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Agenda Item 7
REPORT #RWSC 2011-03

**REPORT TO REGIONAL WATER SUPPLY COMMISSION
MEETING OF WEDNESDAY, 16 FEBRUARY 2011**

SUBJECT WATER CONSERVATION BYLAW

ISSUE

To consider amending Stage 1 of the Water Conservation Bylaw.

BACKGROUND

Concerns have been expressed about the relevance of the current Stage 1 of Water Conservation Bylaw for a number of reasons, including the availability of water in the Sooke Reservoir, surplus to current needs, the revenue challenges posed by declining total water use, and debt repayment obligations as a result of land purchases in the Leech watershed. A copy of the bylaw is attached (**Attachment 1**). **Attachment 2** provides a history of outdoor water use restrictions since 1992. Under the current bylaw, Stage 1 restrictions are in effect each year between May 1 and September 30 allowing lawn watering two days a week between the hours of 4 am to 10 am and 7 pm to 10 pm, a total of 18 hours per week. Watering of trees, shrubs, flowers and vegetable gardens is permitted on any day during the prescribed hours for Stage 1, using a hose with a shut off nozzle or handheld container, or with a micro or drip irrigation system on any day at any time. The current bylaw has been in effect since 2003.

Compared to 1995, total water use in the region has declined by 11% despite an increase in population of 14%. There are a number of factors that account for this including plumbing code changes requiring 6-litre or less toilets, the market acceptance of high efficiency washing machines, (toilet and washing machine rebates totaled 25,314 and 13,744 respectively), public education programs (information brochures, workshops, school curricula, etc.), the drought of 2001, and increases in water charges including the move toward municipalities charging for sewer costs based on water use. In CRD's Water Efficiency survey conducted in 2008, 87% of residents were in support of having watering restrictions, including 66% who "strongly support" them. Support has increased since the previous survey in 2004.

A statistical analysis of summer water use over the past 15 years suggests that removing Stage 1 may result in about a 2% increase in annual water use or about \$500,000 in potential additional revenue. However, it is difficult to quantify how changes in social attitudes towards lawn watering will affect water demand if Stage 1 is changed. Residents who have ceased to water their lawns may not start to do so just because of changes to Stage 1. Changing Stage 1 will also mean that all the current printed information sheets and brochures will have to be revised. The thousands of fridge magnets around the region would become obsolete. The result may be considerable confusion in the minds of the public.

ALTERNATIVES

Alternative 1. That the Regional Water Supply Commission not undertake a review of the Water Conservation Bylaw, and direct staff to concentrate its efforts on communication and public education about outdoor water use during the summer.

Alternative 2. That the Regional Water Supply Commission refer the bylaw and any suggestions for revisions to the Water Advisory Committee for consideration, reporting back to the Commission at the March 16 meeting.

IMPLICATIONS

Alternative 1.

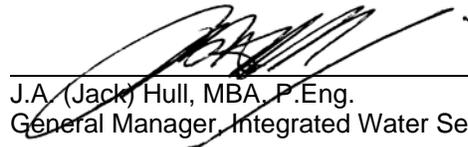
Each year students are hired for the summer to assist with outreach programs and to conduct bylaw compliance patrols in all the service areas. For a first violation, an information package on the conservation bylaw is sent to the property. For a second violation, the resident will receive a visit from a Bylaw Enforcement Officer. For a third violation, a ticket may be issued. Refer to **Attachment 3** for statistics on violations. In 2010 the Water Efficiency program was reduced by eliminating the rebate programs, given the changes to regulations and the acceptance of high efficiency washing machines. The 2011 budget includes a reduction in the number of summer students, which will result in less enforcement of the bylaw.

Alternative 2.

The role of the Water Advisory Committee is to provide advice to the Regional Water Supply Commission on water supply, water quality, the stewardship of the lands held by the Regional District for water supply purposes and water conservation measures. By referring the issue to the Committee, the Commission will have the benefit of advice provided by the Committee which represents a broad cross-section of the public at large. The Committee's next meeting is scheduled for March 1. A report from the Committee could then be brought back to the Commission on March 16. However, for the Commission to give direction to staff for any changes to the bylaw and for those changes to be adopted by the Commission in time to go to the CRD Board on April 13 would require a special meeting of the Commission.

RECOMMENDATION

That the Regional Water Supply Commission not undertake a review of the Water Conservation Bylaw, and direct staff to place more emphasis on communication and public education about outdoor water used during the summer..



J.A. (Jack) Hull, MBA, P.Eng.
General Manager, Integrated Water Services

CAPITAL REGIONAL DISTRICT

Bylaw No. 3061

WATER CONSERVATION BYLAW

WHEREAS under Section 796.2 of the *Local Government Act*, a regional district may regulate in relation to a service;

AND WHEREAS under section 796.2 of the *Local Government Act* a regional government has authority to regulate Water use even though a participating Municipality is responsible for Water distribution within that municipality;

AND WHEREAS the Capital Regional District (“CRD”) under the *Capital Region Water Supply and Sooke Hills Protection Act* (the “Act”) has established a Water supply local service in the following participating municipalities (“Participating Municipalities”):

- The Corporation of the City of Victoria
- The Corporation of the District of Oak Bay
- The Corporation of the District of Saanich
- Corporation of the Township of Esquimalt
- The Corporation of the District of Central Saanich
- Town of Sidney
- District of North Saanich
- District of Metchosin
- City of Colwood
- Town of View Royal
- District of Langford
- District of Sooke
- That portion of the Juan de Fuca Electoral Area as shown in Schedule C.

AND WHEREAS the CRD supplies bulk Water to the following:

- The Corporation of the City of Victoria
- The Corporation of the District of Oak Bay
- The Corporation of the District of Saanich
- Corporation of the Township of Esquimalt
- Saanich Peninsula Water Commission
- Juan de Fuca Water Distribution Commission

NOW, THEREFORE, the Board of the Capital Regional District in open meeting assembled enacts as follows:

1. Definitions

In this bylaw:

“Appliance” means a device or mechanism, other than that owned and operated by the Municipality or CRD, in or through which Water is piped or used for a domestic or commercial purpose.

“Board” means Board of the Capital Regional District.

“Boat” means a vessel propelled on water by an engine, oars or sails.

“Boulevard” means that portion of any highway other than the paved, improved or main travelled roadway, driveway or sidewalk and includes any landscaped median.

“Bylaw Enforcement Officer” means a person appointed or contracted by the Board or the Council of a Municipality to enforce this bylaw.

“Commission” means the Regional Water Supply Commission.

“CRD” means the Capital Regional District.

“Exempted Person” means an Owner or Occupier of property identified in Schedule “A” as exempt from one or more of the regulations under this bylaw.

“Farm” means a parcel of land classified as farmland for assessment and taxation purposes.

“Fill” means to fill completely with Water.

“General Manager” means the General Manager of the Capital Regional District Water Department.

“Micro-irrigation or Drip-irrigation System” means a system using irrigation components which consume less than 20 gallons per hour and operate at less than 25 psi to deliver Water to the root zone of the plant material being irrigated, and includes spray emitter systems (Micro-Sprays), point source emitters and linear tape systems as defined in the BC Trickle Manual prepared and published by the BC Ministry of Agriculture and Food, Resource Management Branch (issue 1999), but does not include weeper or soaker hoses.

“Municipality” means the District of Sooke, District of Metchosin, City of Colwood, Town of View Royal, District of Langford, that portion of the Juan de Fuca Electoral Area as shown on Schedule C, the Corporation of the City of Victoria, Corporation of the Township of Esquimalt, The Corporation of the District of Oak Bay, The Corporation of the District of Saanich, District of Central Saanich, District of North Saanich and the Town of Sidney.

“Newspaper” has the same meaning as in the *Local Government Act*.

“Notice” means a Notice given under Section 6 of this bylaw.

“Nursery” means a business in which flowers, plants, trees or shrubs are grown or displayed for sale.

“Occupier” has the same meaning as in the *Local Government Act*.

“Over-Watering” means to Water in a manner that saturates the lawn, Boulevard or landscaped area being watered and results in Water spreading onto areas beyond them.

“Owner” has the same meaning as in the *Local Government Act*.

“Permit” means a Permit issued under Section 9(1) of this bylaw.

“Public Authority” has the same meaning as defined in the *Local Government Act*.

“Restricted Hours” means those time periods during which watering is permitted in Schedule “A” of this bylaw.

“Sprinkler” means a hose connected or other sprinkler system but excludes a Micro-irrigation or Drip-irrigation system.

“Stage” means the Stages 1, 2 and 3 of Water Use Restrictions prescribed in Schedule “A” of this bylaw.

“Vehicle” means a device in, on or by which a person or thing is or may be transported or drawn on a highway.

“Water” means Water supplied by the CRD directly or indirectly to an Owner or Occupier or the act of using or applying such Water.

“Water Use Restrictions” means the restrictions prescribed in Schedule “A” of this bylaw.

“Watering Days” means those days during which Watering is permitted in Schedule “A” of this bylaw.

2. Application

The restrictions and regulations in this bylaw are applicable in each Municipality.

3. Prohibitions

- (1) The prohibitions in subsections 3(2) and 3(3) are in force at all times of the year.
- (2) No person shall damage or allow the deterioration of any Appliance so as to result in a waste of Water.

- (3) No person shall waste Water by using more Water than is required to provide a service, produce a product or complete a task, including but not limited to
 - (a) allowing a tap or hose to run Water unnecessarily, and
 - (b) the Over-Watering of plants or lawns.
- (4) No person, being an Owner or Occupier of property in the Municipality, shall use Water or cause Water to be used contrary to the provisions of this bylaw in effect at the time of use.

4. Inspection

A Bylaw Enforcement Officer has the authority to enter at all reasonable times on any property that is subject to this bylaw to ascertain whether the requirements of this bylaw are being met or the regulations in this bylaw are being observed.

5. Effective Dates of Stages and Restrictions

- (1) Stage 1 and the Water Use Restrictions for Stage 1 prescribed in Schedule “A” are in effect in each year from May 1st to September 30th both inclusive, except as provided under subsection (2).
- (2) The Commission, by resolution, may
 - (a) amend the effective period of time for Stage 1, or
 - (b) terminate or bring into effect a Stage more restrictive than Stage 1 at any time of the year for any period of time.
- (3) The Stage determined under subsection (2) and the Water Use Restrictions prescribed under Schedule “A” for that Stage take effect on the commencement date stated in this bylaw or the Notice for that Stage and remain in effect until that Stage is terminated.
- (4) A Stage will remain in effect until it is terminated by resolution or otherwise under this bylaw, or until the commencement of another Stage.

6. Notice

- (1) The General Manager must give Notice or cause Notice to be given to persons within the Municipality of the applicable Stage determined under Section 5(2) and its effective dates of commencement and termination when determined by the Commission.

- (2) The Notice under subsection (1) must be given at least once
 - (a) before the commencement of the applicable Stage, and
 - (b) within a reasonable time after the resolution of the Commission to terminate the Stage.
- (3) The Notice under this section must be published in a Newspaper and broadcast from a radio station, and may also be broadcast from a television station or cable television channel serving the Capital Regional District and posted on the CRD web site.

7. Determination Factors

In making a determination under Section 5(2), the Commission may consider, but shall not be bound by, whether or not a greater than 80% probability exists that during that calendar year, the volume of Water in the Sooke Lake Reservoir and the Goldstream Reservoirs will exceed in total 20.5 million cubic metres, or 20% of total storage (16 million cubic metres in the Sooke Lake Reservoir and 4.5 million cubic metres in the Goldstream Reservoirs).

8. Water Use Restrictions

The Water Use Restrictions for each Stage are prescribed in Schedule “A” to this bylaw and must be obeyed during the period that the applicable Stage is in effect under this bylaw.

9. Permits, Exemptions and Special Cases

- (1) The CRD may issue Permits in the special cases and manner prescribed in Schedule “B”.
- (2) Exemptions and special cases to the regulations in this bylaw are prescribed in Schedule “A”.
- (3) Exempted Persons and Permit holders are exempted from Section 3 to the extent permitted by Schedule “A” and the conditions of the Permit where applicable.

10. Schedules

Schedules “A”, “B” and “C” of this bylaw form part of and are enforceable in the same manner as this bylaw.

11. Penalty

- (1) A person who contravenes this bylaw commits an offence, is punishable in accordance with the Offence Act, and on conviction, in addition to the penalties prescribed under the Offence Act, is subject to the following minimum fines:

- (a) for an offence under section 3(3) of this bylaw, a minimum fine of \$75 plus costs if the offence is committed during Stage 1, \$150 plus costs if the offence is committed during Stage 2, \$225 plus costs if the offence is committed during Stage 3, and \$75 plus costs if the offence is committed when no Stage is in effect; and
- (b) for an offence under section 3(4) of this bylaw, a minimum fine of \$50 plus costs for each offence under Stage 1, \$75 plus costs for each offence under Stage 2, and \$100 plus costs for each offence under Stage 3.

12. Repeal

Capital Regional District Water Use Restrictions Bylaw No. 1, 2001 is repealed.

13. Effective Date

This bylaw shall take effect upon the date of its adoption.

14. Bylaw Citation

This Bylaw may be cited as “Capital Regional District Water Conservation Bylaw No. 1, 2003”.

READ A FIRST TIME, this 9th day of April , 2003.

READ A SECOND TIME, this 9th day of April , 2003.

READ A THIRD TIME, this 23rd day of April , 2003.

ADOPTED this 23rd day of April , 2003.

CHAIR

SECRETARY

SCHEDULE "A"

to Bylaw No. 3061

OUTDOOR WATER USE RESTRICTION STAGES

1. STAGE 1 – TWO DAYS PER WEEK LAWN WATERING

(1) During Stage 1,

(a) no person shall use a Sprinkler to water a lawn growing on a property with

- (i) an even numbered address, except on Wednesday and Saturday between the hours of 4:00 a.m. to 10:00 a.m. and 7:00 p.m. to 10:00 p.m.; and
- (ii) an odd numbered address, except on Thursday and Sunday between the hours of 4:00 a.m. to 10:00 a.m. and 7:00 p.m. to 10:00 p.m.; and

(b) a person may

- (i) water trees, shrubs, flowers and vegetables on any day with a Sprinkler during the prescribed hours for Stage 1 lawn watering and on any day at any time if watering is done by hand-held container or a hose equipped with a shut-off nozzle;
- (ii) water newly planted trees, shrubs, flowers and vegetables by any method during installation and for the following 24 hours;
- (iii) use Micro-irrigation or Drip- irrigation systems to Water trees, shrubs, flowers and vegetables at any time on any day;
- (iv) under the authority of a Permit, water new sod on installation and during the first 21 days after installation, and water newly seeded lawns until growth is established or for 49 days after installation, whichever is less, but only during the prescribed Stage 1 lawn Watering hours;
- (v) water all weather playing fields at any time if failure to do so will result in a permanent loss of plant material; and
- (vi) wash a vehicle with Water using a hand held container or hose equipped with a shut-off nozzle and at car dealerships or commercial car washes.

(2) As exceptions to the Stage 1 restrictions,

- (a) Owners or Occupiers of property who, by reason of physical or mental incapacity, are unable to water their property within the restricted days and times, may water their property on any two days of the week for a maximum of 9 hours per day;
- (b) Nurseries, Farms, turf farms and tree farms are exempted from the restrictions;

- (c) Public Authorities may water lawns and Boulevards on any day but no more than two days per week; and
- (d) owners or operators of golf courses may water
 - (i) fairways at any time on any day;
 - (ii) trees, shrubs, flowers and vegetables grown on golf courses in accordance with Section 1(1) (b) (i), (ii) and (iii) of this Schedule; and
 - (iii) golf greens and tees on any day if failure to do so will result in permanent loss of plant material.

2. STAGE 2 – ONE DAY PER WEEK LAWN WATERING

- (1) During Stage 2,
 - (a) no person shall use a Sprinkler to water a lawn growing on a property with
 - (i) an even numbered address, except on Wednesday between the hours of 4:00 a.m. to 10:00 a.m. and 7:00 p.m. to 10:00 p.m.;
 - (ii) an odd numbered address, except on Thursday between the hours of 4:00 a.m. to 10:00 a.m. and 7:00 p.m. to 10:00 p.m.;
 - (b) no person shall use Water to wash sidewalks, driveways or parking lots, exterior windows or exterior building surfaces, except as necessary for applying a product such as paint, preservative and stucco, preparing a surface prior to paving or repointing bricks, or if required by law to comply with health or safety regulations; and
 - (c) a person may
 - (i) water trees, shrubs, flowers and vegetables on any day with a Sprinkler during the prescribed hours for Stage 2 lawn watering and on any day at any time if watering is done by hand-held container or a hose equipped with a shut-off nozzle;
 - (ii) water newly planted trees, shrubs, flowers and vegetables by any method during installation and for the following 24 hours;
 - (iii) use Micro-irrigation or Drip- irrigation systems to water trees, shrubs, flowers and vegetables at any time on any day;
 - (iv) water all weather playing fields at any time if failure to do so will result in a permanent loss of plant material; and
 - (v) wash a vehicle with Water using a hand held container or hose equipped with a shut-off nozzle and at car dealerships and commercial car washes.

- (2) As exceptions to Stage 2 restrictions,
 - (a) Owners or Occupiers of property who, by reason of physical or mental incapacity, are unable to water their property within the restricted days and times, may water their property on one day per week for a maximum of 9 hours per day;
 - (b) Nurseries, Farms, turf farms and tree farms are exempted from the restrictions;
 - (c) Public Authorities may water lawns and Boulevards on any day but no more than one day per week; and
 - (d) owners or operators of golf courses may water
 - (i) fairways at any time on not more than two days per week;
 - (ii) trees, shrubs, flowers and vegetables grown on golf courses in accordance with Section 2(1) (c) (i), (ii) and (iii) of this Schedule; and
 - (iii) (iii) golf greens and tees on any day if failure to do so will result in permanent loss of plant material;

3. STAGE 3 – NO LAWN WATERING

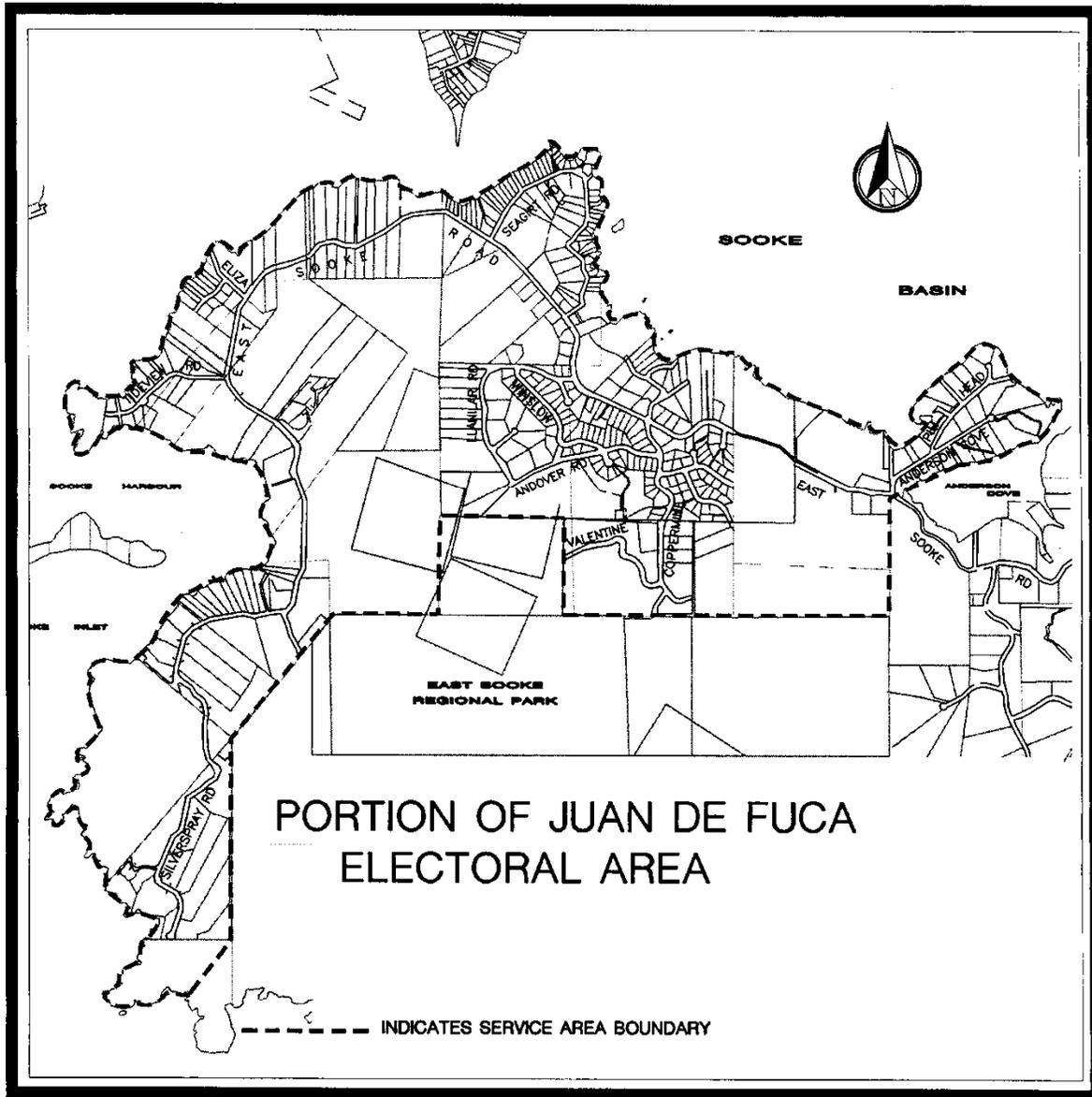
- (1) During Stage 3,
 - (a) no person shall
 - (i) water a lawn or Boulevard;
 - (ii) Fill a swimming pool, hot tub or garden pond;
 - (iv) Fill or operate a decorative fountain at any time; or
 - (iv) wash a Vehicle or a Boat with Water.
 - (b) a person may
 - (i) water trees, shrubs, flowers and vegetables on any day between the hours of 4:00 a.m. to 10:00 a.m. and 7:00 p.m. to 10:00 p.m. if watering is done by hand-held container or a hose equipped with a shut-off nozzle;
 - (ii) water newly planted trees, shrubs, flowers and vegetables between the hours of 4:00 a.m. to 10:00 a.m. and 7:00 p.m. to 10:00 p.m. only by hand-held container or a hose equipped with a shut-off nozzle during installation and during the following 24 hours after installation is completed;

- (iii) use Micro-irrigation or Drip- irrigation systems to water trees, shrubs, flowers and vegetables on any day between the hours of 4:00 a.m. to 10:00 a.m. and 7:00 p.m. to 10:00 p.m.;
 - (iv) water all weather playing fields at any time, but only if failure to do so will result in a permanent loss of plant material; and
 - (v) use Water to wash sidewalks, driveways or parking lots, exterior windows or exterior building surfaces, but only if necessary for applying a product such as paint, preservative and stucco, preparing a surface prior to paving or repointing bricks, or if required by law to comply with health or safety regulations.
- (2) As exceptions to the Stage 3 restrictions,
- (a) Nurseries, Farms, turf farms and tree farms are exempted from the restrictions;
 - (b) owners or operators of golf courses may water
 - (i) fairways at any time on not more than one day per week;
 - (ii) trees, shrubs, flowers and vegetables grown on golf courses in accordance with Section 3(1) (b) (i), (ii) and (iii) of this Schedule; and
 - (iii) golf greens and tees on any day if failure to do so will result in permanent loss of plant material;
 - (c) wading pools may be Filled with Water; and
 - (d) Vehicles and Boats may be washed with Water only at car dealerships and commercial car washes using less than 57 litres of Water per Vehicle wash or 50% recirculated Water as long as the total amount of Water, excluding recirculated Water, does not exceed 57 litres per Vehicle wash.

SCHEDULE "B"
to Bylaw No. 3061

PERMITS

1. During Stage 1, a person who has installed a new lawn, either newly seeded or new sod, may apply to the Capital Regional District Water Department for a Permit, which will allow the new lawn to be Sprinkled with Water outside of permitted days, but within Restricted Hours. The Permit shall be conspicuously displayed at the premises for which it was issued.
2. The Capital Regional District Water Department shall issue a Permit to an applicant pursuant to Section 1 upon payment to the Capital Regional District Water Department of a fee in an amount determined by the Commission.
3. New sod may be watered for 21 days after installation and newly seeded lawn may be watered until growth is established or for 49 days after installation, whichever is less, provided a Permit pursuant to Section 1 has been issued for the premises at which the new lawn has been installed.
4. Permits will not be issued or be valid during Stages 2 or 3 restrictions.



Capital Regional District
Bylaw No.3061
Schedule C

History of Watering Restrictions

- 1992 - August 10th to October 2nd - Mandatory Restrictions were approved by resolution for the Western Communities and Sooke and the other municipalities were requested to implement similar restrictions. STAGE 2 Lawn watering was restricted to one-inch once per week according to house number. No enforcement. Should not be considered as Stage 1.
- 1993 - February 26th to August 27th – Stage 1 voluntary restrictions that included lawn watering twice per week, discontinuance of washing sidewalks, parking lots, turn off fountains that do not recycle water, etc. Enforcement was by the municipalities except in the Western Communities where the GVWD¹ enforced it.
- 1994 - No restrictions.
- 1995 – Stage 1 voluntary restrictions from June 3rd to July 21st (see 1993 for extent of restrictions), AND July 22nd to August 18th Stage 2 restrictions which reduced lawn watering to once per week between 4 a.m. and 9 a.m. and 7 p.m. and 10 p.m.
- 1996 - No restrictions.
- 1997 - No restrictions.
- 1998 - No restrictions.
- 1999 - June 10 - September 30th – Stage 1 restrictions in effect that limited lawn watering to two days per week between certain hours. No enforcement.
- 2000 - From here onwards restrictions are in effect every year from June 1st to September 30th. Stage 1 restrictions limit lawn watering to two days per week. No enforcement.
- 2001/2002 - Stage 3 restrictions (no lawn watering) April 2, 2001 – December 18, 2001 AND Stage 2 restrictions from December 18, 2001 to January 8, 2002 (not a lawn watering period).
- 2002 - Stage 1 restrictions from July 1, 2002 to September 30, 2002 (delayed from June 1st to July 1st to permit lowering of Sooke Reservoir to accommodate dam construction work.)
- 2003 – Stage 1 restrictions from May 1 to September 30, 2003. The bylaw was amended to put in place annual restrictions from May 1st each year.
- 2004 – Stage 1 restrictions from May 1 to September 30, 2004.
- 2005 – Stage 1 restrictions from May 1 to September 30, 2005
- 2006 - Stage 1 restrictions from May 1- September 30, 2006
- 2007 - Stage 1 restrictions from May 1- September 30, 2007
- 2008 – Stage 1 restrictions from May 1 - September 30, 2008.
- 2009 – Stage 1 restrictions from May 1 - September 30, 2009.
- 2010 - Stage 1 restrictions from May 1 - September 30, 2010
- 2011 - Stage 1 restrictions from May 1 - September 30, 2011

¹ Greater Victoria Water District (GVWD) until 1997 when it became a Department within the CRD.

Violations: HISTORICAL - May 1 - September 30	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
First Violations (Warning Letter Sent)	661	880	788	995	888	1146	647	470	114	806
Second Violations	96	123	95	95	62	79	34	23	9	84
Third Violations	13	16	10	14	15	17	8	7	5	13
Fourth Violations (or more)	4	4	3	0	-	-	-	-	-	-
Visit by Bylaw Enforcement - Warning Ticket Issued	79	117	80	94	59	105	39	19	21	48
Municipal Violation Ticket Issued	6	5	6	2	2	2	0	0	0	3

Updated: Jan 20, 2011 KT