FOR CITY USE ONLY

Date Received:
Percentage of Credit:
Credit Applied (Date):
Credit Applied By:



City of Harrisonburg Department of Public Works 320 East Mosby Road Harrisonburg, VA 22801 540·434·5928 stormwater@harrisonburgva.gov



Water Quality Credit Application

Due July 1 to the Public Works Department

Parcel Information

Tax map parcel number(s):	Parcel street address:
(See Web-GIS site and measure polygon tool at http://www.harrisonburgva.g	ov/stormwater-utility to find Tax Map #)

Owner Information

Owner name (Last, First, M.I.):	
Owner mailing address:	
Phone number (w/area code): ()	_Email:

<u>Type of Water Quality Practice – Choose All That Apply:</u>

□ I have a septic system and am interested in connecting to sanitary sewer.

Roof Drain Disconnection (10-20% Stormwater Credit. See Section 8.A. in Credit Manual.) Pictures required.

Number of disconnected downspouts: _____out of _____total downspouts.

Roof area draining to the disconnected downspouts: ______ sq. ft.

Total roof area: _______ sq. ft.

What percentage of the roof is disconnected? _____%

(See Web-GIS site and measure polygon tool at <u>http://www.harrisonburgva.gov/stormwater-utility</u> to find roof area)

Rain Barrel/Cistern (20% Stormwater Credit. See Section 8.D. in Credit Manual.) Pictures required.

Total volume of barrel(s)/cistern(s): ______ gallons Total roof area draining to the barrel(s)/cistern(s): ______ sq. ft.

An overflow control mechanism and mosquito prevention device included? Yes 🗌 No 🗌

Conservation Landscaping (10	% Stormwate	er Credit. Se	e Section 8.G. in Credit Manua	l.)
Must cover 20% of the property. What landscaping? Attach additional sheets	,, , ,			ent or planned conservation
Туре:			Quantity:	
Туре:			Quantity:	
🗌 Rain Garden (25-50% Stormwate	r Credit. See	Section 8.B.	. in Credit Manual.)	
🗌 Rain Garden (25-50% Stormwate	er Credit. See	Section 8.B	e. in Credit Manual.) <mark>Pictures n</mark>	equired.
Area (length x width): Depth: Impervious surface area draining to t	inche he rain garde	S	ft.	Ponding depth Mulch layer Rain garden soil mix Existing ground
Type and Quantity of Plants (native V	egetation Re	commende	rd):	Rain garden soil mix depth (12" to 24" typical)
Туре:			Quantity:	
Туре:			Quantity:	
Type: Quantity:				
Attach additional sheets if necessary				
Urban Tree Canopy (10% Storm	vater Credit.	See Section	a 8.F. in Credit Manual.)	
Choose one:				
Lot size 2.5 acres or less	→ tree canop	oy coverage	is 20% or more of total prope	rty
Lot size 2.5 to 5.0 acres	tree canopy	/ coverage i	s 10% or more of total proper	ty
Lot size greater than 5.0	\rightarrow tree cano	oy 5% or mo	ore of total property	
New Tree Planting (The projected g	rowth of tree	es planted n	nuch meet the above canopy c	overage criteria)
Туре:	Quantity:	Year Planted: 	Caliper Size* or Height at planting (Circle One):	Projected canopy cover at 10 year growth:
*2" caliper minimum sapling is required f planted is not included in the referenced	-			

Septic to Sanitary Sewer Connection (10-50% Stormwater Credit. See Section 8.B. in Credit Manual.)

- If the current homeowner has connected from a septic system to the sanitary sewer system since 2006, a 50% credit is available.
- If the current homeowner purchased a home that was connected from a septic system to the sanitary sewer system since 2006, a 10% credit is available.

Year of Connection to the Sanitary Sewer System: ______

Year Applicant Purchased This Home:	

Nutrient Management and Lawn Care Agreement (10% Stormwater Credit. See Section 8.H. in Credit Manual.)

Do you fertilize your lawn? (Choose One)

Yes	\square	Fill out the separate H	omeowner Nu	trient Management	and Lawn Care	Agreement
105		i in out the separate i		the management		, Biechiche

No Check both requirements below, both are mandatory.

My property is not fertilized at all.

This strategy is suitable for lawns that are relatively flat and mature and have a dense grass cover. Property owners should rely on soil mineralization, lawn clippings and atmospheric deposition to supply the nutrients needed for growth.

I maintain a dense cover of grass or conservation landscaping to reduce runoff, prevent erosion, and retain nutrients.

Dense grass or plant cover helps to reduce surface runoff which can be responsible for significant nutrient loss from the lawn. Lawns with poor turf cover have a high risk for nutrient loss, especially if soils are compacted or slopes are steep. Any bare spots or eroding areas should be reseeded, and may require some soil amendments, or in extreme cases, stabilization with a biodegradable erosion control cover.

□ Impervious Cover Removal/Pervious Paver and/or Vegetated Roof Installation (See Section 8.1. in Credit Manual for more information.)

Impervious Cover Removed: ______Sq. Ft.

If a permeable hardscape will replace the impervious cover, explain the type of material installed and the underdrain system (provide a drawn plan, if available):

What is the depth of the stone reservoir? ______ Inches

If a vegetated roof(s) will replace the impervious cover, explain the type of system installed (provide a drawn plan, if available):

Regional BMP (50% Stormwater Credit. See Section 8.E. in Credit Manual.)

Type of regional BMP: ____

The following are needed to complete an application for a Regional BMP Credit:

- Stormwater Utility Fee Regional BMP Agreement
- Construction Plans and Record Drawings, if available
- BMP and Property Sketch

Required Attachments To Complete Water Quality Application:

Signed Stormwater Utility Fee Maintenance Agreement

BMP and Property Sketch, if needed

Give a general sketch of the stormwater management BMP(s) installed on your property. You may provide a sketch on an aerial map. Include the following, if applicable: location of rain barrels, outline of deck/shed/driveway, outline of tree canopy; square footage of rain gardens, conservation landscaping, and vegetated filter strips. Include square footage and drainage path(s) to the BMP(s) as well as the intended overflow drainage path away from the BMP(s). If multiple BMPs are being installed, please sketch each BMP installed. (See Web-GIS site and measure polygon tool on http://www.harrisonburgva.gov/stormwater-utility)

Homeowner Nutrient Management and Lawn Care Agreement, if applicable

Signature of Agreement

I hereby certify the above information to be true and correct to the best of my knowledge. I agree that pollutant credits approved by the City of Harrisonburg as Stormwater Utility Fee Credits will no longer be available for any other use, including Virginia Stormwater Management Program requirements.

Owner Printed Name

Owner Signature

Date

Credit Application ID:



City of Harrisonburg, Virginia Department of Public Works 320 East Mosby Road Harrisonburg, VA 22801 540·434·5928 stormwater@harrisonburgva.gov

Stormwater Utility Fee Maintenance Agreement

For new and pre-existing Residential BMPs

This Agreement, made and entered into this _____ day of ______, by and between ______, by and between ______ ("Property Owner") and the City of Harrisonburg, a Virginia municipal

corporation, ("City").

The City and the Property Owner(s) agree to the following terms and conditions as follows:

The City requires that any on-site stormwater management BMP, as outlined in the credit application, be adequately constructed, operated, and maintained by the Property Owner(s).

1. Location of the Facility. The on-site stormwater management BMP facility (check one) □ located on the Property or □ on Harrisonburg City Tax Map as parcel ______, has been constructed by the Property Owner(s) in accordance with the specifications identified in the appropriate Stormwater Utility Fee Credit Manual for Non-Residential or Residential.

2. Commitment to Operation and Maintenance of Facility. The Property Owner(s), including any homeowners association, shall adequately operate, inspect, and maintain the stormwater management BMP facilities in accordance with the specific operation, inspection, and maintenance requirements set forth in the attachment to the maintenance agreement.

3. Documentation. The Property Owner(s) shall document any maintenance, landscaping, and repairs performed to the on-site stormwater management BMP facilities on the City's Maintenance Record form and provide a copy of said Maintenance Record to the City or its representatives upon request. Regular inspection by the Property Owner(s) is encouraged, but submittal of inspection forms to the City is not required.

4. Right of Entry on Property. The Property Owner(s) grants permission to the City and its authorized agents and employees, to enter upon the Property at reasonable times and upon presentation of proper identification, to inspect the stormwater management BMP facilities whenever the City deems necessary. Except for emergencies, City representatives shall use reasonable efforts to provide at least a 24 hour notice to the Property Owner(s) before entry upon the Property. The purpose of inspections is to assure safe and proper functioning of the facilities, follow-up on suspected or reported deficiencies, and/or to respond to citizen complaints. In the event any deficiency is observed during an

inspection, the City shall provide the Property Owner(s) copies of the inspection findings and a directive with timeline to commence any necessary repairs.

5. Failure to Maintain. In the event the Property Owner(s) fails to operate and maintain the stormwater management BMP facilities in good working condition and in accordance with the attachment, the City will notify the Property Owner(s) in writing of deficiencies and required maintenance actions. If maintenance actions are not corrected by the Property Owner(s) within 90 days after notification is sent, the revocation of stormwater utility fee credits will take effect immediately and this maintenance agreement is voided. It is expressly understood and agreed that the City is under no obligation to maintain or repair said stormwater management BMP facilities, and in no event shall this Agreement be construed to impose any such obligation on the City.

The Property Owner(s) may reinstate their credit by following the procedures and requirements outlined in the appropriate Stormwater Utility Fee Credit Manual for Non-Residential or Residential.

6. Credit Effective Dates. Credits will be valid for five (5) years from the date of application approval or until transfer of ownership (i.e. sale of the property to another party), whichever is first. The Property Owner(s) will need to re-apply for the credit every five (5) years. Credits do not transfer with ownership changes.

7. Release of City. The Property Owner(s), its successors and assigns, shall release the City, its elected officials, offices, employees and designated representatives, from all damages, accidents, casualties, occurrences, or claims or causes of action which might arise from or be asserted against said City, its elected officials, offices, employees, and representatives related to the construction, presence, existence, operative or maintenance of the stormwater management BMP facilities by the Property Owner(s) or City. In the event that such a claim is asserted, the City shall promptly notify the Property Owner(s) and the Property Owner(s) shall defend, indemnify, and hold harmless the City, its elected officials, City Officers or employees, and its associated individuals, in any suit or action based on the claim.

8. Checklist. Mark all Residential on-site stormwater management BMPs pertaining to this agreement. By checking these, you also certify that you have reviewed and agree to the Operations, Inspection, and Maintenance requirements for each stormwater management BMP provided by the City.

- □ Roof Drain Disconnection
- Rain Garden
- □ Vegetated Filter Strip
- □ Rain Barrel/Cistern
- Regional BMP
- □ Tree Planting
- □ Conservation Landscaping
- □ Homeowner Nutrient Management and Lawn Care Agreement
- □ Impervious Cover Removal, Including Permeable Hardscapes and Vegetated Roofs

Upon signing this document, The City and the Property Owner(s) agree to the terms and conditions as outlined above and as described in the appropriate Stormwater Utility Fee Credit Manual for Non-Residential or Residential effective on the date signed.

Owner Printed Name

Date Received:



City of Harrisonburg, Virginia Department of Public Works 320 East Mosby Road Harrisonburg, VA 22801 540·434·5928 stormwater@harrisonburgva.gov

Homeowner Nutrient Management and Lawn Care Agreement For those homeowners that apply fertilizer to their lawns

Parcel Information

Tax Map Parcel Number: ______

Parcel Street Address: ______

Nutrient Management Information

If all the selected provisions of the Nutrient Management Agreement are followed this Agreement is valid for 5 years from the date of application approval before re-submittal is required.

Square footage of turf covered by this agreement: ______sq. ft.

(See Web-GIS site and measure polygon tool at <u>http://www.harrisonburgva.gov/stormwater-utility</u> to measure turf area)

Nutrient Management Provisions

Read the following and check each provision you will implement on your lawn. Items 1 and 2 are required. For items 3-9, at least two provisions must be followed.

- 1. Maintain a dense cover of grass or conservation landscaping to reduce runoff, prevent erosion, and retain nutrients ***Mandatory**
 - Dense grass or plant cover helps to reduce surface runoff which can be responsible for significant nutrient loss from the lawn. Lawns with poor turf cover have a high risk for nutrient loss, especially if soils are compacted or slopes are steep. Any bare spots or eroding areas should be reseeded, and may require some soil amendments, spot fertilization and, in extreme cases, stabilized with a biodegradable erosion control cover.
- 2. Reduce Fertilizer *Choose one option
 - You have three fertilization options to reduce the risk that fertilizer from your lawn will reach local waterways, depending on the conditions of your lawn and your aesthetic preferences. If you are entering into a Nutrient Management Agreement, you are required to choose one of the following options:

- 1. OPTION 1: The first strategy relies on a "reduced rate and monitor" fertilization approach. In this strategy, you only apply one-third to a half of the recommended application rate on the fertilizer bag label, and then monitor how your lawn responds over the next couple of months. If you are unsatisfied with the look of your lawn at that point, you can always re-apply fertilizer at the smaller dose. In most situations, however, you will find it hard to notice much of a difference in how good your lawn looks.
- 2. OPTION 2: The second strategy is to fertilize at the recommended nitrogen fertilization rate but split it into 3 or 4 small doses during the growing season. Individual application rates should be no more than 0.9 pound of nitrogen per 1,000 square feet of lawn in most parts of the local watershed. When assessing your property, we recommended that you measure your lawn area which will help you to figure out how much fertilizer you will need to buy. If you choose to fertilize, the following practices can further reduce the risk that fertilizer you do apply ever reaches local waterways.
- 3. OPTION 3: Apply fertilizers based on soil test results. Soil samples collected by homeowners can be analyzed by the Virginia Cooperative Extension. More information on soil testing is available at <u>www.soiltest.vt.edu</u>.
 - The following is an additional list of places in Virginia where you can get a soil test analysis to see what (if any) fertilizer is required for your lawn. (<u>http://pubs.ext.vt.edu/452/452-129/452-129.html</u>; <u>http://www.soiltest.vt.edu/</u>; <u>http://www.al-labs-eastern.com/</u>; <u>http://www.lynnhavenrivernow.org/files/pages/Soil_sample_April_2010.pdf</u>)

For items 3-9, choose two or more provisions to follow.

- 3. Do not apply fertilizers before spring green up or after the grass becomes dormant
 - Researchers have concluded that the highest fertilizer loss occurs in the winter when grass is dormant. In the northern part of the Bay watershed, dormancy usually begins around Halloween, whereas it begins around Thanksgiving in the southern part of the watershed.
- 4. Maximize use of slow release N fertilizer
 - The risk of nutrient loss during the growing season can be further reduced if you buy slow release fertilizer products. Check the bag label when you shop to see how much water insoluble nitrogen or WIN it contains -- at least 20 to 50% of WIN is generally desirable.
- 5. Immediately sweep off any fertilizer that lands on paved surface
 - Rotary spreaders are the most common method to apply fertilizers and can broadcast fertilizer granules near the edge of the lawn, street, or driveway, where they can be washed away in the next storm. Some experts think as much as 2 to 4% of applied fertilizer can be washed away in this manner. If you are buying a new spreader, consider models that have side broadcast deflectors that can sharply reduce off-target fertilization.

- 6. Never apply fertilizer within 15 to 20 feet of any water feature and manage this zone as a grass, meadow, or forest buffer
 - The risk of nutrient loss is also high when fertilizer is applied close to water features such as swales, drainage ditches, streams, shorelines, sinkholes and wetlands. Create a "fertilizer free" buffer zone around these water features and manage this are as a conservation landscape. Even if you don't fertilize your lawn, there are still other good practices to make you yard more environmentally-friendly.
- 7. 🗌 Keep lawn clippings and mulched leaves on the lawn and keep them out of streets and storm drains
 - Lawn clippings are an important nutrient and organic matter source which can enhance the health of your soils and your lawn. Using a composting lawn mower to keep the clippings on your lawn adds about one pound of N per 1,000 square feet of natural (and free) fertilizer to your lawn each year. You should treat lawn clippings and tree leaves as if they were a bag of fertilizer, and strive to keep them on your lawn, and out of the gutter, street, or storm drain system. When you rake your leaves in the Fall, it is good practice to run over them with your composting mower to mulch them into small fragments and add them to your compost pile in the backyard. Come late Spring, they will decompose into a fine organic mulch that you can add to your rain garden or conservation landscape as a top dressing (assuming that you turn over the pile every couple of months). Another option is to follow the yard debris and bulk collection schedule in the City of Harrisonburg. http://www.harrisonburgva.gov/bulk-collection
- 8. Set mower height at 3 inches or taller
 - Maintaining taller grass produces a deeper and more extensive root system, which in turn, increases nutrient uptake and reduces lawn runoff volume. The deeper roots also reduce the need for supplemental irrigation during times of drought, suppress weeds and increase turf density.
- 9. Use a professional lawn care service participating in the Water Quality Agreement Program with the Virginia Department of Conservation and Recreation <u>http://dcr.virginia.gov/soil_and_water/wqagree.shtml</u>

Do you hire a landscaping company to apply fertilizer/pesticide to your lawn)?Yes 🗌 No 🗌
--

Annual Nitrogen and Phosphorus fertilization rate, if any: _____

Signature of Agreement

Upon signing this document, I agree to follow the selected responsible lawn care maintenance items for the extent of the Agreement and for the total land area listed in this Agreement.

Owner Printed Name

Owner Signature

Date

Additional Resources

Virginia Cooperative Extension – Urban Nutrient Management; <u>http://www.ext.vt.edu/topics/lawn-garden/urban-nutrient-management/index.html</u>

Example Homeowner Nutrient Management Plan (VA DCR); http://www.dcr.virginia.gov/soil_and_water/documents/nmtmsc-example_home_lawn_nmp.pdf

Chesapeake Bay Urban Nutrient Management Guidance;

http://www.chesapeakebay.net/documents/Final CBP_Approved_Expert_Panel_Report_on_Urban_Nutrient_Managem_ent--short.pdf