

REPORT

Engineering Services

To: Mayor Cote and Members of Council **Date:** March 28, 2022

From: Lisa Leblanc **File:** 05.1035.10
Director of Engineering Services (Doc# 2015152)

Item #: 2022-185

**Subject: Amendment to the Water Shortage Response Bylaw No. 6948, 2004 -
Revision of Lawn Sprinkling Regulations**

RECOMMENDATION

THAT the Water Shortage Response Bylaw Amendment Bylaw No. 8314, 2022, which amends Water Shortage Response Bylaw No. 6948, 2004, be granted three readings.

PURPOSE

To introduce an amendment to the Water Shortage Response Bylaw No. 6948, 2004 for Council's consideration (Attachment 1).

BACKGROUND

Metro Vancouver's Drinking Water Conservation Plan (DWCP) is a regional policy developed with local governments in the GVWD and other stakeholders to manage the use of drinking water during periods of high demand, mostly during late spring to early fall, and during periods of water shortages and emergencies. The DWCP helps ensure our collective needs for drinking water are met affordably and sustainably now, and in the future. The DWCP is enacted by each member municipality by implementation of a municipal bylaw, which enables municipal staff to enforce the water restrictions.

The record-breaking heatwave observed during the summer of 2021 resulted in unprecedented sustained high water use. The long-range climate projections show that our region can expect longer summer dry spells and decreased winter snowpack, limiting summer water availability. In October 29, 2021 the Greater Vancouver Water District Board approved revisions to the DWCP to reflect the recent climate events experienced by the region. The revisions include reduction of lawn watering from two days per week

to one day per week for residential and non-residential addresses during Stage 1, with a complete ban on lawn watering in Stage 2. Furthermore, the revisions include changes to the allowable time window to water trees, shrubs, and flowers during Stage 1 and 2.

EXISTING POLICY/PRACTICE

The existing City's policy/practice is based on the Water Shortage Response Bylaw No. 6948, 2004 (last amended in 2018) that sets Stage 1 through Stage 4 restrictions for watering residential, non-residential and government/schools/parks lawns, trees, shrubs, and flowers. The City's bylaw follows the recommendations of the DWCP and Stage 1 is effective annually between May 1st and October 15th.

The GVWD Commissioner provides management and oversight of the activities of the GVWD as authorized by the GVWD Board and has the authority to make a decision to activate, extend, or deactivate stages within the DWCP at any time. Recommendations to activate, extend, or deactivate a different stage of the DWCP are made by Metro Vancouver (MV) staff to the GVWD Commissioner and if required the GVWD Commissioner may consult with the GVWD Board Chair and standing committee Chair, on the recommendations.

Each stage of the DWCP is designed to reduce demand for drinking water:

- Stage 1 reduces demand in the summer months by promoting water conservation and efficient watering practices;
- Stages 2 and 3 describe further restrictions to limit water use and are likely to be activated during unusually hot and dry conditions to maximize conservation through to early fall with the return of seasonal rainfall or until the risk of water shortage is over;
- Stage 4 is an emergency stage that limits both indoor and outdoor water uses to ensure an adequate supply of drinking water for human consumption and essential uses such as firefighting.

A number of factors guide the GVWD Commissioner's decision to activate the more restrictive stages of the DWCP. Activation of Stages 2, 3, and 4 of the DWCP is based on measured facts, reasoned predictions, historical patterns and modelling, with a goal of ensuring the sufficient supply of drinking water until the events that caused the more restrictive stages are over. As climate change is resulting in warmer and drier summers, the DWCP supports climate adaptation by reducing the region's demand on and conserve the water supply during the critical summer months.

ANALYSIS

The record-breaking heatwave that our region experienced last summer (2021) resulted in unprecedented sustained high water use, which reached a regional daily water consumption of 1.79 billion liters on June 27, 2021, just shy of the 2 billion liters all-time high set in 2009. The region also experienced sustained high water use above 1.5 billion

liters per day, for 40 days, compared to the average of only 15 days during a typical summer. The region is expected to grow by 35,000 people per year for the next few decades, while the City of New Westminster's population is expected to grow from approximately 70,000 people in 2015 to 102,000 people in 2041. Population growth will place demands not only on water supply, but also on water infrastructure if not carefully planned.

The proposed bylaw amendment No. 8314, 2022 updates the current lawn sprinkling regulations for Stage 1 and Stage 2 restrictions with the following changes:

- Reduction of lawn watering from two days per week to one day per week during Stage 1;
- A complete ban on lawn watering in Stage 2; and
- Reduction of the allowable time window for watering trees, shrubs, and flowers during Stage 1 and Stage 2 from '1AM – 9AM' to '4AM – 9AM'.

This bylaw amendment, combined with a strong education and enforcement program, will help reduce seasonal water demand and offer a number of regional benefits, including financial savings, potential deferral of major infrastructure projects, greenhouse gas reductions and operational flexibility. No changes are required to the City's Bylaw Notice Enforcement Bylaw and the Municipal Ticket Information Bylaw.

Communication

Metro Vancouver will be promoting this change with a robust communication plan to ensure widespread public notification of the changes to be implemented as of May 1, 2022. As a first step, the DWCP webpage and communication materials (e.g. DWCP summary document) have been updated on the Metro Vancouver webpage. Subsequently, the City will update its website to reflect changes to the DWCP following adoption of the proposed bylaw amendment.

Furthermore, Metro Vancouver will deliver education and communication campaigns for the region through the following methods:

- Promote changes through a digital campaign running to encourage good water habits. The campaign will focus on changes to lawn watering regulations, including steps residents can take in the fall and winter to prepare their lawns for spring;
- Email landscape, irrigation, and turf farm industry groups to notify them of the changes and offer to meet to answer any questions;
- Update education/enforcement communication materials to share with municipalities staff to ensure consistent messaging;
- Metro Vancouver will be deploying a summer student door knocking educational program as part of the region's outreach campaign.

FINANCIAL IMPACT

Potential reduction in water consumption as a result of the lawn sprinkling regulations may reduce city costs for water purchases from the GVWD.

INTERDEPARTMENTAL LIAISON

Staff from the following departments have been involved in the development of the Bylaw:

- Climate Action Planning and Development (Licensing & Integrated Services).

OPTIONS

The following options are presented for Council's Consideration:

1. That the Water Shortage Response Bylaw Amendment Bylaw No. 8314, 2022, which amends Water Shortage Response Bylaw No. 6948, 2004, be granted three readings.
2. Defer the proposed Water Shortage Response Amendment Bylaw No. 8314, 2022, and request Metro Vancouver to provide further information.

Staff recommend Option 1.

CONCLUSION

The Drinking Water Conservation Plan (DWCP) is intended to conserve water by managing discretionary uses in a manner which minimizes the impact on residents and does not impose unnecessary economic hardships on businesses. The proposed bylaw amendment updates the City's Water Shortage Response Bylaw No. 6948, 2004 to include revised lawn sprinkling regulations that were approved by the GVWD Board on October 29, 2021 in response to recent and anticipated future climate events.

ATTACHMENTS

Attachment 1 - Proposed Water Shortage Response Bylaw Amendment Bylaw No. 8314, 2022

Attachment 2 - Water Shortage Response Bylaw No. 6948, 2004

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