

## Request for Decision

### Water Efficiency Plan

Presented To:	Finance Committee
Presented:	Monday, Mar 28, 2011
Report Date	Thursday, Mar 24, 2011
Type:	Follow Up Reports to Parking Lot Items

### Recommendation

For Information Only

### Finance Implications

It is expected that the costs for development of the Water Efficiency Plan and the delivery of initial program initiatives will take place within approved budget allocations. Additional funding allocations may be required once the Plan is finalized and approved by Council and the components are identified. Future budget requirements would be incorporated into future budget submissions for consideration by Council once the program is defined.

### Background:

At the Finance Committee meeting of March 7, 2011, a request was made for information relating to the plans to develop a Water Efficiency Plan.

Greater Sudbury is blessed with plentiful sources of water and residents expect ready access to a safe and reliable fresh water supply. However, with current pressures from regulatory requirements, costs of electricity and chemicals, treating and distributing potable drinking water to our customers is becoming increasingly challenging and costly. Dependable safe drinking water provides the foundation for a healthy and prosperous community. Because of the abundance of water in our area many have the false impression that supplies are boundless and thus become complacent about water issues, particularly efficiently using this resource.

Therefore the intent of this strategic initiative is to develop a Water Efficiency Plan to promote efficient water use, including reducing water loss, in the most cost-effective way. The Plan will be tailored to the needs of Greater Sudbury and contain a set of standard, industry accepted water efficiency measures and a prioritized implementation plan.

The Water Efficiency Plan will provide a defined framework for the City's water efficiency efforts and outline the scope, purpose, elements, and benefits including potential water and budgetary savings.

#### Signed By

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## **Objectives:**

Typical goals of a Water Efficiency Plan include generally promoting the efficient use of potable water in Greater Sudbury and specifically to produce cost containment through:

- Reducing and/or deferring capital costs for non-growth related expansion of the City's water & wastewater infrastructure through efficient use of the water supply by all users;
- Reducing operating costs through reduced variable costs of production;
- Reducing water use, and thereby reducing consequent wastewater treatment volumes while continuing to meet the needs of customers;
- More effective stewardship of the environment by reducing the wasteful use of water; a non-renewable resource .

## **Potential Benefits:**

A water efficiency plan will identify specific benefits to the customers beyond reduced costs for infrastructure expansion. A Plan will illustrate how to achieve realistic reductions in water consumption through the implementation of water efficiency programs to provide benefits such as:

- improved ability to optimize water supply and wastewater treatment operations;
- avoidance of energy and chemical costs;
- improvements to surface water quality;
- facilitate decision making by Council as they address the challenges facing our city's water supplies;
- budgetary cost containment;
- monetary savings in water billing to the customers; and,
- preservation of a valuable non-renewable resource for future generations.

## **Typical Plan Components:**

Specific water efficiency initiatives included in the Plan will be tailored to provide the greatest benefit to the Greater Sudbury situation. Although no formal plan exists at this time Water / Wastewater Services has already implemented several water efficiency initiatives on an ad-hoc basis including:

- Leak Detection Program
- Non-revenue water reduction program
- Universal Metering / Meter Calibration and Replacement
- Watermain Rehabilitation / Renewal
- Water Conservation By-Law / Watering Restrictions
- Rain Barrels
- Treatment Process Upgrades

Other initiatives that are typically considered in formal Water Efficiency Plans may include the following:

### **City**

- City Facilities Retrofit Program (fixtures)
- Xeriscaping – landscaping techniques to reduce watering requirements

### **Customers**

- Public Education Outreach & Promotion
- Incentive Programs - Toilet Replacement Subsidy Program, Clothes Washer Replacement Subsidy

Program, High Volume User Retrofit Program

- Water Efficiency Kits (such as: showerheads, faucet aerators, toilet displacement bags, toilet leak detection dye tablets, shower flow-rate bags, hose or tap washers, water timers and rain gauges)
- Water Irrigation Timer Program
- Monitoring and Assessment Tools (use of customer surveys to determine usage patterns and influences on production rates)
- Indoor & Outdoor Water Audits

**Implementation:**

The development of the Water Efficiency Plan is scheduled to commence in late 2011 with implementation of priority deliverables commencing during 2012.