

City of Richmond

Report to Committee

To Public Works o Transportation -

To:

Public Works & Transportation Committee

Date: July 15, 2004

Aug 25,2000

From:

Eric G. Gilfillan

File:

12-8060-20-7784/7785

Director, Operations

Xr: 10-6650-08-01

Re:

Revised Water Shortage Response Plan (Sprinkling Restrictions)

Staff Recommendation:

That Council implement the GVRD Water Shortage Response Plan (Sprinkling Restrictions) by giving the following bylaws first, second and third readings:

- (a) Water Use Restriction Bylaw No. 7784; and
- (b) Municipal Ticket Information Authorization Bylaw No. 7321, Amendment Bylaw No. 7785.

Director, Operations

(1206)

Att. 3

	FOR ORIGINA	ATING DIVIS	SION USE ONLY		
ROUTED TO:	Con	CURRENCE	CONCURRENCE OF G	ENERAL MANA	GER
City ClerkLaw		.Y 12 N D		}	
REVIEWED BY TAG	YES	NO	REVIEWED BY CAO	YES/	NO

Staff Report

Background

The Water Shortage Response Plan (WSRP) was first prepared by the Greater Vancouver Regional District and adopted by the City of Richmond as the water restriction bylaw in 1993. It is a tool to reduce demand for water during the summer months (when high demand and low rainfall can strain limited storage capacity) and in the event of water shortages due to unforeseen emergency situations at any time of the year. The most familiar component of the WSRP is the lawn sprinkling regulations. The WSRP is intended to manage discretionary uses of water in a manner, which minimizes the impact on residents and does not impose unnecessary economic hardships on businesses.

Each member municipality enacts the WSRP by implementation of a municipal bylaw, which enables municipal staff to enforce the water restrictions.

Analysis

The revised WSRP was approved by the GVRD Board at its meeting of May 26, 2004. In 2004, the original WSRP was extensively revised based on:

- a) Experience with the 1993 WSRP;
- b) Analyses of best practices and similar water shortage plans from other jurisdictions;
- c) Technical analysis of summer water use within various commercial sectors;
- d) Analysis of extensive public input during the summer of 2003;
- e) Input from the GVRD, municipal staff including the REAC Water Subcommittee; and
- f) Input from the GVRD Water Committee and public delegations to that committee

Key changes from the 1993 WSRP to the revised 2004 WSRP included:

- Combining Stages 1 (public education only) & 2 (twice-weekly sprinkling restrictions) of the 1993 WSRP into a single stage enacted automatically each year.
- The addition of a new Stage 4 containing water restrictions to be enacted only in cases of severe water shortages or extreme emergency situations.
- More uniformly applied watering restrictions on private and commercial lawns.
- More explicit wording of water use restrictions and new restrictions on certain activities not previously mentioned in the WSRP (e.g. uses of water such as fountains or aesthetic pressure washing that are viewed by the public as 'cosmetic')
- The addition of a water shortage assessment chart to provide a general guideline to the points at which increased water shortage actions (e.g. advancing to a subsequent stage in the WSRP, or increasing water withdrawn from Coquitlam reservoir) may be enacted.
- Golf courses and water depend businesses are identified and given specific direction instead of meeting a general percentage reduction in use, based on 1990 consumptions.
- The addition of an 'At-A-Glance' summary of the WSRP, primarily for use by public sector staff.

Financial Impact

The penalties level for non-compliance with the WSRP has been increased significantly to reflect urgency of the increasing stages of water restrictions. Under the old plan a \$75 fine was applied, revised penalties are outlined below.

- (a) \$100 if the offence is committed when Stage 1 Restrictions are in force;
- (b) \$200 if the offence is committed when Stage 2 Restrictions are in force;
- (c) \$500 if the offence is committed when Stage 3 Restrictions are in force; or
- (d) \$1000 if the offence is committed when Stage 4 Restrictions are in force.

Conclusion

Since 1993, the Water Shortage Response Plan has been an important and effective tool for managing demand for water in times of shortages or emergencies. The revised WSRP provides greater clarity and consistency in the application of restrictions, guidelines for the 'triggers' that would move the region from one stage of the WSRP to another, and a new stage of water restrictions to be used as a contingency in the event of extreme shortages or emergencies.

Steve McClurg Manager, Water Services (1209)

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2004 GVWD Water Shortage Response Plan - At a Glance

: ACCEPTABLE
. ACCLI TABLE

: RESTRICTED

: PROHIBITED

NOTE: These restrictions apply only to the use of <u>treated drinking water</u>. The WSRP restrictions do not apply to the use of rain water, gray water, or any forms of recycled water.

ACTIVITY	WSRP STAGES	RESTRICTION DETAILS
	1 2 3 4	
Residential and commercial awn sprinkling		STAGE 1: June 1-Sept. 30, even addresses Saturday and Wednesday, odd addresses Sunday and Thursday, 4-9 a.m. and 7-10 p.m.
		STAGE 2: Even-numbered addresses Wednesday, odd- numbered addresses Thursday, 4-9 a.m. and 7-10 p.m.
		STAGES 3-4: All forms of watering using treated drinking water are prohibited.
New (unestablished) residential and commercial		STAGES 1-2: Sprinkling outside restricted times allowed only at the discretion of each municipality and with special permits to be displayed on lawn.
lawns, trees, shrubs, flowers		STAGES 3-4: No new permits issued or renewed. All forms of watering using treated drinking water are prohibited.
Flowers & vegetable gardens, decorative		STAGE 3: Only if done by hand using a spring-loaded shut off nozzle, or using containers or drip irrigation. Use of sprinklers or soaker hoses is prohibited.
planters, shrubs and trees		STAGE 4: All forms of watering using treated drinking water are prohibited.
Commercial flowers and vegetable gardens		STAGE 4: All forms of watering using treated drinking water are prohibited.
Private pools and spas, and		STAGE 3: Refilling is prohibited.
garden ponds		STAGE 4: Refilling is prohibited.
Public water play parks and pools		STAGES 2-3: Unless otherwise authorized by municipality, only water play parks with user-activated switches will be operated.
		STAGE 4: All water parks shut down. Municipal outdoor pools closed. Winterization deferred until Stage 4 is lifted by GVWD.
Public and commercial fountains and water features		STAGES 2-4. All state down.
Private and commercial outdoor impermeable		STAGES 2-3: Only for health and safety purposes or to prepare a surface for painting or similar treatment. Washing for aesthetic purposes is prohibited.
surfaces (i.e., driveways, sidewalks and parkades)		STAGE 4: All forms of hosing of outdoor surfaces are prohibited unless ordered by a regulatory authority (i.e. WCB. public health inspector, etc).

2004 GVWD Water Shortage Response Plan - At a Glance (con't)

ACTIVITY	WSRP STAGES	RESTRICTION DETAILS
Private and commercial pressure washing	1 2 3 4	STAGES 2-3: Only for health and safety purposes or to prepare a surface for painting or similar treatment. Washing for aesthetic purposes is prohibited. Private pressure washing prohibited in Stage 3.
		STAGE 4: All forms of hosing of outdoor surfaces are prohibited unless ordered by a regulatory authority for health and safety reasons (i.e., WCB, public health inspector, etc).
Outdoor car washing and		STAGES 1-2: Only with hose equipped with spring-loaded shut off.
boat washing		STAGES 3-4: No outdoor washing or rinsing of vehicles and pleasure crafts, except for safety (windows, lights and licenses only).
Commercial carwashes		STAGE 4: Commercial carwashes shut down.
Golf courses		STAGE 1: Municipalities request golf course operators cut water use on fairways by as much as possible.
		STAGE 2: Water greens and tee areas normally; fairways only once weekly. Signage indicating the use of non-GVWD water is encouraged.
		STAGE 3: Water greens and tee areas minimally; fairways may not be watered.
		STAGE 4: All forms of watering using treated drinking water are prohibited.
Commercial turf farms		STAGE 4: All forms of watering using treated drinking water are prohibited.
Artificial turf and outdoor tracks (i.e., bicycle and motorcycle tracks, running tracks)		STAGES 1-3: Hosing for health and safety only. STAGE 4: All forms of watering using treated drinking water are prohibited.
School yards, sports and sand-based playing fields		STAGES 2-3: Minimum levels required to maintain areas in useable condition.
Juna basea playing		STAGE 4: All forms of watering using treated drinking water are prohibited.
Cemetery lawns		STAGE 1: June 1-Sept. 30, even addresses Saturday and Wednesday, odd addresses Sunday and Thursday, 4-9 a.m. and 7-10 p.m.
		STAGE 2: Only once weekly (Wed. and Thurs.).
		STAGES 3-4: All forms of watering using treated drinkin water are prohibited.

Contact Information

For information regarding enforcement of the WSRP, please contact the City of Richmond's service center at 604-244-1262 or 24 hour dispatcher at 604-270-8721.

For the City of Richmond's automated WSRP information line call 604-276-4355.

For general regional WSRP information, please contact the GVRD Information Centre at 604-432-6200.

For copies of media releases issued during the WSRP implementation, please go to www.gvrd.bc.ca

2004 GVWD Water Shortage Response Plan - At a Glance *Application of the WSRP to Municipal Property*

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: PROHIBITED

ACTIVITY	WSRP ST	AGES	RESTRICTION DETAILS
	1 2	3 4	
Municipal parks		en. Landan	STAGE 2: These surfaces may be watered only within the once-weekly times.
		!	STAGE 3: All forms of watering using treated drinking water are prohibited.
v			STAGE 4: All forms of watering using treated drinking water are prohibited. Shut down faucets in parks and public spaces, except for drinking fountains equipped with spring-loaded shut off.
Municipal ornamental lawns, grassed boulevards.		E. D. Santa	STAGE 1: June 1-Sept. 30, even addresses Saturday and Wednesday, odd addresses Sunday and Thursday, 4-9 a.m. and 7-10 p.m.
			STAGE 2: Only once weekly (Wed. and Thurs.)
			STAGES 3-4: All forms of watering using treated drinking water are prohibited.
Municipal hydrant flushing			STAGES 1-4: Only for unscheduled safety or public health reason. Routine flushing to be scheduled outside WSRP timeframe.

Water Use Restriction Bylaw No. 7784

The Council of the City of Richmond enacts as follows:

PART ONE: DECLARATION AND ANNOUNCEMENT OF RESTRICTION STAGES

1.1 Declaration of Restriction Stages

- 1.1.1 The Commissioner may, by letter to the General Manager, Engineering and Public Works, declare that the Greater Vancouver Water District has activated a restriction stage.
- 1.1.2 If the Commissioner makes a declaration under subsection 1.1.1, the restriction stage described in the declaration comes into force in the City seventy-two hours after the Commissioner or the General Manager, Engineering & Public Works makes a public announcement of the declaration.
- 1.1.3 When a **restriction stage** comes into force under this section, any **restriction** stage that had been in force, if any, ceases to be in force.
- 1.1.4 If no restriction stage is in force on June 1st of any year, Stage 1 Restrictions come into force on that date without prior declaration of the Commissioner or announcement under section 1.1.2.

PART TWO: RESTRICTION STAGES

2.1 Stage 1 Restrictions

- 2.1.1 Subject to the provisions of section 2.5, when **Stage 1 Restrictions** are in force, a **person** must not:
 - (a) water lawns, except:
 - (i) at premises with even-numbered civic addresses, on Wednesdays and Saturdays between 4:00 a.m. and 9:00 a.m. and between 7:00 p.m. and 10:00 p.m.; and
 - (ii) at premises with odd-numbered civic addresses, on Thursdays and Sundays between 4:00 a.m. and 9:00 a.m. and between 7:00 p.m. and 10:00 p.m.; or

(b) use a hose providing water to wash boats or motor vehicles, unless the hose is equipped with an automatic shut-off device.

2.2 Stage 2 Restrictions

- 2.2.1 Subject to the provisions of section 2.6, when Stage 2 Restrictions are in force, a person must not:
 - (a) water lawns, except:
 - (i) at premises with even-numbered civic addresses, on Wednesdays between 4:00 a.m. and 9:00 a.m. and between 7:00 p.m. and 10:00 p.m.; and
 - (ii) at premises with odd-numbered civic addresses, on Thursdays between 4:00 a.m. and 9:00 a.m. and between 7:00 p.m. and 10:00 p.m.;
 - (b) use a hose providing water to wash sidewalks, driveways, walls, roofs or other outdoor surfaces, unless the hose is equipped with an automatic shut-off device and the purpose of washing is:
 - (i) to prepare a surface for painting, sealing, or similar treatment;
 - (ii) to prevent or control fires; or
 - (iii) for the health or safety of any person; or
 - (c) operate ornamental fountains.

2.3 Stage 3 Restrictions

- 2.3.1 Subject to the provisions of section 2.7, when Stage 3 Restrictions are in force, a person must not:
 - (a) water:
 - (i) any lawn: or
 - (ii) flower gardens, vegetable gardens, decorative planters, shrubs or trees, unless such watering is carried out by hand with a hose equipped with an automatic shut-off device and is not carried out using sprinklers or soaker hoses:

- (b) use a hose providing water to wash boats or motor vehicles, unless the hose is equipped with an automatic shut-off device and the purpose of the washing is to maintain visibility of lights or licence plates, or through windows, or is otherwise for the safe operation of the boat or motor vehicle;
- (c) water as prohibited in clauses (b) and (c) of subsection 2.2.1;
- (d) use water to fill or re-fill garden ponds, ornamental fountains, hot-tubs, or swimming pools; or
- (e) use a hose providing water unless the hose is equipped with an automatic shut-off device.

2.4 Stage 4 Restrictions

- 2.4.1 Subject to the provisions of section 2.8, when **Stage 4 Restrictions** are in force, a **person** must not:
 - (a) water as prohibited in:
 - (i) clause (c) of subsection 2.2.1; and
 - (ii) clauses (b), (d), and (e) of subsection 2.3.1;
 - (b) water, or engage in drip irrigation of:
 - (i) lawns or landscaping, whether newly planted or otherwise:
 - (ii) flower or vegetable gardens;
 - (iii) decorative planters;
 - (iv) shrubs or trees;
 - (v) artificial turf; or
 - (vi) outdoor tracks;
 - (c) operate a lawn sprinkler using water for play;
 - (d) use a hose providing water to wash sidewalks, driveways, walls, roofs or other outdoor surfaces, unless the hose is equipped with an automatic shut-off device and the washing has been ordered by a regulatory authority;
 - (e) operate a water play park or water slide; or

- (f) operate a car wash.
- 2.4.2 For greater certainty, the provisions of subsection 2.4.1 apply to all areas of:
 - (a) commercial nurseries and produce farms;
 - (b) turf farms;
 - (c) golf courses;
 - (d) sports playing fields; and
 - (e) school yards.

2.5 Exceptions to Water Use Restrictions - Stage 1

- 2.5.1 The Stage 1 Restrictions specified in subsections 2.1.1 do not apply to:
 - (a) a **person** who **waters** lawns or landscaping at premises pursuant to a **permit**, provided the **person** is and has been at all times in compliance with the **permit**;
 - (b) watering:
 - (i) public sports playing fields;
 - (ii) school yards;
 - (iii) turf at turf farms;
 - (iv) artificial turf or outdoor race tracks where watering is required for dust control or safety;
 - (v) flower gardens, vegetable gardens, decorative planters, shrubs or trees; and
 - (vi) the playing surface of golf courses; and
 - (c) commercial car washes.

2.6 Exceptions to Water Use Restrictions – Stage 2

- 2.6.1 The Stage 2 Restrictions specified in subsection 2.2.1 do not apply to:
 - (a) a **person** who **waters** lawns or landscaping at premises pursuant to a permit issued under subsection 3.1.3. provided the **person** is and has been at all times in compliance with the permit;

(b) watering:

- (i) as permitted in clauses (b)(i) through (v) and (c) of subsection 2.5.1.;
- (ii) flowers or produce at commercial nurseries or produce farms;
- (iii) trees at tree farms; and
- (iv) the tee-off areas and putting greens of golf courses.

2.7 Exceptions to Water Use Restrictions - Stage 3

- 2.7.1 The Stage 3 Restrictions specified in subsection 2.3.1 do not apply to watering:
 - (a) as permitted in clauses (b)(i) through (iv) and (c) of subsection 2.5.1.;
 - (b) flowers or produce at commercial nurseries or produce farms;
 - (c) trees at tree farms; and
 - (d) the tee-off areas and putting greens of golf courses, provided that water is used only to the extent necessary to maintain the viability of the grass in those areas.

2.8 Time Limit for Water Use Restrictions

- 2.8.1 No **Restriction Stage** remains in force after September 30th of any year, unless the **Commissioner** makes a declaration under this section.
- 2.8.2 At any time before or after September 30th of any year, the Commissioner may, by letter to the General Manager, Engineering & Public Works declare that notwithstanding subsection 2.8.1, a Restriction Stage will remain in force or come into force after September 30th.

PART THREE: PERMITS

3.1 Permits for New Lawns or Landscaping

- 3.1.1 A person who has installed a new lawn, either by placing sod or turf or by seeding, or who has installed new landscaping on a substantial part of the outdoor portion of a premises may apply to the General Manager, Engineering & Public Works for a permit authorizing the person to water the new lawn and new landscaping when Stage 1 Restrictions or Stage 2 Restrictions are in force.
- 3.1.2 An application for a **permit** must be accompanied by an application fee of \$30.00.

- 3.1.3 The General Manager, Engineering & Public Works, upon being satisfied that an applicant qualifies under section 3.1.1, may issue a permit to the applicant.
- 3.1.4 Notwithstanding Stage 1 Restrictions or Stage Restrictions, the holder of a valid permit is authorized to water new lawn and new landscaping at the premises described in the permit during the times and for the period specified in the permit.
- 3.1.5 A permit does not exempt the holder from Stage 3 Restrictions or Stage 4 Restrictions.
- 3.1.6 A **permit** must be affixed to a post facing the street serving the premises, beside the principal driveway from the street to the premises.
- 3.1.7 A **permit** expires and is of no force or effect 21 days after the date of its issue, unless extended under subsection 3.1.7.
- 3.1.8 Before or after the expiration of a **permit**, the **permit** holder may apply for one extension of the **permit**, but any such extension must end on or before 42 days from the date of the issue of the **permit** under section 3.1.3.

PART FOUR: DELEGATION OF AUTHORITY

- 4.1 Delegation of Authority of General Manager, Engineering & Public Works
 - 4.1.1 The General Manger, Engineering & Public Works may delegate some or all of his or her powers and duties under this bylaw.

PART FIVE: INTERPRETATION

5.1 In this bylaw, unless the context otherwise requires:

AUTOMATIC SHUT-OFF DEVICE means a device attached to a water hose that is spring-loaded and shuts off the supply of water automatically unless hand pressure is applied to allow the supply of water.

CITY

means the City of Richmond.

COMMERCIAL

means for profit or gain.

COMMISSIONER

means the Commissioner of the Greater Vancouver

Water District.

COUNCIL

means the Council of the City.

DRIP IRRIGATION

means a system using irrigation components which consume less than 20 gallons (91 litres) per hour and operate at less than 25 PSI (172 kPa) to deliver water to the root zone of the plant material being irrigated.

GENERAL MANAGER, ENGINEERING & PUBLIC WORKS

means the person appointed by **Council** to the position of General Manager, Engineering & Public Works and includes a person to whom the General Manager, Engineering & Public Works has delegated authority under this bylaw.

PERMIT

means a permit issued under Part 3 of this bylaw.

PERSON

does not include a municipality, a regional district, the provincial government, or any body appointed or created under an enactment of Canada or British Columbia.

PUBLIC ANNOUNCEMENT

means one or more advertisements or public service announcements in any one of:

- (i) a television or radio broadcast from a station that broadcasts to the City;
- (ii) a newspaper or other publication intended for general circulation, including one that is distributed without charge to the reader, that contains news and advertising. and is distributed within the City at least once per week.

RESTRICTION STAGE

means restrictions on water use imposed by the Commissioner, specifically the stages of restrictions specified in Part Two of this bylaw.

STAGE 1 RESTRICTIONS

means the restrictions on water use specified in section 2.1 of this bylaw.

STAGE 2 RESTRICTIONS

means the restrictions on water use specified in section 2.2 of this bylaw.

STAGE 3 RESTRICTIONS

means the restrictions on water use specified in section 2.3 of this bylaw.

STAGE 4 RESTRICTIONS

means the restrictions on water use specified in section 2.4 of this bylaw.

WATER

used as a noun, means water supplied directly or indirectly by Greater Vancouver Water District or the City of Richmond, whether or not mixed with rain water, gray water or recycled water.

WATER OR WATERING

used as a verb, mean the application or distribution of water (used as a noun) to lands or plants but does not include the method known as drip irrigation.

WATER PLAY PARK

means a recreational facility that is primarily out of doors, that includes water slides longer than 10 meters.

PART SIX: OFFENCES AND PENALTIES

- 6.1 Any person who:
 - (a) violates or who causes or allows any of the provisions of this bylaw to be violated; or
 - (b) fails to comply with any of the provisions of this or any other bylaw or applicable statute; or
 - (c) neglects or refrains from doing anything required under the provisions of this bylaw,

is deemed to have committed an infraction of, or an offence against this bylaw is liable on summary conviction, to the penalties provided in section 6.2, and each day that such violation is caused, or allowed to continue, constitutes a separate offence.

- Upon conviction pursuant to the *Offence Act* for an offence against this bylaw, the offender is liable to the following fines:
 - (a) for a first conviction, not less than \$3,000 and not more than \$10,000;
 - (b) for a second or subsequent conviction, not less than \$5,000 and not more than \$10,000.
- In a prosecution under this bylaw, the onus of establishing an exemption under sections 2.5, 2.6 or 2.7 lies on the **person** claiming the exemption.

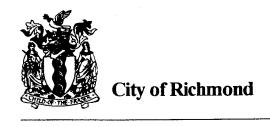
PART SEVEN: PREVIOUS BYLAW REPEAL

7.1 Water Restrictions Bylaw No. 6085 (adopted May 25, 1993); and Amendment Bylaw No. 6767 (adopted June 9, 1997), are repealed.

PART EIGHT: SEVERABILITY & CITATION

- 8.1 If any part, section, sub-section, clause, or sub-clause of this bylaw is, for any reason, held to be invalid by the decision of a Court of competent jurisdiction, such decision does not affect the validity of the remaining portions of this bylaw.
- 8.2 This bylaw is cited as "Water Use Restriction Bylaw No. 7784".

FIRST READING	CITY OF RICHMON
SECOND READING	APPROVE for comment original comment original comment original comment original comment original comment original comment or commen
THIRD READING	GL -
ADOPTED	for legalit
MAYOR	CITY CLERK



Municipal Ticket Information Authorization Bylaw No. 7321, Amendment Bylaw No. 7785

The Council of the City of Richmond enacts as follows:

Bylaw No. 7321 is amended by repealing Schedule B 14 and substituting the following:

WATER USE RESTRICTION BYLAW NO. 7784

Column 1	Column 2	Column 3
Offence	Bylaw Section	Fine
Watering contrary to Stage 1 Restrictions	2.1.1	\$100
Watering contrary to Stage 2 Restrictions	2.2.1	\$200
Watering contrary to Stage 3 Restrictions	2.3.1	\$500
Watering contrary to Stage 4 Restrictions	2.4.1	\$1,000
Watering contrary to the terms of a permit	3.1.4	\$100
Failure to display permit	3.1.6	\$100

2. This Bylaw is cited as "Municipal Ticket Information Authorization Bylaw No. 7139, Amendment Bylaw No. 7785".

FIRST READING	CITY OF RICHMOND
SECOND READING	APPROVED for content by originating dept.
THIRD READING	
ADOPTED	APPROVED for legality by solicitor
MAYOR	CITY CLERK