



**To:** General Purposes Committee

**Date:** April 27, 2015

**From:** John Irving, P.Eng. MPA  
Director, Engineering

**File:** 10-6125-04-01/2015-  
Vol 01

**Re:** Amendments to Water Use Restriction Bylaw and Consolidated Fees Bylaw  
to Support Chafer Beetle Biocontrol

**Staff Recommendation**

1. That Water Use Restriction Bylaw No. 7784, Amendment Bylaw No.9247 be introduced and given first, second and third readings.
2. That Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9248 be introduced and given first, second and third readings.

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

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

## Staff Report

### Origin

In order to control the damage to lawns associated with pest damage on private property, amendments to the City's Water Use Restriction Bylaw No. 7784 and Consolidated Fees Bylaw No. 8636 are being proposed. These amendments will allow watering of lawns on private property during summer months, when water restrictions are in place, in order to support biocontrol of the European chafer beetle.

### Analysis

#### European Chafer Beetle Control

European chafer beetle *Rhizotrogus majalis* has become a serious lawn pest found in residential, commercial and city landscapes. It was first discovered in New Westminster in 2001 and has subsequently spread to Richmond, Burnaby, Vancouver and Coquitlam. Since first observations in 2010, the European chafer beetle has spread across the City, with significant damage occurring over the past twelve months.

Currently, there are no permitted chemical insecticides for use on chafer larvae under the City's Pesticide Use Control Bylaw No. 8514. For infested lawn areas, the application of nematodes (naturally occurring microscopic round worms) has proven to be the most effective control. Products containing *heterorhabditis bacteriophora* nematodes are available at local garden centres. The beneficial nematodes should be applied to the infested lawn area at the end of July when chafer is in the beginning of its grub/larvae stage. Ample watering is required before and after application of nematodes for at least two weeks to allow the nematodes to percolate into the soil profile to the chafer grubs. The amount of watering required is greater than allowed under Stage 1 and Stage 2 water restrictions as set out in Bylaw 7784.

An amendment to Bylaw No. 7784 is proposed to provide the means for property owners to obtain a water exemption permit (See Attachment 1, Water Use Restriction Bylaw No. 7784, Amendment Bylaw No. 9247). Applicants will be required to provide proof of purchase of nematodes via receipt or invoice from a company to the applicant's address showing nematode treatment is required. A company may apply for nematode permits on behalf of a property. The application fee for this permit is proposed to be \$33.50 for properties without metered water and free for properties with metered water (see Attachment 2, Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9248). Properties without a water meter will have to accept a water meter installation as part of the permit approval process as well, where applicable. The permit will allow sprinkling outside of restricted days/hours to the area of lawn treated with nematodes under Stage 1 and Stage 2 water restrictions. Permits are not valid during Stage 3 and Stage 4 water restrictions. The permit will only be valid between July 15 and August 15 for 21 days within the validity period and cannot be renewed. The City reserves the right to revoke and/or cancel a permit for non-compliance within the terms or conditions of this permit. A resident applying for a water exemption permit must have the permit affixed to a post facing the street serving the premises, beside the principal driveway or in a visible location on the front yard.

As part of the City's Enhanced Pesticide Management Program, information on European chafer beetle control can be found in Richmond's *European Chafer in Your Lawn* brochure and at [Richmond.ca/chafer](http://Richmond.ca/chafer). City Staff continue to respond to telephone calls and provide expert advice including recommendations to home owners experiencing lawn damage associated with the European chafer beetle. The City's 2015 spring and summer Natural Lawn Care workshops include more sessions specific to European chafer beetle control to address the growing concern of this pest in the community.

### **Financial Impact**

There are no financial impacts associated with these bylaw amendments.

### **Conclusion**

Due to the recent proliferation of European Chafer Beetle damage to lawns on private property in the City, the use of nematodes for biocontrol of this pest is recommended. Amendments to the Water Use Restriction and Consolidated Fees bylaws support the requirement for successful biocontrol of the European chafer beetle on private properties.



Lesley Douglas, B.Sc., R.P.Bio.  
Manager, Environmental Sustainability  
(604-247-4672)

LD:th

- Att. 1: Water Use Restriction Bylaw No. 7784, Amendment Bylaw No. 9247.
- 2: Consolidated Fee Bylaw No. 8636, Amendment Bylaw No. 9248.



**Water Use Restriction Bylaw No. 7784,  
Amendment Bylaw No. 9247**

The Council of the City of Richmond enacts as follows:

1. The Water Use Restriction Bylaw No. 7784, as amended, is further amended by deleting Section 3.1 in its entirety and substituting the following:

**“3.1 Permits**

- 3.1.1 A **person** may apply to the **General Manager, Engineering & Public Works** for a **permit** authorizing the **person** to **water** when **Stage 1 Restrictions** or **Stage 2 Restrictions** are in force if:
  - (a) the **person** has installed a new lawn, either by placing sod or turf or by seeding, or new landscaping on a substantial part of the outdoor portion of a property; or
  - (b) the **person** is applying nematodes to a lawn to control the growth of European Chafer Beetle.
- 3.1.2 An application for a **permit** must be accompanied by supporting documents, as required by the **General Manager, Engineering & Public Works**, and the application fee specified in the Consolidated Fees Bylaw No. 8636, as amended or replaced from time to time.
- 3.1.3 The **General Manager, Engineering & Public Works**, upon being satisfied that an applicant qualifies under subsection 3.1.1(a) or (b) and has complied with subsection 3.1.2, may issue a **permit** to the applicant and include terms and conditions in respect to the **permit**.
- 3.1.4 Notwithstanding **Stage 1 Restrictions** or **Stage 2 Restrictions**, the holder of a valid **permit** is authorized to **water** in accordance with the terms and conditions of the **permit**.
- 3.1.5 A **permit** does not exempt the **permit** holder from **Stage 3 Restrictions** or **Stage 4 Restrictions**.
- 3.1.6 A **permit** must be affixed to a post facing the street servicing the property, beside the principal driveway or if there is no driveway, in a visible location in the front yard of the property.

3.1.7 A **permit** is valid for the period of 21 days from the date of issue, except that a **permit** issued for the purpose of subsection 3.1.1(b) may only be valid for a period of 21 days between July 15 and August 15 of each year.

3.1.8 A **permit** holder may apply for an extension of a **permit** issued for the purpose of subsection 3.1.1(a), but such extension must end on or before 42 days from the original date of issue under subsection 3.1.3. A **permit** issued for the purpose of subsection 3.1.1(b) cannot be extended.”

2. This Bylaw is cited as “**Water Use Restriction Bylaw No. 7784, Amendment Bylaw 9247**”.

FIRST READING

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SECOND READING

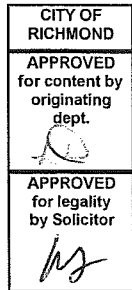
\_\_\_\_\_

THIRD READING

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ADOPTED

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\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CORPORATE OFFICER



Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9248

The Council of the City of Richmond enacts as follows:

- 1. The Consolidated Fees Bylaw No. 8636, as amended, is further amended by deleting the table under Schedule – Water Use Restriction and substituting the following:

Table with 2 columns: Description, Fee. Rows include permit application fees for lawns, nematode applications for European Chafer Beetle control (with and without water meter service).

- 2. This Bylaw is cited as “Consolidated Fees Bylaw No. 8636, Amendment Bylaw No. 9248”.

FIRST READING

SECOND READING

THIRD READING

ADOPTED

Four horizontal lines for signatures.

Vertical stamp: CITY OF RICHMOND, APPROVED for content by originating dept. (with signature), APPROVED for legality by Solicitor (with signature).

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CORPORATE OFFICER