public agencies would consider ``technologies, services and practices in aid of water efficiency``

# Municipal Water Bills

- ▶ OWOWCA provides that requirements for information to be provided in municipal water bills may be prescribed
- ▶ We will advocate that this should include water conservation information
- ▶ An example is comparison of water usage to municipal or neighbourhood average
- ▶ Information that promotes conservation and efficiency would be important – for example comparisons to a notional per capita ‘‘target’’

# Building Code Amendments

- Minister is to initiate a review of the Building Code with reference to water conservation standards, within six months of coming into force, and then every five years thereafter
- The Building Code Energy Advisory Council is renamed the Building Code Conservation Advisory Council and mandated to advise on both energy and water conservation
- Ministry of Municipal Affairs and Housing consulted on potential changes to Ontario's Building Code including enhanced water efficiency requirements for toilets, urinals, and showerheads as well as expanding the permitted uses of rainwater

# Green Energy Act amendments

- ▶ Water conservation was added to the list of requirements that may be established for government buildings, in addition to energy conservation
- ▶ Requirements may be specified for government facilities relating to energy conservation, energy efficiency, water conservation, the adoption of renewable energy technologies, and the adoption of technologies and services that promote the efficient use of water and reduce negative impacts on Ontario's water resources.

# Labels and Standards

- Water efficiency labels and standards may be prescribed for water use appliances
- Particular marks may be enabled or prescribed
- Particular disclosure of information may be prescribed
- We have advocated, for example, an approach like the U.S. EPA WaterSense label (akin to EnergyStar) – see [www.epa.gov](http://www.epa.gov) and navigate to the `WaterSense` page.

## The WaterSense Label

By using water efficient products and practices, consumers save natural resources, reduce water consumption, and save money. In order to realize these savings, consumers need to be able to identify products and services that use less water while performing as well as or better than conventional models.

WaterSense makes it easy to find and select [water efficient products](#) and ensures consumer confidence in those products with a label backed by third party, independent, testing and certification. Certifying organizations help maintain the WaterSense integrity and credibility by verifying and testing products for: conformance to WaterSense specifications, efficiency, performance, label use and also conduct periodic market surveillance.

WaterSense also recognizes some professional [service programs](#) that meet WaterSense specifications by incorporating a strong water efficiency component.

### What it Means

#### [Products bearing the WaterSense label:](#)

- Perform as well or better than their less efficient counterparts.



- > [Why WaterSense](#)
- > [The WaterSense Label](#)
- > [Product Certification & Labeling](#)
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# Blue Strings

- ▶ The groups endorsing H2Ontario, and the Ontario Water Conservation Alliance members, have called for water infrastructure grants to be linked to demonstrated conservation initiatives
- ▶ Premier referred to a `Blue Strings` approach in a speech June 17<sup>th</sup> 2010 at the Water Summit in Mississauga, i.e. the idea that future infrastructure grants may require that approaches that take advantage of new technologies and water conservation may be required
- ▶ We will urge this approach to require conservation initiatives as a condition of infrastructure funding at least in larger or growing municipalities

# WATER TAP Regulation

- The first regulation passed under the Act is the Regulation to establish the Water Technology Acceleration Partnership, a not for profit corporation – Regulation 40/11, passed in March 2011
- Its initial members have now been appointed by the Minister of Research and Innovation
- As of April 2012, the Board members are to elect their new members

# Water TAP Board composition

- ▶ Non-crown corporation to support the growth of globally competitive water technology companies by bringing together innovators in industry, academia, government, branding Ontario's expertise, and promoting growth of the industry domestically and internationally (MRI-led)
- ▶ Once the Water TAP board is responsible to elect its new members, the regulation directs that they are to ensure the following representation on the Board to carry out Water TAPs objects:
  - ▶ (a) an officer or employee of an academic institution;
  - ▶ (b) an officer or employee of a private sector corporation engaged in,
    - (i) developing and marketing water and wastewater technologies or services, or
    - (ii) raising capital for or financing the development of water and wastewater technology sector;
  - ▶ (c) an entrepreneur who owns or manages an innovative small business in Ontario's clean-technology sector; and
  - ▶ (d) an officer or employee of a municipality.

# What's Next

- Minister should set the aspirational targets under the Act for water conservation (with consultation)
- Minister should consult and set the non-regulatory performance targets and performance indicators for municipalities under the Act
- MoE should begin or continue development of the requirements for a range of sector based conservation plans under the OWRA

# What's Next cont'd

- ▶ The Minister should Initiate a comprehensive consultation process for content of the municipal sustainability plans under the Act
- ▶ Among the topics that we think the regulations for sustainability plans should address, are the following:
  - Use common watershed health metrics to set targets and performance indicators for municipalities in that watershed; and encouraging cooperative solutions among or between those municipalities;
  - Provide strong regulations and guidance for municipal water sustainability plans both as to financial plan requirements, and as to content of the plans in areas regarding water conservation and utilization of green infrastructure and innovation

# What`s Next Cont`d

- Other content should include:
  - Ensuring fully integrated municipal water systems that optimize management of drinking water, wastewater, and storm water;
  - Using innovative approaches in infrastructure planning – including for example, mechanisms to utilize conservation, innovation and green infrastructure to avoid higher capital costs associated with infrastructure expansion; and development of the “Blue Strings” approach to require water conservation as an eligibility condition for infrastructure financing.

# Ontario should strive for continued leadership

- ▶ Ontario has made gains in water treatment technology, and has shown leadership regionally in the Great Lakes in terms of water quantity protection in negotiating the Great Lakes St. Lawrence Water Sustainability Agreement
- ▶ All sectors, government, conservation, public interest, water industry, municipalities, and water users have major opportunities and we must build on the momentum created by the Water Opportunities and Conservation Act

# Conclusion

- As more specific requirements are developed under new regulations and new instruments and techniques are considered, they must be systematically integrated into existing approaches
- Multiple new requirements mean that innovation will be rewarded, and “business as usual” in terms of water management is unlikely to be tenable in the future

# See also CELA's website

The screenshot shows a web browser window displaying the CELA website. The browser's address bar shows the URL <http://www.cela.ca>. The website header features the CELA logo, a search bar, and navigation links: Home, About CELA, e-Bulletin, Français, Library, and Contact Us. A descriptive paragraph states: "The Canadian Environmental Law Association (CELA) is a non-profit, public interest organization established in 1970 to use existing laws to protect the environment and to advocate environmental law reforms." The main content area is divided into three columns. The left column lists various services and resources such as News, Publications, Our Services, and CELA in the Courts. The middle column, titled "Featured Items and Collections", lists several key areas: Toxics Use Reduction in Ontario, Source Water Protection, Nuclear Phase-Out, PBDEs - Flame Retardants as problematic as PCBs, Children's Health and the Environment, and Energy Conservation and Renewables. The right column, titled "News and Events", lists recent events: Nov 25 2010 (CELA's 40th Anniversary Celebration) and Nov 01 2010 (Major health and environment organizations call on government to eliminate public exposure to BPA). The browser's taskbar at the bottom shows the system tray with the date 9:16 PM on 15/11/2010.