

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 1, Report No. 10, of the Finance, Administration and Audit Committee, which was adopted, as amended, by the Council of the City of Vaughan on November 21, 2017, as follows:

By receiving Communication C6 from the Deputy City Manager, Public Works and the Director of Environmental Services, dated November 20, 2017.

1 STORMWATER CHARGE IN RURAL AREAS AND FEEDBACK FROM STORMWATER CHARGE IMPLEMENTATION

The Finance, Administration and Audit Committee recommends:

- 1) That the recommendation contained in the following report of the Deputy City Manager of Public Works and the Director of Environmental Services, dated November 6, 2017, be approved;
- 2) That staff review the application of the stormwater charge as implemented for commercial and agricultural properties in rural areas and bring forward recommendations for refinements as part of the 2018 Budget process, including the necessary off-setting adjustments to other property categories;
- 3) That Communication C2, presentation material entitled, “*Stormwater Charge*”, be received;
- 4) That the following deputations be received:
 1. Mr. Richard Lorello, Treelawn Boulevard, Kleinburg;
 2. Ms. Lucy Raffaele, on behalf of Mr. Riccardo Bozzo, Hwy 27, Kleinburg, who submitted a video deputation;
 3. Mr. Antonio DiBenedetto;
 4. Mr. Bob Moore, Direct Services Limited, Chester Avenue, Newmarket, on behalf of YRCC 1123; and
- 5) That Communication C1 from Ms. Heidi Kreiner-Ley, Bathurst Street, Richmond Hill, dated November 2, 2017, be received.

Recommendation

The Deputy City Manager of Public Works and the Director of Environmental Services, in consultation with Director of Financial Services/Deputy City Treasurer, recommends:

1. That Council receives this report for information.

Contribution to Sustainability

The stormwater charge directly supports *Green Directions Vaughan* Goal 1: To significantly reduce our use of natural resources and the amount of waste we generate. Furthermore, it directly adds resolution to the following objective:

- Objective 1.3: To support enhanced standards of stormwater management at the City and work with others to care for Vaughan’s watersheds

Economic Impact

There is no economic impact with the adoption of this report.

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 1, Finance Report No. 10 – Page 2

Communications Plan

Not applicable

Purpose

To respond to New Business at the Finance, Administration and Audit Committee on September 20, 2017, and inform Council of the property categories used to assign the stormwater charge for rural properties, how these were developed and the resident feedback to the stormwater charge in the first year of implementation.

Background - Analysis and Options

Climate change is having an effect on the frequency and intensity of storms.

Under a changing climate, scientists have indicated that meteorological conditions across Ontario are expected to change, in specific the frequency of small extreme precipitation events is anticipated to increase. Scientists have used Intensity Duration Frequency (IDF) curves which are meteorological based tools used to design drainage infrastructure to show that storms are increasing. Studies such as the 2011 SENES report 'Toronto's Future Weather and Climate Driver Study' showed that the extreme daily rainfall is expected to rise to 155.4 mm in 2040-2049 from 80 mm in 2000-2009 in Vaughan.

The City's existing stormwater infrastructure is being challenged at managing the different storm event patterns.

The City of Vaughan has experienced flooding, most notably in the Thornhill area (Blocks 1, 8, 9 and 16) with ten or more flood calls in the past ten (10) years within each block. Extensive flooding also occurred on August 9, 2005 and on August 21, 2012 City-wide which resulted in road closures. In addition, open space areas and river valleys are becoming more susceptible to erosion as weather patterns change and the intensity of storm water moving through these areas increases.

Council approved implementation of a stormwater charge to fund a new stormwater program, displaying leadership in proactively mitigating the effects of climate change.

Prior to the implementation of the stormwater charge, the stormwater program had been funded by wastewater rates, property taxes and the gas tax. The funds were inadequate to provide a level of service which could help mitigate the effects of climate change and long term asset management.

The stormwater charge is being used to fund new capital projects to reduce flooding and erosion risks

With the implementation of the stormwater charge and a stable revenue stream, staff are implementing the stormwater program. The City is starting capital projects to help mitigate the risk of flooding and erosion in known problem areas in the City. In the 2017 Budget, Council approved the retrofit of the Rainbow creek outfall and Ashbridge Pond operational enhancement. These projects will address a low-lying area in Woodbridge (Block 43). The stormwater charge has also allowed for the number of stormwater pond cleanouts to double, increased monitoring of storm ponds and increased cleaning and inspection of stormwater pipes and other infrastructure. The stormwater charge is also funding a portion of the Edgely Pond project in the VMC. Other stormwater capital improvement projects initiated in 2017 include: the Clarence Street stormwater

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 1, Finance Report No. 10 – Page 3

infrastructure improvements, Pine Valley outfall improvement, and King-Vaughan Road culvert replacements. Review and monitoring of erosion prone sites and development of a program to proactively mitigate and manage the City's risk and liability is under development.

The stormwater charge is applied to properties based on the estimated amount of run-off of stormwater

The City of Vaughan uses the following categories for the application of the stormwater charge:

- Residential – low (single detached), medium (townhouse) and high (multi-res)
- Non-residential – small (less than one acre), medium (between one and 10 acres) and large (more than 10 acres)
- Agricultural/Vacant

These categories were chosen as they are representative of the City's land use and are typical of what other municipalities have done. The 2015 MPAC data was used to put the properties into the categories above. From the MPAC data, the City could calculate the number of properties in each category and determine the land mass assigned to each category. This information is critical for determining the amount of the stormwater charge for each category.

The stormwater run-off used for each category above was taken from the City's Engineering Design Standards. As land is developed in Vaughan, the developer must meet the engineering design criteria for stormwater run-off for each property type. City staff determined that using stormwater run-off was the most equitable and consistent factor for determining the charge as the engineering design standards are used consistently across the City.

Notwithstanding the above, City Council directed staff to exempt certain property types including government agencies, places of worship, schools and owned by non-profit organizations. These exemptions are consistent with the exemptions for the application of the tax levy.

The calculations of the stormwater charge consider property type, stormwater run-off, land mass for each category and number of properties in each category.

The property types described above were determined by examining all property types in the MPAC data and grouping them into broader categories. The non-residential or Industrial/Commercial/Institutional (I/C/I) were divided into small, medium and large to more equitably distribute the stormwater charge among these properties. Also, the establishment of a large category of more than 10 acres is consistent with other municipalities.

Once the number of categories was determined, the number of properties and the land area was compiled and calculated. Using the stormwater run-off coefficient for each property category, the impervious area was calculated. The share of impervious area was applied to the budget needed for the stormwater program and a dollar value was assigned to each property type. The stormwater charge was developed by dividing the number of properties in each category by the dollar value assigned to each property category.

Rural Properties in the City of Vaughan fall into three of the Property Categories: Agricultural/Vacant, Residential and Industrial/Commercial/Institutional (I/C/I).

City Council was particularly interested in the application of the annual charge for rural areas, as identified in the New Business at FAA on September 20, 2017. Properties located in the rural areas in Vaughan tend to fall into one of three categories on the assessment roll – agriculture/farm, residential and/or I/C/I. While possibly still zoned as agricultural, properties that

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 1, Finance Report No. 10 – Page 4

are assessed and classified in the I/C/I category are those where the use of the land is a non-res/non-farm use and will be assessed as such. Consequently, the I/C/I stormwater charge will be charged as a result in line with the assessment roll.

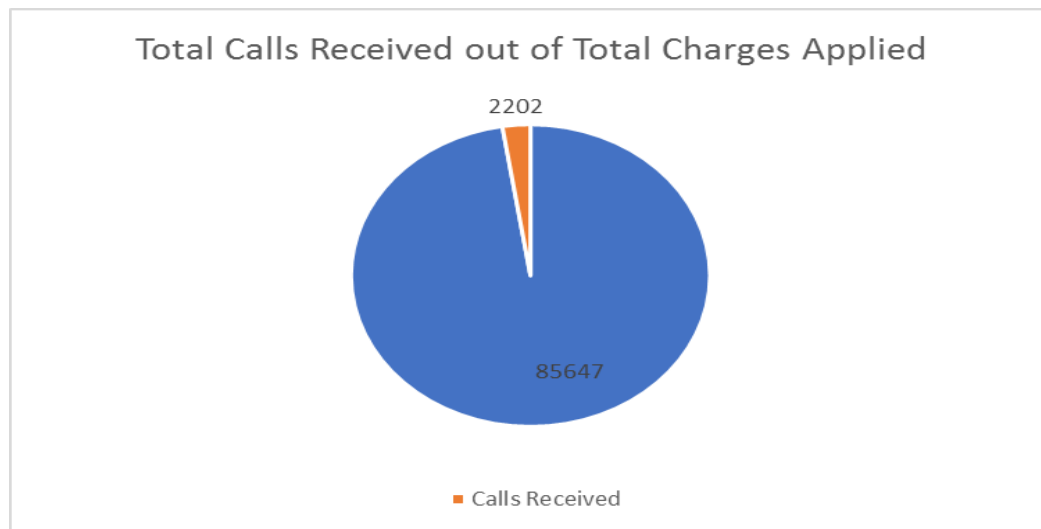
The implementation of the stormwater charge in 2017 has been successful, with few inquiries and/or complaints.

The stormwater charge appears on an Alectra bill (water/wastewater, electric and/or stormwater) and is an annual charge which appeared between June and September.

Environmental Services worked with Finance, Access Vaughan and Alectra to establish three tiers of customer service to respond to inquiries about the Stormwater charge. Frequently asked questions were developed with the assistance of Corporate Communications to ensure consistent messaging was delivered at all levels of customer service.

Tier 1 consisted of Access Vaughan and Alectra customer service representatives handling routine inquiries. Tier 2 consisted of Environmental Service subject matter experts who addressed more technical questions or questions that were unable to be addressed by the tier one representatives. Individuals who were dissatisfied with the second tier customer service response were asked to document their concern in writing for review by the third tier. Tier 3 consisted of management staff from Finance and Environmental Services who reviewed each request individually and provided a follow-up letter back to the individual.

The following chart illustrates the total calls received out of the total charges which were applied:

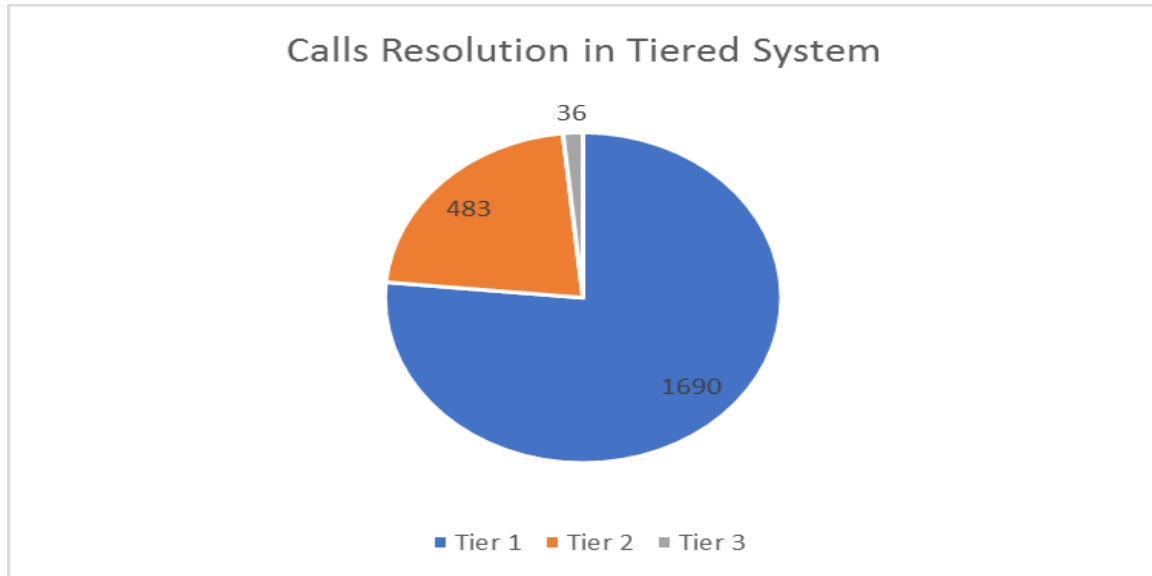


CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 1, Finance Report No. 10 – Page 5

The following chart illustrates the total number of calls received broken into Tier 1, 2 and 3:



Alectra, Access Vaughan and Councillor offices received 2,202 calls related to the 85,647 accounts that received a stormwater charge. This represents 2.57% of all charges applied across the City. Of the 2,202 calls received, 483 went to Tier 2. Most of the calls were requests for information about the charge and were satisfied with the answer, some calls were confused about the messaging regarding the charge and needed further explanation, and 36 of the calls escalated to Tier 3 review of the charge. Of the 36 calls which were examined at Tier 3, two of the charges were determined to have been incorrectly applied and 34 were determined to have been correctly applied.

The following chart shows the number of complaints by property type which reached Tier 3:

Property Type	Number of complaints
Non-residential – large	7
Non-residential – medium	2
Agricultural/Vacant	25
Residential – Low	2
Total	36

The number of complaints that escalated to Tier 3 review represents 1.6% of all calls made to the City.

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

The stormwater charge supports the Term of Council Priorities:

- Continue to cultivate an environmentally sustainable city
- Meet Council tax rate targets (no more than 3%)
- Invest, renew and manage infrastructure and assets

CITY OF VAUGHAN

EXTRACT FROM COUNCIL MEETING MINUTES OF NOVEMBER 21, 2017

Item 1, Finance Report No. 10 – Page 6

Regional Implications

There are no Regional implications with the adoption of this report.

Conclusion

The stormwater charge is a dedicated funding source applied to seven property categories across the City of Vaughan. These charges are based on the stormwater run-off expected from the properties. The stormwater charge was implemented between June and September 2017 with few calls and/or complaints from residents and businesses.

Attachments

None

Report prepared by:

Jennifer Rose, Director, Environmental Services, ext. 6116
Chris Wolnik, Manager, Wastewater and Stormwater Services, ext. 6152



C <u>6</u>
Communication
COUNCIL: <u>Nov 21/17</u>
FAA Rpt. No. <u>10</u> Item <u>1</u>

DATE: November 20, 2017

TO: Mayor and Members of Council

FROM: Stephen Collins, Deputy City Manager- Public Works
Jennifer Rose, Director of Environmental Services

RE: **Communication: Finance, Administration and Audit Committee (November 6, 2017 – AM Meeting) Report # 10, Item #1 - Stormwater Charge in Rural areas and Feedback from Stormwater Charge Implementation**

Purpose

To respond to the recommendation at the Finance, Administration and Audit Committee on November 6, 2017, that staff review the application of the stormwater charge as implemented for large commercial and agricultural properties in rural areas and bring forward recommendations for refinements as part of the 2018 Budget

Background

Staff have been working, over the past couple of weeks, to provide a recommendation to Council which addresses the above recommendation to review the application of the stormwater charge for large commercial and agricultural properties in rural areas.

Staff request that the recommendations be provided in a report to the Finance, Administration and Audit Committee on January 22, 2017. A recommendation in this report will include a referral to the January Special Council Meeting for the 2018 Budget.

Respectfully Submitted

Stephen Collins, P.Eng
Deputy City Manager, Public Works

Jennifer Rose
Director, Environmental Services

From: Heidi Kreiner-Ley <heidi2020@sympatico.ca>
Sent: November-02-17 2:08 PM
To: clerk; Bellisario, Adelina; McEwan, Barbara
Cc: heidi kreiner-ley
Subject: Re: LETTER OF DEPUTATION - Nov 6/17 Finance Comm - 11730 Keele Street ANNUAL STORMWATER CHARGE
Attachments: Pennard Site Plan.pdf; Alectra Inv 11730 Keele Street.pdf
Importance: High

TO: Barbara McEwan, CITY CLERK and to Adelina Bellisario

I am providing this letter to the City Clerk (Clerk@Vaughan.ca and Adelina.Bellisario@Vaughan.ca) to be included in the November 6, 2017 9:30 am Finance, Administration and Audit Committee Meeting as a Deputation for Item #1 Storm Water Charges in Rural Area and Feedback on Stormwater Charge Implementation and to be further spoken to at the Evening Meeting at 7:00 pm, if required)

Good day Members of the Finance, Administration and Audit Committee, Councillors and Staff:

Further to my meeting with Councillor Marilyn Iafrate and Jennifer Rose, of Environmental Services on August 24, 2017; numerous emails with Mr Dean Ferraro, Chris Wolnick and Jennifer Rose since that time and my further meeting with Jennifer Rose and Chris Wolnik on October 24, 2017, please be advised that I wish to initiate a Tier Three review of the above-noted property/matter and the invoicing of the the Annual StormWater charges (Water/WasteWater Charges) in the extreme amount of \$16,740.78 for a rural property, which is serviced by private septics, private wells and which has been mandated by the City of Vaughan to maintain its storm water within the property by way of a Site Plan Agreement.

I wish to also provide some history on this matter that the other City of Vaughan Council Members might understand why I came to the City with, not only with the above concerns about the charges but also 'how' the invoice was sent out.

The property known as 11730 Keele Street is an agricultural farm property of approximately 94 acres on the west side of the CN rail line. There is a farm house on the property which is rented to Ms Patti-lynn and MR. Terry Davidson. These residential tenants received their hydro bill on July 26, 2017 (copy attached) with the sum of \$16,740.78 added as "Annual Storm Water Charge" under the heading "Your Water/Wastewater Charge." They were quite taken aback by this and contacted Alectra/Power Stream advocating a mistake had occurred. They were told they were responsible for this charge and if they did not pay their hydro would be 'cut off'. They then contacted me at my office (Property Manager for the Owners) and were quite distressed.

I made a number of calls to find out the situation as we, the owners were not given any notice of Water/WasteWater/Storm Water charges being applied to our properties prior to this invoice. The Davidson's were not happy when employees from Power Stream/Alectra showed up at their door and threatened to disconnect their hydro for non-payment of this amount.

I also contacted Alectra/PowerStream and requested that the invoice be sent directly to the owners, so that we may deal with this issue. We were informed this was impossible, as the owners do not have an Alectra account. This of course makes sense as hydro is paid by the tenants and not the owners. Thus the invoice was held in limbo until the matter, through Mr Dean Ferraro, Director of Finance, could be resolved and Alectra was told to cease and desist in

disturbing the Davidsons and not cut off their hydro. The problem still exists that an invoice cannot be generated to the actual owners of the property.

It then came to light that the invoice was in fact for the Commercial/Industrial property fronting on Keele Street known as 11770, 11790 and 11800 Keele Street and did not apply to 11730 Keele Street at all. These buildings are legally occupied by Terra Garden Centre, Discount Marine and a number of other smaller tenants and are zoned Commercial and Industrial and have been for over twenty years. This is where the concern of Water/Wastewater/Stormwater charges and the billing thereof falls apart. May I explain further.

After the invoicing situation was under control, I then met with Councillor Marilyn lafrate on August 24, 2017. Ms Jennifer Rose was in her office at that time. It was agreed that this matter would be brought forward for discussion and investigation, as this property is an anomaly in the City of Vaughan with respect to impact on the Water/WasteWater/StormWater.

I further met with Jennifer Rose and Chris Wolnik on October 24, 2017 and provided them with the Registered Site Plan with the City of Vaughan. During the rezoning of the property known as 11770-11800 Keele Street the owners were required to perform many studies including Hydrogeological, Drainage, Storm Water Management, Grading Approvals, etc. It is part of the Site Plan Agreement with the City of Vaughan that all Storm Water be maintained WITHIN the property boundaries and a Grading Plan was provided to the City and approved at the time of Re-zoning and Site Plan Agreement. NO STORMWATER leaves the property or impacts downstream. All ditches, whether within the property or on the City of Vaughan/Region of York boulevards along Keele Street are maintained by the Owners/Tenants. The driveways, parking areas and service areas are gravel to provide a permeable surface and assure all rain water and drainage is contained on the property with proper ditches and grading.

The property is serviced by approved and legal private wells and septic systems and does not use ANY municipal services. The owner was even required to install underground tanks and siamese connections for water for the Fire Department on the property.

The City of Vaughan made the owners assure that the property was self-contained in all aspects of Storm Water/Waste Water and any other impacts on the surrounding area or downstream.

I have provided the documentation to Jennifer Rose and Chris Wolnik and am enclosing a copy of the invoice originally sent to the residential tenants as well as a copy of the site plan drawing which indicates the ditches and storm water drainage.

I cannot attend the up-coming Finance, Administration and Audit Committee meeting on November 6th, 2017 at 9:30 am and 7:00 pm, wherein this matter will be discussed, as I am out of the country. I therefore wish to provide this Letter as my Deputation to be read and heard with regard to this matter.

We strongly feel that the Annual Storm Water Charge which is being levied against rural Commercial and Industrial properties which are self-contained, provide their own Waste Water Disposal, Storm Water Management and Private Wells, should NOT be invoiced the same as Industrial and Commercial properties within the southern and urbanized Industrial/Commercial areas. We have no impact on neighbouring properties, downstream or any other areas in the City of Vaughan. It is our opinion that these properties should be treated the same as Farm properties, which, in fact have greater impact than the Industrial/Commercial, as they are not under Site Plan Agreements and all the stringent requirements that comes with that.

Please assure that I am notified of all further meetings and discussion regarding this matter.

Should you require any further information or wish to speak to me please contact me on my cell at **416-930-6544**

My best regards,

Heidi Kreiner-Ley

Property Manager for Garont Investments Limited and Pennard Investors Inc

*Heidi Kreiner-Ley, President/Broker of Record
Joseph Kreiner Real Estate Limited, Brokerage
10737 Bathurst Street
Richmond Hill, Ontario,
L4C 7V3*



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Page 1 of 1

TERRY & PATTILYNN DAVIDSON

11730 KEELE ST

MAPLE, ON L6A 1S1

Bill # 544454118842

Service Location: 11730 KEELE ST, MAPLE

Premise # 5444500499

Residential

RECEIVED

AUG 21 2017

Tom Patti Davidson

Account Number	5444500000 To be used for payments
Statement Date	JUL 26, 2017
Amount Due	\$17,010.76
Due Date	AUG 14, 2017

A 1.5% late payment charge will be calculated and applied if received after due date E&OE

*Ontario's Fair Hydro Plan substantially lowers electricity bills for typical residential consumers. This includes the 8% rebate introduced in January

*Electricity Rates have changed effective July 1, 2017, go to www.AlectraUtilities.com for information

*Electricity provided by Alectra Utilities Corporation as Standard Supply Service

Service	Meter#	From	To	# Days	Previous Reading	Current Reading	Read Type	Multiplier	Usage	Adjustment Factor	Adjusted Usage
Electric	PWST235086	06/21/2017	07/24/2017	33	110386.660	111289.820	Regular	1.0	923 160 KWH	1.036900	957.225

Your Previous Charges

Amount of Last Bill 135.42
No Payment Received 0.00

Balance Forward - DUE IMMEDIATELY..... **\$135.42**

Your Adjustments

Penalty Adjustment 0.68

Your Total Adjustment Amount **\$0.68**

Your Electricity Charges

Electricity

Summer-On-Peak 91.236 kWh @ \$0.132 12.04
Summer-On-Peak 34.214 kWh @ \$0.157 5.37
Summer-Mid-Peak 115.775 kWh @ \$0.095 11.00
Summer-Mid-Peak 43.415 kWh @ \$0.113 4.91
Summer-Off-Peak 464.378 kWh @ \$0.065 30.18
Summer-Off-Peak 174.142 kWh @ \$0.077 13.41
Delivery 46.13
Regulatory 2.90
Regulatory 1.56
Debt Retirement Charge 0.00
Debt Retirement Charge 0.00
Debt Retirement Charge Exemption Saved You \$1.76 0.00

Your Total Electricity Charges **\$127.50**

HST (HST Registration 728604299) **\$16.57**

8% Provincial Rebate **\$10.19 CR**

Your Water/Wastewater Charges

Annual Stormwater Charge 16,740.78

Your Total Water/Wastewater Charges **\$16,740.78**

Total Amount Due - \$17,010.76

Daily Average Electricity Usage

Read Date	# of Days	kWh per day
JUL 24 17	33	27.97
JUN 21 17	29	28.20
MAY 23 17	32	35.11
APR 21 17	30	49.02
MAR 22 17	29	63.62
FEB 21 17	28	62.20
JAN 24 17	63	59.45
NOV 22 16	60	31.31
SEP 23 16	63	23.27
JUL 22 16	59	22.35
MAY 24 16	63	40.30
MAR 22 16	61	58.30
JAN 21 16	59	56.60

Stormwater Charge

Finance, Administration and Audit Committee, November 6, 2017



Purpose of the Report

- At Finance, Administration and Audit Committee on September 20, 2017, New Business was introduced:
 - Staff provide a report which outlines how the stormwater charge is applied to rural areas
 - Provide an update on the implementation of the stormwater charge and feedback received

Stormwater Services are intended to protect property and the environment



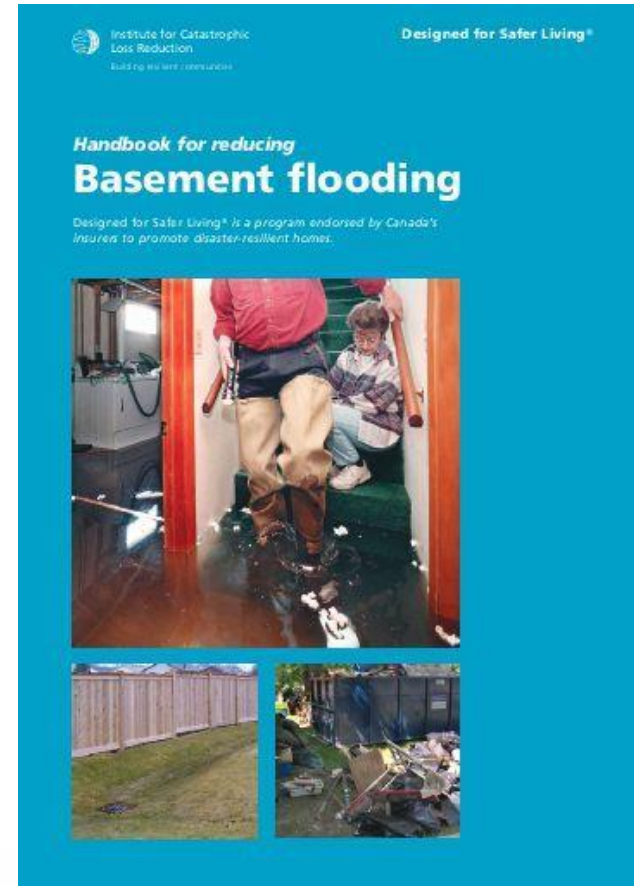
Proactive Stormwater Management Necessary to Mitigate the Effects of Climate Change

- 2017 Flooding
 - Spring – Western Quebec and Parts of Ontario
 - August – Windsor received 45-88 mm of rain on Monday, August 28 and another 50 on Tuesday August 29
 - October 30 - Ottawa



Impact of flooding to citizen

- Property damage
 - Financial
 - Insurance rates can go up for those who have experienced flooding
 - some homes cannot purchased basement flooding insurance
 - Damage to basements can be costly to repair
 - Emotional
 - Precious heirlooms can be destroyed
 - Emotional pain as flooding impacts a home many times over



“Canadian cities not ready for ‘weather whiplash’”

Toronto Star, August 22, 2015

- More frequent severe weather
- Insurance claim payouts from severe weather events average \$ 1 billion annually over the last several years
- Canadian municipalities are in an excellent position to build resilience to climate change



Vaughan Council approved a Stormwater Charge

- On March 22, 2016, Council approved
 - A variable stormwater charge to be applied to properties in the City
 - That the stormwater charge be calculated based on typical stormwater run-off
 - That government agencies, schools, places of worship and non-profits be exempt based on the same criteria and legislation for exempting property through the Assessment Act
 - The implementation of processes and plans to support the stormwater charge

Vaughan is one of nine Ontario Municipalities to show leadership in adoption of a stormwater charge

Stormwater Charge Implementation

Stormwater Charge Communication- By the Numbers

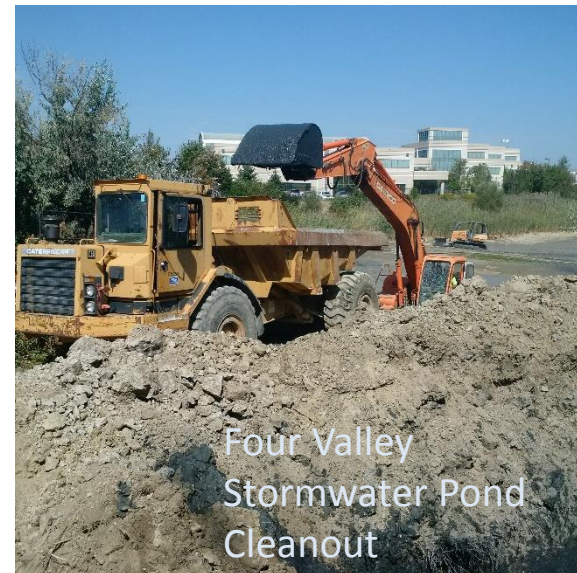
- **110** – 60 second radio promotions on 105.9 The Region
- **9** – ¼ page newspaper ads in Lo Specchio, Vaughan Citizen, Thornhill Liberal
- **205,000** – utility bill buck slips inserts
- **2,283** - views of the ‘What is stormwater’ educational video
- **80,000** – homes received 2016 summer edition of Vaughan At Work featuring SW charge
- **7, 035** – targeted ads on social media platforms
- **3,523** – letters to agricultural/vacant property owners
- **5** - stories appeared on local media outlets

Stormwater Charge Applied to Properties

Property Type	Annual Charge for 2017
Industrial Commercial Institutional (ICI) (small - < 1acres)	\$41.28
ICI (medium – 1-10 acres)	\$1,066.21
ICI (large > 10 acres)	\$16,740.78
Agricultural/Vacant	\$694.65
Residential (Low)- single residential	\$50.00
Residential (Med) – townhomes	\$30.61
Residential (High) - condos	\$184.00

Stormwater Charge Introduced in 2017 Budget

- 2017 Stormwater budget - \$12 million
- 2017 Stormwater Budget included:
 - Capital Projects to mitigate flooding in Thornhill and Woodbridge
 - Enhanced the Operations and Maintenance of stormwater infrastructure
 - Reserve Contribution



Erosion Control initiatives

- Prioritize watershed areas for erosion hazard sites causing public safety, environment to be at risk
- Monitor high risk erosion site
- Mitigate



Federal and Provincial Governments Provide Grants to help Municipalities mitigate the effects of Climate Change

- 2017 Vaughan received a Canadian Water and Wastewater Fund Grant for \$ 20.5 million
 - \$3.8 million for stormwater projects
 - Stormwater management pond (SWP) cleanouts – McNaughton, Fossil Hill, Sugar Bush, Exchange Way, Fairfax.
 - Church Street Stormwater pumping station evaluation
- Today's FAA includes a report asking for Council approval to apply for a grant from the Federation of Canadian Municipalities to fund stormwater pilots



Calculating the Stormwater Charge

New Business From Sept 20, 2017 FAA

The Finance, Administration and Audit Committee recommends that staff report back to a future Finance, Administration and Audit Committee meeting on the Wastewater Annual charges for **rural areas.**

There are three property categories which fall in to rural areas:

Industrial/Commercial/Institutional

Agricultural/Vacant

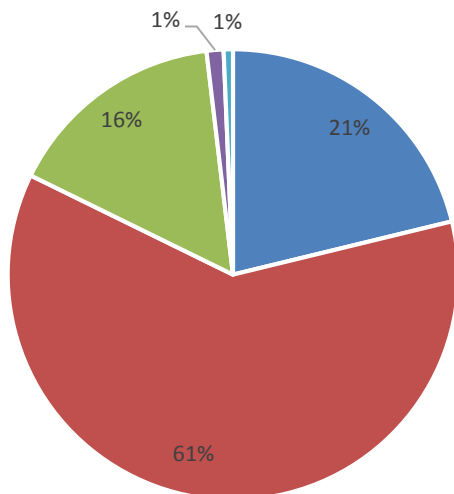
Residential

Steps to determine Stormwater Charge

- Divide the City into 7 property categories
- Determine the area of the land for each property category
- Determine the % of this land which is impermeable (water cannot penetrate)
- Divide the budget required for the stormwater program into the % for each property category
- Divide that cost by the number of properties in each category

Stormwater Charge Applied to Properties

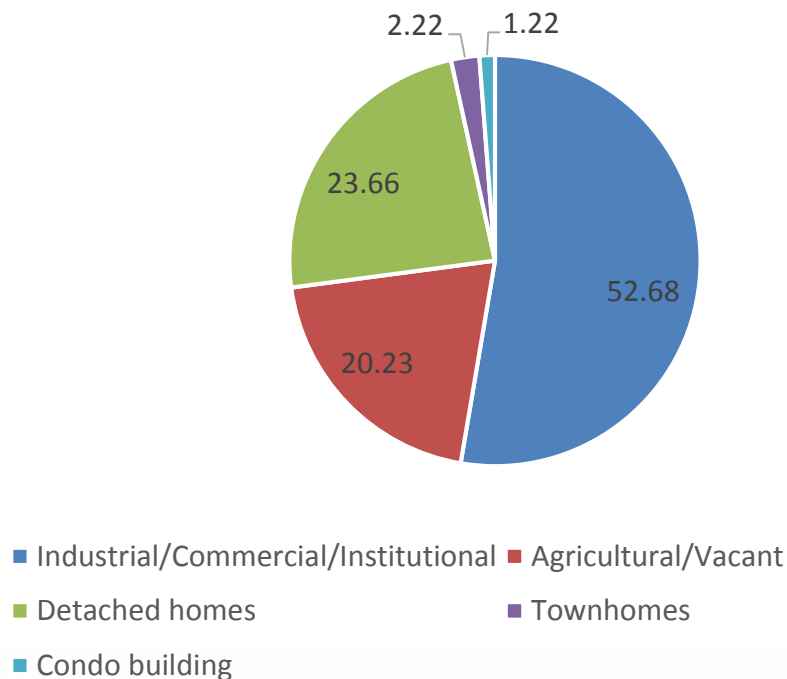
Property Category by Land Area



■ ICI ■ A/V ■ RES L ■ Res M ■ Res H

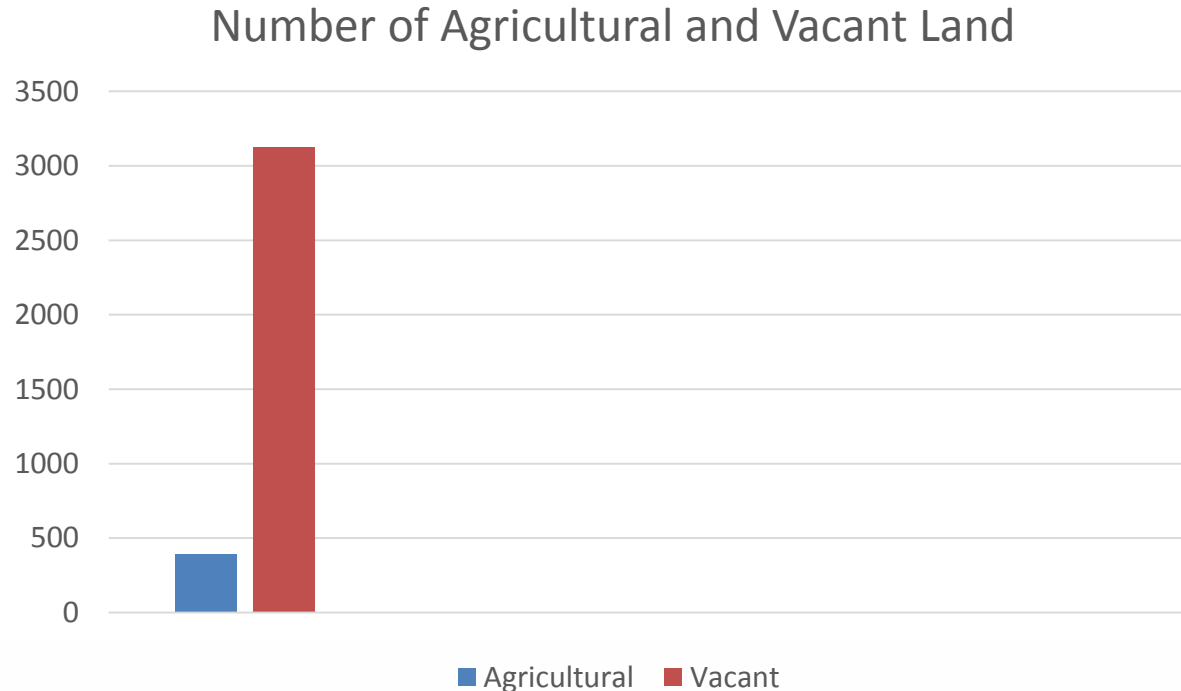
Property Type	Land Area (acres)
Commercial	4,690
Industrial	8,983
Institutional	1,312
Agricultural/Vacant	43,150
Residential (Low)	11,213
Residential (Medium)	859
Residential (High)	472

Property Categories by % hard surface area



The total budget needed for the stormwater program is allocated to each property category's hard surface area


Stormwater Charge Applied to Agricultural/Vacant



Agricultural/
Vacant
Stormwater
Charge
\$694.65

Stormwater Charge Applied to Properties

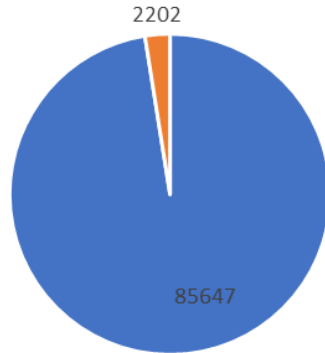
- An example for I/C/I:

I/C/I Property Type	Size	% of Total I/C/I Land Area	% of Properties		Stormwater Charge
I/C/I Small	Less than 1 acre	3%	68%		\$41.28
I/C/I Medium	Between 1 and 10 acres	33%	29%		\$1,066.21
I/C/I Large	More than 10 acres	64%	4%		\$16,740.78
Total		100%	100%		

Stormwater Charge Implementation Feedback

Feedback Received from Implementation of the Stormwater Charge

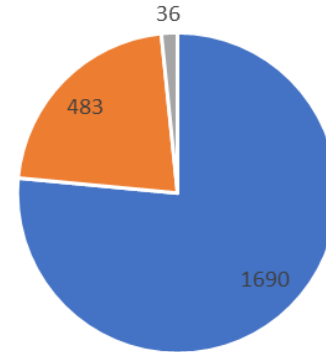
Total Calls Received out of Total Charges Applied



2.57 % of all charges issued required more info

■ Calls Received

Calls Resolution in Tiered System



1.6 % of all calls received requested a review of the charge

■ Tier 1 ■ Tier 2 ■ Tier 3

Feedback from Implementation of the Stormwater Charge (Tier 2)

Percent of total property owners who called	
Residential Property Owners	<1%
Commercial Property Owners	<2%
Agricultural Property Owners	20% (1 in 5)
Vacant Property Owners	3%

Feedback from Implementation of the Stormwater Charge (Tier 3)

Property Type	Number of complaints
Non-residential – large	7
Non-residential – medium	2
Vacant	7
Agricultural	18
Residential – Low	2
Total	36

Questions?

Municipal Comparison – Typical Annual Stormwater Charges

Municipality	Residential (single detached)	Non-Residential (Small <1 acre)	Non-Residential (Large <10 acres)
Aurora	\$60.12	\$763.56	\$763.56
Markham	\$47.00	\$29/\$100,000 of CVA	\$29/\$100,000 of CVA
Richmond Hill	\$62.24	\$180.82	\$180.82
Kitchener	\$149.88	\$766.92	\$14,218.20
Waterloo	\$127.92	\$328.32	\$12,515.76
Mississauga	\$102.00	<\$1,546.01	<\$15,459.91
London	\$184.44	\$184.44	<\$6,140.16
St. Thomas	\$90.72	\$90.72	\$12,568.80

TRCA vs City responsibilities

Activity	City responsibility	TRCA responsibility
Flooding hazards	<ul style="list-style-type: none">• Mitigate impacts to our infrastructure	<ul style="list-style-type: none">• Review municipal policy documents to ensure consistency with S3.1PPS
Stormwater Management	<ul style="list-style-type: none">• Provides approval authority• Manages and maintains all SW assets	<ul style="list-style-type: none">• Provides tech expertise in SW quantity, quality, erosion and water balance
Erosion and Sediment Control	<ul style="list-style-type: none">• Address erosion issues on City owned lands• Opportunity to develop additional initiatives	<ul style="list-style-type: none">• Provides permits for projects in regulated areas• Provides inspections for infrastructure under partnership with various municipalities

Stormwater Charge Applied to Properties

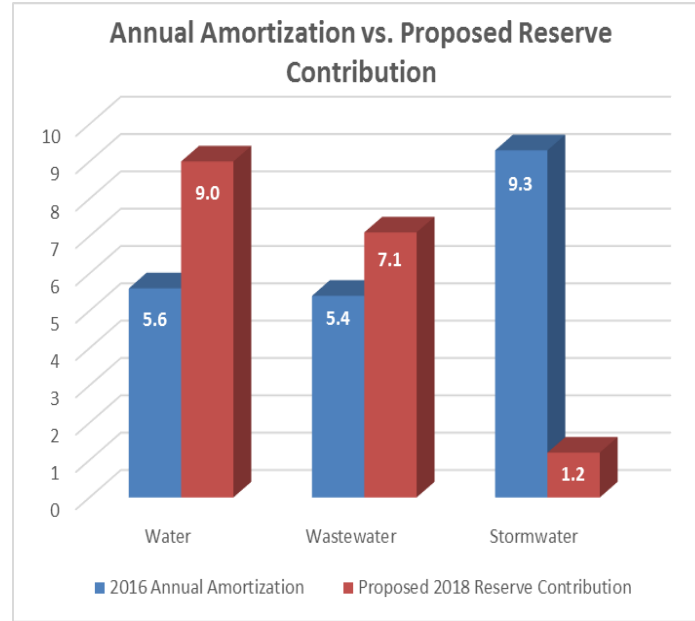
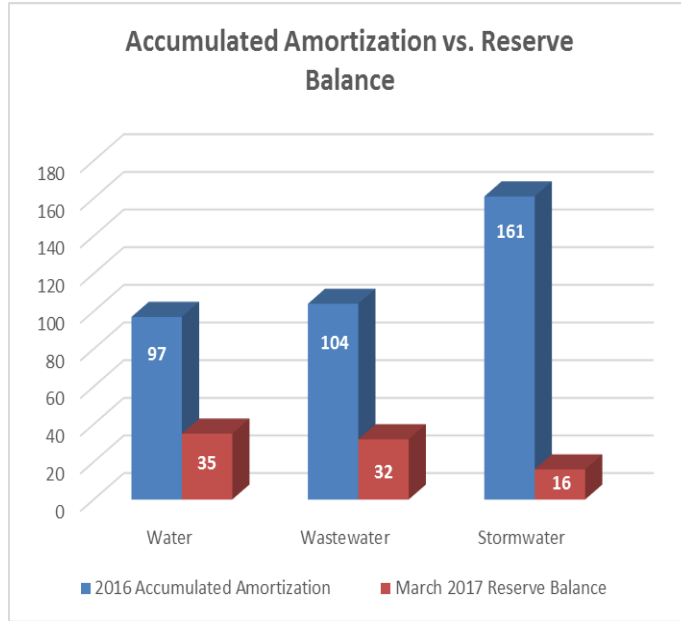
Property Type	# of Units (Tax Roll #s)
Commercial	2,326
Industrial	4,608
Institutional	208
Agricultural/Vacant	4,966
Residential (Low)	67,365
Residential (Med)	10,146
Residential (High)	11,521 (180 condos)

Stormwater Charge Applied to Properties

- The stormwater run-off is applied to the acres to determine theoretical impervious (paved) area

Property Type	Run-off Coefficient	% share of Total Impervious Area
Commercial	0.75	16.49%
Industrial	0.75	31.58%
Institutional	0.75	4.61%
Agricultural/Vacant	0.10	20.23%
Residential (Low)	0.45	23.66%
Residential (Med)	0.55	2.22%
Residential (High)	0.55	1.22%

Rate Setting



Other approaches to Agricultural/Vacant

- Richmond Hill – residential and farm properties charge- \$ 62.24
- Markham- all properties in the non-residential including vacant land charge is \$ 29 per \$100,000 of Current Value Assessment.
- London - residential land area 0.4 ha or less without a stormdrain within 90 m is \$ 11.54/month
 - Land area above 0.4 ha is \$127.92/month per ha

STORMWATER CHARGE IN RURAL AREAS AND FEEDBACK FROM STORMWATER CHARGE IMPLEMENTATION**Recommendation**

The Deputy City Manager of Public Works and the Director of Environmental Services, in consultation with Director of Financial Services/Deputy City Treasurer, recommends:

1. That Council receives this report for information.

Contribution to Sustainability

The stormwater charge directly supports *Green Directions Vaughan* Goal 1: To significantly reduce our use of natural resources and the amount of waste we generate. Furthermore, it directly adds resolution to the following objective:

- Objective 1.3: To support enhanced standards of stormwater management at the City and work with others to care for Vaughan's watersheds

Economic Impact

There is no economic impact with the adoption of this report.

Communications Plan

Not applicable

Purpose

To respond to New Business at the Finance, Administration and Audit Committee on September 20, 2017, and inform Council of the property categories used to assign the stormwater charge for rural properties, how these were developed and the resident feedback to the stormwater charge in the first year of implementation.

Background - Analysis and Options**Climate change is having an effect on the frequency and intensity of storms.**

Under a changing climate, scientists have indicated that meteorological conditions across Ontario are expected to change, in specific the frequency of small extreme precipitation events is anticipated to increase. Scientists have used Intensity Duration Frequency (IDF) curves which are meteorological based tools used to design drainage infrastructure to show that storms are increasing. Studies such as the 2011 SENES report 'Toronto's Future Weather and Climate Driver Study' showed that the extreme daily rainfall is expected to rise to 155.4 mm in 2040-2049 from 80 mm in 2000-2009 in Vaughan.

The City's existing stormwater infrastructure is being challenged at managing the different storm event patterns.

The City of Vaughan has experienced flooding, most notably in the Thornhill area (Blocks 1, 8, 9 and 16) with ten or more flood calls in the past ten (10) years within each block. Extensive flooding also occurred on August 9, 2005 and on August 21, 2012 City-wide which resulted in road closures. In addition, open space areas and river valleys are becoming more susceptible to erosion as weather patterns change and the intensity of storm water moving through these areas increases.

Council approved implementation of a stormwater charge to fund a new stormwater program, displaying leadership in proactively mitigating the effects of climate change.

Prior to the implementation of the stormwater charge, the stormwater program had been funded by wastewater rates, property taxes and the gas tax. The funds were inadequate to provide a level of service which could help mitigate the effects of climate change and long term asset management.

The stormwater charge is being used to fund new capital projects to reduce flooding and erosion risks

With the implementation of the stormwater charge and a stable revenue stream, staff are implementing the stormwater program. The City is starting capital projects to help mitigate the risk of flooding and erosion in known problem areas in the City. In the 2017 Budget, Council approved the retrofit of the Rainbow creek outfall and Ashbridge Pond operational enhancement. These projects will address a low-lying area in Woodbridge (Block 43). The stormwater charge has also allowed for the number of stormwater pond cleanouts to double, increased monitoring of storm ponds and increased cleaning and inspection of stormwater pipes and other infrastructure. The stormwater charge is also funding a portion of the Edgely Pond project in the VMC. Other stormwater capital improvement projects initiated in 2017 include: the Clarence Street stormwater infrastructure improvements, Pine Valley outfall improvement, and King-Vaughan Road culvert replacements. Review and monitoring of erosion prone sites and development of a program to proactively mitigate and manage the City's risk and liability is under development.

The stormwater charge is applied to properties based on the estimated amount of run-off of stormwater

The City of Vaughan uses the following categories for the application of the stormwater charge:

- Residential – low (single detached), medium (townhouse) and high (multi-res)
- Non-residential – small (less than one acre), medium (between one and 10 acres) and large (more than 10 acres)
- Agricultural/Vacant

These categories were chosen as they are representative of the City's land use and are typical of what other municipalities have done. The 2015 MPAC data was used to put the properties into the categories above. From the MPAC data, the City could calculate the number of properties in each category and determine the land mass assigned to each category. This information is critical for determining the amount of the stormwater charge for each category.

The stormwater run-off used for each category above was taken from the City's Engineering Design Standards. As land is developed in Vaughan, the developer must meet the engineering design criteria for stormwater run-off for each property type. City staff determined that using stormwater run-off was the most equitable and consistent factor for determining the charge as the engineering design standards are used consistently across the City.

Notwithstanding the above, City Council directed staff to exempt certain property types including government agencies, places of worship, schools and owned by non-profit organizations. These exemptions are consistent with the exemptions for the application of the tax levy.

The calculations of the stormwater charge consider property type, stormwater run-off, land mass for each category and number of properties in each category.

The property types described above were determined by examining all property types in the MPAC data and grouping them into broader categories. The non-residential or Industrial/Commercial/Institutional (I/C/I) were divided into small, medium and large to more equitably distribute the stormwater charge among these properties. Also, the establishment of a large category of more than 10 acres is consistent with other municipalities.

Once the number of categories was determined, the number of properties and the land area was compiled and calculated. Using the stormwater run-off coefficient for each property category, the impervious area was calculated. The share of impervious area was applied to the budget needed for the stormwater program and a dollar value was assigned to each property type. The stormwater charge was developed by dividing the number of properties in each category by the dollar value assigned to each property category.

Rural Properties in the City of Vaughan fall into three of the Property Categories: Agricultural/Vacant, Residential and Industrial/Commercial/Institutional (I/C/I).

City Council was particularly interested in the application of the annual charge for rural areas, as identified in the New Business at FAA on September 20, 2017. Properties located in the rural areas in Vaughan tend to fall into one of three categories on the assessment roll – agriculture/farm, residential and/or I/C/I. While possibly still zoned as agricultural, properties that are assessed and classified in the I/C/I category are those where the use of the land is a non-res/non-farm use and will be assessed as such. Consequently, the I/C/I stormwater charge will be charged as a result in line with the assessment roll.

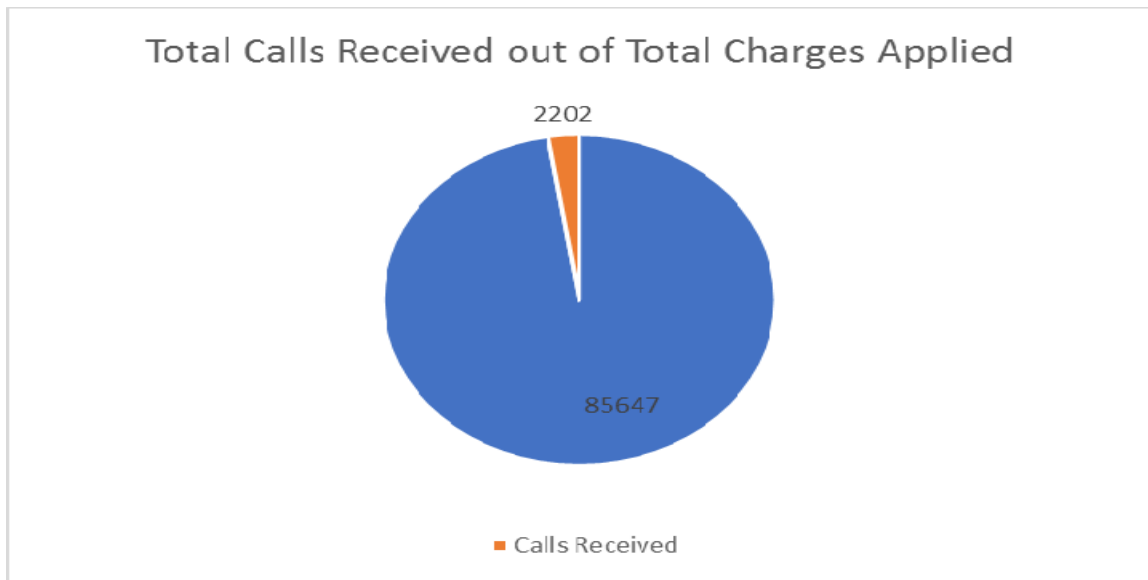
The implementation of the stormwater charge in 2017 has been successful, with few inquiries and/or complaints.

The stormwater charge appears on an Alectra bill (water/wastewater, electric and/or stormwater) and is an annual charge which appeared between June and September.

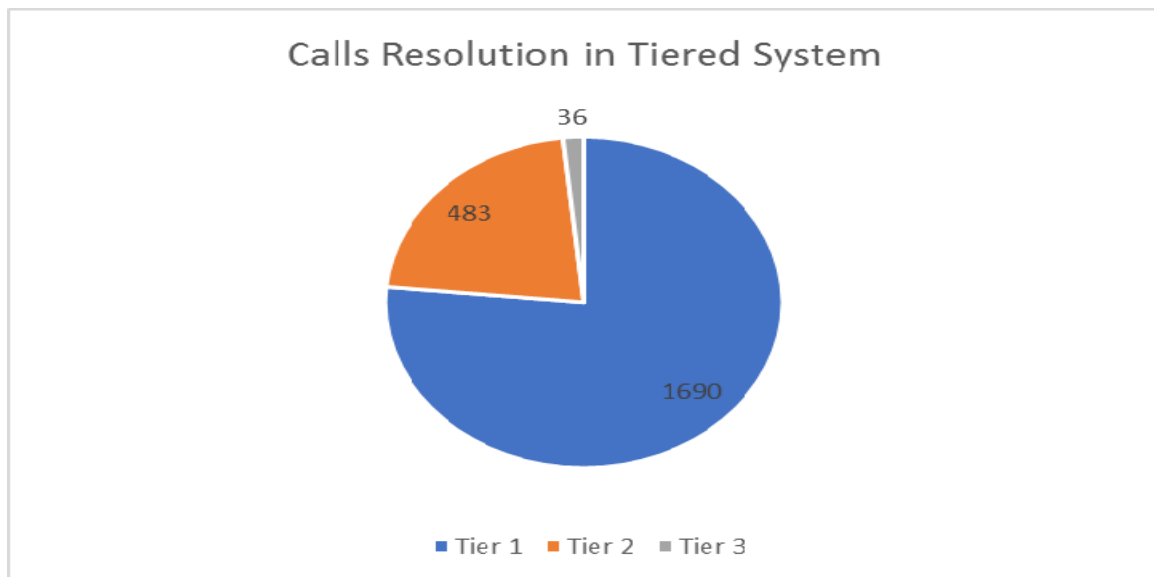
Environmental Services worked with Finance, Access Vaughan and Alectra to establish three tiers of customer service to respond to inquiries about the Stormwater charge. Frequently asked questions were developed with the assistance of Corporate Communications to ensure consistent messaging was delivered at all levels of customer service.

Tier 1 consisted of Access Vaughan and Alectra customer service representatives handling routine inquiries. Tier 2 consisted of Environmental Service subject matter experts who addressed more technical questions or questions that were unable to be addressed by the tier one representatives. Individuals who were dissatisfied with the second tier customer service response were asked to document their concern in writing for review by the third tier. Tier 3 consisted of management staff from Finance and Environmental Services who reviewed each request individually and provided a follow-up letter back to the individual.

The following chart illustrates the total calls received out of the total charges which were applied:



The following chart illustrates the total number of calls received broken into Tier 1, 2 and 3:



Alectra, Access Vaughan and Councillor offices received 2,202 calls related to the 85,647 accounts that received a stormwater charge. This represents 2.57% of all charges applied across the City. Of the 2,202 calls received, 483 went to Tier 2. Most of the calls were requests for information about the charge and were satisfied with the answer, some calls were confused about the messaging regarding the charge and needed further explanation, and 36 of the calls escalated to Tier 3 review of the charge. Of the 36 calls which were examined at Tier 3, two of the charges were determined to have been incorrectly applied and 34 were determined to have been correctly applied.

The following chart shows the number of complaints by property type which reached Tier 3:

Property Type	Number of complaints
Non-residential – large	7
Non-residential – medium	2
Agricultural/Vacant	25
Residential – Low	2
Total	36

The number of complaints that escalated to Tier 3 review represents 1.6% of all calls made to the City.

Relationship to Term of Council Service Excellence Strategy Map (2014-2018)

The stormwater charge supports the Term of Council Priorities:

- Continue to cultivate an environmentally sustainable city
- Meet Council tax rate targets (no more than 3%)
- Invest, renew and manage infrastructure and assets

Regional Implications

There are no Regional implications with the adoption of this report.

Conclusion

The stormwater charge is a dedicated funding source applied to seven property categories across the City of Vaughan. These charges are based on the stormwater run-off expected from the properties. The stormwater charge was implemented between June and September 2017 with few calls and/or complaints from residents and businesses.

Attachments

None

Report prepared by:

Jennifer Rose, Director, Environmental Services, ext. 6116
Chris Wolnik, Manager, Wastewater and Stormwater Services, ext. 6152

Respectfully submitted,

Stephen Collins, P.Eng.
Deputy City Manager, Public Works

Jennifer Rose
Director, Environment Services