

TO: CITY MANAGER

DATE: 2004 08 16

FROM: DIRECTOR ENGINEERING

FILE: 39500-04
42000-01

SUBJECT: WATER SHORTAGE RESPONSE PLAN

PURPOSE: To seek Council approval for the adoption of the GVRD Water Shortage Response Plan.

RECOMMENDATION:

1. **THAT** Council enact a bylaw amending the Waterworks Bylaw to incorporate the recommendations contained in the GVRD Water Shortage Response Plan as outlined in this report.

R E P O R T

1.0 BACKGROUND

Council at its meeting of 2004 August 09 received correspondence from the Greater Vancouver Water District (GVWD) seeking Council support of the revised Water Shortage Response Plan (WSRP). The original WSRP was prepared in 1993 as a tool to reduce demand during the summer months (when high demand and low rainfall can strain water storage capacity) and in the event of water shortages due to unforeseen emergency situations at any time of the year. The WRSP is implemented by each GVWD member municipality through individual municipal bylaws. Burnaby incorporated the original WSRP into its Waterworks Regulation Bylaw.

The most familiar component of the WRSP is the annual 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. Up until 2003, only the first stage of the WSRP had ever been invoked. However, in 2003 further restrictions were imposed due to the hot summer combined with repair and maintenance activities on the GVRD system which limited supply.

2.0 REVISED WATER SHORTAGE RESPONSE PLAN

In 2004, the original WSRP was revised based on:

- a) Knowledge gained during the 2003 experience;
- b) Analysis 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 and municipal staff; 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) and 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.
- The addition of an ‘At-A-Glance’ summary of the WSRP (Attachment #1).

The revised WSRP was approved by the GVRD Board at its meeting of May 26, 2004.

It is recommended that Council support the revised WSRP as developed by the GVRD and amend the Waterworks Bylaw accordingly.

3.0 FINES

The current Waterworks Bylaw allows for a maximum fine of \$100 to be imposed on any person found guilty of an infraction of the bylaw. The City Solicitor recommends that the Waterworks Bylaw be amended to allow fines as provided for in the Offense Act. This change would be consistent with other regulatory bylaws in the City.

4.0 SUMMARY

A revised Water Shortage Response Plan was developed in response to municipal and public input after the summer of 2003. It was subsequently adopted by the GVRD Board on May 26, 2004. The Board has requested that all GVWD members implement the Plan by adopting bylaws to enforce the restrictions under the Plan.

It is recommended that Council enact a bylaw amending the Waterworks Bylaw to incorporate the recommendations contained in the GVRD Water Shortage Response Plan.



W.C. Sinclair, P. Eng.
DIRECTOR ENGINEERING

WCS:dh
Attachment

cc: City Solicitor

Water Shortage Response Plan Stage 1 - At a Glance

NOTE: These restrictions apply only to the use of treated drinking water. The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD.

	ACTIVITY	RESTRICTION DETAILS
RESIDENTIAL	Lawn sprinkling	June 1-Sept. 30, even addresses Saturday and Wednesday, odd addresses Sunday and Thursday, 4-9 a.m. and 7-10 p.m.
	New (unestablished) lawns.	Sprinkling outside restricted times allowed only with municipal permits to be displayed on lawn.
	Flowers, vegetables, planters, shrubs & trees	No restrictions
	Pools, spas, garden ponds	No restrictions
	Private outdoor impermeable surfaces (i.e., driveways, sidewalks)	No restrictions on hosing of outdoor impermeable surfaces
	Private pressure washing	No restrictions on pressure washing
	Outdoor car washing, boat washing	Only with hose equipped with spring-loaded shut off.
COMMERCIAL	Lawn sprinkling (including cemeteries)	June 1-Sept. 30, even addresses Saturday and Wednesday, odd addresses Sunday and Thursday, 4-9 a.m. and 7-10 p.m.
	New (unestablished) lawns.	Sprinkling outside restricted times allowed only with municipal permits to be displayed on lawn.
	Flowers, vegetables, decorative planters, shrubs & trees	No restrictions on watering of flowers, vegetables, planters, shrubs and trees
	Flower and vegetable gardens	No restrictions on watering of flower and vegetable gardens
	Pools, spas, garden ponds	No restrictions
	Fountains and water features	No restrictions
	Outdoor impermeable surfaces (i.e., driveways, sidewalks and parkades)	No restrictions on hosing of outdoor impermeable surfaces
	Pressure washing	No restrictions on pressure washing
	Outdoor car washing, boat washing	Only with hose equipped with spring-loaded shut off.
	Indoor commercial carwashes	No restrictions on the car washing operation
	Golf courses	Municipalities request golf course operators cut water use on fairways by as much as possible.
	Turf farms	No restrictions on watering of commercial turf
	Artificial turf and outdoor tracks (i.e., bicycle, motorcycle & running tracks)	Hosing for health and safety only.
PUBLIC	School yards, sports and sand-based playing fields	No restrictions
	Water play parks and pools	No restrictions
	Fountains and water features	No restrictions
	Municipal parks	No restrictions
	Municipal ornamental lawns, grassed boulevards.	June 1-Sept. 30, even addresses Saturday and Wednesday, odd addresses Sunday and Thursday, 4-9 a.m. and 7-10 p.m.
	Municipal hydrant flushing	Only for unscheduled safety or public health reason. Routine flushing to be scheduled outside WSRP timeframe.

For information regarding enforcement of the WSRP, please contact your municipality.

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

Water Shortage Response Plan Stage 2 - At a Glance

NOTE: These restrictions apply only to the use of treated drinking water. The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD.

	ACTIVITY	RESTRICTION DETAILS
RESIDENTIAL	Lawn sprinkling	Only once weekly. Even-numbered addresses Wednesday, odd-numbered addresses Thursday, 4-9 a.m. and 7-10 p.m.
	New (unestablished) lawns.	Sprinkling outside restricted times allowed only with municipal permits to be displayed on lawn.
	Flowers, vegetables, planters, shrubs & trees	No restrictions on watering of flowers, vegetables, planters, shrubs and trees
	Pools, spas, garden ponds	No restrictions
	Private outdoor impermeable surfaces (i.e., driveways, sidewalks)	Hosing 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	Only for health and safety purposes or to prepare a surface for painting or similar treatment. Washing for aesthetic purposes is prohibited.
	Outdoor car washing, boat washing	Only with hose equipped with spring-loaded shut off.
COMMERCIAL	Lawn sprinkling (including cemeteries)	Only once weekly. Even-numbered addresses Wednesday, odd-numbered addresses Thursday, 4-9 a.m. and 7-10 p.m.
	New (unestablished) lawns.	Sprinkling outside restricted times allowed only with municipal permits to be displayed on lawn.
	Flowers, vegetables, decorative planters, shrubs & trees	No restrictions on watering of flowers, vegetables, planters, shrubs and trees
	Flower and vegetable gardens	No restrictions on watering of flower and vegetable gardens
	Pools, spas, garden ponds	No restrictions
	Fountains and water features	All shut down
	Outdoor impermeable surfaces (i.e., driveways, sidewalks and parkades)	Hosing only for health and safety purposes or to prepare a surface for painting or similar treatment. Washing for aesthetic purposes is prohibited.
	Pressure washing	Only for health and safety purposes or to prepare a surface for painting or similar treatment. Washing for aesthetic purposes is prohibited.
	Outdoor car washing, boat washing	Only with hose equipped with spring-loaded shut off.
	Indoor commercial carwashes	No restrictions on the car washing operation
	Golf courses	Water greens and tee areas normally; fairways only once weekly. Signage indicating the use of non-GVWD water is encouraged.
	Turf farms	No restrictions on watering of commercial turf
	Artificial turf and outdoor tracks (i.e., bicycle, motorcycle & running tracks)	Hosing for health and safety only.
PUBLIC	School yards, sports and sand-based playing fields	Minimum levels required to maintain areas in useable condition.
	Water play parks and pools	Only water play parks with user-activated switches will be operated.
	Fountains and water features	All shut down
	Municipal parks	Only once weekly. Even-numbered addresses Wednesday, odd-numbered addresses Thursday, 4-9 a.m. and 7-10 p.m.
	Municipal ornamental lawns, grassed boulevards.	Only once weekly. Even-numbered addresses Wednesday, odd-numbered addresses Thursday, 4-9 a.m. and 7-10 p.m.
	Municipal hydrant flushing	Only for unscheduled safety or public health reason. Routine flushing to be scheduled outside WSRP timeframe.

For information regarding enforcement of the WSRP, please contact your municipality.
For general WSRP information, please contact the GVRD Information Centre at 604-432-6200.

Water Shortage Response Plan Stage 3 - At a Glance

NOTE: These restrictions apply only to the use of treated drinking water. The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD.

	ACTIVITY	RESTRICTION DETAILS
RESIDENTIAL	Lawn sprinkling	All forms of watering using treated drinking water are prohibited.
	New (unestablished) lawns.	No new permits issued or renewed. All forms of watering using treated drinking water are prohibited.
	Flowers, vegetables, planters, shrubs & trees	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.
	Pools, spas, garden ponds	Refilling is prohibited.
	Private outdoor impermeable surfaces (i.e., driveways, sidewalks)	Hosing only for health and safety purposes or to prepare a surface for sealing or similar treatment. Washing for aesthetic purposes is prohibited.
	Private pressure washing	Private pressure washing is prohibited.
	Outdoor car washing, boat washing	No outdoor washing or rinsing of vehicles and pleasure crafts, except for safety (windows, lights and licenses only).
COMMERCIAL	Lawn sprinkling (including cemeteries)	All forms of watering using treated drinking water are prohibited.
	New (unestablished) lawns.	No new permits issued or renewed. All forms of watering using treated drinking water are prohibited.
	Flowers, vegetables, decorative planters, shrubs & trees	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.
	Flower and vegetable gardens	No restrictions on watering of flower and vegetable gardens
	Pools, spas, garden ponds	Refilling is prohibited.
	Fountains and water features	All shut down
	Outdoor impermeable surfaces (i.e., driveways, sidewalks and parkades)	Hosing only for health and safety purposes or to prepare a surface for sealing or similar treatment. Washing for aesthetic purposes is prohibited.
	Pressure washing	Only for health and safety purposes or to prepare a surface for painting or similar treatment. Washing for aesthetic purposes is prohibited.
	Outdoor car washing, boat washing	No outdoor washing or rinsing of vehicles and pleasure crafts, except for safety (windows, lights and licenses only).
	Indoor commercial carwashes	No restrictions on the car washing operation
	Golf courses	Water greens and tee areas at minimum levels required to maintain areas in useable condition; fairways may not be watered.
	Turf farms	No restrictions on watering of commercial turf
	Artificial turf and outdoor tracks (i.e., bicycle, motorcycle & running tracks)	Hosing for health and safety only.
PUBLIC	School yards, sports and sand-based playing fields	Minimum levels required to maintain areas in useable condition.
	Water play parks and pools	Only water play parks with user-activated switches will be operated.
	Fountains and water features	All shut down
	Municipal parks	All forms of watering using treated drinking water are prohibited.
	Municipal ornamental lawns, grassed boulevards.	All forms of watering using treated drinking water are prohibited.
	Municipal hydrant flushing	Only for unscheduled safety or public health reason. Routine flushing to be scheduled outside WSRP timeframe.

For information regarding enforcement of the WSRP, please contact your municipality.
 For general WSRP information, please contact the GVRD Information Centre at 604-432-6200.

Water Shortage Response Plan Stage 4 - At a Glance

NOTE: These restrictions apply only to the use of treated drinking water. The WSRP restrictions do not apply to the use of rain water, gray water, any forms of recycled water, or other sources of water outside the GVWD.

	ACTIVITY	RESTRICTION DETAILS
RESIDENTIAL	Lawn sprinkling	All forms of watering using treated drinking water are prohibited.
	New (unestablished) lawns.	No new permits issued or renewed. All forms of watering using treated drinking water are prohibited.
	Flowers, vegetables, planters, shrubs & trees	All forms of watering using treated drinking water are prohibited.
	Pools, spas, garden ponds	Refilling is prohibited.
	Private outdoor impermeable surfaces (i.e., driveways, sidewalks)	All forms of hosing of outdoor surfaces are prohibited unless ordered by a regulatory authority (i.e., WCB, public health inspector, etc...).
	Private pressure washing	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, boat washing	No outdoor washing or rinsing of vehicles and pleasure crafts, except for safety (windows, lights and licenses only).
COMMERCIAL	Lawn sprinkling (including cemeteries)	All forms of watering using treated drinking water are prohibited.
	New (unestablished) lawns.	No new permits issued or renewed. All forms of watering using treated drinking water are prohibited.
	Flowers, vegetables, decorative planters, shrubs & trees	All forms of watering using treated drinking water are prohibited.
	Flower and vegetable gardens	All forms of watering using treated drinking water are prohibited.
	Pools, spas, garden ponds	Refilling is prohibited.
	Fountains and water features	All shut down
	Outdoor impermeable surfaces (i.e., driveways, sidewalks and parkades)	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...).
	Pressure washing	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, boat washing	No outdoor washing or rinsing of vehicles and pleasure crafts, except for safety (windows, lights and licenses only).
	Indoor commercial carwashes	All shut down
	Golf courses	All forms of watering using treated drinking water are prohibited.
	Turf farms	All forms of watering using treated drinking water are prohibited.
Artificial turf and outdoor tracks (i.e., bicycle, motorcycle & running tracks)	All forms of watering using treated drinking water are prohibited.	
PUBLIC	School yards, sports and sand-based playing fields	All forms of watering using treated drinking water are prohibited.
	Water play parks and pools	All water parks shut down. Municipal outdoor pools closed. Winterization deferred until Stage 4 is lifted by GVWD.
	Fountains and water features	All shut down
	Municipal parks	All forms of watering using treated drinking water are prohibited.
	Municipal ornamental lawns, grassed boulevards.	All forms of watering using treated drinking water are prohibited.
	Municipal hydrant flushing	Only for unscheduled safety or public health reason. Routine flushing to be scheduled outside WSRP timeframe.

For information regarding enforcement of the WSRP, please contact your municipality.
 For general WSRP information, please contact the GVRD Information Centre at 604-432-6200.

