

January 7, 2010

**Great Lakes-St. Lawrence River Water Resources Regional Body  
DECLARATION OF FINDING**

Water Management Program Review  
Water Conservation and Efficiency Program Review  
Province of Ontario

**PURPOSE**

Pursuant to Article 300 of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement (“Agreement”), each Party State and Province must submit a report to the Great Lakes-St. Lawrence River Water Resources Regional Body (Regional Body) on actions taken by that State or Province to meet the provisions of the Agreement. Following the review of such reports, the Regional Body shall determine if that State or Province’s program meets or exceeds the provisions of the Agreement; does not meet the provisions of the Agreement; or, would meet the provisions of the Agreement if certain modifications were made and what options may exist to assist the jurisdiction in meeting the provisions of the Agreement. However, and as noted below, Article 300 of the Agreement has not come into force as of this date, so all such submissions to date and subsequent Declarations of Findings issued pursuant to this Article are recognized as voluntary, and shall not be implied to indicate that Article 300 of the Agreement has come into force.

**STIPULATIONS**

***Entry into Force of the Agreement***

1. The Agreement was signed by the Great Lakes Governors and Premiers on December 13, 2005. Pursuant to Article 709 of the Agreement, the terms of the Agreement do not come into force unless and until all Parties to the Agreement notify all other Parties that measures have been enacted into law, except for the following terms that came into force on December 13, 2005:
  - a. Preamble
  - b. Chapter 1
  - c. Article 202
  - d. Article 208
  - e. Article 302
  - f. Article 303
  - g. Article 304
  - h. Chapter 4
  - i. Chapter 6
  - j. Chapter 7

To date, no such notification has been given, and the remaining terms of the Agreement have not come into force, except as described in Regional Body Resolution #8 (Attachment “A”).

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***Relevant Action Taken by the Regional Body***

1. Pursuant to Article 304, Paragraph 1 of the Agreement, the Regional Body must identify Basin-wide Water conservation and efficiency objectives to assist the Parties in developing their Water conservation and efficiency programs by **December 13, 2007**. The Regional Body adopted Basin-wide Water conservation and efficiency objectives in fulfillment of this provision on **December 13, 2007**.

***Provisions of the Agreement that must be met by the Province of Ontario by a future date***

1. Pursuant to Article 207 Paragraph 1 of the Agreement and Article 709, paragraph 2.e. of the Agreement, the Baseline for determining a New or Increased Diversion, Consumptive Use or Withdrawal will be set 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 207 Paragraph 1 has not yet come into force.
2. Pursuant to Article 200, Article 201 and Article 709, Paragraph 2.a-b. of the Agreement, all New or Increased Diversions are to be prohibited, with exceptions, 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 207 Paragraph 1 has not yet come into force.

Exemptions as described in Article 208 came into force on December 13, 2005.

3. Pursuant to Article 207, Paragraph 1 and Article 709, Paragraph 2.e. of the Agreement, each Party must submit a list of Baseline Diversions, Consumptive Uses and Withdrawals to the Regional Body one year after 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 207 Paragraph 1 has not yet come into force.
4. Pursuant to Article 300 and Article 709, Paragraph 2.g. of the Agreement, each Party must submit a report to the Regional Body detailing its Water management and conservation and efficiency programs pursuant to the Agreement one year after 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 300 Paragraph 1 has not yet come into force.
5. Pursuant to Article 304, Paragraph 2 and Article 709, Paragraph 2.i of the Agreement, consistent with the Basin-wide goals and objectives adopted by the Regional Body, each Party must establish Water conservation and efficiency goals and objectives

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within two years after 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 304 Paragraph 2 has not yet come into force.

6. Pursuant to Article 304, Paragraph 2, 4 and 5, as well as Article 709, Paragraph i. of the Agreement, each Party must establish a Water Conservation and Efficiency program for all water users that is consistent with the Basin-wide goals and objectives as well as Party goals and objectives within two years after 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 304, Paragraphs 2, 4 and 5 have not yet come into force.
7. Pursuant to Article 301 and Article 709, Paragraph 3.d. of the Agreement, each Party must develop and maintain a Water resources inventory for the collection, interpretation, storage, retrieval exchange, and dissemination of information concerning the Water resources of the Party, including, but not limited to, information on the location, type, quantity, and use of those resources and the location, type, and quantity of Withdrawals, Diversions and Consumptive Uses, within five years after 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 301, has not yet come into force.
8. Pursuant to Article 206, Paragraph 1 and Article 709, Paragraph 3.c. of the Agreement, each Party must create a program for the management and regulation of New or Increased Withdrawals and Consumptive Uses by adopting and implementing measures consistent with the decision-making standard of the Agreement (see Article 203) within five years after 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 206, Paragraph 1 has not yet come into force.
9. Pursuant to Article 206, Paragraph 2 and Article 709, Paragraph 3.c. of the Agreement, each Party must set threshold levels that comply with Article 206, Paragraph of the Agreement within ten years after 60 days after the last Party to the Agreement has notified the others that it has completed the Measures necessary to implement the parts of the Agreement as described in Article 709, Paragraphs 2 a.-j. No such notification has occurred, and therefore Article 206, Paragraph 2 has not yet come into force.

Any Party that fails to set such thresholds shall apply a threshold for management and regulation of all New or Increased Withdrawals of 100,000 gallons per day or greater average in any 90 day period.

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***FINDING ON PROVINCE OF ONTARIO'S WATER MANAGEMENT AND CONSERVATION AND EFFICIENCY PROGRAMS***

The Regional Body have received the Province of Ontario's report on its Water management and conservation and efficiency programs, which are attached hereto as Attachments "B" and "C", respectively. Upon review of said submissions, the terms of the Agreement, as well as other actions taken by the Province of Ontario as described above, the Regional Body finds the following:

***Provisions of the Agreement that must be met by the Province of Ontario by a future date***

1. The Regional Body finds that the Agreement does not require the setting of a Baseline for New or Increased Withdrawals, Diversions or Consumptive Uses at this time.
2. The Regional Body finds that the Agreement does not require that New or Increased Diversions be prohibited at this time.
3. The Regional Body finds that the Agreement does not require the Province of Ontario to submit a list of Diversions, Consumptive Uses and Withdrawals at this time.
4. The Regional Body finds that, although the Agreement does not require the Province of Ontario to submit a report on its water management and conservation and efficiency programs, the Province voluntarily submitted such reports which are attached hereto as Attachments "B" and "C", respectively, to the Regional Body by December 8, 2009.
5. The Regional Body finds that the Agreement does not require the adoption or implementation of water conservation and efficiency goals and objectives at this time.
6. The Regional Body finds that the Agreement does not require adoption or implementation of a water conservation and efficiency program at this time.
7. The Regional Body finds that the Agreement does not require the adoption or implementation of a water resources inventory program at this time.
8. The Regional Body finds that the Agreement does not require the adoption or implementation of a water management program at this time.
9. The Regional Body finds that the Agreement does not require the adoption or implementation of a threshold for determining which Withdrawals of Water will be subject to management pursuant to the Agreement at this time.

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THEREFORE, the Regional Body, after reviewing the Water Management Program report submitted by the Province of Ontario, finds that such program meets or exceeds the current requirements of the Agreement.

FURTHERMORE, the Regional Body, after reviewing the Water Conservation and Efficiency Program report submitted by the Province of Ontario, finds that such program meets or exceeds the current requirements of the Agreement.

***Issued by the Great Lakes-St. Lawrence River Water Resources Regional Body on January 7, 2010.***

# ATTACHMENT “A”

**GREAT LAKES—ST. LAWRENCE RIVER WATER RESOURCES REGIONAL  
BODY**

**RESOLUTION #8—ENTRY INTO FORCE OF CHAPTER 5 OF THE  
AGREEMENT (REGIONAL REVIEW)**

WHEREAS, on December 13, 2005, the Governors of the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio and Wisconsin, the Commonwealth of Pennsylvania, and the Premiers of Ontario and Québec signed the *Great Lakes—St. Lawrence River Basin Sustainable Water Resources Agreement* (“Agreement”); and,

WHEREAS, Chapter 7 of the Agreement came into force on December 13, 2005, pursuant to Article 709 paragraph 1j of the Agreement; and,

WHEREAS, pursuant to Article 709, Paragraph 2j of the Agreement, Chapter 5 of the Agreement will come into force “60 days after the last Party [State or Province] has notified the others that it has completed the Measures necessary to implement” specific provisions of the Agreement as described in Article 709, Paragraph 2 of the Agreement; and,

WHEREAS, the Parties to the Agreement have neither completed all the Measures as described in Article 709, Paragraph 2, nor have they notified the other Parties that they have completed such Measures; and,

WHEREAS, the Great Lakes—St. Lawrence River Basin Water Resources Compact (Compact) became effective on December 8, 2008; and,

WHEREAS, the Compact requires Regional Review to be performed from time to time to properly implement the terms of the Compact; and,

WHEREAS, Article 705 of the Agreement states that “Each Party shall, from the date of execution of this Agreement, exercise its best efforts to refrain from taking any action that would defeat the objectives of this Agreement;” and,

WHEREAS, the inability to engage in Regional Review would hinder the ability of the States to implement the Compact, which would in turn defeat the objectives of the Agreement.

NOW THEREFORE BE IT RESOLVED that the members of the Regional Body declare that Chapter 5 of the Agreement shall come into force immediately as of December 8, 2008, with regard to any requirements for Regional Review that may arise in respect of proposals from the States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio and Wisconsin, and the Commonwealth of Pennsylvania as they implement the Compact.

BE IT FURTHER RESOLVED that in accordance with Paragraph 5 of Article 709 of the Agreement, the terms, agreements and review processes contained in the Great Lakes Charter of 1985 (Charter) shall remain in full force and effect, except for those instances where Regional Review may take place in respect of diversion proposals from the States as they implement the Compact. In such instances, Regional Review shall replace prior notice and consultation requirements and activities in the Charter. The Regional Body shall be used for all prior notice and consultation activities under the Charter where they continue to apply.

BE IT FINALLY RESOLVED that Chapter 5 of the Agreement shall come into force with regard to any requirements for Regional Review that may arise in respect of proposals from the Provinces of Ontario and Quebec once each province has notified the other Parties that they have completed the measures needed to implement the prohibition of diversions and the management and regulation of exceptions. Once notice has been provided, Regional Review shall replace prior notice and consultation requirements under the Charter for diversion proposals in that Province.

***Adopted by the Great Lakes-St. Lawrence River Water Resources Regional Body on  
December 8, 2008.***

# ATTACHMENT “B”

Ministry of Natural  
Resources

Natural Resource  
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Ministère des Richesses  
naturelles

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December 7, 2009

David Naftzger, Secretary  
Great Lakes-St. Lawrence River Water Resources Regional Body  
c/o Council of Great Lakes Governors  
35 East Wacker Drive, Suite 1850  
Chicago, Illinois 60601

Dear Mr. Naftzger:

As Ontario's incoming member of the Regional Body I am pleased to submit Ontario's Water Management Programs Report and Water Conservation and Efficiency Program Report for review by the Regional Body pursuant to Article 300 of the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement*. Ontario is voluntarily submitting these reports in keeping with the U.S. interstate Compact deadline of December 8<sup>th</sup>, 2009. While the corresponding Agreement deadline has not yet been reached, Ontario is fulfilling its commitment to meet the Compact deadlines where possible.

To meet its commitments under the Agreement, Ontario is enhancing existing, long-standing water management programs and is developing a provincial water conservation and efficiency strategy. The attached reports highlight the key existing and proposed program elements which contribute to Agreement implementation.

Ontario is not, at this time, submitting a baseline list of existing water withdrawals, diversions and consumptive uses. The intra-basin transfer regulations and policies under development in Ontario must first be brought into force to guide the establishment of the province's list of existing transfers. Options for establishing Ontario's baseline list was the subject of public consultation this summer and fall. We plan to submit the required data in keeping with the timelines of the Agreement.

It is my hope that the information provided in the attached reports demonstrates Ontario's commitment to meeting the provisions of the Agreement to protect and conserve the waters of the Great Lakes-St. Lawrence River Basin for generations to come.

Sincerely,

A handwritten signature in blue ink that reads "Rosalyn Lawrence". The signature is written in a cursive style with a large initial "R".

Rosalyn Lawrence  
Assistant Deputy Minister  
Natural Resource Management Division

**Province of Ontario  
Water Management Programs Overview**

The following information is submitted by the Province of Ontario to the Great Lakes Regional Body pursuant to the requirements in Article 300 of the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement* (Agreement). The information is limited to the provincial water management programs which contribute to the achievement of Ontario's Agreement commitments.

**1. Lead agencies and contact(s):**

The Ontario Ministries of Natural Resources and Environment share primary water management responsibility at the provincial level and are working collaboratively to implement Ontario's commitments under *Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement* (Agreement).

**Key Contacts:**

Dan Marinigh, Director  
Lands and Waters Branch

Ontario Ministry of Natural Resources

Sharon Bailey, Director

Land and Water Policy Branch

Ontario Ministry of the Environment

**2. Provincial water management program implementing laws, regulations and policies:**

Ontario is implementing its Agreement commitments through enhancement of existing water management programs. The primary provincial legislative tools that contribute to Agreement implementation are listed below. Federal legislation and management activities may also apply (e.g. Fisheries Act) but are not outlined in this report.

The *Ontario Water Resources Act*, 1990 (OWRA) provides for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use. The Act provides the authority for the Permit to Take Water Program administered by the Ministry of the Environment. In 2007 the OWRA was amended through the *Safeguarding and Sustaining Ontario's Water Act* (SSOWA) to incorporate key provisions of the Agreement.

- *Ontario Water Resources Act*, R.S.O. 1990, c. O.40:  
[www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90o40\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90o40_e.htm)
- *Safeguarding and Sustaining Ontario's Water Act*, S.O. 2007, c.12 – Bill 198:  
[www.e-laws.gov.on.ca/html/source/statutes/english/2007/elaws\\_src\\_s07012\\_e.htm](http://www.e-laws.gov.on.ca/html/source/statutes/english/2007/elaws_src_s07012_e.htm)

The *Water Taking Regulation* under the OWRA outlines matters that the Ministry of the Environment must consider when issuing a Permit to Take Water. Amendments to the regulation are under development to bring key Agreement commitments into force (e.g. ban on intra-basin transfer and regulation of exceptions)

- *Water Taking Regulation*, Ontario Regulation 387/04:  
[www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_040387\\_e.htm](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_040387_e.htm)

Supporting permit application policies and guidance materials are outlined in section 6 of this report.

*The Lakes and Rivers Improvement Act*, 1990 (LRIA), administered by the Ministry of Natural Resources, provides for the management, preservation and use of Ontario's lakes and rivers and the land under them, the protection of public rights and riparian interests, the management of fish and wildlife dependent on lakes and rivers, protection of natural amenities and the protection of people and property by ensuring that dams and diversions are suitably located, constructed and maintained.

- *Lakes and Rivers Improvement Act*, R.S.O. 1990, c. L.3:  
[www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90l03\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90l03_e.htm)
- *Construction Regulation*, Ontario Regulation 454/96:  
[www.e-laws.gov.on.ca/html/regs/english/elaws\\_regs\\_960454\\_e.htm](http://www.e-laws.gov.on.ca/html/regs/english/elaws_regs_960454_e.htm)

*The Clean Water Act*, 2006, administered by the Ministry of the Environment, protects existing and future sources of Ontario's drinking water. A key component of the legislation is the preparation of locally developed, science based risk assessment reports (quality and quantity risks) and source protection plans.

- *The Clean Water Act*, 2006,, R. S.O. 2006, c. 22:  
[www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_06c22\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_06c22_e.htm)

#### *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem*

The Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA) is a key primary agreement through which the province works with Canada and other implementation partners to clean up and restore the Great Lakes. It outlines how the two governments will cooperate and coordinate their efforts towards the Vision of a healthy, prosperous and sustainable Great Lakes Basin Ecosystem for present and future generations. COA helps Canada meet its responsibilities under the Canada-U.S. Great Lakes Water Quality Agreement. The first COA was signed in 1971. The current and 7<sup>th</sup> COA expires on March 31, 2010.

COA links water quality and quantity management and aquatic ecosystem health re-enforces Ontario's water management commitments through Result 1.3.d of the Lake and Basin Sustainability Annex of the 2007 COA – Sustainable use of land, water and other natural resources to provide benefits from the Great Lakes now and in the future – which states that Canada and Ontario will: “Foster sustainable water use and conservation consistent with the intent of the Great Lakes - St. Lawrence River Basin Sustainable Water Resources Agreement.

- *2007 Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem*  
<http://www.ene.gov.on.ca/publications/6263e.pdf>

The *Provincial Policy Statement* (PPS, 2005), under the authority of Section 3 of the *Planning Act*, administered by the Ministry of Municipal Affairs and Housing, provides policy direction on matters relating to land use planning that are of provincial interest, including protecting and restoring water quality and quantity, promoting efficient and sustainable use of water resources, including practices for water conservation and sustaining water quality, and protection from water-related natural hazards.

- *Provincial Policy Statement*:  
<http://www.mah.gov.on.ca/Asset1421.aspx>

The Ontario *Environmental Assessment Act*, 1990 (EA Act) provides for two types of environmental assessment planning and approval processes: Individual Environmental Assessments (EA) carried out and submitted to the Minister of the Environment for review and approval, or Class Environmental Assessments which are approved subject to compliance with an approved class environmental assessment process (e.g. Municipal Engineers Association Class EA for Municipal Infrastructure projects, including water and wastewater projects)

- *Ontario Environmental Assessment Act*, R.S.O. 1990, Chapter E.18  
[www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90e18\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e18_e.htm)

### **3 & 4. Summary of the province's water management program scope and thresholds:**

The focus of the following summary is on the water use regulation elements of Ontario's water management programs.

#### ***Water Use Regulation Overview***

The *Ontario Water Resources Act* and its companion regulations are directed at the protection of the quality and quantity of Ontario's surface and groundwater resources. The legislation provides for:

- prohibitions related to the discharging of pollutants to surface or groundwater and water quality standards; and
- a permit system that governs the taking of large amounts of surface or groundwater (>50,000 litres per day [over 13,000 U.S. Gallons per day]).

The Permit to Take Water Program applies to all water use sectors. Water takings for ordinary household purposes, the direct watering of livestock or poultry, and for firefighting purposes are exempt from the requirement to obtain a permit. *The Safeguarding and Sustaining Ontario's Water Act, 2007* amended the *Ontario Water Resources Act* to eliminate the livestock watering exemption for withdrawals 379,000 litres per day or more (equivalent to 100,000 U.S. gallons per day) to ensure consistency with the Agreement.

Water withdrawals from all Ontario water sources, including withdrawals from the Great Lakes, other surface waters, and groundwater, are regulated in Ontario.

Dams and water diversions (e.g. for hydroelectric power production) are also regulated through the *Lakes and Rivers Improvement Act*, which regulates works forwarding, holding back or diverting water and is administered through the Ministry of Natural Resources. Water management plans, developed under the LRIA, provide the coordinated and strategic direction for the management of river flows and levels as they are affected by the operation of waterpower generating facilities and water control structures.

#### ***Water Withdrawals***

A permit to take water is required for any withdrawal of water over 50,000 litres per day from any water source in the Province. In issuing a permit to take water the following factors are considered:

- Protection of the natural functions of the ecosystem – e.g. potential impact of the natural variability of water flow or water levels, minimum stream flow, habitat that depends on water flow or water levels and interrelationships between groundwater and surface water

- Water availability – e.g. impact on water balance and sustainable aquifer yield, existing water uses, low water conditions, whether the taking is in a high use or medium use watershed (certain highly consumptive water uses are restricted in these watersheds), any planned municipal use approved under the *Environmental Assessment Act* or under a Municipal Official Plan
- Issues related to the use of water – e.g. whether water conservation is implemented in accordance with best water management standards for the relevant sector, the purpose for the water use, and other issues

Water Taking Classification – To assist in the evaluation of proposed water takings, applications are classified based on their potential risk to the environment or potential to interfere with other water users.

- Category 1 takings have a lower risk of causing adverse environmental impacts or interference (e.g. permit renewals with no past interference or impact problems, ponds not connected to or receiving water from surface water, takings from a Great Lake or connecting channel less than 1 million litres per day (260,000 US gallons))
- Category 2 and Category 3 takings have a greater potential to cause adverse environmental impact or interference.
  - Applications for Category 2 takings require a scoped assessment certified by a qualified person.
  - Applications for Category 3 takings require a detailed ecological/hydrological/hydrogeological study prepared by a qualified person

Public Involvement – In Ontario, most types of permit applications are posted to the *Environmental Bill of Rights Registry* for public review and comment unless exempted (e.g. Environmental Assessment process met, temporary water use less than one year, agriculture). As well, municipalities and conservation authorities whose area of jurisdiction a proposed water taking is located are given notice of Permit to Take Water applications. Proponents may appeal Ministry decisions on permits. In addition, third parties may seek leave to appeal Ministry decisions on permits.

Water Use Reporting – Ontario’s *Water Taking* regulation requires every permit holder to collect and record data on the volume of water taken daily and to report the previous year’s data to the Ministry each year before March 31 of the following year. This requirement applies to all permitted water takers in Ontario’s three water basins (Great Lakes –St. Lawrence Basin, Hudson Bay Basin and the Nelson Basin). Each permit lists at least one and often several water taking sources and the volume of water taken daily from each source is to be monitored and reported to the province annually.

Decision-Making Standard – The *Ontario Water Resources Act* (as amended by the *Safeguarding and Sustaining Ontario’s Water Act, 2007*) provides authority to make regulations to implement the decision making standard under the Agreement. Ontario’s current criteria for issuing permits to take water will be evaluated for consistency with the Agreement standards and modified if necessary in accordance with the timelines committed to in the Agreement.

Conservation Measures – The *Ontario Water Resources Act* also provides authority to make regulations requiring conservation measures or a conservation plan. Currently water users are

required to identify existing and proposed conservation measures in the permit application. The new regulation-making authorities and Ontario's Water Conservation and Efficiency Strategy currently under development may augment current requirements.

Return Flow, Water Quality – Section 53 of the Ontario Water Resources Act, requires Ministry of the Environment approval to establish, alter extend or replace new or existing sewage works. Certificates of Approval are issued for approved works. Sewage works means any works for the collection, transmission, treatment and disposal of sewage or any part of any such works. Sewage includes drainage, storm water, commercial wastes and industrial wastes and any such other matter or substance that is specified by regulation.

It is the responsibility of the proponent to assess the assimilative capacity, and determine the actual and potential uses of the intended receiver of the effluent from the proposed works, and derive from this analysis the effluent quality and discharge regimen criteria for the proposed works. Terms and conditions of the Certificate of Approval deal with the criteria for operation and performance of the sewage works, requirements for monitoring and recording of specific indicators of the environmental impact of the works, reporting on incidents, and provision of contingencies to prevent and deal with accidental spills or upsets.

Regulations under the *Environmental Protection Act* specify effluent monitoring requirements and effluent limits for nine industrial sectors.

- *Environmental Protection Act*, R.S.O. 1990, CHAPTER E.19  
[www.e-laws.gov.on.ca/html/statutes/english/elaws\\_statutes\\_90e19\\_e.htm](http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90e19_e.htm)

In addition, the *Ontario Water Resources Act* (as amended by the *Safeguarding and Sustaining Ontario's Water Act, 2007*) provides authority to the issuing Director to impose terms and conditions in a Permit to Take Water governing the return, after use, of water taken under the permit.

The *Water Management Policies, Guidelines and Provincial Water Quality Objectives* is the Ministry's of the Environment's publication which is based on the guiding principles such as protection, preservation, and sustainability of the province's water resources for future generations. In order to effectively implement these principles, ecosystem and watershed management, how pollutants are controlled, and the inter-relationship of air, water and land management are all important considerations.

### ***Consumptive Uses***

Currently, the estimated consumptive use associated with a proposed new or increased water taking is screened by the Ministry of Natural Resources, using generally accepted consumptive use coefficients, if the proposed use approaches the 19 million litre per day (5 million U.S. gallons per day) threshold requiring Prior Notice and Consultation with the other Great Lakes jurisdictions under the Great Lakes Charter, 1985. These water users are encouraged to conduct a site specific consumptive use evaluation to determine whether the Charter threshold will be exceeded.

Ontario's recent consultation sought public input on proposed changes to the Permit to Take Water Program. Among the proposed changes to be implemented through regulation and supporting policy is the development of a two-stage consumptive use methodology for the province. The first

stage will involve application of a refined list of consumptive use coefficients under development for 33 water use sectors/activities. Beyond a threshold to be defined by regulation/policy water users will be required to complete a site specific consumptive use evaluation. Over time the site specific evaluations will help to redefine the sector/activity specific coefficients.

### ***Water Diversions, Intra-Basin Transfers***

**Ban on Out of Basin Diversions/Transfers** – In 1999, Ontario introduced a ban on water diversions or transfers out of the province’s three major water basins (Great Lakes – St. Lawrence River Basin, the Hudson Bay Basin and the Nelson River Basin). This ban was elevated to legislation in 2007 under the *Ontario Water Resources Act*. There are only exceptions to Ontario’s ban on diversions for transfers of water in containers 20 litres or less, water incorporated into a product that is transferred out of the basin, water required for the operation of a vehicle or vessel, water for firefighting or other emergency purposes, existing transfers commenced before January 1, 1998, and transfer of water pursuant to the order of the Lieutenant Governor in Council dated October 2, 1913 respecting the Greater Winnipeg Water District. In Ontario there are NO exceptions to the ban on diversions for straddling communities or straddling counties.

**Intra-Basin Transfers** – Amendments to the *Ontario Water Resources Act* in 2007 also introduced the ban on intra-basin water transfers from one Great Lake watershed to another and the regulation of exceptions, consistent with the straddling community and intra-basin transfer provisions of the Agreement and the exception standard criteria. In keeping with the Agreement, the intra-basin transfer provisions apply to new or increased transfers 379,000 litres per day (100,000 U.S. gallons per day) or more. Permits for transfers involving a consumptive use 19 million litres per day (5 million U.S. gallons per day) or more must be issued by the Minister of the Environment following regional review, taking into consideration the Declaration of Finding issued by the Regional Body. The legislation encourages municipal water uses 379,000 litres per day or more to return water to the source Great Lake watershed and requires any transfers involving a consumptive use of 19 million litres per day or more to return water to the source watershed, in keeping with the Agreement.

The new provisions will come into force once supporting regulations and policies are passed. Ontario is developing the regulations and policies through the engagement of its multi-stakeholder Agreement Advisory Panel, a Municipal Sector Working Group and Ontario First Nations. Ontario posted a proposal paper on the Ontario Environmental Bill of Rights Registry for public consultation from August 5 to October 4, 2009. The paper, *Safeguarding and Sustaining Ontario’s Water Resources for Future Generations*, [www.ene.gov.on.ca/envision/env\\_reg/er/documents/2009/010-6350.pdf](http://www.ene.gov.on.ca/envision/env_reg/er/documents/2009/010-6350.pdf) outlined options for implementing the intra-basin transfer provisions of the Agreement by regulation (including consumptive uses) and proposed elements of a provincial water conservation and efficiency strategy.

To address proposed intra-basin transfers of water in the interim to final regulations, Ontario issued a *Municipal Directive* and *Technical Bulletin* to Ontario municipalities in March 2008. It provides guidance to municipalities to ensure compliance with the Great Lakes Charter prior notice and consultation requirements and consistency with the spirit of the *Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement* for new or increased consumptive uses or intra-basin transfers 19 million litres per day or more.

## **5. Overview of provincial reporting and database of withdrawals, consumptive uses and diversions including implementation status, database elements and capabilities, and reporting mechanisms (e.g. electronic submission):**

### ***Annual Submission to Regional Water Use Database***

Provincial reporting of withdrawals, consumptive uses and diversions to the Great Lakes Commission's *Regional Water Use Database* is coordinated by the Ontario Ministry of Natural Resources. To date, the information reported to the database has been estimated using various sources including the Ministry of the Environment's Permit to Take Water database, Environment Canada's municipal water use database, agriculture water use reports, Statistics Canada census surveys, and direct contact with individual operators. Consumptive uses were calculated using generalized consumptive use coefficients applied to the estimates of water taken, by water use sector. In recent years calendar year 2000 data has been used for regional reporting in the absence of available survey data.

Ontario recently phased in new regulatory reporting requirements for permitted water takers to report daily water taking volumes into the Water Taking Reporting System (see next section for more information). It is anticipated that over the coming years the water use data from this new source, augmented by information from other non-permitted uses, will represent a significant enhancement to the quality of Ontario's database submission, consistent with the reporting commitments of the Agreement. In the meantime, some estimated data will continue to be used.

### ***Water User Reporting under Ontario's Water Taking Regulation***

By regulation, water users province-wide are required to report their daily water use. Phase-in of this requirement for all water use sectors was completed in 2008. Since then, all permit to take water holders are expected to submit daily water taking volumes, electronically to the provincial *Water Taking Reporting System* through an internet-based interface [www.environet.ene.gov.on.ca/wtrs/](http://www.environet.ene.gov.on.ca/wtrs/) or via hard copy submitted using a *Water Taking Submission Form* [www.ene.gov.on.ca/programs/6003e.pdf](http://www.ene.gov.on.ca/programs/6003e.pdf) prior to March 31 every year. The Water Taking Reporting System database represents the provincial warehouse for reported actual volumes of water taken by all permitted users in the province.

In addition, the *Permit to Take Water Database* is the primary warehouse of permit holder information (permit number, owner name, address, water taking source information: water use sector, source coordinates, taking type and source name and maximum permitted volumes). As the reporting provisions of the Agreement are phased-in, enhancements to both databases will be required to warehouse information specifically related to applications that involve intra-basin transfers, return flow, and calculated or measured consumptive uses. Other data management processes will be required to assemble and format all water use data, including information from the permitting program and other non-permitted takings to meet the requirements of the *Interim State/Provincial Reporting Protocols to the Regional Water Use Database*.

By regulation, water takers are required to measure water taking/use by flow meter, or calculate it using a method acceptable to the program Director. Details on metering and calculation methods are included in Appendix A of the *Technical Bulletin Permit to Take Water Program Monitoring and Reporting of Water Takings*. [www.ene.gov.on.ca/programs/6003e.pdf](http://www.ene.gov.on.ca/programs/6003e.pdf)

Appendix A of the Bulletin provides information on closed conduit metering systems, open channel metering systems, monitoring of water takings by using calculation methods, monitoring methods for some specific types of water takings including dams, reservoirs, wetlands, conservation purposes and diversions, and monitoring methods for agricultural irrigation water takings. Calculated volumes of water taken daily are required to be within 20% accuracy or better of the measured volume.

Permit holders are required to comply with any additional data collection and reporting conditions required by a permit such as specific monitoring methods, collection of information at a greater frequency, recording a daily maximum flow, and a requirement that all water taking information be analyzed by a qualified professional.

***Permitted Water Taking Reporting by Sector, Source, Quantity and Location***

Permitted takings are managed by sector, source, quantity and location. The following table identifies the existing water taking sector and sub-sector categories under the program.

Agriculture	Irrigation of (includes frost protection): field and pasture crop; fruit orchard; market garden/flowers; nursery; sod farm; tender fruits; tobacco
Commercial	Aquaculture, bottled water, golf course irrigation, mall/business; snowmaking
Construction	Dredging, road building
Dewatering	Pits and quarries, construction
Industrial	Aggregate washing, brewing/soft drinks, cooling water, food processing, manufacturing; pipeline testing; power generation
Recreation	Aesthetic, fish pond, wetland
Remediation	Groundwater
Water Supply	Campground, communal, municipal
Miscellaneous	Dam/reservoir, heat pump, wildlife conservation, pump test
<i>* each sector has the option of identifying 'other', with a requirement to specify use</i>	

Taking types are categorized as surface water or ground water and by name of the source (e.g. watercourse name and tributary to). Permitted quantities are set at a maximum rate per minute, maximum number of hours of taking a day, maximum volume per day, and maximum number of days taking in a year. The locations of takings are identified by their geographic coordinates (Datum NAD83) including UTM zone, easting and northing.

**6. Ontario’s Provincial withdrawal application documents:**

As part of the Permit to Take Water program, Ontario’s *Application for Permit to Take Water* (September 2007) [www.ene.gov.on.ca/envision/gp/5046e02.pdf](http://www.ene.gov.on.ca/envision/gp/5046e02.pdf) collects information from applicants under the authority of the Ontario Water Resources Act, the *Environmental Bill of Rights*, C. 28, Statutes of Ontario, 1993, and is used by the Province to evaluate applications under Section 34 of the Act (Water Taking). Assistance is provided to applicants in completing the Application Form through local Regional Offices of the Ministry of the Environment, along with a published *Guide to Permit to Take Water Application Form* found at <http://www.ene.gov.on.ca/envision/gp/5046e.pdf>

Information requested on the form is categorized as the application type (e.g. new, amended, or renewal), permit category classification, applicant information, water taking information (e.g.

source, public consultation requirements, and water taking sector and volume information), and location mapping and supporting studies. Revisions to the form will be required to identify information specifically related to applications that involve intra-basin transfers, return flow, and consumptive uses.

Links to related policies and manuals supporting permit to take water applicants, proponents, and application reviewers:

- a) *Permit To Take Water Manual* (April 2005): [www.ene.gov.on.ca/envision/gp/4932e.pdf](http://www.ene.gov.on.ca/envision/gp/4932e.pdf). This manual sets out the decision making process generally followed by the Ministry and explains to applicants, proponents, and the public the requirements and considerations that are generally taken into account as reviewers are evaluating a proposed or existing water taking.
- b) *Technical Guidance Document for Surface Water Studies in Support of Category 3 Applications for Permit to Take Water* (April 2008): [www.ene.gov.on.ca/publications/6643e.pdf](http://www.ene.gov.on.ca/publications/6643e.pdf). This document provides guidance and a consistent, structured approach for a surface water study (hydrological and or ecological) study in support of a category 3 Permit to Take Water applications (or for Category 2 applications, where applicable).
- c) *Technical Guidance Document for Hydrogeological Studies in Support of Category 3 Applications for Permit to Take Water* (April 2008): [www.ene.gov.on.ca/publications/6644e.pdf](http://www.ene.gov.on.ca/publications/6644e.pdf). This document provides guidance and a consistent, structured approach for a hydrogeological study in support of Category 3 Permit to Take Water applications (or for Category 2 applications, where applicable).
- d) *Interactive Water Use Mapping Tool*: [www.lio.ontario.ca/imf-ows/imf.jsp?site=pttw\\_en](http://www.lio.ontario.ca/imf-ows/imf.jsp?site=pttw_en). The web-based mapping tool assists applicants in determining the tertiary watershed and the classification of a proposed water taking location for the purposes of the *Water Taking Regulation*.

## **7. Description of Provincial initiatives that support an improved scientific understanding of the waters of the basin (including groundwater) in basin water resource management:**

### ***Initiatives supporting improved scientific understanding of basin waters:***

#### ***Watershed Management***

- Ontario's 36 Conservation Authorities established under the Conservation Authorities Act, and administered by Ministry of Natural Resources, are local, watershed management agencies that deliver services and programs that protect and manage water and other natural resources in partnership with governments, landowners and other organizations.
- Conservation Authorities are mandated to ensure the conservation, restoration and responsible management of Ontario's water, land and natural habitats through programs that balance human, environmental and economic needs.
- Conservation Authorities undertake watershed management planning that serves as a water and resource management tool to protect, enhance and restore watershed health, and also develop water budgets under the provincial source water protection program.

### *Flows and Levels*

- Ontario's Surface Water Monitoring Centre (Ministry of Natural Resources) collects, monitors and analyzes water flows, levels and climate data, performs Watershed Conditions Analysis, conducts a daily Hazard Identification and Risk Assessment (HIRA) to identify areas throughout the province where a potential risk of flood or drought, creates conditions reports, notifications, advisories on flood and low water conditions and supports decision making for provincial programs (flood, low water/drought, Great Lakes water takings, water budgets, water management planning compliance, dam safety, emergency response).
- The Ministry of Natural Resources administers management regimes under the *Lakes and Rivers Improvement Act*, 1990 for flows and levels at dams along rivers to protect the public from floods and other hazards, while supporting flows, ecosystem health, drinking water supply, hydro-electricity generation, navigation for commercial and recreational purposes, agricultural irrigation, and municipal, commercial and industrial use.
- Ontario's Low Water Response Program (Ministry of Natural Resources) ensures provincial preparedness and assists in the mitigation of the effects of drought through the implementation of short-term, low-water management strategies.

### *Water Budget Studies*

- Under the *Clean Water Act*, 2006, the Ministry of the Environment has partnered with Conservation Ontario, Conservation Authorities and the Ministry of Natural Resources to implement Ontario's Source Water Protection program and develop source water protection plans. The Ministry of Natural Resources is leading the development of water budgets to estimate surface and groundwater supplies, water use demand, and water quantity risk assessments in support of the plans.

### *Groundwater Monitoring, Modelling and Mapping*

- Ontario's Provincial Groundwater Monitoring Network (Ministry of the Environment) monitors ambient groundwater quantity and quality conditions in the province through a network of monitoring wells. Information provides an indicator of aquifer conditions and will support water-taking, drought management, land use planning decisions, and water budget and cumulative impact studies.
- The Ontario Geological Survey's groundwater mapping program contributes to water management initiatives, including the development of GIS-based maps / databases, regional (3-D) aquifer mapping, watershed characterization, thematic studies, regional groundwater sampling, method/protocol and product development.

### *Consumptive Use Studies*

- To support the consumptive water use requirements of the Agreement, the Ministry of Natural Resources initiated a study to recommend a methodology to identify significant consumptive water taking proposals and assist in generating basin-wide totals of consumptive water demand. When completed, the study will provide important considerations regarding existing consumptive use coefficients for various water use sectors, alternative methods for calculating consumptive use, and recommendations for implementation.

### *Cumulative Impacts Studies*

- Participation on the regional Water Resource Managers' Initiative, Source Water Protection Committees and commitment to developing water budgets contribute to the cumulative

### *Aboriginal Traditional Knowledge (ATK)*

- Through a memorandum of understanding the Ministry of Natural Resources and the Union of Ontario Indians, representing the Anishinabek Nation, are working collaboratively to support Agreement implementation.
- The Anishinabek Nation have a deep connection to the land and value water as sacred and living. Many Anishinabek women, who have the responsibility for water, have a great understanding of traditional knowledge, practices and values with respect to water and take part in sacred ceremonies related to the care for water. The Ministry of Natural Resources is seeking a greater understanding of these Anishinabek principles and perspectives as well as broader Aboriginal Traditional Knowledge and Values and is involved with several related initiatives:
  - Formalized partnership with the Anishinabek Women's Water Commission to facilitate opportunities for strengthening the understanding of ATK (e.g., participation in policy input sessions, community teaching)
  - Participation in water ceremony
  - Participation in ATK conferences
  - Adoption of related messaging within Ontario's Water Conservation and Efficiency Strategy

### *Water Resources Information Program*

- The Water Resources Information Program (Ministry of Natural Resources) ensures that accessible and accurate information about Ontario's water resources for use by provincial ministries, municipalities, conservation authorities and others to create maps, conduct geographic analysis and support decisions about the province's water resources. The program developed updated watershed boundaries to support the implementation of the Agreement.

### *Climate Change Modelling*

- Adaptation research within Ontario related to the effects of climate change will include introducing a four-year investment to enhance the government's modelling, monitoring and research capacity. An Expert Panel on Climate Change Adaptation will provide Ontario with adaptation strategies to address the impacts of climate change in communities and ecosystems.

### **Attachments:**

- Municipal Technical Bulletin
- Application for Permit to Take Water

The additional documents referenced in this report are available by request, please contact: [greatlakesannex.mnr@ontario.ca](mailto:greatlakesannex.mnr@ontario.ca)

# Technical Bulletin

## Environmental Assessment Direction for Municipal Water and Wastewater Projects Proposing an Intra-Basin Transfer

### PURPOSE

The purpose of this Technical Bulletin is to provide interim direction to municipalities planning water and wastewater projects to ensure that intra-basin transfers are not undertaken in a manner that is inconsistent with the provisions of the **Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement** until supporting regulations are in place. The Technical Bulletin also provides direction to municipalities on requirements under the Great Lakes Charter which currently remains in force.

### BACKGROUND

In June 2007, *the Safeguarding and Sustaining Ontario's Water Act* (SSOWA) received Royal Assent, amending the *Ontario Water Resources Act* (OWRA). These changes to the OWRA help implement the commitments Ontario made in signing the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement, 2005 (Agreement) with Quebec and the eight Great Lakes States (parties of the Agreement). The Agreement committed the parties to a ban on water diversions (or transfers), with strictly regulated exceptions, strengthened water conservation and common environmental standards for regulating the use of surface or groundwater resources of the Great Lakes – St. Lawrence River Basin.

Among the amendments made to the OWRA through SSOWA is the *prohibition of a new or increased transfer of 379,000 litres of water per day or greater from one Great Lakes Watershed to another subject to strict exceptions*. While the OWRA was amended to incorporate the provisions of the Agreement in 2007, supporting regulations are required to fully implement the Agreement before these provisions can be proclaimed. The Ministries of Environment (MOE) and Natural Resources (MNR) are working collaboratively to develop regulations to manage intra-basin transfers.

Until regulations are completed and the other Great Lakes jurisdictions bring provisions of the Agreement into law, the Great Lakes Charter, 1985 (Charter) remains in force. The Charter commits Ontario to Prior Notice and Consultation with the eight Great Lakes States and Québec before approving any new or increased water diversion (transfer out of the Great Lakes Basin or from the watershed of one Great Lake to another) over 19 million litres per day<sup>1</sup>. The Charter also requires *Prior Notice and Consultation for any new or increased consumptive use of water over 19 million litres per day*.

### ENVIRONMENTAL ASSESSMENT

Municipal water and wastewater servicing proposals (such as expansions of water and sewage infrastructure i.e. pipes, treatment plants etc.) are generally planned and designed under the Municipal Engineers Association Municipal Class Environmental Assessment (MEA Class EA). MOE Regional Offices, specifically Environmental Resources Planner/Environmental Assessment Coordinators are mandatory points of contact where a proposed undertaking (i.e. projects, activities etc.) is classified as Schedule B or C in the MEA Class EA.

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<sup>1</sup> The Ontario Water Resources Act (OWRA) prohibits the transfer of water out Ontario's three major water basins including the Great Lakes Basin – see section 34.3 of the OWRA. A prohibition against transfers out of the Great Lakes Basin has been in place under the OWRA since 1999.

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The MEA Class EA, Section A.2.10 identifies the Agreement, the OWRA and SSOWA as key provincial legislation to consider while undertaking the Class EA process. Additionally, Section A.2.10.2 recommends that technical consultation with the MOE is undertaken for all complex projects involving the construction of water supply and treatment as well as sewage treatment and disposal systems. Projects resulting in an intra-basin transfer subject to the Agreement or consumptive uses that trigger the Prior Notice and Consultation provisions of the Charter are considered complex projects.

While this Technical Bulletin is geared to projects under the MEA Class EA, proponents undertaking an individual EA should also consider the principles of the Charter, the Agreement and the direction outlined below.

**DIRECTION TO ENSURE COMMITMENTS UNDER THE GREAT LAKES CHARTER ARE SATISFIED IN RELATION TO CONSUMPTIVE USE AND WATER DIVERSION.**

There are two triggers under the Charter for Prior Notice and Consultation that are relevant to an Ontario water taking, one in relation to intra-basin transfers and one in relation to the consumptive use portion of a water withdrawal (or taking).

Consumptive use is defined as that portion of water withdrawn or withheld from the Basin that is lost or otherwise not returned to the basin due to evaporation, incorporation into products or other processes.<sup>2</sup> For municipal water use, the consumptive portion of the withdrawal has been estimated to be 10-15% of the new or increased withdrawal volume.<sup>3</sup> Under the Charter, Prior Notice and Consultation is required for proposed withdrawals that involve a new or increased consumptive use of water of 19 million litres per day or more averaged over any 30-day period.

All undertakings for municipal water projects which will result in a new or increased water diversion (transfer of water between Great Lake watersheds) of 19 million litres per day or more averaged over any 30-day period will also trigger the Charter.

The proponent should contact the Lands and Waters Branch, MNR (administrator of the Charter) (contact information below) to confirm the consumptive use and/or water diversion, identify what supporting information is required and coordinate Prior Notice and Consultation if required.

**DIRECTION TO ENSURE COMMITMENTS UNDER THE GREAT LAKES- ST. LAWRENCE RIVER SUSTAINABLE WATER RESOURCES AGREEMENT ARE SATISFIED IN RELATION TO INTRA-BASIN TRANSFERS**

Proponents of undertakings for municipal water or wastewater projects where one of the alternatives will result in a new or increased intra-basin transfer of 379,000 litres per day or more should consider treating the undertaking as a Schedule C undertaking under the MEA Class EA.

Schedule C undertakings proceed under the full planning and document procedures (Phase 1-5) as specified in the MEA Class EA. The five phases of the MEA Class EA require greater analysis of the preferred solution and additional public consultation. The Schedule C process includes identification of the problem or opportunity (Phase 1);

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<sup>2</sup> This definition comes from the Agreement. A slightly differently worded definition appears in the Charter. Subsection 1 (6) of the OWRA also provides a definition of consumptive use that draws on these definitions.

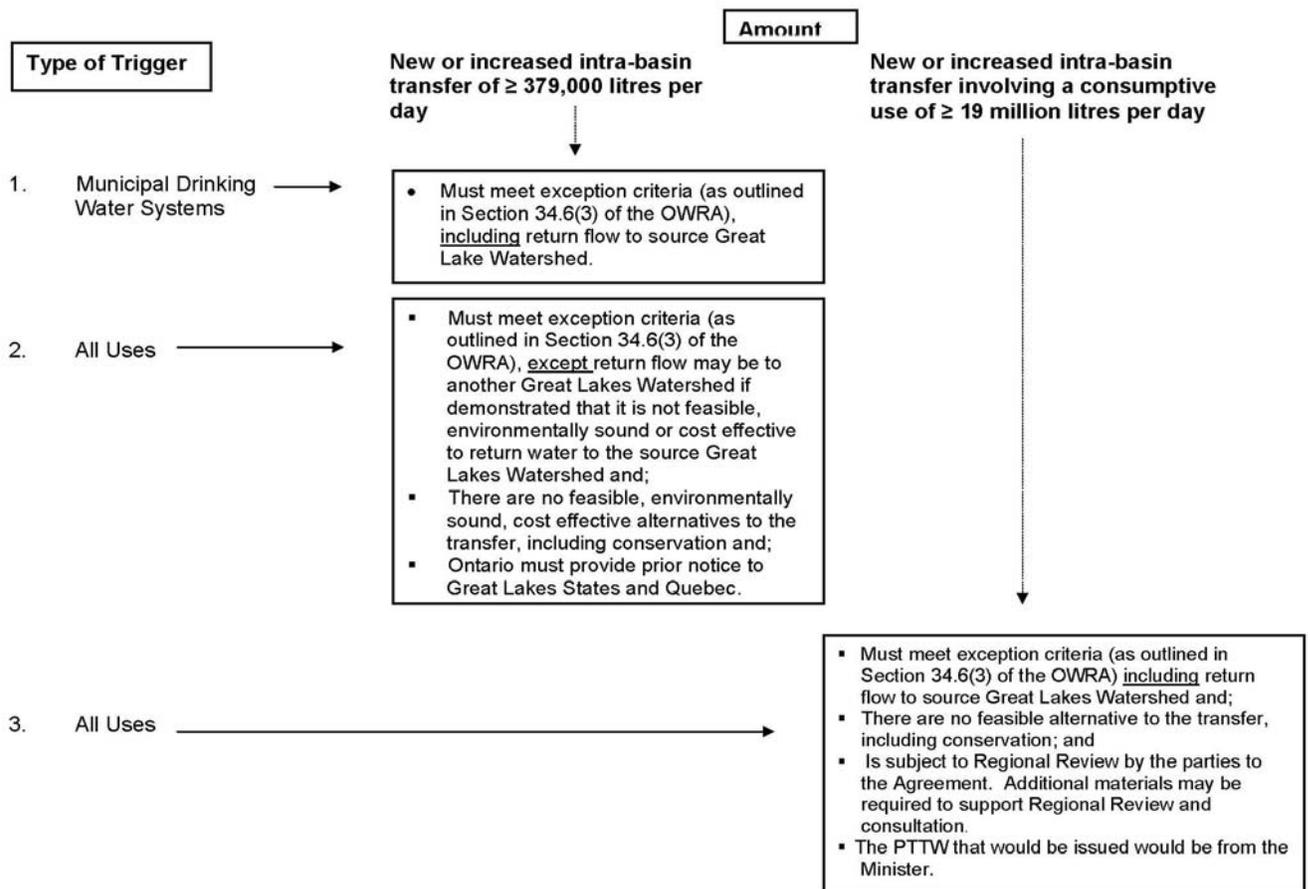
<sup>3</sup> The Ministries are consulting on what approach to take in relation to calculating the amount of consumptive use as part of its consultation on the SSOWA regulations.

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identification of alternative solutions (Phase 2); identification of alternative design concepts for preferred solution (Phase 3); documentation of the rationale, planning, design and consultation process of the project in an Environmental Study Report (Phase 4); and implementation (Phase 5). In comparison, Schedule B undertakings only require fulfillment of Phase 1 and 2 of the MEA Class EA process only.

The contents of the Environmental Study Report are outlined in Section A.4.2 of the MEA Class EA. In the Environmental Study Report, the proponent (with the assistance of the MOE and MNR) should demonstrate how intra-basin transfer provisions outlined in Section 34.6(1)-(3) of the OWRA (Schedule 1) have been met. The ESR should also show that the principles of the Agreement have been considered. Below is a summary of the intra-basin transfer provisions as outlined in Section 34.6(1)-(3) of the OWRA.

### Agreement Intra- Basin Transfer Provisions



Note: 1. 379,000 l/d and 19 million l/d are both amount referenced in SSOVA and the Agreement.  
 2. Consumptive use has in the past been calculated using a co-efficient – for municipal takings, 10-15% is the co-efficient that has been used.  
 Consumptive use = water that is lost through evaporation, incorporation into a product or any other process where water is not returned to the basin.

Consultation requirements for Schedule C projects as outlined in Section A.3.4 of the MEA Class EA, require three mandatory points of contact. At the third point, the Environmental Study Report is placed on the public record for at least 30 calendar days and the Notice of Completion of the Environmental Study Report shall advise the public and review agencies of their rights with regard to requesting a Part II Order (“Bump-up”) request (section 16 of the *Environmental Assessment Act*). The appeal process of the MEA Class EA is outlined in Section A.2.8 of the MEA Class EA.

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If the proponent is unwilling to voluntarily treat its proposed undertaking as a Schedule C undertaking, the Ministry may consider making a recommendation to the Minister of the Environment under ss. 16(3) of the *Environmental Assessment Act*, requesting that he/she order that the project be assessed as a Schedule C undertaking under the MEA Class EA. Additionally, the Ministry may consider making a recommendation for a ss.16 (3) order for additional requirements such as specific monitoring and reporting.

Furthermore, the MOE (in consultation with a proponent) may determine that an undertaking should be assessed as an individual EA if the size of the proposed undertaking or complexity warrants such analysis (e.g. if Regional Review is required) and recommend that the Minister of the Environment make an order under ss. 16(1) of the *Environmental Assessment Act*.

Proponents who adhere to the Technical Bulletin and demonstrate that a proposed intra-basin transfer meets the criteria outlined in subsections 34.6 (1) to (3) of the OWRA to the satisfaction of the MOE and the MNR may be able to use this work to demonstrate compliance with the intra-basin regulations currently under development.

### **MASTER PLANS**

Section A.2.7 of the MEA Class EA identifies that municipalities may consider a group of related projects under a Master Planning process. There are a variety of basic approaches to Master Planning as described in the MEA Class EA, all of which at a minimum, address Phases 1 and 2 of the MEA Class EA process. When preparing a Master Plan, proponents are encouraged to consider the Agreement and how it applies to specific projects identified by the Master Plan at this stage in the planning process. If a project identified in a Master Plan considers an alternative that will result in a new or increased intra-basin transfer of 379,000 litres per day or more, proponents should consider treating the specific project as a Schedule C undertaking under the MEA Class EA.

For more information, please contact:

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## Schedule 1: Exceptions and Criteria for Intra-Basin Transfers

### **Water transfers: Great Lakes watersheds**

- 34.6 (1) A permit shall not be issued or amended under section 34.1 so as to authorize the taking of water from a Great Lakes watershed if,
- a. any of the water would be transferred; and
  - b. the new or increased transfer amount would be the threshold amount. 2007, c. 12, s. 1 (12).

### **Exceptions**

(2) Subsection (1) does not apply to the following transfers:

1. A transfer that satisfies the following criteria:

- i. The portion of the new or increased transfer amount that is lost through consumptive use,
  - a. is always less than 19 million litres, or the lower amount prescribed by the regulations, per day, or
  - b. if a regulation is made prescribing the manner of calculating average amounts of water, is less than an average of 19 million litres, or the lower amount prescribed by the regulations, per day.
- ii. The water is taken by the operating authority of a municipal drinking water system within the meaning of the Safe Drinking Water Act, 2002 and the system serves a major residential development within the meaning of that Act.
- iii. The criteria described in paragraphs 1 to 7 of subsection (3) are satisfied.

2. A transfer that satisfies the following criteria:

- i. The portion of the new or increased transfer amount that is lost through consumptive use,
  - a. is always less than 19 million litres, or the lower amount prescribed by the regulations, per day, or
  - b. if a regulation is made prescribing the manner of calculating average amounts of water, is less than an average of 19 million litres, or the lower amount prescribed by the regulations, per day.
- ii. The water is taken by the operating authority of a municipal drinking water system within the meaning of the Safe Drinking Water Act, 2002 or by any other person.
- iii. It has been demonstrated that conservation of existing water supplies is not a feasible, environmentally sound and cost effective alternative to,
  - a. the transfer, in the case of a new transfer, or
  - b. the transfer of the additional amount, in the case of an increased transfer.
- iv. There are no other feasible, environmentally sound and cost effective alternatives to,
  - a. the transfer, in the case of a new transfer, or
  - b. the transfer of the additional amount, in the case of an increased transfer.
- v. The criterion described in paragraph 1 of subsection (3) is satisfied, or it is not feasible, environmentally sound or cost effective to satisfy that criterion.
- vi. The criteria described in paragraphs 2 to 7 of subsection (3) are satisfied.
- vii. Notice of the application for the permit or amendment has been given to the Province of Quebec, the states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio and Wisconsin and the Commonwealth of Pennsylvania in accordance with the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement of 2005.

3. A transfer that satisfies the following criteria:

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- i. The portion of the new or increased transfer amount that is lost through consumptive use,
  - a. is at least 19 million litres, or the lower amount prescribed by the regulations, on any day, or
  - b. if a regulation is made prescribing the manner of calculating average amounts of water, is at least an average of 19 million litres, or the lower amount prescribed by the regulations, per day.
- ii. It has been demonstrated that conservation of existing water supplies is not a feasible, environmentally sound and cost effective alternative to,
  - a. the transfer, in the case of a new transfer, or
  - b. the transfer of the additional amount, in the case of an increased transfer.
- iii. There are no other feasible, environmentally sound and cost effective alternatives to,
  - a. the transfer, in the case of a new transfer, or
  - b. the transfer of the additional amount, in the case of an increased transfer.
- iv. The criteria described in paragraphs 1 to 7 of subsection (3) are satisfied.
- v. The requirements of subsection 34.1 (14) have been complied with. 2007, c. 12, s. 1 (12).

### **Criteria**

- (3) The criteria referred to in subparagraphs 1 iii, 2 v and vi and 3 iv of subsection (2) are:
1. The new or increased transfer amount is returned, either naturally or after use, to the same Great Lakes watershed from which it was taken, except for an amount prescribed by the regulations that may be lost through consumptive use.
  2. The efficient use and conservation of existing water supplies cannot reasonably avoid,
    - i. the transfer, in the case of a new transfer, or
    - ii. the transfer of the additional amount, in the case of an increased transfer.
  3. The new or increased transfer amount is reasonable, given the purposes for which,
    - i. the transfer is done, in the case of a new transfer, or
    - ii. the transfer of the additional amount is done, in the case of an increased transfer.
  4. The transfer, in the case of a new transfer, or the transfer of the additional amount, in the case of an increased transfer, is implemented so as to ensure that it does not result in any significant individual or cumulative adverse impacts on the quantity or quality of the waters, or the water-dependent natural resources, of the Great Lakes-St. Lawrence River Basin, considering the potential cumulative impacts of any precedent-setting consequences associated with the transfer or the transfer of the additional amount, as the case may be.
  5. The transfer, in the case of a new transfer, or the transfer of the additional amount, in the case of an increased transfer, is implemented so as to incorporate feasible, environmentally sound and cost effective water conservation measures to minimize the taking of water and losses of water through consumptive use.
  6. The transfer is implemented so as to ensure that it complies with,
    - i. the Boundary Waters Treaty of 1909,
    - ii. the International Boundary Waters Treaty Act (Canada), and
    - iii. any other treaty, agreement or law that is prescribed by the regulations.
  7. The transfer, in the case of a new transfer, or the transfer of the additional amount, in the case of an increased transfer, is implemented so as to ensure that it complies with any other criteria that are prescribed by the regulations for the purpose of implementing Article 209 (Amendments to the Standard and Exception Standard and Periodic Assessment of Cumulative Impacts) of the Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement of 2005, including criteria relating to

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climate change or other significant threats to the Great Lakes-St. Lawrence River Basin. 2007, c. 12, s. 1

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For Office Use Only			
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## General Information and Instructions

### General:

Information requested in this form is collected under the authority of the *Ontario Water Resources Act*, R.S.O. 1990 (OWRA) and the *Environmental Bill of Rights*, C. 28, Statutes of Ontario, 1993, (EBR) and will be used to evaluate applications for a Permit to Take Water as required by Section 34 (OWRA).

### Instructions:

- Applicants are responsible for ensuring that they complete the most recent application form.** When completing this form, please refer to the "Guide to Permit to Take Water Application Form" (referred to as the Guide). Application forms and supporting documentation are available from your local Regional or District Office of the Ministry of the Environment, and in the "Publications" section of the Ministry of the Environment website at <http://www.ene.gov.on.ca/envision/gp/index.htm>.
- Questions regarding completion and submission of this application should be directed to local Regional Office of the Ministry of the Environment. Contact information for these offices is available in the Guide or on the Ministry of the Environment website at <http://www.ene.gov.on.ca/envision/org/op.htm>
- This form must be completed with respect to all the requirements of the Guide for it to be considered an application for approval. **Incomplete applications will be returned to the applicant.**
- A complete application consists of:
  - a completed, signed application form
  - all required supporting information identified in this form and the Guide, and
  - a certified cheque or money order, in Canadian funds, made payable to the **Ontario Minister of Finance** for the application fee when required. Payment may also be made by Visa, MasterCard or American Express,

The Ministry may require additional information during the technical review of any application initially accepted as complete.

- The original application, along with supporting information and the application fee should be sent to:

**Ministry of the Environment,  
Attention: Permit to Take Water Director  
Director, Environmental Assessment and Approvals Branch,  
2 St. Clair Avenue West, Floor 12A  
Toronto, Ontario, M4V 1L5**

- Information contained in this application form is not considered confidential and will be made available to the public upon request. Information submitted as supporting information may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the *EBR*. If you do not claim confidentiality at the time of submitting the information, the Ministry of the Environment may make the information available to the public without further notice to you. If you are identifying confidential material, please indicate why you believe the information is confidential.

## 1. Permit Administration

Please indicate if this is an application for a:

- New Permit
- Amendment to Permit (attach a photocopy of permit)
- Renewal of Permit (attach a photocopy of permit)

## 2. Classification

Classification	Fee Required	No Fee Required
<input type="checkbox"/> Category 1	<input type="checkbox"/> \$750	<input type="checkbox"/> Reason _____
<input type="checkbox"/> Category 2	<input type="checkbox"/> \$750	<input type="checkbox"/> Reason _____
<input type="checkbox"/> Category 3	<input type="checkbox"/> \$3,000	<input type="checkbox"/> Reason _____

### 3. Applicant Information

Applicant Name <i>(legal name of individual or organization as evidenced by legal documents such as a copy of Driver's Licence or Master Business Licence)</i>		Business Identification Number
Business Name <i>(the name under which the entity is operating or trading if different from the Applicant Name - also referred to as trade name)</i>		
Applicant Type:	North American Industry Classification System (NAICS) Code	
<input type="checkbox"/> Corporation	<input type="checkbox"/> Federal Government	
<input type="checkbox"/> Individual	<input type="checkbox"/> Municipal Government	
<input type="checkbox"/> Partnership	<input type="checkbox"/> Provincial Government	
<input type="checkbox"/> Sole Proprietor	<input type="checkbox"/> Other <i>(describe):</i> _____	

### 4. Applicant Physical Address

Civic Address - Street information <i>(street number/name/type/direction/unit/suite/emergency 911 location number and street)</i>				
City / Town	County/District	Province/State	Country	Postal Code
Telephone Number <i>(including area code)</i>	Fax Number <i>(including area code)</i>	E-mail Address		

### 5. Applicant Mailing Address

Same as Applicant Physical Address? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If no, complete below</b>			
Civic Address - Street information <i>(street number/name/type/direction/unit/suite/emergency 911 location number and street/P.O.Box/Rural Route Number)</i>			
City / Town	Province/State	Country	Postal Code

### 6. Project Technical Information Contact

Name	Company	Same as Applicant? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If no, complete below</b>	
Address Information:			
Same as Applicant Mailing Address? <input type="checkbox"/> Yes <input type="checkbox"/> No <b>If no, please provide technical information contact mailing address below</b>			
Civic Address - Street information <i>(street number/name/type/direction/unit/suite/emergency 911 location number and street/P.O.Box/Rural Route Number)</i>			
City / Town	Province/State	Country	Postal Code
Telephone Number <i>(including area code &amp; extension)</i>	Fax Number <i>(including area code)</i>	E-mail Address	

**7. Source Information** – Note: Source Information must be provided separately for each source. Please complete and submit multiple copies of this Source Information section (pages 3 and 4 of this form) if your application includes more than one source.

Number of Water Taking Sources Included in this Application (do not include domestic uses that do not require a permit)				
Total Number of Wells	Total Number of Lake Intakes	Total Number of Ponds	Total Number of Watercourse Intakes	
Source Location Information (if multiple sources are included in application, provide information for each source)				
Civic Address - Street information (street number/name/type/direction/unit/suite/emergency 911 location number and street)				
Lot	Concession	Part	Reference Plan	
Municipality/Unorganised Township		County/District	Original Geographic Township	
Geographic (GPS) Coordinates (to be provided in Datum NAD83)				
Method of Collection	Accuracy Estimate	UTM Zone	Easting	Northing
Is the Applicant the owner of the site where water taking will occur?				
<input type="checkbox"/> Yes <input type="checkbox"/> No <b>if no, attach the owner's name, address and a signed letter granting consent for the applicant to access the water taking location</b>				
Is the site where water taking will occur located in an area of development control as defined by the <i>Niagara Escarpment Planning &amp; Development Act</i> ?				
<input type="checkbox"/> Yes <input type="checkbox"/> No				
Is the site where water taking will occur located on the Oak Ridges Moraine Conservation Area as defined by the Oak Ridges Moraine Conservation Plan (a regulation made under the <i>Oak Ridges Moraine Conservation Act</i> )?				
<input type="checkbox"/> Yes <input type="checkbox"/> No				
Are you aware of any complaints or impacts resulting from water takings at the site?				
<input type="checkbox"/> Yes <b>if yes, please describe:</b> _____ <input type="checkbox"/> No				
Will water from the site be packaged in a container (bottled water, tanks)?				
<input type="checkbox"/> Yes <b>if yes, what size of containers?</b> <input type="checkbox"/> greater than 20 litres <input type="checkbox"/> 20 litres or less <input type="checkbox"/> No				
Are wells located within 500 m of the site where water taking will occur?				
<input type="checkbox"/> Yes <input type="checkbox"/> No <b>if no, what is the distance to the nearest well?</b> _____				
Is municipal water available to all dwellings within 500m of the site where water taking will occur?				
<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown				
Estimated start date of water taking	Water taking to extend for a period of: _____ <input type="checkbox"/> days <input type="checkbox"/> weeks <input type="checkbox"/> months <input type="checkbox"/> years <input type="checkbox"/> indefinite			
Is activity subject to the <i>Environmental Assessment Act</i> ?				
<input type="checkbox"/> Yes <b>if yes, please attach approval or Notice of Completion</b> <input type="checkbox"/> No				
If yes, did the project receive any Part II Orders / Bump-Up requests?				
<input type="checkbox"/> Yes <b>if yes, what was the date of the Minister's Decision?</b> _____ <input type="checkbox"/> Decision pending <input type="checkbox"/> No				
List any public consultation/notification that has occurred related to the proposed water taking (i.e., public hearings, notification of First Nations, etc.)				

**Watercourse** - please complete this table if applying to take water from a watercourse (i.e., stream, municipal ditch, open drain, etc.)

Watercourse Name	Tributary to
Does flow in the watercourse stop at any time during the year?	
<input type="checkbox"/> Yes <b>if yes, during which months?</b> _____ For what period of time? _____ <input type="checkbox"/> No	
Do you move/relocate the water intake (pump)?	
<input type="checkbox"/> Yes <b>if yes, please provide primary and secondary locations on attached map</b> <input type="checkbox"/> No	

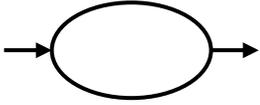
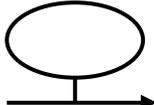
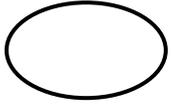
**Well** - please complete this table if applying to take water from a well (includes sumps for mines and quarries)

Well Name / Identifier	Water Well Record Number	If not available, provide name of property owner at time of well construction	
Has the well been deepened?			
<input type="checkbox"/> Yes <b>if yes, what was the date of deepening?</b> _____ <input type="checkbox"/> No			
Type of Well: <input type="checkbox"/> Drilled <input type="checkbox"/> Bored <input type="checkbox"/> Dug <input type="checkbox"/> Driven or Jetted (sandpoints/wellpoints)			
If 'Driven or Jetted', provide the following:			
Total number of sandpoints/wellpoints: _____			
Number of interconnected sandpoint/wellpoint systems: _____			
Can you measure the depth to water in this well?			
<input type="checkbox"/> Yes <b>if yes, what is the depth to static water level?</b> _____ Date Measured: _____ <input type="checkbox"/> No			
Has a pumping test been done?			
<input type="checkbox"/> Yes <b>if yes, please attach report</b> <input type="checkbox"/> No			

**Lake** - please complete this table if applying to take water from a lake

Lake Name
-----------

**Pond/Reservoir** - please complete this table if applying to take water from a pond/reservoir

Pond Name / Identifier				
Was the pond constructed (man made)?				
<input type="checkbox"/> Yes <b>if yes, please provide date of construction</b> _____ <input type="checkbox"/> No				
Pond Size				
Average Length	Average Width	Average Depth of Water	Maximum Depth of Water	Approximate Volume of Pond
Pond Type				
Select the diagram that most accurately resembles your pond:				
 <input type="checkbox"/> online	 <input type="checkbox"/> by-pass	 <input type="checkbox"/> connected	 <input type="checkbox"/> dugout	
Source of pond water (select all that apply)				
<input type="checkbox"/> Seepage / springs / groundwater				
<input type="checkbox"/> Surface water runoff (including tile drains, does not include watercourse or open channel)				
<input type="checkbox"/> Pumped water (if water is pumped into a pond, complete section information for source from which water is pumped - i.e., well, lake or watercourse)				
<input type="checkbox"/> Flowing water (watercourse, open drains, ditches, etc.)				
If "flowing water",				
1. Does water flow into the pond (inflow)?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
If yes, is there a structure to regulate the inflow?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, describe: _____
2. Does water flow out of the pond (outflow)?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
If yes, is there a control structure to regulate the outflow?		<input type="checkbox"/> Yes	<input type="checkbox"/> No	If yes, describe: _____



## 10. Attachments

The following must be attached for all applications (Category 1, 2 and 3) to be complete:

- Map Requirements**  
On a 1:10 000 OBM (Ontario Base Map) (1:50 000 only acceptable in locations where 1:10 000 is not obtainable), mark and label:
  - all existing and proposed water taking locations with sources corresponding with source name
  - all of the following features within 500m of each source: existing wells (indicate use of existing well, springs, watercourses, wetlands, water bodies, property lines, locations and name of property owners, nearest road intersection, dwellings).
- Describe **in detail** how, where and when all water is obtained, stored, transferred, used and returned to the environment (if applicable). Details must include the source of all water takings (and corresponding source name if applicable), purpose of the water taking, period of water taking, and maximum quantity requested (see Guide for further instruction).  
Note: If your application is subject to posting on the Environmental Bill of Rights (EBR) Registry, this description will be used to create the Proposal Notice. The ministry may change the wording as required, to meet the EBR posting requirements.
- Describe how water taking needs (rates, amounts and time periods) were determined. Provide all relevant information and calculations to demonstrate the water takings requested are warranted. Calculation worksheets are available. Refer to Appendix E of the Guide.
- Attach completed water conservation Schedule 1.

The following must be attached for all Category 2 applications:

- Completed Schedule 2 and/or Schedule 3 signed by a Qualified Person.

The following must be attached for all Category 3 applications:

- Study \_\_\_\_\_

## 11. Statement/Signature of Applicant

**I, the undersigned, hereby declare that to the best of my knowledge:**

- The information contained herein and the information submitted in support of this application is complete and accurate in every way and I am aware of the penalties against providing false information.
- The Project Technical Information Contact identified in Section 6 if this form is authorized to act on my behalf for the purpose of obtaining this approval.

Print Name

Signature

Date (yyyy/mm/dd)

For Office Use Only			
Reference Number	Payment Received	Date (y/m/d)	Initials
	\$		

**12. Payment Information**

Application Category		Amount Enclosed	
<input type="checkbox"/> Category 1 (\$750)	<input type="checkbox"/> Category 2 (\$750)	<input type="checkbox"/> Category 3 (\$3000)	<input type="checkbox"/> no fee required
		\$	
Method of Payment			
<input type="checkbox"/> Certified Cheque	<input type="checkbox"/> Money Order	<input type="checkbox"/> VISA	<input type="checkbox"/> MasterCard
<input type="checkbox"/> American Express			
Credit Card Information (if paying by VISA, MasterCard or American Express)*			
Name on Card (please print)	Credit Card Number	Expiry Date (yy/mm)	
Cardholder Signature	Date (y/m/d)		

\*NOTE: credit card accepted for payments UNDER \$10,000.00 only.

# ATTACHMENT “C”

Ministry of Natural  
Resources

Natural Resource  
Management Division

Room 6540, Whitney Block  
99 Wellesley Street West  
Toronto ON M7A 1W3  
Tel: 416-314-6131  
Fax: 416-314-1994

Ministère des Richesses  
naturelles

Division d'Administration de  
Ressources minérales

Édifice Whitney, bureau 6540  
99, rue Wellesley Ouest  
Toronto (Ontario) M7A 1W3  
Tél.: 416-314-6131  
Télééc.: 416-314-1994



December 7, 2009

David Naftzger, Secretary  
Great Lakes-St. Lawrence River Water Resources Regional Body  
c/o Council of Great Lakes Governors  
35 East Wacker Drive, Suite 1850  
Chicago, Illinois 60601

Dear Mr. Naftzger:

As Ontario's incoming member of the Regional Body I am pleased to submit Ontario's Water Management Programs Report and Water Conservation and Efficiency Program Report for review by the Regional Body pursuant to Article 300 of the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement*. Ontario is voluntarily submitting these reports in keeping with the U.S. interstate Compact deadline of December 8<sup>th</sup>, 2009. While the corresponding Agreement deadline has not yet been reached, Ontario is fulfilling its commitment to meet the Compact deadlines where possible.

To meet its commitments under the Agreement, Ontario is enhancing existing, long-standing water management programs and is developing a provincial water conservation and efficiency strategy. The attached reports highlight the key existing and proposed program elements which contribute to Agreement implementation.

Ontario is not, at this time, submitting a baseline list of existing water withdrawals, diversions and consumptive uses. The intra-basin transfer regulations and policies under development in Ontario must first be brought into force to guide the establishment of the province's list of existing transfers. Options for establishing Ontario's baseline list was the subject of public consultation this summer and fall. We plan to submit the required data in keeping with the timelines of the Agreement.

It is my hope that the information provided in the attached reports demonstrates Ontario's commitment to meeting the provisions of the Agreement to protect and conserve the waters of the Great Lakes-St. Lawrence River Basin for generations to come.

Sincerely,

A handwritten signature in blue ink that reads "Rosalyn Lawrence". The signature is written in a cursive style with a large initial 'R'.

Rosalyn Lawrence  
Assistant Deputy Minister  
Natural Resource Management Division

December 1, 2009

**Province of Ontario  
Water Conservation and Efficiency Program Overview**

The following information is submitted by the Province of Ontario to the Great Lakes Regional Body pursuant to the requirements in Article 300 of the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement*.

**1. Lead agency/agencies and contact person(s)**

The lead agency is the Ontario Ministry of the Environment. The contact person is Sharon Bailey, Director, Land and Water Policy Branch.

**2. Status of Ontario's water conservation and efficiency goals and objectives consistent with the Basin-wide goals and objectives**

The Ministry of the Environment has been leading the development of Ontario's water conservation and efficiency goals, objectives and programs, working in conjunction with the Ministry of Natural Resources and eight other ministries. Efforts began as early as August 2007 when the ministries met with over sixty-five people from First Nations, municipalities, industry, agriculture and environmental groups to seek input on the draft regional water objectives and initial ideas for Ontario's future objectives and program activities.

The following year the Ministry investigated many of the stakeholders' suggestions, conducted a jurisdictional scan, and funded the development of a municipal outdoor water use manual and associated training seminars by the Ontario Water Works Association. The Ministry also supported research regarding: (1) municipal water conservation and efficiency performance indicators by the Canadian Water Works Association; (2) the water-energy nexus in municipal drinking-water and wastewater systems by POLIS Project on Ecological Governance; and (3) industrial water conservation and efficiency by the University of Guelph. Finally, nine sector-specific meetings and two meetings with the Ontario's Agreement Advisory Panel - a group made of representatives from various stakeholder groups, including municipalities, environmental organizations, and businesses - were held at the end of 2008 and early 2009 to present the results of this work and to solicit additional thoughts as to what should be included in Ontario's water conservation and efficiency strategy.

Most recently, Ontario prepared a proposal paper entitled "*Safeguarding and Sustaining Ontario's Water Resources for Future Generations*" and posted it on the Ontario Environmental Bill of Rights Registry for public comment from August 5 to October 4, 2009. The Proposal Paper addressed how Ontario intends to move forward on three critical water management topics including developing a water conservation and efficiency strategy. The Proposal Paper can be downloaded at [http://www.ene.gov.on.ca/envision/env\\_reg/er/documents/2009/010-6350.pdf](http://www.ene.gov.on.ca/envision/env_reg/er/documents/2009/010-6350.pdf)

The proposal paper identified the economic and environmental benefits of conserving and using water more efficiently and cited Ontario’s commitments under the Agreement to explain why it was developing a strategy for all water users across the entire province. The five water conservation and efficiency goals in the Agreement were identified as part of the basis for the strategy. Five sections were proposed for the strategy itself: guiding principles, mission statement, targets, objectives and possible actions.

In the province’s past discussions, many people expressed strong support for Ontario to adopt objectives similar to the regional water conservation and efficiency objectives developed by the Agreement signatories, with minor refinements to emphasize the importance of taking ecological water needs into account. Accordingly, the following objectives were proposed:

<b>Strategy Objectives</b>	
1. Guide programs toward long-term sustainable water use including taking ecosystem needs for water into account.	<ul style="list-style-type: none"> <li>a. Use adaptive programs that are goal-based, accountable and measurable over time.</li> <li>b. Develop and implement programs openly and collaboratively, including with local stakeholders, Aboriginal people, governments and the public.</li> <li>c. Prepare and maintain long-term water demand forecasts.</li> <li>d. Develop long-term strategies that incorporate water conservation and efficient water use and integrate them with other environmental management practices and considerations like energy use and climate change.</li> <li>e. Review and build on existing programs and planning efforts and consider other jurisdictions’ practices and experiences.</li> </ul>
2. Adopt and implement supply and demand management to promote efficient use and conservation of water resources.	<ul style="list-style-type: none"> <li>a. Maximize water use efficiency and minimize waste of water.</li> <li>b. Promote appropriate innovative technology for water reuse.</li> <li>c. Conserve and manage existing water supplies to prevent or delay the demand for and development of additional supplies.</li> <li>d. Provide incentives to encourage efficient water use and conservation.</li> <li>e. Include water conservation and efficiency in the review of proposed new or increased uses.</li> <li>f. Promote investing and maintenance of efficient water infrastructure and green infrastructure.</li> </ul>
3. Improve monitoring and standardize data reporting among state and provincial water conservation and efficiency programs.	<ul style="list-style-type: none"> <li>a. Improve and increase the measurement and evaluation of water conservation and water use efficiency.</li> <li>b. Encourage measures to monitor, account and report on water loss.</li> <li>c. Track and report program progress and effectiveness.</li> </ul>
4. Develop science, technology and research.	<ul style="list-style-type: none"> <li>a. Encourage the identification and sharing of innovative management practices and state-of-the art technologies.</li> <li>b. Encourage research, development and implementation of water use and efficiency and water conservation technologies and standards.</li> <li>c. Seek and involve traditional knowledge and practices of Aboriginal people in Ontario.</li> <li>d. Strengthen scientific understanding of the linkages between water</li> </ul>

Strategy Objectives	
	conservation practices and ecological needs and responses.
5. Develop education programs and information sharing for all water users.	<ul style="list-style-type: none"> <li>a. Ensure equitable public access to water conservation and efficiency tools and information.</li> <li>b. Inform, educate and increase awareness regarding water use, conservation and efficiency and the importance of water.</li> <li>c. Promote the cost-saving aspect of water conservation and efficiency for both short-term and long-term economic sustainability.</li> <li>d. Share conservation and efficiency experiences, including successes and lessons learned.</li> <li>e. Enhance and contribute to regional information sharing.</li> <li>f. Encourage and increase training opportunities in collaboration with professional or other organizations in order to increase water conservation and efficiency practices and technological applications.</li> <li>g. Ensure that conservation programs are transparent and that information is readily available.</li> <li>h. Aid in the development and dissemination of sector-based best management practices and results achieved.</li> <li>i. Seek opportunities for the sharing of traditional knowledge and practices of Aboriginal people.</li> </ul>

The Province obtained considerable feedback on the Proposal Paper acquired through its receipt of 57 written submissions, holding four engagement sessions across Ontario and individual discussions with the Ontario Water Works Association, Canadian Water and Wastewater Association, Eastern Ontario Municipal Water Association and First Nations. Overall, there was strong support for the basis of the strategy and the proposed objectives. Ontario fully expects its final water conservation and efficiency strategy to be consistent with the regional goals and objectives.

### **3. Current Provincial Legislation, Regulations, Plans, Policies and Guidance related to Water Conservation and Efficiency**

#### Legislation and Regulations

##### ***Ontario Water Resources Act and the Water Taking Regulation***

Water takings in Ontario are governed by the *Ontario Water Resources Act* (OWRA) and the Water Taking Regulation (Ontario Regulation 387/04). The purpose of the OWRA is to provide for the conservation, protection and management of Ontario's waters and for their efficient and sustainable use, in order to promote Ontario's long-term environmental, social and economic well-being.

The Permit to Take Water (PTTW) program provides for the conservation, protection, and wise use and management of Ontario's waters. Any person taking more than a total of 50,000 litres of water in a day must first obtain a permit to take water. There is currently an exception for water taken for domestic uses, direct watering of livestock, and firefighting.

Currently, there are some 6,600 permits to take water and there are approximately 1,200 permit applications per year. This includes both applications for new water takings and applications for a new permit for an existing taking when the previous permit expires (approximately 1/3 of permits are renewals). Permitted water uses include: municipal, commercial, industrial, and communal water supplies, agricultural irrigation, recreational uses, water bottling, hydroelectric power generation, and other uses such as construction de-watering.

The regulation and accompanying guidelines and procedures manual establish clear technical requirements and standards to promote consistent, sound, defensible decisions related to permit applications and to promote stronger conservation measures. The regulation identifies the factors to be considered by the ministry when assessing water taking applications, including:

- protection of ecosystem natural function, including minimum stream flow
- impact on groundwater and surface water quantity and quality
- low water conditions
- whether water conservation measures are being implemented or are proposed to be implemented in the use of water, in accordance with best water management standards and practices for the relevant sector if these are available
- demonstrated need for the water (reasonable prospect of use)
- whether there is a medium or high level of water use in the watershed

Permits for new or increased water takings that remove water from a watershed, as specified in the regulation, are prohibited in those tertiary watersheds classified as “high use.” High use watersheds are shown on the Summer Low Flow Map and Average Annual Flow Map specified in the regulation.

As of 2008, all permit holders have been required to collect and record data on the volumes of water taken daily and report these “actual” water takings to the Ministry of the Environment each year.

### ***Safeguarding and Sustaining Ontario's Water Act, 2007***

The Ontario government passed the *Safeguarding and Sustaining Ontario's Water Act, 2007* (SSOWA) to enable implementation of the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement and other amendments to the Permit to Take Water program. With respect to water conservation, SSOWA amended the *Ontario Water Resources Act* to enable a Ministry of the Environment Director to require water conservation plans by PTTW holders and for proposed intra-basin transfers. In addition, regulations may be made under the *Ontario Water Resources Act* requiring persons to develop and implement water conservation plans or to take other measures to promote the efficient use of water or reduce water losses through consumptive use.

### ***Building Code Act, 1992***

Ontario's Building Code is a regulation under the *Building Code Act* that sets out technical and administrative requirements that must be met when a building is constructed, renovated or undergoes a change of use. Plumbing requirements are included in the Building Code. Provisions that support water efficiency (e.g., through

mandating low flow toilets in new construction and additional bathrooms added to existing buildings) were added to the Building Code in 1996 to improve water efficiency in any new construction/renovation that occurs.

Ontario's new Building Code (Ontario Regulation 350/06) replaced the old Building Code (Ontario Regulation 403/97) as of December 31, 2006. While prescriptive requirements are maintained, the new Building Code is written in an "objective-based" format, linking code requirements to underlying objectives. Resource Conservation is one category of objectives and includes Water Conservation. In addition, the new Building Code enables certain "green" technologies, some of which encourage water conservation such as rainwater harvesting and grey water re-use.

In October 2009 Ontario consulted on proposed changes to the Building Code including eliminating the exemptions in the Building Code that allow for the installation of 13 litre toilets in some renovations and some new construction. The changes would only allow for the installation of toilets with a maximum flush cycle of 6 litres or less, as is currently the case for the majority of new construction.

### ***Clean Water Act, 2006***

The purpose of *Clean Water Act, 2006* is to protect existing and future sources of drinking water in Ontario in terms of both quality and quantity of water. It is part of the Ontario Government's commitment to ensure the sustainability of clean, safe drinking water for all Ontarians and to implement the recommendations of the Walkerton Inquiry.

The *Clean Water Act* requires that source protection committees be established, representing the municipalities, industries and people of the local watershed. The committees will assess risks to the source water quality and quantity, and write a plan to address significant drinking water threats. This work includes identifying present and future groundwater and surface water municipal supplies, and areas where large regional aquifers are being recharged. It also involves measuring how much water exists both at surface and below ground, how it moves, and how much water is withdrawn to identify potential water shortages. Part of this process will be looking at the long-term water supply situation of municipalities, and determining whether current or future water availability is threatened.

If there are significant drinking water threats associated with water quantity, the source protection plan must include policies to address those threats. Such policies may address water conservation. The *Clean Water Act* allows for policies in a source protection plan to be implemented through existing regulatory requirements or voluntary initiatives. Municipal by-laws and land-use planning controls could also be used to mitigate a significant drinking water threat.

Under the *Clean Water Act*, source protection planning must also consider several federal and provincial Great Lakes agreements, including the *Great Lakes Charter* and the *Great Lakes-St Lawrence River Basin Sustainable Water Resources Agreement*. For example, when choosing policies in a source protection plan to address a significant drinking water

threat, the source protection committee might consider the water conservation goals under these agreements and look for co-benefits.

### ***Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem***

The *Canada-Ontario Agreement Respecting the Great Lakes Basin Ecosystem (COA) 2007-2010* is the framework through which the Canadian federal government and Province of Ontario work cooperatively to understand, restore and protect the aquatic ecosystem health of the Great Lakes. The 2007 COA links aquatic ecosystem health, water conservation, and sustainable water use. Through the COA, Ontario and Canada committed to fostering sustainable water use and conservation consistent with the intent of the Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement.

### ***Green Energy Act, 2009***

On May 14, 2009 the Ontario government passed the Green Energy Act intending to attract new investment, create new green economy jobs and better protect the environment. Part III Energy Efficiency and Efficient Use of Water states that no person shall offer for sale, sell or lease an appliance or product to which this Part applies unless the appliance or product meets the prescribed efficiency standard or requirement and a prescribed label or other prescribed marking that confirms compliance with the prescribed efficiency standard or requirements. Part IV allows for the Lieutenant Governor in Council to make regulations including prescribing water efficiency standards or requirements for the prescribed appliances or products. These regulations are currently under development.

## **Plans, Polices and Guidance**

### **Growth Plan for the Greater Golden Horseshoe**

The Growth Plan for the Greater Golden Horseshoe, 2006, was prepared under the *Places to Grow Act, 2005*, and represents the province's long-term vision for managing the rapid growth that is forecast for this region to 2031. The Plan contains policies that call for more compact and complete communities, require co-ordination between infrastructure investment and land-use planning and support the development of a culture of conservation.

This plan includes water conservation policies: construction of new, or expansion of existing, municipal or private communal water and wastewater systems should only be considered when strategies for water conservation and other water demand management initiatives are being implemented. Municipalities will develop and implement official plan policies and other strategies in support of conservation objectives: water conservation, including water demand management, for the efficient use of water, and water recycling to maximize the reuse and recycling of water.

### **Oak Ridges Moraine Conservation Plan, 2002 and Technical Papers**

The Oak Ridges Moraine Conservation Plan requires that every upper-tier municipality and single-tier municipality within the designated moraine area begin to prepare a water budget and conservation plan for every watershed whose streams originate within the municipality's area of jurisdiction (section 25(1)).

## **Lake Simcoe Protection Plan**

On June 2, 2009 the government released the Lake Simcoe Protection Plan to address environmental protection of the watershed. Drawing on expert advice from scientists, the plan sets a new standard for environmental protection in the province and provides a road map to help restore and protect the health of Lake Simcoe. The plan – which focussed on lands within the Lake Simcoe watershed -- is supported by a regulation (Ontario Regulation 219/09) under the *Lake Simcoe Protection Act, 2008*.

Among other things, the Plan promotes greater efforts to conserve and use water more efficiently in order to maintain future demands for water within sustainable limits. To monitor progress in achieving the water quantity-related objectives of the Plan, the indicators of environmental health relating to water quantity include effective water conservation and efficiency plans (e.g., as measured through reductions in peak water demand, reduced water use per capita, progress in achieving municipal targets).

The Plan contains the following policies to promote greater efforts to conserve and use water more efficiently throughout the Lake Simcoe watershed:

- Within five years of the date the Plan comes into effect, municipalities will prepare and begin implementation of a water conservation and efficiency plan, that has regard to the recommended standards and practices for the municipal sector including those recommended by the Ontario Water Works Association;
- The Ministry of Agriculture, Food and Rural Affairs, in cooperation with key stakeholders, will assist and encourage water conservation and efficiency efforts in the agricultural community through stewardship programs aimed at promoting the adoption of best management practices;
- The Ministry of the Environment will work with other water use sectors such as the major recreational use sector and other commercial and industrial sectors in the Lake Simcoe watershed to encourage the development and implementation of water conservation and efficient use practices for their sector; and
- An application to establish or expand a major recreational use shall be accompanied by a recreation water use plan that demonstrates, for example:
  - water use for maintenance or snow-making or both are kept to a minimum;
  - the use of water-conserving technologies in clubhouses and restaurants and in the irrigation and watering of sports field surfaces, golf fairways, tees and greens, and landscaped areas around buildings and structures; and
  - other water conservation technologies (such as rainwater harvesting or reuse of stormwater) will be used to reduce water use.

## **Ontario Low Water Response**

The province's "Ontario Low Water Response" (OLWR) provides a framework to ensure provincial preparedness, to assist in coordination and to support local response in the event of a drought due to extended periods of low rainfall and high temperatures. OLWR

is intended to mitigate the effects of drought through the implementation of short-term, low-water management strategies in cooperation with the local conservation authorities. These complement the long-term approaches that manage both water supply and demand.

OLWR consists of a tiered level system whereby the level of low water conditions will indicate the placement of the watershed in either a Level I, II or III Low Water Condition. If a low water level is declared for a watershed or part of watershed, all permit holders for water takings in that watershed may be asked to document their water efficiency and conservation practices that are in place or are proposed. Local Water Response Teams may also be required to outline contingency measures that will be adopted within the watershed to achieve water use reduction targets of 10-20%. Varying levels of conservation are required depending on the low water level that has been declared. OLWR reflects the historical partnership between the Ministries of the Environment, Natural Resources, and Agriculture, Food and Rural Affairs, local conservation authorities, municipalities and water users.

### **Provincial Policy Statement (2005)**

Under the authority of Section 3 of the *Planning Act*, the Provincial Policy Statement (PPS) provides policy direction on matters relating to land use planning that are of provincial interest. The PPS sets the policy foundation for regulating the development and use of land. Section 1.6.4.1 of the PPS states that planning for water and sewage services shall promote water conservation and water use efficiency. In addition, section 2.2.1 states that planning authorities shall protect, improve or restore the quality and quantity of water by, among other things, “promoting efficient and sustainable use of water resources, including practices for water conservation and sustaining water quality”.

### **Financial Plans Regulation for the Municipal Drinking-Water License Program and Financial Plans Guidance Document for Drinking-Water Systems and Municipal Wastewater Systems**

As part of the province’s commitment to implement all of Justice O’Connor’s Walkerton recommendations, the Ministry of the Environment put in place a new approvals framework under the *Safe Drinking Water Act* for municipal residential drinking-water systems – the Municipal Drinking-Water License Program. Financial plans are one of the elements which must be put in place for a license to be issued.

A Financial Plans Regulation and Financial Plans Guidance Document were prepared by the Province in 2007. The Regulation outlines requirements set out by the Minister of the Environment. The Guidance Document supports municipalities with the preparation of their financial plans and contains a number of principles, such as:

“Ensuring users pay for the services they are provided leads to equitable outcomes and can improve conservation. In general, metering and the use of rates can help ensure users pay for services received.”

Taken together, the Financial Plans Regulation and Guideline are a key step in the province’s long term strategy to ensure the financial sustainability of municipal drinking-water and wastewater systems.

#### **4. How Ontario currently promotes Environmentally Sound and Economically Feasible Water Conservation Measures**

Applicants for a Permit to Take Water must complete “Schedule 1 – Implementation of Water Conservation in accordance with Best Management Practices and Standards for the Relevant Sector”. Applicants must identify what water conservation measures and practices they are currently implementing or anticipate implementing over the duration of the permit.

Applicants also must state their goals for reducing the use, loss or waste of water or for increasing the efficiency of water use e.g., litres per day per unit of production or litres per day per capita for the residential sector.

Schedule 1 contains a list of water conservation best management measures and practices for applicants to check off. For the measures and practices checked off, applicants are to provide specific details of the best management practices and to provide information used in determining water conservation and efficiency management practices and measures.

Finally, applicants are asked to identify any approval or certification that they have received for implementing water conservation and efficiency measures e.g., Environmental Farm Plan, Audubon Cooperative Sanctuary Program for Golf Courses.

With respect to the municipal sector, the Ministry provided funding to the Ontario Water Works Association to prepare “*Water Efficiency: Best Management Practice*” in 2005 as well as “*Outdoor Water Use Reduction Manual*” in 2008 and associated seminars. The “*Outdoor Water Use Reduction Manual*” is available at:

[http://www.owwa.com/img/content\\_images/Image/Outdoor%20Water%20Use%20Manual.pdf](http://www.owwa.com/img/content_images/Image/Outdoor%20Water%20Use%20Manual.pdf)

For the agricultural sector, the Ontario Ministry of Agriculture, Food and Rural Affairs provides a number of fact sheets and guides on best management practices containing information on efficient irrigation systems, staggering irrigation schedules and preparing Environmental Farm Plans.

#### **5. Ontario’s water conservation and efficiency program implementation timeline and status**

Ontario is on track to finalize its water conservation and efficiency strategy and begin implementing programs by December 2010.