

Planning & Development Services Report to
Executive Committee
2024 June 11

ISC: UNRESTRICTED
EC2024-0665

Securing Calgary's Water Future – City-wide Outdoor Watering Schedule

PURPOSE

Advancing water conservation is essential to maintaining a reliable water supply today and for future generations. This report proposes the immediate implementation of an Outdoor Watering Schedule ('Watering Schedule') through the Water Utility Bylaw (Attachment 2 & 3) to proactively reduce water usage, raise awareness of efficient watering practices and support water conservation as a normal part of everyday life for Calgarians. The Watering Schedule allows outdoor sprinkler use any two days per week up to a maximum of three hours per day between 8:00pm and 10:00am totalling up to six hours per week. Watering with a spray nozzle or by hand may continue any day and at any time. Additional amendments are proposed to ensure clarity and equity when implementing Stage one to four Outdoor Water Use Restrictions.

PREVIOUS COUNCIL DIRECTION

In alignment with Council's direction to advance priority water demand strategies from the Drought Resilience Plan in the 2023-2026 business cycle (CD2023-0756) (Attachment 1), this report brings forward amendments to the Water Utility Bylaw, which proposes reductions in non-essential outdoor water use. These activities also support Calgary's Water Security Framework (UCS2019-1539) and Calgary's Climate Strategy: Pathways to 2050 (CD2022-0465) objectives to provide safe, secure and reliable water supply in a changing climate.

RECOMMENDATION:

That the Executive Committee recommend that Council:

1. Give three readings to the proposed bylaw in Attachment 2 to amend Bylaw 40M2006, the Water Utility Bylaw; and
2. Direct Administration to return in Q1 2025 to Community Development Committee with an updated Water Efficiency Plan including a renewed suite of water conservation tools to manage Calgary's water use in a changing climate and growing population, following engagement.

CHIEF ADMINISTRATIVE OFFICER/GENERAL MANAGER COMMENTS

Acting General Manager Debra Hamilton and General Manager Doug Morgan concur with the recommendations of this report. Approval of the proposed amendments and implementation of a Watering Schedule are key to helping secure Calgary's water future.

HIGHLIGHTS

- Our water supply is changing and river flows will be very different in the future because of a changing climate.
- Administration's efforts to prepare and respond to drought risks have underscored a need for additional water conservation tools to proactively reduce community-wide water use and enhance community preparedness for transitioning into Outdoor Water Use Restrictions if/when required. Proposed amendments to the Water Utility Bylaw include:

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1. New authority to the Director, Water Services to declare a Water Schedule to proactively respond to drought and/or manage seasonal water demand and reduce outdoor water use and;
 2. Updates to Outdoor Water Use Restrictions to improve clarity and equity of outdoor water use for customers.
- If approved, Administration intends to implement the Watering Schedule for the summer 2024 season, effective immediately, supported by a city-wide communications campaign.
 - As a commitment through Calgary's Drought Resilience Plan, Administration will present an updated Water Efficiency Plan to Council in Q1 2025 followed by more comprehensive proposed amendments to the Water Utility Bylaw as needed which would factor in long-term water conservation goals. Engagement on elements of the Water Efficiency Plan will take place in Q3 2024.

DISCUSSION

Calgary is a big city on a small river.

The City committed to reducing its water consumption by 30 per cent over 30 years and achieved this target 10 years ahead of schedule, while serving a city and regional customer base that has grown by half a million people. While we have made great progress over the last twenty years, we need to do more to ensure that the water needs of Calgary's expected future population of two million people are met in the face of a changing climate bringing increased frequency and severity of drought conditions, changing water supply patterns and longer, hotter, drier summers.

Administration's recent efforts to prepare and respond to drought risk have underscored a need for additional water conservation tools to proactively reduce community-wide water use and better equip our community to transition into Outdoor Water Use Restrictions if/when required. At the same time, changes to the Water Utility Bylaw have been identified that will improve equity in how the restricted activities in Schedule E are applied to citizens and businesses, allow for consistent application of the bylaw, and clarify permitted uses for customers when The City needs to rely on more stringent outdoor water use restrictions stages.

Amendments will provide an immediate opportunity to make a change by managing seasonal water demand, and better preparing The City to support long-term drought resilience, even during times of normal water supply. They include:

1. The addition of a Watering Schedule (section 19.1 and Schedule D.1)
 - Provides new authority to the Director, Water Services to implement a Watering Schedule to proactively respond to drought and/or manage seasonal water demand and reduce outdoor water use. This schedule incorporates best practices for efficient outdoor watering in a dry climate permitting outdoor sprinkler use any two days per week up to a maximum of three hours per day between the hours of 8:00pm and 10:00am, totaling six hours of sprinkler time. Watering with a spray nozzle or by hand may continue any day and at any time.

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- The Watering Schedule will be enforceable under the Water Utility Bylaw (failure to comply will be a bylaw offence); however, bylaw enforcement will continue to take an education-first approach.
- The Watering Schedule familiarizes customers with prescribed watering times, enhancing community preparedness for transitioning into Outdoor Water Use Restrictions if/when required.

2. Amendments to Outdoor Water Use Restrictions (section 20 and Schedule "E")

- Changes to Outdoor Water Use Restrictions address implementation challenges experienced in 2023. Changes will increase equity in how the bylaw is applied to Calgarians and businesses, allowing for consistent application of the bylaw, and clarify permitted outdoor water uses for customers.
- Key changes include clarifying permitted water use for construction and renovation; allowing water use for new tree and shrub establishment; and allowing testing and auditing of irrigation systems.
- Stages one through four of Outdoor Water Use Restrictions will remain unchanged.
- These changes will support The City's drought response in 2024 and will ensure consistency with the new Schedule D.1.

Should Council pass these amendments on June 18, 2024, Administration intends to declare a city-wide Watering Schedule, supported by a city-wide communications campaign. The Watering Schedule will remain in place throughout the summer (2024) unless more restrictive measures are required due to worsening drought conditions or operational needs in which case the Director, Water Services would consider enacting Outdoor Water Use Restrictions.

Throughout the 2024 outdoor water use season, Administration will evaluate how the use of Schedule D.1 and the updated Schedule E impact customers and water demand trends in Calgary. This information will be used to guide the Water Efficiency Plan policies, programs and tactics, including finalizing a permanent long term water schedule for Calgary. Input from customers and partners in the development of these solutions will occur through the Water Efficiency Plan engagement.

EXTERNAL ENGAGEMENT AND COMMUNICATION

- | | |
|--|---|
| <input type="checkbox"/> Public engagement was undertaken | <input checked="" type="checkbox"/> Dialogue with interested parties was undertaken |
| <input type="checkbox"/> Public/interested parties were informed | <input type="checkbox"/> Public communication or engagement was not required |

Internal engagement has been undertaken with bylaw users and affected business units, including endorsement from the Water Treatment & Supply Service Team. Public feedback from over 700 service requests and Councillor inquiries during the 2023 outdoor water use restrictions informed proposed changes, aiming to enhance clarity and equity for customers.

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Administration continually conducts research and engagement on matters related to Utility programs. In 2021, during the Drought Resilience Plan engagement, Calgarians showed strong support (71%) for outdoor watering schedules. In 2023, Administration conducted surveys and focus groups with residential customers, who supported the rationale for outdoor water restrictions and emphasized the importance of early, clear communication prior to implementing stricter measures.

IMPLICATIONS

Social

The amendments will limit Calgarians outdoor water use during specified times of day, which will require a shift in habits and may limit some convenient watering practices. However, the Watering Schedule will help proactively raise awareness of efficient watering practices and support water conservation as a normal part of everyday life for Calgarians. The proposed amendments to Schedule E will clarify regulations and promote equitable water use across the four stages of restrictions.

Environmental

The amendments support bylaw compliance to better protect public health, the environment, and infrastructure. Environmental benefits include protecting river health and supporting Calgary's downstream neighbours who also rely on the river for a sustainable water supply. In addition, amendments will support maintaining the health of the urban tree canopy and green infrastructure in Calgary.

Economic

Administration will continue to monitor the economic impact of limiting outdoor water use for both operations and customers, being cognisant that water use restrictions can have disproportionate impacts on certain industries including the landscape and irrigation industry in Calgary. The City remains committed to mitigate these impacts where possible.

Service and Financial Implications

No anticipated financial impact

This report recommendation has no direct financial implications to The City's capital or operating budgets. Water conservation efforts may lead to increased expenditure (communication, education, enforcement) and reduced revenues as demand decreases. The Utility lines of service have sustainment reserves to manage revenue variability.

RISK

The risks of a limited water supply for a growing population in Calgary are becoming increasingly apparent. Seasonal demand management pressures persist largely due to outdoor water use, placing strains on infrastructure and rivers. Implementing a watering schedule can proactively mitigate these risks by limiting outdoor water use during specific times and promoting efficient watering practices to minimize water loss. These community-wide actions increase our resilience to drought and readies our community to enter into more stringent restrictions if needed.

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ATTACHMENTS

1. Background and Previous Council Direction
2. Proposed Wording for a Bylaw to Amend Bylaw 40M2006 - the Water Utility Bylaw
3. Summary of Proposed Water Utility Bylaw Amendments
4. Presentation

Department Circulation

General Manager/Director	Department	Approve/Consult/Inform
Debra Hamilton, Acting General Manager	Planning and Development Services	Approve
Doug Morgan, General Manager	Operational Services	Approve
Carolyn Bowen, Director	Planning and Development Services – Climate and Environment	Approve
Nancy Mackay, Director	Operational Services - Water Services	Approve

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