



## **Governance and Priorities Committee Report**

### **For the Meeting of November 5, 2015**

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**To:** Governance and Priorities Committee      **Date:** October 29, 2015  
**From:** Fraser Work, Director of Engineering and Public Works  
**Subject:** Update on the Stormwater Utility Implementation and Proposed Bylaw Amendments for the Stormwater Utility and Rainwater Rewards Program

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### **RECOMMENDATION**

That Council:

1. Direct staff to bring forward amendments to the Sanitary Sewer and Stormwater Utilities bylaw to regulate all businesses who operate under Schedule 'E' in the Stormwater Codes of Practice pollution prevention program for protection of the environment.
2. Direct staff to bring forward an updated Sanitary Sewer and Stormwater Utilities Bylaw Stormwater Fee to charge "Low Density Residential" properties the 'Local' frontage rate for all frontage lengths, and an update to the Street/Sidewalk Cleaning Factor rate for 'Local' frontages.
3. Direct staff to bring forward an amendment to the Sanitary Sewer and Stormwater Utilities bylaw Rainwater Management Credit Table for Multi-Family Residential, Civic Institutional and Commercial/Industrial properties to:
  - a. Treat roof impervious area and surface impervious area equally.
  - b. Lower minimum size of treated area to 10%, and adjust size increments to 5%.
4. Direct staff to investigate options to eliminate permit fees for projects completed under the Rainwater Rewards program.
5. Direct staff to bring forward minor housekeeping updates to the Sanitary Sewer and Stormwater Utilities bylaw as outlined in this report.

### **EXECUTIVE SUMMARY**

The purpose of this report is to provide Council with an update on the implementation of the Stormwater Utility and to seek direction regarding proposed bylaw amendments for the Stormwater Utility and Rainwater Rewards Program.

Council adopted the Stormwater Utility and the Rainwater Rewards credit program in July 2014. In January 2015 the pilot Rainwater Management Rebate Program was adopted.

The new stormwater utility is a user-pay system, and charges are based on property characteristics, including impervious area, frontage length and street classification for street cleaning fees, intensity

factor based on BC Assessment use codes, and participation in the City's Code of Practice pollution prevention program.

The Rainwater Rewards program has been adopted to offer rebates and/or credits to property owners who manage rainwater more sustainably on their property through installation of rain gardens, cisterns, bioswales, permeable paving, green roofs and rain barrels, and promotes sustainable rainwater and stormwater management through development of an education program.

The Stormwater Utility and Rainwater Rewards program launched in May 2015, and the first stormwater bills will be sent in fall 2016. Property owners have received property assessment notices outlining what to expect as the utility is introduced, components of the fee and estimated charges for their property. Hundreds of inquiries were generated by the mail out, prompting a review of several policies related to the stormwater utility.

The recommendations in this report made by the Interdepartmental Stormwater Utility team are in response to public feedback and to address necessary bylaw updates. Specific recommendations have been made on the following:

- Stormwater Codes of Practice
- Street and Sidewalk cleaning factor fee
- Rainwater Rewards credit program
- Elimination of permit fees for Rainwater Rewards work
- Minor housekeeping updates to the Sanitary Sewer and Stormwater Utilities bylaw

## **PURPOSE**

The purpose of this report is to provide an update on the implementation of the Stormwater Utility and to seek Council direction on proposed bylaw amendments for the Stormwater Utility and Rainwater Rewards Program.

## **BACKGROUND**

In July 2014, Council adopted the Sanitary Sewer and Stormwater Utilities Bylaw, including the Stormwater Utility and Credit Program. In January 2015, Council adopted the pilot Rainwater Management Rebate Program as proposed in the report dated January 7, 2015, for the period of April 2015 to December 15, 2017, and directed staff to report back to Council after the pilot project is complete. The Credit and Rebate programs are jointly referred to as the Rainwater Rewards program.

The new stormwater utility is a user-pay system, distributing costs based on the property's impact on the stormwater system. The annual stormwater utility fees are based on the following property characteristics:

- Impervious areas/hard surfaces such as roofs, driveways and parking lots.
- Street frontage length and street classification for street and sidewalk cleaning fees.
- Property type based on BC Assessment use codes.
- Participation in the City's Stormwater Codes of Practice pollution prevention program.

The Rainwater Rewards program offers incentives to property owners who manage rainwater more sustainably on their property through installation of rain gardens, cisterns, bioswales, permeable

paving, green roofs and rain barrels and promotes sustainable rainwater and stormwater management through development of an education program. Incentives offered include one-time rebates (\$35-\$1,500) and an annual credit of 10% for low density residential properties, and credits ranging from 2.5-50% off the annual stormwater bill for all other property types. Using sustainable rainwater management practices will help to improve stormwater quality, reduce peak stormwater flows and reduce the overall quantity of water entering the municipal stormwater system.

## **ISSUES & ANALYSIS**

### **Stormwater Utility Implementation Update**

The Stormwater Utility and Rainwater Rewards program launched in May 2015. To communicate the changes to stormwater billing and introduce the new incentive program, information packages were mailed with property assessment notices to all property owners in the City. The notices included an update on what to expect as the utility is introduced, including components of the fee and estimated charges for their property, to be billed annually, starting in the fall of 2016, along with information about the credit and rebate program.

Staff have developed the following resources, found on the City website, to assist property owners in participating in the Rainwater Rewards incentive program:

- Rainwater Management Standards "Do-It-Yourself for your Home" for simpler installations on low density residential properties.
- Rainwater Management Standards "Professional Edition" for more complicated low density residential projects and for all multi-family, civic/institutional and business properties.
- "Rainwater Management Planner" online tool based on the VicMap platform that allows property owners to review their property characteristics, and to virtually add a rainwater management method to their property to see the rebate and/or credit available.

Between May 1<sup>st</sup> and September 30<sup>th</sup>, 2015, staff received hundreds of inquiries via email, phone and visits to City Hall, generating over 435 calls for service. Staff held five open-house "Ask an Expert" drop-in sessions for property owners to speak one-on-one with staff about their assessment notices or ideas for implementing the Rainwater Rewards program on their property. These sessions were attended by 115 property owners. Staff also attended two community events to promote the program, and interacted with 80 residents.

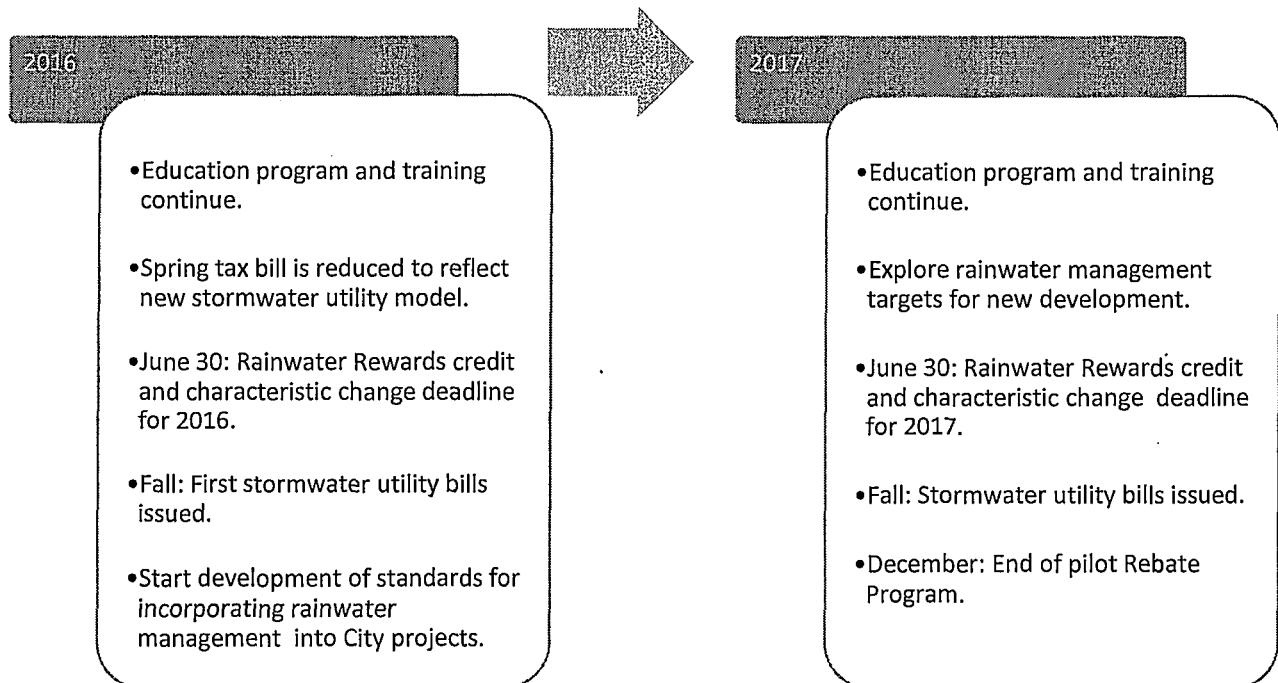
Public inquiries and feedback were related to following subjects:

- Inquiries and applications for the Rainwater Rewards program
- Applications for property characteristic changes
- Clarification on bill amount
- Concern about bill amount
- Concern about bill calculation method and the move to a utility

Priority has been given to inquiries that are more time sensitive, including applications for new projects under the Rainwater Rewards program. Staff are currently working through credit applications for existing rainwater management methods, and requests for property characteristic changes, to ensure all changes have been reviewed and updated prior to the 2016 billing.

As of September 30, 2015, there have been 26 applications for the rainwater rewards program, and 61 applications for characteristic changes.

The program focus for 2016 includes a continuation of promotion of the Rainwater Rewards program through education and training, integration of rainwater management design guidelines into City projects on roads, rights of ways, and on City facilities and to explore the potential of adopting rainwater management targets for new developments. The timeline below outlines the program's next steps and timing of deadlines and billing.



### **Proposed Changes Bylaw Amendments for the Stormwater Utility and Rainwater Rewards Program**

The intent of the Stormwater Utility is to distribute costs in a fair and equitable manner, relating a property's demand and impact on the system to the fees. However, the utility model is complex, and it was impossible to anticipate all potential impacts of the new model. All feedback since the launch in May 2015 was collected and reviewed by the Interdepartmental Stormwater Utility team. The following recommendations have been proposed by the team in response to the feedback.

- 1. Direct staff to bring forward amendments to the Sanitary Sewer and Stormwater Utilities bylaw to regulate all businesses who operate under Schedule 'E' in the Stormwater Codes of Practice pollution prevention program for protection of the environment.**

Section 24 of the Sanitary Sewer and Stormwater Utilities bylaw requires any businesses listed in Schedule "E" (listed below) to operate their business in accordance with the conditions as outlined in the Codes of Practice (the Codes) to obtain approval to discharge water into the municipal stormwater system.

The City has adopted Codes of Practice for the following industries, found in Schedule 'E' of the bylaw:

1. Construction and Development Activities

2. Automotive Operations and Parking Lot Operations
3. Recreation Facilities
4. Outdoor Storage Yard Operations
5. Recycling Operations

Compliance with the Codes is required as a stormwater source control measure to reduce the amount of contaminants discharged to the municipal stormwater system and to preserve and protect our local watersheds and marine receiving environment. Examples of measures required include installation of catch basins or stormwater rehabilitation units to capture contaminants, regular maintenance of those systems, spill prevention and response measures and record keeping. The City's Stormwater Quality program enforces the stormwater quality section of the bylaw, including the Codes of Practice.

Of late, Stormwater Quality program resources have focused on registering and enforcing the Automotive Operations and Parking Lot Operations Code. With the introduction of the Stormwater Utility, a fee of \$152.97 will be charged to these properties regulated under the Codes of Practice to fund administration of the program.

Under the new Stormwater Utility, Code of Practice fees have currently been assessed to all properties with 10 or more parking spaces, and properties operating as an automotive business, regardless of connection status. However, in a review of stormwater utility fees for properties not connected to the City's stormwater system, it was identified that compliance is required only as a condition of discharge into municipal infrastructure. Therefore properties not connected are exempt from the Codes and are not required to employ any pollution prevention measures, which may result in the direct discharge of pollutants to the shoreline and waterways, with no spill response materials required to be on-site, or spill reporting requirements.

Currently there are 19 properties that are not connected to the municipal stormwater system that have 10 or more parking spaces.

The Codes of Practice have been adopted under the authority of Section 8(3)(a) of the *Community Charter*, which states:

*8(3) A council may, by bylaw, regulate, prohibit and impose requirements in relation to the following:*

*(a) municipal services;*

This means the City cannot currently regulate any businesses listed in Schedule "E" that do not discharge to the municipal stormwater system. As the purpose of the Codes of Practice program includes protection of the marine receiving environment, it is recommended that the Bylaw be amended to include all properties identified in Schedule "E", regardless of connection status.

This change can be adopted under Section 8(3)(j) of the *Community Charter*, which states:

*8(3) A council may, by bylaw, regulate, prohibit and impose requirements in relation to the following:*

*(j) protection of the natural environment;*

Including all properties, regardless of their connection status to the municipal stormwater system, will require compliance with the Codes of Practice, and will require pollution prevention measures to be in place for protection of the marine receiving environment.

**2. Direct staff to bring forward an amendment to the Sanitary Sewer and Stormwater Utilities Bylaw Stormwater Fee to charge “Low Density Residential” properties the ‘Local’ frontage rate for all frontage lengths, and an update to the Street/Sidewalk Cleaning Factor rate for ‘Local’ frontages.**

Charges for the “Street/Sidewalk Cleaning Factor” of the stormwater utility are based on two components, length of property frontage, and street classification, which reflects the level of street cleaning service provided. Staff received many inquiries from low density residential property owners on corner lots or lots with multiple frontages due to an increase in fees based on this factor, in many cases a doubling of fees as compared to a neighbour with a similar property.

The following were considered in the review of this charge:

1. Low density residential (LDR) properties all have similar impact to roads regardless of the number of frontages the property may have.
2. LDR corner lots on arterial or collector streets generally do not benefit from the increased traffic, and may have lower property values as a result of the location.
3. LDR properties with multiple frontages may benefit from the dual frontage, including multiple access points, and in residential areas, may have higher property values.

To address the imbalance in charges related to street cleaning for low density residential lots with multiple frontages, it is recommended that the rate for “Local” streets be applied to the entire length of all frontages for all LDR properties, regardless of the type of street the property fronts.

Using the “Local” frontage rate for all low density residential frontages will result in lost revenue of approximately \$150,000 at the current rate of \$1.08/meter. To offset this loss, it is recommended that the Local fee per metre be amended from \$1.08 to \$1.57. While this rate change may appear significant, the impact to the average bill in each tier is modest, with 88% of properties projected to receive a bill that will either be a decrease or an increase of no more than \$5 than the estimate they received in the mail. The low density residential properties will see a decrease of 3% to the average bill because this tier is no longer paying downtown, arterial or collector rates. Multi-family residential properties will see an increase of 2% to their average bill. Civic/institutional and commercial/industrial properties will see an increase of 1% to their average bill because they are still paying the higher arterial, collector and downtown rates, plus an increased local rate in some cases.

**3. Direct staff to bring forward an amendment to the Sanitary Sewer and Stormwater Utilities bylaw Rainwater Management Credit Table for Multi-Family Residential, Civic Institutional and Commercial/Industrial properties to:**

**a. Treat roof impervious area and surface impervious area equally.**

The Rainwater Rewards credit program was designed to favour rainwater management treating ground surface runoff over roof runoff, as improvements to water quality was identified as a higher priority for the City than reducing volumes of water entering the stormwater system, and ground surface water runoff generally contains higher levels of contaminants. This was identified as a priority in the results of the Rainwater Credit Program Case Studies, presented to Council in July 2014.

However, as an unintended consequence of this model, it was determined that properties that have no ground surface runoff to treat (for example, many downtown buildings that are built to the

property line), are only eligible for a maximum credit of 20%, even when 100% of the site runoff is treated. Conversely, a property such as a parking lot, with no roof impervious area, is only eligible for a maximum credit of 30% when 100% of the site runoff is treated.

In addition, when properties have a combination of ground surface and roof surface runoff to treat, it would be possible to achieve a large credit by treating only a small portion of the impervious area. For example, if 90% of a property is covered by a structure, with 10% remaining for parking, a 30% credit could be achieved by treating only 9% of the property's total impervious area (90% of the ground surface runoff).

Because the stormwater utility fees do not differentiate between surface or roof area, it is possible that the Rainwater Rewards program could be exploited when basing the available credits based on origin of the runoff. It is therefore recommended that the credit program for multi-family, civic/institutional and commercial/industrial, be amended as follows:

- Equal credits for cisterns plumbed for indoor use, infiltration chambers, rain gardens, bioswales, permeable pavement, and green roofs, regardless of runoff origin, as the City's Rainwater Management Standards for these methods have all been designed to achieve the same rainfall target of 32 mm/24 hours.
- Reduced credits available for cisterns plumbed for irrigation use, and cisterns not plumbed (hand use only), as they generally do not have dedicated use during times of heaviest rainfall.
- No change to the Education credits.

**b. Lower minimum size of treated area from 25% to 10%, and adjust size increments to 5%.**

An objective identified in the public consultation held in fall 2013 was to increase accessibility and scalability of the credit program. Specifically for existing buildings, it can often be difficult to retrofit for rainwater management in the absence of sufficient surface area or structural capacity.

Lowering the minimum treated area from 25% of the site area to 10% would increase the accessibility of the program for more properties who wish to manage rainwater, while adjusting the increments to 5% would more closely correlate the area treated to the credit awarded.

**4. Direct staff to investigate options to eliminate permit fees for projects completed under the Rainwater Rewards program.**

City approval processes were identified as a potential barrier to the Rainwater Rewards program in the public consultation as well as in the Rainwater Credit Program Case Studies. In response, Council adopted amendments to the Official Community Plan and Zoning Regulation Bylaw to streamline regulations and to encourage participation in the incentive program.

To further streamline the approval process for the Rainwater Rewards program, the Interdepartmental Stormwater Utility team has recommended that options be investigated for plumbing and electrical permit fees to be eliminated when work is being specifically to qualify for the Rainwater Rewards program. No changes are recommended for any rainwater management work being done as part of a larger project or development.

A preliminary review of the options available includes:

- Requiring any Rainwater Rewards work be required to obtain an Engineering permit under the program in lieu of a Plumbing or Electrical permit, and have all reviews and inspections be coordinated under the one permit.
- Amending the fees sections in the associated bylaws to eliminate the fees associated with the permits, while still requiring Plumbing and Electrical permits to be obtained.

Further analysis is required to assess the potential fee implications, and a legal review is needed to determine the necessary bylaw amendments.

**5. Direct staff to bring forward minor housekeeping updates to the Sanitary Sewer and Stormwater Utilities bylaw.**

The proposed amendments are of a housekeeping nature, and do not change the intent of the bylaw.

- Schedule "A" 11 (b) - Change table title "Rainwater Management Credit Table – Multi-Family Residential, Civic/Industrial and Commercial/Industrial Properties" to "Rainwater Management Credit Table – Multi-Family Residential, Civic/Institutional and Commercial/Industrial Properties".
- Schedule "A" 11 (c) - addition of the requirement of green roofs to be designed and installed under the supervision of a Professional Engineer and/or Architect.
- Update Schedule "F" Code of Practice Registration Form to address typos and provide clarification on the registration form details, such as referring to the current bylaw, 'Applicant' vs. 'Company', 'Operator' vs. 'Owner' and identifying sections for 'office use only'.

## **OPTIONS & IMPACTS**

**Option 1: That Council direct staff to move forward with the following recommendations: (recommended)**

1. Direct staff to bring forward amendments to the Sanitary Sewer and Stormwater Utilities bylaw to regulate all businesses who operate under Schedule 'E' in the Stormwater Codes of Practice pollution prevention program for protection of the environment.

This amendment will increase the number of properties regulated under the Codes of Practice by 19, which the program does have the capacity to manage. Properties regulated under the Codes will be charged a flat fee of \$152.97 to cover the costs of administering the program. Properties must comply with the requirements in the Codes, which include but are not limited to:

- Prohibitions of discharge of wastewater other than rainwater
- Installation and maintenance of stormwater rehabilitation units
- Spill prevention and response requirements
- Record keeping of maintenance records and spills

2. Direct staff to bring forward an amendment to the Sanitary Sewer and Stormwater Utilities Bylaw Stormwater Fee to charge "Low Density Residential" properties the 'Local' frontage rate for all



frontage lengths, and an update to the Street/Sidewalk Cleaning Factor rate for 'Local' frontages.

Changing the rate structure for the Street and Sidewalk Cleaning Factor for low density residential properties will moderate the fee increase for properties with multiple frontages. The remainder will be redistributed amongst all properties with local frontages, 88% of properties are projected to receive a bill that will either be a decrease or an increase of no more than \$5 than the estimate they received in the mail. This results in a 3% decrease to the average low density residential property, a 2% increase to the average multifamily residential property and a 1% increase to the average civic/institutional and commercial bill.

3. Direct staff to bring forward an amendment to the Sanitary Sewer and Stormwater Utilities bylaw Rainwater Management Credit Table for Multi-Family Residential, Civic Institutional and Commercial/Industrial properties to:
  - a. Treat roof impervious area and ground impervious area equally.
  - b. Lower minimum size of treated area to 10%, and adjust size increments to 5%.

These changes will increase the credits available to properties with one type of impervious area (roof or ground surface), eliminate the potential for properties to exploit the Rainwater Rewards program and increase the accessibility of the program to properties that have limited space to treat rainwater runoff.

4. Direct staff to investigate options to eliminate permit fees for projects completed under the Rainwater Rewards program.
5. Direct staff to bring forward minor housekeeping updates to the Sanitary Sewer and Stormwater Utilities bylaw.

## **Option 2: Do not direct staff to move forward with recommendations**

### *2015 – 2018 Strategic Plan*

Option 1 supports Objective 11 of the Strategic Plan: Steward water systems and Waste streams responsibly.

### *Impacts to 2015 – 2018 Financial Plan*

There is no impact on the 2015-2018 Financial Plan as the proposed changes only shift costs between categories of the fee structure. Waiving of permit fees may have an impact on the financial plan; however at this point the magnitude of this has not been determined.

### *Official Community Plan Consistency Statement*

The recommendation is consistent with Goal 11 of the City's Official Community Plan, specifically the following:

11 (d) That an integrated approach to rainwater is established and maintained in coordination with watershed planning.

11.20 Promote sustainable site design that reduces peak runoff volumes and rainwater contaminants through elements such as on-site retention, pervious surfaces, green space, and plantings.

## CONCLUSIONS

The proposed recommendations have been made by the Interdepartmental Stormwater Utility team to address concerns and feedback of property owners, improve fairness and accessibility of the Stormwater Utility and Rainwater Rewards incentive program, as well as address minor housekeeping updates to the Sanitary Sewer and Stormwater Utilities bylaw.

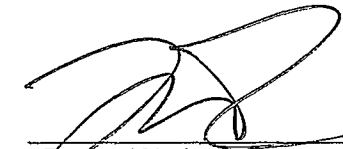
Respectfully submitted,



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Stormwater Management  
Specialist



Jas Paul  
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Fraser Work  
Director, Engineering and  
Public Works

Report accepted and recommended by the City Manager:

  
Date: October 30, 2015

### List of Attachments (if relevant)

Appendix A - Proposed Rainwater Rewards Credit Table  
Appendix B - Sanitary Sewer and Stormwater Utilities Bylaw