

**STAFF REPORT:        Engineering & Public Works Department**



**REPORT TO:**            Engineering & Public Works Committee  
**MEETING DATE:**      September 23, 2008  
**REPORT NO.:**         EPW.08.92  
**SUBJECT:**             Water Efficiency/Conservation Statement  
**PREPARED BY:**       Meg Boyd, Compliance & Efficiency  
                                 Coordinator, Dave McGuire, Water ORO &  
                                 John Caswell, Water & Wastewater Services  
                                 Manager

**A. Recommendations**

THAT Council receive Report EPW.08.92 entitled "Water Efficiency/Conservation Statement" for their information.

**B. Background**

In 2007, the Town retained the services of Barry Randall to prepare a Water Efficiency Action Plan which included the annual quantification of unbilled water uses and recommended actions to move the Town toward a Best Practice goal of 10-15% unaccounted for water.

The attached Water Efficiency/Conservation Statement provides a preliminary review of water issues arising in the Town. A summary of recommendations are also presented aimed at assisting the Town in achieving its desired water conservation targets. Water efficiency refers to the measuring and monitoring of all water used in the Town. From the supply at the Water Treatment Plant to the metered use of water at residential, commercial and other end users, the goal of the Water Efficiency/Conservation Statement is to identify methods to reduce the unaccounted for water from the current approximate 30% level to between 10-15%. Staff from the Water Group has been working towards locating and repairing leaks as well as developing consistent methods for recording accounted for water on a monthly basis.

In concert with the Great Lakes and St. Lawrence Initiative, the Town passed a resolution on April 11, 2007 stating it will "work toward achieving a 15 percent reduction in total water usage per user unit below 2000 water consumption levels by the year 2015", to 0.572 m<sup>3</sup> per unit per day. The conservation target of 15% per unit reduction below year 2000 (0.672 m<sup>3</sup>/unit/d) levels refers to an equivalent unit that combines single residential connections with a weighted number of units depending on the type of industrial, commercial or institutional user. An evaluation of the 2007 water consumption levels indicate that the Town is currently at 0.668 m<sup>3</sup>/unit/d indicating that a strong focus on implementing conservation methods is required in order to achieve a 15% reduction (to 0.572 m<sup>3</sup>/unit/d) reduction by 2015. This report highlights water efficiency targets as well as explores proposed measures for achieving this goal.

Several initiatives are recommended to address the current rate of approximately 70% efficiency (30% unaccounted for water use) in the delivery system including:

- Continue with the full implementation of meters and reduce the current levels of unmetered connections
- Perform detailed water loss analysis (audio and visual inspections)
- Work with Financial Services data to create an on-line management tool for bi-monthly assessment of water efficiency
- Include financial analysts, on site water technicians, billing administrators and environmental (sustainability planners) in water conservation meetings to ensure integration of sustainability principles across all departments
- Continue to monitor unbilled water usage from such sources as: instruments, hydrant flushing, fire flow testing, fire fighting, maintenance, water leaks, dead end flushing, auto flushers, new construction and designated distribution sampling stations
- Further explore subsidizes such as the distribution of rain barrels and other water saving initiatives as a form of public education
- Promote water conservation initiatives through such means as the Town's web portal and include water saving tips in the bi-monthly utility billings

The recommendations presented in this report provide residents with opportunities to reduce their water consumption, thus reducing their utility bill.

### **Review and Updating**

The Water Efficiency/Conservation Statement will be reviewed on an annual basis to allow the Town to revisit recommendations to accommodate changes in population.

### **C. The Blue Mountains' Strategic Plan**

This Report furthers the Town's Strategic Plan Goal # 3, "Preserving and enhancing natural and environmental features, and cultural heritage of the community" and #6 "providing a strong well managed municipal government".

### **D. Environmental Impacts**

The development of a Water Efficiency/Conservation Statement provides an initial evaluation of the methods currently in place as well as explores methods for improving efficiency.

Water conservation is critical in sustaining our water resources and protecting the environment. Reducing maximum day water demand is both environmentally and fiscally responsible. Furthermore, reducing maximum day demands will also reduce the amount of water we draw from Georgian Bay.

**E. Budget Impact**

Costs for the implementation review and update of the Efficiency Statement are included in the operating budget under Water Efficiency Initiatives. A portion of these funds will be utilized for yet to be determined Efficiency Programs e.g. Low Flush Toilet Replacement.

**F. Attached**

1. Town of The Blue Mountains Water Efficiency/Conservation Statement

Respectfully submitted,

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John Caswell  
Manager of Water and Wastewater Services

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Reg Russwurm  
Director of Engineering and Public Works