



ADMINISTRATIVE REPORT

Report Date: March 29, 2018
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Meeting Date: April 18, 2018

TO: Standing Committee on Policy and Strategic Priorities
FROM: General Manager of Engineering Services
SUBJECT: Drinking Water Conservation By-law

RECOMMENDATION

- A. THAT Council approve, in principle, repealing the existing Water Shortage Response By-law and enacting the proposed Drinking Water Conservation By-law to align with the Metro Vancouver Drinking Water Conservation Plan;

FURTHER THAT the Director of Legal Services be instructed to prepare the necessary amending by-law generally in accordance with Appendix B.

- B. THAT Council approve, in principle, amending the By-law Notice Enforcement By-law to authorize the enforcement of contraventions under stage 1 and stage 2 water use restrictions and amending the Ticket Offences By-law to remove the authority to enforce contraventions under stage 1 and stage 2 water use restrictions;

FURTHER THAT the Director of Legal Services be instructed to prepare the necessary amending by-laws generally in accordance with Appendix C.

REPORT SUMMARY

The Water Rationing By-law 7109, enacted in 1993, was replaced in 2004 with the Water Shortage Response By-law 8912, with the purpose of aligning with the regional plan to manage demand of outdoor uses of drinking water during the peak summer demand period, water shortages and emergencies. In June 2017, the Greater Vancouver Water District Board (GVWD) approved an updated Water Shortage Response Plan and have renamed it the Drinking Water Conservation Plan. The purpose of the new plan remains the same, with amendments that integrate lessons learned from the 2015 drought and public consultation. Member municipalities of the GVWD are encouraged to follow the restrictions in the plan through adoption in their corresponding by-laws and by demonstrating leadership in local civic facilities and parks.

The Drinking Water Conservation Plan was drafted through a consultation process conducted by Metro Vancouver with local government, industry stakeholders and public through workshops, public dialogues and online surveys during the period from December 2016 to January 2017.

The proposed City of Vancouver Drinking Water Conservation By-law aligns with the watering restrictions and process set out in the regional Drinking Water Conservation Plan with the following additional changes:

- Authorization has been given to the City Engineer to activate water use restriction stages if, in the opinion of the City Engineer, such activation is necessary to protect and conserve the city water supply, even if notice from the GVWD Commissioner has not yet been received. This provides consistency with other municipalities within Metro Vancouver.
- Metro Vancouver's Plan recommends a new separate category of restrictions to cover water use by Governments/Schools/Parks. For simplicity, Vancouver has not included a separate restriction category for Governments/Schools/Parks, but includes all the restrictions for special uses such as playing fields and water play parks within the non-residential category. Parks will follow their Water Conservation Action Plan, endorsed by the Parks Board on September 18, 2017, which will have farther reaching water conservation impact.

COUNCIL AUTHORITY/PREVIOUS DECISIONS

- Water Rationing By-law 7109 (1993)
- By-law 7109 replaced with the Water Shortage Response By-law 8912 (2004)

CITY MANAGER'S/GENERAL MANAGER'S COMMENTS

The City Manager and General Manager of Engineering Services support approval of Recommendations A and B above.

REPORT

Background/Context

This report provides an overview of the proposed new Drinking Water Conservation By-law, how it aligns with the regional Drinking Water Conservation Plan, and its estimated impact towards the Greenest City water conservation target.

The Greenest City Action Plan (GCAP) includes a target to reduce total per capita water consumption by 33% from 2006 levels. This target was chosen to promote the sustainable use of the current water supply, aspiring to completely offset population and economic growth through efficient use of drinking water to avoid the financial, environmental and social costs associated with expanding water and sewer infrastructure.

At the end of 2017, the suite of initiatives and programs delivered by the Clean Water Conservation work plan has resulted in an 18% reduction over 2006 levels. A further 5% reduction is projected by 2020 from policies and programs realizing their full benefit over this

period, including the more restrictive outdoor watering schedule proposed in the Drinking Water Conservation by-law.

The need for greater water conservation efforts is mounting with pressure on the regional supply source from a growing population and climate change. Metro Vancouver is spending \$3.5 billion to upgrade and expand the water system over the next 10 years and is planning for expansion of the regional source capacity at the Coquitlam Reservoir by 2030. In addition, Metro Vancouver is currently in negotiations with BC Hydro for additional withdrawal from the Coquitlam Reservoir in accordance with the Coquitlam Water Use Plan.

Supply expansion options beyond 2030 are expected to be even more significant. Considering the scale of the infrastructure, environmental impacts, and their impact on water rates, increased demand-side management in the City, through requiring greater water conservation, could help to defer the infrastructure expansion timeline and will result in direct savings to Vancouver residents whom would pay a smaller portion of the overall capital costs of regional upgrades.

Drinking Water Conservation By-law

The Regional Drinking Water Conservation Plan is the parent document to the proposed Drinking Water Conservation By-law. The Plan was adopted by the GVWD Board on June 7, 2017 following consultation with the public and various stakeholders from December 2016 to January 2017. It outlines prescriptive outdoor water use restrictions through a staged approach tied to source supply levels and identifies the process by which each stage is activated and deactivated.

Member municipalities of the GVWD are encouraged to follow the restrictions in the plan through adoption in their corresponding by-laws. Guidelines were provided to local governments to assist with amending these by-laws to ensure regional consistency. The City's proposed by-law is consistent with the Plan with some contextual exceptions and harmonization with other existing City by-laws and practices, which are set out in the Report Summary above.

Strategic Analysis

The Drinking Water Conservation plan and the corresponding proposed City by-law require increased restrictions on watering and outdoor water use. A detailed comparison of the existing by-law and the proposed amendments to align with the regional plan are found in Appendix A.

The estimated impact of these measures is 1% reduction in the City's total water consumption. To promote awareness and city-wide adoption, a comprehensive education campaign is planned for spring 2018 that leverages regional awareness efforts and provides targeted programming for Vancouver residents to meet the new requirements. The City will take a coordinated approach with the GVWD to increase awareness through earned media, a targeted social media campaign, advertising and updated print and digital collateral.

The City will also offer a Water Efficiency Advisor Program, in which two co-op students will be available over the summer to assist residents with adjusting their irrigation timers to match the new requirements. Promotion of this program is planned through City communication channels, education at public events, as well as referrals through Water Enforcement Officers. Last summer a trial of this program was offered and 51 assessments were conducted at resident's homes with an average outdoor water savings of 28% achieved through reprogramming of

irrigation systems and identifying irrigation leaks. Follow-up emails with residents indicated they found the service helpful.

Destination Parks such as Stanley Park, VanDusen, and Queen Elizabeth, as well as other large parks are not yet fully converted to automated irrigation systems that can be programmed to the times set out in the regional Drinking Water Conservation Plan. The botanical displays at these parks can include rare species and are valuable public assets and attractions for tourists and special events. Parks Board Water Conservation Action Plan, endorsed by the Parks Board on September 18, 2017, has a commitment to meet the Greenest City target of 33% water use reduction and states the principle to endeavour to compliance with existing by-laws and best practices including increasing irrigation efficiency as a priority action. Parks will follow their Water Conservation Action Plan which will have farther reaching water conservation impact than the watering restrictions denoted in the by-law, while not jeopardizing the loss of these public assets.

Dedicated water enforcement will continue with two seasonal officers, taking an education-first approach to help residents transition into the new regulations in the first year. The proposed amendments to the By-law Notice Enforcement By-law authorize enforcement of contraventions under stage 1 and stage 2 water use restrictions through the By-law Notice Enforcement By-law No. 10201 and remove the authority to enforce from the Ticket Offences By-law No. 9360. This change provides flexibility in delivering the by-law notice and a less onerous administrative process when enforcement is required. Offences under stage 3 and 4 will continue to be enforced under the Ticket Offences By-law, or the Offence Act, to allow fines above the \$500 maximum penalty allowed under the By-law Notice Enforcement By-law. Currently the penalty for contravention of the Water Shortage Response By-law is \$250 at each stage. The suggested graduated penalty or fines structure is consistent with the regional recommendations and is noted below.

Water Restriction Stage	Penalty	By-law
1	\$250	By-law Notice Enforcement By-law
2	\$500	By-law Notice Enforcement By-law
3	\$750	Ticket Offences By-law
4	\$1000	Ticket Offences By-law

Implications/Related Issues/Risk (if applicable)

Financial

There are no financial implications.

CONCLUSION

This report provides an overview of the proposed new Drinking Water Conservation By-law, how it aligns with the regional Drinking Water Conservation Plan, and its estimated impact towards the Greenest City water conservation target.

The recommendations detailed in this report align with the regional plan to manage demand of outdoor uses of drinking water during the peak summer demand period, water shortages and emergencies. Adoption of the proposed amended by-laws will enable local enforcement of the water restrictions.

* * * * *

Appendix A: Summary of approved amendments from the regional Drinking Water Conservation Plan

Item	Current (Water Shortage Response By-law)	Approved (Drinking Water Conservation Plan)
Activation period	May 15 to Oct 15	May 1 to Oct 15
Lawn watering	3 mornings in stage 1	2 mornings in stage 1
Watering flowers, vegetables, planters, shrubs, and trees	No restrictions in stages 1 and 2	<ul style="list-style-type: none"> - On any day from 4 am to 9 am for residential users and 1 am to 9 am for non-residential. - On any day at any time if using a handheld hose, soaker hose, water container, or drip irrigation.
Watering golf courses	<p>Stage 2: Golf courses may water greens and tee areas normally; fairways may only be watered once weekly.</p> <p>Stage 3: Golf courses may water greens and tee areas at minimum levels required to maintain areas in useable condition; fairways may not be watered.</p>	<p>Stage 2: Fairway watering 1 day in a 7-day period except if operating under an approved local government water management plan.</p> <p>Stage 3: Fairway watering 1 day in a 7-day period except if operating under an approved local government water management plan.</p>
Commercial car washing	No restrictions in stage 3	<p>Stage 3: Commercial vehicle washing prohibited except for:</p> <ul style="list-style-type: none"> - A facility that installed an automatic vehicle wash system before November 1, 2017, is operating on a basic wash and rinse cycle only. - A facility that installed an automatic vehicle wash system after November 1, 2017, is operating using a water recycling system that achieves a minimum 60% water recovery rate over the full wash cycle. - A hand wash and self-service facility, is operating using a high-pressure wands or brushes that achieve a

		maximum flow rate of 11.4 litres per minute.
Topping up or filling pools, spas and garden ponds	Prohibited in Stage 3	Stage 3: Topping-up or filling of pools and hot tubs is prohibited except for pools and hot tubs with a permit to operate in accordance with health authorities having jurisdiction over pool and hot tub regulation.
Watering soil-based playing fields	No restrictions in stages 1,2 and 3	<p>Stage 1: On any day between 7 pm and 9 am, except if:</p> <ul style="list-style-type: none"> - Watering newly over-seeded fields if in compliance with a local government permit - operating under an approved local government water management plan <p>Stage 2: No more than 4 days in a 7-day period between 7 pm to 9 am with the same exceptions as in Stage 1.</p> <p>Stage 3: no more than 3 days in a 7-day period between 7 pm to 9 am with the same exceptions as in Stage 1.</p>
Watering sand-based playing fields	No restrictions in stages 1,2 and 3	<p>Stages 1 and 2: On any day between 7 pm to 9 am, except if:</p> <ul style="list-style-type: none"> - Watering newly over-seeded fields if in compliance with a local government permit. - Operating under an approved local government water management plan. <p>Stage 3: No more than 5 days in a 7-day period between 7 pm and 9 am with the same exceptions as in Stage 1.</p>

APPENDIX B: Drinking Water Conservation By-law

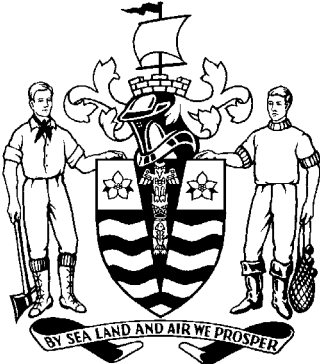
BY-LAW NO. _____

**DRAFT By-law to repeal
the Water Shortage Response By-law and
to enact a new Drinking Water Conservation By-law**

NOTE: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting;

1. Council repeals Water Shortage Response By-law No. 8912 and enacts the Drinking Water Conservation By-law attached as Schedule A to this by-law.

**CITY OF VANCOUVER
BRITISH COLUMBIA**



DRINKING WATER CONSERVATION BY-LAW NO. ____

DRINKING WATER CONSERVATION BY-LAW

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BY-LAW NO. _____

Drinking Water Conservation By-law

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

PART 1 INTERPRETATION

By-law name

1.1 The name of this by-law, for citation, is the “Drinking Water Conservation By-law”.

Definitions

1.2 In this by-law:

“aesthetic water feature” means a fountain, pond, or other water feature that primarily serves an aesthetic purpose, but does not include ponds that contain fish;

“alternative water sources” means water that comes from sources other than the Greater Vancouver Water District or the City;

“automatic shut-off device” means a device, attached to a water hose, that shuts off the supply of water automatically unless the application of hand pressure allows the supply of water;

“boulevards adjacent to the premises” means:

- (a) on a street with curbs, the portion of public property between the outside curb and the adjoining property line of the premises; and
- (b) on a street without curbs, the portion of public property between the edge of the roadway and the adjoining property line of the premises;

“City Engineer” means the individual appointed by Council to be General Manager of Engineering Services or a person duly authorized to carry out the powers and duties of the General Manager of Engineering Services;

“commercial vehicle wash facility” means a facility that offers vehicle washing services to the public for a fee, but does not include car dealerships, fleet vehicle washing facilities, or charity car washes;

“GVWD Commissioner” means the Commissioner of the Greater Vancouver Water District, which operates under the name “Metro Vancouver”;

“new lawn” means a lawn that is newly established either by seeding or the laying of new sod or turf;

“non-residential premises” means premises zoned for uses other than residential uses, and includes premises zoned for mixed residential and non-residential uses;

“over-seeded” means the application of grass seed on existing turf for the purpose of mitigating against grass thinning;

“person” does not include a municipality, a regional district, the Province of British Columbia, or any body appointed or created under an enactment of Canada or British Columbia;

“playing field” means a field located on non-residential premises that is designed and maintained to be played upon, or that is used for sporting or other community events and activities, but does not include lawns or golf courses;

“residential premises” means premises zoned for residential uses;

“sand-based playing field” means a playing field that is constructed with a highly permeable sand-based root zone over a drainage system with drain pipes bedded in gravel;

“soaker hose” means a garden hose or pipe with small holes that allow water to seep into the ground, discharging water through the entire length of its porous surface;

“soil-based playing field” means a playing field that is covered with grass, sod, or turf;

“sprinkler” means a device that sprays water, and includes both automatic and non-automatic devices;

“stage 1 water use restrictions” mean restrictions on water use described in Part 6 of this by-law;

“stage 2 water use restrictions” mean restrictions on water use described in Part 7 of this by-law;

“stage 3 water use restrictions” mean restrictions on water use described in Part 8 of this by-law;

“stage 4 water use restrictions” mean restrictions on water use described in Part 9 of this by-law;

“water play park” means a recreational facility that is primarily outdoors, including spray pools, wading pools, spray parks, splash pads, and water slides;

“water use permit” means a permit issued under this by-law that authorizes watering a new lawn or an over-seeded playing field, or a lawn being treated for pest infestations using nematodes;

“water use plan” means a water use plan approved by the City Engineer for a playing field or golf course under this by-law; and

“water use restriction stages” means stage 1, 2, 3 and 4 water use restrictions as described in this by-law.

Table of contents

1.3 The table of contents for this by-law is for convenient reference only, and is not for use in interpreting or enforcing this by-law.

Schedules

1.4 The schedules attached to this by-law form part of this by-law.

Severability

1.5 A decision by a court that any part of this by-law is illegal, void, or unenforceable is not to affect the balance of this by-law.

PART 2 AUTHORITIES

Administration

2.1 The City Engineer is authorized to administer the applicable provisions of this by-law.

Power of entry

2.2 The City Engineer, and all persons authorized to act on behalf of the City Engineer, may enter any building or premises at any reasonable time for the purpose of administering or enforcing this by-law.

Authority of the City Engineer

2.3 The City Engineer is authorized to:

- (a) activate water use restriction stages, other than stage 1 water restrictions;
- (b) announce water use restriction stages;
- (c) issue water use permits;
- (d) issue notices or orders; and
- (e) approve water use plans,

in accordance with this by-law.

Notices and orders

2.4 The City Engineer may issue in writing such notices or orders as may be necessary to notify a person of a contravention of this by-law, in the manner set out in this by-law.

Scope of order

2.5 The City Engineer may order a person who contravenes any provision of this by-law:

- (a) to comply with the by-law within a specified time;
- (b) to discontinue or refrain from proceeding with any water use in contravention of this by-law; or
- (c) to allow the City Engineer to enter any building or premises at any reasonable time for the purpose of administering or enforcing this by-law.

Service of order

2.6 A notice or order issued under this by-law is sufficiently served if:

- (a) the notice or order is delivered by hand, by ordinary prepaid mail or by registered mail, to the owner's address as shown in the records of the Assessment Authority of British Columbia; or
- (b) in the case of an owner that is a corporation, the notice or order is delivered by hand, by ordinary prepaid mail, or by registered mail, to the registered and records office of the corporation; or
- (c) in any case, the notice or order is delivered by electronic mail to the electronic mail address of a water use permit holder as shown in the permit application, or of the applicant for a water use plan as shown in the plan application; or
- (d) the notice or order is posted on the affected premises.

Deemed receipt of order

2.7 Notices and orders issued in accordance with this by-law are deemed to have been received:

- (a) four days after mailing, if sent by ordinary prepaid mail, to the mailing address of the owner;

- (b) on the date of delivery as noted in the Canada Post tracking system, if sent by registered mail;
- (c) 24 hours after sending, if sent by electronic mail to the electronic mail address of the permit holder as shown in the permit application or of the applicant for a water use plan as shown in the plan application; and
- (d) immediately upon receipt, if handed to the owner or a representative of the owner, delivered to the registered and records office for the owner, or posted on the affected premises.

PART 3 WATER USE PERMITS

Application for water use permit

3.1 A person may apply to the City Engineer for a water use permit for:

- (a) a new lawn or an over-seeded playing field; or
- (b) a lawn that is being treated for pest infestations using nematodes.

Permit application form

3.2 The permit application must be in the form prescribed by the City Engineer and accompanied by the requisite fee set out in Schedule A to this by-law.

Permit time limits

3.3 The City Engineer may issue a water use permit for a specific address or location, except that:

- (a) a water use permit must be for no more than 21 consecutive days;
- (b) an extension of a water use permit must be for no more than 21 additional consecutive days; and
- (c) a water use permit must not be issued for a specific address or location for more than 42 days in total in a calendar year.

Permit conditions

3.4 The City Engineer may impose conditions on water use permits regarding:

- (a) time, dates, locations and duration of watering;
- (b) inspections;

- (c) responsibilities of the permit holder; and
- (d) compliance with this by-law or other enactments.

Effect of permit on lawns

3.5 A person who waters a lawn in accordance with a water use permit:

- (a) is exempt from stage 1 and 2 water use restrictions to the extent provided in this by-law; and
- (b) is not exempt from the general water restrictions or stage 3 and 4 water use restrictions, except that any exemptions under a permit issued before stage 3 restrictions came into effect remain in effect until the permit expires.

Effect of permit on playing fields

3.6 A person who waters a playing field in accordance with a water use permit:

- (a) is exempt from stage 1, 2 and 3 water use restrictions to the extent provided in this by-law; and
- (b) is not exempt from the general water restrictions or stage 4 water use restrictions.

Posting and compliance with permit

3.7 A person who is the holder of a water use permit must:

- (a) post the water use exemption permit issued by the City Engineer, at the place specified in the water use permit, and in such a manner that the exemption permit is visible from the street;
- (b) only water a lawn or playing field at the place and during the times and dates specified in the water use permit;
- (c) comply with all conditions on the water use permit; and
- (d) comply with all applicable provisions of this by-law.

Extension of permit

3.8 Before the expiry of a water use permit for a new lawn or an over-seeded playing field, a person may apply for one extension of the permit on the same terms and conditions as previously imposed by the City Engineer, accompanied by the requisite fee set out in Schedule A to this by-law.

Expiry of permit

3.9 A water use permit expires 21 days after the date of issue or, if the City Engineer has granted an extension, 42 days after the original date of issue.

Revocation of permit

3.10 The City Engineer may revoke a permit if, in the opinion of the City Engineer:

- (a) there is a contravention of a condition of the permit;
- (b) the permit was issued in error;
- (c) the permit was issued on the basis of false or incorrect information; or
- (d) the permit holder fails to comply with the provisions of this by-law.

PART 4 WATER USE PLANS

Application for approval of water use plan

4.1 A person may apply in writing to the City Engineer for approval of a proposed water use plan for a playing field or golf course and the application must include the requisite fee set out in Schedule A to this by-law and the following information:

- (a) the volume of water the operation has consumed from June 1 to September 30 for each of the preceding five years;
- (b) the volume of water the operation would consume, under the proposed water use plan, from June 1 to September 30 annually;
- (c) proposed water conservation measures;
- (d) proposed watering schedules, based on stage 1, 2 and 3 water use restrictions;
- (e) the proposed implementation date for the water use plan; and
- (f) such further information as the City Engineer may require.

Consideration of proposed plan

4.2 The City Engineer may:

- (a) approve a proposed water use plan;

- (b) amend a proposed water use plan prior to approval; or
- (c) refuse to approve a proposed water use plan.

Plan conditions

4.3 The City Engineer may impose conditions on a water use plan.

Effect of plan

4.4 A person who waters a playing field or golf course pursuant to a water use plan approved under this Part:

- (a) is exempt from stage 1, 2 and 3 water use restrictions to the extent provided in this by-law; and
- (b) is not exempt from stage 4 water use restrictions.

Reporting and compliance with water use plan

4.5 A person who implements an approved water use plan must:

- (a) start the water use plan on the implementation date set out in the water use plan;
- (b) report actual water consumption to the City Engineer:
 - (i) monthly when stage 1 or 2 water use restrictions are in effect, and
 - (ii) bi-weekly when stage 3 water use restrictions are in effect; and
- (c) comply with all commitments, conditions, and restrictions set out in the water use plan.

Termination of plan by City Engineer

4.6 The City Engineer may terminate or suspend a water use plan by notifying the applicant in writing:

- (a) 24 hours before the termination or suspension date, if an applicant fails to comply with the provisions of this by-law; or
- (b) seven days before the termination date in all other cases.

Termination of plan by applicant

4.7 An applicant may terminate a water use plan by notifying the City Engineer in writing, in which case the water use plan will terminate on the later of the date specified in the notice or the date on which the City Engineer receives the notice.

PART 5 WATER USE RESTRICTION STAGES

Stage 1 water use restrictions

5.1 Stage 1 water use restrictions are automatically in effect from May 1 to October 15 in each calendar year, unless the City Engineer:

- (a) activates a different water use restriction stage; and
- (b) announces to the public that a different water use restriction stage is in place, in accordance with this by-law.

Activation of water use restriction stage

5.2 The City Engineer is authorized to:

- (a) activate a water use restriction stage on receipt of notice from the GVWD commissioner of the activation of a water use restriction stage by the GVWD;
- (b) activate a water use restriction stage if, in the opinion of the City Engineer, such activation is necessary to protect and conserve the City water supply; and
- (c) activate a water use restriction stage other than a stage 1 water use restriction.

Announcement of water use restriction stage

5.3 The City Engineer must make a public announcement of the activation of any water use restriction stage, other than the automatic activation of the stage 1 water use restriction on May 1 of each calendar year, and may do so by any or all of the following means:

- (a) radio or television broadcast;
- (b) posting on the City website;
- (c) delivery of notices; or
- (d) publication in a local newspaper.

Commencement of water use restriction stage

5.4 A water use restriction stage, other than the automatic activation of the stage 1 water use restriction on May 1, takes effect 72 hours after a public announcement is made in accordance with any of the provisions of section 5.3.

Deemed notice

5.5 Notice of a water use restriction stage, other than the automatic activation of the stage 1 water use restriction on May 1, is deemed to have been received 72 hours after a public announcement in accordance with any of the provisions of section 5.3.

Expiry of existing restriction stage

5.6 A water use restriction stage that takes effect under section 5.4 replaces any existing water use restriction stage.

PART 6 GENERAL WATER RESTRICTIONS

Water use restrictions do not apply to alternative water sources

6.1 The water use restrictions set out in this by-law do not apply to a person watering using water obtained from alternative water sources.

General prohibition against wasting water

6.2 A person must not waste water, or suffer, permit or allow waste of water at any time. Without limiting the generality of the foregoing, a person must not waste water, or suffer, permit or allow waste of water at any time by:

- (a) the free discharge or flow of water from premises, on or into a sanitary sewer, watercourse, storm drain, street or adjacent premises;
- (b) leaking of water from appliances, devices, machines, equipment, systems, ponds, fountains or water features;
- (c) the use of ponds, waterways, water features, fountains or swimming pools, which do not have a water recirculation device;
- (d) the use of an irrigation system which applies water to an impervious surface; or
- (e) the use of a water hose which is not equipped with an automatic shut-off device.

**PART 7
STAGE 1
WATER USE RESTRICTIONS**

Compliance with stage 1

7.1 Unless otherwise provided in this by-law, a person must comply with the water use restrictions in this Part 7, from May 1st to October 15th.

Stage 1 restrictions

7.2 Except as otherwise provided in section 7.3, when stage 1 water use restrictions are in effect:

- (a) a person may only water a lawn, including any cultivated boulevards adjacent to the premises:
 - (i) at residential premises with even-numbered addresses, on Wednesdays and Saturdays between 4:00 a.m. and 9:00 a.m.,
 - (ii) at residential premises with odd-numbered addresses, on Thursdays and Sundays between 4:00 a.m. and 9:00 a.m.,
 - (iii) at non-residential premises with even-numbered addresses, on Mondays between 1:00 a.m. and 6:00 a.m. and on Fridays between 4:00 a.m. and 9:00 a.m., and
 - (iv) at non-residential premises with odd-numbered addresses, on Tuesdays between 1:00 a.m. and 6:00 a.m. and on Fridays between 4:00 a.m. and 9:00 a.m.;
- (b) a person may only water trees, shrubs, flowers and plants using a sprinkler:
 - (i) at residential premises between 4:00 a.m. and 9:00 a.m., and
 - (ii) at non-residential premises between 1:00 a.m. and 9:00 a.m.; and
- (c) a person may only water a soil-based or sand-based playing field between 7:00 p.m. and 9:00 a.m.

Exemptions from stage 1 restrictions

7.3 The provisions of sections 7.2 do not apply to a person watering:

- (a) a lawn or playing field in compliance with a water use permit issued under this by-law;
- (b) a playing field or golf course in accordance with a water use plan approved under this by-law;
- (c) a vegetable garden or edible plants; or

- (d) concrete for curing purposes.

**PART 8
STAGE 2
WATER USE RESTRICTIONS**

Compliance with stage 2

8.1 Unless otherwise provided in this by-law, when stage 2 water use restrictions are in effect, a person must comply with the water use restrictions in this Part 8.

Stage 2 restrictions

8.2 Except as otherwise provided in section 8.3, when stage 2 water use restrictions are in effect:

- (a) a person may only water a lawn, including any cultivated boulevards adjacent to the premises:
- (i) at residential premises with even-numbered addresses, on Wednesdays between 4:00 a.m. and 9:00 a.m.,
 - (ii) at residential premises with odd-numbered addresses, on Thursdays between 4:00 a.m. and 9:00 a.m.,
 - (iii) at non-residential premises with even-numbered addresses, on Mondays between 1:00 a.m. and 6:00 a.m., and
 - (iv) at non-residential premises with odd-numbered addresses, on Tuesdays between 1:00 a.m. and 6:00 a.m.;
- (b) a person may only water trees, shrubs, flowers and plants using a sprinkler:
- (i) at residential premises between 4:00 a.m. and 9:00 a.m., and
 - (ii) at non-residential premises between 1:00 a.m. and 9:00 a.m.;
- (c) a person must not wash an impermeable outdoor surface except:
- (i) for health or safety reasons,
 - (ii) to prepare a surface for painting, sealing, or similar treatment, or
 - (iii) if the washing is carried out by a commercial cleaning operation for aesthetic purposes;
- (d) a person must not fill, refill or add water to an aesthetic water feature;
- (e) a person must not water a golf course fairway on more than one day in any seven day period;

- (f) a person must not water a soil-based playing field on more than four days in any seven day period, and may only water between 7:00 p.m. and 9:00 a.m. on those days;
- (g) a person may only water a sand-based playing field between 7:00 p.m. and 9:00 a.m.; and
- (h) a person must not operate a water play park unless it is equipped with user-activated switches.

Exemptions from stage 2 restrictions

8.3 The provisions of section 8.2 do not apply to a person watering:

- (a) a lawn or playing field in compliance with a water use permit issued under this by-law;
- (b) a playing field or golf course in accordance with a water use plan approved under this by-law;
- (c) a vegetable garden or edible plants; or
- (d) concrete for curing purposes.

PART 9 STAGE 3 WATER USE RESTRICTIONS

Compliance with stage 3

9.1 Unless otherwise provided in this by-law, when stage 3 water use restrictions are in effect, a person must comply with the water use restrictions in this Part 9.

Stage 3 restrictions

9.2 Except as otherwise provided in section 9.3, when stage 3 water use restrictions are in effect:

- (a) a person must not water a lawn, including any cultivated boulevards adjacent to the premises;
- (b) a person must not water trees, shrubs, flowers or plants with a sprinkler or a soaker hose;
- (c) a person must not wash an impermeable outdoor surface except:
 - (i) for health or safety reasons, or

- (ii) if it is carried out by a commercial cleaning operation to prepare a surface for painting, sealing, or similar treatment;
- (d) a person must not fill, refill or add water to a an aesthetic water feature, hot tub or swimming pool;
- (e) a person must not wash a motor vehicle or boat by hand, except to clean windows, lights, mirrors, licence plates or boat engines for safety reasons;
- (f) a person must not water a golf course fairway;
- (g) a person must not operate a commercial vehicle wash facility;
- (h) a person must not water a soil-based playing field on more than three days in any seven day period, and may only water between 7:00 p.m. and 9:00 a.m. on those days;
- (i) a person must not water a sand-based playing field on more than five days in any seven day period, and may only water between 7:00 p.m. and 9:00 a.m. on those days; and
- (j) a person must not operate a water play park unless it is equipped with user-activated switches.

Exemptions from stage 3 restrictions

9.3 The provisions of section 9.2 do not apply to:

- (a) a person watering:
 - (i) a lawn in accordance with a water use permit issued before stage 3 water use restrictions came into effect,
 - (ii) a playing field in compliance with a water use permit issued under this by-law,
 - (iii) a playing field or golf course in accordance with a water use plan approved under this by-law,
 - (iv) a vegetable garden or edible plants, or
 - (v) concrete for curing purposes;
- (b) a non-residential hot tub or swimming pool operated pursuant to a permit issued by a health authority; or
- (c) a person who operates a commercial vehicle wash facility that:
 - (i) in the case of a facility that installed an automatic vehicle wash system before November 1, 2017, is operating on a basic wash and rinse cycle only,
 - (ii) in the case of a facility that installed an automatic vehicle wash system after November 1, 2017, is operating using a water recycling system that

- achieves a minimum 60% water recovery rate over the full cycle wash, and
- (iii) in the case of a hand wash and self-service facility, is operating using high pressure wands or brushes that achieve a maximum flow rate of 11.4 litres per minute.

**PART 10
STAGE 4
WATER USE RESTRICTIONS**

Compliance with stage 4

10.1 Unless otherwise provided in this by-law, when stage 4 water use restrictions are in effect, a person must comply with the water use restrictions in this Part 10.

Stage 4 restrictions

10.2 When stage 4 water use restrictions are in effect:

- (a) a person must not water a lawn, including any cultivated boulevards adjacent to the premises;
- (b) a person must not water trees, shrubs, flowers, plants, or vegetable gardens;
- (c) a person must not wash an impermeable outdoor surface, except when ordered to do so for health or safety reasons by a regulatory authority;
- (d) a person must not fill, refill or add water to an aesthetic water feature, hot tub or swimming pool;
- (e) a person must not wash a motor vehicle or boat, except to clean windows, lights, mirrors, licence plates or boat engines for safety reasons;
- (f) a person must not operate a commercial vehicle wash facility;
- (g) a person must not water a golf course;
- (h) a person must not water a soil-based or sand-based playing field; and
- (i) a person must not operate a water play park.

**PART 11
OFFENCES AND PENALTIES**

Offences

11.1 Every person who:

- (a) violates any provision of this by-law;
- (b) suffers, permits or allows any act to be done in contravention of this by-law;
- (c) neglects to do anything required to be done by this by-law; or
- (d) fails to comply with an order or notice given under this by-law,

is guilty of an offence and liable to the penalties listed herein.

Fines and penalties

11.2 Every person who commits an offence against this by-law is liable to a fine of no less than \$250 and no more than \$10,000 for each offence.

Continuing offences

11.3 Every person who commits an offence of a continuing nature against this by-law is liable to a fine of no less than \$250 and no more than \$10,000 for each day such offence is continued.

Minimum fines based on water use restriction stages

11.4 Notwithstanding sections 11.2 and 11.3, every person who commits an offence:

- (a) against the provisions of Part 6 of this by-law when stage 1 water use restrictions are in effect, is liable to a fine of no less than \$250.00;
- (b) against the provisions of Part 7 of this by-law, is liable to a fine of no less than \$250.00;
- (c) against the provisions of Part 6 of this by-law when stage 2 water use restrictions are in effect, is liable to a fine of no less than \$500.00;
- (d) against the provisions of Part 8 of this by-law, is liable to a fine of no less than \$500.00;
- (e) against the provisions of Part 6 of this by-law when stage 3 water use restrictions are in effect, is liable to a fine of no less than \$750.00;
- (f) against the provisions of Part 9 of this by-law, is liable to a fine of no less than \$750.00;
- (g) against the provisions of Part 6 of this by-law when stage 4 water use restrictions are in effect, is liable to a fine of no less than \$1000.00; and
- (h) against the provisions of Part 10 of this by-law, is liable to a fine of no less than \$1,000.00.

Onus regarding exemption

11.5 In a prosecution under this by-law, the onus of establishing an exemption under sections 7.3, 8.3 or 9.3, or of establishing that a person is using water obtained from alternative water sources, lies on the person claiming the exemption.

**PART 12
MISCELLANEOUS**

Repeal

12.1 Council repeals Water Shortage Response By-law No. 8912.

Force and effect

12.2 This by-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this day of , 2018

Mayor

Clerk

SCHEDULE A
FEES

Water Use Permit application fee for new lawn or over-seeded playing field.....	\$35.31
Water Use Permit extension application fee for new lawn or over-seeded playing field.....	\$35.31
Water Use Permit application fee for lawn being treated for pest infestations using nematodes.....	\$20.00

EXPLANATION

APPENDIX C: By-Law Notice Enforcement and the By-law Ticket Offences By-law

BY-LAW NO.

**DRAFT By-law to amend the
By-law Notice Enforcement By-law No. 10201
Regarding Drinking Water Conservation By-law Offences**

NOTE: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting;

1. This By-law amends the indicated provisions of By-law Notice Enforcement By-law No. 10201.
2. Council adds the following to the end of Schedule "A":

**“ Drinking Water Conservation
By-law No. []**

	Description	A1 Penalty	A2 Discount	A3 Surcharge
6.2	Wasting water Stage 1	250	125	125
7.2(a)(i)	Water residential lawn at even-numbered addresses outside permitted hours Stage 1	250	125	125
7.2(a)(ii)	Water residential lawn at odd-numbered addresses outside permitted hours Stage 1	250	125	125
7.2(a)(iii)	Water non-residential lawn at even-numbered addresses outside permitted hours Stage 1	250	125	125
7.2(a)(iv)	Water non-residential lawn at odd-numbered addresses outside permitted hours Stage 1	250	125	125
	Water residential trees, shrubs, flowers or plants using a sprinkler outside			

	Description	A1 Penalty	A2 Discount	A3 Surcharge
7.2(b)(i)	permitted hours Stage 1	250	125	125
7.2(b)(ii)	Water non-residential trees, shrubs, flowers or plants using a sprinkler outside permitted hours Stage 1	250	125	125
7.2(c)	Water playing field outside permitted hours Stage 1			
7.2(c)	Wasting water Stage 2	250	125	125
6.2	Water residential lawn at even-numbered addresses outside permitted hours Stage 2	500	250	250
8.2(a)(i)	Water residential lawn at odd-numbered addresses outside permitted hours Stage 2	500	250	250
8.2(a)(ii)	Water residential lawn at even-numbered addresses outside permitted hours Stage 2	500	250	250
8.2(a)(iii)	Water non-residential lawn at odd-numbered addresses outside permitted hours Stage 2	500	250	250
8.2(a)(iv)	Water non-residential lawn at even-numbered addresses outside permitted hours Stage 2	500	250	250
8.2(b)(i)	Water residential trees, shrubs, flowers or plants using a sprinkler outside permitted hours Stage 2	500	250	250
8.2(b)(ii)	Water non-residential trees, shrubs, flowers or plants using a sprinkler outside permitted hours Stage 2	500	250	250
8.2(c)	Wash impermeable outdoor surface Stage 2			
8.2(c)	Fill aesthetic water feature	500	250	250

EXPLANATION

**By-law to amend the
By-law Notice Enforcement By-law No. 10201
Regarding drinking water conservation offences**

At a Regular Council meeting on _____, 2018, Council resolved to amend the By-law Notice Enforcement By-law. Enactment of the attached By-law will implement Council's resolution.

Director of Legal Services

BY-LAW NO. _____

**Draft By-law to amend Ticket Offences By-law No. 9360
Regarding the Drinking Water Conservation By-law**

NOTE: A By-law will be prepared generally in accordance with the provisions listed below, subject to change and refinement prior to posting;

1. This By-law amends the indicated provisions of Ticket Offences By-law No. 9360.
2. Council strikes out Table 6 and replaces it with the following:

**“Table 6
Drinking Water Conservation By-law**

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>	<u>Column 4</u>
City Engineer Poundkeeper	Wasting water Stage 3	Section 6.2	\$750.00
	Water lawn Stage 3	Section 9.2(a)	\$750.00
	Water trees, shrubs, flowers or plants Stage 3	Section 9.2(b)	\$750.00
	Wash impermeable outdoor surface Stage 3	Section 9.2(c)	\$750.00
	Fill aesthetic water feature, hot tub, or swimming pool Stage 3	Section 9.2(d)	\$750.00
	Wash motor vehicle or boat Stage 3	Section 9.2(e)	\$750.00
	Water golf course fairway Stage 3	Section 9.2(f)	\$750.00
	Operate commercial vehicle wash facility Stage 3	Section 9.2(g)	\$750.00
	Water soil-based playing field outside permitted number of days or hours Stage 3	Section 9.2(h)	\$750.00
	Water sand-based playing field outside permitted number of days or hours Stage 3	Section 9.2(i)	\$750.00
	Operate water play park without		

<u>Column 1</u>	<u>Column 2</u>	<u>Column 3</u>	<u>Column 4</u>
	user-activated switches Stage 3	Section 9.2(j)	\$750.00
	Wasting water Stage 4		
	Water lawn Stage 4	Section 6.2	\$1000.00
	Water trees, shrubs, flowers or plants Stage 4	Section 10.2(a)	\$1000.00
		Section 10.2(b)	\$1000.00
	Wash impermeable outdoor surface Stage 4		
		Section 10.2(c)	\$1000.00
	Fill aesthetic water feature, hot tub, or swimming pool Stage 4		
		Section 10.2(d)	\$1000.00
	Wash motor vehicle or boat Stage 4		
		Section 10.2(e)	\$1000.00
	Operate commercial vehicle wash facility Stage 4		
		Section 10.2(f)	\$1000.00
	Water golf course Stage 4		
		Section 10.2(g)	\$1000.00
	Water playing field Stage 4		
		Section 10.2(h)	\$1000.00
	Operate water play park Stage 4		
		Section 10.2(i)	\$1000.00

3. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

4. This By-law is to come into force and take effect upon enactment.

ENACTED by Council this _____ day of _____, 2018

Mayor

City Clerk

EXPLANATION

**Ticket Offences By-law amending By-law No. 9360
Re: Drinking Water Conservation**

On _____, 2018, Council approved amendments to the Ticket Offences By-law regarding conservation of drinking water. Enactment of the attached By-law will accomplish Council's resolution.

Director of Legal Services
_____, 2018