

A Guide to the Stormwater Quality Credits Program

The Minneapolis Stormwater Quality Credits program offers residents and business owners a credit of up to fifty percent of monthly stormwater utility charges.

The program encourages City residents to manage rainwater and address problems arising from stormwater runoff in an urban environment. In Minneapolis, and other large cities, large amount of impervious surfaces (hard surfaces, such as buildings areas, asphalt or cement, heavily compacted soils) stop stormwater from being naturally absorbed into the ground. The runoff from these areas transports de-icing salt, metals & petrochemicals from cars, excess fertilizer, pet waste and trace amounts from common chemicals, to receiving bodies of water. This is a major source of water pollution in urban areas. In urban environments, the amount of impervious area on a property is the most significant factor affecting both the quality and quantity of stormwater runoff.



By using stormwater Best Management Practices (also known as BMPs), property owners can partially duplicate the effect of the open areas and wetlands, providing natural drainage prior to urbanization. The Quality Credits program offers property owners a credit equivalent to fifty percent of the stormwater charges for the portion of their impervious area that drains to an approved stormwater quality management tool. Below is a partial list of stormwater BMPs approved for use in the Quality Credits program:

- ***Rain Gardens***
- ***Pervious Pavers***
- ***Wet Ponds***
- ***Dry Wells***
- ***Sand Filters***
- ***Filter Strips***
- ***Infiltration Trenches***
- ***Green Roofs***

While the reduction in charges offered by the Stormwater Quality Credit may not seem large for smaller sites, there are other potential benefits to participating in the program. In addition to creating a sustainable urban environment, many stormwater BMPs can be built as attractive landscape features that add “curbside appeal” and increase property values. Many realtors state well designed landscape projects are one of the best investments property owners can make, outperforming the costlier projects such as room additions, or kitchen and bath upgrades. Participation in the Stormwater Quality Credits Program by a property owner contributes towards the common good and a worthwhile investment for the individual property owner.

Frequently Asked Questions (FAQ)

Since the inception of the Minneapolis Stormwater Utility Fee in 2005, the Public Works Department has responded to thousands of requests for information and reviewed hundreds of Stormwater Credit applications. The following page contains answers to some Frequently Asked Questions received by staff regarding the Stormwater Quality Credit Program.

1. I don't see that any rain leaves my yard when it rains. Why don't my lawn and garden areas count as stormwater BMPs?

While a rain shower of a few tenths to one quarter of an inch may not result in visible runoff, there are several reasons that lawns and gardens do not function as adequate stormwater

BMPs. Typically, soil in a yard is heavily compacted. The roots of common turf grasses and many garden plants are very shallow, therefore not capable of absorbing much moisture. During heavy rains, these areas become saturated beyond capacity, not allowing them to retain moisture. This generates runoff that is transported to receiving bodies of water. Stormwater BMPs, like rain gardens or sand filters, are designed to allow filtration and infiltration of stormwater runoff, thereby helping to reduce the transport of pollutants to area lakes and streams.

2. If pervious pavers qualify as a stormwater BMP, why do existing gravel driveways or brick patios and sidewalks count as impervious areas?

For pervious pavers to function effectively, both the surface and subsurface structure must be properly designed to allow for infiltration of stormwater runoff. A gravel driveway lacks this required substructure. Because the soils are compacted by vehicles, the surface becomes nearly as impervious as asphalt or concrete during a significant rain. For areas paved with standard bricks, lack of adequate spacing between individual pavers and the absence of a substructure properly designed to allow infiltration, results in a nearly impervious surface. Only those paved areas constructed with materials and techniques specifically designed to act as stormwater BMPs qualify for the Stormwater Quality Credits Program.

3. Does a rain barrel qualify as a Stormwater Quality Credit?

Installation of rain barrels alone does not qualify as a Stormwater BMP. Rain barrel capacity is too small to have an appreciable effect on the quality of stormwater runoff from a site. During a one-inch rain storm, a 1,000 S.F. area will generate over 700 gallons of water and with an average capacity of approximately 50 gallons. Typical rain barrels are unable to adequately treat this amount of runoff, even if more than one is installed. By providing water to irrigate gardens between rains, rain barrels are still an environmentally sound and useful tool for water conservation.

4. The City recently required me to disconnect my gutters from the sanitary sewer system. Do I get a credit for this on my monthly stormwater bill?

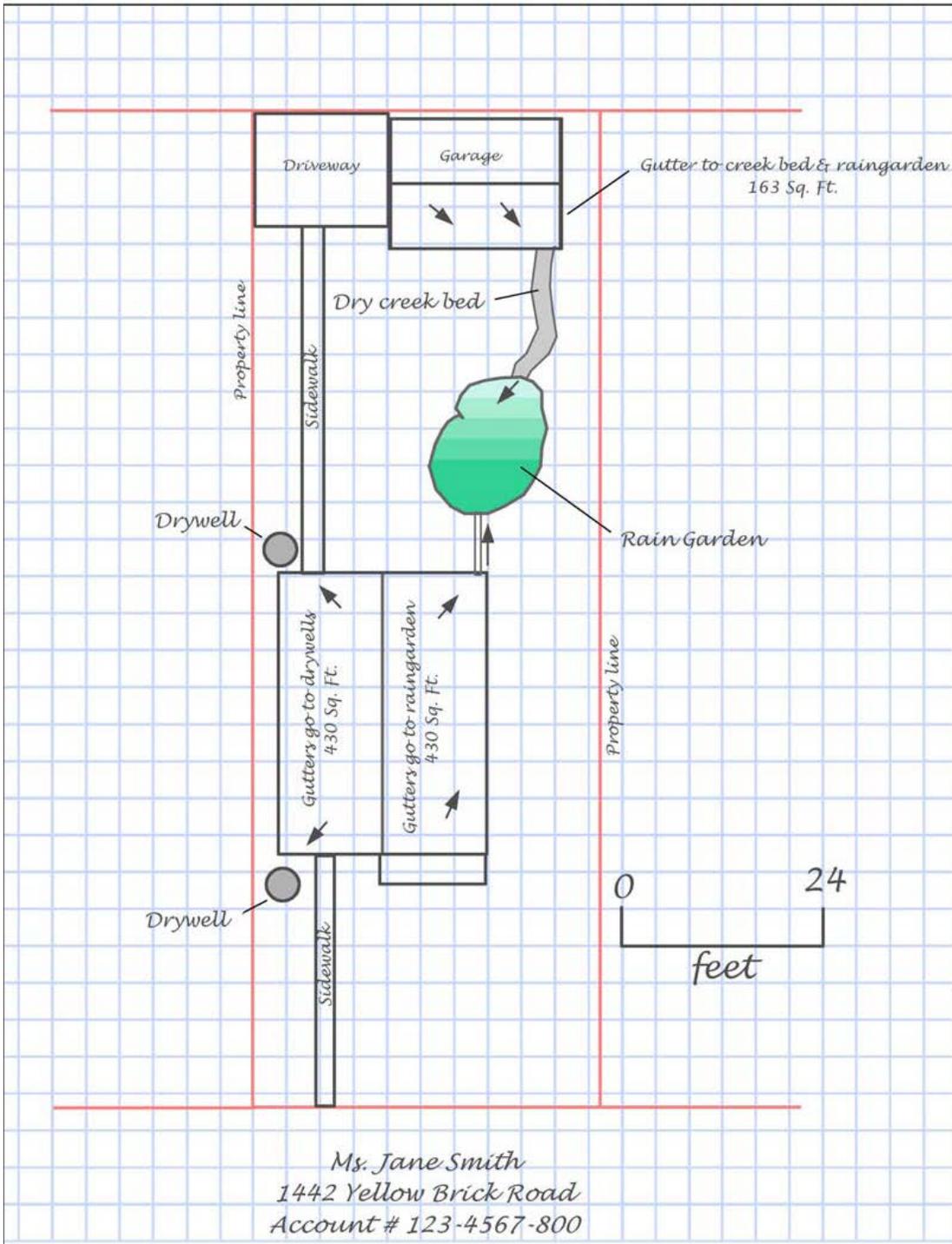
There is no relation between the Rainleader Disconnect requirement and Stormwater Utility fees. Compliance does not qualify a property to receive Stormwater Quality Credits. Roof drains, gutters and area drains connected to the sanitary sewer can cause the amount of flow to exceed the capacity of the sanitary system. This could result in the overflow of raw sewage directly to area streams and rivers. Removing these connections (as well as sump pump and other “clear water” connections) address both environmental and public health concerns, and are also mandated by the Metropolitan Council, Minnesota State Government and Minneapolis City Ordinances.

Stormwater Quality Credits Application Form instructions

Introduction: To qualify to receive a Stormwater Quality Credit for your property, you need to submit a completed credit application form. This should include a scaled map showing the location of impervious areas and stormwater BMPs installed on the property. The map must identify which portions of the impervious areas drain to which BMPs. Include arrows to show the general direction of flow. While there are several ways to create an acceptable map, the easiest way is to draw a map on square grid notebook paper as shown in the example on the following page.

The Property Map

The example map shown below is one that could be drawn on an 8 1/2" x 11" sheet of grid paper, displaying a Stormwater BMP plan for a typical single family home. This map shows a rain garden and two dry wells that treat the runoff from the roof of the house and part of the garage. Because the rain garden is located away from the garage, a dry creek bed (usually a heavy plastic liner covered with decorative rock) conveys water from a downspout to the rain garden. The measurements on the map are the same as those used for all of the examples used in these instructions. Refer back to the map example when completing the form.



The Application Form

Section I – Contact & Account information

Provide the name, mailing address, telephone number and email address of the applicant. Include the property address for the credit site and **Property Identification Number (PIN)**. Also include monthly utility bill account number and the amount of your current stormwater charges.

¹ The Property Identification Number (PIN) can be found on the City's property information web site. Go to: <http://www.ci.minneapolis.mn.us/propertyinfo/> and follow the instructions to search the site. Property ID is the same as your PIN.

Section II - Measuring the impervious area on your property

To determine what portion of the property is impervious, measure (in S.F.) the building footprint, any patios or decks, sidewalks (do not include public sidewalk along the street), garage or parking areas, driveways or any hard surface. Enter the figures for each category, totaling in the appropriate boxes.

Example:

Square feet home/building	910.0
Square feet patio/deck	
Square feet sidewalk	144.0
Square feet garage	325.0
Square feet parking/driveway	195.0
Square feet other _____	
Total square feet of impervious area	1,574.0

¹ To calculate the total number of square feet, multiply the length of any structure or paved area on your property by its width. For example, a 20' x 30' house would have 600 square feet of impervious area (20' x 30' = 600 S.F.).

Measure all impervious areas; add them together to determine your property's total impervious area.

The figure of total impervious area on your property will be used to verify current information on the account, calculating the percentage of your Stormwater Quality Credit.

Section III - Verify Current Stormwater Charges

The monthly charge for stormwater accounts is listed in terms of **Equivalent Stormwater Units**, or ESU. An ESU is equal to 1,530 S.F. of impervious area, which is the average total impervious square footage on a single family lot in Minneapolis. To determine the initial ESU rate for your account, the City used data from Hennepin County and Minneapolis Assessor's offices. This data contained data on the total lot size, ground-floor building square footage, garage size and other improvements on the property. These records may not reflect current property conditions, such as recent driveway or sidewalk additions. A current total is needed to verify the correct level of charges and to calculate and apply the credit. Use the total impervious area you recorded in Section II to verify the charges as shown below.

Single Family Homes:

Monthly bills for single family homes are divided into three rate groupings. If your property is a single family home, find the grouping your impervious area belongs in the table below. Enter the ESU and monthly charge figures for that group in the appropriate boxes in Section III on the form:

Group 1: Less than 1,485 S.F.	0.75 ESU	\$9.27 per month
Group 2: 1,486 to 1,585 S.F.	1.00 ESU	\$12.36 per month
Group 3: 1,586 S.F. or more	1.25 ESU	\$15.45 per month

Example: Using the figure of 1,574 S.F. from the example for Section II – 1,574 is more than 1,485, but less than 1,585, so a single family home with 1,574 S.F. of impervious area would fit in Group 2, resulting in a rate of 1.0 ESU and charges of \$12.36 per month.

For all other properties

For all properties other than single family homes, including duplexes & apartments, divide the total impervious area by 1,530 according to the chart in Section III to determine the ESU rate and monthly charges for your account.

Example: For a small business or apartment building with 3,577.5 S.F. of impervious area – 3,577.5 divided by 1,530 = 2.34, resulting in a rate of 2.34 ESU and charges of \$28.92 per month.¹

¹ In 2017, the monthly charge for Stormwater Utility fees is \$12.36 per ESU, so a small business with 2,295 S.F. of impervious area would be charged for 1.5 ESUs or \$18.54 per month (2,295 divided by 1,530 = 1.5 or 1.5 ESU).

Section IV - Stormwater BMPs & Treated Areas

The table for Section IV is similar to the table in Section II for total impervious areas. However, there is an additional column to list the stormwater BMPs you have installed for the credit. In this table, only list the portion of your impervious areas that drain to your Stormwater BMP.

Example: Using figures for a site with 1,574 total impervious area as used in the example map.

Impervious Areas	Square Feet	Stormwater BMPs
Square feet home/building	860	Rain Garden – Dry wells
Square feet patio/deck		
Square feet sidewalk		
Square feet garage	163	Rain Garden
Square feet parking/driveway		
Square feet other _____		
Total square feet of impervious area	1,023	

Section V - Calculate the Percentage of Impervious Area Treated

To fill the Section V table, divide the total area draining to Stormwater BMPs from Section IV by the figure for total impervious area from Section III. This will give you the percentage of impervious area treated by Stormwater BMPs.

Example: Divide the 1,023 S.F. in treated impervious area by 1,574 S.F. total impervious area. This equals 0.6499, which equals 65%. Enter these figures in the table for Section V as shown below.

Total areas draining to BMPs (from Step IV)	Divided by total impervious area (from Step III)	Equals % of impervious area treated for quality
<u>1,023 S.F.</u>	<u>1,574 S.F.</u>	<u>0.6499 = 65%</u>

Section VI - Calculating Percentage Reduction in Stormwater Utility Fees

Since the Stormwater Quality Credit equals 50% of the fee for the area treated by Stormwater BMPs, divide the percentage of treated impervious area by 2 to calculate the percent reduction in monthly Stormwater Utility Fees.

Example: 65% divided by 2 equals 32.5 %. Enter these figures in the table as shown below.

Percent of impervious area treated for quality <u>65%</u>	Divided by 2 equals percent reduction in stormwater utility fee <u>0.325 = 32.5%</u>
--	---

Section VII - Ratepayer Certification

The purpose of this section is to certify that the Stormwater BMPs have been properly installed and to grant City of Minneapolis inspectors the right to enter the property for verification. Sign and date the completed Stormwater Quality Credit Application. Mail the application to the address shown on page. If you need further assistance, please contact Stormwater Utility Administration at 612-673-2965.



Application for Stormwater Quality Credit

Materials required to complete application

Check when attached	Materials Required for Application to be Processed
	Completed and signed application must include: <ul style="list-style-type: none"> • Current account information • Calculations for your site's pervious and impervious areas
	Property map: <ul style="list-style-type: none"> • Map must be to scale • Map must show impervious area • Map must indicate how stormwater drains to stormwater BMP

Submit Applications to:

This application must be completed and signed before it will be processed. When completed, send application and all attachments to:

City of Minneapolis Stormwater Credits
 Room 300, 309 Second Ave S
 Minneapolis, MN 55401-2238

If you have questions, please call: Stormwater Utility Office (612) 673-2766

I - Contact & Account Information

Property Owner Name	
Mailing Address	
City, State, ZIP Code	
Home/Personal Phone	
Work Phone	
Email Address	
Property Address	
Street Address	
City, State, ZIP Code	
Property Identification Number (PIN)	
Utility Account Number	
Current Monthly Stormwater Charge	

II - Measure the impervious area on your property

Determine what portion of this property is impervious area (see instruction guide for definition).

Square feet home/building	
Square feet patio/deck	
Square feet sidewalk	
Square feet garage	
Square feet parking/driveway	
Square feet other _____	
Total square feet of impervious area	

III - Verify the Current Stormwater Charges

Fill out the table below to verify the current stormwater charges for your property.

Total Impervious Area (from Step II)	Divided by 1,530 (See note for single family homes)	Times \$12.36
= _____ S.F.	= _____ ESU	= \$ _____ per month

Note: Single family homes are divided into three classes for Equivalent Stormwater Units (ESU). If property is a Single Family Home, use the following figures to enter the ESU in the table above.

Single family homes:

- If less than 1,485 total impervious S.F. → enter **.75** for ESU
- If 1,485 to 1,585 total impervious S.F. → enter **1.00** for ESU
- If more than 1,585 total impervious S.F. → enter **1.25** for ESU

All other properties, calculate the ESU according to the table instructions.

IV - Stormwater Management Tools/Practices (Stormwater BMPs)

Fill out the table below to calculate the amount of impervious area that drains to a stormwater management tool/practice (see instruction guide for a list of tools and practices).

Impervious Areas	Square Feet	Stormwater BMPs
Square feet home/building		
Square feet patio/deck		
Square feet sidewalk		
Square feet garage		
Square feet parking/driveway		
Square feet other _____		
Total square feet of impervious area		

V - Section V. Calculate the Percentage of Impervious Area Treated

Calculate the percentage of the impervious area that drains to your stormwater management tools/practices. See instruction guide for more details.

Total areas draining to BMPs (from Step IV) _____	Divided by total impervious area (from Step III) _____	Equals % of impervious area treated for quality _____
--	--	---

VI - Calculate Percentage Reduction in Property's Stormwater Utility Fee

Calculate the percentage of the impervious area that drains to your stormwater management tools/practices. See instruction guide for more details.

% of impervious area treated for quality _____	Divided by 2 _____	Equals % reduction/credit in property's stormwater utility fee _____
--	---------------------------	--

VII. Ratepayer Certification

By signing this application, I certify that I am the owner or authorized representative of the owner and have read this application and understand the terms and conditions of the credit program. I certify this application and additional materials accurately describe stormwater management and disposal on the property identified on this application. I grant the City of Minneapolis permission to enter this property for the sole purpose of conducting a site inspection of the stormwater management and disposal facilities on this property.

_____ Signature	_____ Print Name	_____ Date
--------------------	---------------------	---------------