



City of Richmond

Report to Committee

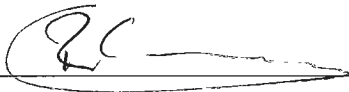

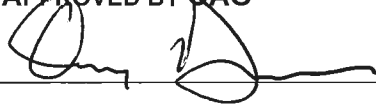
To: Public Works and Transportation Committee **Date:** February 23, 2018
From: John Irving, P.Eng. MPA **File:** 10-6060-03-01/2018-
 Director, Engineering Vol 01
Re: **Water Use Restriction Bylaw No. 7784, Amendment Bylaw No. 9774**

Staff Recommendation

That the Water Use Restriction Bylaw No. 7784, Amendment Bylaw No. 9774 be introduced and given first, second and third readings.

John Irving, P.Eng. MPA
 Director, Engineering
 (604-276-4140)

Att. 2

REPORT CONCURRENCE		
ROUTED TO: Corporate Communications Law Water Services Parks Services Community Bylaws	CONCURRENCE <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	CONCURRENCE OF GENERAL MANAGER 
REVIEWED BY STAFF REPORT / AGENDA REVIEW SUBCOMMITTEE	INITIALS: 	APPROVED BY CAO 

Staff Report

Origin

The Drinking Water Conservation Plan (the “Plan”) was originally prepared by Metro Vancouver in 2004 as the Water Shortage Response Plan and was adopted by the City of Richmond through the Water Use Restriction Bylaw No. 7784. The Plan and bylaw identify staged water use restrictions that manage discretionary uses of water while minimizing impacts on residents and avoiding unnecessary hardships on businesses during periods of high demand, water shortages and emergencies.

In 2016, Metro Vancouver completed a review of the Plan. Proposed changes were presented to member municipalities and were reviewed by City staff. At the January 23, 2017 Regular Council Meeting, Council adopted the following motion:

That the comments on Metro Vancouver’s proposed changes to the Water Shortage Response Plan, as summarized in the staff report titled “Water Shortage Response Plan – Proposed Changes,” dated January 3, 2017, from the Director, Engineering be submitted to Metro Vancouver.

The City’s comments were submitted to Metro Vancouver and the Plan has been revised based on comments submitted by member municipalities. The updated Drinking Water Conservation Plan has been finalized by Metro Vancouver. This report proposes amendments to the City of Richmond’s Water Use Restriction Bylaw No. 7884 to reflect changes in the Plan.

This report supports Council’s 2014-2018 Term Goal #4 Leadership in Sustainability:

Continue advancement of the City’s sustainability framework and initiatives to improve the short and long term livability of our City, and that maintain Richmond’s position as a leader in sustainable programs, practices and innovations.

4.1. Continued implementation of the sustainability framework.

4.2. Innovative projects and initiatives to advance sustainability.

This report supports Council’s 2014-2018 Term Goal #6 Quality Infrastructure Networks:

Continue diligence towards the development of infrastructure networks that are safe, sustainable, and address the challenges associated with aging systems, population growth, and environmental impact.

6.1. Safe and sustainable infrastructure.

6.2. Infrastructure is reflective of and keeping pace with community need.

Analysis

Metro Vancouver's Drinking Water Conservation Plan

The Plan identifies four stages of watering restrictions. Stage 1 is activated each year during the summer months. Higher stages, each with more stringent restrictions for outdoor water use, are activated by Metro Vancouver in response to more critical water supply conditions. Stages 2 and 3 are likely to be activated during unusually hot and dry conditions, while Stage 4 may be activated during an emergency to limit water use to essential needs only.

The unprecedented hot and dry summer of 2015 together with a low winter snowpack resulted in record-low storage levels in Metro Vancouver's reservoirs and the activation of Stage 3 of watering restrictions. This was the most significant activation of the Plan to date and the challenges experienced during the summer of 2015 prompted Metro Vancouver to review and update the Plan in 2016 and 2017.

The Plan was updated to align with four key principles:

1. To recognize drinking water as a precious resource that must be conserved;
2. To maintain the environmental, economic vitality and health and safety of the region to the extent possible in the face of a water shortage;
3. To optimize available water supplies and reduce water use; and
4. To minimize adverse impacts to public activity and quality of life for the region's residents.

The revised Plan (Attachment 1) was approved by the Greater Vancouver Water District (GVWD) Board in June 2017 and took effect in November 2017.

Proposed Changes to the Water Use Restriction Bylaw No. 7784

Proposed changes to the City of Richmond's Water Use Restriction Bylaw No. 7784 generally align with Metro Vancouver's revisions to the Plan. One exception is proposed for the watering of City lawns, parks and boulevards and the additional provision proposed is further detailed below.

Proposed Changes to Align with Updates to the Plan

The following changes to Bylaw No. 7784 are proposed to align with updates made to the Plan:

- The activation date for Stage 1 Restriction is revised from May 15 to May 1 annually;
- New general restrictions that apply throughout all restriction stages:
 - All hoses must have an automatic shut-off device;
 - Water must not be unnecessarily run off on impermeable surfaces such as driveways, curbs, pathways and gutters when watering lawns and plants;
 - Artificial playing turf and outdoor tracks must not be watered except for a health or safety reason;
 - Hoses and taps must not run unnecessarily; and
 - Irrigation systems must not be faulty, leaking or misdirected.

- An exemption that allows the City to use water outside of water restrictions for the purpose of protecting public health and safety;
- Lawn sprinkling:
 - Lawn sprinkling during Stage 1 is reduced from 3 mornings per week to 2 mornings per week; and
 - The designated lawn sprinkling day for residential properties with even-numbered addresses during Stage 2 has been changed from Monday to Wednesday.
- The sprinkling of trees, shrubs and flowers (excluding edible plants) which was previously unrestricted during Stages 1 and 2 is restricted to the hours below during Stages 1 and 2:
 - Residential lots: Permitted only from 4:00 am to 9:00 am; and
 - Non-residential and public lots: Permitted only from 1:00 am to 9:00 am.
- Watering of soil-based and sand-based playing fields, which was previously unrestricted, is proposed to be restricted as follows, except when operating in accordance with an approved Water Management Plan or when operating under a local government permit for newly seeded fields:
 - Stage 1: Watering permitted from 7:00 pm to 9:00 am on any day;
 - Stage 2: Watering of soil-based playing fields permitted between 7:00 pm and 9:00 am on any day for no more than 4 days in a 7-day period; watering of sand-based playing fields permitted between 7:00 pm and 9:00 am on any day; and
 - Stage 3: Watering of soil-based playing fields permitted between 7:00 pm and 9:00 am on any day for no more than 3 days in a 7-day period; watering of sand-based playing fields permitted between 7:00 pm and 9:00 am on any day for no more than 5 days in a 7-day period.
- Provisions have been added to allow owners and operators of golf courses and playing fields to apply to the City to operate under approved Water Management Plans;
- Restrictions prohibiting the topping up of ornamental fountains during Stage 2 and Stage 3 have been extended to all aesthetic water features;
- Restrictions for commercial car washing during Stage 3 are introduced to encourage adoption of efficient technologies that reduces water use;
- The use of water to fill or re-fill commercial pools and hot-tubs which was previously prohibited during Stage 3 is proposed to be permitted if operating in accordance with a permit issued by an authorized health authority; and
- Restrictions for the operation of water play parks and pools during Stage 2 and Stage 3 have been introduced.

Proposed Changes for Watering of City Lawns, Parks and Boulevards

The Plan restricts watering of City lawns, parks and boulevards to the same time periods as non-residential properties. The restricted watering times create operational issues for large parks and remotely controlled sprinkling systems throughout the City. These systems were exempt from restrictions in previous versions of the Plan.

Staff recommend permitting the watering of City lawns and boulevards outside of prescribed hours when operating under an approved Water Management Plan in Stages 1 and 2, similar to provisions provided for golf courses and playing fields. The Water Management Plan ensures that watering operations are designed to align with the key principles of the Plan by optimizing available water supplies, reducing water use and minimizing adverse impacts to public activity. Similar provisions are being proposed for the City of Surrey.

Public Communication and Next Steps

If Amendment Bylaw No. 9774 is adopted, Stage 1 watering restrictions will take effect on May 1, 2018. Staff will develop and implement a comprehensive communication strategy prior to May 2018 to ensure that residents and business owners are aware of the proposed changes. The strategy will include aspects of Metro Vancouver's regional communication pieces and will include social media, news releases and the City's website.

Financial Impact

None.

Conclusion

The Drinking Water Conservation Plan and the City's Water Use Restriction Bylaw No. 7784 have been effective tools for managing water demand during times of shortages or emergencies. Metro Vancouver's amendments to the Plan will further improve demand management and promote water conservation. Staff recommend that the City's Water Use Restriction Bylaw No. 7784 be amended to be consistent with regional initiatives with one additional provision introduced for the watering of City lawns, parks and boulevards.



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Att 1: Drinking Water Conservation Plan

Att 2: Water Use Restriction Bylaw No. 7784, Amendment Bylaw No. 8774

metrovancouver



Metro Vancouver Drinking Water Conservation Plan



Published date: This Plan is to come into force and take effect on November 1, 2017

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1 Overview of the Drinking Water Conservation Plan

The Greater Vancouver Water District (GVWD) was created and constituted under the provincial statute the *Greater Vancouver Water District Act*, to supply drinking water to the Metro Vancouver region. The GVWD is governed by an Administration Board (the Board) consisting of representatives from the local government members of the GVWD. The Board appoints a Commissioner (the GVWD Commissioner) who provides management and oversight of the activities of the GVWD. The GVWD operates under the name “Metro Vancouver”.

Metro Vancouver, working together with the local government members of the GVWD, provides clean, safe drinking water to the region’s population of 2.5 million. Metro Vancouver’s *Drinking Water Conservation Plan* (DWCP) is a regional policy developed with local governments 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.

There are two complementary documents to the DWCP. One is the Board’s *Drinking Water Conservation Policy* which describes: 1) the GVWD Commissioner’s decision-making process for activating and deactivating Stages of the DWCP; and 2) the implementation process for local governments.

The second complementary document is Metro Vancouver’s *Drinking Water Management Plan*, which sets out the following three goals:

1. Provide clean, safe drinking water.
2. Ensure the sustainable use of water resources.
3. Ensure the efficient supply of water.

The water restrictions, as outlined in the DWCP, provide regional direction for meeting Goal 2 – Ensuring the sustainable use of water resources.

The DWCP applies only to local government members of the GVWD and the use of drinking water from the GVWD’s water system. Jurisdictions that are not local government members of the GVWD are encouraged to follow the restrictions in the plan to help conserve drinking water and demonstrate leadership and consistency to water users across the region. The DWCP restrictions do not apply to the use of rain water, grey water, any forms of recycled water, or water from sources outside the GVWD water system. If water is supplied from an alternative source other than the GVWD water system, such users are encouraged to display signs indicating the alternative water source.

Underlying the development and implementation of the DWCP are the following four principles:

1. Recognize drinking water as a precious resource that must be conserved.
2. Maintain the environmental, economic vitality and health and safety of the region to the extent possible in the face of a water shortage.
3. Optimize available water supplies and reduce water use.
4. Minimize adverse impacts to public activity and quality of life for the region’s residents.

2 Metro Vancouver’s role in ensuring the sustainable use of water resources

2.1 Managing the region’s drinking water responsibly

Metro Vancouver is responsible for storing, treating and delivering clean, safe drinking water through its local governments to over 2.5 million people in the Metro Vancouver region of British Columbia.

Metro Vancouver’s water system includes three watersheds and associated dams and reservoirs, treatment facilities, an extensive transmission system, plus the performance of related operational and maintenance tasks to manage this infrastructure.

Metro Vancouver distributes water to local government members on a cost recovery basis.

Local governments then deliver drinking water, through their infrastructure, directly to individual properties. All individual billing and enforcement of water use restrictions is undertaken by each respective local government.

Metro Vancouver manages the region’s water system in accordance with Provincial regulations and Federal guidelines. In addition to meeting those regulations and guidelines, Metro Vancouver is responsible for developing long-range plans for managing the region’s drinking water and operating the water system. The system is operated in alignment with priorities identified in Metro Vancouver’s *Board Strategic Plan*, under the region’s *Drinking Water Management Plan* and in consideration of the principles of sustainability through decision making that considers social, economic, and environmental values.



2.2 Water conservation in Metro Vancouver

Water conservation is a major component of Metro Vancouver’s planning to ensure the sustainable use of water resources. Helping water users such as residents, businesses, schools, and local governments to use only what they need helps ensure an efficient and relatively cost effective water system.

Most precipitation in Metro Vancouver occurs between November and April. Dry summer months lead to an increase in water use, particularly for the outdoor uses described in the DWCP. Assisting water users to develop sustainable water use habits year round makes a significant difference in lowering daily demand and sustaining reservoir levels during dry months. Lowering demand through water conservation practices also defers the need to invest in expanding the infrastructure, even as the region’s population grows by approximately 35,000 residents annually.

The DWCP describes the staged restrictions related to outdoor water use that water users should follow to:

- Prevent water from being wasted;

- Prepare for and respond to drought and emergency conditions;
- Ensure drinking water can be delivered to all users during the summer when rainfall levels are lowest and the demand for water is highest;
- Adapt to a changing climate;
- Support fish habitat and ecosystems;
- Minimize the costly expansion of the water system infrastructure; and
- Maintain adequate water pressure to keep the system operating safely and effectively.

More information on Metro Vancouver’s water conservation initiatives, improvements and expansion to the delivery system, and planning for future water supply can be found at metrovancover.org.

3 Drinking Water Conservation Plan – Stages 1 through 4

Each stage of the DWCP is designed to reduce demand for drinking water through specific water restrictions which become more restrictive with higher stages. The following general restrictions apply to all stages of the plan in addition to the specific water restrictions contained in each stage:

- All hoses must have an automatic shut-off device
- Water must not unnecessarily run off on impermeable surfaces such as driveways, curbs, pathways, or gutters when watering lawns and plants
- Artificial playing turf and outdoor tracks must not be watered except for a health or safety reason
- Hoses and taps must not run unnecessarily
- Irrigation systems must not be faulty, leaking, or misdirected

In most cases, the stages of the plan will be activated in successive order, but they can also be activated immediately in any order.

Stage 1 reduces demand in summer months, and is automatically in effect on May 1 until October 15.

Stages 2 and 3, activated and deactivated by the GVWD Commissioner, are likely to be activated during unusually hot and dry conditions to maximize conservation.

Stage 4, activated and deactivated by the GVWD Commissioner during an emergency to immediately limit water use to essential needs only.

The decision to activate more restrictive stages of the DWCP is based on measured facts, reasoned predictions, and historical patterns, with a goal of ensuring the sufficient supply of water until the concerns that caused the more restrictive stages are over, typically in the early fall with the return of seasonal rainfall.

3.1 Stage 1 Water Restrictions

Stage 1 comes into effect automatically each year – on May 1 until October 15 – to prevent drinking water wastage and ensure water users employ efficient and effective watering practices.

User	Water Use	Restriction
RESIDENTIAL	Watering lawns	Even-numbered civic addresses: on Wednesdays and Saturdays from 4 am to 9 am Odd-numbered civic addresses: on Thursdays and Sundays from 4 am to 9 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	Outside restricted lawn watering times if in compliance with a local government permit
	Watering trees, shrubs, and flowers excluding edible plants	On any day from 4 am to 9 am if using a sprinkler On any day at any time if using a handheld hose, soaker hose, water container, or drip irrigation
NON-RESIDENTIAL	Watering lawns (mixed-use buildings e.g. residential and commercial should follow Non-residential watering times)	Even-numbered civic addresses: on Mondays from 1 am to 6 am and on Fridays from 4 am to 9 am Odd-numbered civic addresses: on Tuesdays from 1 am to 6 am and on Fridays from 4 am to 9 am
	Watering new lawns or lawns being treated for European Chafer Beetle	Outside restricted lawn watering times if in compliance with a local government permit
	Watering trees, shrubs, and flowers excluding edible plants	On any day from 1 am to 9 am if using a sprinkler On any day at any time if using a handheld hose, soaker hose, water container, or drip irrigation
GOVERNMENTS/ SCHOOLS/PARKS	Watering lawns and grass boulevards	Even-numbered civic addresses: on Mondays from 1 am to 6 am and on Fridays from 4 am to 9 am Odd-numbered civic addresses: on Tuesdays from 1 am to 6 am and on Fridays from 4 am to 9 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	Outside restricted lawn watering times if in compliance with a local government permit
	Watering trees, shrubs, and flowers excluding edible plants	On any day from 1 am to 9 am if using a sprinkler On any day at any time if using a handheld hose, soaker hose, water container, or drip irrigation

User	Water Use	Restriction
GOVERNMENTS/ SCHOOLS/PARKS	Watering soil-based playing fields	On any day from 7 pm to 9 am, except if: <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
	Watering sand-based playing fields	On any day from 7 pm to 9 am, except if: <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
	Flushing water mains	Prohibited

3.2 Stage 2 Water Restrictions

Stage 2 restrictions conserve drinking water to ensure the existing supply will last until the return of seasonal rainfall or until the water shortage situation is over. These restrictions are designed to conserve enough drinking water to avoid or delay moving to Stage 3 as long as possible.

User	Water Use	Restriction
RESIDENTIAL	Watering lawns	Even-numbered civic addresses: on Wednesdays from 4 am to 9 am Odd-numbered civic addresses: on Thursdays from 4 am to 9 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	Outside restricted lawn watering times if in compliance with a local government permit
	Watering trees, shrubs, and flowers excluding edible plants	On any day from 4 am to 9 am if using a sprinkler On any day at any time if using a handheld hose, soaker hose, water container, or drip irrigation
	Washing impermeable surfaces	Prohibited except if: <ul style="list-style-type: none"> - For a health or safety reason - Preparing a surface for painting or similar treatment - Aesthetic cleaning by a commercial cleaning operation
	Topping up or filling aesthetic water features	Prohibited
NON-RESIDENTIAL	Watering lawns (mixed-use buildings e.g. residential and commercial should follow Non-residential watering times)	Even-numbered civic addresses: on Mondays from 1 am to 6 am Odd-numbered civic addresses: on Tuesdays from 1 am to 6 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	Outside restricted lawn watering times if in compliance with a local government permit
	Watering trees, shrubs, and flowers excluding edible plants	On any day from 1 am to 9 am if using a sprinkler On any day at any time if using a handheld hose, soaker hose, water container, or drip irrigation
	Watering golf courses	Fairways watering anytime on any one day in a 7-day period, except if operating under an approved local government water management plan

User	Water Use	Restriction
NON-RESIDENTIAL	Washing impermeable surfaces	Prohibited except if: <ul style="list-style-type: none"> - For a health or safety reason - Preparing a surface for painting or similar treatment - Aesthetic cleaning by a commercial cleaning operation
	Topping up or filling aesthetic water features	Prohibited
GOVERNMENTS/SCHOOLS/PARKS	Watering lawns and grass boulevards	Even-numbered civic addresses: on Mondays from 1 am to 6 am Odd-numbered civic addresses: on Tuesdays from 1 am to 6 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	Outside restricted lawn watering times if in compliance with a local government permit
	Watering trees, shrubs, and flowers excluding edible plants	On any day from 1 am to 9 am if using a sprinkler On any day at any time if using a handheld hose, soaker hose, water container, or drip irrigation
	Watering soil-based playing fields	No more than 4 days in a 7-day period from 7 pm to 9 am, except if: <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
	Watering sand-based playing fields	On any day from 7 pm to 9 am, except if: <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
	Flushing water mains	Prohibited
	Operating water play parks and pools	Prohibited except water play parks with user-activated switches
	Topping up or filling aesthetic water features	Prohibited

3.3 Stage 3 Water Restrictions

Stage 3 restrictions respond to serious drought conditions, or other water shortage, and achieve further reductions in drinking water use by implementing a lawn watering ban and additional stricter measures.

User	Water Use	Restriction
RESIDENTIAL	Watering lawns	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	Local government permits issued in Stages 1 or 2 remain in effect until permit expires No new permits issued or renewed
	Watering trees, shrubs, and flowers excluding edible plants	Prohibited if using a sprinkler or soaker hose On any day at any time if using a handheld hose, water container, or drip irrigation
	Washing impermeable surfaces	Prohibited except if: <ul style="list-style-type: none"> - For a health or safety reason - Preparing a surface for painting or similar treatment by a commercial cleaning operation
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	Prohibited
	Washing vehicles and boats	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety
NON-RESIDENTIAL	Watering lawns (mixed-use buildings e.g. residential and commercial should follow Non-residential watering times)	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	Local government permits issued in Stages 1 or 2 remain in effect until permit expires No new permits issued or renewed
	Watering trees, shrubs, and flowers excluding edible plants	Prohibited if using a sprinkler or soaker hose On any day at any time if using a handheld hose, water container, or drip irrigation
	Watering golf courses	Fairways watering prohibited except if operating under an approved local government water management plan
	Washing impermeable surfaces	Prohibited except if: <ul style="list-style-type: none"> - For a health or safety reason

User	Water Use	Restriction
NON-RESIDENTIAL		<ul style="list-style-type: none"> - Preparing a surface for painting or similar treatment by a commercial cleaning operation
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	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
	Washing vehicles and boats	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety
	Commercial vehicle washing	Prohibited except if: <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 high-pressure wands or brushes that achieve a maximum flow rate of 11.4 litres per minute
GOVERNMENTS/SCHOOLS/PARKS	Watering lawns and grass boulevards	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	Local government permits issued in Stages 1 or 2 remain in effect until permit expires No new permits issued or renewed
	Watering trees, shrubs, and flowers	Prohibited if using a sprinkler or soaker hose On any day at any time if using a handheld hose, water container, or drip irrigation
	Watering soil-based playing fields	No more than 3 days in a 7-day period from 7 pm to 9 am except if: <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
	Watering sand-based playing fields	No more than 5 days in a 7-day period from 7 pm to 9 am, except if:

User	Water Use	Restriction
GOVERNMENTS/SCHOOLS/PARKS		<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
	Flushing water mains	Prohibited
	Operating water play parks	Prohibited except water play parks with user-activated switches
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	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
	Washing vehicles and boats	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety

3.4 Stage 4 Water Restrictions

Stage 4 is an emergency stage that limits both indoor and outdoor water uses as much as possible to ensure an adequate supply of drinking water for human consumption, use in firefighting and to protect the quality of drinking water within the water system for public health.

Stage 4 is activated based on the rare occurrence of a significant emergency, such as an earthquake, flood, wild land and interface fire, severe weather, or a prolonged regional power outage that causes significant impacts to the water system infrastructure (e.g. damage to major water transmission lines, pump stations, or treatment plants).

In addition to the following outdoor water restrictions, Metro Vancouver could request that industrial water users implement voluntary reductions or reschedule production processes that consume large amounts of water until Stage 4 is deactivated.

User	Water Use	Restriction
RESIDENTIAL	Watering lawns	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	All local government permits issued for lawn watering are invalidated
	Watering trees, shrubs, flowers and edible plants	Prohibited
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	Prohibited
	Washing impermeable surfaces	Prohibited except if ordered by a regulatory authority having jurisdiction for a health or safety reason
	Washing vehicles and boats	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety
NON-RESIDENTIAL	Watering lawns (mixed-use buildings e.g. residential and commercial should follow Non-residential watering times)	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	All local government permits issued for lawn watering are invalidated
	Watering trees, shrubs, flowers and edible plants	Prohibited

NON-RESIDENTIAL	Watering golf courses	Prohibited
	Washing impermeable surfaces	Prohibited except if ordered by a regulatory authority having jurisdiction for health or safety reason
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	Prohibited
	Washing vehicles and boats	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety
	Commercial vehicle washing	Prohibited
GOVERNMENTS/SCHOOLS/PARKS	Watering lawns and grass boulevards	Prohibited
	Watering new lawns or lawns being treated for European Chafer Beetle	All local government permits issued for lawn watering are invalidated
	Watering trees, shrubs, flowers and edible plants	Prohibited
	Watering soil-based playing fields	Prohibited
	Watering sand-based playing fields	Prohibited
	Flushing water mains	Prohibited
	Operating water play parks	Prohibited
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	Prohibited
	Washing vehicles and boats	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety

3.5 Stage activation

Stage 1 comes into effect automatically on May 1 until October 15 each year.

Stages 2, 3 and 4 are activated and deactivated by the GVWD Commissioner.

The following factors guide the GVWD Commissioner's decision to activate or deactivate stages of the DWCP:

- Available storage capacity of the Capilano and Seymour Reservoirs and alpine lakes;

- Water allocated to Metro Vancouver by BC Hydro from the Coquitlam Reservoir;
- Hydrologic forecasting parameters including temperature, rainfall, snowpack, and snowmelt;
- Seasonal water demand trends (measured and charted daily);
- User compliance with the restrictions; and
- Water transmission system performance and ability to deliver water during periods of high demand.

Once the GVWD Commissioner makes the decision to activate or deactivate a stage, all local governments are alerted within 24 hours, which triggers public notification and enforcement.

The GVWD Commissioner has the authority to activate, extend or deactivate stages at any time.

3.6 Public notification

Metro Vancouver and local governments are responsible for communicating information to water users about the restrictions in clear and plain language including:

- Providing public access to the restrictions in both a full and abbreviated version;
- Distributing communications materials;
- Promoting the annual start date of the restrictions;
- Notification of activation or deactivation of stages;
- Responding to queries; and
- Recording feedback for consideration in future reviews.

3.7 Monitoring and enforcement

Local governments incorporate the DWCP restrictions into local government bylaws, where each local government is responsible for monitoring and enforcing the restrictions in their communities. Local governments will ensure that their respective enforcement and penalties for violations of the water restrictions increase with each successive stage of the DWCP to reflect the severity of the situation requiring the activation of an advanced stage.

Local governments may use a variety of tools to promote and ensure bylaw compliance including educational materials, using verbal and written warnings, issuing tickets and imposing fines.

3.8 Updating the Drinking Water Conservation Plan

The DWCP is reviewed periodically to reflect population growth, climate change, new technologies and changes in water system infrastructure. Proposed changes are discussed with local governments responsible for plan implementation and enforcement, and with stakeholders. All updates are reviewed and approved by the Board.

4 Exemption for local governments for health and safety reasons

Metro Vancouver encourages all local governments to follow the watering restrictions in the DWCP to conserve water and demonstrate leadership. However, Metro Vancouver recognizes that local governments have important decisions to make regarding protecting public health and safety, and that certain circumstances may require the use of drinking water in a manner that is not consistent with the DWCP restrictions. Therefore, local governments have the authority to use water during any stage and are exempt from the restrictions in the DWCP for activities that are necessary for the purpose of protecting public health and safety. Examples include:

- Flushing water mains where a significant health or safety concern is identified;
- Washing down public spaces where significant health concerns are raised, or on the recommendation of the local health authority;
- Wetting forest and park perimeters or boulevards as part of a fire prevention strategy during extreme hot and dry weather, or on the recommendation of the local fire authority; and
- Protection of publicly funded infrastructure such as community playing fields or swimming facilities, on the recommendation of the city manager of the local government having jurisdiction.

5 Members of the Greater Vancouver Water District

The following are the members of the GVWD:

Village of Anmore	City of Maple Ridge	City of Port Moody
Village of Belcarra	City of New Westminster	City of Richmond
City of Burnaby	City of North Vancouver	City of Surrey
City of Coquitlam	District of North Vancouver	Tsawwassen First Nation
Corporation of Delta	City of Pitt Meadows	City of Vancouver
City of Langley	City of Port Coquitlam	District of West Vancouver
Township of Langley		

The Director representing Electoral Area A on the Metro Vancouver Regional District is a member of the GVWD Administration Board.

6 Glossary and terms

In the DWCP:

Aesthetic cleaning – means the use of water for cleaning when it is not for a health or safety reason.

Aesthetic water feature – means a fountain, pond, or other water feature that primarily serves an aesthetic purpose. It does not include ponds that contain fish.

Automatic shut-off device – means a device attached to a water hose that shuts off the supply of water automatically unless hand pressure is applied to operate the device.

Automatic vehicle wash system – includes:

- **Conveyor vehicle wash** – a commercial vehicle washing facility where the customer’s vehicle moves through an enclosed conveyance mechanism during the wash.
- **In-bay vehicle wash** – a commercial vehicle washing facility where the customer parks the vehicle inside a bay, and the vehicle remains stationary while a spray mechanism moves over the vehicle to clean it.

Basic wash and rinse cycle – means a process sequence in an automatic vehicle wash system that consists of a single wash stage followed by a single rinse stage and no additional processes or optional stages; typically this is the minimum level of service that a customer can select, where total water usage is less than 200 litres per vehicle.

Board – means the Administration Board of the GVWD.

Commercial cleaning operation – means a company, partnership, or person that offers commercial cleaning services, including pressure washing, window cleaning, and other similar building cleaning services, to the public for a fee.

Commercial vehicle washing – means commercial vehicle washing services offered to the public for a fee, but excludes car dealerships, fleet vehicle washing facilities, and charity car washes.

Drip Irrigation – means an irrigation system that delivers water directly to the root zone of the plant at a low flow rate through individual emission points (emitters) using droplets of water and excludes sprinkler irrigation systems, micro-spray systems, misting systems, and soaker hoses.

Edible plant – means a plant grown for the purpose of human consumption.

European Chafer Beetle – means an invasive insect pest whose larvae feed on the roots of grasses, causing serious damage to lawns. The Chafer Beetle larvae can be treated naturally using nematodes, which typically requires a moist lawn for a period of 2 to 3 weeks from the day of application.

Flushing water main – discharging water from a water main for routine maintenance such as water quality management and measurement of firefighting flow capacity.

Golf course – means the greens, tee areas, and fairways that are designed and maintained as playing surfaces for golf, but does not include rough areas or lawns that are not maintained as playing surfaces.

Governments/Schools/Parks – includes property zoned for local government, provincial, or federal uses including road rights of way, and school, college, and university uses.

GVWD – means the Greater Vancouver Water District.

GVWD Commissioner – the person that the Administration Board of the GVWD appoints as its Commissioner.

Hand wash and self-service facility – a commercial vehicle washing facility where the facility's staff wash the customer's vehicle, or the customer wash their own vehicles with spray wands and brushes.

Health and safety reason – means a precaution necessary to protect health and safety, including the removal of contaminants, bodily fluids, slip and fall hazards, controlling pests, and suppressing and controlling dust.

Impermeable surface – means a material added to the surface of the ground, or on the exterior of a building or structure that is impermeable to water, including but not limited to glass, wood, concrete, asphalt, paving stones, and other similar materials.

Lawn – means a cultivated area surrounding or adjacent to a building that is covered by grass, turf, or a ground cover plant such as clover, including areas such as boulevards, parks, school yards and cemeteries, but excluding golf courses, soil-based playing fields, and sand-based playing fields.

Local government – means the local government members of the GVWD.

New lawn – means a lawn that is newly established either by seeding or the laying of new sod or turf.

Non-residential – includes properties zoned for a permitted use other than a residential use, including commercial, industrial, and institutional uses, and including a property zoned for mixed residential and non-residential uses, but excluding governments/schools/parks.

Non-residential pool and hot tub – means a pool or hot tub permitted to be operated in accordance with health authorities having jurisdiction over pool and hot tub regulation, including pools and hot tubs operated by government agencies, hotels, multi-family strata corporations, and private clubs.

Odd-numbered civic address or Even-numbered civic address – means the numerical portion of the street address of a property, and in the case of multi-unit commercial or residential complex such as townhouses, condominiums or other strata-titled properties, means the numerical portion of the street address that is assigned to the entire complex, and not the individual unit number.

Over-seeded – means the application of grass seed on existing turf, typically in early fall or spring and may also include associated processes such as aeration, weeding, dethatching and fertilization, for the purpose of mitigating against grass thinning.

Residential – means a property zoned for single-family or multi-family residential use.

Residential pool and hot tub – means a residential pool or hot tub installed for the use of the occupants and guests of one single family dwelling or duplex and does not require a permit in accordance with health authorities having jurisdiction over pool and hot tub regulation.

Sand-based playing field – means a playing field that is constructed with a highly permeable sand-based root zone typically 30 to 40 centimetres deep over a drainage system with drain pipes bedded in gravel, and is designed and maintained to be playable year-round.

Soaker hose – means a garden hose or pipe with small holes that allow water to seep into the ground, to the roots of plants, 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 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, golf courses, or sand-based playing fields.

Vehicle – a device in, on or by which a person or item is or may be transported or drawn on a highway or other roadway.

Water management plan – a plan proposed by the owner or operator of a golf course, soil-based playing field, and sand-based playing field operators and approved by the local government having jurisdiction. The plan sets out terms such as water use targets during the different stages of the DWCP, restrictions to reduce water use, and reporting requirements for the owner or operator.

Water play park – a recreational facility that is primarily outdoors, including spray pools and wading pools, spray parks, splash pads, and water slides.

Watering lawn – means applying water to a lawn with any device or tool including but not limited to a sprinkler, hose, mister, or drip irrigation.



**Water Use Restriction Bylaw No. 7784,
Amendment Bylaw No. 9774**

The Council of the City of Richmond enacts as follows:

1. The **Water Use Restriction Bylaw No. 7784**, as amended, is further amended by:
 - a) deleting subsection 1.1.4 and replacing it with the following:

“1.1.4 If no **restriction stage** is in force on May 1st of any year, **Stage 1 Restrictions** come into force on that date without prior declaration of the **Commissioner** or announcement under subsection 1.1.2.”;
 - b) deleting Section 2.1 to Section 2.7, replacing it with the following and renumbering the remaining sections:

“2.1 General Restrictions

2.1.1 All **persons** must comply with the following general restrictions when **Stage 1 Restrictions**, **Stage 2 Restrictions**, **Stage 3 Restrictions** or **Stage 4 Restrictions** are in force, in addition to the specific **water** restrictions set out for each individual **restriction stage**:

- a) all hoses must have an **automatic shut-off device**;
- b) **water** must not be unnecessarily run off on impermeable surfaces such as driveways, curbs, pathways, gutters when **watering** lawns and plants;
- c) artificial playing turf and outdoor tracks must not be **watered** except for a health or safety reason;
- d) hoses and taps must not run unnecessarily; and
- e) irrigation systems must not be faulty, leaking, or misdirected.

2.2 Stage 1 to Stage 4 Restrictions

- 2.2.1 When **Stage 1 Restrictions** are in force, all **persons** must comply with the watering restrictions specified in Schedule A of this bylaw.
- 2.2.2 When **Stage 2 Restrictions** are in force, all **persons** must comply with the watering restrictions specified in Schedule B of this bylaw.

2.2.3 When **Stage 3 Restrictions** are in force, all **persons** must comply with the watering restrictions specified in Schedule C of this bylaw.

2.2.4 When **Stage 4 Restrictions** are in force, all **persons** must comply with the watering restrictions specified in Schedule D of this bylaw.

2.3 Exceptions to Water Use Restrictions

2.3.1 Notwithstanding the activation of any **restriction stage**, the **City** may use **water** and is exempt from the **water** restrictions applicable to that stage, where use of the **water** is needed to carry out activities required for the purpose of protecting public health and safety, including but not limited to:

- a) flushing water mains where a significant health or safety concern is identified;
 - b) washing down public spaces where significant health concerns are raised, or on the recommendation of the local health authority;
 - c) wetting forest and park perimeters or boulevards as part of a fire prevention strategy during extreme hot and dry weather, or on the recommendation of the local fire authority; and
 - d) protection of publicly funded infrastructure such as community playing fields or swimming facilities, on the recommendation of the **General Manager, Engineering & Public Works.**”;
- c) deleting Section heading **PART THREE: PERMITS** and replacing it with **PART THREE: PERMITS AND WATER MANAGEMENT PLANS;**
- d) inserting the following new subsection 3.1.2 and renumbering the remaining subsections:
- “3.1.2 The owner or operator of a newly over-seeded **soil-based playing field** or **sand-based playing field** may, when **Stage 1 Restrictions** or **Stage 2 Restrictions** are in force, apply to the **General Manager, Engineering & Public Works** for a **permit to water** in accordance with the terms and conditions of the **permit**.”;
- e) deleting newly renumbered subsection 3.1.4 and replacing it with the following:
- “3.1.4 The **General Manager, Engineering & Public Works**, upon being satisfied that an applicant qualifies under subsection 3.1.1 or 3.1.2 and has complied with subsection 3.1.3, may issue a **permit** to the applicant and include terms and conditions in respect to the **permit**.”;
- f) deleting newly renumbered subsection 3.1.9 and replacing it with the following:

“3.1.9 When **Stage 1 Restrictions** or **Stage 2 Restrictions** are in force, a **permit** holder may apply for an extension of a **permit** issued for the purpose of subsection 3.1.1(a) or 3.1.2, but such extension must end on or before 42 days from the original date of issue under Section 3.1. A **permit** issued for the purpose of subsection 3.1.1(b) cannot be extended. When **Stage 3 Restrictions** or **Stage 4 Restrictions** are in force, a **permit** holder may not apply for an extension.”;

g) inserting the following new Section 3.2:

“3.2 Water Management Plans

3.2.1 When **Stage 1 Restrictions**, **Stage 2 Restrictions** or **Stage 3 Restrictions** are in force, a **person** who is the owner or operator of lawns or grass boulevards on **public lots**, **golf courses**, **soil-based playing fields**, or **sand-based playing fields** may apply to the **General Manager, Engineering & Public Works** for approval of a **Water Management Plan**.

3.2.2 Applications for approval of a **Water Management Plan** must be accompanied by supporting documents and information as required by the **General Manager, Engineering & Public Works**.

3.2.3 The **General Manager, Engineering & Public Works**, upon being satisfied that an applicant has complied with subsection 3.2.2, may:

- a) approve the **Water Management Plan** in whole or in part;
- b) amend the **Water Management Plan**; or
- c) impose additional commitments, conditions and restrictions as part of the **Water Management Plan**.

3.2.4 Notwithstanding **Stage 1 Restrictions** or **Stage 2 Restrictions** or **Stage 3 Restrictions**, the holder of an approved **Water Management Plan** is authorized to **water** in accordance with the terms and conditions of the approved **Water Management Plan**. Approved **Water Management Plans** do not exempt holders from **Stage 4 Restrictions**.

3.2.5 Termination or suspension of **Water Management Plans**:

- a) The holder of an approved **Water Management Plan** may terminate such plan by notifying the **General Manager, Engineering & Public Works** in writing. Such termination shall be effective on the date specified in the notice or, if no date is specified in the notice, on the date on which the **General Manager, Engineering & Public Works** receives the notice.

- b) The **General Manager, Engineering & Public Works** may terminate or suspend a **Water Management Plan** for noncompliance with any terms and conditions contained within the **Water Management Plan** by notifying the holder of the plan in writing. Such termination or suspension shall be effective at the time such notification is given to the holder of the **Water Management Plan**.
 - c) The **General Manager, Engineering & Public Works** may terminate or suspend a **Water Management Plan** for any reason by notifying the owner or operator in writing at least seven (7) days before the termination or suspension date.
 - d) In the event of termination or suspension of the **Water Management Plan**, the requirements of the **restriction stage** currently in place shall apply.”;
- h) inserting the following definitions in alphabetical order:

“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.
AUTOMATIC VEHICLE WASH SYSTEM	means either a conveyor vehicle wash or in-bay vehicle wash .
BASIC WASH AND RINSE CYCLE	means a process sequence in an automatic vehicle wash system that consists of a single wash stage followed by a single rinse stage and no additional processes or optional stages, with total water usage being less than 200 litres per vehicle.
CONVEYOR VEHICLE WASH	means a commercial vehicle washing facility where the customer’s vehicle moves through an enclosed conveyance mechanism during the wash.
EDIBLE PLANT	means a plant grown for the purpose of human consumption.
FAIRWAYS	means the part of a golf course between a tee and the corresponding green, but does not include tee areas and greens.
GOLF COURSE	means the greens, tee areas, and fairways that are designed and maintained as playing surfaces for golf, but does not include rough areas or lawns that are not maintained as playing surfaces.
HAND WASH AND SELF-	means a commercial vehicle washing facility where

SERVICE FACILITY	the facility's staff wash the customer's vehicle using spray wands and brushes, or the customer washes their own vehicles with spray wands and brushes.
IN-BAY VEHICLE WASH	means a commercial vehicle washing facility where the customer parks the vehicle inside a bay, and the vehicle remains stationary while a spray mechanism moves over the vehicle to clean it.
PUBLIC LOT	means a property zoned for local government, provincial, federal or regional district uses including, but not limited to, dedicated highways, road rights-of-way, park land, schools, college and university uses.
SAND-BASED PLAYING FIELD	means a playing field that is constructed with a highly permeable sand-based root zone, typically 30 to 40 centimetres deep, over a drainage system with drain pipes bedded in gravel, and is designed and maintained to be playable year-round.
SOAKER HOSE	means a garden hose or pipe with small holes that allow water to seep into the ground, to the roots of plants, 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 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, golf courses or sand-based playing fields.
SPRINKLER	means any device that sprays water in the absence of constant human control, which is attached to a hose or pipe located upon or under the surface of the ground, and excludes drip irrigation and soaker hoses.
WATER MANAGEMENT PLAN	means a plan proposed by the owner or operator of a lawn or grass boulevard on public lots, golf course, soil-based playing field or sand-based playing field to establish terms for watering during the different restriction stages to reduce water use and is submitted to and approved by the General Manager, Engineering & Public Works according to Part 3 of this bylaw.”;

- i) deleting the definitions for **PERSON, STAGE 1 RESTRICTIONS, STAGE 2 RESTRICTIONS, STAGE 3 RESTRICTIONS** and **STAGE 4 RESTRICTIONS** and replacing them with the following definitions:

“PERSON means any individual but does not include a regional district, the provincial government, or any body appointed or created under an enactment of Canada or British Columbia.

STAGE 1 RESTRICTIONS means the restrictions on water use specified in Schedule A of this bylaw.

STAGE 2 RESTRICTIONS means the restrictions on water use specified in Schedule B of this bylaw.

STAGE 3 RESTRICTIONS means the restrictions on water use specified in Schedule C of this bylaw.

STAGE 4 RESTRICTIONS means the restrictions on water use specified in Schedule D of this bylaw.”; and

- j) By adding Schedules A through D attached to and forming part of this bylaw as new Schedules A through D of Water Use Restriction Bylaw No. 7784.

2. This Bylaw is cited as **“Water Use Restriction Bylaw No. 7784, Amendment Bylaw No. 9774”**.

FIRST READING

SECOND READING

THIRD READING

ADOPTED

CITY OF RICHMOND
APPROVED for content by originating dept.
<i>JS</i>
APPROVED for legality by Solicitor
<i>JM</i>

MAYOR

CORPORATE OFFICER

SCHEDULE A to BYLAW NO. 9774

SCHEDULE A to BYLAW NO. 7784

STAGE 1 RESTRICTIONS

Lot	Water Use	Restriction
Residential Lots	Watering lawns	A person may only water at the following times: - Even-numbered civic addresses: on Wednesdays and Saturdays from 4 am to 9 am - Odd-numbered civic addresses: on Thursdays and Sundays from 4 am to 9 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	A permit holder may water outside restricted lawn watering days if in compliance with a permit .
	Watering trees, shrubs, decorative planters, and flowers excluding edible plants	A person may only water from 4 am to 9 am if using a sprinkler . A person may water on any day at any time if using a handheld hose, soaker hose , water container, or drip irrigation .
Non-Residential Lots	Watering lawns	A person may only water at the following times: - Even-numbered civic addresses: on Mondays from 1 am to 6 am and on Fridays from 4 am to 9 am - Odd-numbered civic addresses: on Tuesdays from 1 am to 6 am and on Fridays from 4 am to 9 am
	Watering new lawns or lawns being treated for European Chafer Beetle	A permit holder may water outside restricted lawn watering days if in compliance with a permit .
	Watering trees, shrubs, decorative planters, and flowers (excluding edible plants and turf at turf farms)	A person may only water from 1 am to 9 am if using a sprinkler . A person may water on any day at any time if using a handheld hose, soaker hose , water container, or drip irrigation .
Public Lots	Watering lawns and grass boulevards	Watering is only allowed at the following times, except when watering in accordance with an approved water management plan : - Even-numbered civic addresses: on Mondays from 1 am to 6 am and on Fridays from 4 am to 9 am - Odd-numbered civic addresses: on Tuesdays from 1 am to 6 am and on Fridays from 4 am to 9 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	A permit holder may water outside restricted lawn watering days if in compliance with a permit .

	<p>Watering trees, shrubs, decorative planters, and flowers excluding edible plants</p>	<p>Watering is only allowed from 1 am to 9 am if using a sprinkler. Watering is allowed on any day at any time if using a handheld hose, soaker hose, water container, or drip irrigation.</p>
	<p>Watering soil-based playing fields</p>	<p>Watering is only allowed from 7 pm to 9 am except: - watering newly over-seeded fields in compliance with a permit; or - watering in accordance with an approved water management plan</p>
	<p>Watering sand-based playing fields</p>	<p>Watering is only allowed from 7 pm to 9 am except: - watering newly over-seeded fields in compliance with a permit; or - watering in accordance with an approved water management plan</p>
	<p>Flushing water mains</p>	<p>Prohibited</p>

SCHEDULE B to BYLAW NO. 9774

SCHEDULE B to BYLAW NO. 7784

STAGE 2 RESTRICTIONS

Lot	Water Use	Restriction
Residential Lots	Watering lawns	A person may only water at the following times: - Even-numbered civic addresses: on Wednesdays from 4 am to 9 am - Odd-numbered civic addresses: on Thursdays from 4 am to 9 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	A permit holder may water outside restricted lawn watering days if in compliance with a permit
	Watering trees, shrubs, decorative planters, and flowers excluding edible plants	A person may only water from 4 am to 9 am if using a sprinkler . A person may water on any day at any time if using a handheld hose, soaker hose , water container, or drip irrigation .
	Washing impermeable surfaces (sidewalks, driveways, fences, walls, roofs, or other outdoor surfaces)	Prohibited except if: - For the health or safety of any person ; - To prepare the surface for painting, sealing, or similar treatment; - To prevent or control fires; or - For aesthetic cleaning .
	Topping up or filling aesthetic water features	Prohibited
Non-Residential Lots	Watering lawns	A person may only water at the following times: - Even-numbered civic addresses: on Mondays from 1 am to 6 am - Odd-numbered civic addresses: on Tuesdays from 1 am to 6 am
	Watering new lawns or lawns being treated for European Chafer Beetle	A permit holder may water outside restricted lawn watering days if in compliance with a permit
	Watering trees, shrubs, decorative planters, and flowers excluding edible plants and turf at turf farms	A person may only water from 1 am to 9 am if using a sprinkler . A person may water on any day at any time if using a handheld hose, soaker hose , water container, or drip irrigation .
	Watering golf courses	Watering of fairways is allowed on no more than one day in a seven-day period, except if operating under an

		approved water management plan .
	Washing impermeable surfaces (sidewalks, driveways, fences, walls, roofs, or other outdoor surfaces)	Prohibited except if: <ul style="list-style-type: none"> - For the health or safety of any person; - To prepare the surface for painting, sealing, or similar treatment; - To prevent or control fires; or - For aesthetic cleaning.
	Topping up or filling aesthetic water features	Prohibited
Public Lots	Watering lawns and grass boulevards	Watering is only allowed at the following times, except when watering in accordance with an approved water management plan : <ul style="list-style-type: none"> - Even-numbered civic addresses: on Mondays from 1 am to 6 am - Odd-numbered civic addresses: on Tuesdays from 1 am to 6 am
	Watering new lawns or lawns being treated for the European Chafer Beetle	A permit holder may water outside restricted lawn watering days if in compliance with a permit .
	Watering trees, shrubs, decorative planters, and flowers excluding edible plants	Watering is only allowed from 1 am to 9 am if using a sprinkler . Watering is allowed on any day at any time if using a handheld hose, soaker hose , water container, or drip irrigation .
	Watering soil-based playing fields	Watering is allowed on no more than four days in a seven-day period and only from 7 pm to 9 am, except if: <ul style="list-style-type: none"> - watering newly over-seeded fields if in compliance with a permit; or - watering in accordance with an approved water management plan
	Watering sand-based playing fields	Watering is only allowed from 7 pm to 9 am, except if: <ul style="list-style-type: none"> - watering newly over-seeded fields if in compliance with a permit; or - watering in accordance with an approved water management plan
	Flushing water mains	Prohibited
	Operating water play parks and pools	Prohibited except water play parks with user-activated switches.
	Topping up or filling aesthetic water features	Prohibited

SCHEDULE C to BYLAW NO. 9774

SCHEDULE C to BYLAW NO. 7784

STAGE 3 RESTRICTIONS

Lot	Water Use	Restriction
Residential Lots	Watering lawns	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	A permit holder may water outside lawn watering restrictions if in compliance with a issued in Stage 1 or Stage 2 . No new permits shall be issued or renewed.
	Watering trees, shrubs, decorative planters, and flowers excluding edible plants	Prohibited if using a sprinkler or soaker hose . A person may water on any day at any time if using a handheld hose, water container, or drip irrigation .
	Washing impermeable surfaces (sidewalks, driveways, fences, walls, roofs, or other outdoor surfaces)	Prohibited except if: - For the health or safety of any person ; - To prepare the surface for painting, sealing, or similar treatment; or - To prevent or control fires.
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	Prohibited
	Washing vehicles, boats, trailers and other motive equipment	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety.
Non-Residential Lots	Watering lawns	Prohibited
	Watering new lawns or lawns being treated for European Chafer Beetle	A permit holder may water outside lawn watering restrictions if in compliance with a permit issued in Stage 1 or Stage 2 . No new permits shall be issued or renewed.
	Watering trees, shrubs, decorative planters, and flowers excluding edible plants and turf at turf farms	Prohibited if using a sprinkler or soaker hose . A person may water on any day at any time if using a handheld hose, water container, or drip irrigation .
	Watering golf courses	Watering of fairways is prohibited except if operating under an approved water management plan
	Washing impermeable surfaces (sidewalks, driveways, fences, walls, roofs, or other outdoor	Prohibited except if: - For the health or safety of any person ; - To prepare the surface for painting, sealing, or

	surfaces)	similar treatment; or - To prevent or control fires.
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	Prohibited except for pools and hot tubs operating in accordance with written permission issued by an authorized health authority .
	Washing vehicles, boats, trailers and other motive equipment	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety.
	Commercial vehicle washing	Prohibited except if operating under the following conditions: - Facilities that installed an automatic vehicle wash system before November 1, 2017: operating on a basic wash and rinse cycle only; - Facilities that installed an automatic vehicle wash system after November 1, 2017: operating using a water recycling system that achieves a minimum 60% water recovery rate over the full wash cycle; and - Hand wash and self-service facilities : operating using high-pressure wands or brushes that achieve a maximum flow rate of 11.4 litres per minute.
Public Lots	Watering lawns and grass boulevards	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	A permit holder may water outside lawn watering restrictions if in compliance with a permit issued in Stage 1 or Stage 2 . No new permits shall be issued or renewed.
	Watering trees, shrubs, decorative planters, and flowers excluding edible plants	Prohibited if using a sprinkler or a soaker hose Watering is allowed on any day at any time if using a handheld hose, water container, or drip irrigation
	Watering soil-based playing fields	Watering is allowed on no more than 3 days in a 7-day period and only from 7 pm to 9 am, except if: - Watering newly over-seeded fields if in compliance with a permit ; or - Operating under an approved water management plan
	Watering sand-based playing fields	Watering is allowed on no more than 5 days in a 7-day period and only from 7 pm to 9 am, except if: - Watering newly over-seeded fields if in compliance with a permit ; or - Operating under an approved water management

	plan.
Flushing water mains	Prohibited
Operating water play parks and pools	Prohibited except water play parks with user-activated switches.
Topping up or filling aesthetic water features	Prohibited
Topping up or filling pools and hot tubs	Prohibited except for pools and hot tubs operating in accordance with written permission issued by an authorized health authority .
Washing vehicles, boats, trailers and other motive equipment	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety.

SCHEDULE D to BYLAW NO. 9774

SCHEDULE D to BYLAW NO. 7784

STAGE 4 RESTRICTIONS

Lot	Water Use	Restriction
Residential Lots	Watering lawns	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	All permits issued for lawn watering are revoked.
	Watering trees, shrubs, decorative planters, and flowers and edible plants	Prohibited
	Washing impermeable surfaces (sidewalks, driveways, fences, walls, roofs, or other outdoor surfaces)	Prohibited except if ordered by a regulatory authority having jurisdiction, for a health or safety reason.
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	Prohibited
	Washing vehicles, boats, trailers and other motive equipment	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety.
Non-Residential Lots	Watering lawns (mixed-use buildings should follow non-residential lot watering times)	Prohibited
	Watering new lawns or lawns being treated for European Chafer Beetle	All permits issued for lawn watering are revoked.
	Watering trees, shrubs, decorative planters, and flowers and edible plants	Prohibited
	Watering golf courses	Prohibited
	Washing impermeable surfaces (sidewalks, driveways, fences, walls, roofs, or other outdoor surfaces)	Prohibited except if ordered by a regulatory authority having jurisdiction, for a health or safety reason.
	Topping up or filling aesthetic water features	Prohibited

	Topping up or filling pools and hot tubs	Prohibited
	Washing vehicles, boats, trailers and other motive equipment	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety.
	Commercial vehicle washing	Prohibited
	Watering turf at turf farms	Prohibited
Public Lots	Watering lawns and grass boulevards	Prohibited
	Watering new lawns or lawns being treated for the European Chafer Beetle	All permits issued for lawn watering are revoked.
	Watering trees, shrubs, decorative planters, and flowers including edible plants	Prohibited
	Watering soil-based playing fields	Prohibited
	Watering sand-based playing fields	Prohibited
	Watering artificial turf and outdoor race tracks	Prohibited
	Flushing water mains	Prohibited
	Operating water play parks and pools	Prohibited
	Topping up or filling aesthetic water features	Prohibited
	Topping up or filling pools and hot tubs	Prohibited
	Washing vehicles, boats, trailers and other motive equipment	Prohibited except to clean windows, lights, mirrors, licence plates, and boat engines for safety.