



---

## Public Works & Transportation Committee

Anderson Room, City Hall  
6911 No. 3 Road

Wednesday, March 21, 2012  
4:00 p.m.

Pg. #      ITEM

### MINUTES

**PWT-3**      *Motion to adopt the minutes of the meeting of the Public Works & Transportation Committee held on Wednesday, February 22, 2012.*



### NEXT COMMITTEE MEETING DATE

Wednesday, April 18, 2012 (tentative date) at 4:00 p.m. in the Anderson Room

### ENGINEERING AND PUBLIC WORKS DEPARTMENT

1. **BC STEWARDSHIP REGULATION RELATING TO PACKAGING AND PRINTED PAPER**  
(File Ref. No. 10-6370-00) (REDMS No. 3486556)

**PWT-11**

See Page **PWT-11** for full report

*Designated Speaker: Suzanne Bycraft*

### STAFF RECOMMENDATION

*That the staff report dated March 2, 2012 regarding BC Stewardship Regulation Relating to Packaging and Printed Paper, be received for information.*



2.    **FLOOD PLAIN DESIGNATION AND PROTECTION BYLAW 8204, AMENDMENT BYLAW 8876**

(File Ref. No. 10-6060-04-01) (REDMS No. 3477400)

**PWT-17**

See Page **PWT-17** for full report

*Designated Speakers: Lloyd Bie and Wayne Craig*

**STAFF RECOMMENDATION**

*That Flood Plain Designation and Protection Bylaw 8204, Amendment Bylaw 8876 be introduced and given first, second and third reading.*

☐

3.    **RESIDENTIAL WATER METER PROGRAM UPDATE**

(File Ref. No. 10-6650-02) (REDMS No. 3486556)

**PWT-21**

See Page **PWT-21** for full report

*Designated Speakers: Lloyd Bie & Jason Ho*

**STAFF RECOMMENDATION**

*That the options for alternate water utility rate structures that enhance water conservation and equity be brought forward for consideration in 2012 prior to the annual utility rates report.*

☐

4.    **MANAGER'S REPORT**

**ADJOURNMENT**

☐



## Public Works & Transportation Committee

Date: Wednesday, February 22, 2012  
Place: Anderson Room  
Richmond City Hall  
Present: Councillor Linda Barnes, Chair  
Councillor Chak Au, Vice-Chair  
Councillor Linda McPhail  
Councillor Harold Steves  
Absent: Councillor Derek Dang  
Call to Order: The Chair called the meeting to order at 4:00 p.m.

### MINUTES

It was moved and seconded

*That the minutes of the meeting of the Public Works & Transportation Committee held on Wednesday, January 18, 2012, be adopted as circulated.*

**CARRIED**

### NEXT COMMITTEE MEETING DATE

Wednesday, March 21, 2012 (tentative date) at 4:00 p.m. in the Anderson Room

### ENGINEERING AND PUBLIC WORKS DEPARTMENT

1. **NO. 1 ROAD NORTH DRAINAGE PUMP STATION UPGRADE**  
(File Ref. No. 10-6340-20-P.11314) (REDMS No. 3469687)

## Public Works & Transportation Committee

Wednesday, February 22, 2012

---

With the aid of artist renderings, John Irving, Director, Engineering, accompanied by Milton Chan, Senior Project Engineer, reviewed the proposed pump station upgrade. Mr. Irving highlighted that the proposed pump station layout has been designed to keep as low a profile as possible in an effort to preserve view corridors. He commented on the various finishes and materials that may be used to enhance the proposed pump station. Also, Mr. Irving noted that the proposed pump station maintenance access would be appealing and complimentary to the existing trail system.

In reply to queries from Committee, Mr. Irving and Mr. Chan provided the following information:

- the proposed pump functions at a higher efficiency and can pump higher volumes than the existing pump;
- staff are working with a landscape architect in an effort to minimize impact to the Fraser River; and
- the proposed pump station is significantly larger than the Williams Road pump station, however pump stations generally appear similar.

Discussion ensued regarding the potential to install wayfaring signage and Mr. Irving advised that interpretive signage could be accommodated.

It was moved and seconded

***That the design concept for the No.1 Road North Drainage Pump Station Upgrade be endorsed.***

**CARRIED**

### 2. **TOILET REBATE PROGRAM**

(File Ref. No. 10-6650-02) (REDMS No. 3459822)

It was moved and seconded

***That \$100,000 be allocated from the water levy stabilization provision to increase total 2012 Toilet Rebate Program funding to \$200,000.***

**CARRIED**

### 3. **SUSTAINABLE GREEN FLEET POLICY 2020**

(File Ref. No. 10-6000-01) (REDMS No. 3358139)

Suzanne Bycraft, Manager, Fleet & Environmental Programs, reviewed the financial aspect of the proposed policy amendment, noting that a funding gap was identified in the vehicle/equipment reserve. Staff are proposing several amendments to the Green Fleet Policy 2020 in an effort to minimize the financial impact to budgets, while simultaneously stabilizing the reserve.

Ms. Bycraft spoke of how vehicle usage is charged, noting that revenue from vehicles vary based on usage. The proposed policy amendment would allow that any revenue generated as a result of additional use of a vehicle, be populated back to the reserve fund to help offset the cost of that vehicle.

## Public Works & Transportation Committee

Wednesday, February 22, 2012

---

In reply to a query from the Committee, Ms. Bycraft advised that in accordance with the City's current Green Fleet Policy 2020, staff can review alternative acquisition strategies, such as leasing, for vehicles and equipment where it provides best value.

It was moved and seconded

*That Green Fleet Policy 2020 be re-named "Sustainable Green Fleet Policy 2020" and that the policy be amended by replacing the text of the current policy with the text set out in Attachment 4 of the report dated February 7, 2012 from the Director, Public Works Operations.*

**CARRIED**

#### 4. **PUBLIC SPACES RECYCLING PILOT PROGRAM – RESULTS**

(File Ref. No. 10-6370-01) (REDMS No. 3459612)

Ms. Bycraft highlighted that this project provided Richmond with the opportunity to host the first pilot public space recycling program in British Columbia.

In reply to queries from Committee, Ms. Bycraft advised that (i) scavenging remains an ongoing challenge as it often creates a mess, requiring additional time to tidy the area, and damages receptacles; and (ii) many receptacles have openings that can accommodate an arm reaching inside to remove something without damaging the structure.

Ms. Bycraft commented on the future of the public spaces recycling program and advised that staff are fine-tuning modifications to the containers and the instructional/promotional signage in an effort to maximize the program's overall effectiveness. Also, she noted that a full scale implementation of a public spaces recycling program, including both indoor and outdoor environments would have a significant financial impact, therefore a gradual implementation of the program is preferred.

Ms. Bycraft spoke of the development of a more formal recycling program for events such as easier check-in and check-out processes for event organizers. Also, she commented on creating visual consistency of the containers, so that the containers the City lends out for events are similar in appearance to those already in the public realm.

In reply to a query from Committee, Robert Gonzalez, General Manager, Engineering and Public Works, advised that an update on the public spaces recycling program would be incorporated in the annual recycling initiatives update.

Discussion ensued regarding staff implications of the program and Ms. Bycraft advised that it is difficult to determine whether additional staff resources would be required as the program grows. Also, in reply to a query from Committee, Ms. Bycraft advised that findings of the program are shared with other municipalities at the Metro Vancouver Board.

## Public Works & Transportation Committee

Wednesday, February 22, 2012

---

Bruce Rozenhart, Richmond resident, advised that John Challinor, Director of Corporate Affairs, Nestlé Waters Canada, sends his regrets, as he could not attend the meeting. Mr. Rozenhart highlighted that this is the first pilot public space recycling program in British Columbia and he believes it attests to Richmond's commitment to the environment. He commented on Encorp Pacific Canada's future role in the program and noted that there is lots of interest in the program.

Loren Slye, Chair of the Steveston 20/20 Group (formerly the Steveston Group of 8), spoke in favour of the staff report and congratulated Nestlé Waters Canada for their generosity. In reply to a query from the Chair, Mr. Slye remarked that the pilot program was well received by the community and by merchants in Steveston.

It was moved and seconded

- (1) *That the pilot program model be used to further develop and expand public spaces recycling in a graduated manner to City facilities, at City events, and to other City properties, including streetscapes, open spaces and parks; and*
- (2) *That Nestlé Waters Canada be thanked for their sponsorship of the program and for the donation of the recycling containers to the City of Richmond.*

CARRIED

### 5. **4252Q – AWARD OF CONTRACT FOR BATTERY-POWERED ICE RESURFACERS**

(File Ref. No. 10-6000-01) (REDMS No. 3442708)

Ms. Bycraft spoke of the City's current practice for ice resurfacing, noting that one resurfacer is utilized for two sheets of ice and three resurfacers are utilized for six sheets of ice. She highlighted that the City has been very efficient with its equipment and noted that this arrangement is unusual as typically each sheet of ice has its own designated resurfacer.

In reply to queries from Committee, staff advised that the proposed new ice resurfacers would likely not require significant staff training. Also, it was noted that the Richmond Arenas Community Association did not participate in the facilitation of the proposed new ice resurfacers, however an interdepartmental staff team consisting of arena and fleet operations staff were actively involved throughout the entire process.

It was moved and seconded

- (1) *That Contract 4252Q, for the Supply and Delivery of Five Battery-Powered Ice Resurfacers, be awarded to Vimar Equipment Ltd. at a total cost of \$453,430.00, plus applicable taxes and levies; and*

## Public Works & Transportation Committee

Wednesday, February 22, 2012

---

- (2) *That the additional required funding of \$288,738.50 be approved with funding from the Public Works Equipment Reserve and that the 2012 Capital Budget and the 5-Year Financial Plan (2012-2016) be adjusted accordingly.*

CARRIED

### 6A. OTHER ITEMS

(i) *Long-Term Steveston Harbour Plan*

In reply to a query from the Chair, Mr. Gonzalez provided an update on the long-term Steveston Harbour Plan, stating that staff have been actively meeting with the Steveston Harbour Authority and will be able to provide Council with an update in the upcoming months. Also, he stated that staff would be recommending some strategies to expedite the processes.

(ii) *Memorandum of Understanding with the Steveston Harbour Authority*

Mr. Gonzalez advised that a draft memorandum of understanding has been forwarded to the Steveston Harbour Authority and staff anticipate reporting on this matter in conjunction with the Long-Term Steveston Harbour Plan.

Discussion ensued regarding the pay-parking on Steveston Harbour Authority lots and the Chair advised that the Authority has agreed to defer further pay-parking measures on two of their other lots until May 1, 2012. The Chair urged that staff act in a timely manner on this topic, along with the long-term Steveston Harbour Plan. Also, it was noted that event parking be included in the long-term Steveston Harbour Plan.

(iii) *Fraser Basin Council*

The Chair requested that staff provide Council with an update on the Fraser Basin Council's recent activities.

(iv) *Emergency Preparedness*

The Chair made reference to a letter from a Richmond resident regarding earthquake preparedness and insurance (copy on file, City Clerk's Office). It was noted that the letter be forwarded to the Manager of Emergency Programs to provide the author of the letter with information on emergency preparedness.

## Public Works & Transportation Committee

Wednesday, February 22, 2012

---

### 6. MANAGER'S REPORT

#### *(i) Pedestrian Safety Campaign*

Victor Wei, Director, Transportation, advised that ICBC, Richmond Fire-Rescue and Richmond RCMP will be launching a pedestrian safety campaign that will target four key locations in Richmond (No. 1 Road and Blundell Road, No. 3 Road and Cambie Road, No. 3 Road and Saba Road, and Lansdowne Road and Garden City Road) in an effort to educate pedestrians on road safety.

It was noted that pedestrian safety information be forwarded to the Richmond Community Cycling Committee.

#### *(ii) Various Correspondence*

The Chair made reference to a letter from a Richmond resident regarding the safety of the intersection at No. 4 Road and Odlin Road (copy on file, City Clerk's Office). It was noted that information related to the road network of the West Cambie Area would be helpful.

The Chair made reference to a letter requesting a sidewalk that would run along Ash Street from Walter Lee Elementary School to Williams Road (copy on file, City Clerk's Office). Mr. Wei advised that although this request is a high priority, it would not be possible to complete the project in 2012 due to limited funding. However, he noted that the walkway request would be submitted for consideration as part of the 2013 capital budget process.

Discussion ensued regarding the City's protocol related to such requests and Mr. Wei advised that staff are in the process of developing an evaluation criteria to help determine priority.

#### *(iii) BC Building Code Amendments*

The Chair commented on the recent amendments to the BC Building Code and it was noted that staff report to a future Planning Committee meeting what those changes were and how they impact Richmond.

### ADJOURNMENT

It was moved and seconded

*That the meeting adjourn (4:55 p.m.).*

**CARRIED**



## **Public Works & Transportation Committee**

**Wednesday, February 22, 2012**

---

Certified a true and correct copy of the Minutes of the meeting of the Public Works & Transportation Committee of the Council of the City of Richmond held on Wednesday, February 22, 2012.

---

Councillor Linda Barnes  
Chair

---

Hanieh Berg  
Committee Clerk





# City of Richmond

## Report to Committee

**To:** Public Works and Transportation Committee

**Date:** March 2, 2012

**From:** Tom Stewart, AScT.  
Director, Public Works Operations

**File:** 10-6370-00/Vol 01




**Re:** BC Stewardship Regulation Relating to Packaging and Printed Paper

### Staff Recommendation

That the staff report dated March 2, 2012 regarding BC Stewardship Regulation Relating to Packaging and Printed Paper, be received for information.

Tom Stewart, AScT.  
Director, Public Works Operations  
(604-233-3301)

Att 1

FOR ORIGINATING DEPARTMENT USE ONLY		
CONCURRENCE OF GENERAL MANAGER 		
REVIEWED BY TAG 	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
REVIEWED BY CAO 	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>

## Staff Report

### Origin

This report provides information regarding an amendment to the B.C. Environmental Management Act Recycling Regulation to include a stewardship program for Post-Consumer Packaging and Printed Paper in B.C.

### Analysis

#### *Background*

On May 19, 2011, the B.C. Government amended the Recycling Regulation to include the Packaging and Printed Paper Product category (PPP) (Schedule 5). As a result of this amendment, all PPP producers must submit a stewardship plan for the management of these materials to the Ministry of Environment by November 19, 2012 and implement the recycling program by May 19, 2014. The Regulation applies to residential premises and municipal property but *not* industrial, commercial or institutional property. The Regulation requires producers to be 100% responsible for the life cycle management of their products, including collection, processing and marketing for all PPP throughout the province.

To respond to the stewardship plan and implementation requirements, the producers have established one representative agency, Multi-Materials B.C. (MMBC). MMBC is a non-profit agency, the Board of which is made up of representatives of the following groups:

- Retail Council of Canada
- Food and Consumer Products of Canada
- Canadian Federation of Independent Grocers
- Canadian Restaurant and Food Services Association
- Canadian Newspaper Association

#### *Items Included in Packaging and Printed Paper Product Category*

Packaging and printed paper is defined in the regulation as follows:

- Printed paper means “paper that is not packaging, but is printed with text or graphic as a medium for communicating information, and includes telephone directories but does not include
  - (a) other types of bound reference books,
  - (b) bound literary books, or
  - (c) bound text books.”
- Packaging is defined as “a material, substance or object that is:
  - (a) used to protect, contain or transport a commodity or product, or
  - (b) attached to a commodity or product or its container for the purpose of marketing or communicating information about the commodity or product.”

An example list of products that will be included in the new PPP program is included in **Attachment 1**. The listing is broken down into those items already included in typical municipal recycling collection programs vs. new items that will fall under the PPP program definitions. Staff note that beverage containers (except milk containers) are not included since they are already included in the deposit/refund stewardship program.

### ***Current Status***

MMBC is currently in the process of preparing the product stewardship plan for submission to the Province. The plan will require the Province's approval to ensure it meets the intent of the regulation. To assist in this process, MMBC has retained a consultant to prepare a steady state assessment (i.e. "Current System for Managing Residential Packaging and Printed Paper in British Columbia"); and an options document ("Packaging and Printed Paper Stewardship Program Design Options"). The steady state assessment document basically identifies the current collection, processing and marketing infrastructure in the province. The design options document identifies a multitude of options for managing these various aspects of the PPP regulation. While the wide variations provided made it difficult to make meaningful comparisons, the design options centre around four key possibilities:

1. MMBC creates a business branch to provide all the services;
2. MMBC contracts with others to provide the services;
3. MMBC provides financial incentives;
4. Any combination of the above options.

As part of their consultation process, the above documents were presented at a public workshop forum on February 14<sup>th</sup> held in Vancouver. Richmond staff were in attendance. Comments on these two documents were to be submitted by February 28<sup>th</sup>. In particular, municipalities were asked to confirm the information about their programs as contained in the steady state assessment. Richmond staff have provided feedback directly to MMBC on this document. In addition, on behalf of member municipalities, Metro Vancouver provided feedback principally on the PPP Design Options document. Key points highlighted included: proposed criteria for evaluating the various options; clarification of jurisdictional issues relating to collection on municipal lands; potential challenges for consideration; need for municipal autonomy in program delivery with appropriate compensation provided; and additional questions for consideration.

A copy of the steady state assessment or design options reports are available at: Stewardship Agencies of BC - <http://bcstewards.com/mmhc.htm>.

### ***Impact to the City of Richmond***

The impacts of this new regulation to local governments are not known at this time. They will become more evident once the proposed product stewardship plan, which will identify how industry intends to meet the requirements of the regulation, is provided. The impacts could range from MMBC providing all recycling collection services for PPP products, to more of a status quo arrangement, where producers offset municipal costs (or a portion thereof) for providing recycling services. How services are delivered may also vary between urban vs. rural

environments. This is all very subjective at this stage without knowing what the stewards will propose, however, staff will report to Council with more information as it becomes available.

What is known at this stage is that the regulation applies to all products currently collected in the City's blue box (single-family) and blue cart (multi-family) recycling programs, as well as to the PPP products accepted at the Recycling Depot. In addition, packaging materials currently disposed of in the garbage (meat trays and wraps, chip bags, milk cartons, etc.) will also be included, as will PPP materials in public streetscapes, parks, etc. (i.e. public spaces recycling program).

This legislation is quite different from other industry stewardship programs, which have principally focused on items not already included in municipal recycling programs. It is the first legislation of its kind that places total responsibility for PPP management on producers, and requires 100% industry funding. However, because the regulation does not apply to commercial premises, it is interesting to note that there will be some variations. For example, if an individual consumes a cup of coffee from a disposable cup inside a commercial establishment and disposes of it there (or in another commercial establishment), the coffee cup *is not* covered under the regulation. However, as soon as the individual walks outside of the commercial establishment onto a public streetscape or takes the disposable coffee cup home for disposal, the coffee cup *is* captured by the regulation.

Municipalities have agreed to work collectively to ensure that common issues and concerns are understood and addressed. As part of this, Richmond staff have participated in a number of discussions at the Metro Vancouver level on this issue that has resulted in a municipal issues document which has also been provided to MMBC. This document includes issues such as emphasis on the waste reduction hierarchy (i.e. packaging reduction), design for environment principles, maintenance or improvement of service levels, etc. as well as other general issues for consideration of the MMBC group as they move forward on this important legislative initiative.

### *Next Steps*

MMBC will be using the information from the steady state assessment and design options documents to prepare their stewardship plan for submission to the Province by November 19, 2012. The stewardship plan will require provincial approval prior to scheduled implementation on May 19, 2014. Prior to being submitted to the Province, stewardship plans must undergo public consultation. Once the stewardship plan is made available as part of the consultation process, City staff will provide additional information to members of Council on the potential impacts to the City.

A consolidated summary timeline is provided in Table 1 for information. Table 2 lists the specific industry representatives on the Board of MMBC.

**Table 1: PPP Stewardship Plan/Regulation: Timelines and Consultation**

<b>Timeline</b>	<b>Description</b>
May 19, 2011	The government of BC added Schedule 5 to the BC Recycling Regulation
February 14, 2012	MMBC Packaging and Printed Paper Stewardship Program Workshop and Webcast on Steady State Assessment and Design Options Document
February 28, 2012	Comments due to MMBC on above
Spring, 2012	Industry consultation with stakeholders on stewardship plan
November 19, 2012	Deadline to submit Stewardship Plan to the Ministry
May 19, 2014	Program implementation

**Table 2: MMBC Board of Directors**

<b>Name</b>	<b>Title</b>	<b>Company</b>
Allen Langdon	Vice President, Sustainability	Retail Council of Canada
Gary Sands	Vice President	Canadian Federation of Independent Grocers
John Hinds	CEO	Canadian Newspaper Association
Mark von Schellwitz	Vice President, Western Canada	Canadian Restaurant & Foodservices Association
Rachel Kagan	Senior Director, Environment and Sustainability Policy	Food & Consumer Products of Canada

**Financial Impact**

None.

**Conclusion**

The B.C. Government amended the Recycling Regulation to include the Packaging and Printed Paper Product category. This requires that producers implement a stewardship program by May 19, 2014. This is the first legislation of its kind. As the regulation applies to many of the materials currently collected in the City's recycling programs, there will be an impact to the City's programs. Until the draft stewardship plan has been prepared by MMBC, it is not yet clear what those impacts will be. Staff will continue to monitor this issue and report back to Council once the details of the stewardship plan are made available.



**Suzanne Bycraft**  
 Manager, Fleet & Environmental Programs  
 (604-233-3338)

**Attachment 1**

Following is an example list of products that will be included in the new PPP EPR program:

<b>Material Type</b>	<b>Typical Municipal Collection</b>	<b>Items in PPP EPR</b>
<b>Fibre</b>		
Newspaper and Inserts	✓	✓
Magazines/Catalogues	✓	✓
Phone Directories	✓	✓
Office Paper	✓	✓
Corrugated Cardboard	✓	✓
Milk Cartons	x	✓
Tetra-Paks	x	✓
Coffee Cups	x	✓
Other Printed Paper	✓	✓
<b>Glass</b>		
Glass Bottles & Jars	✓	✓
<b>Metal</b>		
Metal Food & Beverage Cans & Tin	✓	✓
<b>Plastics</b>		
Rigid Plastic Bottles & Containers – Types 1,2,4, & 5	✓	✓
Disposable Shopping Bags & Other Film Plastics	x	✓
Take-Out Food Containers	x	✓
Styrofoam Trays & Packaging	x	✓
<b>Asseptics</b>		
Milk Gable-Tops	x	✓





## City of Richmond

## Report to Committee

Engineering and Public Works

**To:** Public Works and Transportation Committee      **Date:** March 1, 2012  
**From:** John Irving, P.Eng., MPA      **File:** 10-6060-04-01/2012-Vol 01  
Director, Engineering  
**Re:** Flood Plain Designation and Protection Bylaw 8204, Amendment Bylaw 8876

### Staff Recommendation

That Flood Plain Designation and Protection Bylaw 8204, Amendment Bylaw 8876 be introduced and given first, second and third reading.

John Irving, P. Eng., MPA  
Director, Engineering

WC:blg

Att. (Flood Plain Designation and Protection Bylaw 8204, Amendment Bylaw 8876)

FOR ORIGINATING DEPARTMENT USE ONLY					
<b>ROUTED TO:</b>		<b>CONCURRENCE</b>		<b>CONCURRENCE OF GENERAL MANAGER</b>	
Law .....		Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>
Building Approvals .....		Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>
Development Applications .....		Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>
Policy Planning .....		Y	<input checked="" type="checkbox"/>	N	<input type="checkbox"/>
<b>REVIEWED BY TAG</b>		YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>
<b>REVIEWED BY CAO</b>		YES	<input checked="" type="checkbox"/>	NO	<input type="checkbox"/>

## Staff Report

### Origin

In September 2008, Council adopted the Flood Plain Designation and Protection Bylaw 8204 which defined the Flood Construction Levels (FCL) requirements within the City of Richmond. Since the adoption of the bylaw, staff have periodically identified areas in the bylaw for improvement and brought appropriate bylaw amendments forward for Council consideration. The proposed amendments support the following Council Term Goals:

*"Demonstrate leadership in and significant advancement of the City's agenda for sustainability through the development and implementation of a comprehensive strategy"; and*

*"Improve City transportation and mobility elements".*

### Analysis

#### General Exemption for Commercial or Industrial Uses

The intent of Section 4.3 (b) of Part 4: General Exemptions in the Bylaw 8204 is to facilitate the ease of wheelchair accessibility to commercial or industrial buildings that are located within 3 m of City roads. Currently, the bylaw requires that the minimum habitable building elevation be equivalent to the highest level of any road that is adjacent to the parcel. Some commercial/industrial buildings front more than one road (i.e. corner lots) whereby the road elevation along each building face may be different. Under this approach the minimum habitable building must be equivalent to the highest adjacent road, which sometimes results in steps being required to access the building interior from some entrances which hinders wheelchair access to these areas. Therefore, staff proposes to amend Section 4.3(b) to require the minimum building elevation to be equivalent to the highest level of the fronting sidewalk (or road if no sidewalk exists) providing pedestrian access adjacent to the building. This amendment would facilitate wheelchair access and a continuous street frontage where commercial/industrial properties front more than one road. A similar exemption is already in place within the Steveston Village Area.

### Financial Impact

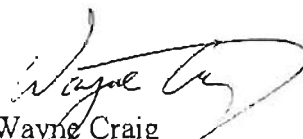
None.

### Conclusion

Staff recommends that Section 4.3 (b) of Bylaw 8204 be amended to permit commercial or industrial buildings with entrances within 3 metres of a City road to be constructed at or above the same elevations as the fronting City sidewalk (or road if no sidewalk exists) adjacent to the parcel.



Lloyd Bie, P. Eng.  
Manager, Engineering Planning  
Engineering Planning  
(604-276-4656)



Wayne Craig  
Program Coordinator - Development  
Development Applications  
(604-247-4625)



**Flood Plain Designation and Protection Bylaw 8204, Amendment  
Bylaw 8876**

The Council of the City of Richmond enacts as follows:

1. Flood Plain Designation and Protection Bylaw 8204, as amended, is further amended by deleting Section 4.3 (b) and replacing with the following:  
  
“4.3(b) the underside of the floor system, or the top of a **pad** supporting any space or room of a building or structure, is at or above the elevation of the fronting City sidewalk existing at the time of application, (or if no sidewalk, the **road**) providing pedestrian access that is adjacent to that parcel.”
2. This Bylaw is cited as “**Flood Plain Designation And Protection Bylaw 8204, Amendment Bylaw 8876**”.



FIRST READING

SECOND READING

THIRD READING

ADOPTED

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CITY OF RICHMOND
APPROVED for content by originating dept. 
APPROVED for legality by Solicitor 

\_\_\_\_\_  
MAYOR

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





# City of Richmond

## Report to Committee

**To:** Public Works and Transportation Committee

**Date:** March 8, 2012

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

**File:** 10-6650-02/2012-Vol  
01

**Re:** Residential Water Meter Program Update

### Staff Recommendation

That options for alternate water utility rate structures that enhance water conservation and equity be brought forward for consideration in 2012 prior to the annual utility rates report.

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

FOR ORIGINATING DEPARTMENT USE ONLY			
<b>ROUTED To:</b>	<b>CONCURRENCE</b>	<b>CONCURRENCE OF GENERAL MANAGER</b>	
Water Services	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>		
<b>REVIEWED BY TAG</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	<b>REVIEWED BY CAO</b>	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>

## Staff Report

### Origin

The City has mandatory and volunteer water meter programs for both single-family and multi-family dwellings. This report documents the current status of these residential water meter programs for Council's information.

### Analysis

#### *Single-Family Water Metering*

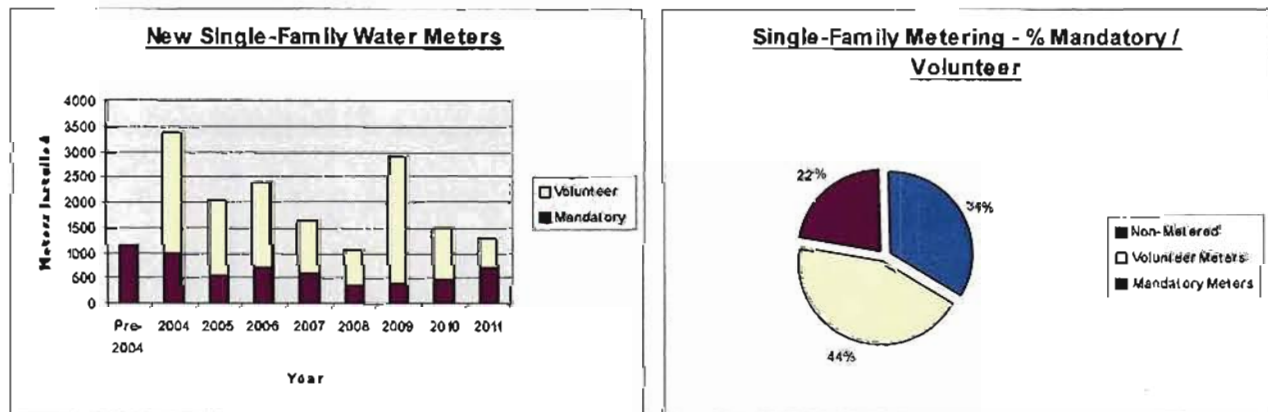
Mandatory water meters for single-family dwellings are required where:

- A building permit application has been submitted for works valued at more than \$75,000;
- The property requires water service maintenance or renewal; and
- The fronting watermain is being upgraded or replaced.

Volunteer single-family water meters are available to any property owner that requests one. The City contracted Neptune Technology Group to manage the Volunteer Single-Family Water Meter Program, which includes program promotion as well as installation, maintenance and reading of water meters. The current three-year contract with Neptune Technology Group concludes at the end of this year. Staff will bring forward a separate report in 2012 identifying options to move forward with volunteer single-family water metering after 2012 for Council's consideration.

Water meters have been installed for 66% of single-family and duplex dwellings (44% through the volunteer program and 22% through the mandatory program). The breakdown of installed volunteer and mandatory single-family water meters is identified in Figure 1. In 2011, approximately 87% of these customers saved money compared to the flat rate, on average saving 31%.

Figure 1: Single-Family Water Metering by Program



### *Multi-Family Water Metering*

Water meters have been mandatory for all new multi-family dwellings since 2005. To date, there have been 55 mandatory water meters installed in multi-family complexes, comprising 2,533 units.

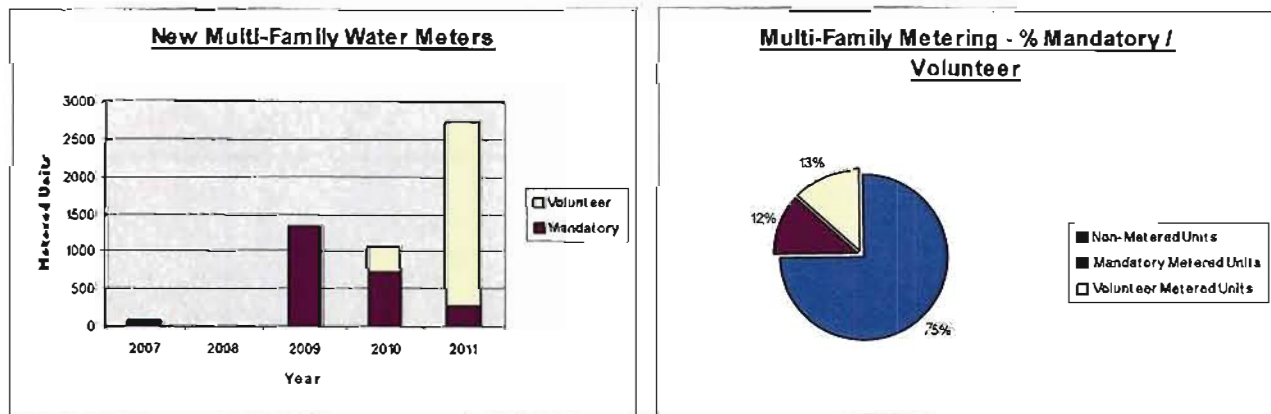
The volunteer metering program for multi-family dwellings, which began in 2010, has continued to receive significant interest. The City has received formal requests from 177 strata complexes to initiate the water metering implementation process, including 55 apartment, 118 townhouse, and 4 hybrid complexes, accounting for 11,803 multi-family dwelling units. 77 strata complexes have passed resolutions and provided final approval to the City for installation of water meters. Table 1 below summarizes the statistics for the volunteer multi-family water meter applications.

Table 1: Multi-Family Water Meter Program Statistics

	Multi-Family Complexes	Dwelling Units
In Process / Under Consideration	81	5,580
Strata Considered and Declined	19	1,291
Strata Approved	77	4,932
Total Applications Received	177	11,803
Volunteer Meters Installed	58	3,679

In total, 25% of multi-family dwellings are currently metered (13% through the volunteer program and 12% through the mandatory program). The breakdown of multi-family water meters is identified in Figure 2.

Figure 2: Multi-Family Water Metering by Program



In 2011, 96% of metered multi-family complexes saved money compared to the flat rate, on average saving 51%. In particular, all of the volunteer multi-family complexes saved money, on average saving 47%. The significant savings is partially attributed to new water-efficient

fixtures (low-flow toilets, washing machines, shower heads, etc.) that are now either required by the City for new construction or strongly encouraged for existing dwellings.

### **Impact on Water Rates**

As significant numbers of residential water customers (currently 49% of all multi-family and single-family residential units combined) move from the flat rate system to water meters, there is an opportunity for the City to additionally enhance water conservation efforts and equity through the water rate structure. Examples of alternate metered rate structures that support water conservation include inclined block rate and seasonal water pricing.

The assumption that average water use in the flat rate group is increasing as lower water consumers volunteer for water meters is supported by the "Water, Sanitary & Drainage Modelling for the Proposed 2041 OCP: Water Modelling" report completed by KWL Associates Ltd. in September 2011. The report indicates that flat rate single-family residential customers use roughly twice as much water for seasonal irrigation (largely lawn watering) compared to metered single-family residential customers. This may be a basis for increasing the flat rate more rapidly than the metered rate which would provide further incentive for flat rate customers to move to the more equitable metered system.

Staff are currently developing a medium term water rate options that considers rate-based water conservation incentives and flat rates that reflect water use in that user group. These options will be brought forward for Council's consideration in 2012 prior to the annual utility rates report.

### **Financial Impact**

None at this time.

### **Conclusion**

The residential water meter programs have continued to be successful, improving the City's sustainability while reducing costs for Richmond residents. Currently, 66% of single-family dwellings and 25% of multi-family dwellings are metered. The volunteer water meter programs have continued to attract significant interest and provide residents with an equitable and environmentally beneficial option for charging water use.



Lloyd Bie, P.Eng.  
Manager, Engineering Planning  
(4075)



Jason Ho, P.Eng.  
Project Engineer  
(1281)

JH:jh