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APPLICATION UNDER THE GREAT LAKES CHARTER

The Transportation and Works Committee recommends the adoption of the recommendations contained in the following report, November 17, 2008, from the Commissioner of Environmental Services, together with the following additional recommendation:

3. That Council endorse the actions of staff regarding the submission of the Intra-basin Transfer Application to the Province under the 1985 Great Lakes Charter.

1. RECOMMENDATIONS

It is recommended that:

1. The Regional Clerk circulate this report to the Clerks of the local municipalities.
2. Staff report back to Regional Council on the ongoing activities concerning Intra-basin Transfer, the changes to the *Ontario Water Resources Act* (OWRA), and any implications for the Region.

2. PURPOSE

Since 1985, the movement of water out of the entire Great Lakes Basins and from and between watersheds of each of the Great Lakes has been the subject of several agreements among the Province of Ontario and nine other jurisdictions. Water transfers of particular interest include:

- Out of basin transfer – The withdrawal/loss of water out of the Great Lakes Basin.
- Intra-basin Transfer – The transfer of water between and among watersheds of the Great Lakes.
- Consumptive Use – The loss of water from the Great Lakes basin due to evaporation (e.g. Outdoor water use), or incorporation of water into manufactured products (e.g. water bottling operations) or other processes. Consumptive Uses may or may be considered in conjunction with an Intra-basin Transfer.

The purpose of this report is to outline the maturation of these agreements, and update Regional Council on the Region's application to the Province under the 1985 *Great Lakes Charter: Principles for the Management of Great Lakes Water Resources*.

3. BACKGROUND

The Great Lakes Charter: Principles for the Management of Great Lakes Water Resources Addresses threats of Bulk Diversions from the Great Lakes Watersheds

In 1985, the provinces of Ontario and Quebec and the Great Lakes States of Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania and Wisconsin responded to concerns about proposals to divert large quantities of water out of the Great Lakes Basin (collectively, the watersheds of all five Great Lakes and the upstream portion of the St. Lawrence River) and signed the *Great Lakes Charter: Principles for the Management of Great Lakes Water Resources*.

The Great Lakes Charter is a non-binding good-faith agreement that, among other things, requires the parties to consult on proposals involving intra-basin transfers and/or consumptive uses greater than 19 million litres per day (MLD). The consent and concurrence of all states and provinces that may be affected by the application is desired but is not mandatory. Comments received by the applicant's governing body are to be carefully considered before a decision on the application is rendered.

Principles concerning intra-basin transfer are strengthened with The Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement (2005) and The Great Lakes-St. Lawrence River Basin Water Resources Compact (2005)

In December 2005 after 4 years of negotiations, the parties to the Great Lakes Charter established two new agreements: another "good faith" agreement involving Ontario and all the Great Lakes states titled *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement of 2005* (the "Agreement"); and a legally binding *Great Lakes-St. Lawrence River Basin Water Resources Compact of 2005* (the "Compact") signed only by the eight Great Lakes States.

The Agreement is non-binding, but provides a framework for all parties to pass or modify laws and policies to put into place new protections for the waters of the Great Lakes basin. Changes from the Great Lakes Charter include a prohibition on Intra-basin Transfers (subject to three limited exceptions), additional restrictions on Consumptive Uses and the introduction of a formal process for Regional Review of applications (including provisions to allow any affected person or organization, including any of the parties to the Agreement, to challenge decisions within the applicant's home jurisdiction).

The Province moves towards implementing the 2005 agreement with the Safeguarding and Sustaining Ontario's Water Act, 2007

At this time, the elements of the 2005 Agreement governing Intra-basin Transfers and Consumptive Uses are not in effect. However, as required under the Agreement, Ontario

has started the process towards implementation under the *Safeguarding and Sustaining Ontario's Water Act, 2007* which primarily amends the *Ontario Water Resources Act* ("OWRA") to incorporate the necessary requirements. These changes are not yet in effect pending further regulations. These implementing regulations are currently expected to be released in draft in the Spring of 2009.

To permit Lake Ontario drinking water to supply the Towns of Aurora, Newmarket, and the communities of Holland Landing, Queensville, and Sharon in the Town of East Gwillimbury to the year 2031, York Region must obtain approval for an Intra-basin Transfer

Figure 1 illustrates the terminologies of Intra-basin Transfer, Consumptive Use, and return flow as it applies to York Region. The Region currently receives Lake Ontario water through supply agreements with the Region of Peel and the City of Toronto. The Lake Simcoe watershed lies within the Lake Huron basin, which encompasses the local area municipalities north of Aurora, and the northern portions of Whitchurch-Stouffville and the Township of King. Currently, Aurora and Newmarket are on a blended supply of Lake Ontario surface water and local groundwater sources. Therefore, all Lake Ontario based supplies to Newmarket and Aurora (as well as future plans to use Lake Ontario based supply for growth in the communities of Holland Landing, Queensville, and Sharon in the Town of East Gwillimbury) qualify as Intra-basin Transfers. Return flow from these areas are provided via the York Durham Sewage System (YDSS) minus any water loss due to outdoor water use, evaporation, and manufacturing processes (Consumptive Uses).

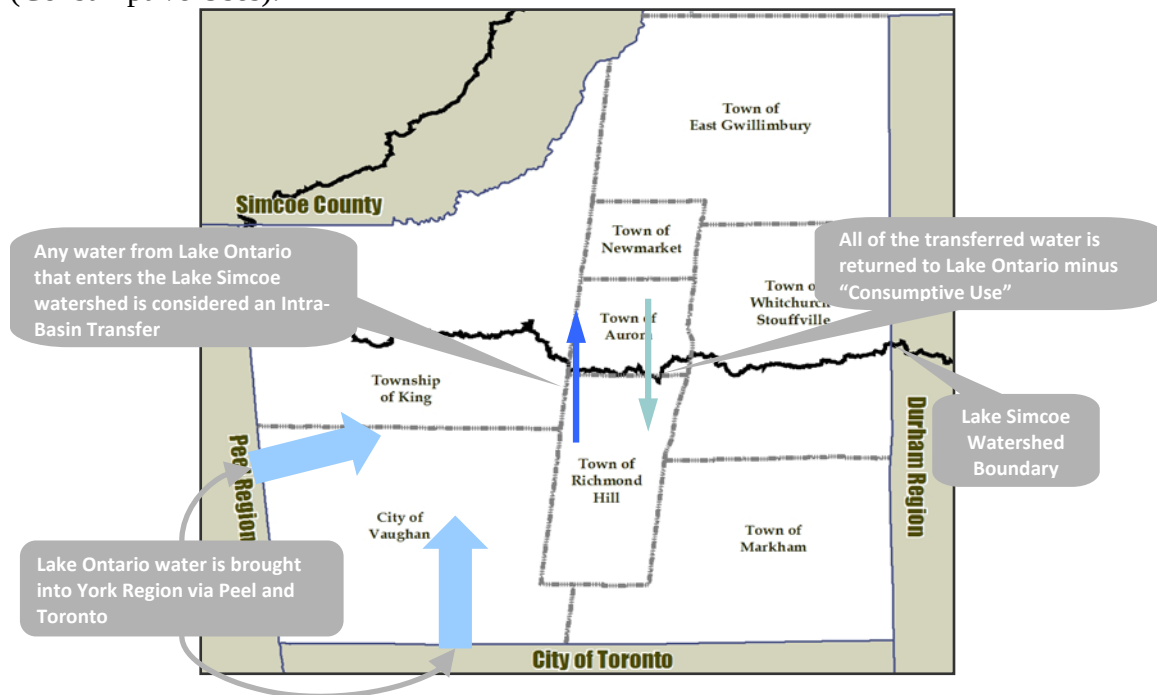


Figure 1: Moving Lake Based Water in York Region

This application is founded in part in good planning practices consistent with working within the Places to Grow framework to provide the infrastructure and water capacity to meet approved growth to 2031. Infrastructure is sufficient, and the Region is now seeking to comply with applicable requirements to secure sufficient water capacity. At this time, a fair amount of uncertainty remains as to when new regulations implementing the 2005 Agreement will come into effect, and how this may impact Regional and local planning. In addition, the Region's Water and Wastewater Servicing Master Plan is currently underway and greater certainty is required regarding the Region's ability to maintain and increase Intra-basin Transfer as a viable servicing option.

The approval for Intra-basin Transfer and Consumptive Uses will be required in addition to existing approvals already held by the Region (e.g. Certificates of Approval (CofA)).

Requirements of Intra-basin Transfer have been Imposed through a Statutory Process

The Holland Landing Queensville Sharon (HLQS) sewer project with its intra-basin transfer implications was approved by MOE based on the 19 MLD threshold in the 1985 Great Lakes Charter Agreement. The intra-basin transfer issue was first raised by MOE in their letter dated February 8, 2008 in response to Part II Order requests. A meeting was held on March 6, 2008 with MOE and MNR. Subsequently, their concern was addressed by demonstrating that the HLQS sewer project would not result in an intra-basin transfer of water exceeding the 19 MLD threshold, and the Part II Order requests were denied. It should be noted that in addition to growth in East Gwillimbury, growth in Aurora and Newmarket will also contribute to an increase in intra-basin transfer, and the 19 MLD threshold applies to the combined transfer for these three communities.

During the same time, Peel Region was addressing comments made by MOE and MNR with respect to their Class EA on the Lakeview Water Treatment Plant Phase 2 Expansion. This project is one of the cost shared projects identified in the York-Peel Water Supply Agreement, and as such MOE and MNR have concerns with respect to its intra-basin transfer implications. In response to an inquiry from Peel Region, York Region indicated that the amount of intra-basin transfer resulting from the proposed plant expansion would be assessed through completion of the York Region Water and Wastewater Master Plan Update. This information was communicated to MNR by Peel Region. Subsequently, in June 2008, a presentation by the York Region Master Plan team was made to MOE and MNR, providing an overview of the servicing issues in York Region. It was agreed that further consultations are required, and currently York Region is participating in the Province's consultation process in developing the new regulations.

4. ANALYSIS AND OPTIONS

The Intra-basin Transfer application highlights York Region's efforts to promote water conservation

The Region's Intra-basin Transfer application frames the Region's approach to servicing future growth in terms of good planning, water conservation and efficiency, sustainability, and legacy environmental benefits. Further to this, the application addresses the "exception criteria" currently contemplated under the *Safeguarding and Sustaining Ontario's Water Act, 2007* and incorporated into the *Ontario Water Resources Act* (although not in effect) to demonstrate that our current actions will support the intent of future regulations:

1. The transferred water is returned to the source watershed with the exception of losses through consumptive use (return flow)
2. No reasonable alternative exists including conservation
3. The transfer volume is reasonable
4. There is no individual or cumulative adverse impacts on the quantity or quality of the waters or natural resources
5. Water conservation programs are implemented
6. Complies with applicable legislation
7. Complies with other criteria within the 2005 Agreement

The application sought to secure the approval of an escalating intra-basin transfer of up to 140 MLD to support proposed maximum day demands to the year 2031. To support the volume request, we assumed that no groundwater supplies contributed to future water supply demands in Aurora, Newmarket, and the East Gwillimbury communities of Holland Landing, Queensville, and Sharon. (Table 1)

Table 1
Intra-basin Transfer Water Supply Demands to the year 2031

Community	2031 Max. Day (MLD)	2031 Avg. Day (MLD)
Holland Landing / Queensville/ Sharon	42.9	23.8
Newmarket	53.8	29.9
Aurora	42.6	23.9
Total Demand	139.3	77.6
Current Well Supply	69.0	69.0
Required Lake Based Supply	70.3	8.6

The application was submitted and signed by Commissioner Mahoney, in keeping with standard practices for regulatory applications. Under the Charter, the application will trigger Regional review and consultation among the affected jurisdictions.

Staff continues to work with the Province to shape pending regulations

The Ministries of the Environment and of Natural Resources are working to develop the regulations needed to implement the 2007 amendments to the *Ontario Water Resources Act* (OWRA). As such, the Province intends to issue a Municipal Directive and Technical Bulletin to inform municipalities of their responsibility to consider all proposed projects involving an Intra-basin Transfer as a Schedule “C” project under the Municipal Engineers Association (MEA) Municipal Class Environmental Assessment process. With input from staff, the Province further amended this bulletin to include consideration of Intra-basin Transfer during the Master Plan process as well.

Following this, the Province intends to pursue consultation with municipal and stakeholder groups regarding:

1. Implementing regulations for Intra-basin Transfers
2. Development of regional water conservation and efficiency programs
3. Implementation of Phase 2 Water Charges (i.e. tiered rates)
4. Development of information and science surrounding the Great Lakes watersheds.

Staff from the Departments of Environmental Services and Planning and Development Services have been actively engaged in communicating with the Province on the municipal perspective of the proposed regulations. Timelines for these consultations are expected to be rather aggressive, with most activities occurring between November 2008 and March 2009.

5. FINANCIAL IMPLICATIONS

Internal staff resources have been used to develop the application. Consulting services have been procured to examine consumptive use as it relates to the entire Region. Consultant costs are expected to be approximately \$7,000.

6. LOCAL MUNICIPAL IMPACT

The submission of this application under the 1985 *Great Lakes Charter* seeks to secure sufficient drinking water capacity to meet the approved growth demands of the Towns of Aurora, Newmarket, and East Gwillimbury to the year 2031, along with related Consumptive Uses for the entire Region.

In his letter giving approval to the Class Environmental Assessment for the Holland Landing, Queensville, and Sharon Wastewater Infrastructure project, Minister Gerretsen

stated his satisfaction of the proposed project with regards to Intra-basin Transfer in that all water transferred into the Lake Huron watershed would be returned to the source watershed, barring consumptive use. As this is also the basis of the current application, it is expected that the application should be accepted by the Province.

Future consultation with the Province will involve discussions regarding implementation of Phase 2 of the new Water Charges regulations. Since the Region does not directly bill municipal water users, and this is the responsibility of the local municipalities, local municipalities may need to be involved during these consultations. Region staff are working with the Province to determine consultation needs in this area, and will facilitate a regional consultation workshop on this matter if the need arises.

7. CONCLUSION

The Region has made an application under the 1985 *Great Lakes Charter*, for the Intra-basin Transfer of Lake Ontario water to meet the 2031 drinking water requirements for the Towns of Aurora, Newmarket and the communities of Queensville, Holland Landing and Sharon in East Gwillimbury, along with approval for related Consumptive Uses of Lake Ontario water projected for the entire Region to 2031.

The application frames the Region's approach to servicing future growth in terms of good planning, water conservation and efficiency, sustainability, and legacy environmental benefits. Further to this, the application addresses the "exception criteria" currently contemplated under the *Safeguarding and Sustaining Ontario's Water Act, 2007* to demonstrate that our current actions will support the intent of future regulations.

Staff will remain involved in consultations with the Province to further define future regulations pertaining to intra-basin transfer, and will update Regional Council on an as needed basis regarding any implications for York Region.

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection at Ext. 5077.

The Senior Management Group has reviewed this report.