Description of proposed regulatory amendments to support implementation of the Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement

Introduction

In December 2005, the premiers of Ontario and Québec and the governors of the eight U.S. Great Lakes states (Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin) signed the Great Lakes–St. Lawrence River Basin Sustainable Water Resources Agreement (Agreement). The Agreement commits the provinces and states that share the Great Lakes to implement measures to better protect, conserve and restore the waters of the Great Lakes–St. Lawrence River Basin.

Link to the Agreement: http://www.mnr.gov.on.ca/en/Business/Water/1ColumnSubPage/STEL02_164560.html

In signing the Agreement, the Parties committed to:

- 1. Ban new or increased transfers of water out of the Great Lakes–St. Lawrence River Basin with strictly regulated exceptions. **Ontario has banned out-of-basin transfers since 1999.**
- 2. Develop and implement water conservation and efficiency goals, objectives, and programs in each jurisdiction, based on Basin-wide goals and objectives. **Ontario finalized its water conservation and efficiency goals and objectives in 2012 and has 49 existing programs in place.**
- Strengthen information and science related to Great Lakes water and water use to support sound decision-making. Each year, Ontario reports information on water takings to the Great Lakes – St. Lawrence River Basin water-use data repository. In 2013, Ontario also collaborated with the other Parties to complete the first cumulative impact assessment under the Agreement.
- 4. Manage water takings based on the provisions outlined in the Agreement. **Ontario's** existing Permit to Take Water program generally meets or exceeds the standards of the Agreement. This document outlines proposed regulatory amendments that would fully align Ontario's program with the provisions of the Agreement.
- 5. Regulate new or increased transfers of water from one Great Lake watershed to another (intra-basin transfers) based on the standards of the Agreement. **Ontario passed** legislation in 2007 to enable the regulation of intra-basin transfers under the Agreement. This document outlines proposed regulatory amendments that would implement the regulatory requirements for intra-basin transfers.

Ontario is proposing to regulate new or increased water takings and transfers of water between Great Lakes watersheds in accordance with the provisions of the Agreement. Once these provisions are implemented, Ontario will have put in place all the regulatory measures that are needed to meet its commitments under the Agreement.

To implement provisions of the Agreement related to managing water takings and transfers of water between Great Lakes watersheds, Ontario is proposing to amend the Water Taking Regulation (Ontario Regulation 387/04 under the Ontario Water Resources Act) and the Classification of Proposals for Instruments Regulation (Ontario Regulation 681/94 under the Environmental Bill of Rights, 1993). Amendments to the Ontario Water Resources Act and the Safe Drinking Water Act, 2002 would also be proclaimed in order to authorize and give effect to the amended regulations and to ensure the Ministry's Permit to Take Water program aligns with Ontario's commitments in the Agreement.

This document summarizes the proposed regulatory changes and the legislative amendments that would need to be proclaimed. We invite your comments. The Ministry will consider all comments received during the Environmental Registry comment period. Following the closure of the comment period and after considering comments received, the Ministry intends to recommend final regulatory amendments. The Ministry intends to recommend that the regulatory amendments be brought into force on January 1, 2015 and that the associated legislative amendments also be proclaimed at that time.

Key terms

Before describing the proposed regulatory amendments, it is helpful to review some key terms related to the Agreement.

Water taking and consumptive use

The Agreement contains provisions that relate to takings and consumptive uses of water, and other provisions that relate to transfers of water between Great Lakes watersheds (also known as intra-basin transfers). As defined in the Agreement, 'consumptive use' means 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.

The Great Lakes – St. Lawrence River Basin and its watersheds

The Agreement defines the Great Lakes – St. Lawrence River Basin as the watershed of the Great Lakes and the St. Lawrence River upstream from Trois-Rivières, Québec within the jurisdiction of the Parties.



Figure 1: Great Lakes - St. Lawrence River Basin Watersheds

Under section 34.5 of the Ontario Water Resources Act to be proclaimed, the Great Lakes – St. Lawrence River Basin is divided into the following five watersheds:

- the Lake Superior watershed;
- the Lake Huron watershed;
- the Lake Erie watershed;
- the Lake Ontario watershed; and
- the St. Lawrence River watershed.

Intra-basin transfer

An intra-basin transfer refers to a transfer of water from one Great Lakes watershed to another. It is a transfer within the Great Lakes – St. Lawrence River Basin. For example, a transfer of water from the Lake Ontario watershed to the Lake Huron watershed is an intra-basin transfer. Managing intra-basin transfers is a complex issue for Ontario in light of Ontario's geography and patterns of growth. Ontario borders four of the five Great Lakes and the St. Lawrence River and has more kilometres of intra-basin watershed boundaries than all the other jurisdictions combined.

Connecting channels

"Connecting channels" are water bodies that connect two Great Lakes. For example, the Niagara River is the connecting channel between Lake Erie and Lake Ontario. The Agreement defines the watershed of each Great Lake to include its upstream and downstream connecting channels. Other jurisdictions use this definition to implement the Agreement.

Volume thresholds that trigger requirements under the Agreement

The Agreement specifies threshold amounts above which proposals for new or increased takings, consumptive uses, or transfers of water would be subject to the Agreement's decision-making criteria and provisions for regional notice and review.

The Agreement refers to two thresholds – 379,000 litres of water per day and 19 million litres consumptive use of water per day. For municipal water systems, these thresholds are roughly equivalent to population increases of 800 and 330,000 people, respectively. Proposals for new or increased intra-basin transfers of 379,000 litres of water per day or more must satisfy specific environmental criteria outlined in the Agreement. Proposals must demonstrate that there are no feasible alternatives to the transfer and that making efficient use of existing water supplies cannot avoid the transfer. A new or an increased intra-basin transfer must:

- be limited to amounts that are reasonable;
- where feasible, return water to the Great Lake watershed from which it was taken;
- be implemented in a way that does not cause significant individual or cumulative impacts on water quantity or quality;
- use feasible, environmentally sound and cost-effective conservation measures; and
- comply with applicable laws and agreements, including the Boundary Waters Treaty.

In addition, under the Agreement, the province or state in which the proposal is located must provide notice to the other Parties before making a decision on the proposal.

According to the Agreement, additional requirements apply to proposed new or increased intrabasin transfers or water takings that involve a consumptive use of 19 million litres per day or more. Intra-basin transfers above this threshold must return water to the source Great Lake watershed from which it was taken. Proposals for intra-basin transfers must also undergo Regional Review by the Parties to the Agreement. For proposed water takings with a consumptive use of 19 million litres per day or more, notice of the proposal and an opportunity to comment must be provided to the other Parties before a decision on the proposal is made.

The remainder of this document describes:

- 1. The existing legislative amendments to the Ontario Water Resources Act and the Safe Drinking Water Act, 2002 that would need to be proclaimed in order to authorize and give effect to the amended regulations.
- 2. The proposed amendments to the Water Taking Regulation.
- 3. The proposed amendments to the Classification of Proposals for Instruments Regulation.

1. Proclamation of legislative amendments

Water takings in Ontario are governed by the Ontario Water Resources Act and the Water Taking Regulation, a regulation under the Act. The purpose of the Act 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. It requires anyone taking more than 50,000 litres of water in a day, with some exceptions, to obtain a Permit to Take Water. This is one of the most stringent requirements amongst Great Lakes jurisdictions. Ontario's existing Permit to Take Water program fulfills or exceeds most of the requirements of the Agreement.

In 2007 the government passed the Safeguarding and Sustaining Ontario's Water Act, 2007 which amended the Ontario Water Resources Act and the Safe Drinking Water Act, 2002 to allow key commitments of the Agreement to be implemented.

The Ministry intends to recommend that the regulatory changes in this proposal be brought into force on January 1, 2015. It would be further recommended that on that date the provisions of the Safeguarding and Sustaining Ontario's Water Act, 2007 be brought into force which add the following provisions to Ministry of the Environment statutes: sections 33.1, 34 to 34.11, 75 (1.2) to (1.4), 76 (1)(b)(vi.1), and 76 (1)(b.1) of the Ontario Water Resources Act and sections 32 (5) 2 iv and 44(1)(e) of the Safe Drinking Water Act, 2002. These sections are necessary to authorize and give effect to the amended regulations.

The sections to be proclaimed would:

- Update the existing section of the Ontario Water Resources Act that deals with water taking.
- Require proposals for new or increased transfers of water between Great Lakes watersheds to meet specified criteria prior to a permit being issued (the criteria specified in the Act mirror the provisions of the Agreement).
- Authorize the Ministry to regulate a person who transfers water even if that person is not the one who takes the water under the permit (the Act defines this person as a "related transferor").
- Require a permit holder or a related transferor causing a new or increased transfer of water between Great Lakes watersheds to obtain an amendment to the permit that authorizes the transfer.
- Require water takers who are currently "grandfathered" to obtain a permit if they establish a new or an increased transfer of water between Great Lake watersheds ("grandfathered" water takers are those persons who commenced taking water prior to March 30, 1961 and who are not required to obtain a permit).
- Outline the terms and conditions that a Director may include in a permit, including terms and conditions governing the transfer of water between Great Lakes watersheds.
- Authorize the Director to establish baseline amounts for existing transfers of water between Great Lakes watersheds.
- Authorize the Director to amend other Ministry of the Environment approval documents to help regulate a transfer (e.g., a sewage works approval that regulates the return of transferred water as sewage).
- Add a requirement to ensure that, if a municipal drinking water system takes and transfers water between Great Lakes watersheds, that a Permit to Take Water authorizing the intra-basin transfer has been issued before a licence for the system is issued or renewed under the Safe Drinking Water Act, 2002.

- Enable the Minister to be responsible for decisions on transfers of water between Great Lakes watersheds that are 19 million litres per day consumptive use or more.
- Define terms related to regulating the transfer of water between Great Lakes watersheds.
- Grant Parties to the Agreement access to the Environmental Review Tribunal and standing with respect to judicial review of specified decisions.
- When Parties to the Agreement prepare an assessment of cumulative impacts (which the Agreement specifies will be done at least every 5 years), require the Minister to:
 - publish the assessment on the Environmental Registry and invite public comments;
 - highlight parts of the assessment that consider climate change and other major threats; and
 - publish a statement summarizing actions Ontario intends to take in response to the assessment.
- Make minor amendments to the Director's authority to issue orders related to water taking and flowing water that may be causing interference.
- Provide authority to the Lieutenant Governor in Council to make regulations (e.g., regarding water takings, transfers of water or sewage, water conservation).

The Ontario Water Resources Act and the Safe Drinking Water Act, 2002, including the sections to be proclaimed, can be accessed on e-Laws at <u>www.e-laws.gov.on.ca</u>

2. Proposed amendments to the Water Taking Regulation (O. Reg. 387/04 under the Ontario Water Resources Act)

The existing Water Taking Regulation spells out matters that the Director shall consider when making decisions about Permits to Take Water. In addition, it specifies requirements for notification, and requires permit holders to monitor the amount of water that they take each day and report these amounts to the Ministry each year.

The proposed changes to the regulation would manage new or increased transfers of water between Great Lakes watersheds in accordance with the provisions of the Agreement. It would also better align the regulation with the Agreement's provisions related to new or increased takings and consumptive uses of water. The proposed amendments are described below.

Takings and consumptive uses of water

Decision-Making Standard

The Agreement outlines criteria for managing new or increased takings and consumptive uses of water from the Great Lakes–St. Lawrence River Basin (the Decision-Making Standard). According to the Agreement, new or increased takings and consumptive uses shall:

- return water to the source watershed from which it was taken;
- be implemented in a way that does not cause significant individual or cumulative impacts on water quantity or quality;
- use feasible, environmentally sound and cost-effective water conservation measures;
- comply with applicable laws and agreements, including the Boundary Waters Treaty; and

• be reasonable based on a consideration of factors outlined in the Agreement, such as whether water will be used efficiently.

The requirements in the Ministry's existing Water Taking Regulation and Permit to Take Water program meet or exceed most of these criteria. To fully align with the Agreement's Decision-Making Standard, the regulation would specify the following additional matters for a Permit to Take Water Director to consider when making decisions regarding Permits to Take Water:

- The amount of water that will be lost through consumptive use;
- Issues related to the return of water after use; and
- Any applicable laws or international agreements that may apply to the water taking.

Proposals Subject to Prior Notice

Under the Agreement, the Parties agree to provide each other with notice and an opportunity to comment on any proposal for a new or increased consumptive use of water of 19 million litres per day or more in any 90-day period. The Parties' comments are to address whether or not the proposal is consistent with the Agreement's Decision-Making Standard. The regulation would specify that, if this provision applies to a Permit to Take Water application, the Director shall ensure that other Parties are notified and given an opportunity to comment before making a decision on the application.

Intra-basin Transfers

Great Lakes watershed boundaries

To identify existing or proposed new intra-basin transfers, the boundaries of the Great Lakes watersheds need to be clearly defined. The regulation would refer to a map of the Great Lakes – St. Lawrence River Basin watersheds which would be available on the Province of Ontario's website and which could be amended from time to time. The draft regulation would include a provision that would allow for the watershed boundaries to be adjusted if more accurate information becomes available.

The map of the watershed boundaries may be viewed by following this link: <u>http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@water/documents/document/2853</u> <u>31.pdf</u>

The Agreement states that the watershed of each Great Lake shall include its upstream and downstream connecting channels. Other jurisdictions have used this definition to implement their programs. Subsection 75 (1.4) of the Ontario Water Resources Act specifies that a regulation may describe the Great Lakes watersheds so that they overlap to include the upstream and downstream connecting channels of each Great Lake. Ontario is proposing to align with the best practices of other jurisdictions and describe the Great Lakes watersheds so that they overlap to include both the upstream and the downstream connecting channels of each Great Lake. Specifically, for the purposes of identifying intra-basin transfers, the St. Mary's River would be considered part of both the Lake Superior watershed and the Lake Huron watershed; the St. Clair River, Lake St. Clair, and the Detroit River would be considered part of both the Lake Erie watershed; and the Niagara River would be considered part of both the Lake Erie watershed.

As is the practise in other jurisdictions, the regulation would specify that water transferred between a Great Lake watershed and the watershed of its connecting channel (or vice versa) would not be considered an intra-basin transfer. Therefore, the regulation would provide that these water takings would not be subject to the intra-basin transfer provisions of the Ontario Water Resources Act (sections 34.5 to 34.11) and the intra-basin transfer provisions of the Regulation. These water takings would continue to be subject to other applicable requirements of the Act and Regulation (e.g., the criteria that the Director is required to apply to every Permit to Take Water application). This approach is consistent with the approach adopted by other Parties whose jurisdiction includes the watersheds of connecting channels.

Following the practice in other jurisdictions, the regulation would also specify that water that is transferred from the immediate outlet of Lake Ontario to the St. Lawrence River (or vice versa) would similarly not be considered an intra-basin transfer. These water takings would continue to be subject to other applicable requirements of the Act and Regulation.

Water takings for domestic use or for watering livestock will not require a permit unless a new or an increased intra-basin transfer is established

Water takings for the watering of livestock or poultry or for domestic purposes (other than by a municipality or a public utility company) are currently not required to obtain a Permit to Take Water. The proposed amendment to the regulation would retain these existing exceptions for watering of livestock or poultry or for domestic purposes. Only if the water taker establishes a new or an increased transfer of water between Great Lake watersheds of 379,000 litres of water or more per day would a permit be required. This requirement is not anticipated to impact current agricultural operations. Currently, no existing livestock or poultry operations use 379,000 litres of water per day.

Thresholds

As noted above, the Agreement specifies threshold amounts above which proposals for new or increased transfers or consumptive uses of water would be subject to the Agreement's decision-making criteria and provisions for regional notice and review. The thresholds are 379,000 litres per day for prior notice of intra-basin transfers, 19 million litres per day consumptive use for regional review of proposed intra-basin transfers, and 19 million litres per day consumptive use for prior notice and comment on proposed consumptive uses of water.

To allow a proponent and the Ministry to determine whether a proposed intra-basin transfer or consumptive use of water exceeds the applicable threshold amounts, the draft regulation would specify methods for:

- 1. Establishing a baseline amount of water;
- 2. Determining how much water would be consumed by the proposed use;
- 3. Calculating average amounts;
- 4. Considering all applications within a 10-year time period; and
- 5. Dealing with cases that involve two or more Permits to Take Water

Establishing a baseline amount of water

The baseline will provide the starting point for determining what is considered a new or an increased transfer or consumptive use of water.

For existing water takings, it is proposed that the baseline would be set at the authorized maximum amount in the Permit to Take Water as of the day prior to the regulation coming into effect. If the authorized taking amount was changed after that date as a result of environmental assessment work that had been completed prior to the date the regulation comes into effect, the baseline could be established using the amounts specified in the environmental assessment.

Under section 34.8 of the Ontario Water Resources Act, persons who are currently transferring water between Great Lakes watersheds have two years from the date this section comes into force to make a request to the Director for a determination of the amount of water they are currently deemed to be transferring (i.e., the transfer baseline). The regulation would specify that, if it is reasonable in the circumstances to do so, the Director would establish the transfer baseline at the authorized taking amount as of the day prior to the regulation coming into effect. If the authorized taking amount were increased after that date as a result of environmental assessment work that had been completed prior to the date the regulation comes into effect, the transfer baseline could be established using the increase.

For projects that underwent prior notice and consultation with other Great Lakes jurisdictions under the Great Lakes Charter or projects that have begun prior notice and consultation before the regulation comes into force, the Director would deem the amount considered under the Charter to be the baseline provided that the Ministry of Natural Resources has confirmed that Ontario's prior notice and consultation obligations under the Charter have been satisfied. This provision will assist in transitioning between the Great Lakes Charter and the Agreement.

This proposed approach to setting baselines is intended to accommodate existing infrastructure investments and past environmental planning decisions.

Determining how much water would be consumed

Consumptive use is the 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. For example, in municipal water systems, consumptive use is about 12% of the water that is taken. In other sectors, consumptive use varies from 0 to 85% depending on the specific type of water use.

The regulation would specify that consumptive use would be calculated using a method specified by the Director and that is published on the environmental registry. The method for calculating consumptive use is currently being developed and would be published prior to the proposed regulation coming into force. In general terms, the ministry is considering an approach where all water taking applications would be screened by estimating the consumptive use volume of the proposal using general consumptive use coefficients, as published by the Ontario Ministry of Natural Resources <u>www.waterbudget.ca/consumptiveuse</u>. General consumptive use coefficients reflect sector-wide averages and can produce a reasonable estimate of consumptive use for different categories of water use. However, they do not take individual processes or system-specific circumstances into account.

If the estimated consumptive use of a proposal is close to or above 19 million litres per day (e.g., consumptive use of 17 million litres per day), the applicant would be asked to complete a site-specific assessment of consumptive use for their individual operation. If the site-specific assessment confirms that the consumptive use of the proposed water taking or transfer is 19 million litres per day or more, it would be subject to Prior Notice and Comment (in the case of takings) or Regional Review (in the case of intra-basin transfers). Along with further details of the method for determining consumptive use, the ministry would also provide guidance for water takers for undertaking site-specific consumptive use assessments.

Calculating average amounts

The Agreement specifies that proposed amounts of water shall be determined based on the average water use in any 90-day period. Similarly, the Ontario Water Resources Act allows for averaging amounts of water. The regulation would specify the method for calculating a 90-day average amount of water for the purposes of these provisions.

Considering all applications within a 10-year time period

The Agreement includes a timing provision to ensure that projects involving staged increases in water use are assessed according to the provisions of the Agreement. Consistent with the Agreement, the regulation would specify that all of a proponent's applications for new or increased intra-basin transfers or consumptive uses of water within a 10-year time period shall be considered in determining whether a proposal exceeds a threshold of the Agreement.

Cases involving two or more Permits to Take Water

In some cases, a person may be the holder of two or more permits for water takings that supply a common water distribution system. The regulation would stipulate that the total amounts of water that supply a common distribution system shall be included in determining if a proposed new or increased intra-basin transfer or consumptive use exceeds the threshold amount.

Allowing reciprocal access to other jurisdictions

Under the Agreement, Ontario, Québec, and the eight Great Lake states agree to provide each other with substantially equivalent access to their courts or tribunals to challenge certain decisions in relation to water takings and transfers. The regulation would provide a reciprocating jurisdiction with the right to appeal a decision to the Environmental Review Tribunal or to bring an application for judicial review of a decision that involves a new or increased consumptive use of 19 million litres per day or more or a new or increased intra-basin transfer. The regulation would prescribe the following as reciprocating jurisdictions: the Province of Québec, the states of Illinois, Indiana, Michigan, Minnesota, New York, Ohio and Wisconsin, and the Commonwealth of Pennsylvania. Other jurisdictions have already granted this right of access to Ontario.

3. Proposed amendments to Classification of Proposals for Instruments Regulation (O. Reg. 681/94 under the Environmental Bill of Rights, 1993)

Currently, a proposal for a Permit to Take Water is posted on the Environmental Registry for public comment as it is considered a Class 1 instrument.. Proposals for water takings of less than a year and water takings for the irrigation of agricultural crops are not considered Class 1 proposals.

The proposed amendment would specify that a permit for over one year to transfer water would also be considered a Class 1 instrument and therefore subject to posting on the Environmental Registry for public comment. Proposals associated with setting a transfer baseline or proposals for permits for the purpose of irrigation of agricultural crops or watering of livestock or poultry would not be considered Class 1 proposals. Therefore, posting of these types of proposals on the Environmental Registry would not be required.

In conclusion, with this proposal, Ontario will have put in place all the regulatory measures that are needed to meet its commitments under the Agreement.