

CITY OF CHARLOTTETOWN POLICY

WATER EFFICIENCY

Policy Number: P-W&S-1

Originating Department: Water & Sewer Utility

Approved By: City Council

Date of Approval: October 09, 2012

1. Purpose

- 1.1. To promote water-efficiency and reduce overall water consumption
- 1.2. To raise awareness of the importance of water conservation and its role in the City's overall sustainability
- 1.3. To provide guidelines for the use of water

2. Scope

- 2.1. Staff of City of Charlottetown while performing City duties
- 2.2. Residents using City facilities
- 2.3. Applicable to all City of Charlottetown holdings including land, facilities and also to City events and services including existing and design and construction of new developments

3. Responsibility

- 3.1. All City Departments

4. Policy

Indoor Water Use

- 4.1. All water dispensing hardware (faucets, showerheads, toilets, urinals, etc.) in new construction will be of a low-flow type

- 4.1.1. Maximum flow rates by fixture below:

Toilets* (tank or tankless)	4.8 L (1.28 gpf)
Urinals	1.9 L (0.5 gpf)
Bathroom Faucets	5.7 L (1.5 gpm)
Showerheads	7.6 L (2.0 gpm)

Please note: There is no industry standard for kitchen faucets as they are viewed as having a primary function of filling sinks and pots and restrictions in this area would increase task time for the consumer

*Toilets must be MaP Tested for performance and be “Right Height” models for accessibility

4.1.2. Additional standards for high-traffic public washrooms;

- 4.1.2.1. Faucets with automatic sensors
- Showers with automatic shut-offs

4.2. All retrofits of existing water dispensing hardware will be with the water-efficient fixtures noted above (excluding toilets)
All retrofits of existing toilets will be with standard flush-volume toilets unless plumbing is being modernized to optimize low-flow flush functionality

4.3. A leak reporting system will be adopted;

- 4.3.1. Signage will promote the reporting of water leaks on all City properties
- 4.3.2. Leaks found in civic buildings will be reported to the Public Works Department where the order for repair will be transferred to the maintenance staff
- 4.3.3. Leaks found in parks and rinks will be reported to the Parks and Recreation Department where the order for repair will be transferred to the maintenance staff

4.4. Equipment used for rink maintenance;

- 4.4.1. Any new technology or practice that comes forward that allows the City to limit the amount of water used to flood indoor or outdoor rinks or provides an alternative source of water will be considered

Outdoor Water Use

All outdoor water use will be subject to the requirements of the City of Charlottetown Seasonal Water Restrictions and Water Shortages Restrictions. The City of Charlottetown will demonstrate leadership by following restrictions in all operations

4.5. Irrigation of sports fields;

- 4.5.1. All new sports fields that require irrigation will be required to supply untreated water and appropriate signage will be located on site to explain water source for irrigation,
- 4.5.2. Irrigation will take place in the mornings, or in the evenings in accordance with the Utility Department water use restrictions to reduce evaporation of water

4.6. Gardens, flower beds and hanging baskets;

- 4.6.1. The use of perennials that require less or no water will be promoted
- 4.6.2. Annuals with high-watering needs will be limited

- 4.6.3. Xeriscapingⁱ practices including soil augmentation at planting and climate-adapted plant selection will be encouraged
- 4.6.4. Watering of annuals will take place in the mornings or in the evenings in accordance with the Utility Department water use restrictions to reduce transpiration of water
- 4.6.5. Rain barrels, cisterns and wells on City property will be promoted as a supply of water for watering;

- 4.7. Outdoor pools and splash pads will continue to be monitored daily in order to detect possible leaks

- 4.8. All new water features will be designed to recirculate water

- 4.9. Fire hydrants will continue to be flushedⁱⁱ as necessary;
 - 4.9.1. Flush volumes will be determined by industry best management practices
 - 4.9.2. Any new technology or practice that comes forward for hydrant flushing will be evaluated for cost-effectiveness and water savings
 - 4.9.3. The potential for capturing and reusing flushed hydrant water will be evaluated

- 4.10. Street sweepers will continue to be used when necessary;

Recycled water, rain water and untreated non-municipal water will be used as the water source for street sweeping

5. Measurements

- 5.1. Water consumption of individual buildings will be monitored using regular billing information
- 5.2. Water use data will be reported annually to the appropriate departments and to the public on the City's website

6. Review

- 6.1. This policy will be reviewed every 3 years and updated as required

ⁱ Xeriscaping – plant selection and landscaping layouts that reduce watering requirements

ⁱⁱ Hydrant flushing is an essential form of system maintenance that ensures that hydrants are functioning properly in the event of a fire and that build-up of minerals and bacteria do not affect water quality