



## TOWN OF GEORGINA

26557 Civic Centre Rd., Keswick, Ontario L4P 3G1

March 29, 2011

Via fax, original by mail

Regional Municipality of York,  
17250 Yonge Street,  
NEWMARKET, Ontario  
L3Y 6Z1

Attn: Denis Kelly, Regional Clerk

Dear Mr. Kelly:

Re: Region of York  
Inflow and Infiltration Reduction Strategy  
Long Term Water Conservation Strategy  
Town Staff Report No. EPW-2011-0013

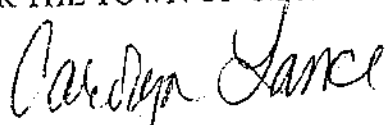
Please be advised that Town Council at its meeting held on March 28, 2011, considered the above-noted report and passed the following motion:

**RESOLUTION NO. C-2011-0119**

1. THAT REPORT NO. EPW-2011-0013 BE RECEIVED FOR INFORMATION.
2. THAT THE COUNCIL OF THE TOWN OF GEORGINA ENDORSES THE REGION OF YORK INFLOW AND INFILTRATION REDUCTION STRATEGY AND LONG TERM WATER CONSERVATION STRATEGY AND AGREES TO PARTICIPATE WITH THE IMPLEMENTATION OF THESE STRATEGIES OVER THE COMING YEARS.

I have enclosed a copy of Report No. EPW-2011-0013 for your reference. If you have any questions or concerns, please contact Bob Magloughlen, Director of Engineering & Public Works, at 905-476-4301, ext. 233 or [bmagloughlen@georgina.ca](mailto:bmagloughlen@georgina.ca).

Sincerely,  
FOR THE TOWN OF GEORGINA,

  
Carolyn Lance

Administrative Assistant to the Town Clerk

cc: Bob Magloughlen, Director of Engineering & Public Works



**THE CORPORATION OF THE TOWN OF GEORGINA**

**REPORT NO. EPW-2011-0013**

**FOR THE CONSIDERATION OF  
COUNCIL**

**MARCH 28, 2011**

**COPY**

**SUBJECT: REGION OF YORK  
INFLOW AND INFILTRATION REDUCTION STRATEGY  
LONG TERM WATER CONSERVATION STRATEGY**

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**RECOMMENDATION:**

- 1. THAT REPORT NO. EPW-2011-0013 BE RECEIVED FOR INFORMATION.**
- 2. THAT THE COUNCIL OF THE TOWN OF GEORGINA ENDORSES THE REGION OF YORK INFLOW AND INFILTRATION REDUCTION STRATEGY AND LONG TERM WATER CONSERVATION STRATEGY AND AGREES TO PARTICIPATE WITH THE IMPLEMENTATION OF THESE STRATEGIES OVER THE COMING YEARS.**

**REPORT:**

Council heard a joint deputation at its meeting of January 17, 2011 from the Director of Engineering and Public Works and staff from the Region of York regarding the above. The purpose of the deputations was to advise Council of the activities that have been occurring and to advise that the strategies were to go before Region Council in February. That has now occurred and we attach the Regional staff report for Councils' information.

The Region is now seeking the endorsement of these strategies from all area municipalities.

**Inflow and Infiltration Reduction Strategy**

As explained to Council in previous reports, "inflow" is the direct connection of clear water sources to sanitary sewers such as rainwater downspouts, cross connections, sump pump discharges, flooded manholes, etc. "Infiltration" is clear groundwater that leaks into the sanitary sewer system through pipe joints, breaks or manholes. The result is that non contaminated or polluted water becomes mixed with sewage and is pumped through the system for ultimate treatment at a sewage treatment plant. This extraneous flow occupies pipe capacity, is costly to transmit and will reduce quality of

treatment. The goal of the Region's strategy to reduce overall sewage flows into the system from I/I sources by 6%.

As Council is aware, water and sewage systems within the Region of York are two tier systems in that the Region owns and is responsible for the treatment works and the trunk transmission facilities, i.e. trunk sewers and watermain. The area municipalities are responsible for the local collection and distribution mains. Therefore it is not sufficient for the Region of York to only address I/I in its own system but it must look at the system, in its entirety. Therefore the area municipalities must be actively involved in reducing I/I sources within their own systems.

The Region has made a rough estimate of requiring a total expenditure of \$100 million over the next 20 years to achieve the 6% reduction target. They have agreed that half of this cost should be borne by the Region to fix its own systems and to assist municipalities with addressing their needs. The estimated cost for Georgina excluding the Region's share will be \$60,000 to \$70,000 per year. Therefore implementing the Town's share of the I/I strategy will consume approximately 10% of our annual expenditures for reserves (capital replacement). This expenditure is completely worthwhile since the work required for I/I reduction such as pipe lining, joint grouting, and manhole repairs will extend the useful life of our existing sewer system by decades and forms an appropriate asset management program. That, combined with reduced operating costs for pumping is reason to endorse the Region's Inflow and Infiltration Reduction Strategy. Although the Town can accommodate its share of the proposed program within the current budget, the Region may have to increase its charges to the Town for sewage treatment sufficiently to cover its costs of the program.

It should be noted that a great deal of work has been done prior to the formal strategy being prepared. Measurements of I/I were made to identify priority areas and a high priority area exists in Keswick and another in Sutton. These high priority areas are to be addressed as "pilot" projects to identify best methods of rehabilitation and are proposed to be carried out in 2011. Because these are considered pilot projects the Region has agreed to fund \$1,470,000 of a total \$1,775,000 project. The Town carried out some rehabilitation work on the sewer system last year as part of the Queen Street reconstruction project and therefore the Town's share in the pilot projects has been reduced to \$250,000. An amount of \$250,000 has been included in the 2011 wastewater budget for these projects.

#### Long Term Water Conservation Strategy

The second component of the Region's plan to reduce sewage flows is to reduce water consumption and has submitted the attached staff report to Regional Council.

Any reduction in internal water demand, i.e. toilet flushing, showering, faucets, cooling, etc. directly reduces sewage flow. Other water conservation measures such as outside

water use and watermain leak repairs do not affect sewage flows but address sustainability of the water supply.

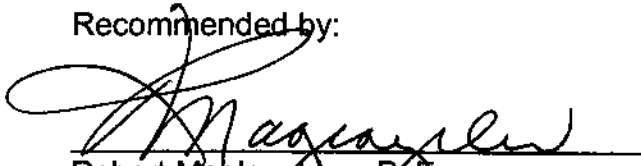
Council will see that the majority of the initiatives being proposed by the Region are geared toward the water users and do not involve the area municipalities directly. The areas where we are directly involved is to provide the Region with water consumption data for all properties based on water billings and to work closely with the Region on its leak detection program for regional trunk and local municipal watermains. The costs for these two activities is staff time only. No direct expenditures are required by the Town.

### Conclusion

The Ministry of the Environment has made it a condition of various approvals that the Region of York and its area municipalities prepare and endorse an I/I Reduction Strategy and Water Conservation Strategy by March 31, 2011. These documents have now been prepared with input from Town staff. Although the I/I program will be an ongoing cost to the Town, we will receive the benefits of rehabilitated sewer systems, reduced pumping costs, higher levels of sewage treatment and like waste recycling it is the right thing to do. Similarly, reduction of water consumption will make better use of existing infrastructure and will reduce the draws from Lake Simcoe that would otherwise be required if water demand were not reduced.

It is recommended therefore that these two strategies be endorsed by Council.

Recommended by:

  
Robert Magloughlin, P. Eng.  
Director of Engineering & Public Works

Approved by:

  
Susan Plamondon, B.A. LL.B  
Chief Administrative Officer  
RM/hay  
Atts.