

**CITY OF GUELPH
OUTSIDE WATER USE BYLAW AND PROGRAM REVIEW
SUMMARY OF PROPOSED REVISIONS**

Background

Guelph is a community that depends on a limited supply of groundwater to meet our drinking water needs. As our City grows and changes over time, it is important that we work together to conserve water for future generations and to protect against the impacts of drought—particularly during dry summer periods.

The Outside Water Use By-law and Program have been in place in Guelph for nearly 10 years. During prolonged periods of drought in 2012, the City of Guelph implemented enhanced water use restrictions under the by-law to ensure there was enough water to support both the needs of the City and the local environment. At the time, residents and businesses expressed concerns over aspects of the by-law, including permissible water uses during extreme periods of drought.

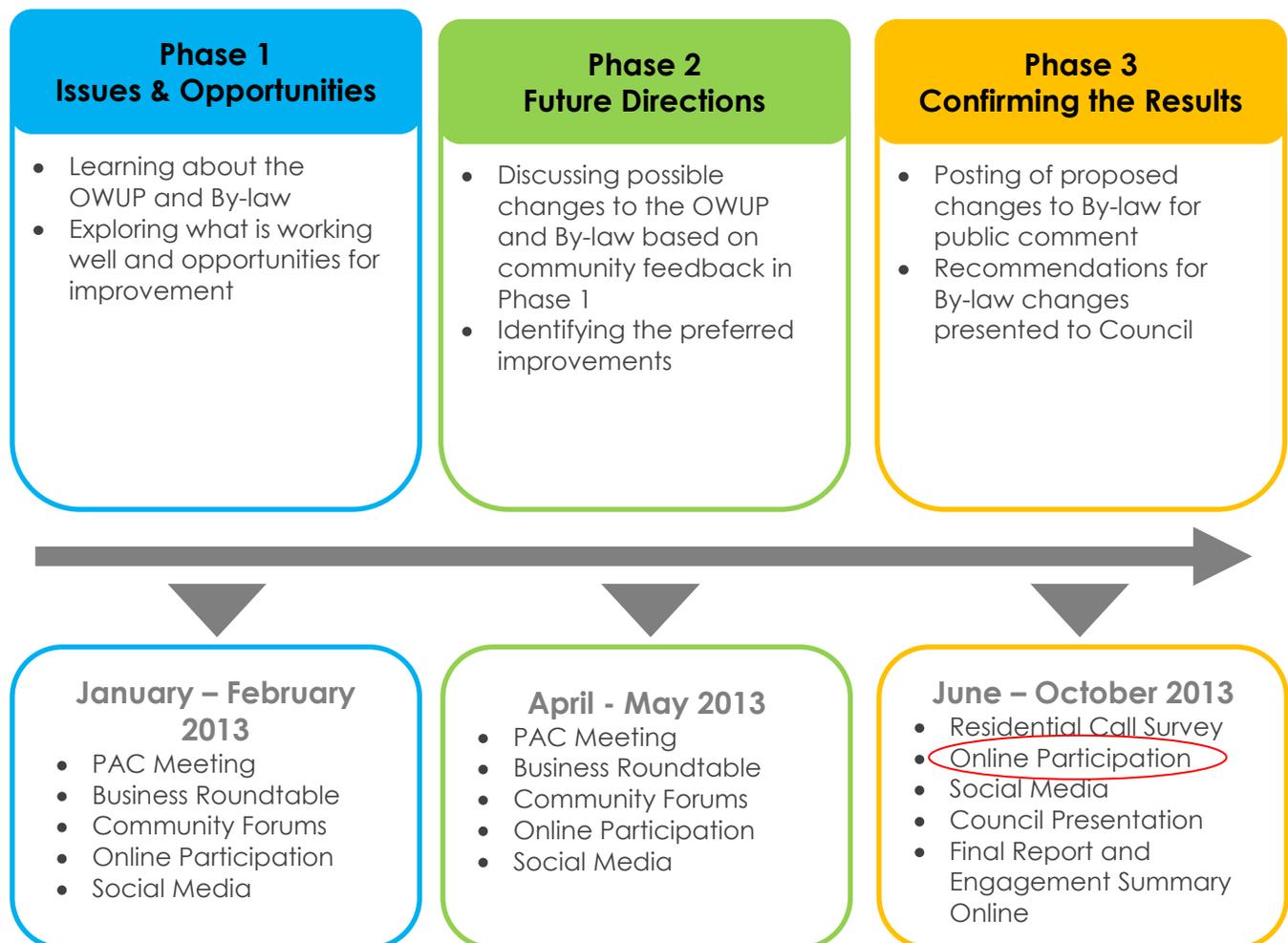
In response to these concerns, and to ensure continued management of our water resources in the best way possible, the City of Guelph Water Services Department initiated a review of the Outside Water Use By-law and Program in January 2013 to:

- Discuss successes and explore aspects of the Outside Water Use By-law and Program that are working well; and
- Examine opportunities for refinements to the By-law and Program that could help the City better manage our water resources into the future.

Since initiation of the by-law review, the City has gathered feedback from residents and businesses on potential changes to the Outside Water Use By-law and Program through community forums, business roundtables, online engagement forums and, most recently, a residential call survey. This review process is now reaching completion with proposed changes to the By-law and Program here posted for public review and comment.

This report provides an overview of the review process to date, proposed changes to the By-law, key information gathered that is informing these changes, and information on how the community can provide feedback to assist City staff in preparing by-law change recommendations to City Council. Public comments on proposed changes will be accepted from August 15 to 28, 2013. More information on the by-law review process and channels by which to provide feedback are available on the City's website at www.guelph.ca/owureview.

Process Overview



Phase 3

We are now in Phase 3 of the review process, with a recent residential call survey completed in July 2013. This survey was used to collect quantitative resident feedback about community perceptions and awareness about local water conservation initiatives, and to explore preferences related to potential changes to the Outside Water Use By-law and Program. To ensure statistical accuracy and equal participation from the City’s six wards, 400 randomly selected households were interviewed using the stratified sampling method. The results can be considered accurate to within $\pm 4.9\%$, 19 out of 20 times (95% confidence interval).

Qualifying questions were used to verify eligibility requirements and targeted:

- Residents of the City of Guelph;
- Residents connected to the municipal water supply;
- Individuals responsible for the household water bill; and
- Adults, 18 years of age or older.

Based on the information gathered through the call survey, and feedback through other stakeholder consultation opportunities to date, a number of changes to the by-law have been proposed and are described in subsequent sections of this report.

Online Participation – Proposed By-law Changes Review and Comment Period

As part of Phase 3, a public review and comment period on proposed changes is being held from Thursday, August 15 to Wednesday, August 28, 2013. Residents and local business are invited to review changes to the by-law as outlined below, and to submit comments via phone, email, mail or fax (contact details are provided in the “*Next Steps –Join the Conversation*” section of this report, page 11). Comments received through this review period will assist staff in finalizing proposed changes to the by-law for City Council’s consideration, and will be included in a report to Guelph City Council in October 2013.

Stakeholder Feedback Received to Date

For reference, complete summary reports of feedback received throughout the Outside Water Use By-law review are posted on the City’s website at www.guelph.ca/owureview. Core themes of stakeholder feedback received include the following:

- **Exemptions:** Certain activities could be exempted from the water use restrictions because they are essential to the community, such as watering food gardens, new trees and historically significant community landmarks (e.g. John McCrae House).
- **Time Periods for Lawn/Garden Watering:** Slight changes to the timing or schedule of these restrictions would make it easier for residents to water their lawns while still conserving water and complying with the by-law. For example, some people feel that allowing watering earlier in the morning would help to limit the amount of water lost to evaporation when watering.
- **Car Washing:** While some people feel that individual car washing is not an essential activity and should be more restricted, others feel it uses only a minimal amount of water and should be allowed even when water supply is low.
- **Private Pools:** There were a number of suggestions on how to address water use by pool owners, such as limiting pool top ups to certain times of the day, restricting filling of pools during times of low water supply, and requiring that pool owners use pool covers to eliminate water losses due to evaporation.
- **By-law Compliance:** The City should look at ways to better monitor and enforce compliance with the by-law. It was suggested that this could include increased enforcement or higher monetary fines for non-compliance.

- **Response Levels:** The number and structure of the Water Response Levels could be improved to better encourage conservation and awareness of the Program. For example, an increase in the degree of restrictions from Blue to Yellow would help to differentiate between levels. Furthermore, the City could consider introducing a new level, such as orange, to express caution as drought conditions persist and to allow for a minor amount of water use prior to the introduction of more comprehensive outside water use restrictions
- **Industry and Bulk Users:** It is important that the Outside Water Use By-law and Program provide more clarity for industry, businesses and bulk water users. In addition, program administration should be reviewed to better support needs and expedite permitting processes for common business applications.
- **Automated sprinklers:** Additional restrictions or requirements should be considered for individuals and commercial property owners who install automated sprinkler systems.
- **Education:** Residents and businesses need to continue to be educated on the importance of water conservation and the requirements of Outside Water Use By-law and Program.
- **Municipal Leadership:** The City should demonstrate its commitment to water conservation and show leadership in this area. The City should also do more to encourage and support residents and businesses to implement water efficiency measures, such as the planting of drought resistant plants and use of large-scale rainwater harvesting systems.

Overview of Proposed By-law Revisions and Rationale

Taking into consideration resident and business feedback received through the by-law review process, the following section outlines key information attained for each core theme through consultation and proposed changes to the by-law (where appropriate) as supported by stakeholder feedback:

1.0 By-law Exemptions

1.1 Food Garden Watering

Survey Findings:

- Overall 27.3% and 47.5% of respondents were supportive and very supportive, respectively, of exemptions to permit watering for private food gardens.

Proposed Changes:

Exemption to be added to by-law to allow private food garden watering under program levels 0, 1 & 2.

1.2 Outdoor Tree Watering

Survey Findings:

- Overall 27.8% and 33.3% of respondents were supportive and very supportive, respectively, of exemptions to permit outdoor tree watering.

Proposed Changes:

Exemption to be added to by-law to allow outdoor tree watering within the tree's dripline under program levels 0, 1 & 2.

1.3 Watering of landscapes at Historically Significant Community Landmarks (John McCrae House)

Survey Findings:

- A slight majority (51%) of respondents indicated support for exemptions on watering for landscape maintenance purposes at John McCrae House.

Proposed Changes:

Exemption to be added to by-law to allow once-per-week landscape watering at John McCrae House during program Level 2 Red.

2.0 Outside Water Use Program Levels

2.1 Changes to Permitted 7-9 a.m./p.m. watering periods

Survey Findings:

- 48.7% would be supportive of morning only watering times
- 66.8% would be supportive of evening only watering times
- 44.2% would be supportive of longer time blocks for watering (i.e. 3 hour permitting time periods in morning and evening)
- 78.5% indicated support to maintain currently permitted water times under the by-law and 76% indicated support to maintain the current system (water times/frequency) as a whole.

Proposed Changes: Changes in Permitted Watering Times

Greatest public support for maintaining current format and schedule of permitted watering under by-law. No changes proposed to the by-law at this time.

2.2 Changes to Program Restriction Format: Levels 0 Blue and 1 Yellow

Survey Findings:

- When asked of creating greater differentiation between the similar terms of Program Levels 0 Blue and 1 Yellow, 28.5% of respondent indicated that changes should be made, while 62.8% advised that the current program levels should remain the same.

Proposed Changes: Changes in Permitted Watering Times

Greatest public support for maintaining current format of program Levels 0 Blue and 1 Yellow under by-law. No changes proposed to the by-law at this time.

2.3 Inclusion of New Program Level

Survey Findings:

- While nearly all respondents (97%) reported awareness of the Outside Water Use By-law and Program, just over half (54.5%) indicated they are aware of the program's three water restriction levels.
- The majority of respondents (52.3%) would support a new restriction level. Slightly more respondents (62%) believe the colour-coded levels of the Outside Water Use By-law and Program should remain the same.

Proposed Changes: Inclusion of New Program Level (Orange)

Inclusion of additional Outside Water Use Program level (Orange) in the by-law is not recommended at this time. Staff and City's Water Conservation and Efficiency Public Advisory Committee will review environmental low water response thresholds and operational indicators for proposed level Orange with consideration for potential future implementation.

3.0 Car Washing

Survey Findings:

- Although car ownership is nearly universal amongst respondents (97%), relatively few indicated they wash their cars regularly (4.6% weekly).
- 42.3% and 26.5% of respondents indicated Commercial Carwash as the method by which they wash their car.
- 86.3% of respondents indicated they would support total restrictions on at-home car washing during Level 2 Red of the Outside Water Use Program.

Proposed Changes: Car Washing

Addition of at-home vehicle washing restriction under Level 2 Red within the by-law.

4.0 Private Pools

Survey Findings:

- Relatively few respondents (19.8%) reported having a pool.
- 81% of respondents with pools indicated current use of a pool cover.
- 65.8% of respondents with pools indicated they would support limiting pool top-up water use to certain times of the day.
- 59.5% of respondents with pools indicated they would support turning down the pool thermostat during times of low water supply.

Proposed Changes: Private Pools

No change to permitted activities under by-law proposed at this time. Creation of educational resources on pool water efficiency best practices – including pool top-up times, thermostat temperatures and benefits of pool covers and solar blankets – is recommended as part of ongoing Outside Water Use Program operations.

5.0 By-law Compliance

Survey Findings:

- Overall, the majority of respondents (58.3%) believe the current fine level for non-compliance (\$130 per non-compliance event) is appropriate, however 83.5% of respondents supported an increase of fine amounts for repeat offenders.
- Respondent opinion indicates that more enforcement (29.3%) and education & outreach (25.3%) are required to encourage compliance with the Outside Water Use By-law and Program.
- The majority of respondents (60.8%) also indicated they would report by-law noncompliance, primarily by telephone (72.1%).

Proposed Changes: By-law Enforcement

Increased fine amount for repeated non-compliance to be proposed through amended by-law as feasible. Enhanced by-law enforcement protocols already enacted in 2013 based on public support received during Phases 1 & 2 of the by-law review process.

6.0 Industrial and Bulk Users

Consultation Findings:

- Permit structure: Modify the bulk permitting process to allow for greater convenience in customer service for business, and develop a new cost-recovery structure.
- Simplify the process for businesses obtaining permits; a business should be able to call directly and apply for a permit over the phone.

Proposed Changes: Industrial and Bulk Users

Amend permitting within by-law to support industry-based business processes, such as bulk permitting for watering of landscapes within new developments. City staff will review Outside Water Use Program administration to evaluate opportunities to further expedite permitting processes to businesses and other community members.

7.0 Automated Sprinkler Systems

Survey Findings:

- Only 6.4% of respondents who water their lawn do so through the use of an automated irrigation system.
- Of households surveyed with automated irrigation systems, only 33.3% of respondents expressed interest in both a system audit and rebates towards the installation of water saving technologies (such as smart controllers) to be offered by the City to help homeowners improve the efficiency of their home irrigation system.
- Of all households that water their lawn, 68.8% of respondents expressed support for the City requiring specific design standards for automated irrigation systems (e.g. control valves to reduce water leakage) for property owners installing new automated irrigation systems.

Proposed Changes: Automated Sprinkler Systems

No changes to by-law proposed at this time. City staff to seek Council endorsement for the subsequent review of design standards for new automated irrigation systems installations as part of final reporting for the Outside Water Use By-law Review. Educational resources to be developed under ongoing Outside Water Use Program including best practices for water efficiency in irrigation system design, and available contractor certification designations for those choosing to install automated irrigation systems. In addition, the City of Guelph and other Ontario municipalities continue consultation with Landscape Ontario regarding the design and implementation of water efficiency-based training and certification programs for contractors installing automated irrigation systems.

8.0 Education

Survey Findings:

- The three top mechanisms respondents use to get information about the Outside Water Use Program include newspaper (37%), roadside signs (19.5%) and radio (9%).

- Survey results also suggest that the City should continue to provide the same level of information about the Outside Water Use By-law and Program using a combination of communication methods, including the top three reported above.

Proposed Changes: Education

No changes to by-law proposed. With confirmed effectiveness of roadside signs, City staff will identify opportunities for further sign placement within the community, with specific focus to areas of recent growth in the east and south of Guelph.

9.0 Municipal Leadership

9.1 Municipal Programming

Survey Findings:

- Relatively few respondents use a rain barrel (29%) or a rainwater harvesting system (1.5%).
- The majority of respondents who don't use either a rain barrel or rainwater harvesting system indicated they hadn't thought about using one before (30.6%) or cited cost (21.6%) as a barrier.
- 55.3% of respondents indicated interest in purchasing a larger capacity outdoor rainwater harvesting system if the City offered them an incentive (e.g. rebate).
- Of households surveyed with automated irrigation systems, only 33.3% expressed interest in both a proposed system audit service and rebates towards the installation of water saving technologies (e.g. smart controllers) to be offered by the City to help homeowners improve the efficiency of their home irrigation system.

Proposed Changes:

No amendments proposed to by-law. City staff to pursue revisions to current Rainwater Harvesting System Rebate program to allow for eligibility of outdoor only, seasonal rainwater harvesting systems. The City's annual rain barrel truckload sale will continue in 2014 with reference to the community's continued positive response and the substantial remaining market potential for program as confirmed through the survey. Private irrigation system audit and incentive programs will not be pursued at this time due to limited available market and interest among applicable respondents.

9.2 Municipal Operations

Municipal Drought Response Protocol

The City of Guelph is committed to conservation and stewardship of our finite groundwater resources, especially in times of seasonal drought. In alignment with the

by-law review, a multi-departmental Municipal Drought Response Team was formed, including representatives from the City's Engineering Services, Emergency Services, Parks and Recreation, Public Works, Water Services, and Wastewater Services departments, with the mandate of evaluating outside water use activities relating to City operations, and identifying further opportunities for transition in how the City's operations use water when seasonal drought is experienced. Included below is an overview of proposed by-law changes, as well best practices and actions already employed by the City, to support additional outside water efficiency through its operations.

It is important to note that standards for many City services are prescribed through Provincial regulations and other guidelines. The City cannot totally eliminate outside water use associated with individual operational tasks due its obligation to maintain a standard of care with reference to these legal requirements. However, where possible, transitions in City operations have already occurred so as to achieve compliance with these directives while decreasing seasonal outside water use.

Proposed Changes:

- Requirement through by-law to direct City to select best available water efficient technology through procurement and renewal of City assets contributing to outside water use.
- Implementation of 30-day watering exemptions for new sod/seed installed on private property as a result of property damage/remediation from City-lead capital projects and maintenance programs.
- Requirement for 20% reduction of City sports field watering times during Level 2 Red drought conditions.
- Reductions in street sweeping operational times and sweeping in the absence of water during Level 2 Red drought conditions.
- Cancellation of public education and demonstration projects which require water during Level 2 Red drought conditions.

Other Outside Water Efficiency Best Practices currently employed:

- Implementation of technology upgrades at City sports fields to qualify irrigational needs by soil moisture levels, monitor real-time water use, and to proactively shut down irrigation system zones should excess water use be observed due to system maintenance issues, or leakage due to vandalism.
- Use of new technologies to help control water loss and evapotranspiration when watering municipal horticultural plantings.
- Delay of sod and plantings for capital work which may occur during times of drought, to times more suitable for plant health and requiring less watering to establish green infrastructure.

- Use of calcium for dust control related to capital projects in order to reduce water use and increase effectiveness of dust control.
- Technology upgrades at City-owned splash pads to increase efficiency through the treatment and recirculation of water.
- Domestic fixture and other upgrades at City facilities, seasonal and year-round, to decrease water use.
- Changes to project timing for water use activities required through legislation, such as watermain cleaning and hydrant testing programs, to non-peak water use periods.
- Standards for planting and maintenance of new trees on City property, including mulching requirements, approved seasonal planting times, and root-based watering systems, to best support tree health and reduce watering needs.

Next Steps – Join the Conversation

As a final step in the Outside Water Use By-law review process, we welcome your input on the above proposed changes and how they will affect you and the community. Residents and local businesses are invited to submit comments by phone, fax, mail or email. It is asked that all comments be submitted by end of day on Wednesday, August 28, 2013 to assist City staff in finalizing proposed changes to the by-law for City Council's consideration. Final reporting to Guelph City Council will occur in October 2013, with all comments shared in a report to Council for reference.

Outside Water Use By-law comments

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