

Stormwater Utility Frequently Asked Questions

The City of Kitchener transferred stormwater management funding from property taxes to a user-fee program, effective Jan. 1, 2011. This new stormwater user rate appeared on monthly utility bills beginning in February 2011. The average single dwelling homeowner will be charged approximately \$9.45/per month for stormwater management for the period January 2011 to January 2012. As part of the annual budget process, the stormwater rate will be reviewed and adjusted as necessary. Harmonized Sales Tax (HST) does not apply to the stormwater rate.

This funding model allows us to dedicate dollars specifically to stormwater management -- a service that has been consistently underfunded through the tax base.

1. What is stormwater?

Stormwater runoff is water that flows across the land and over hard surfaces before it's routed into drainage systems and then on to our natural areas such as creeks, lakes and wetlands.

2. What is the city's responsibility for stormwater?

The city is responsible for managing all aspects of stormwater within its jurisdiction through the planning for and controlling of runoff from rain and melted snow. The stormwater infrastructure includes roadways, ditches, storm sewers, storm sewer manholes and catchbasins, stormwater management ponds and other facilities, etc. The city is responsible for operating and maintaining the various components and are held accountable to a variety of regulatory agencies such as the Ministry of Environment, Ministry of Natural Resources, Fisheries and Oceans Canada, Grand River Conservation Authority, etc. for providing and maintaining this infrastructure. The purpose of the infrastructure is to reduce downstream erosion, flooding and water-quality degradation.

The city does not maintain facilities that are located on private property or that fall under the jurisdiction of other governmental jurisdictions such as the Region of Waterloo or the Grand River Conservation Authority.

3. How did the city pay for its stormwater services in the past?

Stormwater services were historically funded from revenue derived from property taxes collected by the city. Stormwater had to compete for these funds with other city services such as parks, roads, libraries, social services, etc. Approximately 6.8 per cent of the annual tax levy was used to support the city's stormwater services.

4. Why do we need to spend more money on stormwater now?

Although the city has done a good job providing stormwater services on a limited budget, the backlog of stormwater projects has grown and some maintenance activities have not been performed.

As well, provincial and federal laws require that municipalities address the environmental impacts of stormwater pollution. In fact, Ontario's Water Opportunities Act, 2010 includes a strong focus on the need for municipal water sustainability plans, as well as the establishment of performance indicators and targets for municipal water, wastewater and stormwater services.

However, since neither the federal or provincial governments provide municipalities with funding to address the impacts of stormwater pollution, the city must investigate alternative means for raising the dollars necessary to manage the issue.

The new user rate will allow the city to improve its stormwater service levels by:

- Keeping pollutants out of our stormwater system - leading to better protection of our source water.
- Preventing local flooding and pollution from reaching our creeks and streams - preserving their health and vitality.
- Replacing aging stormwater infrastructure (pipes, catch basins), some of which are 80 to 100 years old.

- Accelerating needed improvements to the local stormwater management system, including Victoria Park Lake, Grand River Erosion Control and Kolb Drain Restoration.

5. Why not raise property taxes?

A stormwater user fee represents a more dedicated, sustainable funding mechanism than property taxes, since rates are assessed to each parcel of land based on how much stormwater runoff they contribute rather than on property value.

This is the most fair and equitable approach to funding stormwater management since the properties that have the most impervious area and use the system more also pay more.

In addition, by transferring stormwater management from property taxes to a user-fee model, the funds collected are guaranteed to be used for stormwater management.

6. How will the new stormwater rate be charged?

The stormwater rate will be charged based upon the contribution of stormwater runoff, as indicated by the amount of impervious surface area on the property. The rate will be administered in the same manner as a water or sewer rate on the monthly utility bill.

7. What if I don't currently receive a utility bill?

All property owners, including condominium owners and rural land owners, will be receiving a utility bill for the stormwater utility if they have impervious surfaces on their property. Billing is always for the previous month, so this stormwater user rate will appear on monthly utility bills as of February, 2011. For ease of payment, customers may choose the following payment options: pre-authorized bank withdrawals, epost, internet or telephone banking.

8. What is impervious area?

Impervious area includes hard surfaces that block the entry of rainwater into the ground (infiltration). Examples include rooftops, driveways, parking areas, patios, garages, etc. All of these land use types have a high runoff coefficient (used in the engineering design of stormwater infrastructure) as water cannot infiltrate through them. The amount of impervious area on a property directly correlates to its contribution of runoff volume and pollutant loading to the city's stormwater management system.

Gravel driveways or parking areas are similar to their asphalt counterpart in that over time, the gravel gets compacted and fine soil particles begin to fill the voids in the gravel and it infiltrates very little, if any, stormwater runoff. *The Region of Waterloo and Area Municipalities Design Guidelines and Supplemental Specifications for Municipal Services* (January 2011) forms the basis of stormwater design criteria as amended or extended by the *City of Kitchener Development Manual* (June 2010). Neither document distinguishes between gravel and paved areas as both would be treated as impervious area when considered in the engineering design process. Furthermore, nothing precludes a landowner from paving a gravel driveway over time. As such, the City has chosen to consider gravel driveways and parking areas to be included in the impervious delineation of the sites.

9. How is impervious area calculated?

For residential properties, the impervious area was calculated by delineating the roofs of the building as well as any sheds and garages. For properties constructed before 2005, the area is based on aerial photographs flown in April 1997, 2000, 2003, 2006 and 2009; whereas other properties constructed after 2005 are based on the outline provided by a building survey submitted to the City of Kitchener. Fine tuning of building rooftops and addition of sheds and garages is still underway by staff for residential properties and it is anticipated that this will be completed by June 2011.

The driveway and other paved areas were not delineated however they were taken into account. This was done through the stormwater management program and funding review feasibility study, which was completed in October 2008. As part of the study, a statistical analysis of roof size in comparison to the overall impervious area of the site

(which would include the roof, patios, driveways, etc.) was undertaken. As predicted, a direct relationship between the size of a rooftop area and the overall imperviousness of a residential dwelling was found. Three tiers for residential single detached properties were determined and the target was to have approximately 10 per cent of residential areas in the small category, 80 per cent in the medium category and the remaining 10 per cent in the large category.

*** See Figure 1 at the end of this document to see the delineation of the rooftops and sheds/garages on a number of properties.**

For non-residential properties, the 2009 aerial photographs were utilized and the outline of the buildings, parking lots and driveways and sidewalks or walkways were delineated and the areas were added together to get the total impervious area for the property. This total area then translates into a monthly charge. Figure 2 illustrates the delineation of the areas.

- Building roof outline – blue line
- Parking lot and driveways – purple hatched line
- Sidewalks or walkways – green hatched line

*** See Figure 2 at the bottom of this document to see the delineation of all impervious areas.**

Through standard processes that are already in place such as site plan approval and building permits, impervious area mapping and building footprint size of homes and sheds will be kept up to date in city databases.

10. Why should I pay if there is no stormwater inlet in front of my property?

All properties generate stormwater runoff that is conveyed, stored, treated, and/or discharged by the city. Even though the stormwater inlets, pipes, ditches and ponds may be remote from your property, your parcel still contributes runoff which ultimately discharges to the city stormwater management system and facilities.

11. What is the proposed rate structure for residential and non residential properties?

The following table becomes effective July 1st, 2011:

Type Code	Description	Basis for Charge	Number of Dwelling Units	Monthly Charge per Property
1	Residential Single Detached Small	Detached homes with building footprint size of 105 m ² or less	1	\$5.67
2	Residential Single Detached Medium	Detached homes with building footprint size between 106-236 m ²	1	\$9.45
3	Residential Single Detached Large	Detached homes with building footprint size of 237 m ² or more	1	\$12.42
4	Residential Townhouse / Semi-Detached	Per dwelling unit	1	\$6.75
5	Residential Condominium	Per dwelling unit	1	\$3.78
6	Multi-Residential (2-5 Units)	Per building	Duplex	\$7.56
			Triplex	\$11.34
			Four-plex	\$15.12
			Five-plex	\$18.90
7	Multi-Residential (>5 Units)	Per property (according to number of dwelling units)	varies	Charge = (# units) × (\$1.89/month)
8	Non-Residential Smallest	26 - 1,051 m ² of impervious area	n/a	\$18.09
9	Non-Residential Small	1,052 - 1,640 m ² of impervious area		\$48.33

10	Non-Residential Medium-Low	1,641 - 7,676 m ² of impervious area	\$126.63
11	Non-Residential Medium-High	7,677 - 16,324 m ² of impervious area	\$369.63
12	Non-Residential Large	16,325 - 39,034 m ² of impervious area	\$895.86
13	Non-Residential Largest	39,035 m ² or greater of impervious area	\$1,923.21

12. Why are tax-exempt parcels charged in the same manner as property taxpayers?

Within the definition of a “user fee,” all developed properties must utilize the same basis for a charge throughout the municipal stormwater management service area. In June 2010, Council recommended the following: “That places of worship and charitable organizations which own property affected by the applicable stormwater rate, be provided an indefinite grant of 100%, contingent on the implementation of a stormwater or environmental education program for their members or clients.”

13. I have a residence on my property, so why am I charged a non-residential rate? What does the commercial-residential designation mean?

As the City was establishing the stormwater rate structure, it was determined that the average large residential property in Kitchener has 344 m² of impervious area. If a property has multiple uses beyond residential use such as equipment storage, home office, or commercial enterprise then the total impervious area for the property is compared to the average large residential area of 344 m². If the property has more than 344 m² of impervious area then it is assessed the appropriate non-residential rate. If the property has less than 344 m² then it is assessed the appropriate residential rate. The commercial-residential (comm-res) designation is used by our billing system to determine if there are multiple uses on a property. This approach is taken to ensure that the same consistent and fair distribution of stormwater management costs across the City is maintained.

14. Is there any incentive for me to take measures to address the effects of stormwater runoff from my property on the local stormwater system?

In June 2010, council recommended “that staff provide a report related to a non-residential and residential stormwater rate credit policy prior to January 1, 2012, with applicable credits being retroactively applied to January 1, 2011.” These incentives would be provided to property owners who install on-site controls that reduce their individual contributions of stormwater runoff and pollutant loading to the municipal stormwater system. Encouraging such source controls supports a municipality’s stormwater management policies and water quality initiatives. Input from the public will be sought later this year prior to finalizing the credit policy.

Figure 1 - Delineation of the rooftops and sheds/garages on a number of residential properties.



Figure 2 - Delineation of all impervious areas on a non-residential property.



15. I live in a rural area, on a separate septic and well system, and there are no storm sewers on my street. Why should I pay this stormwater rate?

All properties with impervious areas (hard surfaces such as roof tops, driveways, etc.) contribute stormwater runoff (precipitation that does not infiltrate into the ground but rather flows overland). In rural areas, this runoff is often directed to roadways, ditches and watercourses, all of which must be maintained by the City of Kitchener. In addition, stormwater runoff eventually ends up in our creeks and if left untreated, degrades the aquatic habitat and water quality of the streams. The proper maintenance of our existing infrastructure as well as the retrofit and construction of new infrastructure will result in fewer pollutants being released in the environment. This in turn will result in fewer pollutants in our drinking water. It is important to understand surface water runoff and underground aquifers (underground rivers that public and private wells draw water from) are all connected and the impacts that pollution have on water affect both urban and rural properties. Since all of us rely on similar drinking water sources, regardless of whether it is through a private well or city pipes, stormwater management and the management of water as a whole affects us all.

16. I live on a farm and my runoff goes directly into a watercourse, not on city-owned infrastructure. Why should I pay this stormwater rate?

During the development of the rate structure, we recognized that a large part of total agricultural land area was not necessarily having the same level of impact as, say a large box store, on our stormwater infrastructure. Nor were they necessarily serviced by expensive storm sewers across their property frontage. Nevertheless, these properties are generally serviced for stormwater via roadside ditches which the municipality is responsible for maintaining to convey stormwater flows away from these properties. Agricultural properties can also impact watercourses if crop inputs are misapplied. Most “farm-like” properties fall under the single detached residential categories (small, medium, or large) while most mixed-use (some commercial or industrial use, etc.) properties located in agricultural areas are still assessed at the appropriate non-residential stormwater rate.