

MEMORANDUM

May 3, 2016

TO: Transportation, Infrastructure, Energy and Environment Committee

FROM: Amanda Mihill, Legislative Attorney *A. Mihill*
KL Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Worksession:** Expedited Bill 11-16, Stormwater Management – Water Quality Protection Charge – Grants - Credits

Expedited Bill 11-16, Stormwater Management – Water Quality Protection Charge – Grants-Credits, sponsored by Lead Sponsor Council President on behalf of the County Executive, was introduced on April 5, 2016. A public hearing was held on April 26 (see correspondence at ©78-112).

Expedited Bill 11-16 would:

- authorize establishment of a watershed restoration grant program for certain owners of improved aircraft landing areas to offset the cost of the Water Quality Protection Charge;
- clarify the eligibility criteria for a property owner to receive a Water Quality Protection Charge credit;
- expand the timeframe for a property owner to appeal the denial of a request for a credit or adjustment of the amount of the Water Quality Protection Charge billed to the property owner; and
- generally amend County law regarding the Water Quality Protection Charge.

A companion regulation, Executive Regulation 12-16, attached for informational purposes, is on ©15-26. A draft of the Water Quality Protection Charge Credit Procedures Manual, which is referred to in the Regulation, is on ©27-61. Committee members should note that while some of the testimony that was presented at the public hearing and in written correspondence was directed at the proposed regulation, that regulation is not pending before the Committee. Therefore, any issues raised with regard to the regulation are not addressed in this packet. The DEP is currently accepting public comments on Executive Regulation 12-16 and will transmit the Regulation to the Council once the comment period has closed and DEP has reviewed comments received.

Background: Water Quality Protection Charge

In 2001, the Council approved Bill 28-00, which created the stormwater management fund (called the Water Quality Protection Fund). This fund is supported by the annual Water Quality Protection Charge. In 2013, the Council enacted Expedited Bill 34-12, which subjected all properties not otherwise exempt under State law to the Water Quality Protection Charge (including, for the first time, many commercial properties); allowed property owners to obtain credits for undertaking certain water quality protection measures on their properties; and authorized financial hardship exemptions for certain owner-occupants of residential properties. The charge is based on an equivalent residential unit (ERU), defined as 2,406 square feet (which was the calculated statistical median of the total horizontal impervious area of developed single-family detached residences in the County at the time the fund was established). Beginning in 2013, DEP implemented the rate structure described in the chart below.

Property Classification	Description	Rate (per ERU)
Single Family Residential Properties		
Tier 1	0-1,000 sq. ft. impervious area	33% of an ERU
Tier 2	1,000-1,410 sq. ft. impervious area	50% of an ERU
Tier 3	1,410-3,412 sq. ft. impervious area	100% of an ERU
Tier 4	3,412-3,810 sq. ft. impervious area	150% of an ERU
Tier 5	3,810-5,815 sq. ft. impervious area	200% of an ERU
Tier 6	5,815-6,215 sq. ft. impervious area	250% of an ERU
Tier 7	6,215+ sq. ft. impervious area	300% of an ERU
Multifamily Residential Properties		
Multifamily	0+ sq. ft. impervious area	Assessed based on actual imperviousness that is converted to an ERU number
Nonresidential Properties		
Nonresidential	0+ sq. ft. impervious area	Assessed based on actual imperviousness that is converted to an ERU number
Nonprofit Properties		
Tier 1	0-6,910 sq. ft. impervious area	150% of an ERU
Tier 2	6,910-54,455 sq. ft. impervious area	900% of an ERU
Tier 3	54,455+ sq. ft. impervious area	2,300% of an ERU
Agricultural Properties		
Agricultural	Impervious area includes only houses and is assessed as single family residential tier classification	See single family residential tier classification above.

The Council sets the ERU rate each year by resolution. The FY16 rate is \$88.40. The FY17 operating budget assumes an increase to \$95.00 (the Council will set this in mid-May as part of the budget action.). Overall, for FY17, the Water Quality Protection Fund is assumed to raise about \$34 million from the charge. Revenue from the County's excise tax on disposable shopping bags

also goes to the Water Quality Protection Fund. The FY17 budget assumes \$2.3 million in revenue from this source.

In addition to stormwater facilities inspections, maintenance and repair the WQPC covers many other Countywide costs, such as storm drain maintenance, street sweeping, education and outreach, water quality monitoring, billing/account maintenance, office lease costs, DEP staffing, the Park and Planning chargeback, and many other charges. These costs are recovered through Water Quality Protection Fund revenues and are built into the ERU rate set by the Council each year. To the degree some properties pay a partial charge or perhaps even no charge a slightly higher charge must be spread across all other properties which do pay into the Fund.

Background: NPDES MS4 Permit

Revenue from the Water Quality Protection Fund is used to fund the activities required under the County's National Pollutant Discharge Elimination Systems Municipal Separate Storm Sewer System (NPDES MS4) Permit. A portion of the Water Quality Protection Fund is also appropriated to the Montgomery County side of M-NCPPC for its water quality activities required to meet separate permits. As the Committee knows, the cost implications for implementation of the current permit are substantial. Two years ago, DEP estimated the permit costs to be about \$305 million through 2015 and nearly \$1.9 billion through 2030. Additional background information on the NPDES MS4 Permit can be found in a memorandum from Senior Legislative Analyst Keith Levchenko on ©62-77.

Issues for Committee Discussion

1. Credit program – structural maintenance. Bill 11-16 would clarify the eligibility criteria for a property owner to receive a credit. Current law requires the Director of DEP to grant a credit if “the property contains a stormwater management system that is not maintained by the County”. According to DEP, the intent behind this language is that credits are provided only if property owners **structurally** maintain systems and the County does not have cost liability for performing structural maintenance. Bill 11-16 would specify that the Director of DEP must grant a credit only if the property contains a stormwater management system for which the County does not perform structural maintenance.

Paul Chod, on behalf of himself, and Diane Feuerherd, on behalf of Minkoff Development Corporation, object to this portion of Bill 11-16. Mr. Chod and Ms. Feuerherd, both speaking in reference to stormwater management ponds located on property known as the Shady Grove Development Park. Mr. Chod believes that his property should not be precluded from receiving a credit because he performs non-structural maintenance (landscaping, grass cutting, and trash removal) and his stormwater facilities treat runoff from surrounding properties. Particularly since, from Mr. Chod's perspective, the County has only had to perform structural maintenance once.¹

¹ Aside from Mr. Chod's objection to having to provide structural maintenance in order to receive credits, Mr. Chod contends that his Shady Grove property should get a 100% annual credit since his Shady Grove property's stormwater management facilities (which meet the stormwater treatment standards in place when they were built) treat his property's stormwater as well as a substantial amount of offsite stormwater. DEP agrees that the offsite stormwater

The DEP estimates that since 2009, the County has spent roughly \$21,000 on inspection and maintenance on the ponds at the Shady Grove Development Park. Part of the reasoning behind allowing credits only for properties in which the County does not perform structural maintenance is because while several years may go by in which the County does not incur significant costs, at some point, the County will indeed incur significant costs, such as dredging the pond or other such activities or repairs. The DEP staff estimates that major maintenance on stormwater ponds is required approximately every 20-30 years and costs on average \$649,000.

Options for Committee consideration. One option to address Mr. Chod's concern is for the County to cede structural maintenance of the ponds at Shady Grove Development Park to Mr. Chod. If that were to happen, Mr. Chod would then be eligible to receive an annual credit. One related issue to this option is whether a property owner who performs structural maintenance should be eligible to receive a structural maintenance credit (in addition to the annual WQPC credit), taking into account revenues generated from off-site properties that drain into the property owner's ponds. Committee members may wish to explore this with DEP staff. If Committee members support this approach, the following language could be added to Bill 11-16:

The Director may establish, by regulation, structural maintenance credits for property owners who are responsible for structural maintenance of stormwater management facilities on their properties which treat water from off-site properties.

If a property owner does not structurally maintain their stormwater facilities, then the difference between that property and an "off-site" property is the fact that the owner of the pond has to perform nonstructural maintenance. In this case, perhaps the property owner could receive a credit or grant to perform this function. Committee members may wish to also explore this option with DEP staff.

2. Credit program – common ownership communities. The Council also heard from Devin Battley, on behalf of the Lindbergh Park Owners Association. As Council staff understands the issue raised by Mr. Battley, there are stormwater management facilities within this community. Those facilities are considered "onsite stormwater management systems" only for the properties in which the systems are located and therefore only those specific properties receive a credit. However, all of the members of the common ownership community invest in the facilities and Mr. Battley believes that the credit should therefore be dispersed throughout all of the owners in the common ownership community. Council staff has asked DEP staff to be prepared to discuss this issue at the worksession, including the feasibility of dispersing the credit as requested by Mr. Battley.

should be taken into account, and that the new legislation and pending regulation will allow for consideration of this point. However, DEP contends that Mr. Chod's stormwater management facilities do not treat (by current stormwater management standards) 100% of the volume of stormwater generated on his site or on the neighboring properties and therefore the credit should be less than 100%. This issue is not discussed in detail in this memorandum because this is an issue that will be addressed during the Committee's eventual review of the regulation.

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Expedited Bill No. 11-16
 Concerning: Stormwater Management –
Water Quality Protection Charge –
Grants – Credits
 Revised: _____ Draft No. ____
 Introduced: April 5, 2016
 Expires: October 5, 2017
 Enacted: _____
 Executive: _____
 Effective: _____
 Sunset Date: None
 Ch. _____, Laws of Mont. Co. _____

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND

Lead Sponsor: Council President at the Request of the County Executive

AN EXPEDITED ACT to:

- (1) authorize establishment of a watershed restoration grant program for certain owners of improved aircraft landing areas to offset the cost of the Water Quality Protection Charge;
- (2) clarify the eligibility criteria for a property owner to receive a Water Quality Protection Charge credit;
- (3) expand the timeframe for a property owner to appeal the denial of a request for a credit or adjustment of the amount of the Water Quality Protection Charge billed to the property owner; and
- (4) generally amend County law regarding the Water Quality Protection Charge.

By amending

Montgomery County Code
 Chapter 19, Erosion, Sediment Control and Storm Water Management
 Sections 19-29A and 19-35

Boldface	<i>Heading or defined term.</i>
<u>Underlining</u>	<i>Added to existing law by original bill.</i>
[Single boldface brackets]	<i>Deleted from existing law by original bill.</i>
<u>Double underlining</u>	<i>Added by amendment.</i>
[[Double boldface brackets]]	<i>Deleted from existing law or the bill by amendment.</i>
* * *	<i>Existing law unaffected by bill.</i>

The County Council for Montgomery County, Maryland approves the following Act:

55 (h) A person that believes that the Director of Environmental Protection
56 has mistakenly assigned a Charge to the person’s property or
57 computed the Charge incorrectly may apply to the Director of
58 Environmental Protection in writing for a review of the Charge, and
59 request an adjustment to correct any error, not later than September 30
60 of the year that payment of the Charge is due. An aggrieved property
61 owner may appeal the Director’s decision to the County Board of
62 Appeals within [10] 30 days after the Director issues the decision.

63 (i) A person that believes that the Director of Environmental Protection
64 has incorrectly denied the person’s application for a credit or
65 exemption under subsection (e) may appeal the Director’s decision to
66 the County Board of Appeals within [10] 30 days after the Director
67 issues the decision.

68 * * *

69 **Sec. 2. Expedited Effective Date:** The Council declares that this
70 legislation is necessary for the immediate protection of the public interest. This
71 Act takes effect on the date on which it becomes law.

72

LEGISLATIVE REQUEST REPORT

Expedited Bill 11-16

Stormwater Management – Water Quality Protection Charge—Grants--Credits

DESCRIPTION:	Expedited Bill 11-16 would clarify the eligibility criteria for a property owner to receive a credit against the Water Quality Protection Charge and extend the property owner's timeframe to appeal a Director's decision. It would also authorize establishment of a watershed restoration grant program for the owners of certain improved aircraft landing areas used by the public to offset the cost of the Charge.
PROBLEM:	The owners of some properties that contain stormwater management systems maintained by the County have become eligible to receive credits against the Water Quality Protection Charge based on criteria that do not require the property owner to maintain the system. Also, the timeframe within which a property owner must request a credit or to challenge the amount of the Charge billed to that property owner is inadequate. The Montgomery County Airpark cannot divert additional air traffic to the County's only nearby private airport without the private airport expanding its airstrip. The private airport does not charge a fee for landing of aircrafts but is assessed the Charge for the impervious surface area of the airstrip, which the owner wishes to expand to receive the additional diverted traffic.
GOALS AND OBJECTIVES:	To incentivize property owners to treat stormwater runoff from their properties by using and maintaining the most effective stormwater management systems for reducing the discharge of pollutants to the maximum extent practicable; to allow property owners more time to appeal the denial of a request for a credit or adjustment of the amount of the Water Quality Protection Charge billed to the property owner; and to offset the cost of paying the Charge through a watershed restoration grant program for certain owners of improved aircraft landing areas that are used by the public.
COORDINATION:	Department of Environmental Protection
FISCAL IMPACT:	See Fiscal Impact Statement.
ECONOMIC IMPACT:	See Economic Impact Statement
EXPERIENCE ELSEWHERE:	To be researched.

SOURCE OF
INFORMATION:

Vicky Wan, Department of Environmental Protection, 240-777-7722

APPLICATION
WITHIN
MUNICIPALITIES:

N/A

PENALTIES:

N/A

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OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

March 24, 2016

TO: Nancy Floreen, President
Montgomery County Council

FROM: Isiah Leggett, County Executive 

SUBJECT: Proposed Legislation Regarding Stormwater Management – Water Quality Protection Charge

The purpose of this memorandum is to transmit for introduction an expedited bill that modifies the Water Quality Protection Charge grant and credit programs. I am also attaching a Legislative Request Report and Fiscal and Economic Impact Statements for the bill. Because the changes are also included in the Executive Regulations governing the Charge program, I am also transmitting for informational purposes, the proposed regulations which makes conforming changes consistent with this bill.

The bill amendments are as follows:

1. Establish a watershed restoration grant program for certain owners of improved aircraft landing areas to offset the cost of the Water Quality Protection Charge - The only private airport in Montgomery County that is exempt from county property taxes under Section 8-302 of the Tax-Property Article, Maryland Code, allows for the public use of its airstrip for aircraft landing free of service charges and that airstrip is assessed a Water Quality Protection Charge. To offset the cost of paying the Charge, a property that meets the above definition can apply for a grant through the watershed restoration grant program.
2. Clarifies the eligibility criteria for a property owner to receive a credit – This section previously was ambiguous. Clarifying language has been added to clarify the intent that a credit will only be provided to property owners that

maintain stormwater management systems which the County does not have cost liabilities in performing structural maintenance.

3. Credit revocation – Currently a property owner can still be granted a credit even if a stormwater management system is found to be in non-working condition under Section 19-28, Inspection and Maintenance of Stormwater Management Systems. Language is added to allow DEP the ability to revoke a credit if the property owner does not correct deficiencies to satisfy the property owners' maintenance obligations under Section 19-28.
4. Extend the property owner's timeframe to appeal a Director's decision – Currently a property owner has 10 days after a Director issues the decision to appeal. This extends the timeframe to 30 days to give those property owners additional time to properly prepare a response.

The amendments to the accompanying Regulations are as follows:

1. Eligibility – Creates a credit eligibility section that clearly states that the stormwater management system must be maintained by the property owner exclusively and in accordance to the maintenance requirements under Section 19-28 of the Code for the property owner to be eligible to receive a credit.
2. Credit Awards –
 - i. Changes the credit award from being dependent on the type of stormwater management facility to now be based on the proportion of the volume of water treated by the stormwater management system.
 - ii. Increases the maximum credit for a nonresidential or multifamily residential property to 100 percent for treatment of adjacent properties.
 - iii. Change the maximum credit for complete onsite treatment of stormwater to 60 percent based on the county's impervious surface of 60 percent privately owned and 40 percent publically owned.
3. Credit revocation – Adds language to allow DEP the ability to revoke a credit if the property owner does not correct deficiencies to satisfy the property owners' maintenance obligations under Section 19-28.
4. Timeframe to appeal a Director's decision – Increases the timeframe for a property owner to appeal a Director's decision from 10-days to 30-days.

Nancy Floreen, Council President
March 24, 2016
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5. Watershed Restoration Grant – Adds language to allow a grant program for certain owners of improved aircraft landing areas to offset the cost of the WQPC.

If you have any questions about this bill, please contact Lisa Feldt, DEP Director at 240-777-7781.

Attachments: (5)

Bill XX-16
Legislative Request Report
Fiscal Impact Statement
Economic Impact Statement
Draft Executive Regulation XX-16

c: Joseph Beach, Director, Department of Finance
Jennifer Hughes, Director, Office of Management and Budget
Marc Hansen, County Attorney
Lisa Feldt, Director, Department of Environmental Protection
Bonnie Kirkland, Assistant Chief Administrative Officer

**Economic Impact Statement
Expedited Bill XX-16, Stormwater Management
Water Quality Protection Charge Grants and Credits**

Background:

This legislation would make the following changes to the Water Quality Protection Charge (WQPC):

- 1) Provide a grant to offset the cost of the WQPC to the owners of improved aircraft landing areas exempt from County property taxes under Section 8-302 of the Tax-Property ("TP") Article, Maryland Code;
- 2) Clarify the eligibility criteria for a property owner to receive a WQPC credit; and
- 3) Expand the timeframe for a property owner to appeal the denial of a request for a credit or adjustment of the amount of the WQPC billed to the property owner.

1. The sources of information, assumptions, and methodologies used.

The source of information is the Department of Environmental Protection (DEP) 2015 Water Quality Protection Charge Billing database. DEP revenue reduction assumes that the airport's runway configuration does not change.

2. A description of any variable that could affect the economic impact estimates.

Revenue-reduction estimates related to the WQPC grant program may fluctuate in future fiscal years depending on the amount of impervious surface area and the amount of the WQPC. However, even with an increase in impervious surface area, the revenue impact is expected to be minimal. Any revenue reductions due to grants are offset by adjustments to the WQPC in order to generate sufficient revenues to pay for the required stormwater management expenditures and to meet the debt service coverage ratio. Based on data provided by DEP, estimates of the revenue reduction related to the grant program increase from \$3,800 in FY17 to \$5,600 by FY22.

3. The Bill's positive or negative effect, if any on employment, spending, saving, investment, incomes, and property values in the County.

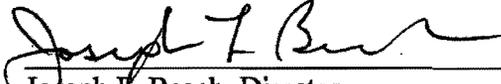
DEP estimates that the cost of the WQPC incurred by the airport is approximately \$4,500 in FY17. Therefore, the estimated difference in the cost of the WQPC and the grant of \$3,800 is \$700 costs borne by the aircraft landing area. Because of the small difference between the cost and the grant, Expedited Bill XX-16 would have no economic impact on employment, spending, saving, investment, incomes, and property values in the County.

4. If a Bill is likely to have no economic impact, why is that the case?

Expedited Bill XX-16 would have no economic impact as stated in paragraph 3.

**Economic Impact Statement
Expedited Bill XX-16, Stormwater Management
Water Quality Protection Charge Grants and Credits**

5. **The following contributed to or concurred with this analysis:** David Platt and Rob Hagedoorn, Department of Finance; Vicky Wan and Patty Bubar, Department of Environmental Protection.



Joseph F. Beach, Director
Department of Finance

3/17/16
Date

Fiscal Impact Statement
Expedited Council Bill XX-16, Stormwater Management
Water Quality Protection Charge Grants and Credits

1. Legislative Summary.

This legislation would make the following changes to the Water Quality Protection Charge (WQPC):

- a) Provide a grant to offset the cost of the WQPC to the owners of improved aircraft landing areas exempt from County property taxes under Section 8-302 of the Tax-Property ("TP") Article, Maryland Code;
- b) Clarify the eligibility criteria for a property owner to receive a WQPC credit; and
- c) Expand the timeframe for a property owner to appeal the denial of a request for a credit or adjustment of the amount of the WQPC billed to the property owner.

2. An estimate of changes in County revenues and expenditures regardless of whether the revenues or expenditures are assumed in the recommended or approved budget. Includes source of information, assumptions, and methodologies used.

For Item 1a: Bill XX-16 is limited to owners of improved aircraft landing areas exempt from County property taxes under Section 8-302 of the Tax-Property ("TP") Article, Maryland Code. Currently there is one property in the county that meets this definition. The proposed bill would reduce the WQPC revenues by 40 equivalent residential units (ERUs), or approximately \$3,600 in FY16.

For Item 1b: No fiscal impact as a result of this change as this is inserting clarifying language for eligibility criteria.

This change does not alter the current policy of providing a credit only to those properties with facilities that are in proper working condition for which the Department of Environmental Protection (DEP) does not have responsibility to repair or generally manage.

The updated language also allows DEP to revoke a credit application if a facility was found to be deficient during the normal inspection process.

For Item 1c: No fiscal impact as a result of this change. This is expanding the current timeframe from 10 days to 30 days for a property owner to appeal the denial of a request for a credit or an adjustment.

This bill does not have a fiscal impact on expenditures.

3. Revenue and expenditure estimates covering at least the next 6 fiscal years.

For Item 1a: Assuming the airport's runway remains the same, the revenue reduction estimates related to the grant program is:

FY16: \$3,600

FY17: \$3,800

FY18: \$4,200

FY19: \$4,600
FY20: \$5,000
FY21: \$5,500
FY22: \$5,600

Any revenue reductions due to credits and/or grants is offset by adjustments to the WQPC in order to generate sufficient revenues to pay for the required stormwater management expenditures and to meet the debt service coverage ratio.

- 4. An actuarial analysis through the entire amortization period for each regulation that would affect retiree pension or group insurance costs.**

Not applicable.

- 5. An estimate of expenditures related to County's information technology (IT) systems, including Enterprise Resource Planning (ERP) systems.**

Not applicable.

- 6. Later actions that may affect future revenue and expenditures if the regulation authorizes future spending.**

Not applicable.

- 7. An estimate of the staff time needed to implement the regulation.**

The additional time is not expected to be significant and can be absorbed by existing DEP staff.

- 8. An explanation of how the addition of new staff responsibilities would affect other duties.**

Not Applicable.

- 9. An estimate of costs when an additional appropriation is needed.**

Additional appropriation is not needed.

- 10. A description of any variable that could affect revenue and cost estimates.**

Not Applicable.

11. Ranges of revenue or expenditures that are uncertain or difficult to project.

Not Applicable.

12. If a bill is likely to have no fiscal impact, why that is the case.

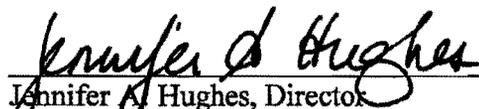
Not applicable.

13. Other fiscal impacts or comments.

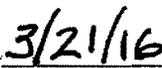
Not applicable.

14. The following contributed to and concurred with this analysis:

Vicky Wan, Department of Environmental Protection
Patty Bubar, Department of Environmental Protection
Matt Schaeffer, Office of Management and Budget
Alex Espinosa, Office of Management and Budget



Jennifer A. Hughes, Director
Office of Management and Budget



Date



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Water Quality Protection Charge	Number 12-16
Originating Department Department of Environmental Protection and Department of Finance	Effective Date

Montgomery County Regulation on:

WATER QUALITY PROTECTION CHARGE

DEPARTMENT OF ENVIRONMENTAL PROTECTION AND
DEPARTMENT OF FINANCE

Issued by: County Executive
Regulation No. 12-16
COMCOR No. 19.35.01

Authority: Code Section 19-35
Supersedes: Executive Regulation 16-14AM
Council Review: Method (1) under Code Section 2A-15
Register Vol. 33 No. 4

Comment Deadline: May 31
Effective Date: _____
Sunset Date: None

Summary: This regulation, which amends Executive Regulation 16-14AM, modifies the Water Quality Protection Charge credit criteria and expands the timeframe for a property owner to appeal the denial of a request for a credit or adjustment of the amount of the Water Quality Protection Charge billed to the property owner.

Address: Written comments on these regulations should be sent to:

Vicky Wan
Office of the Director
Department of Environmental Protection
255 Rockville Pike
Rockville, Maryland 20850

Staff Contact: For further information or to obtain a copy of this regulation, contact Vicky Wan at (240) 777-7722.



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Water Quality Protection Charge	Number 12-16
Originating Department Department of Environmental Protection and Department of Finance	Effective Date

19.35.01.01 General Provisions

- A. **Authority.** In accordance with the authority conferred under Chapter 19, Section 19-35, of the Montgomery County Code, 2004, as amended (hereinafter referred to as the "Code"), the County Executive hereby promulgates this regulation for the purpose of implementing the County's Water Quality Protection Charge as set forth in Chapter 19 of the Code.
- B. **Applicability.** This regulation applies to all owners of residential property and nonresidential property in Montgomery County, Maryland.

19.35.01.02 Definitions

The definitions of the terms used in this regulation are provided in Chapter 19, Section 19-21, of the Code. For purposes of this regulation, the following additional words and phrases will have the meaning respectively ascribed to them in this regulation unless the context indicates otherwise:

Agricultural Property means a property that is used primarily for agriculture, viticulture, aquaculture, silviculture, horticulture, or livestock and equine activities; temporary or seasonal outdoor activities that do not permanently alter the property's physical appearance and that do not diminish the property's rural character; or activities that are intrinsically related to the ongoing agricultural enterprise on the property.

Base Rate means the annually designated dollar amount set by the County Council to be assessed for each equivalent residential unit of property that is subject to the Water Quality Protection Charge.

Condominium means a property that is subject to the condominium regime established under the Maryland Condominium Act.

Director means the Director of the Montgomery County Department of Environmental Protection or the Director's designee.

Eligible Nonprofit Property means real property owned by a 501(c)(3) nonprofit organization that is listed with the Maryland Department of Assessments and Taxation as exempt from *ad valorem* property taxes under State law

Equivalent Residential Unit or ERU means the statistical median of the total horizontal impervious area of developed single family detached residences in the County that serves as the base unit of assessment



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Water Quality Protection Charge	Number 12-16
Originating Department Department of Environmental Protection and Department of Finance	Effective Date

for the Water Quality Protection Charge. The designated ERU for Montgomery County equals 2,406 square feet of impervious surface.

Multifamily Residential Property means a mobile home park or a residential building where one or more dwelling units share a common entrance from the outside with other dwelling units that are arranged above, below or next to one another in the same building, and any housing unit that is subject to the condominium regime established under the Maryland Condominium Act.

Parking Lot means any area that is intended for parking of motor vehicles.

Water Quality Protection Charge or Charge means an [assessment] excise tax levied by the Director of Finance to cover the cost of constructing, operating, and maintaining facilities within the County's stormwater management system and fund related expenses allowed under applicable state law based on the impact of stormwater runoff from the impervious areas of developed land in the County.

19.35.01.03 Classification of Properties

For purposes of determining the appropriate assessment rate, all properties that are subject to the Water Quality Protection Charge are assigned to one of the following classifications:

- A. Single Family Residential Tier 1 (SFR1): For single family residential properties where the estimated total impervious area is greater than 0 square feet and less than or equal to 1,000 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.
- B. Single Family Residential Tier 2 (SFR2): For single family residential properties where the estimated total impervious area is greater than 1,000 square feet and less than or equal to 1,410 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.
- C. Single Family Residential Tier 3 (SFR3): For single family residential properties where the estimated total impervious area is greater than 1,410 square feet and less than or equal to 3,412 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.
- D. Single Family Residential Tier 4 (SFR4): For single family residential properties where the estimated total impervious area is greater than 3,412 square feet and less than or equal to 3,810



MONTGOMERY COUNTY EXECUTIVE REGULATION

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Water Quality Protection Charge	Number 12-16
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square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.

- E. Single Family Residential Tier 5 (SFR5): For single family residential properties where the estimated total impervious area is greater than 3,810 square feet and less than or equal to 5,815 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.
- F. Single Family Residential Tier 6 (SFR6): For single family residential properties where the estimated total impervious area is greater than 5,815 square feet and less than or equal to 6,215 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.
- G. Single Family Residential Tier 7 (SFR7): For single family residential properties where the estimated total impervious area is greater than 6,215 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.
- H. Multifamily residential property: For multifamily residential properties the impervious area includes the residential structures that contain the dwelling units, the sidewalks, parking lots and any other permanent installations on the developed parcel, whether under single or common ownership, that is impenetrable by water.
- I. Nonresidential property: Nonresidential properties may include commercial properties such as office buildings, hotels, retail establishments or industrial properties such as factories and warehouses. Nonresidential properties may also include properties owned by homeowner associations, nonprofit organizations, and any government-owned properties subject to the Charge. The impervious area for these properties includes all buildings, parking lots, sidewalks, and any other impermeable installations permanently attached to the land parcel containing those installations.
- J. Nonprofit Tier 1 (NP1): For eligible nonprofit property where the estimated total impervious area is greater than 0 square feet and less than or equal to 6,910 square feet and includes all buildings, driveways, parking lots, sidewalks, and any other impermeable installations permanently attached to the land parcel containing those installations.
- K. Nonprofit Tier 2 (NP2): For eligible nonprofit property where the estimated total impervious area is greater than 6,910 square feet and less than or equal to 54,455 square feet and includes all



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buildings, driveways, parking lots, sidewalks, and any other impermeable installations permanently attached to the land parcel containing those installations.

- L. Nonprofit Tier 3 (NP3): For eligible nonprofit property where the estimated total impervious area is greater than 54,455 square feet and includes all buildings, driveways, parking lots, sidewalks, and any other impermeable installations permanently attached to the land parcel containing those installations.
- M. Agricultural property: The impervious area for agricultural properties only includes the houses on those properties and is assessed in accordance with the Single Family Residential Tier classification.

19.35.01.04 Rates

- A. Single family residential properties: The Charge for each single family residential property is based on a percent of the base rate for one ERU in accordance with its assigned tier classification as follows:
 - (1) Single Family Residential Tier 1 (SFR1): The Charge for each Single Family Residential Tier 1 property is 33 percent of the applicable base rate for one ERU.
 - (2) Single Family Residential Tier 2 (SFR2): The Charge for each Single Family Residential Tier 2 property is 50 percent of the applicable base rate for one ERU.
 - (3) Single Family Residential Tier 3 (SFR3): The Charge for each Single Family Residential Tier 3 property is 100 percent of the applicable base rate for one ERU.
 - (4) Single Family Residential Tier 4 (SFR4): The Charge for each Single Family Residential Tier 4 property is 150 percent of the applicable base rate for one ERU.
 - (5) Single Family Residential Tier 5 (SFR5): The Charge for each Single Family Residential Tier 5 property is 200 percent of the applicable base rate for one ERU.
 - (6) Single Family Residential Tier 6 (SFR6): The Charge for each Single Family Residential Tier 6 property is 250 percent of the applicable base rate for one ERU.
 - (7) Single Family Residential Tier 7 (SFR7): The Charge for each Single Family Residential Tier 7 property is 300 percent of the applicable base rate for one ERU.



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B. Multifamily residential properties: The Charge for each multifamily residential property is based on the number of ERUs assigned to the property in accordance with the following procedure:

- (1) The Director determines the number of ERUs for a multifamily residential property by dividing the property's actual impervious area by the designated ERU for Montgomery County.
- (2) The Director computes the billable Charge by multiplying the base rate by the total number of ERUs assigned to the property.
- (3) If the multifamily residential property is a condominium development, the Director calculates the Charge to be billed in equal shares to the owners of the development by dividing the total ERUs calculated for the property by the number of individual condominium units and then multiplying the sum by the base rate to determine the amount billable to each unit owner.

C. Nonresidential properties: Except for eligible nonprofit property subject to nonprofit tier classifications under subsection D, the Charge for each nonresidential property is based on the number of ERUs assigned to the property in accordance with the following procedure:

- (1) The Director determines the number of ERUs for a nonresidential property by dividing the property's actual impervious area by the designated ERU for Montgomery County.
- (2) The Director computes the billable Charge by multiplying the base rate by the total number of ERUs assigned to the property.
- (3) If the nonresidential property is a condominium development, the Director calculates the Charge to be billed in equal shares to the owners of the development by dividing the total ERUs calculated for the property by the number of individual condominium units and then multiplying the sum by the base rate to determine the amount billable to each unit owner.

D. Nonprofit properties: The Charge for eligible nonprofit property must not exceed the percent of the base rate for one ERU in accordance with the assigned tier classification as follows:

- (1) Nonprofit Tier 1 (NP1): The Charge for each nonprofit property is based on its total impervious area up to 150 percent of the applicable base rate for one ERU.



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(2) Nonprofit Tier 2 (NP2): The Charge for each nonprofit property is based on its total impervious area up to 900 percent of the applicable base rate for one ERU.

(3) Nonprofit Tier 3 (NP3): The Charge for each nonprofit property is based on its total impervious area up to 2,300 percent of the applicable base rate for one ERU.

E. Agricultural properties: The Charge for each agricultural property is based on a percent of the base rate for one ERU in accordance with the applicable Single Family Residential Tier.

19.35.01.05 Credits

A. Eligibility. If a property contains a stormwater management system, the system must be maintained by the property owner exclusively and in accordance with the maintenance requirements of Section 19-28 of the Code for the property owner to be eligible to receive a credit against the Water Quality Protection Charge.

B. Credit Awards.

(1) The Director must award a [maximum] credit [of 50], not to exceed 60 percent, based on the proportion of the total volume of water [treated by a combination of] treatment provided by the stormwater management system relative to the environmental site design [and other stormwater management systems maintained by the property owner exclusively, or a maximum credit of 80 percent,] storage volume required under State law as specified in the Water Quality Protection Charge Credit Procedures Manual published by the Director and incorporated by reference as if fully set forth. The volume of treatment required will be based on the [volume of water completely treated by] environmental site design [practices alone, as] specified in the [application provided to a] 2000 Maryland Stormwater Design Manual, as amended.

(2) A nonresidential property or a multifamily residential [property owner if the property contains a County approved stormwater management system and the system is maintained by the property owner exclusively, in accordance with the maintenance requirements of the Department of Environmental Protection. A] property must be credited for treatment of off-site drainage from other properties located within the same drainage area as that property, [A] not to exceed 100 percent of the Charge billed to the property owner, if the stormwater management system located on the nonresidential property or multifamily residential property treats the required on-site environmental site design storage volume while at the same time providing additional storage volume for



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off-site drainage. The total credit will be determined by applying the percent credit of off-site property to the impervious area of that off-site property and then adding that computation to the credit for the on-site impervious area, not to exceed 100 percent of the total Charge billed to the property owner as specified in the Water Quality Protection Charge Credit Procedures Manual.

(3) The owner of a property that does not contain a stormwater management system must be credited if that property is located within the same drainage area as another property that contains a stormwater management system [if] for which the County does not perform structural maintenance and both properties have the same owner. However, a property owner must not receive a credit based on a calculation that exceeds the total impervious area on the property for which the credit is issued.

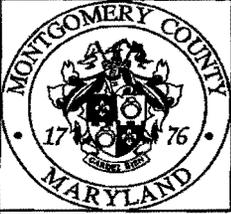
[B. The Director must award a maximum credit of 80 percent based on the volume of water treated as specified in the application provided by the Department to the owner of a single family residential property or agricultural property if the property contains a County approved stormwater management system that is maintained, by the property owner exclusively, in accordance with the maintenance requirements of the Department of Environmental Protection.]

C. Application Schedule.

- (1) To receive the credit, the property owner must apply to the Director of Environmental Protection in a form prescribed by the Director not later than September 30 of the year that payment of the Charge is due.
- (2) Once approved, the credit is valid for three years. To renew the credit, the property owner must reapply to the Director in a form prescribed by the Director not later than September 30 of the year that payment of the Charge is due.

D. Credit Revocation.

- (1) The Director of Environmental Protection may revoke a credit granted under this Section if the property owner does not continue to take the measures needed to assure that the stormwater management system remains in proper working condition by correcting any deficiencies discovered by the Director during a maintenance inspection.



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- (2) The Director must not reinstate a revoked credit until the property owner has sufficiently corrected the deficiencies to fully satisfy the property owner's maintenance obligations under Section 19-28 of the Code.

E. Appeals.

- (1) If the Director denies or revokes the credit, the property owner may seek reconsideration of the Director's decision by submitting a written request for reconsideration with supporting reasons to the Director within [10] 30 days after the date of the Director's written decision.
- (2) If the Director does not approve the request for reconsideration, the property owner may appeal the Director's final decision within [10] 30 days after the Director issues that decision as provided in Chapter 2A, Article I, of the County Code.

19.35.01.06 Billing and Payment

- A. The Director must prepare and forward to the Director of Finance the necessary data for collecting the Water Quality Protection Charge from owners of property subject to the Charge. The data must identify every parcel to be charged and include the amount of the Charge. If requested by the owner using the review and adjustment process outlined in Section 19.35.01.07, the Director may consolidate under a single parcel any contiguous parcels owned by the same legal owner. If the Director combines two or more parcels consisting individually of at least one residential parcel and at least one nonresidential parcel, the Director must, for purposes of calculating the Water Quality Protection Charge, treat the consolidated parcel as nonresidential property.
- B. The Director of Finance must include the Charge as a separate line item on the real estate tax bill for each property subject to the Charge.
- C. The Director of Finance must deposit all payments collected under this Section into a County stormwater management fund.
- D. Interest on any overdue payment accrues according to the same schedule and at the same rate charged for delinquent real property taxes until the owner has remitted the outstanding payment and interest. An unpaid Charge is subject to all penalties and remedies that apply to unpaid real property taxes. Any delinquent Charge is a lien against the property. The lien has the same



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priority as a lien imposed for nonpayment of real property taxes. The Charge must be collected in the same manner as real property taxes.

19.35.01.07 Requests for Adjustment; Appeals

- A. A property owner may request a review and adjustment of the Charge by petitioning the Director in writing, not later than September 30 of the year that payment of the Charge is due if the property owner believes that the Charge has been assigned or calculated incorrectly.
- B. When submitting a petition for review of the Charge, the property owner must include a detailed statement of the basis for the petition and documents supporting the property owner's assertion that the property should be assigned to a different classification, the impervious area measurements used to calculate the ERUs for the property are incorrect, or the property is not subject to the Charge under applicable law.
- C. Within 60 days after receiving the petition, the Director must review the Charge assigned to the property and make a written determination of whether the property owner's request for an adjustment of the Charge should be granted or denied. The Director may request additional information from the property owner that the Director reasonably believes will help the Director decide whether the property owner is entitled to an adjustment.
- D. If the Director concludes that the Charge was levied by mistake or resulted from an inaccurate computation, the Director must submit the corrected data to the Department of Finance with a request for an adjustment to the property owner's bill. After receiving the Director's request, the Director of Finance must make an appropriate adjustment based on the new data submitted by the Director and refund any overpayment to the property owner.
- E. If the Director concludes that some or all of the requested adjustment should be denied, the property owner may seek reconsideration of the Director's conclusion by submitting a written request for reconsideration with supporting reasons to the Director within [10] 30 days after the date of the Director's written decision.
- F. If the Director does not approve the request for reconsideration, the property owner may appeal the Director's final decision within [10] 30 days after the Director issues that decision as provided in Chapter 2A, Article I, of the County Code.



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- G. The County Board of Appeals is the designated authority charged with hearing and deciding all appeals taken from the Director's final decision to deny any relief requested under this regulation.

19.35.01.08 Requests for Exemption

- A. Before paying the Charge, the owner of residential property that is owner-occupied, or a nonprofit organization that owns property subject to the Charge, may apply for a financial hardship exemption from the Charge by submitting a written request to the Director of Finance in a form prescribed by the Director not later than September 30 of the year when payment of the Charge is due.
- B. (1) To qualify for the exemption, the request submitted by an owner-occupant of residential property must be accompanied by a copy of the owner-occupant's income tax returns indicating that the property owner's gross household income did not exceed 170 percent of the poverty guidelines published by the United States Department of Health and Human Services for the year before payment of the Charge is due or verification that the property owner meets eligibility criteria for receiving benefits under the Maryland Energy Assistance Program for the year that payment of the Charge is due.
- (2) The request submitted by a nonprofit organization must be accompanied by the organization's most recent federal tax return or other verification of total revenues derived from the property for which the exemption is sought, as required by the Director of Finance. To qualify for a partial exemption: (i) the amount of the Charge must exceed 0.2% of the organization's total revenues from the property for which the exemption is sought for the year before payment of the Charge is due; and (ii) the property for which the exemption is sought must be exempt from real property *ad valorem* taxation under State law. The amount of the partial exemption is the amount of the Charge that exceeds 0.2 percent of the nonprofit's total revenues derived from the property.
- C. The Director of Finance must issue a written decision to grant or deny the exemption within 30 days after receiving the request.
- D. Any exemption granted under this Section is only valid for the year that payment of the Charge is due.



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- E. If the Director of Finance denies the exemption, the property owner may seek reconsideration of the Director's decision by submitting a written request for reconsideration with supporting reasons to the Director within [10] 30 days after the date of the Director's written decision.
- F. If the Director of Finance does not approve the request for reconsideration, the property owner may appeal the Director's final decision within [10] 30 days after the Director issues that decision as provided in Chapter 2A, Article I, of the County Code.

19.35.01.09 Requests for Grants

[A homeowners' association] An owner of an improved aircraft landing area that is exempt from County property taxes under Maryland Code, Tax-Property Art., § 8-302, as amended, may apply for a grant to offset all or part of the cost of the Charge [for any private maintenance road, as defined in Section 24B.00.02.02 of the Code of Montgomery County Regulations, which is eligible for State highway user revenues, not including any parking lot,] by submitting a written application to the Director [in a form prescribed by the Director] not later than September 30 of the year that payment of the Charge is due.

19.35.01.10. Severability

If a court holds that a portion of this regulation is invalid, the other portions remain in effect.

Approved as to Form and Legality
Office of County Attorney

By [Signature]
Date 4/20/16
Walter F. Wilson

Isiah Leggett
County Executive

Water Quality Protection Charge Credit Procedures Manual

DRAFT

Prepared for

Montgomery County Department of
Environmental Protection

April 2016



DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**
MONTGOMERY COUNTY • MARYLAND

Change Log

Date	Version	Change	Author / Editor

DRAFT

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Introduction

The purpose of this credit manual is to provide Montgomery County residents, land and business owners with information regarding how to obtain a credit for their Water Quality Protection Charge (WQPC).

1.1 Overview

Background

The Water Quality Protection Charge (WQPC) is a part of Montgomery County property tax bills. The WQPC raises funds to improve the water quality of our streams and reduce the impacts of stormwater runoff. Stormwater is rain that runs off hard surfaces and carries pollution to our streams. It is one of the biggest water quality problems in Montgomery County. When left unmanaged, stormwater flows through storm drains to nearby creeks and streams at high speeds and in large volumes. This polluted, unhealthy water damages property, erodes creek banks, harms wildlife, and eventually ends up in the Chesapeake Bay.

Restoration projects funded by the WQPC reverse and prevent the impact of stormwater. They also create jobs and boost the local economy.

What is the Water Quality Protection Charge?

The Water Quality Protection Charge (WQPC) can be found on Montgomery County property tax bills. All property owners in Montgomery County pay the WQPC, including businesses, Home Owner Associations, and non-profit organizations.

The WQPC is calculated based on the potential for a property to contribute to stormwater runoff. Typically, a larger, more developed property produces more runoff, and therefore, receives a higher charge. The WQPC is based on the amount of impervious area on a property. Impervious surfaces, like sidewalks and driveways, block water from infiltrating the ground. They cause increased runoff, overload the drainage system, and transport pollutants and nutrients to bodies of water.

What is the Credit Program?

Property owners can receive a credit off their annual Water Quality Protection Charge by maintaining stormwater management practices on their property. Stormwater management practices capture and treat runoff so that the water does not flow directly into storm drains or streams. They remove pollutants, protect public health and prevent flooding, stream damage and erosion.

For more information about the WQPC or the Credit program, please refer to the County Department of Environment's website at the following location:

<https://www.montgomerycountymd.gov/DEP/water/wqpc.html>

1.2 Organization

The remainder of this WQPC Credit Procedures Manual is organized into the following sections:

- Section 2: Single-Family Residential Credits
- Section 3: Non-Residential/Multi-Family Credits

1.3 Definitions

This section provides definitions for key terms in this WQPC User's Guide.

Environmental Site Design (ESD): As defined by the Maryland Department of Environment Stormwater Design Manual, Environmental Site Design, or ESD, is a comprehensive design strategy for maintaining predevelopment runoff characteristics and protecting natural resources and relies on integrating site design, natural hydrology, and smaller controls to capture and treat runoff.

Environmental Site Design Volume (ESDv): The Environmental Site Design Volume (ESDv) is based on the ESD Rainfall Target, P_E , which ranges from 1-inch to 2.6-inches and is multiplied by the volumetric runoff coefficient (R_v) and the site area. Refer to the Stormwater Design Manual for more details.

Impervious Area: Hard surfaces like sidewalks, driveways and roofs that block water from infiltrating the ground and generate stormwater “runoff” or flow onto another area.

Maryland Department of Environment Stormwater Design Manual: Herein referred to as the “Stormwater Design Manual”, this refers to Maryland's official guide for stormwater management principals, methods, and practices in Maryland. It is available for download or viewing at MDE's website. The Stormwater Design Manual was originally published in October 2000 and was most recently updated in May 2009.

Multi-Family Residential (MFR) Property: A multifamily residential property (also known as a condo) is any housing unit that is subject to the condominium regime established under the Maryland Condominium Act. Multiple residences share a common entrance and they can be arranged above, below or next to one another in the same building.

Non-Residential (NR) Property: Commercial properties such as office buildings, hotels, retail establishments or industrial properties such as factories and warehouses. Also includes properties owned by homeowner associations, not-for-profit entities such as religious institutions, healthcare facilities, other developed properties devoted to non-governmental charitable and institutional uses, and any government-owned properties subject to the WQPC.

Single Family Residential (SFR) Property: A detached home or townhome. A detached home is a free-standing residence that does not share a wall with another property. A townhome, also known as a rowhouse or attached house, is a semi-detached property that shares at least one wall with another property.

Volumetric Runoff Coefficient (R_v): Defined by the Stormwater Design Manual as the value that is applied to a given rainfall volume to yield a corresponding runoff volume based on the percent impervious cover in a drainage area. The R_v value is calculated using the following: $R_v = 0.05 +$

0.009(I); where I = percent impervious cover. Refer to the Stormwater Design Manual for more details.

Water Quality Protection Charge (WQPC): The Water Quality Protection Charge (WQPC) is Montgomery County's stormwater charge, and is a part of Montgomery County property tax bills. The WQPC raises funds to improve the water quality of our streams and reduce the impacts of stormwater runoff.

Water Quality Volume (WQv): The Water Quality Volume (WQv) is defined by the Maryland Department of Environment Stormwater Design Manual as the storage needed to capture and treat the runoff from 90% of the average annual stormwater runoff volume equal to 1-inch multiplied by the volumetric runoff coefficient (Rv) and the site area. Refer to the Stormwater Design Manual for more details

Single Family Residential WQPC Credits

2.1 Overview

Credits of up to 60% off the Water Quality Protection Charge (WQPC) are available to property owners who maintain stormwater management practices on their property. The credit is provided to property owners who own and maintain on-site stormwater management practices and is based on the volume of water captured as defined by the (MDE) Stormwater Design Manual and as described in the section below.

Only properties with stormwater management practices are eligible for a credit. Those practices must be maintained by the property owner and in accordance with the maintenance requirements of the Montgomery County Department of Environmental Protection.

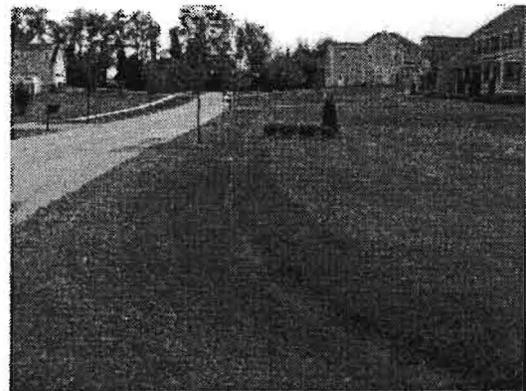
2.2 SFR Stormwater Practices

In general, stormwater practices located on SFR properties are smaller and defined substantially in the MDE Stormwater Design Manual, Volume I, Chapter 5 “Environmental Site Design”. The following are definitions for stormwater management system facility types as defined by MDE and recognized by the Montgomery County WQPC SFR Credit Application.

2.2.1 Swales

Swales are vegetated landscaped channels that provide drainage, water quality treatment, and lower peak flow rates of stormwater runoff. Swales can be surfaced with grass (grass swales), plants (bioswales) or may be designed to have ponding (wet swales). Swales provide pollutant removal through vegetative filtering, settling of sediment, biological uptake by plants, and/or infiltration into the underlying soil media.

- *MDE Stormwater Design Manual Reference:
Page 5.108, ESD Practice M-8*



2.2.2 Roof Leader Disconnection to Pervious Areas

Roof leader disconnection involves directing flow from roof downspouts onto vegetated areas where it can soak into or filter over the ground. This “disconnects” the rooftop from the storm drain system and reduces both runoff volume and pollutants delivered to waterways and water bodies. Disconnected downspouts should be discharged to pervious areas (lawns, landscaping, or undisturbed forests) with slopes less than 5% and to undisturbed or uncompacted soils that will allow stormwater to infiltrate.



- *MDE Stormwater Design Manual Reference: Page 5.57, ESD Practice N-1*

2.2.3 Non-Roof Area Disconnection to Pervious Areas

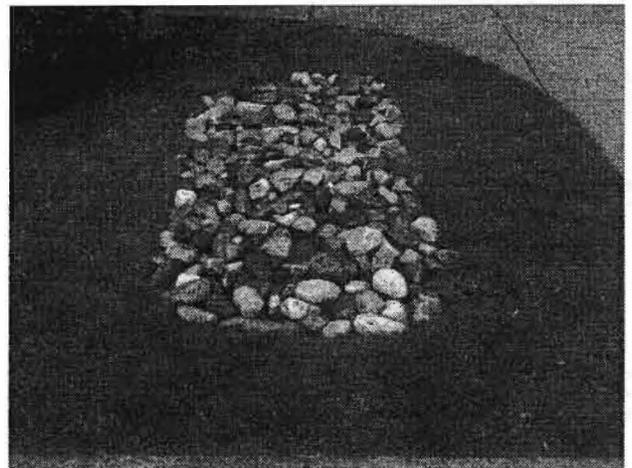
Non-rooftop disconnection involves directing flow from impervious surfaces onto vegetated areas where it can soak into or filter over the ground. Non-rooftop disconnection is commonly applied to smaller or narrower impervious areas like driveways, sidewalks and patios, and small parking lots. Note: driveways typically drain to the street and do not typically qualify for this practice. Disconnections should be discharged to pervious areas with slopes less than 5% and to undisturbed or uncompacted soils that will allow stormwater to infiltrate.



- *MDE Stormwater Design Manual Reference: Page 5.61, ESD Practice N-2*

2.2.4 Dry Well

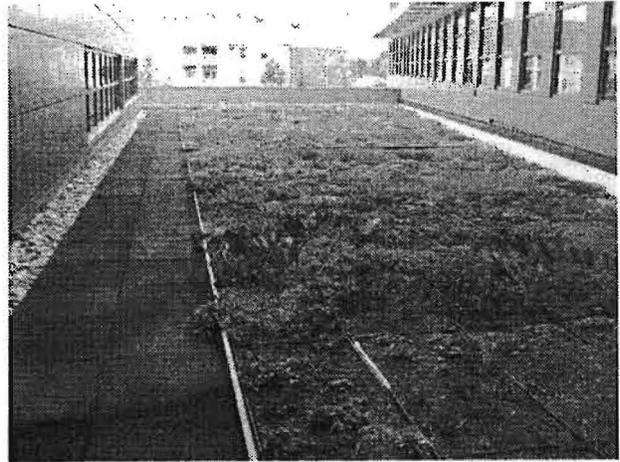
A dry well is an excavated pit or structural chamber filled with gravel or stone that provides temporary storage of stormwater runoff, typically from rooftops. Rooftop runoff is directed to these storage areas and infiltrates into the surrounding soils prior to the next storm event. Pretreatment of water is recommended to filter sediment, leaves, and other debris that might clog the dry well. The drainage area to a dry well should not exceed 1,000 square feet and should be not be located in silt or clay soils. Dry wells constructed prior to ESD regulations (pre-2011) are not an accepted stormwater management practice.



- *MDE Stormwater Design Manual Reference: Page 5.91, ESD Practice M-5*

2.2.5 Green Roofs

Green roofs are alternative surfaces that replace conventional construction materials and include a protective covering of planting soil and vegetation. Also known as vegetated roofs, roof gardens, or eco-roofs, these may be used in place of traditional flat or pitched roofs to reduce impervious cover and more closely mimic natural hydrology. The more common “extensive” green roof is a lightweight system where the soil layer (growing medium) is between two and six inches thick and limits plants to low-growing, herbaceous varieties. “Intensive” green roofs have thicker soil layers (eight inches or greater) and are capable of supporting more diverse plants including trees and shrubs. A more robust structural loading capacity is needed to support the additional weight of green roofs.



➤ *MDE Stormwater Design Manual Reference: Page 5.91, ESD Practice M-5*

2.2.6 Conservation Landscaping

Conservation landscaping includes removing impervious surfaces, mowed turf, and/or invasive species and replacing with 6-9” of uncompacted soil, native plant species, and 1-2” of ponding depth (a depression above the soil that allows water to pond temporarily before infiltration). Conservation landscaping also helps with stormwater management because native plants don't need as much fertilizer or pesticide to thrive. This means that when it rains, fewer chemicals are channeled into the nearby waterways, which leads to healthier and cleaner streams and rivers.



➤ *MDE Stormwater Design Manual Reference: Page 5.91, ESD Practice M-5*

2.2.7 Micro-bioretenention and Rain Gardens

Micro-bioretenention practices capture and treat runoff from small impervious areas by passing it through a filter bed mixture of sand, soil, and organic matter. Filtered stormwater is either returned to the site through an underdrain or partially infiltrated into the soil. Micro-bioretenention practices are versatile and may be adapted for use anywhere there is landscaping. Micro-bioretenention should be downhill and set back at least 10' from structures to protect the structures, unless an impermeable liner is provided. They should comprise of a 2-4' filter media later underlain by a gravel drainage layer. A perforated underdrain pipe is recommended in all applications and is required in poorly draining soils such as silts and clays.



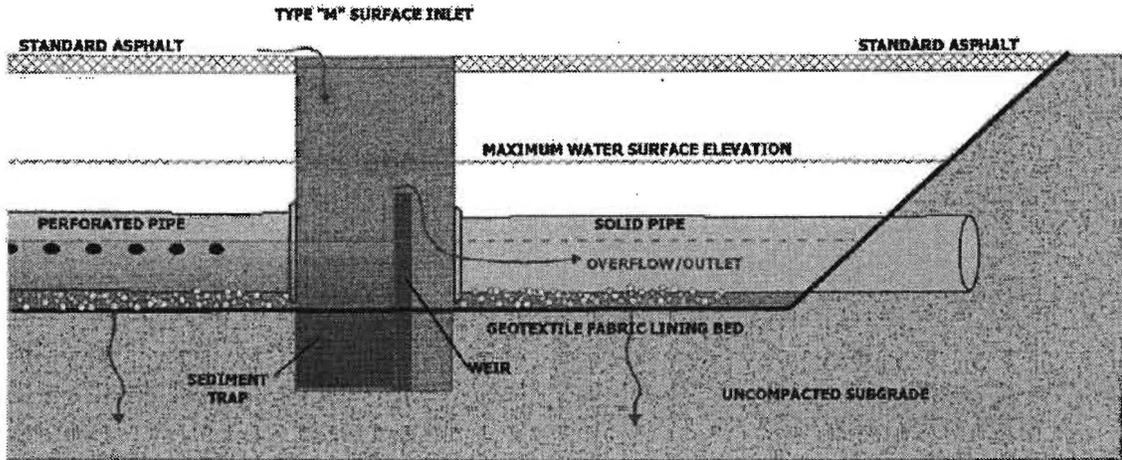
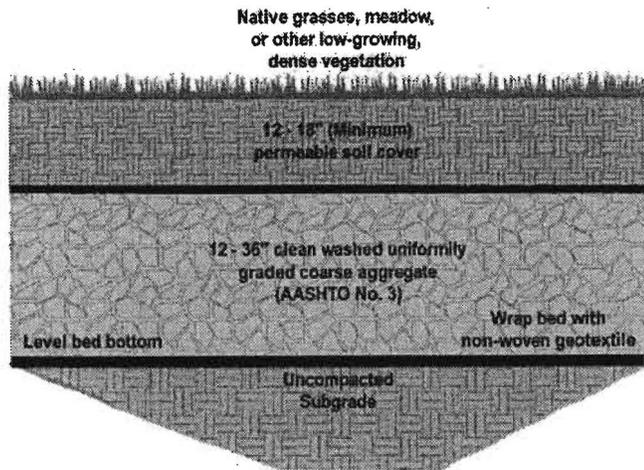
Rain gardens are similar practices, except are typically smaller and do not have underdrainage (typically buried perforated pipe). Rain gardens always depend on the underlying soil for proper drainage. Also, rain gardens are built with native soils mixed with compost or a special soil mix, while bioretention has a special soil mixed with sand, as well as gravel beneath, for the system to hold more water. The rain garden soil and mulch layer should be 12" minimum. An overflow conveyance system should be included to pass larger storms. Rain gardens are restricted for smaller drainage areas, 2,000 square feet or less.

➤ *MDE Stormwater Design Manual Reference:*

- *Micro-bioretenention Page 5.96, ESD Practice M-6*
- *Rain Garden (MDE Manual Page 5.104, ESD Practice M-7*

2.2.8 Micro-infiltration

Micro-infiltration is comprised of stone gravel or prefabricated plastic structure layers called “infiltration beds” underlying various site surfaces such as driveways, sidewalks, patios, or turf. Separation with filter fabric or permeable sand layers is needed to keep the infiltration bed clean. Micro-infiltration must be installed over permeable, sandy soils, and the bottom of the infiltration bed must be level and uncompacted. An underdrain or overflow may be necessary to handle large rain events.



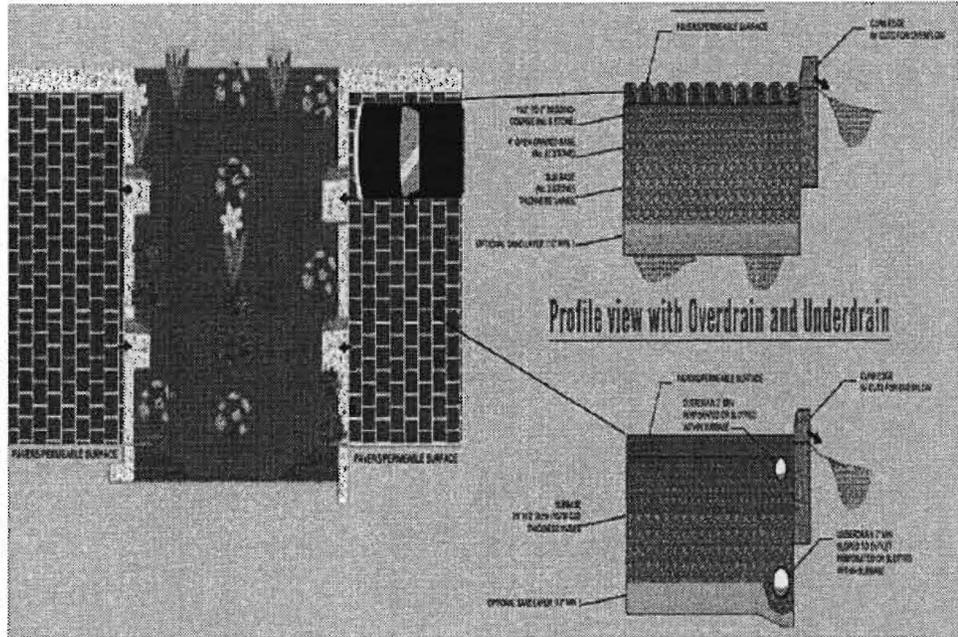
2.2.9 Pervious Pavement

Pervious pavements are alternatives that may be used to reduce imperviousness. While there are many different materials commercially available, permeable pavements may be divided into three basic types: porous bituminous asphalt, pervious concrete, and permeable interlocking concrete pavements. Permeable pavements typically consist of a pervious surface course and open graded stone base/subbase or sand drainage system, with a minimum open graded stone depth of 12”.

Stormwater drains through the pavement, is captured in the stone layer, and infiltrates into the surrounding soils. Porous pavements are best suited over sandy, permeable soils, and may require an underdrain or overflow for large rain events.

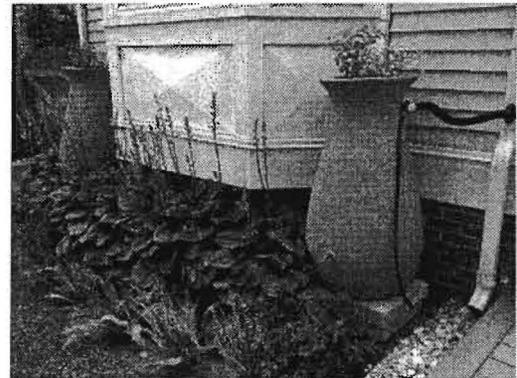
- *MDE Stormwater Design*

Manual Reference: Page 5.46, ESD Practice A-2



2.2.10 Rainwater Harvesting: Rain Barrels and Cisterns

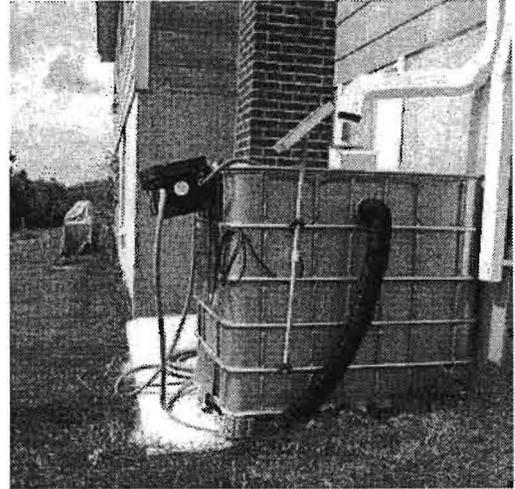
Rainwater harvesting practices intercept and store rainfall for future use. Stored water may be used for outdoor landscaping irrigation, car washing, or non-potable water supply. The capture and re-use of rainwater promotes conservation, as well as reduces runoff volumes and the discharge of pollutants downstream. These practices should be drained after each storm to make room to store rainfall runoff from the next storm.



Rain barrels are small stormwater containers, typically prefabricated, less than 100 gallons, and in the shape of a barrel. They are typically used to provide temporary storage of stormwater from roof leaders. These systems are generally designed for outdoor use.

Cisterns are large storage tanks typically used in capturing rainwater for non-potable water supply, providing a year-round source. The complexity of the sizing, installation, and accessories of this type of application make it more realistic for commercial operations. Separate plumbing, pressure tanks, pumps, and backflow preventers are necessary for indoor applications.

- *MDE Stormwater Design Manual Reference:
Page 5.71, ESD Practice M-1*



2.2.11 Sheet Flow to Conservation Area

Conservation areas or easements are typically set up when land is developed and may or may not be owned by individual residents themselves. Stormwater runoff is effectively treated when flow from developed land is directed to adjacent conservation areas which are essentially natural, undisturbed areas water can soak into or filter over the ground. Landscaping should consist of uncompacted soils with native, non-turf landscaping or vegetation. This practice can only be used for stormwater that is sheet flowing (not concentrated or channelized) from an impervious area less than 100 feet in length. The conservation area should have a slope less than 5%, a minimum width of 50 feet, and should be approximately ½ acre or larger in total size.

2.3 SFR Credit Application and Calculator

The SFR credit application is available on the County’s WQPC website and prepopulates initial application information including parcel area, impervious area, year the permit for the primary structure was approved, and WQPC information. Applicants must complete their contact information and whether they are the owner or owner’s agent completing the application.

The primary form on the application “Stormwater Management System Information”, referred to herein as the “SFR Credit Calculator”. In this section applicants must input the size and/or number of stormwater management systems on their property. Based on this information, the SFR Credit Calculator computes a volume of water treated by the practice based on assumptions typical for each practice within the County, and within the context of a typical single family residence structure and how it is typically drained to stormwater facilities. ***Explanation of how volume captured by each practice is computed is provided in Appendix A.***

In general, practices which are larger and/or hold more volume such as bioretention are given more credit, while smaller and less intensive practices such as rainwater harvesting are given less credit.

Once completed, the SFR Credit Calculator accumulates the volume treated by all practices on the site and prorates the WQPC credit up to 60%. Credit is prorated according to Equation 2.1 based on how much volume is provided (“Volume Captured”) versus how much is required at the property per the MDE Maryland Stormwater Design Manual (“Environmental Site Design Volume”, ESDv):

SECTION 2 – SINGLE FAMILY RESIDENTIAL WQPC CREDITS

$$\text{Eqn. 2.1} \quad \text{SFR WQPC Percent Credit} = \frac{\text{Total Volume Captured}}{\text{Environmental Site Design Volume, ESDv}} \times 60\%$$

The credit and WQPC charge (after credit) is computed according to Equations 2.2 and 2.3:

$$\text{Eqn. 2.2} \quad \text{WQPC Credit} = \text{Percent Credit} \times \text{WQPC Charge on Bill (before credit)}$$

$$\text{Eqn. 2.3} \quad \begin{aligned} \text{WQPC Charge (after credit)} &= \text{WQPC Charge on Bill (before credit)} \\ &- \text{WQPC Credit} \end{aligned}$$

Nonresidential/Multifamily Residential WQPC Credits

3.1 Overview

The Non-Residential/Multi-Family (NR/MFR) Water Quality Protection Charge (WQPC) Credit is calculated for a single parcel (referred to herein as “the site”) and is based on the sum of the volume of stormwater treatment provided by each stormwater management system practice at the site. Stormwater management system practices are generally based on Maryland Department of the Environment (MDE) recognized practices in the Maryland Stormwater Design Manual (MDE, revised 2010). After the volume of stormwater treatment provided (“Treatment Volume”) is assessed for each stormwater management system at the site, the total Treatment Volume is used to calculate the total site WQPC Credit as described in this section.

WQPC Credits of up to 60% are available to NR/MFR property owners who own and maintain approved stormwater management practices on the site. For property owners that treat stormwater drainage from offsite in addition to all of the onsite required volume, WQPC credits of up to 100% are available. The list of approved NR/MFR WQPC practices which are eligible to receive credit is provided in Table B-2 of Appendix B.

Only properties with approved stormwater management practices are eligible for a credit. Those practices must be maintained by the property owner and in accordance with the maintenance requirements of the Montgomery County Department of Environmental Protection.

3.2 NR/MFR Credit Application and Calculator

The NR/MFR Credit application is available on the County’s WQPC website and prepopulates initial application information including parcel area, impervious area, and WQPC information. Applicants must provide their contact information and whether they are the owner or owner’s agent completing the application. The applicant may also provide site specific soils data according to the Soil Conservation Services (SCS) Hydrologic Soil Group, if available. If no site-specific soil data is available, Type C soils are assumed, since that is the predominant soil type in Montgomery County.

If stormwater drainage from offsite is also treated by one of the onsite stormwater management systems, the “Offsite Data” section can be completed for credit up to 100% off the WQPC.

Explanation of how the Offsite Data and additional WQPC Credit is calculated is provided in Appendix B.

The primary form on the application is Section 3, called the “Stormwater Management System Information”, and referred to herein as the “NR/MFR Credit Calculator”. At a minimum, the following information is required to be entered in the NR/MFR Credit Calculator for each stormwater management system entry:

- Facility Type: To be selected from a prepopulated list of approved practices which generally correspond to practices approved by MDE according to the Maryland Stormwater Design Manual. See Table B-2 provided in Appendix B for a complete list of approved practices.
- Year Permitted: The year that the stormwater management system was permitted, to be selected from the following eras: Pre-1985, 1985-2003, 2003-2010, or Post-2010.
- DEP Maintained: The applicant must certify whether the stormwater management system is maintained by the County DEP or by the property owner. Only stormwater management systems maintained by the property owner exclusively are eligible for WQPC Credit.
- Onsite Drainage Area: The total contributing drainage area which drains to the stormwater management system, to be entered in units of square feet.
- Onsite Impervious Drainage Area: The portion of total contributing drainage area which is considered to be impervious, to be entered in units of square feet.

Applicants have two options for obtaining WQPC Credit:

1. Applicant Input Design Volume (“Provided WQv”): Applicant can directly input the design volume into the NR/MFR Credit Calculator if design plans or other design data are available. This volume will typically be provided in the design plans as Water Quality Volume (WQv) (if project pre-dates Environmental Site Design (ESD) site requirements), or Environmental Site Design Volume (ESDv), and should be entered in units of cubic feet. The applicant may also have an agent evaluate the design treatment volume if documentation from the original design is not available. Note that the County DEP will check design documentation for all applications with input design treatment volume.
2. Assumed Volume (“Assumed Provided WQv”): If no design data are available for the stormwater management system’s treatment volume, the NR/MFR Credit Calculator will automatically calculate an Assumed Treatment Volume based on the practice’s design era and contributing drainage area. The assumed volume calculator cannot calculate and account for offsite credit. Offsite credit must be calculated using the Applicant Input Design Volume method and engineering calculations must be submitted to support the offsite treatment. *Explanation of how the Assumed Treatment Volume is calculated is provided in Appendix B.*

Once completed, the NR/MFR Credit Calculator accumulates the volume treated by all practices on the site and prorates the WQPC Credit up to a maximum of 60% for practices that treat the full Environmental Site Design volume (ESDv), as defined in Chapter 5 of the MDE Maryland Stormwater Design Manual. For sites with stormwater management systems which pre-date the ESD era systems and treat up to the full Water Quality Volume (WQv) as defined in Chapter 2 of the MDE Maryland Stormwater Design Manual, a maximum WQPC Credit of up to 45% is available. Credit is prorated according to Equations 3.1 and 3.2, based on how much total volume is provided (“Provided WQv”) versus how much is required at the property per the MDE Maryland Stormwater Design Manual (either “Water Quality Volume”, WQv; or “Environmental Site Design Volume”, ESDv):

For treatment up to the first 1-inch (up to 45% WQPC Credit):

$$\text{Eqn. 3.1} \quad \text{NR/MFR WQPC \% Credit} = \frac{\text{Provided WQv}}{\text{Required WQv}} \times 45\%$$

For treatment over 1-inch (up to 60% WQPC Credit):

Eqn. 3.2

$$\text{NR/MFR WQPC \% Credit} = \left[\frac{\text{Provided WQv}}{\text{Required WQv}} \times 45\% \right] + \left[\frac{\text{Provided (ESDv - WQv)}}{\text{Required (ESDv - WQv)}} \times 15\% \right]$$

After the WQPC Percent Credit is calculated, the credit and WQPC charge (after credit) is then computed according to Equations 3.3 and 3.4:

$$\text{Eqn. 3.3} \quad \text{WQPC Credit} = \text{Percent Credit} \times \text{WQPC Charge on Bill (before credit)}$$

$$\text{Eqn. 3.4} \quad \text{WQPC Charge (after credit)} = \text{WQPC Charge on Bill (before credit)} \\ - \text{WQPC Credit}$$

3.3 NR/MFR Credit Calculation Examples

The following examples are provided to further illustrate the NR/MFR WQPC Credit program.

3.3.1 Example 1 – Design Data Available - NR/MFR Pre-ESD Era

EXAMPLE 1 – NR/MFR PRE-ESD ERA, DESIGN DATA AVAILABLE

➤ **Site Information:**

- Single wet pond extended detention SWM system (P-3) to treat all onsite impervious and some pervious area, built in 2005
- Design Plans available
- Site-specific soils data, split between “HSG-B” and “HSG-C” soils
- **WQPC = \$2,968.49** for 80,794 SF of impervious

From County WQPC:

Surface	Area (square feet)	% Impervious
Building Area	29,773	% I = 66.72%
Driveway/Parking	51,021	
Other Impervious	0	
Total Impervious	80,794	
Total Lot Area	121,096	
% Impervious	66.72%	

Site Runoff Coefficient
 $R_v = 0.05 + 0.009 \times \% I$
 $R_v = 0.65$



Note: WQPC Property Image used to illustrate example only and does not reflect actual site treatment conditions.

➤ **SWM System Information:**

- ✓ **Facility Type:** Wet Pond Extended Detention (P-3)
- ✓ Built in the 2003-2010 era
- ✓ Property Owner maintained
- ✓ **Total Drainage Area:** 106,349 square feet
- ✓ **Impervious Drainage Area:** 80,794 square feet
- ✓ No Offsite Area Treated
- ✓ **Provided WQv for P = 1-inch:**
 - WQv = 5,765 cubic feet from design plans
 - Applicant input

➤ **Calculate Required WQv:**

1. Rainfall Depth, P = 1 inch
2. Site Runoff Coefficient, $R_v = 0.65$ (rounded)
3. Required WQv per Stormwater Design Manual:

$$WQv = \frac{P \times R_v \times Area}{12 \text{ inch/ft}} = \frac{(1 \text{ inch}) \times 0.65 \times 121,096 \text{ sq-ft}}{12 \text{ inch/ft}} = 6,564 \text{ cubic ft}$$

➤ **Calculate WQPC % Credit (for treatment up to the first 1-inch):**

$$WQPC \text{ % Credit} = \frac{\text{Provided WQv}}{\text{Required WQv}} \times 45\% = \frac{5,765 \text{ cu-ft}}{6,564 \text{ cu-ft}} \times 45\% = 39.52\%$$

➤ **Calculate WQPC Credit:**

$$\text{Onsite WQPC Credit} = \text{Percent Credit} \times \text{Onsite WQPC} = 39.52\% \times \$2,968.49 = \$1,173.15$$

➤ **Calculate WQPC:**

$$WQPC \text{ (after credit)} = \text{Onsite WQPC} - WQPC \text{ Credit} = \$2,968.49 - \$1,173.15 = \$1,795.35$$

3.3.2 No Design Data - NR/MFR Pre-ESD Era

EXAMPLE 2 – NR/MFR PRE-ESD ERA, NO DESIGN DATA**Site Information:**

- Single Bioretention SWM system to treat all onsite impervious/pervious area, built in 2000
- No design documentation available
- No soils data
- **WQPC = \$2,968.49** for 80,794 SF of impervious

From County WQPC:

Surface	Area (square feet)	% Impervious
Building Area	29,773	% I = 66.72%
Driveway/Parking	51,021	
Other Impervious	0	
Total Impervious	80,794	
Total Lot Area	121,096	
% Impervious	66.72%	

Site Runoff Coefficient

$$R_v = 0.05 + 0.009 \times \% I$$

$$R_v = 0.65$$



Note: WQPC Property Image used to illustrate example only and does not reflect actual site treatment conditions.

SWM System Information:

- ✓ Facility Type: Bioretention (F-6)
- ✓ Built in the 1985-2003 era
- ✓ Property Owner maintained
- ✓ Total Drainage Area: 121,096 SF
- ✓ Impervious Drainage Area: 80,794 SF
- ✓ No Offsite Area Treated
- ✓ No Design WQv available
 - Auto-calculate WQv in Calculator

Design Treatment Volume (Assumed Provided WQv):

1. Treatment Fraction, By Era = 0.50 (from Table B-2)
2. Treatment Depth for Full Credit, By Era = 1.0 inch (from Table B-2)
3. Treatment Depth Credit, P = 1.0 inch x (0.50) = 0.50 inch
4. Provided WQv calculated per Stormwater Design Manual:

$$WQv = \frac{P \times R_v \times Area}{12 \text{ inch/ft}} = \frac{(0.50 \text{ inch}) \times 0.65 \times 121,096 \text{ SF}}{12 \text{ inch/ft}} = 3,282 \text{ cubic ft}$$

Required WQv calculated in (Ex. 1)

- 6,564 cubic feet

Calculate WQPC % Credit (for treatment up to the first 1-inch):

$$WQPC \text{ \% Credit} = \frac{\text{Provided WQv}}{\text{Required WQv}} \times 45\% = \frac{3,282 \text{ cu-ft}}{6,564 \text{ cu-ft}} \times 45\% = 22.50\%$$

Calculate WQPC Credit:

$$\text{Onsite WQPC Credit} = \text{Percent Credit} \times \text{Onsite WQPC} = 22.50\% \times \$2,968.49 = \$667.91$$

Calculate WQPC:

$$WQPC \text{ (after credit)} = \text{Onsite WQPC} - WQPC \text{ Credit} = \$2,968.49 - \$667.91 = \$2,300.58$$

3.3.3 No Available Treatment Volume - ESD era Practice

EXAMPLE 3 – NR/MFR ESD ERA, NO DESIGN DATA

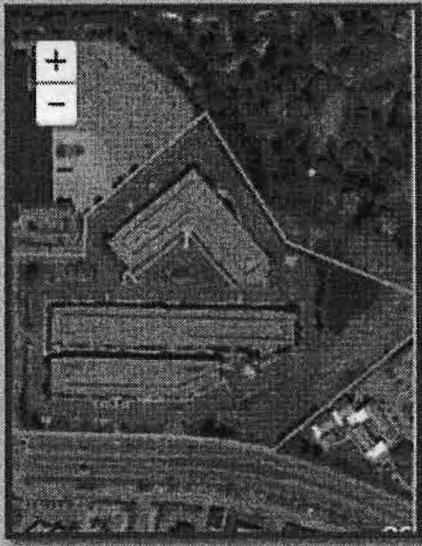
Site Information:

- Submerged Gravel Wetland SWM system to treat all onsite area, built in 2011
- No design documentation available, no soils data
- WQPC = \$2,968.49 for 80,794 SF of impervious

From County WQPC:

Surface	Area (square feet)	% Impervious
Building Area	29,773	% I = 66.72%
Driveway/Parking	51,021	
Other Impervious	0	
Total Impervious	80,794	
Total Lot Area	121,096	
% Impervious	66.72%	

Site Runoff Coefficient
 $R_v = 0.05 + 0.009 \times \% I$
 $R_v = 0.65$



Note: WQPC Property Image used to illustrate example only and does not reflect actual site treatment conditions.

SWM System Information:

- ✓ Facility Type: Submerged Gravel Wetland (M-2)
- ✓ Built in the Post-2010 era
- ✓ Property Owner maintained
- ✓ Total Drainage Area: 121,096 square feet
- ✓ Impervious Drainage Area: 80,794 square feet
- ✓ No Offsite Area Treated
- ✓ No Design WQv/ESDv available
 - Auto-calculate WQv and ESDv in Calculator

Required WQv calculated in (Ex. 1)

- 6,564 cubic feet

Design Treatment Volume (Assumed Provided WQv): = 13,128 cubic ft

- Treatment Fraction, By Era = 1.0 (from Table B-2); Treatment Depth for Full Credit, $P_E = 2.0$ inch
- Treatment Depth Credit, $P_E = 2.0$ inch \times (1.0) = 2.0 inch
- Provided ESDv Calculated per MDE Stormwater Design Manual:

$$ESDv = \frac{P_E \times R_v \times Area}{12 \text{ inch/ft}} = \frac{(2.0 \text{ inch}) \times 0.65 \times 121,096 \text{ sq-ft}}{12 \text{ inch/ft}} = 13,128 \text{ cubic ft}$$

Calculate WQPC % Credit (for treatment over 1-inch):

$$WQPC \text{ \% Credit} = \frac{\text{Provided WQv (6,564 cf)}}{\text{Required WQv (6,564 cf)}} \times 45\% + \frac{\text{Provided (ESDv-WQv) (13,128 cf - 6,564 cf)}}{\text{Required (ESDv-WQv) (13,128 cf - 6,564 cf)}} \times 15\% = 60.00\%$$

Calculate WQPC Credit:

$$\text{Onsite WQPC Credit} = \text{Percent Credit} \times \text{Onsite WQPC} = 60.00\% \times \$2,968.49 = \$1,781.09$$

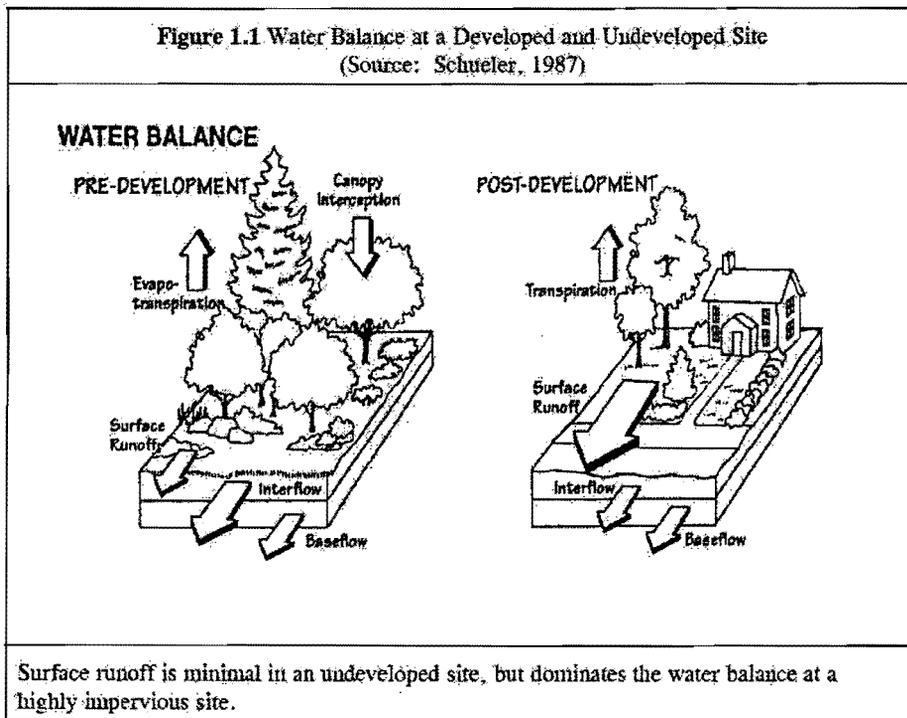
Calculate WQPC:

$$WQPC \text{ (after credit)} = \text{Onsite WQPC} - \text{WQPC Credit} = \$2,968.49 - \$1,781.09 = \$1,187.40$$

Appendix A: Basis for Single Family Residential Credit Calculation

A.1 Background

Stormwater practices located on SFR properties are smaller and defined substantially in the MDE Stormwater Design Manual, Volume I, Chapter 5 “Environmental Site Design” (ESD). According to the manual, the target for ESD implementation is “woods in good condition” or better, representing a predevelopment condition. Woods in good condition holds and treats stormwater much better than typical residential land by storing, soaking in, filtering, evaporating, and consuming water. This is demonstrated by the Water Balance Figure below from Page 1.3 of the MDE Manual.



ESD stormwater practices and approved facilities mimic how woods in good condition keeps and treats stormwater. Acceptable ESD practices are defined in the body of this Manual; however, applicants can also download and refer to the MDE Stormwater Design Manual.

A.2 Environmental Site Design Volume (ESDv) Requirement

The primary requirement under ESD stormwater facilities is to provide the equivalent volume of water that “woods in good condition” at that site would provide. Contingent on the ESD practice, this volume can be based on the equivalent storage, infiltration, or evapotranspiration of the stormwater.

1. The **ESDv Formula** is located on page 5.18 of the MDE Manual and is calculated by the following equation:

$$\text{ESDv (Required)} = \frac{\text{Design Rainfall (Pe)} \times \text{Runoff Coefficient (Rv)} \times \text{Area (A)}}{12}$$

2. **Area** is equal to the residence's Parcel Area. This entire area must mimic "woods in good condition" land in terms of stormwater to fully satisfy ESD requirements.
3. **Design or Target Rainfall, Pe**, is the inches of rain required to be captured. Pe is variable dependent on how impervious the parcel is and what type of soils are on the parcel. The more impervious the parcel is, the more that ESD stormwater facilities must provide capture volume to compensate. The better the soils are (the more porous and better at soaking in rain) the more stormwater that must be captured to mimic woods in good condition. Type A and B soils are best and tend to be sandy and coarse in texture. Type C and D soils are finer, such as clays and silts. **For the SFR application, Type C soils are assumed, since that is the predominant soils type in Montgomery County.**

Table 5.3 below from Page 5.22 of the MDE manual is used to determine the Design Pe for Type C soils, dependent on the percent imperviousness (%I). An example of how to use this table for a 25% impervious site is displayed, resulting in a Pe requirement of 1.2".

Table 5.3 Runoff Curve Number Reductions used for Environmental Site Design (continued)

Hydrologic Soil Group C										
%I	RCN*	Pe = 1"	1.2"	1.4"	1.6"	1.8"	2.0"	2.2"	2.4"	2.6"
0%	74		↑							
5%	75									
10%	76									
15%	78									
20%	79	70								
25%	80	72	→ 70	70						
30%	81	73	72	71						
35%	82	74	73	72	70					
40%	84	77	75	73	71					
45%	85	78	76	74	71					
50%	86	78	76	74	71					
55%	86	78	76	74	71	70				
60%	88	80	78	76	73	71				
65%	90	82	80	77	75	72				
70%	91	82	80	78	75	72				
75%	92	83	81	79	75	72				
80%	93	84	82	79	76	72				
85%	94	85	82	79	76	72				
90%	95	86	83	80	77	73	70			
95%	97	88	85	82	79	75	71			
100%	98	89	86	83	80	76	72	70		

4. **Runoff Coefficient, Rv**, is a dimensionless coefficient in the ESDv Formula that represents the percent of rainfall that will be converted to stormwater runoff. This is also a function of % Impervious because impervious surfaces do not let rain soak into the ground.

The formula for calculating Rv is provided below. The maximum Rv for a 100% impervious site is 0.95 since even impervious surfaces have a small amount of surface storage for evaporation, and may even have cracks or joints in the surface. The runoff coefficient in this example is 0.257:

$$Rv = 0.05 + 0.009 (\%I) = 0.05 + 0.009 (25\%) = 0.275$$

5. Revisiting the ESDv equation above, the **ESDv Required** is divided by 12 to convert Pe from inches to feet, resulting in an ESDv in units of cubic feet which is reported in the SFR Credit Calculator.

A.3 Volume Captured Calculations for Approved Practices

ESD practices accepted in the SFR Credit Application are listed in the SFR Credit Calculator under “Stormwater Management System Information”. The SFR Credit Calculator tab of the SFR application requires the applicant to input the size, and in some cases the quantity, of Stormwater Management Systems on the property. These inputs are used to compute the Volume Captured. A summary of the equations used to compute Volume Captured is provided in the sections below with important assumptions depending on the practice.

A.3.1 Swales

Credit for swales is based on the assumption that most houses are placed at the high point of the parcel, with the half of the residence’s impervious area sloped to the front of the parcel and the other half sloped to the rear of the parcel. A swale located either across the front or rear of the property would accordingly treat one half of the property’s impervious area. Therefore the volume captured by a swale is assumed to be the following, where the runoff coefficient is 0.95 for 100% impervious area:

➤ **Volume Captured = 50% of Lot’s Impervious Area x 2.2” Pe x Runoff Coefficient (0.95) / 12**

Note, the County will check the linear feet of swale to ensure the volume provided by the swale is practical given the amount of volume provided as calculated by this equation.

A.3.2 Roof Leader Disconnection to Pervious Areas

Disconnection practices rely on the porosity and infiltration of the soils on the property to treat stormwater. To determine the volume captured, the SFR Credit Calculator requests the square feet of pervious areas (such as lawns and landscaped areas) receiving flow from disconnected roof leaders, as well as the number of roof leaders disconnected. Important assumptions regarding this practice include:

- i. 100 square feet of pervious area is assumed able to hold approximately 2 cubic feet of volume, capped at the pervious area on the parcel.
- ii. The SFR Credit Calculator checks whether the volume received by the pervious area can hold the volume it receives from the roof leaders, otherwise the volume is capped at the volume of the pervious area.
- iii. The SFR Calculator checks the volume received by the roof leaders (assuming the house’s roof is drained by approximately 4 leaders) to ensure it does not exceed 500 square feet, which is the maximum amount allowed to this practice per the MDE Stormwater Design Manual.
- iv. Overall, the practice volume is discounted by 50% to account for compacted soils and/or insufficient groundcover in pervious areas, or insufficient flow path lengths prior to the

disconnected flow potentially re-entering an impervious area and ultimately in the storm drain system, etc.

The logic for computing the volume captured by this practice therefore is:

- **If** $2 \text{ ft}^3 \text{ per } 100 \text{ ft}^2 \text{ of pervious area} < \text{Roof Leader Impervious Area} \times 2.2'' \text{ Pe} \times \text{Runoff Coefficient } (0.95) / 12$, **then Volume Captured** = 50% Discount $\times 2 \text{ ft}^3 \text{ per ft}^2 \text{ pervious area disconnected to, capped at parcel's pervious area.}$
- **If** $2 \text{ ft}^3 \text{ per } 100 \text{ ft}^2 \text{ of pervious area} > \text{Roof Leader Impervious Area} \times 2.2'' \text{ Pe} \times \text{Runoff Coefficient } (0.95) / 12$, **then Volume Captured** = 50% Discount $\times \text{Roof Leader Impervious Area} \times 2.2'' \text{ Pe} \times \text{Runoff Coefficient } (0.95) / 12$, capped at 500 ft^2 roof impervious area.

A.3.3 Non-Roof Area Disconnection to Pervious Areas

The assumptions used to compute Volume Captured by this practice are identical to the previous practice (Roof Area Disconnection to Pervious Areas), except that since the impervious areas tributary to this practice are non-roof areas (such as driveways, parking, decks, sidewalks, etc.), assumption (iii) from A.3.2 above must be revised to the following:

- iii. The SFR Calculator checks the volume received by a maximum of 2 non-roof areas (assuming the non-roof areas are evenly split between front and back of parcel, where the pervious disconnection areas are assumed to be) to ensure it does not exceed 1,000 square feet, which is the maximum amount allowed to this practice per the MDE Stormwater Design Manual.

The logic for computing the volume captured by this practice therefore is:

- **If** $2 \text{ ft}^3 \text{ per } 100 \text{ ft}^2 \text{ of pervious area} < \text{Non-Roof Impervious Area} \times 2.2'' \text{ Pe} \times \text{Runoff Coefficient } (0.95) / 12$, **then Volume Captured** = 50% Discount $\times 2 \text{ ft}^3 \text{ per ft}^2 \text{ pervious area disconnected to, capped at parcel's pervious area.}$
- **If** $2 \text{ ft}^3 \text{ per } 100 \text{ ft}^2 \text{ of pervious area} > \text{Non-Roof Impervious Area} \times 2.2'' \text{ Pe} \times \text{Runoff Coefficient } (0.95) / 12$, **then Volume Captured** = 50% Discount $\times \text{Non-Roof Impervious Area} \times 2.2'' \text{ Pe} \times \text{Runoff Coefficient } (0.95) / 12$, capped at $1,000 \text{ ft}^2$ non-roof impervious area.

A.3.4 Dry Well

Dry wells have been permitted to be constructed as stormwater management practices in Montgomery County since 2003, even though the practice was not included in the MDE Stormwater Design Manual until ESD was introduced and ESD-type dry wells began to be constructed in approximately 2011. Therefore, Volume Captured credit is based on the era in which it was permitted as itemized below. The SFR Credit Calculator caps tributary impervious area to each dry well at the residence's roof area or 1,000 square feet, which is the maximum to the practice according to the MDE Stormwater Design Manual.

- **If Dry Well(s) permitted prior to 2003**, the practice was not permitted or approved for water quality treatment in the County, therefore **Volume Treated = 0.**
- **If Dry Well(s) permitted between 2003 and 2010**, the practice was permitted/approved for 1" water quality volume credit (pre-ESD volume requirement) and therefore:
 $\text{Volume Captured} = \# \text{ Dry Wells} \times 1,000 \text{ ft}^2 \text{ or Roof Area} \times 1'' \text{ Pe} \times \text{Runoff Coefficient } (0.95) / 12$

- **If Dry Well(s) permitted between 2011 or after**, the practice was permitted/approved for ESD treatment therefore:

$$\text{Volume Captured} = \# \text{ Dry Wells} \times 1,000 \text{ ft}^2 \text{ or Roof Area} \times 2.2'' \text{ Pe} \times \text{Runoff Coefficient} (0.95) / 12$$

A.3.5 Green Roofs

Green roof design as it relates to storage volume is widely varied based on the structural capacity of the roof, drainage configuration, roof slope (if any), types of media, and thicknesses of the media. The average depth of an extensive green roof, the most common green roof type, is approximately 4" and contains approximately 25% voids, which equates to approximately 1" of storage in the media. The SFR Calculator therefore computes volume captured as:

- 1" storage x 1 square foot area / 12 = 0.083 ft³ volume x 7.48 gallons per ft³ = 0.62 gallons
- Rounding down to account for media compaction, system fouling and variability:

$$\text{Volume Captured} = 0.5 \text{ gallons per ft}^2 \text{ green roof}$$

Note, this is also the basis for calculating volume for the County's Rainscapes Rewards program.

A.3.6 Conservation Landscaping

Conservation landscaping receives flow from the residence's impervious areas and stores stormwater within depressed areas around plantings. Since this practice is not drained, ponding depth is typically minimal therefore 2" ponding is assumed. The SFR Calculator therefore computes volume captured as:

- 2" ponding x 1 square foot area / 12 = 0.166 ft³ volume x 7.48 gallons per ft³ = 1.24 gallons
- 9" planting soil with 33% voids is assumed, or 9" x 33% x 7.48 gallons per ft³ / 12 = 1.85 gallons
- Rounding to the nearest whole number, 1.24 gallons + 1.85 gallons = 3 gallons
- **Volume Captured = 3 gallons per ft² conservation landscaping**

Note, this is also the basis for calculating volume for the County's Rainscapes Rewards program.

A.3.7 Rain Gardens, Micro-bioretenion, and Micro-infiltration

These three practices are designed similarly in that the volume captured varies based on the amount of surface ponding and media depth that is placed. 6" is the most common ponding depth for these practices, which represents a balance of capturing volume while avoiding excessive standing water. While media depth varies between these 2 practices, rain garden depths are between 1' minimum and 3' maximum while micro-bioretenion is typically always at the equivalent of a 3' depth (including drainage layer). Micro-infiltration designs vary widely but are also assumed to capture the equivalent of a 3' media depth (including drainage layer). The SFR Calculator therefore computes volume captured as:

- 6" ponding x 1 square foot area / 12 = 0.5 ft³ volume x 7.48 gallons per ft³ = 3.74 gallons
- 1' media x 65% of ponding area (assumed) x 33% voids (assumed) x 1 square foot area / 12 = 1.60 gallons

- **Volume Captured (1' media Rain Garden) = $3.74 + 1.60 = 5$ gallons per ft² (rounded)**
- **Volume Captured (2' media Rain Garden) = $3.74 + (2 \times 1.60) = 7$ gallons per ft² (rounded)**
- **Volume Captured (3' media Rain Garden, Micro-bioretenion, or Micro-infiltration) = $3.74 + (3 \times 1.60) = 9$ gallons per ft² (rounded)**

Note, this is also the basis for calculating volume for the County's Rainscapes Rewards program.

A.3.8 Pervious Pavement

Pervious pavement does not contain surface storage, and the pervious pavement matrix itself is designed not to hold water to prevent damaging the pavement and standing water. Therefore, volume captured by pervious pavement is limited to the underlying stone layer(s) which typically consists of a leveling or base course immediately beneath the pavement, and possibly a coarser stone reservoir or subbase course beneath that. Typically the combination of the stone courses is approximately 12" for pervious pavement designs, therefore the SFR Credit Calculator computes volume captured as:

- **1' stone course x 40% voids (assumed) x 1 square foot area x 7.48 gallons per ft³ = 2.99 gallons**
- **Volume Captured = 3 gallons per ft² pervious pavement**

A.3.9 Rainwater Harvesting: Rain Barrels and Cisterns

Stormwater captured by rainwater harvesting practices are not treated, rather, they are reused onsite for a variety of purposes at a highly variable rate. While the volume of the harvesting devices are fixed and easy to measure and count, the SFR Credit Calculator assumes approximately 40% of the volume is regularly used or "turned over" due to inefficiency in using the volume after rain events, or alternatively assuming the other 60% overflows, becoming stormwater runoff or otherwise not being captured. Therefore, the SFR Credit Calculator computes volume captured as:

- **Volume Captured = Volume of Rainwater Harvesting Device x 40% reuse efficiency**

A.3.10 Sheet Flow to Conservation Area

This practice is similar to the disconnection practices except that conservation areas are typically much larger and are often part of the subdivision process in a development.

To determine the volume captured, the SFR Credit Calculator requests the square feet of conservation area receiving flow. Important assumptions regarding this practice include:

- i. 100 square feet of conservation area is assumed able to hold approximately 6 cubic feet of volume, capped at the pervious area on the parcel.
- ii. The SFR Calculator assumes the entire non-roof impervious on the parcel drains to the conservation area.
- iii. Roof impervious is not eligible for credit due to its proximity to turf areas and that it is unlikely to exist as "sheet" flow (not concentrated or channelized). The roof disconnection credit should be used instead.

- iv. The SFR Credit Calculator checks whether the volume received by the conservation area can hold the volume it receives from the roof leaders, otherwise the volume is capped at the volume of the conservation area.

The logic for computing the volume captured by this practice therefore is:

- If 6 ft^3 per 100 ft^2 of conservation area $<$ Non-Roof Impervious Area \times 2.2" Pe \times Runoff Coefficient (0.95) / 12, **then Volume Captured** = 6 ft^3 per ft^2 conservation area disconnected to.
- If 6 ft^3 per 100 ft^2 of conservation area $>$ Non-Roof Leader Impervious Area \times 2.2" Pe \times Runoff Coefficient (0.95) / 12, **then Volume Captured** = Non-Roof Impervious Area \times 2.2" Pe \times Runoff Coefficient (0.95) / 12, capped at the parcel's total non-roof impervious area.

Appendix B: Basis for Non-Residential/Multi-Family Residential Credit Calculation

B.1 Credit Calculation for Treatment of Onsite Areas

The maximum WQPC Credit for providing stormwater treatment of all onsite area is 60% and is based on providing the full Environmental Site Design volume (ESDv) treatment as defined in Chapter 5 of the MDE Stormwater Design Manual. The 60% maximum WQPC credit is based on the fact that approximately 60% of the County’s Municipal Separate Storm Sewer System (MS4) permit impervious area is located within private property parcels in the county.

Calculation of the required ESDv requires site impervious/pervious data in addition to hydrologic soil group data specific to the site. If no site-specific soils data are available, Hydrologic Soil Group “C” (i.e. HSG C) will be used to evaluate the ESDv required for full treatment.

For sites that provide less than the full ESDv treatment requirement onsite, WQPC credit is based on the fraction of Water Quality Volume (WQv) treatment (as defined in Chapter 2 of the MDE Stormwater Design Manual) provided by each practice and is prorated according to the County average ESDv treatment depth of 2.2-inches (based on typical Hydrologic Soil Group “C” soils within the County) and Table 5.3 of the MDE MS4 guidelines, “Accounting for Stormwater Wasteload Allocations and Impervious Area Treated” (MDE, 2014). Table 3-2 below correlates the ESDv treatment depth with an impervious acre credit per acre of impervious watershed area (also referred to as “impervious area factor”) as shown below. For a treatment depth of 2.2-inches (i.e. the typical ESDv depth for the County), the corresponding impervious area factor is 1.3 impervious acres per acre of watershed impervious area and the corresponding WQPC Credit is 45% (i.e. 60% divided by 1.3, rounded from 46% to 45% for simplicity). A WQPC Credit of 45% therefore applies to practices which treat the full WQv treatment depth of 1-inch, with treatment depths below 1-inch and above 1-inch (but less than the ESDv) prorated as indicated below in Figure B-1.

Table B-1. Impervious Acre Credit for Treatment Above and Below 1-inch of Rainfall
Based on Table 3 of the MDE MS4 guidelines, “Accounting for Stormwater Wasteload Allocations and Impervious Area Treated (2014)”

Impervious Acre Credit for Treatment Above and Below 1 Inch of Rainfall (Source: Table 3: Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated Guidance for NPDES Stormwater Permits, MDE, August 2014).	
Rainfall Depth Treated with ESD (inches), From Table 5.3 in MD Stormwater Manual	Impervious Acre Credit per Acre of Watershed Impervious Area
0.5	0.5
0.75	0.75
1.0	1
1.4	1.1
1.8	1.2
2.2	1.3
2.6	1.4

In summary, the WQPC Credit associated with treatment of the full WQv (based on 1" of treatment depth) is prorated based on linear interpolation according to the values provided in Figure B-3 below.

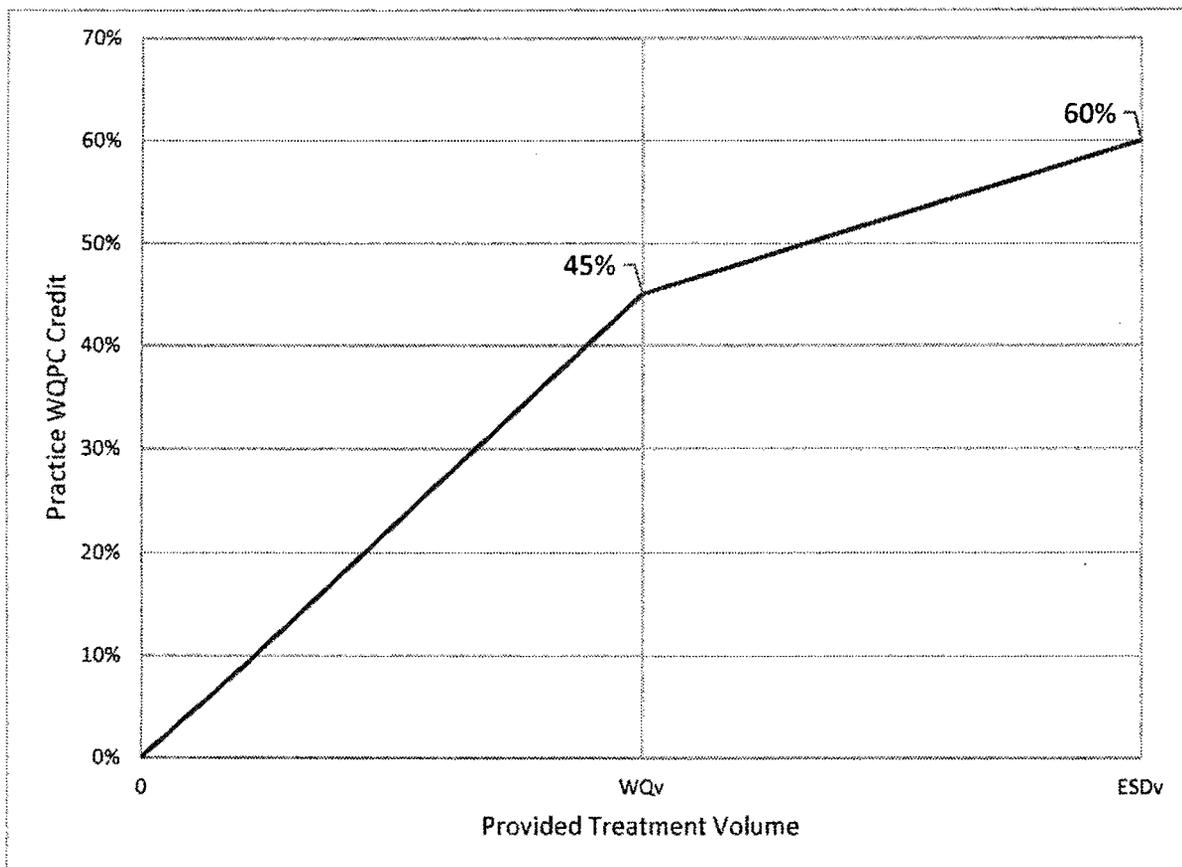


Figure B-1. WQPC Credit Based on Provided Onsite Treatment Volume

B.2 Treatment Volume Calculations

Stormwater treatment practices eligible for credit are generally based on Maryland Department of the Environment (MDE) recognized practices in the Maryland Stormwater Design Manual (MDE, revised 2010). The treatment volume can be determined using one of the following methods:

1. Applicant Input Design Volume ("Provided WQv", to be entered by the applicant)
- or -
2. Assumed Volume ("Assumed Provided WQv", to be evaluated by the WQPC calculator)

These two methods are described in more detail in this section.

B.2.1 Design Volume

If design information is available, the Design Volume can be entered by the applicant into the calculator. The Design Volume may also be referred to on the record plans or drawings as the Water Quality Volume (WQv) provided, or Environmental Site Design Volume (ESDv) provided. The Design Volume should be entered in units of cubic feet.

Treatment Volume calculations for each practice should be completed in accordance with the MDE Stormwater Design Manual using the Unified Stormwater Sizing Criteria referenced in Chapters 2 and 5. For convenience, a summary of these calculations is also provided below.

<p>ESD Sizing Requirements: P_E = Rainfall Target from Table 5.3 used to determine ESD goals and size practices Q_E = Runoff depth in inches that must be treated using ESD practices $= P_E \times R_v$; R_v = the dimensionless volumetric runoff coefficient $= 0.05 + 0.009(I)$ where I is percent impervious cover ESD_v = Runoff volume (in cubic feet or acre-feet) used in the design of specific ESD practices $= \frac{(P_E)(R_v)(A)}{12}$ where A is the drainage area (in square feet or acres)</p>

<p>$WQ_v = \frac{(1.0)(R_v)(A)}{12}$ Eastern Rainfall Zone $P = 1.0$ inches of rainfall where: WQ_v = water quality volume (in acre-feet) $R_v = 0.05 + 0.009(I)$ where I is percent impervious cover A = area in acres*</p>
--

Figure B-2. ESDv and WQv Sizing Requirements
Excerpts from the Maryland Stormwater Design Manual (MDE, 2010)

B.2.2 Assumed Volume

If design information is not available, the Assumed Volume will be evaluated in the NR/MFR calculator based on design era as determined by the Year Permit was Approved for each practice. The volume is calculated using an assumed fraction of required treatment according to what was typical in that design era as shown below in Table 3-1. This assumed fraction of required volume is applied to the typical design standard (provided in treatment depth in inches) as per Year Permit was Approved for each practice as follows:

- Pre-1985: Stormwater management regulations came into effect after this era, and typically no stormwater management was provided prior to 1985; therefore no Assumed Volume will be calculated for practices permitted in this era;
- 1985-2003: Practices permitted in this era included flood control requirements, and the typical design standard is ½-inch of water quality treatment with varying design criteria depending on the practice;

- 2003-2010: The current MDE Stormwater Design Manual (MDE, 2002) was implemented in this era and the typical design standard is treatment of 1-inch of water quality treatment according to water quality volume (WQv) requirements; and
- Post-2010: Chapter 5 of the MDE Stormwater Design Manual took effect in 2010 and the design standard is based on treatment of the required Environmental Design Volume (ESDv), which varies from 1-2.6 inches and is evaluated using hydrologic soil group classification and site imperviousness.

The Assumed Volume is evaluated by multiplying the Treatment Fraction for the selected practice, by the Treatment Depth Required for the era, in order to determine the assumed Treatment Depth. The assumed treatment depth is then applied to the Water Quality Volume (WQv) equation as defined by the MDE Maryland Stormwater Design Manual and summarized below.

$$\begin{array}{ccccccc}
 \text{Assumed Volume} & = & \text{Treatment Fraction} & \times & \text{Treatment Depth Required} & \times & \text{Site Runoff Coefficient, Rv} & \times & \text{Drainage Area to Practice} \\
 \text{(cubic feet)} & & & & \text{(inch)} & & & & \text{(square feet)} \\
 & & & & \text{12 inch/foot} & & & &
 \end{array}$$

See Table B-2 below for assumed Treatment Fractions and Treatment Depths by era.

Table B-2. Assumed Treatment Fractions
Based on Design Era, for valid treatment practices within each design era only

NR-MFR WQPC Credit Application					
Assumed Treatment Volume Table					
Water Quality Treatment Practice Category	Facility	Assumed Volume Fraction Provided of the 1 st WQv Requirement or ESDv (based on Era, and if practice was valid in that Era)			
		Pre-1985 (No water quality requirements - assume no treatment provided)	Installed from 1985-2003 (Fraction of 1 st WQv Requirement Provided)	Installed 2003 - 2010 (Fraction of 1 st WQv Requirement Provided)	Installed 2011 or after (Fraction of ESDv Provided. ESDv requirement varies between 1 st to 2.6 th)
Proprietary Structural Practices (Non-ESD)	Aquafilter	0	0.5	1	0.5
	Bayfilter	0	0.5	1	0.5
	Stormfilter	0	0.5	1	0.5
Structural Practices (Non-ESD)	Bioretention (F-6)	0	0.5	1	1
	Bioretention (F-6)	0	0.5	1	1
	Dry Swale (D-1)	0	0.5	1	1
	Infiltration Trench (I-1)	0	0.5	1	1
	Infiltration Basin (I-2)	0	0.5	1	1
	Peat Sandfilter	0	0.5	1	1
	Separator Sandfilter	0	0.5	1	1
	Surface Sandfilter (F-1)	0	0.5	1	1
	Underground Sandfilter (F-2)	0	0.5	1	1
	Wet Pond (P-2)	0	0.5	1	1
	Wetland	0	0.5	1	1
	Wet Pond Extended Detention (P-3)	0	0.5	1	1
	Wetland Extended Detention (W-2)	0	0.5	1	1
Dry Pond with Sand Filter Base	0	0.5	1	0	
Tree Box	0	0.5	1	1	
ESD Practices Constructed Prior to ESD Standards	Permeable Pavement	0	0	1	0
	Green Roof	0	0	1	0
	Dry Well	0	0	1	0
ESD Practices	Rain Garden (M-7)	0	0	0	1
	Permeable Pavement (A-2)	0	0	0	1
	Rainbarrel (M-1)	0	0	0	1
	Cistern (M-1)	0	0	0	1
	Micro-Bioretention (M-6)	0	0	0	1
	Submerged Gravel Wetlands (M-2)	0	0	0	1
	Landscape Infiltration (M-3)	0	0	0	1
	Micro-Infiltration	0	0	0	1
	Swales (M-8)	0	0	0	1
	Green Roof (A-1)	0	0	0	1
	Reinforced Turf (A-3)	0	0	0	1
	Disconnection (N-1 or N-2)	0	0	0	1
	Sheet Flow (N-3)	0	0	0	1
Dry well (M-5)	0	0	0	1	

Stormwater Pretreatment and Quantity Practices not Providing Water Quality Treatment Volume	
Type	Name
Proprietary	Aquaswirl
	Baysaver
	Baysaver Flowsplitter
	Coirtch CDS System
	Flow Splitter
	Flow Splitter Underground
	Oil/Grit Separators
	Stormceptor
	Stormchamber
	Infiltrator/Stormtech
	Snout
	VZBI
	Vortectinics
Vortentry	
Generic	Dry Pond
	Dry Pond Extended Detention
	Underground Storage

B.3 Treatment of Offsite Areas

For stormwater management systems that provide full treatment of the Environmental Site Design Volume (ESDv) as defined by Chapter 5 of the MDE Maryland Stormwater Design Manual and also treat additional stormwater runoff from offsite, a WQPC Credit up to a maximum of 100% may be obtained for the practice. To be eligible for the additional offsite credit, the maximum onsite NR/MFR WQPC Credit of 60% must already be achieved and is calculated as described in Section 3 of the Manual and B-1 and B-2 of this Appendix.

In Section 2 of the NR/MFR WQPC Credit Application, the applicant can select “Yes” in the Offsite Treatment Information dialogue box and the following additional site information will be required:

- Total Offsite Impervious Area: The portion of contributing offsite drainage area which is considered to be impervious, to be entered in units of square feet. This area does not include onsite impervious area.
- Total Offsite Drainage Area: The total contributing offsite drainage area which drains to the stormwater management system, to be entered in units of square feet. This area does not include onsite contributing drainage area.

The applicant may also provide site specific soils data according to the Soil Conservation Services (SCS) Hydrologic Soil Group, if available. If no site-specific soil data is available, Type C soils are assumed for all offsite areas, since that is the predominant soils type in Montgomery County. The data in Section 2 is used to calculate the offsite required Environmental Site Design Volume (ESDv) as defined by Chapter 5 of the MDE Maryland Stormwater Design Manual.

In Section 3, the applicant may select “Yes” in the “Offsite Area Treated?” dialogue box for individual stormwater management systems which treat additional offsite areas. The applicant must provide an input design Treatment Volume for all facilities that treat offsite area, and this Treatment Volume should include both onsite and offsite areas in units of cubic feet. Additional design plans or other design data is required in order to be eligible for the additional offsite credit, and design treatment volume will be verified by the County DEP. The “Incremental Offsite Treatment Volume” will be back-calculated for each practice from the onsite required ESDv, and a total offsite treatment volume will be calculated for applications with multiple stormwater management systems providing offsite treatment. The Total Incremental Offsite Volume will be used to calculate the additional offsite WQPC Percent Credit.

The Offsite WQPC will be calculated based on the total offsite impervious area treated and the County DEP’s WQPC formula:

$$\text{Offsite WQPC} = \left[\frac{\text{Offsite Impervious Area}}{\text{Equivalent Residential Unit, ERU}} \times \text{Rate} \right]$$

The Equivalent Residential Unit (ERU) is equal to 2,406 square feet, and represents the median amount of impervious space on residential properties in the County. The Rate is set by the County Council each year.

The Offsite Percent Credit is calculated by prorating according to Equation B.1 based on how much offsite treatment volume is provided (“Total Incremental Offsite Volume”) versus how much is required for the offsite drainage area per the MDE Maryland Stormwater Design Manual (offsite ESDv), up to a maximum of 40%:

$$\text{Eqn. B.1} \quad \text{Offsite WQPC Percent Credit} = \frac{\text{Total Incremental Offsite Volume}}{\text{Offsite Environmental Site Design Volume, ESDv}} \times 40\%$$

The Offsite WQPC Credit and Total WQPC Credit is computed according to Equations B.2 and B.3:

$$\text{Eqn. B.2} \quad \text{Offsite WQPC Credit} = \text{Offsite WQPC Percent Credit} \times \text{Offsite WQPC}$$

$$\text{Eqn. B.3} \quad \text{Total WQPC Credit} = \text{Onsite WQPC Credit} + \text{Offsite WQPC Credit}$$

The WQPC Charge is computed according to Equation B.4:

$$\text{Eqn. B.4} \quad \text{WQPC Charge (after credit)} = \text{WQPC Charge on Bill (before credit)} \\ - \text{Total WQPC Credit}$$

T&E COMMITTEE #1
January 21, 2016

Update

MEMORANDUM

January 19, 2016

TO: Transportation, Infrastructure, Energy and Environment (T&E) Committee
FROM: *KL* Keith Levchenko, Senior Legislative Analyst
SUBJECT: Discussion: Update – MS4 Permit

Attachments:

- Excerpt: Restoring Our Watersheds - Montgomery County's 2010-2015 MS4 Watershed Restoration Achievements (August 2015) (Executive Summary Only ©A-11)

Meeting Participants:

Montgomery County Department of Environmental Protection (DEP)

- Lisa Feldt, Director
- Patty Bubar, Deputy Director
- Steven Shofar, Chief of Watershed Management
- Jim Stiles, Manager, Watershed Construction and Contract Management
- Pam Parker, Manager, Watershed Planning and Monitoring
- Amy Stevens, Manager, Stormwater Facility Inspection and Maintenance

T&E Committee Chair Berliner asked DEP to provide an update on the County's National Pollution Discharge Elimination System Municipal Separate Storm Sewer System Discharge (NPDES-MS4) Permit.

DEP has been asked to discuss its accomplishments and lessons learned¹ over the past five years under the most recent permit (which expired in February 2015), some approaches it plans to pursue under the next permit, and the status of the next permit and DEP's negotiations with Maryland Department of the Environment (MDE). DEP's presentation slides were not available as of the time of this memorandum but will be provided to Committee members as soon as they are available.

¹DEP's most recent NPDES-MS4 Annual Report (covering FY14 and dated March 2015) is available on the DEP website at: <https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/water-reports/npdes/AnnualReport-FY14-3-13-15-Final.pdf>. DEP also prepared a supplement to the Annual Report (dated August 2015) focusing on its watershed restoration achievements to date. This report is available on the DEP website at: <https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/water-reports/npdes/MoCo-RestorationAchievements-080715REV2.pdf>

NPDES-MS4 Permit Status

DEP is the lead department coordinating a multi-department/agency effort to meet the requirements of the five-year MS4 permit² issued to the County by MDE on February 16, 2010. This permit expired in February 2015. However, expired permits are assumed to remain in effect pending issuance of a succeeding permit by MDE.

However, clouding this issue somewhat is the fact that this now expired permit has been under legal challenge. In April 2015, the Court of Special Appeals affirmed a Circuit Court decision to remand the permit back to the Maryland Department of the Environment (MDE).³ The Court of Special Appeals agreed with the Circuit Court that the permit did not “afford an appropriate opportunity for public notice and comment and because it lacks crucial details that would explain the County’s stormwater management obligations.” Pending the outcome of this court case, MDE is appealing the case to the Court of Appeals and has not moved forward with a next generation permit for Montgomery County, pending the outcome of this case.

Some background information on the now expired MS4 Permit and its funding is provided below.

NPDES-MS4 Permit Requirements

The County’s Coordinated Implementation Strategy (CCIS)⁴ (dated January 2012) provides the planning basis for the County to meet the following goals, as required in the County’s (now expired) NPDES-MS4 Permit:

1. Meet Total Maximum Daily Load (TMDL) Wasteload Allocations (WLAs) approved by EPA.
2. Provide additional stormwater runoff management on impervious acres equal to 20 percent of the impervious area for which runoff is not currently managed, to the maximum extent practicable (MEP). *This requirement continues to be the primary driver of DEP’s CIP expenditures, and progress in meeting this goal is discussed in more detail below.*
3. Meet commitments in the Trash Free Potomac Watershed Initiative 2006 Action Agreement, which include support for regional strategies and collaborations aimed at reducing trash, increasing recycling, and increasing education and awareness of trash issues throughout the Potomac Watershed.
4. Educate and involve residents, businesses, and stakeholder groups in achieving measurable water quality improvements.

² The County’s MS4 permit is available on the DEP website at:

https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/water-reports/npdes/MOCO_MS4_Permit.pdf

³ Maryland Department of the Environment, et al. v. Anacostia Riverkeeper, et al., 222 Md. App. 153 (2015).

⁴ The County’s Coordinated Implementation Strategy (January 2012) is available on the DEP website at:

<https://www.montgomerycountymd.gov/DEP/Resources/Files/ReportsandPublications/Water/Countywide%20Implementation%20Strategy/Countywide-coordinated-implemented-strategy-12.pdf>

5. Establish a reporting framework that will be used for annual reporting, as required in the County's NPDES-MS4 Permit.
6. Identify necessary organizational infrastructure changes needed to implement the Strategy.

While DEP has made substantial progress over the past five years, DEP has not achieved the 20 percent impervious area control goal (#2 above).

Watershed Restoration Requirements

The most recent permit's 20% requirement for stormwater management noted above translates to an additional 3,777 acres of impervious area restoration to be completed by the County. As noted in the County's August 2015 Watershed Restoration Achievements report:

at the end of the third generation MS4 permit term (February 16, 2015), the County had completed restoration treating 1,726 acres of impervious area or its equivalent, with restoration work treating another 197 acres under construction (acres or projects referred to as "inconstruction"). Restoration projects to treat an additional 2,431 acres were under contract for design (acres or projects referred to as "in-design").

While the County had not completed work on the entire 3,777 acre goal in the permit, it had 4,354 acres at some stage of work (in design, in construction, or completed). About 70 percent (3,085 acres) is being addressed through capital projects (such as stream restoration projects and stormwater management retrofits). The next biggest categories are: agency partnerships (642 acres), new development/redevelopment (305 acres), and management programs (such as street sweeping and catch basin cleaning (249 acres).

This effort represents a major ramp-up in work (and costs) over the past five years. While the work with MDE on the next generation permit is stalled (pending the outcome of the legal case noted above), DEP will be proceeding with this ongoing work.

What will be interesting to see in the coming years is whether (and by how much) water quality improvements occur in the project areas (and whether the associated TMDLs are met). These results, in turn, can inform future permit priorities to ensure the County's large investment in funding is allocated where it can have the biggest impact on water quality.

Cost Implications

As previously discussed by the Committee, the cost implications for implementation of the MS4 permit are substantial. Two years ago, DEP estimated the permit costs to be about \$305 million through 2015 and nearly \$1.9 billion through 2030.

Over the past decade, the DEP budget (not counting the Division of Solid Waste Services) has become dominated by water quality-related efforts. In FY16, the Water Quality Protection Fund budget is \$23.3 million compared to \$2.2 million in the General Fund, or 91 percent.

Water Quality Protection Fund and Charge

DEP's MS4 work (both operating and capital) is budgeted within the County's Water Quality Protection Fund. This self-supporting fund draws its revenue primarily from the Water Quality Protection Charge (WQPC) (an estimated \$32.6 million in FY16) as well as revenue from the County's bag tax (an estimated \$2.4 million in FY16).

The Fund and charge were created in 2001, when the Council approved Bill 28-00.

Three years ago, the Council enacted Bill 34-12 and approved Executive Regulations 17-12AM and 10-13. The bill and regulations included a number of changes to the charge, such as: broadening the charge to include all non-residential properties, establishing a 7 tier rate structure for residential properties, establishing credits for on-site stormwater management practices, and establishing a hardship exemption for residential properties and non-profit organizations. A three-year phase-in period for those properties that experienced an increase in assessments as a result of the legislation was also included.

This past November, at the County Executive's request, the Council enacted legislation (Bill 45-15, Stormwater Management - Water Quality Protection Charge - Curative Legislation) to designate the Water Quality Protection Charge as an excise tax (rather than a fee) to address concerns raised in a Circuit Court opinion (currently under appeal by the County).⁵

DEP is also considering additional substantive changes to the Water Quality Protection Charge itself. Legislation is expected to be transmitted to the Council within the next few months.

Attachment

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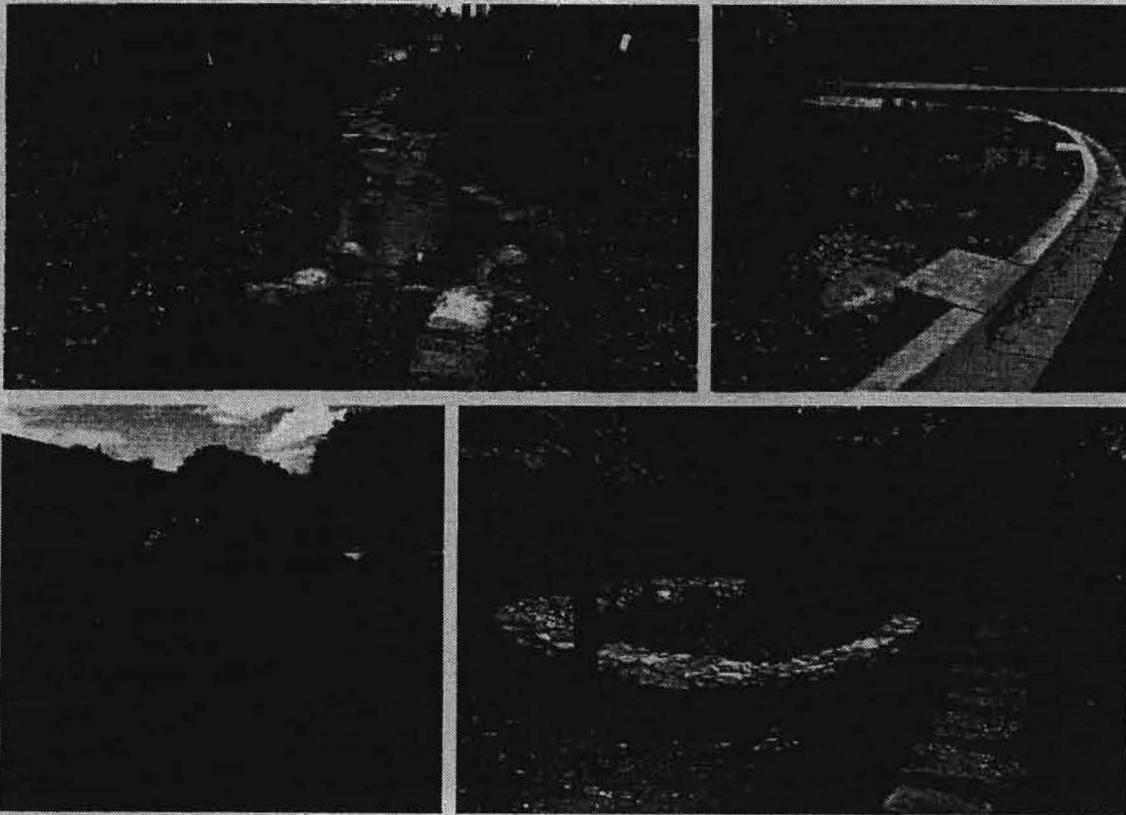
⁵ Paul N. Chod v. Board of Appeals for Montgomery County (Civil No.35398704-V, entered July 23, 2015).

August 2015

RESTORING OUR WATERSHEDS

Montgomery County's 2010-2015 MS4 Watershed Restoration Achievements

Supplement to the Montgomery County Annual Report
for FY14 NPDES Municipal Separate Storm Sewer System Permit



DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION**

Working together for a cleaner, greener county.

Published by the Montgomery County
Department of Environmental Protection
for the Maryland Department of the Environment

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Executive Summary

Stormwater discharges from Montgomery County's storm drain system are regulated under a National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit. The purpose of this document is to be a final summary of Montgomery County's (the County) progress towards meeting the MS4 permit's watershed restoration requirement through the end of the third generation permit term on February 15, 2015. This document is a supplement to the fiscal year 2014 MS4 annual report. Montgomery County Department of Environmental Protection (DEP) has primary responsibility for the majority of the permit requirements, including watershed assessment and restoration managed by DEP's Watershed Management Division (WMD).

In addition to completing implementation of restoration efforts to fulfill the second generation MS4 permit restoration requirement, under the third generation MS4 permit the County was also tasked with restoring an additional 20% of impervious surface area that was not treated to the maximum extent practicable (MEP).

This restoration requirement translated to an additional 3,777 acres of impervious area restoration to be completed by the County. Progress towards meeting this requirement was achieved by tracking impervious acres treated by restoration projects, and impervious acre equivalent credit for alternative urban BMPs, as allowed by Maryland Department of the Environment (MDE). Alternative urban BMPs include practices such as street sweeping, stream restoration, and catch basin cleaning.

Progress Towards the Restoration Requirement

At the end of the third generation MS4 permit term (February 16, 2015), the County had completed restoration treating 1,726 acres of impervious area or its equivalent, with restoration work treating another 197 acres under construction (acres or projects referred to as "in-construction"). Restoration projects to treat an additional 2,431 acres were under contract for design (acres or projects referred to as "in-design"). The County's progress in relationship to the restoration requirement is illustrated in Figure 1.

Progress Towards Restoration Requirement (Acres)

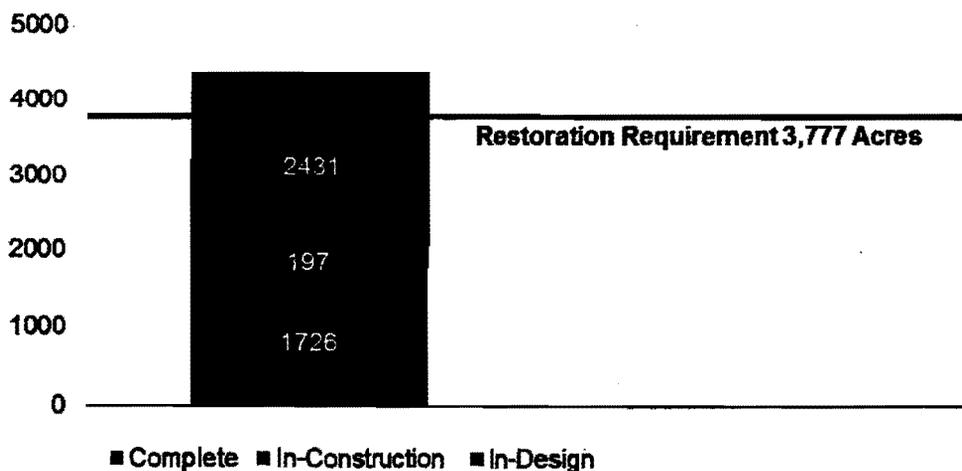


Figure 1 Montgomery County Progress towards the MS4 Permit Watershed Restoration Requirement

DEP's accomplishment of restoring 1,726 acres of impervious area or its equivalent represents completing 46% of the MS4 permit's restoration requirement. Once the in-construction projects are complete this percentage will increase to 51%. Of the projects in-design, 1,854 acres, representing 76% of the 2,431 acres in-design, will need to be realized in order to meet the 20% restoration requirement. The remaining projects will continue to be developed for the next generation MS4 Permit, or can serve as back up inventory for projects in design that may not be feasible to construct.

DEP's progress towards meeting the restoration requirement demonstrates the County's strong commitment to improving water quality and conservation of the environment. The restoration requirement of the third generation MS4 permit represented a significant increase over the second generation MS4 permit requirement. In response, DEP developed a proactive adaptive management approach to take on the intensive and diverse efforts needed for success. The following sections provide context and summarize the efforts undertaken by DEP to progress towards the restoration requirement.

MS4 Permit Background and Accelerating the Watershed Restoration Program

PERMIT BACKGROUND

The County has been subject to an MS4 permit since 1996. The first generation MS4 permit requirements (1996-2001) focused on assessing local watersheds, on identifying locations and extent of stormwater management and receiving stream problems, compiling an inventory of projects to address those problems, and stream physical and biological monitoring. The second generation permit (2001-2006, continued in effect until 2010 due to permit negotiations and legal challenges) included an impervious area restoration requirement to restore 10% of impervious areas not already treated to the MEP. The second generation permit also saw the addition of five municipalities and one special tax district as co-permittees. The third generation MS4 permit (2010-2015)¹ increased the restoration requirement to restore an additional 20% of the impervious areas not already treated to the MEP and added Montgomery County Public Schools (MCPS) as a co-permittee.

In order to comply with the MS4 permit requirements, DEP collaborates with numerous County agencies. These include the Division of Solid Waste Services (DSWS), Department of Permitting Services (DPS), Department of Transportation (DOT), Department of General Services (DGS), and MCPS. DEP also has an established Memorandum of Understanding (MOU) with DGS and is finalizing an MOU with MCPS to increase opportunities for watershed restoration.

STRATEGY DOCUMENTS

DEP had a well-established watershed restoration program in place prior to the third permit cycle; however, the third generation MS4 permit required expansion and acceleration of that existing program. To address the new requirements, the County developed the Implementation Plan Guidance Document that detailed the recommended methods and techniques for preparing individual watershed implementation plans and documented the best available science underlying the technical assumptions used in developing the plans to allow the County

¹ Although it officially expired on February 15, 2015, the permit is administratively continued pending final action, if any, by MDE in response to a decision by the Maryland Court of Special Appeals in Maryland Department of the Environment, et al. v. Anacostia Riverkeeper, et al. to remand the permit to MDE for further proceedings.

to make cost-effective implementation decisions and achieve MDE regulatory approval. The Implementation Plan Guidance Document also prompted the refinement of a BMP coding process, the MS4 permit area, and impervious cover subject to the MS4 permit.

Following the Guidance, watershed implementation plans were developed for most of the County's watersheds where a full range of restoration opportunities were identified and quantified in terms of planning level implementation cost and anticipated pollutant load reduction potential.

DEP then developed the Montgomery County Coordinated Implementation Strategy (the Strategy) in June 2009 that considered implementation across all of the watersheds in an integrated and phased manner. The Strategy laid out a framework for meeting the watershed restoration requirements, Chesapeake Bay Total Maximum Daily Load (TMDL) restoration goals, and setting cost-effective approaches which reflected direct stakeholder input. Finally, the Strategy facilitated project identification and implementation planning by setting priorities among potential projects.

BUDGET, CAPACITY, AND FUNDING

Implementation of the plan laid out in the Strategy required an increased Capital Improvement Program (CIP) budget for funding watershed restoration projects. From 2009 to the latest CIP budget passed for FY15-20, the amount of funding for the watershed restoration program has increased by a factor of ten (Figure 2).

The budget increases translated to a direct increase in number of Water Resources Engineering (WRE) vendors and tasks orders issued for design of restoration projects. In addition, DEP also augmented its project management capacity via a consultant contract coupled with doubling internal staff capacity.

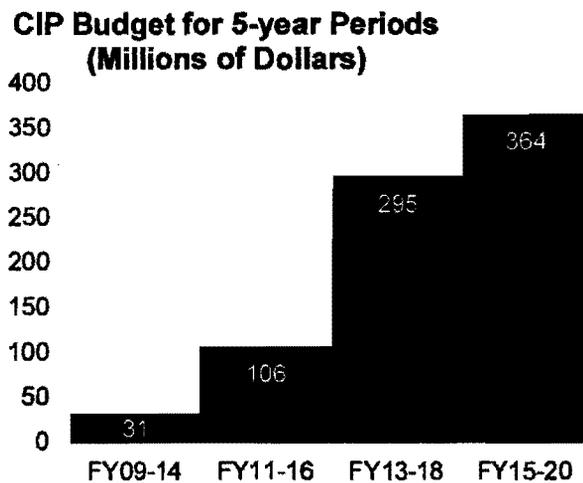


Figure 2 Capital Improvement Program Budgets

The main funding mechanism for the CIP is the Water Quality Protection Charge (WQPC), which went into effect in 2002 and is included as part of the Montgomery County property tax bill. In 2011, the County issued bonds secured by the WQPC to finance the construction and related expenses of watershed restoration projects as approved in the CIP. The issuance of the bonds allowed the capital costs of complying with the increased restoration requirement to be spread over the lifetime of the bonds (and the useful life of the facilities).

Data Management and the Restoration Requirement

DATA MANAGEMENT

The increased restoration requirement of the third generation MS4 permit and increased level of effort to implement watershed restoration projects created a critical need for enhanced data management. In response, DEP has undertaken numerous data management initiatives to specifically support meeting the additional 20% watershed restoration requirement. These efforts include starting a SharePoint site, using Microsoft Project Server (MPS), developing a Business Intelligence System and Dashboard, maintaining and updating the Restoration Sites

Database and developing a new structured query language (SQL database), improving and updating the storm drain layer, and streamlining the drainage areas delineation process.

The County MS4 permit SharePoint site facilitates file hosting and sharing between DEP, project management contractors, WRE contractors, and construction contractors. The SharePoint currently stores content such as task orders, schedules, plans, budgets, designs and reports creating a single repository for restoration project documents. In 2012, DEP began implementing an MPS to monitor CIP project schedule performance. The MPS provides projections of when projects will be ready for construction and completion. Information from the MPS is linked with the Business Intelligence (BI) system and Dashboard. The BI system is designed to analyze data from multiple tables and databases relating to the County's MS4 program to measure and report on specific programmatic performance metrics. The BI system reports six metrics specific to the restoration program including: schedule performance, impervious area restoration progress, program costs, and construction cost estimation accuracy. The metric reports generated by the BI system are easily accessed through an internet-based dashboard interface (the Dashboard).

The Dashboard provides DEP staff and project managers with up-to-date insight into the restoration program's progress towards meeting the 20% restoration requirement (Figure 3). The BI system and the Dashboard have played an important role in continuing adaptive management of the program. The Dashboard can be used to quickly find inefficiencies and identify problems early, serving as a platform for open communication and resource management. Enhanced capabilities are also currently under development by DEP to allow for resource modeling and restoration scenario evaluation using the Dashboard.

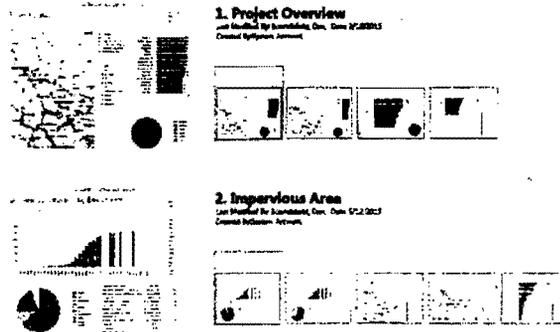


Figure 3 Planning and Compliance Dashboard Screen

DEP also maintains an ESRI ArcGIS Restoration Sites Database that tracks all potential restoration opportunities. In addition to the Restoration Sites Database, the County initiated efforts to create a new SQL database in response to increasing reporting needs and anticipated future permit needs. The purpose of developing the new SQL database is to increase capacity, function, stability and quality of the existing data and improve data organization. The new SQL database represents a significant effort in improving data functionality intended to contribute to the success of the restoration program.

Data management has also involved processing data for storm drain mapping and drainage area delineations. Mapping storm drains is a challenge due to data inconsistency; however, in 2014, DOT began coordinating a large effort to make extensive improvements to the County's storm drain data and to aggregate all the disparate datasets in one central location. DEP maintains open lines of communication with DOT on this effort. On-going construction of new storm drain systems and BMPs requires drainage area delineations to be constantly updated. During the third generation MS4 permit, DEP increased its efforts to delineate drainage areas for newly inventoried BMPs and to perform data quality assurance and control for existing drainage delineations. The number of existing BMP recorded and drainage areas delineated more than doubled from 2011 to 2015.

RESTORATION REQUIREMENT

Determination of the third generation MS4 permit restoration requirement (to restore an additional 20% of uncontrolled impervious areas as of 2009) required the calculation of the impervious cover controlled to the MEP at the end of 2009. As improved information on the area of impervious cover controlled to the MEP became available through new data and more advanced analysis, DEP worked to define the acres represented by the restoration requirement to reflect the most accurate information.

Efforts by DEP to improve the accuracy of the restoration requirement include updating BMP drainage area delineations, verifying existing facilities, incorporating existing roadside swales, and crediting large lot disconnections. Table 1 below illustrates the restoration requirement calculation highlighting how the accuracy of determining the County MS4 impervious area controlled to MEP in 2009 was improved since the Strategy. The restoration requirement of 3,777 acres is 20% of 18,884 acres, which is the County MS4 impervious area under or uncontrolled as of 2009.

Table 1 Restoration Requirement Calculation

	Description	Area (acres)
A.	Impervious Area Subject to Third Generation MS4 Permit	25,119
B.	County MS4 Impervious Area Controlled to MEP in 2009	
	Per The Strategy (2009)	3,661.0
	Updated BMP Tracking and Drainage Area Delineations	691.2
	MEP Verification of Existing Facilities	1,597.3
	Incorporating Existing Roadside Swales	278.3
	Crediting Disconnected Large Lots	7.4
	TOTAL	6,235.2
C.	County MS4 Impervious Area Under/Uncontrolled (2015 Revision) (A-B)	18,884
	Restoration Requirement (2015 Revision) (20% of C)	3,777

**See Section C.ii. for comparison of final restoration requirement and original estimate in the Strategy*

Restoration Projects and Accounting for Credit

The County pursued watershed restoration through six unique delivery methods to make progress towards meeting the third generation restoration requirement of 3,777 acres. These methods included CIP projects, RainScapes and Water Quality Protection Charge (WQPC) Credits, complementary restoration projects, management programs, new development and redevelopment, and agency partnerships. The relative contribution of each delivery method is illustrated in Figure 4. The CIP projects form the foundation of the County's restoration program, contributing 70% of the 4,354 acres of impervious credit either completed, in-construction or in-design.

DEP has taken a watershed-based approach to applying green infrastructure at many scales across the County. The U.S. EPA describes green infrastructure as using *"vegetation, soils, and natural processes to manage water and create healthier urban environments. At the scale of a city or county, green infrastructure refers to the patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water. At the scale of a neighborhood or site, green infrastructure refers to stormwater management systems that mimic nature by soaking up and storing water."* (U.S. EPA, 2015)

Most County restoration projects fall within the realm of green infrastructure, as described by EPA. Stream restoration, reforestation and impervious cover removal contribute to the County's network of green corridors and patches that provide habitat, filter pollutants and absorb stormwater runoff. Even stormwater pond retrofits help to improve water quality and enhance habitat.

In addition to its more traditional, larger-scale restoration and retrofit projects, the County has worked to progressively increase its implementation of green infrastructure at the neighborhood and site scale. Environmental Site Design (ESD) practices have been and will continue to be implemented on public and private properties countywide through a variety of delivery methods.

Within the CIP, Green Streets and Government Facilities and Schools focus on implementation of ESD practices along roads and on publicly owned lands. These ESD practices account for 148 acres of the total CIP impervious area credits. RainScapes and WQPC Credits both incentivize installation of ESD practices on residential, institutional, and commercial properties. These programs have contributed 38.8 acres of impervious area credits. Finally, ESD practices that contribute 68.7 acres of impervious area credits have been or are being implemented through Agency Partnerships. The 256 acres treated by ESD practices may comprise only 6% of the 4,354 acres of impervious area credits the County achieved during this permit cycle, but they represent a commitment by DEP to increase ESD implementation in the future.

Impervious area equivalent credits were calculated in accordance with the MDE 2011 Draft Guidance Document, the MDE 2014 Final Guidance Document, and the Maryland Stormwater Design Manual as applicable for each delivery method and project type. Impervious area

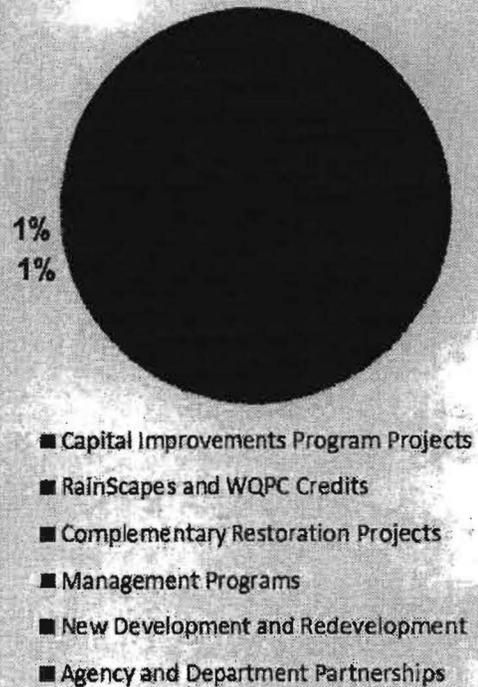


Figure 4 Relative Contribution of Total Impervious Area Credits by Delivery Method

Executive Summary

equivalent credit for individual trees and conservation landscaping is based on a technical memo developed by the Center for Watershed Protection.

Table 2 provides a summary of impervious acre credits by delivery method and applicable subcategory and also shows a breakdown of complete, in-construction, and in-design acres. The following sections briefly describe the delivery methods.

Table 2 Summary of Impervious Acre Credits by Delivery Method and Status

	Complete	In-Construction	In-Design	Total
Capital Improvement Projects	663.6	152.2	2268.8	3084.6
Stream Restoration	88.7	57.5	510.2	656.4
Green Streets	19.1	0.6	91	110.7
Government Facilities	3.2		34.1	37.3
Stormwater Retrofits	552.6	94.1	1633.5	2280.2
RainScapes and WQPC Credits	38.8			38.8
RainScapes	15.8			15.8
WQPC	23.0			23.0
Complementary	6.1	19.7	8.5	34.3
Reforestation	6.0	19.7	8.5	34.2
Impervious Surface Removal	0.1	0.03		0.1
Management Programs	248.6			248.6
Street Sweeping	162.6			162.6
Catch Basin Cleaning	86.0			86.0
New Development and Redevelopment	305.2			305.2
MGPS	12.8			
M-NCPPC	3.3			
Private	53.4			
New BMPs Treating Existing Impervious	235.7			
Agency Partnerships	463.5	25.5	153.3	642.3
ICC	252.7	16.9	58.8	328.4
WSSC	23.2	8.6	94.5	126.3
DGS	0.9			0.9
MCPS	0.7			0.7
DOT	50.0			50.0
USACE	136.0			136.0
Total	1725.8	197.4	2430.6	4353.8

CAPITAL IMPROVEMENT PROGRAM PROJECTS

There are four types of projects undertaken by DEP through the CIP including stream restoration, green streets, projects at government facilities and County schools, and stormwater retrofits. CIP projects require the largest investment of financial and other resources in comparison to other delivery methods.



Stream restoration involves the rehabilitation of degraded stream channels and is considered green infrastructure. Restoration is intended to reduce streambank erosion and sedimentation, enhance riparian and in-stream habitat conditions, and improve water quality conditions.



Green Streets projects consist of designing and constructing ESD stormwater treatment facilities within existing street rights-of-way and is another green infrastructure method. These projects capture stormwater runoff in neighborhoods with minimal existing stormwater controls and install a combination of rain gardens, swales, permeable pavement, curb extensions with bioretention areas, and tree boxes.



Government Facility and County School projects improve stormwater management and treatment on properties owned by the County government and Montgomery County Public Schools (MCPS) by retrofitting sites with new ESD facilities.



Stormwater retrofits involve upgrading outdated stormwater infrastructure to meet accepted current standards. Third generation MS4 permit retrofit projects focused on stormwater ponds since they are the oldest type of stormwater infrastructure and have the greatest potential for water quality improvements and impervious area treatment.

One important factor contributing to the significant number of acres still in-design is that CIP projects were programmed in the approved FY13-18 budget assuming design and permitting occurring within a 15-month period and construction occurring immediately after final design. As implementation progressed, it became evident that the 15-month design and permitting phase was a challenge with the project design and permitting taking from 18 months for small, simple projects to up to three years or more for larger and more complicated projects. In response, DEP decided on a strategy to issue task orders to design all work necessary to meet the permit requirements before the end of the permit term. This strategy demonstrates DEP's commitment to adaptive management and meeting the restoration requirement.

RAINSCAPES AND WQPC CREDITS

The "RainScapes and WQPC Credits" delivery method is an important component of the watershed restoration program because individual residents, property owners, and community groups become engaged in helping support the County stormwater efforts.

DEP's RainScapes program promotes environmentally friendly landscaping and small scale stormwater control and infiltration projects on residential, institutional, and commercial properties by offering technical and financial assistance to property owners (Figure 5). Through RainScapes Rewards, RainScapes Neighborhoods, and RainScapes for Schools, the program has supported implementation of rain gardens, tree plantings, permeable pavement retrofits, dry wells, water harvesting with rain barrels and cisterns, and conservation landscaping.



Figure 5 RainScapes Project

Impervious area restoration from WQPC credits represent impervious areas treated by stormwater management practices located on private property, not already credited through RainScapes. DEP is made aware of, and is able to track credit for, these stormwater management practices through the property owners' application to receive a WQPC credit reducing the WQPC amount the property owner is required to pay.

COMPLEMENTARY RESTORATION PROGRAMS

Complementary restoration projects include reforestation and impervious surface removal usually completed in combination with larger retrofit or restoration projects in their vicinity. These projects demonstrate the County's commitment to treat additional impervious areas even at small scales as the opportunities present themselves.

Reforestation projects establish the next generation of native trees and understory (smaller trees and shrubs), helping improve the environment and improving stormwater management. Impervious surface removal projects address underutilized impervious surfaces replacing them with pervious surfaces or incorporating them into a new ESD practice.

MANAGEMENT PROGRAMS

Street sweeping and catch basin cleaning are two road maintenance management programs overseen by DOT and DEP that contribute to watershed restoration. Street sweeping removes debris and abrasives from road surfaces, helping to keep drainage systems clean and preventing pollutants from entering the waterways (Figure 6). Catch basins, located along the curb line to allow stormwater to enter the storm drain system, need to be cleaned to remove sediment, debris, and trash. Through these programs 623 tons of debris was collected during FY14.



Figure 6 Street Sweeping

NEW DEVELOPMENT AND REDEVELOPMENT

Throughout the course of the third generation MS4 permit, many areas of impervious cover that were not controlled to the MEP at the end of 2009 have become controlled to the MEP as a result of new development and redevelopment activities. The new development and redevelopment delivery method accounts for these newly controlled areas. DEP carried out four desktop analyses to determine the impervious area that received treatment as a result of new development and redevelopment in four categories including MCPS redevelopment, M-NCPPC property acquisition, private redevelopment, and newly added BMPs.

AGENCY PARTNERSHIPS

DEP actively seeks opportunities to partner with other agencies and departments responsible for completing construction projects throughout the County to optimize watershed restoration. During the third generation MS4 permit, DEP established six specific partnerships that have resulted in significant contributions towards meeting the restoration requirement.

These partnerships include the Maryland State Highway Authority Intercounty Connector, through which 40 restoration projects including stream restorations, green streets and stormwater retrofits were funded and constructed. Partnering with the Washington Suburban Sanitary Commission (WSSC), DEP tracks credits from stream restoration projects throughout the county undertaken by WSSC to improve the sewer infrastructure. DEP works with DGS on County-managed properties undergoing development or redevelopment by DGS to fund some aspects of the construction effort to provide water quality treatment for impervious area in addition to what is required by the new construction on the site. In addition to the MCPS CIP projects, DEP partners with MCPS on MCPS construction projects to contribute funds to pay for the stormwater facilities outside of the project area. In addition to the CIP-funded green streets, DEP collaborated with and supported funding for DOT-led green streets projects and worked with DOT to prioritize outfall stabilizations throughout the County. DEP also partnered with the U.S. Army Corps of Engineers (USACE) in the management/restoration of the Anacostia River watershed, tracking credits from stream restoration projects.

PUBLIC OUTREACH

As the number of watershed restoration projects increased, so did the need for public outreach. Whether they are small scale rain gardens or large scale stream restoration projects, DEP proactively communicates its restoration project intentions to stakeholders and nearby residents throughout the process. On average, throughout a project's design, construction, and completion, six public meetings are held which may include an open forum style meeting with a presentation, a site walk, or attending and presenting at a Homeowners Association Board meeting. DEP developed a watershed restoration outreach standard operating procedure (SOP) to provide staff guidance and consistency on how to effectively reach out to the public. DEP has also developed a public outreach database that tracks outreach efforts for the watershed restoration program as well as outreach supporting other third generation MS4 permit requirements.

The number of public outreach meetings saw a five-fold increase from FY2011 to FY2014 with the total number of people reached through attending meetings increasing four-fold from 200 to over 800. In the future, as restoration projects shift increasingly towards small-scale ESD practices, public outreach efforts will continue to increase as smaller scale practices are more integrated into neighborhoods, have more potential impact on nearby residents, and therefore require increased coordination with the public to produce a project that is accepted by the communities.

Lessons Learned and Next Steps

The additional 20% restoration requirement of the third generation MS4 permit resulted in remarkable growth of DEP's watershed restoration program. The lasting impact of this growth will continue to improve water quality and benefit the environment into the future as lessons learned allow DEP to more efficiently and effectively restore the County's watersheds.

During the third generation MS4 permit term, several of DEP's restoration projects received awards and several grants (Figure 7).

Completing more restoration at a faster rate required increased funding. DEP received the necessary financial support from an increased CIP budget made possible by the County's forward-thinking approach to financing through issuing WQPC bonds. Capacity building was also necessary; so, in addition to increasing internal staff, DEP retained consultants to support the restoration program and to facilitate project progress.

DEP also created improved efficiency within the restoration program by expanding its data management efforts. DEP recognizes the value of investing in on-going data management. Improved knowledge of project performance and programmatic progress leads to better decision making and better restoration outcomes. DEP continues to prioritize improved data management as a critical component of the restoration program and DEP's adaptive management strategy.

DEP learned that each restoration delivery method is valuable and poses unique challenges requiring creative solutions. Permitting and public outreach remain the primary drivers of the duration of the design and permitting phase of CIP projects. Smaller-scale implementation will continue to expand as the direct contact with County residents and property owners is extremely valuable in building support for DEP's work. Leveraging partnerships will also continue to be a focus as these efforts proved mutually beneficial in meeting partners' objectives, reducing DEP's costs, and speeding project delivery. Reflecting back, DEP found that project delivery timeframes, on the order of years, were challenged by the restoration requirement timeframe of the five-year permit cycle. This was particularly true for the third generation MS4 permit term where early-phase permit activity required planning and strategic program development prior to project design, permitting, and construction.

The importance of communication with stakeholders and public outreach was magnified during the implementation of restoration projects. DEP greatly values stakeholder input and recognizes that effective communication results in overall improved project outcomes.

Through adaptive management across all project types, DEP is committed to continued improvement of its watershed restoration program to generate efficiencies, develop stakeholder support, and speed project delivery.

Select Program Honors
Awards
<ul style="list-style-type: none">• <i>Stoney Creek Stormwater Management Pond at National Institute of Health</i> National Recreation Award April 2014 American Council of Engineering Companies (ACEC) Engineering Excellence Awards Competition Engineering Excellence Honor Award in Design 2013-2014 ACEC of Metropolitan Washington• <i>Arcola Avenue Green Street Project</i> Achievement Award Winner 2012 National Association of Counties
Grants
<ul style="list-style-type: none">• Department of Natural Resources Chesapeake and Atlantic Coastal Bays Trust Fund• National Fish and Wildlife Foundation Grant Smart integrated stormwater management system demonstration partnership with Washington Council of Governments

Figure 7 DEP Restoration Project Awards and Grants

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**Testimony on Behalf of County Executive Isiah Leggett on Expedited Bill 11-16,
Stormwater Management – Water Quality Protection Charge – Grants and Credits**

April 26, 2016

Good afternoon. My name is Lisa Feldt. I am the Director of the Department of Environmental Protection. Thank you for the opportunity to testify on behalf of County Executive Leggett regarding Expedited Bill 11-16 for Stormwater Management – Water Quality Protection Charge Grants and Credits.

The Department continues to make progress in meeting the watershed restoration requirements of the MS4 Permit issued by the state of Maryland, including the restoration of impervious surface areas to the maximum extent practicable. The Water Quality Protection Charge is the main source of funding for these efforts.

As you are aware, the Water Quality Protection Charge was the subject of a lawsuit last year in which a County Circuit Court ruling called into question the validity of the Water Quality Protection Charge as a tax under the Environment Article of the Maryland Code. The issue has been resolved by explicitly reaffirming the designation of the Water Quality Protection Charge as an excise tax authorized under the County's general taxing authority to levy excise taxes. Concurrent with the lawsuit, other issues were raised regarding the general Water Quality Protection Charge as well as the credit program. The proposed legislation and accompanying regulations achieves a balanced approach to address the issues that have been raised.

There are three principles that guided the reevaluation of the credit program. First, we want to be fair and equitable; Second, we want program criteria that are consistent and easy to administer, and; Third, the credit program should be tied to the management of stormwater runoff that meets current stormwater guidelines set by the State.

The proposed legislation and draft regulations base the credit on the water quality volume treated, consistent with current stormwater standards, rather than by the type of stormwater facility. The accompanying regulation also proposes to align the credit percentages with the county's impervious surface demographics. The county's impervious surface is 60% privately owned and 40% publically owned. The proposed changes provide for a maximum credit of 60 % for treatment of water volume from onsite properties to account for the fact that, there is still 40% of impervious surface in the county that needs to be treated. At the same time, we are proposing to increase the maximum credit to 100% to give recognition to those properties that, in addition to treating their own stormwater runoff, treat the runoff of adjacent properties.

The next modification is not a change but rather a clarification of the eligibility criteria for a property owner to receive a Water Quality Protection Charge credit. The intent is for credits to be provided only to property owners that maintain stormwater management systems for

which the County does not have cost liabilities for performing structural maintenance. The regulations propose clarifying language regarding this intent which is based on the need for the county to maintain sufficient funds to continue providing this maintenance.

An additional change being proposed is to authorize the establishment of a watershed restoration grant program for certain owners of improved aircraft landing areas to offset the cost of the Water Quality Protection Charge and remove outdated language under the grant program that was available to homeowners' associations. Currently, the only private airport in Montgomery County that is exempt from county property taxes under Section 8-302 of the Tax Property Article, Maryland Code, allows for the public use of its airstrip for aircraft landing free of service charges. This property is assessed a Water Quality Protection Charge. Given the property does provide a public service, the owners can apply for a grant through the watershed restoration grant program to offset the cost of paying the charge. In addition, the legislation proposes to clean up the grant program language by removing an outdated provision authorizing grants to offset the cost of paying the Charge billed to homeowners' associations for roads owned by those associations that are used openly and freely by the public. In 2015, the General Assembly amended Section 4-204 of the Environmental Article so that those roads for which homeowners' associations could receive a grant would no longer be subject to the Water Quality Protection Charge. Consequently, there is no longer a need for a grant program to offset payment of the Charge in those situations.

Finally, this bill will expand the timeframe for a property owner to appeal the denial of a request for a credit or adjustment of the amount of the Water Quality Protection Charge. Under the current law, a property owner has 10 days after a Director issues a decision to appeal that decision. This proposal extends that timeframe from 10 days to 30 days to give property owners adequate time to prepare a response.

The County Executive appreciates the opportunity to comment on the proposed Bill. I would be happy to address any questions the Council may have.

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TESTIMONY OF PAUL N. CHOD
In Opposition to Bill 11-16

Good afternoon and thank you for allowing me to speak with you today regarding Bill 11-16. As you know, I am a commercial property owner and developer.

I've spoken several times with you about the Water Quality Protection Charge and the need for greater review of the way the Charge is calculated and how the credits are applied. In November of 2015, I testified before the County Council regarding Bill 45-15, and in February of 2015, submitted a memorandum to summarize recommendations to review and amend this legislation. In October of 2015, I prepared a redline copy of the Charge provisions (Section 19-35 of the County Code and COMCOR 19.35.01.05) and provided it to the County. I am attaching copies of each here, to incorporate as part of my written testimony.

All of our properties in the County incorporate private stormwater management facilities that treat not only our properties but also surrounding properties:

- The two stormwater detention ponds at Shady Grove Development Park (SGDP) treat 150 acres; SGDP owns 41 of those acres (27% of the drainage area). For properties owned by others and treated by our ponds, the County collects \$39,392, Gaithersburg collects \$29,940, and Rockville collects \$32,102, for a total of \$101,434 annually.
- The 5 ponds and numerous biofilters at Seneca Meadows Corporate Center in Germantown treat a drainage area of about 336 acres (207 of those acres, about 60%, belong to our neighbors); the County collects a total Charge of \$133,278 from neighboring properties treated by our Seneca Meadows Corporate Center stormwater facilities each year.
- And, at The Shops at Seneca Meadows in Germantown, we've implemented the modern ESD to completely treat stormwater runoff at our new retail center at a significant cost of several hundred thousand dollars.

We continue to maintain all of our stormwater management systems as required by DPS and DEP with the understanding that our private systems were adequate for this purpose, fully compliant with the regulations when installed, and entitled to a full credit.

Bill 11-16 unfairly amends credit eligibility (Section 19-35(e), also attached) by only allowing a credit if the County does not perform structural maintenance in stormwater facilities. Bill 11-16 as written may remove all credits at SGDP. This is an unfair and unreasonable preclusion that the County Council must reject. Our properties were required to transfer the structural maintenance to the County under a Declaration of Covenants in 1991 after I-270 was widened; the SHA, County and SGDP all incurred additional costs for altering the stormwater ponds due to the highway widening. We still remain obligated to continually perform other maintenance in order to ensure that the facilities function properly and prevent the County from having to perform any other work. Under this amendment, the DEP may deny me, and many other property owners, a credit – even though we have invested substantially (and continue to do so) in order to collect and treat stormwater from the region. This is an unfair, broad and burdensome preclusion, especially considering the \$172,670 collected by the County in 2015

from properties treated by my stormwater management facilities at SGDP and SMCC and not owned by us.

In the 25 years since executing the Declaration of Covenants at SGDP, the County has performed just one structural maintenance at SGDP. A couple of years ago, the DEP replaced the end portion of a stormwater pipe that existed in a County easement. We had a proposal to do the work for \$18,000 before the County inspector reminded us that it was the County's responsibility to do it. The County collected more than twice that cost from our neighboring properties in 2015. That certainly allowed the Charge to cover the cost of whatever stormwater management services were provided to the ponds by the County. Going forward, Bill 11-16 will fail to treat us fairly like that.

Although the Bill appears to raise the credit to 100%, I believe that this amendment to Section 19-35(e) renders the credit provision meaningless. The DEP will continue to collect the Charge without administering a fair credit for private stormwater management; this is made clear in the Fiscal Impact Statement, where the DEP states that raising the credit to 100% will have no fiscal impact. Unfortunately, after our multiple attempts to meet with the DEP and others, Bill 11-16 is not designed to address the unfairness of the Charge and credit system.

I recommend that the County Council REJECT the proposed amendment to Bill 11-16, and specifically retain the existing language contained in Section 19-36(e) and require the DEP to set forth, in its regulations subject to review and public comment, the bases for denying and granting a credit. Further, should any credit be rejected because the County did some structural maintenance, allow the property owner receiving the credit two options: (1) to offset cost of structural maintenance against the Charge revenues received from adjacent properties served by the stormwater management facilities constructed by the owner; or (2) to pay the cost of maintenance over what was received from these other properties.

Thank you, I appreciate your time, and I hope to continue to work with you.

| Print |

Montgomery County Code

Sec. 19-35. Water Quality Protection Charge.

(a) As authorized by State law, the Director of Finance must annually impose and collect a Water Quality Protection Charge, as provided in this Section. The Director must collect the Charge in the same manner as County real property taxes, apply the same interest, penalties, and other remedies (including tax sale) if the Charge is not paid, and generally treat the Charge for collection and administration purposes as if it were a County real property tax. The Director may treat any unpaid Charge as a lien on the property to which the charge applies.

(b) The Charge must be imposed on each property, as specified in regulations adopted by the Executive under Method (1) to administer this Section. The regulations may define different classes of real property, depending on the amount of impervious surface on the property, stormwater runoff from the property, and other relevant characteristics, for purposes of applying the Charge.

(c) The Council must set the rate or rates for the Charge by a resolution adopted each year after *the amount of stormwater treatment provided by the property owner and the County to the property,* holding a public hearing with at least 15 days' notice. The resolution must be adopted no later than *and* the date the Council approves the annual operating budget and presented to the Executive within 3 days after the Council adopts it. If the Executive disapproves a resolution adopted under this Section within 10 days after the Council adopts it and the Council readopts it by a vote of six Councilmembers, or if the Executive does not act within 10 days after the Council adopts it, the resolution takes effect. Unless the resolution specifies otherwise, the rates must take effect on the July 1 after the resolution is adopted.

(d) In the resolution adopted under subsection (c), the Council may set a different rate for each type of property defined by regulation. If different rates are set, the rates must generally reflect the relative amount of impervious surface on each type of property, *and the relative amount of stormwater management provided by the property owner.*

(e) (1) A property owner may apply for, and the Director of Environmental Protection must grant, a credit equal to a percentage, set by regulation, of the Charge if:

(A) the property contains a stormwater management system that is not maintained by the County;

(B) the owner participates in a County-approved water quality management practice or initiative;

(C) the property treats off-site drainage from other properties located within the same drainage area; or

(D) the property does not contain a stormwater management system, but is located in the same drainage area as another that contains a stormwater management system and both properties have the same owner.

(2) To receive the credit, the property owner must apply to the Director of Environmental Protection in a form prescribed by the Director not later than September 30 of the year that payment of the Charge is due. Any credit granted under this subsection is valid for 3 years.

(3) The owner of an owner-occupied residential property, or any non-profit organization that can demonstrate substantial financial hardship may apply for an exemption from all or part of the

Charge for that property, based on criteria set by regulation. The owner or organization may apply for the exemption to the Director of Finance not later than September 30 of the year that payment of the Charge is due.

(f) The Director must deposit funds raised by the Charge, and funds for this purpose from any other source, into a stormwater management fund. Funds in the stormwater management fund may be applied and pledged to pay debt service on debt obligations to finance the construction and related expenses of stormwater management facilities as approved in the Capital Improvements Program. Funds in the stormwater management fund must only be used for:

(1) construction, operation, financing, and maintenance of stormwater management facilities, and related expenses, including debt service payments related to construction and related expenses of stormwater management facilities;

(2) enforcement and administration of this Article; and

(3) any other activity authorized by this Article or state law.

(g) This Charge does not apply to any property located in a municipality in the County which notifies the County that it has imposed or intends to impose a similar charge to fund its stormwater management program in that municipality.

(h) A person that believes that the Director of Environmental Protection has mistakenly assigned a Charge to the person's property or computed the Charge incorrectly may apply to the Director of Environmental Protection in writing for a review of the Charge, and request an adjustment to correct any error, not later than September 30 of the year that payment of the Charge is due. An aggrieved property owner may appeal the Director's decision to the County Board of Appeals within 10 days after the Director issues the decision.

(i) A person that believes that the Director of Environmental Protection has incorrectly denied the person's application for a credit or exemption under subsection (e) may appeal the Director's decision to the County Board of Appeals within 10 days after the Director issues the decision.

(j) The Board of Appeals may hear and decide all appeals taken from a decision of the Director of Environmental Protection under this Section as provided in Article I of Chapter 2A. (2001 L.M.C., ch. 27, § 1; 2002 L.M.C., ch. 3, § 1; 2010 L.M.C., ch. 18, § 1; 2013 L.M.C., ch. 11, § 1; 2015 L.M.C., ch. 14, § 1.)

Editor's note—2015 L.M.C., ch. 14, § 2, states: Retroactivity. This Act applies retroactively to applications for credit or financial hardship exemption submitted on or before September 30, 2014 for Levy Year 2014.

2013 L.M.C., ch. 11, § 2, states:

(a) The Council declares that an emergency exists and that this legislation is necessary for the immediate protection of the public health and safety. This Act takes effect on July 1, 2013. Notwithstanding County Code Section 19-35(b), as amended by Section 1 of this Act, the Director of Finance must phase in the Water Quality Protection Charge as provided in this Section.

(b) The Director must phase in over 3 years any increase in the Charge that results from the application of Section 19-35(b), as amended by Section 1 of this Act, or any regulation adopted under that Section, by including:

(1) only one-third of the additional impervious surface that has been added to the calculation of

the Charge in the fiscal year that begins on July 1, 2013;

- (2) only two-thirds of the additional impervious surface that has been added to the calculation of the Charge in the fiscal year that begins on July 1, 2014; and
 - (3) the full amount of the additional impervious surface that has been added to the calculation of the Charge in the fiscal year that begins on July 1, 2015.
- (c) The phase-in established in this Section does not apply to any portion of the Charge that results from the inclusion in the calculation of the Charge of any impervious surface area that is created after June 30, 2013.
- (d) To receive a credit or exemption under Section 19-35(e) for the fiscal year that begins on July 1, 2013, a property owner must apply to the Director of Environmental Protection or the Director of Finance, as applicable, not later than September 30, 2013.

Former § 19-35, Grandfather clause, derived from 1980 L.M.C., ch. 60, § 3, was repealed by 2001 L.M.C., ch. 27, § 1.

COMCOR - Code of Montgomery County Regulations

SEC. 19-35 WATER QUALITY PROTECTION CHARGE — REGULATIONS

COMCOR 19.35.01 Water Quality Protection Charge

19.35.01.01 General Provisions

A. **Authority.** In accordance with the authority conferred under Chapter 19, Section 19-35, of the Montgomery County Code, 2004, as amended (hereinafter referred to as the "Code"), the County Executive hereby promulgates this regulation for the purpose of implementing the County's Water Quality Protection Charge as set forth in Chapter 19 of the Code.

B. **Applicability.** This regulation applies to all owners of residential property and nonresidential property in Montgomery County, Maryland.

19.35.01.02 Definitions

The definitions of the terms used in this regulation are provided in Chapter 19, Section 19-21, of the Code. For purposes of this regulation, the following additional words and phrases will have the meaning respectively ascribed to them in this regulation unless the context indicates otherwise:

Agricultural Property means a property that is used primarily for agriculture, viticulture, aquaculture, silviculture, horticulture, or livestock and equine activities; temporary or seasonal outdoor activities that do not permanently alter the property's physical appearance and that do not diminish the property's rural character; or activities that are intrinsically related to the ongoing agricultural enterprise on the property.

Base Rate means the annually designated dollar amount set by the County Council to be assessed for each equivalent residential unit of property that is subject to the Water Quality Protection Charge.

Condominium means a property that is subject to the condominium regime established under the Maryland Condominium Act.

Director means the Director of the Montgomery County Department of Environmental Protection or the Director's designee.

Eligible Nonprofit Property means real property owned by a 501(c)(3) nonprofit organization that is listed with the Maryland Department of Assessments and Taxation as exempt from *ad valorem* property taxes under State law.

Equivalent Residential Unit or ERU means the statistical median of the total horizontal impervious area of developed single family detached residences in the County that serves as the base unit of assessment for the Water Quality Protection Charge. The designated ERU for Montgomery County equals 2,406 square feet of impervious surface.

Multifamily Residential Property means a mobile home park or a residential building where one or more dwelling units share a common entrance from the outside with other dwelling units that are arranged above, below or next to one another in the same building, and any housing unit that is subject to the condominium regime established under the Maryland Condominium Act.

Parking Lot means any area that is intended for parking of motor vehicles.

Water Quality Protection Charge or Charge means an assessment levied by the Director of Finance to cover the cost of constructing, operating, and maintaining facilities within the County's stormwater management system and fund related expenses allowed under applicable state law based on the impact of stormwater runoff from the impervious areas of developed land in the County.

19.35.01.03 Classification of Properties

For purposes of determining the appropriate assessment rate, all properties that are subject to the Water Quality Protection Charge are assigned to one of the following classifications:

A. **Single Family Residential Tier 1 (SFR1):** For single family residential properties where the estimated total impervious area is greater than 0 square feet and less than or equal to 1,000 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.

B. **Single Family Residential Tier 2 (SFR2):** For single family residential properties where the estimated total impervious area is greater than 1,000 square feet and less than or equal to 1,410 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.

C. **Single Family Residential Tier 3 (SFR3):** For single family residential properties where the estimated total impervious area is greater than 1,410 square feet and less than or equal to 3,412 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.

D. **Single Family Residential Tier 4 (SFR4):** For single family residential properties where the estimated total impervious area is greater than 3,412 square feet and less than or equal to 3,810 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.

E. **Single Family Residential Tier 5 (SFR5):** For single family residential properties where the estimated total impervious area is greater than 3,810 square feet and less than or equal to 5,815 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.

F. **Single Family Residential Tier 6 (SFR6):** For single family residential properties where the

estimated total impervious area is greater than 5,815 square feet and less than or equal to 6,215 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.

G. Single Family Residential Tier 7 (SFR7): For single family residential properties where the estimated total impervious area is greater than 6,215 square feet and includes the house, driveways, sidewalks, sheds, and any other fixtures on the property that are impenetrable by water.

H. Multifamily residential property: For multifamily residential properties the impervious area includes the residential structures that contain the dwelling units, the sidewalks, parking lots and any other permanent installations on the developed parcel, whether under single or common ownership, that is impenetrable by water.

I. Nonresidential property: Nonresidential properties may include commercial properties such as office buildings, hotels, retail establishments or industrial properties such as factories and warehouses. Nonresidential properties may also include properties owned by homeowner associations, nonprofit organizations, and any government-owned properties subject to the Charge. The impervious area for these properties includes all buildings, parking lots, sidewalks, and any other impermeable installations permanently attached to the land parcel containing those installations.

J. Nonprofit Tier 1 (NP1): For eligible nonprofit property where the estimated total impervious area is greater than 0 square feet and less than or equal to 6,910 square feet and includes all buildings, driveways, parking lots, sidewalks, and any other impermeable installations permanently attached to the land parcel containing those installations.

K. Nonprofit Tier 2 (NP2): For eligible nonprofit property where the estimated total impervious area is greater than 6,910 square feet and less than or equal to 54,455 square feet and includes all buildings, driveways, parking lots, sidewalks, and any other impermeable installations permanently attached to the land parcel containing those installations.

L. Nonprofit Tier 3 (NP3): For eligible nonprofit property where the estimated total impervious area is greater than 54,455 square feet and includes all buildings, driveways, parking lots, sidewalks, and any other impermeable installations permanently attached to the land parcel containing those installations.

M. Agricultural property: The impervious area for agricultural properties only includes the houses on those properties and is assessed in accordance with the Single Family Residential Tier classification.

19.35.01.04 Rates

A. Single family residential properties: The Charge for each single family residential property is based on a percent of the base rate for one ERU in accordance with its assigned tier classification as follows:

(1) Single Family Residential Tier 1 (SFR1): The Charge for each Single Family Residential Tier 1 property is 33 percent of the applicable base rate for one ERU.

(2) Single Family Residential Tier 2 (SFR2): The Charge for each Single Family Residential Tier 2 property is 50 percent of the applicable base rate for one ERU.

(3) Single Family Residential Tier 3 (SFR3): The Charge for each Single Family Residential Tier 3 property is 100 percent of the applicable base rate for one ERU.

19.35.01.05 Credits

80 100

In addition to treatment of water onsite, that it provides treatment of offsite drainage.

A. The Director must award a maximum credit of 80 percent, based on the volume of water treated by a combination of environmental site design and other stormwater management systems maintained by the property owner exclusively, or a maximum credit of 100 percent, based on the volume of water completely treated by environmental site design practices alone, as specified in the application provided to a nonresidential or multifamily residential property owner if the property contains a County approved stormwater management system and the system is maintained by the property owner exclusively, in accordance with the maintenance requirements of the Department of Environmental Protection. A property must be credited for treatment of off-site drainage from other properties located within the same drainage area as that property. A property that does not contain a stormwater management system must be credited if located within the same drainage area as another property that contains a stormwater management system if both properties have the same owner. However, a property owner must not receive a credit based on a calculation that exceeds the total impervious area on the property for which the credit is issued.

a percentage reduction, as specified in this Subsection

so that the total credit for onsite and offsite drainage cannot exceed 100%.

B. The Director must award a maximum credit of 80 percent based on the volume of water treated as specified in the application provided by the Department to the owner of a single family residential property or agricultural property if the property contains a County approved stormwater management system that is maintained, by the property owner exclusively, in accordance with the maintenance requirements of the Department of Environmental Protection.

C. Application Schedule.

(1) To receive the credit, the property owner must apply to the Director of Environmental Protection in a form prescribed by the Director not later than September 30 of the year that payment of the Charge is due.

A stormwater management facility constructed and maintained pursuant to the County DEP regulations and instructions at the time of construction is entitled to receive

(2) Once approved, the credit is valid for three years. To renew the credit, the property owner must reapply to the Director in a form prescribed by the Director not later than September 30 of the year that payment of the Charge is due.

the maximum credit under this subsection.

D. Appeals.

(1) If the Director denies the credit, the property owner may seek reconsideration of the Director's decision by submitting a written request for reconsideration with supporting reasons to the Director within 10 days after the date of the Director's written decision.

(2) If the Director does not approve the request for reconsideration, the property owner may appeal the Director's final decision within 10 days after the Director issues that decision as provided in Chapter 2A, Article I, of the County Code.

19.35.01.06 Billing and Payment

A. The Director must prepare and forward to the Director of Finance the necessary data for collecting the Water Quality Protection Charge from owners of property subject to the Charge. The data must identify every parcel to be charged and include the amount of the Charge. If requested by the owner using the review and adjustment process outlined in Section 19.35.01.07, the Director may consolidate under a single parcel any contiguous parcels owned by the same legal owner. If the Director combines two or more parcels consisting individually of at least one residential parcel and at least one nonresidential parcel, the Director must, for purposes of calculating the Water Quality Protection Charge, treat the consolidated parcel as nonresidential property.

B. The Director of Finance must include the Charge as a separate line item on the real estate

tax bill for each property subject to the Charge.

C. The Director of Finance must deposit all payments collected under this Section into a County stormwater management fund.

D. Interest on any overdue payment accrues according to the same schedule and at the same rate charged for delinquent real property taxes until the owner has remitted the outstanding payment and interest. An unpaid Charge is subject to all penalties and remedies that apply to unpaid real property taxes. Any delinquent Charge is a lien against the property. The lien has the same priority as a lien imposed for nonpayment of real property taxes. The Charge must be collected in the same manner as real property taxes.

19.35.01.07 Requests for Adjustment; Appeals

A. A property owner may request a review and adjustment of the Charge by petitioning the Director in writing, not later than September 30 of the year that payment of the Charge is due if the property owner believes that the Charge has been assigned or calculated incorrectly.

B. When submitting a petition for review of the Charge, the property owner must include a detailed statement of the basis for the petition and documents supporting the property owner's assertion that the property should be assigned to a different classification, the impervious area measurements used to calculate the ERUs for the property are incorrect, or the property is not subject to the Charge under applicable law.

C. Within 60 days after receiving the petition, the Director must review the Charge assigned to the property and make a written determination of whether the property owner's request for an adjustment of the Charge should be granted or denied. The Director may request additional information from the property owner that the Director reasonably believes will help the Director decide whether the property owner is entitled to an adjustment.

D. If the Director concludes that the Charge was levied by mistake or resulted from an inaccurate computation, the Director must submit the corrected data to the Department of Finance with a request for an adjustment to the property owner's bill. After receiving the Director's request, the Director of Finance must make an appropriate adjustment based on the new data submitted by the Director and refund any overpayment to the property owner.

E. If the Director concludes that some or all of the requested adjustment should be denied, the property owner may seek reconsideration of the Director's conclusion by submitting a written request for reconsideration with supporting reasons to the Director within 10 days after the date of the Director's written decision.

F. If the Director does not approve the request for reconsideration, the property owner may appeal the Director's final decision within 10 days after the Director issues that decision as provided in Chapter 2A, Article I, of the County Code.

G. The County Board of Appeals is the designated authority charged with hearing and deciding all appeals taken from the Director's final decision to deny any relief requested under this regulation.

19.35.01.08 Requests for Exemption

A. Before paying the Charge, the owner of residential property that is owner-occupied, or a nonprofit organization that owns property subject to the Charge, may apply for a financial hardship exemption from the Charge by submitting a written request to the Director of Finance in a form prescribed by the Director not later than September 30 of the year when payment of the Charge is

due.

B. (1) To qualify for the exemption, the request submitted by an owner-occupant of residential property must be accompanied by a copy of the owner-occupant's income tax returns indicating that the property owner's gross household income did not exceed 170 percent of the poverty guidelines published by the United States Department of Health and Human Services for the year before payment of the Charge is due or verification that the property owner meets eligibility criteria for receiving benefits under the Maryland Energy Assistance Program for the year that payment of the Charge is due.

(2) The request submitted by a nonprofit organization must be accompanied by the organization's most recent federal tax return or other verification of total revenues derived from the property for which the exemption is sought, as required by the Director of Finance. To qualify for a partial exemption: (i) the amount of the Charge must exceed 0.2% of the organization's total revenues from the property for which the exemption is sought for the year before payment of the Charge is due; and (ii) the property for which the exemption is sought must be exempt from real property *ad valorem* taxation under State law. The amount of the partial exemption is the amount of the Charge that exceeds 0.2 percent of the nonprofit's total revenues derived from the property.

C. The Director of Finance must issue a written decision to grant or deny the exemption within 30 days after receiving the request.

D. Any exemption granted under this Section is only valid for the year that payment of the Charge is due.

E. If the Director of Finance denies the exemption, the property owner may seek reconsideration of the Director's decision by submitting a written request for reconsideration with supporting reasons to the Director within 10 days after the date of the Director's written decision.

F. If the Director of Finance does not approve the request for reconsideration, the property owner may appeal the Director's final decision within 10 days after the Director issues that decision as provided in Chapter 2A, Article I, of the County Code.

19.35.01.09 Requests for Grants

A homeowners' association may apply for a grant to offset all or part of the cost of the Charge for any private maintenance road, as defined in Section 24B.00.02.02 of the Code of Montgomery County Regulations, which is eligible for State highway user revenues, not including any parking lot, by submitting a written application to the Director in a form prescribed by the Director not later than September 30 of the year that payment of the Charge is due.

19.35.01.10 Severability

If a court holds that a portion of this regulation is invalid, the other portions remain in effect.

(Administrative History: Reg. No. 16-14AM (Method 1); Depts.: Environmental Protection and Finance; Supersedes Reg. No. 8-14AM, which superseded Reg. No. 10-13, which superseded Reg. No. 17-12AM, which superseded Reg. No. 6-02AM)

due.

B. (1) To qualify for the exemption, the request submitted by an owner-occupant of residential property must be accompanied by a copy of the owner-occupant's income tax returns indicating that the property owner's gross household income did not exceed 170 percent of the poverty guidelines published by the United States Department of Health and Human Services for the year before payment of the Charge is due or verification that the property owner meets eligibility criteria for receiving benefits under the Maryland Energy Assistance Program for the year that payment of the Charge is due.

(2) The request submitted by a nonprofit organization must be accompanied by the organization's most recent federal tax return or other verification of total revenues derived from the property for which the exemption is sought, as required by the Director of Finance. To qualify for a partial exemption: (i) the amount of the Charge must exceed 0.2% of the organization's total revenues from the property for which the exemption is sought for the year before payment of the Charge is due; and (ii) the property for which the exemption is sought must be exempt from real property *ad valorem* taxation under State law. The amount of the partial exemption is the amount of the Charge that exceeds 0.2 percent of the nonprofit's total revenues derived from the property.

C. The Director of Finance must issue a written decision to grant or deny the exemption within 30 days after receiving the request.

D. Any exemption granted under this Section is only valid for the year that payment of the Charge is due.

E. If the Director of Finance denies the exemption, the property owner may seek reconsideration of the Director's decision by submitting a written request for reconsideration with supporting reasons to the Director within 10 days after the date of the Director's written decision.

F. If the Director of Finance does not approve the request for reconsideration, the property owner may appeal the Director's final decision within 10 days after the Director issues that decision as provided in Chapter 2A, Article I, of the County Code.

19.35.01.09 Requests for Grants

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If a court holds that a portion of this regulation is invalid, the other portions remain in effect.

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TESTIMONY OF PAUL N. CHOD, MINKOFF DEVELOPMENT CORPORATION
In Opposition to Bill 45-15

Good afternoon and thank you for allowing me to speak with you today regarding Bill 45-15.

I am proud of the long term, continued relationship Minkoff Development Corporation has held with Montgomery County.

We have remained committed to stormwater management and have complied with every requirement posed by Montgomery County when we've developed all of our properties. At Shady Grove Development Park south of Gaithersburg, we constructed and maintained two regional ponds with a drainage area of about 150 acres; 110 of those acres belong to our neighbors. It has cost us over 1 million dollars to collect and treat the stormwater from those properties. At Seneca Meadows Corporate Center in Germantown, we've constructed and maintained 5 ponds and many biofilters with a drainage area of about 340 acres; 185 of those acres belong to our neighbors. We also implemented the modern ESD to completely treat stormwater runoff at our new retail center. The cost of all the Seneca Meadows work has been several million dollars. We continue to maintain all of our stormwater management systems with the understanding that our private systems were adequate for this purpose and fully compliant with the regulations when installed.

In 2013, when we were assessed the Water Quality Protection Charge for the first time, I challenged the assessments because I believed that it was unfair to charge me a fee for the very stormwater management that I am already doing and paying for regarding our properties and many of our neighbors' properties. I was unable to receive a reasonable credit from DEP for all the stormwater management work we do.

The Charge was supposed to take into account what County stormwater management services are provided to the property owner, and the cost and treatment of private stormwater management provided by the property owner. That is what the state law requires. And Judge Rupp of the Circuit Court for Montgomery County agreed.

Judge Rupp's ruling should have encouraged the Department of Environment Protection to review and amend the Charge and how it and the credit is calculated. Property owners who privately treat their own stormwater and the stormwater of neighboring properties should receive a credit for all of those efforts. Bill 45-15 is not "curative legislation", but instead is an effort to ignore, and avoid resolving, the larger inequity in the WQPC. If the Charge is truly intended to help remediate the County's impervious area, and to treat the stormwater runoff pollution, then it is common sense to promote and recognize the contribution of private stormwater management to this goal.

I understand that the County needs Bill 45-15 immediately in order to issue revenue bonds. However, I cannot support Bill 45-15 unless the County modifies the legislation going forward to include what the State law reasonably and fairly requires for determining charges and credits.

Thank you, I appreciate your time, and I hope to continue to work with you.

MEMORANDUM

TO: Members of the Montgomery County Council & Staff

FROM: James L. Thompson & Diane E. Feuerherd of Miller, Miller & Canby
On behalf of Paul N. Chod and Minkoff Development Corporation

RE: Recommendations to Review and Amend Montgomery County's
Water Quality Protection Charge (WQPC)

DATE: January 23, 2015

I. Background

According to the Department of Environmental Protection (DEP), the Water Quality Protection Charge (WQPC) is an annual fee that is "calculated based on the potential for a property to contribute stormwater pollution," in order to "raise[] funds to support the County's clean water initiatives to improve stream and water quality and prevent stormwater pollution."¹ Yet, the Charge, as assessed against commercial, non-residential property owners who have installed and maintained private stormwater management facilities on their properties, fails to take into consideration how these private initiatives prevent, without County assistance, pollution from draining into local streams and rivers.

Consider Minkoff Development Corporation ("MDC"), whose stormwater management facilities and practices have been implemented by its president, Paul N. Chod, an engineer by education. Since 1972, MDC has been a staple in the Montgomery County business community, having developed and built over 20 properties in the County. These properties include Shady Grove Development Park, which fronts I-270 between Shady Grove Road and I-370, Seneca Meadows Corporate Center, which fronts I-270 between Germantown Road (Route 118) and Father Hurley Boulevard, and The Shops at Seneca Meadows, the retail development in Germantown anchored by Wegmans Food Market. Each of these properties complied with the County's site design and stormwater management requirements when the properties were developed at considerable expense, and all of the stormwater generated from these properties is privately treated on-site. Shady Grove Development Park has two regional detention ponds to collect and treat stormwater runoff from MDC properties and its neighbors. The full drainage area of these ponds is actually three-times the size of Shady Grove Development Park properties and includes neighboring businesses and a portion of I-270. The value of the land upon which these ponds were constructed and are maintained is no less than \$950,000. Seneca Meadows Corporate Center has four detention ponds, several baysavers and flow splitter manholes, and one sand filter pond to collect and treat stormwater runoff from MDC properties and some of its neighbors. The value of the land upon which these ponds were constructed and are maintained is no less than several million dollars. The Shops at Seneca Meadows fully comply with the environmental site design (ESD) to the maximum extent practicable standard (MEP), and MDC

¹ Department of Environmental Protection, Montgomery County, MD, *Water Quality Protection Charge* (2015), available at <http://www.montgomerycountymd.gov/dep/water/wqpc.html>.

invested more than \$750,000 of stormwater management facilities, independent of land costs. These are costs that MDC has incurred with the understanding that the private, on-site stormwater management systems were adequate for this purpose, fully compliant with the regulations when installed, and that there would be no further charges related to public stormwater facilities.

II. Review the Water Quality Protection Charge

Because the assessment of the WQPC does not equitably take into account MDC's private stormwater management facilities and expenditures, MDC asks that the Montgomery County Council review the WQPC provision, § 19-35. To do so, MDC has appealed the assessment of the WQPC against its properties and has facially challenged the WQPC in court, but it also believes that the inequity of the Charge should be resolved legislatively, if possible. Below are four areas that necessitate review: (A) the WQPC should follow the state law upon which it was recently amended; (B) the Charge should be based on the County services provided to that property; (C) the credit system should reduce the Charge in relation to the benefits of private stormwater management and the costs thereof associated with each property; and (D) the administration of the WQPC Fund, including the credit, should be user friendly, transparent and accurate.

A. A State law requires that the Water Quality Protection Charge (WQPC) be based on the property's share of stormwater services.

Pursuant to § 4-202.1 of the Environment Article of the Maryland Code, Montgomery County must assess a stormwater remediation fee against nearly-all nongovernmental properties "based on the share of stormwater management services related to the property and provided by the county," § 4-202.1(e)(3)(i), and reduce that fee to "account for the costs of, and the level of treatment provided by, stormwater management facilities that are funded and maintained by a property owner," § 4-202.1(f)(2)(i)(3). In 2013, the Montgomery County Council, specifically relying upon and quoting the language of § 4-202.1(e)(3)(i) and citing the General Assembly's credit requirement, amended the WQPC provision to apply to all nonresidential, commercial property owners, including MDC.²

Yet, according to the former DEP Director, Robert Hoyt, a 20% portion of the Charge does not fund services related to the property but "costs associated with projects on parkland, schools and county facilities, as well as storm drain and street sweeping."³ These are general services, for the equal benefit of all in the County, but paid for to a large extent by MDC and other larger commercial properties on a disproportionate basis. It is not only unfair but also fails to meet the requirements of the state law.

It should be noted that before the Montgomery County Board of Appeals, the DEP argued that the WQPC was not subject to § 4-202.1, which directly contradicts the memorandum

² Bill 34-12 Action Packet (March 19, 2013), at 2, http://montgomerycountymd.granicus.com/DocumentViewer.php?file=montgomerycountymd_68c4b7caaf914b1eb11ecfc01d2fa045.pdf.

³ Letter from Robert G. Hoyt to James L. Thompson and Diane Feuerherd (July 28, 2014).

of the County Executive and the statement of DEP Director Hoyt, both contained in the legislative history of the WQPC provision, § 19-35.⁴

B. Commercial property owners, in addition to the costs of constructing and maintaining their own stormwater management facilities, pay more for services that benefit other properties or generally all in Montgomery County.

As you know, the WQPC is assessed against nearly all non-government properties in the County based on the amount of impervious surface area as well as their classification (as a residential, nonresidential, non-profit or agricultural property).⁵ For nonresidential properties, the Charge equates to \$88.40 per Equivalent Residential Unit (“ERU” or 2,406 square feet of impervious surface).⁶ MDC pays this Charge, in addition to its own costs to build and maintain their private stormwater management facilities. For Shady Grove Development Park, the original WQPC based on impervious area was \$44,796.45; after a 50% credit reduction for on-site stormwater management, the new full amount is \$22,398.23. The annual costs for MDC to maintain the ponds are about \$3,500; the WQPC phase-in amounts will be \$7,466.08 for 2013, \$14,932.15 for 2014, and \$22,398.23 for 2015.

The DEP utilizes Charge funds for initiatives unrelated to the MDC properties, and for the benefit of other property owners or the County generally. First, as referenced in Section (A), 20% of the Charge funds general services costs that MDC, due to the size of its properties (not the stormwater pollution it contributes), pays significantly for services benefitting all in the County, without regard to impervious surface area it has treated. When these costs on MDC are considered together with MDC’s own maintenance costs for their ponds and their construction and capital costs, the inequity is clear – if everyone is benefiting, everyone should similarly pay for these services, perhaps in the form of a flat fee.

Second, the Charge funds the RainScapes Rewards Rebate Program, which provides a rebate to fund the installation of a stormwater management program, such as a rain garden.⁷ The rain garden, in turn, qualifies the property owner for an 80% credit. MDC is not eligible for RainScapes, but the Charge it pays funds the stormwater management programs of other property owners to enable them to avoid payment of the very same Charge. This is unfair – MDC is funding the stormwater management on its private property, as well as the private property of others directly and indirectly. Also, after MDC pays for its own storm water management and helps to pay for the rebate program for others, these beneficiaries get an 80% credit which, ironically, is being denied to MDC.

⁴ Testimony of Bob Hoyt, Director of the Department of Environmental Protection, January 15, 2013 and Memorandum from Isiah Leggett, County Executive, to Roger Berliner, County Council President (October 25, 2012), *in* Bill 34-12 Action Packet (April 16, 2013), *in* Bill 34-12 Action Packet (April 16, 2013).

⁵ Montgomery County Code, § 19-35 (b); COMCOR, §19.35.01.03.

⁶ Montgomery County Council, Resolution No. 17-1090 (May 14, 2014); *see also* § 19-35(d) of the Montgomery County Code. The impervious surface area, 2,406 square feet, is also known as the equivalent residential unit (“ERU”).

⁷ “The RainScapes Rewards Rebate Program offers rebates to property owners who install RainScapes techniques such as rain gardens, rain barrels, conservation landscaping and other approved projects that help control stormwater. . . . The RainScapes Program is funded by the County’s Water Quality Protection Charge.” *RainScapes Rewards Rebates*, <http://www.montgomerycountymd.gov/DEP/water/rainscapes-rebates.html>.

C. The WQPC credit should reduce the Charge in recognition of the impact and cost of the property owner's stormwater management practices.

For commercial properties, regardless of whether they take any private stormwater management initiatives or not, the WQPC is the same. The WQPC may be reduced by a maximum of 80%, "based on the volume of water completely treated by environmental site design practices alone," or by a maximum of 50%, "based on the volume of water completely treated by a combination of environmental site design and other stormwater management systems."⁸ In reality, this credit structure is limited and poses significant and cost-prohibitive prerequisites:

(1) The credit, limited to 80% or 50%, does not account for the value of private stormwater management – i.e., the cost of the facilities to the property owner or the benefit of the facilities to the County. In 2013, a 50% credit was ultimately awarded to MDC for the Shady Grove Development Park's regional ponds, reducing the Charge from \$14,902.18 to \$7,466.09. This credit, especially when considering that the Charge will only increase in the future (with the three-year phase in), pales in comparison to the costs that MDC has and will incur for these ponds, which is no less than \$950,000 (the current cost of land).

(2) The Department of Environmental Protection (DEP) refuses to award any credit for the treatment of stormwater pollution from neighboring properties.⁹ Regional ponds can and do treat stormwater runoff from properties owned by others, and therefore benefit the greater community and the County. If the credit is designed to acknowledge stormwater treatment (and thereby incentivize property owners to treat and avoid stormwater pollution), then the size and amount of the credit should coincide with the amount of stormwater treated, including stormwater draining from neighboring lots. MDC's Shady Grove Development Park ponds treat stormwater from a drainage area that is three-times the size of the Park, but the DEP awards a credit to MDC of 50%, based solely on MDC properties. A fair distribution of the credit, which acknowledges the work performed by MDC and the benefit retained by the County and MDC's neighbors, would be to award a credit, based on the all property served, up to, but not to exceed, 100%.

(3) The complete treatment of stormwater should entitle the property owner to the highest-available credit (80%), regardless of whether the facilities are based on Environmental Site Design (ESD) or an older, required strategy. Under the current credit system, only where stormwater is completely treated by *environmental site design (ESD) alone* can the property owner achieve an 80% credit; otherwise, complete treatment of stormwater, by some combination of ESD and older stormwater management directives, will be limited to no more than 50%.

⁸ COMCOR § 19.35.01.05.

⁹ Of note is that the current language of the regulation, COMCOR § 19.35.01.05(A), provides that a credit be awarded for treatment of impervious surfaces of neighboring properties: "A property must be credited for treatment of off-site drainage from other properties located within the same drainage area as that property. . . . A property must be credited for treatment of off-site drainage from other properties located within the same drainage area as that property." The DEP refuses to credit for off-site drainage, unless the properties share the same owner. This is one subject of MDC's present appeal, *Paul N. Chod v. Board of Appeals for Montgomery County*, Circuit Court for Montgomery County, Case No. 398704V.

Because the 80% credit is limited to the new ESD practices *alone*, a property owner having an existing stormwater management facility, which completely treats stormwater as required when the property was developed, would have to *completely abandon* the existing stormwater facility and renovate the parking lots at the property in order to install ESD. This is not only cost-prohibitive, but impossible in most cases. At Shady Grove Development Park, the existing detention ponds cannot, and should not, be removed. Therefore, even if MDC were to install ESD practices onsite (and incur costs of more than \$750,000, as it had done at The Shops at Seneca Meadows), MDC would still be limited to the 50% credit, because the continued presence of these ponds would render the property “completely treated by a combination of environmental site design and other stormwater management systems.”¹⁰

It is impossible, therefore, for an existing property owner to achieve the 80% credit, even though he or she fully treats the stormwater and has remained committed to reducing pollution runoff. If stormwater is completely treated, shouldn't the property owner be recognized with the highest available credit for that work? The answer is, and should be, yes. All property owners who fully treat the stormwater on their property, based on the stormwater management requirements imposed by the County at the time of construction, should receive a full 100% credit.

D. The Administration of the WQPC Fund, including the Credit, Should be User Friendly, Transparent and Accurate.

The WQPC, like any other fee or tax, should be imposed according to the governing State and County laws and in a transparent manner, so that Montgomery County citizens know what and why they have paid the Charge. The DEP has not done so, which frustrates the purpose of the Charge and adds another reason to review and amend the WQPC.

There are flaws in the way the program has been implemented. Last year alone, a number of unimproved properties (with zero impervious area) were incorrectly assessed a WQPC; it was only when alerted to the error that DEP removed the charge. In other cases the aerial photography used by DEP caused distorted assessments where driveways of adjoining properties were assessed to the wrong lots and in some cases public streets were assessed to abutting lots. Also the WQPC appeals process is not the appropriate mechanism to test the accuracy of the WQPC and the appeal deadlines are confusing and unrelated to any normal tax assessment process deadlines, although they appear on the real property tax bill. That's not good enough. Rather, we should be able to trust that the Charge is correctly assessed and collected by the DEP. Has the DEP reviewed its assessment of other properties, to be sure that these errors do not happen again? And, if the DEP has difficulty measuring the impervious surface area of properties in Montgomery County, then the solution is that another method of assessment should be used. Perhaps this is why the County has issued an RFP for a consultant's study to evaluate the current system. That evaluation should not only cover the mechanics of the process, but should also address some of the substantive fairness questions and credits we've set forth above.

¹⁰ COMCOR § 19.35.01.05(A) (emphasis added).

Other counties, similarly subject to the state's stormwater remediation fee requirement, have done a better job of addressing them.¹¹

Moreover, the appeals process cannot be the quick fix for problems with the WQPC, because the timing and methodology of the appeals process can inhibit or dissuade a property owner from challenging the Charge. At present, the WQPC regulations provide for a bifurcated appeal system. If a property owner seeks a credit application, the owner must complete a DEP credit application form no later than October 31st of the year *before* the payment of the Charge is due, which is before the WQPC assessment is made. The property owner is being required to challenge an assessment that he or she does not even know of yet. Considering the time and expense involved in seeking a credit, the property owner should have the right to know what the Charge is before he or she endeavors to reduce it. The credit application, therefore, should not be required until the property owner learns of the amount of the assessment.

The second procedure in the WQPC bifurcated appeal system is for challenges that the Charge was erroneous or based on inaccurate information. The owner is required to complete a separate DEP appeal form, no later than September 30th on the year that payment of the Charge is due. COMCOR § 19.35.01.07. These separate appeals – for the credit and for erroneous assessments – will always involve the same property and similar legal issues, but this structure requires the property owner to pursue two separate appeals. The cost and time expenditures required will dissuade, if not inhibit, property owners from making these important and meaningful challenges to preserve their property rights. The appeal methodology, therefore, should be streamlined to enable a property owner to pursue an appeal and a credit appeal in the same case.

There are other problems as well. The DEP has introduced new, cost-prohibitive credit requirements on its own. In 2013, the DEP penalized any credit applicant who did not produce engineering computations, in support of the credit sought, with a 50% reduction in the credit. This 50% “no computations” reduction was not authorized by the County Council in the WQPC Code provision, nor in the regulations. It is also an onerous requirement to supply computations for stormwater detention ponds constructed more than 10 years ago. For instance, the ponds at Shady Grove Development Park were constructed in the 1970's and modified in the 1980's, and computations were required to be submitted to the DEP at the time of construction and were delivered to the County then (but the owner and engineer no longer possess them). Yet, the cost to re-perform these calculations today is substantial; a new engineer must survey the area, get aerials of the drainage area, calculate drainage, the impact of changes to I-270 and compute the volumes of water at an estimated cost of \$16,000, which vastly exceeds any benefit to be expected from the credit. MDC successfully challenged the 50% “no computations” reduction before the Montgomery County Board of Appeals, who agreed “that the County lacked the authority to reduce [MDC's] credit by half for failure to submit these calculations.” In addition to this successful outcome, MDC also notes the time and expense required to make this successful challenge, an expense which MDC will make as a matter of principle. Transparency and fairness, to all property owners, require review of the administration of the WQPC.

¹¹ Harford County presently provides a 100% credit, and is considering reducing its property tax assessment in the amount of the stormwater fee. “Maryland Stormwater Fee,” Harford County Government, <http://www.harfordcountymd.gov/Interests/Index.cfm?ID=10>; Adam Bednar, “Counties eye ‘rain tax’ adjustments,” *Maryland Daily Record* (Jan. 21, 2015).

III. Recommendations

In light of the issues raised above, MDC recommends that members of the Montgomery County Council consider amending the WQPC, Section 19-35 of the Montgomery County Code and COMCOR Section 19.35.01.01 *et seq.*

First, the Charge should be assessed fairly and, as intended, based on the property owner's contribution of stormwater pollution. Property owners that invest in their own stormwater management facilities should be exempt from the Charge or awarded a full 100% credit, in recognition of the continued private investment in stormwater management and the reduction of county services related to the property. This includes removal of the distinction between properties treated by ESD practices alone and properties treated by ESD and older stormwater management practices.

Second, to raise funding for general stormwater initiatives, which serve the County as a whole but are not related to one property (such as "costs associated with projects on parkland, schools and county facilities, as well as storm drain and street sweeping"), the Council should consider an equitable fee similarly paid by all property owners.

Third, the method of assessment and the rate of Charge can and should be reviewed, similar to current discussions in other counties (including Harford County, Anne Arundel County and Baltimore County).

Fourth, the timing and methodology of the appeal and credit application processes should be reviewed and amended.

TESTIMONY OF DIANE E. FEUERHERD, ESQ.
ON BEHALF OF MINKOFF DEVELOPMENT CORPORATION
In Opposition to Bill 11-16

Good afternoon and thank you. My name is Diane Feuerherd, and I am counsel for Minkoff Development Corporation, a commercial property owner and developer with several properties that have private stormwater management facilities.

Over the past three years, through a number of meetings, writings and even legal action, Minkoff Development Corporation has urged this Council to review and amend the Water Quality Protection Charge provisions, to fairly address how private stormwater management contributes to the County's overall goals of redressing stormwater runoff and pollution. We believe the way that this Charge is calculated fails to take into account the long term and annual costs incurred by the property owners (of time, money, land and continued maintenance).

We OPPOSE Bill 11-16, because it is a step backwards and attempts to jeopardize existing (albeit limited) credit for private stormwater management, rather than address the inequity in the Charge and credit system.

First, Bill 11-16 limits credit eligibility to preclude any and all stormwater management facilities that the County purports to structurally maintain. Minkoff Development's Shady Grove Development Park has an easement and covenants with the County, that the County would perform structural maintenance on the ponds, but only at the County's discretion. SGDP could be one of these excluded properties, despite the fact that maintenance by Minkoff Development has been continual and the need for the County's structural maintenance on these ponds is "essentially nonexistent," *Chod v. Board of Appeals*, Case No. 398704-V (emphasis added), and the ponds serve a drainage area that is three-times the size of its own property.

Property owners who have invested land and resources to construct these facilities have spent over a million dollars, and they actually continue to perform regular maintenance (including landscaping, grass cutting and trash removal), which is necessary to insure that the facility continues to function properly to help prevent the need for structural maintenance. Minkoff Development performs annual maintenance on its ponds and other stormwater management facilities, in order to collect and treat stormwater from its own properties, as well as surrounding properties. It receives no financial contribution from others. After requiring these property owners to install private stormwater management facilities, continually maintain them, it would be patently unfair to preclude them from receiving any credit based upon the County's paper promise to do structural maintenance at some point in the future and only at its discretion. The annual Charge pales in comparison to the amount invested in these facilities; Minkoff Development Corporation and like-minded commercial property owners deserve a credit.

We recommend that the County Council REJECT the proposed changes to Section 19-35(e)(1) and COMCOR 19.35.01.05, concerning credit eligibility. I understand that the DEP does not want to award a credit to a property owner based on a stormwater management facility that he or she fails to maintain; but this concern is already addressed by the addition of Section

19-35(e)(3), to enable the DEP to revoke a credit for maintenance failure.

Second, we oppose the amendments to the credit regulation, COMCOR 19.35.01.05, which remove from the regulation, and therefore from further public comment or review, the criteria for awarding a credit. By punting the credit system and structure to a forthcoming "Water Quality Protection Charge Credit Procedures Manual provided by the Department [DEP]," we are prevented from reviewing and commenting on the substantial changes that Bill 11-16 seeks to make to the existing credits. This delegation of authority, without standards, is improper.

For instance, the amendment appears to substantially narrow the credit to properties using the environmental site design standard *only*, to be laid out further in this forthcoming manual. ESD is a new standard and all properties developed before 2000 could be precluded but we are unable to ascertain the level of change without this manual. Nonetheless, Minkoff Development strongly OPPOSES this amendment, property owners should be awarded a full credit if they constructed a stormwater management facility that abided by the requirements at the time it was constructed.

Although we welcome the credit increase to 100%, which would award a full refund for private stormwater management that serves surrounding properties, it appears that this change, coupled with the limited credit eligibility, is without material effect. One would expect that an increase in credits, to reduce the amount of Charge ultimately collection, would be detailed in the Fiscal Impact Statement as a decrease in annual revenue. To the contrary, the Fiscal Impact Statement for this bill states that there is no anticipated change. We believe that is an indication that the 100% credit will be meaningless.

We recommend that the County Council REJECT the proposed amendment to COMCOR 19.35.01.05, which would have the DEP alone develop a Manual without comment from the public, and require the credit system to be "set by regulation" as required by Section 19-35(e)(1). We further recommend that the T&E Committee, in review of Bill 11-16 specifically inquire of the bill's proponents (1) why it is fair to take a step backwards and bar any and all credit from property owners who have invested substantial resources towards private stormwater management based on the County's structural maintenance easement over time; (2) why the increase to 100% is projected to have no fiscal impact; and (3) why the DEP's proposed credit system is not yet developed, so to be included as part of this regulation and subject to public review, as the statute requires.

Thank you.

Minkoff Development Corporation
Proposed "Redline" to Credit Regulation
May 2, 2016

19.35.01.05 Credits

~~A. Eligibility. If a property contains a stormwater management system, the system must be maintained by the property owner exclusively and in accordance with the maintenance requirements of Section 19-28 of the Code for the property owner to be eligible to receive a credit against the Water Quality Protection Charge.~~

B. Credit Awards.

- (1) ~~The Director must award a credit of 50 percent, based on the volume of water treated by a combination of environmental site design and other stormwater management systems, if the system met the requirements in place at the time of construction and continues to be maintained in accordance with the maintenance requirements of the Department of Environmental Protection. Or, the Director must award a credit of 80 percent, based on the volume of water completely treated by environmental site design practices if the system met the requirements in place at the time of construction and continues to be maintained in accordance with the maintenance requirements of the Department of Environmental Protection.— not to exceed 60 percent as specified in the application and the Water Quality Protection Charge Credit Procedures Manual provided by the Department based on the proportion of the total volume of water treatment provided by the stormwater management system relative to the environmental sit design storage volume required under State law. The volume of treatment required will be based on the environmental site design storage volume (ESDv) requirements specified in the 2000 Maryland Stormwater Design Manual, as amended.~~
- (2) A nonresidential property or a multifamily residential property must be credited for treatment of off-site drainage from other properties located within the same drainage area as that property not to exceed 100 percent of the Charge billed to the property owner, ~~if the stormwater management system located on the nonresidential property or multifamily residential property treats the required on-site environmental site design storage volume while at the same time providing additional storage volume for off-site drainage.~~ The total credit will be determined by applying the percent credit of off-site property to the impervious area of that off-site property and then adding that computation to the credit for the on-site impervious area, not to exceed 100 percent of the total Charge billed to the property owner ~~as specified in the application and the Water Quality Protection Charge Credit Procedures Manual provided by the Department.~~

- (3) The owner of a property that does not contain a stormwater management system must be credited if that property is located within the same drainage area as another property that contains a stormwater management system ~~for which the County does not perform structural maintenance~~ and both properties have the same owner. However, a property owner must not receive a credit based on a calculation that exceeds the total impervious area on the property for which the credit is issued.

C. Application Schedule.

- (1) To receive the credit, the property owner must apply to the Director of Environmental Protection in a form prescribed by the Director not later than September 30 of the year that payment of the Charge is due.
- (2) Once approved, the credit is valid for three years. To renew the credit, the property owner must reapply to the Director in a form prescribed by the Director not later than September 30 of the year that payment of the Charge is due.

D. Credit Revocation.

- (1) The Director of Environmental Protection may revoke a credit granted under this Section if the property owner does not continue to take the measures needed to assure that the stormwater management system remains in proper working condition by correcting any deficiencies discovered by the Director during a maintenance inspection.
- (2) The Director must not reinstate revoked credit until the property owner has sufficiently corrected the deficiencies to fully satisfy the property owner's maintenance obligations under Section 19-28 of the Code.
- (3) If a stormwater management system, treating off-site drainage from other properties located within the same drainage area as that property, is found to require structural maintenance by the Department of Environmental Protection, the Director shall not revoke the property owner's credit, but offer to the property owner the option of reducing the credit in an amount equal to the cost of maintenance that exceeds the total Charge collected from other properties located within the same drainage area, but not to exceed the Charge assessed to the property owner.

E. Appeals.

- (1) If the Director denies or revokes the credit, the property owner may seek reconsideration of the Director's decision by submitting a written request for reconsideration with supporting reasons to the Director within 30 days after the date of the Director's written decision.

(2) If the Director does not approve the request for reconsideration, the property owner may appeal the Director's final decision within 30 days after the Director issues that decision as provided in Chapter 2A, Article I, of the County Code.

Hello,

My name is Alicia Harvey Stanley – I'm the manager at Davis Airport in Laytonsville.

We want to thank the council for considering this grant proposal. As one of only two public use airports in the county, it's important for all of us to have this resource for both emergency relief reasons, and because aviation is good for commerce. Our facility is also used at no charge to calibrate police cars, train firefighters, and host scouting events.

Personally, we bought the airport as a family business because of a love of aviation. We're very proud of the work we've done to make it safe while preserving its rural character. A general aviation airport is not a money making venture, and the runways are not income producing. The state exempts public use airports from property tax as an incentive for people to keep them open, but the addition of the WQPC was more than the income from tie down tenants could carry. We have been unable to make improvements that would bring the runway up to current safety standards because it would increase the fee even more.

We appreciate the efforts that are being made to help us, from the council to the DEP to the Executive Office, and everyone in between. It is my hope that you will vote for the grant and help us to preserve Davis Airport and a resource that serves the common good.

Thank you.



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett
County Executive

Lisa Feldt
Director

October 30, 2015

Ron Godsey
C/O MTM Management
26223 Ridge Road
Damascus, MD 20872

RE: Water Quality Protection Charge Credit Application for Lindberg Park

Dear Mr. Godsey:

We have reviewed the application submitted on behalf of the property owners requesting credits against the Water Quality Protection Charge (WQPC) billed to the tax accounts for properties located within Lindberg Park. In accordance with Section 19.35.01.05 (A) of the Code of Montgomery County Regulations (COMCOR), credits are awarded based on the volume of water treated by a combination of environmental site design and other stormwater management systems if the property contains a County approved stormwater management system and the system is maintained in accordance with the maintenance requirements of the Department of Environmental Protection.

Of the nineteen property tax accounts for which credit requests were submitted, fourteen of the accounts were for properties that did not contain an onsite stormwater management system. The owners of the properties associated with the other five tax accounts received a credit based on the information you provided and the type of onsite stormwater management system that the properties contain. The volume of water treated entitles each of the properties containing a stormwater management system to a credit against the WQPC shown on their annual property tax bills as follows:

1. Tax Account Number 02889595 -44 percent
2. Tax Account Number 02889584 -44 percent
3. Tax Account Number 02890606 -50 percent
4. Tax Account Number 02653791 -50 percent
5. Tax Account Number 02821313 -50 percent

This credit will apply for the 2015 tax levy year (July 1, 2015 to June 30, 2016) and to the WQPC billed for the two subsequent years, during which time the County may conduct periodic inspections, as authorized by the credit application submitted on behalf of the property

255 Rockville Pike, Suite 120 • Rockville, Maryland 20850 • 240-777-7770 • 240-777-7765 FAX
www.montgomerycountymd.gov/dep

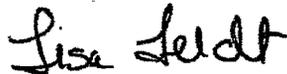
Ron Godsey
October 30, 2015
Page 2

owners, to ensure that the onsite stormwater management systems for which the credit is granted are being maintained in accordance with the County's maintenance requirements. The property owners may locate their updated tax bills online at www.montgomerycountymd.gov/propertytax.

In accordance with COMCOR § 19.35.01.05 (D), any property owner whose request for a credit is denied may seek reconsideration of my decision by submitting to me a written request for reconsideration with supporting reasons within 10 days after the date of the denial.

Thank you for implementing measures to help address stormwater pollution. Please feel free to contact Vicky Wan, Manager of the Water Quality Protection Charge, at 240-777-7722 or via e-mail at vicky.wan@montgomerycountymd.gov with questions or concerns.

Sincerely,



Lisa Feldt
Director

LF:vw

Lindbergh Park Owners Association
C/O Devin Battley
7830 Airpark Rd
Gaithersburg MD 20879

November 9, 2015

Ms. Lisa Feldt

Montgomery County Department of Environmental Protection
255 Rockville Pike, Suite 120
Rockville MD 20850

RE: WQPC credit application from LPOA. Request for reconsideration

Dear MS. Feldt,

I am replying to your letter of October 30th to Ron Godsey concerning our application for WQPC credits. We are very disappointed by your grant of limited credits. I request reconsideration of the disposition of our appeal by the DEP. These credits do not apply fairly to all the property owners in Lindbergh Park. (list attached as schedule A)

MOCO COMCOR 19.35.01 WQPC does not define 'property owner' therefore your interpretation is an unwritten rule. We are all owners in the properties of a common ownership community. This aspect is in the law Sec. 19-35 WQPC, but not your regulations. Also, this interpretation of the law is in direct conflict with fairness standards in Maryland law;

MD. REAL PROPERTY Code Ann. § 11B-104 (2015) (b) Local laws, ordinances, or regulations. – A local government may not enact any law, ordinance, or regulation which would:
(1) Impose a burden or restriction on property which is part of a development because it is part of a development;

This failure to give us complete credits for the creation of our storm water controls and our investments in these facilities is totally unfair. This is a double penalty. We are being forced to pay for what we have already paid for. Are we allowed to fill in our facilities and put this valuable land to another use? The program for WQPC is not being administered in accordance with the State enabling law standards—they don't fairly consider the contributions that the property owner has made for SW management nor the work which the County has done, or not done, on the property in imposing the tax. This is certainly a situation of financial and physical double jeopardy.

Since we made our original application in January 2015, we do find it distressful that we did not get our response until October 30th. Don't you have a 60 day mandate to respond?

With this response you have provided for credits of 44% - 50% for limited properties. Can you please explain why you did not grant the 80% credits that these properties are eligible for as explained in an email from Walter Wilson that was sent on October 16th? (attachment 1) Also,

even in your narrow and defective determination of properties that will receive credit you omitted property account # 02889573. This property is clearly eligible under your rules.

In reality our credits for the WQPC should be 100%. This is based on the court decision 'Paul N. Chod v, Board of Appeals for Montgomery County (Civil No, 398704-V, entered July 23, 2015) Can you please respond to this decision and provide us with the credits that this decision warrants?

I have also received an email from George Leventhal in which he supports my position in this appeal. (attachment 2)

Therefore we request a 100% credit for all properties in the Lindbergh Park Community.

Our request is not limited to the specific points I have made in this letter. We have issues to resolve and we reserve the right to bring up these issues as necessary and at any time.

Sincerely,


Devin Battley

President, Lindbergh Park Owners Association

Schedule A

Real Property Data Search (w2)

Guide to searching the database

Search Result for MONTGOMERY COUNTY

Name	Account	Street	Own Occ	Map	Parcel
BATTLE DEVIN L	01 02889584	LINDBERGH DR	N	GU31	0000
BATTLE DEVIN L	01 02889573	LINDBERGH DR	N	GU31	0000
7400 G LLC	01 02915228	7400 LINDBERGH DR	N	GU31	0000
ALEMEH LLC	01 02915230	7400 LINDBERGH DR	N	GU31	0000
ANGELO KENNETH F &	01 02915241	7400 LINDBERGH DR	N	GU31	0000
ANGELO KENNETH F &	01 02915252	7400 LINDBERGH DR	N	GU31	0000
FAYYAD RICHARD	01 02915217	7400 LINDBERGH DR	N	GU31	0000
FAYYAD RICHARD	01 02915208	7400 LINDBERGH DR	N	GU31	0000
FAYYAD RICHARD M	01 02915194	7400 LINDBERGH DR	N	GU31	0000
MODJARRAD AMIR A E	01 02915181	7400 LINDBERGH DR	N	GU31	0000
MODJARRAD AMIR A E	01 02915172	7400 LINDBERGH DR	N	GU31	0000
MODJARRAD AMIR A E	01 02915183	7401 LINDBERGH DR	N	GT33	0000
MONTGOMERY COUNTY	01 03348411	7404 LINDBERGH DR	N	GU31	0000
BARUCH CRAIG A ET	01 02915308	7404 LINDBERGH DR	N	GU31	0000
BARUCH CRAIG A ET	01 02915310	7404 LINDBERGH DR	N	GU31	0000
BARUCH CRAIG A ET	01 02915321	7404 LINDBERGH DR	N	GU31	0000
BARUCH CRAIG A ET	01 02915332	7404 LINDBERGH DR	N	GU31	0000
BARUCH CRAIG A ET	01 02915274	7404 LINDBERGH DR	N	GU31	0000
HOBBS INVESTMENTS	01 02915263	7404 LINDBERGH DR	N	GU31	0000
HOBBS INVESTMENTS	01 02915296	7404 LINDBERGH DR	N	GU31	0000
PARNN LLC	01 02915285	7404 LINDBERGH DR	N	GU31	0000
PARNN LLC	01 02653825	7405 LINDBERGH DR	N	GT33	0000
MONTGOMERY COUNTY	01 03349621	7405 LINDBERGH DR	N	GT33	0000
MONTGOMERY COUNTY	01 02653906	7410 LINDBERGH DR	N	GU31	0000
KIANG LEE S ET AL	01 03270004	7411B LINDBERGH DR	N	GT33	0000
7411 LINDBERGH DR	01 03270015	7411C LINDBERGH DR	N	GT33	0000
7411 LINDBERGH DR	01 03270026	7411D LINDBERGH DR	N	GT33	0000
7411 LINDBERGH DR	01 03269895	7411A LINDBERGH DR	N	GT33	0000
S & S GROUP LLC	01 03270072	7411J LINDBERGH DR	N	GT33	0000
S & S GROUP LLC	01 03270048	7411E LINDBERGH DR	N	GT33	0000
S & S GROUP LLC	01 03270061	7411H LINDBERGH DR	N	GT33	0000
S & S GROUP LLC	01 03270037	7411I LINDBERGH DR	N	GT33	0000
S & S GROUP LLC	01 03270050	7411G LINDBERGH DR	N	GT33	0000
VEIRS MICHAEL & M	01 03270106	7411M LINDBERGH DR	N	GT33	0000
VEIRS MICHAEL & M	01 03270083	7411K LINDBERGH DR	N	GT33	0000
VEIRS MICHAEL & M	01 03270117	7411N LINDBERGH DR	N	GT33	0000
VEIRS MICHAEL & M	01 03270894	7411L LINDBERGH DR	N	GT33	0000
VEIRS MICHAEL & M	01 03270128	7411P LINDBERGH DR	N	GT33	0000
VEIRS MICHAEL & M	01 03270130	7411	N	GT33	0000
SUNSHINE-LINDBERGH	01 02653893	7420 LINDBERGH DR	N	GT38	0000
7419 LINDBERGH DR	01 02653791	7421 LINDBERGH DR	N	GT33	0000
SUNSHINE-LINDBERGH	01 02653682	7500 LINDBERGH DR	N	GU31	0000
SECURITY STORAGE C	01 02821313	7501 LINDBERGH DR	N	GT33	0000
KAP LINDBERGH PARK	01 02643376	7517 LINDBERGH DR	N	GU31	0000
SUNSHINE-LINDBERGH	01 02653871	7530 LINDBERGH DR	N	GT31	0000
MORLEY LAND PTNSHP	01 02653860	7580 LINDBERGH DR	N	GU31	0000
LINDBERGH DRIVE LL	01 02890806	7561 LINDBERGH DR	N	GU31	0000
BATTLE DEVIN L	01 02890594	7571 LINDBERGH DR	N	GU31	0000
SG ENTERPRISES LLC	01 02653780	7581 LINDBERGH DR	N	GU31	0000
JAL DEVELOPMENT LL	01 02841322	7600 LINDBERGH DR	N	GU31	0000
MACDONALD HOLDINGS	01 02841344	7600 LINDBERGH DR	N	GU31	0000
MIKKELSON ROBERT G	01 02841333	7600 LINDBERGH DR	N	GU31	0000
MILLETTE GILLES &	01 02841286	7600 LINDBERGH DR	N	GU31	0000
RIP INVESTMENT PRO	01 02841300	7600 LINDBERGH DR	N	GU31	0000
ROXY LLC	01 02841311	7600 LINDBERGH DR	N	GU31	0000
SG ENTERPRISES LLC	01 02841297	7600 LINDBERGH DR	N	GU31	0000
VB&G LLC	01 02841355	7600 LINDBERGH DR	N	GU31	0000
LINDBERGH INC	01 02653778	7601 LINDBERGH DR	N	GU31	0000
APPLIED DEVELOPMEN	01 02653847	7610 LINDBERGH DR	N	GU31	0000
JAI DURGA ENTERPRI	01 02653836	7620 LINDBERGH DR	N	GT31	0000
SANDY SPRING NATIO	01 02889595	7653 LINDBERGH DR	N	GU31	0000

Attachment 1

Devin Battley

From: Wilson, Walter <Walter.Wilson@montgomerycountymd.gov>
Sent: Friday, October 16, 2015 3:00 PM
To: Devin Battley; Wan, Vicky; 'Ron Godsey'
Cc: Shofar, Steven; Morgan, Michael
Subject: RE: Lindbergh Park - Storm Water

If multiple tax accounts are assigned to a specific property that contains a stormwater management system, as in the case with a condominium regime, then whatever credit is due is awarded to all of those accounts. However, the credit that may be awarded under any particular scenario is capped at 80 percent of the Water Quality Protection Charge billed to each account.

Walter E. Wilson
Associate County Attorney
Office of the County Attorney
101 Monroe Street, 3rd Floor
Rockville, Maryland 20850
240-777-6759

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From: Devin Battley [mailto:DBattley@battley.com]
Sent: Friday, October 16, 2015 2:27 PM
To: Wilson, Walter; Wan, Vicky; 'Ron Godsey'
Cc: Shofar, Steven; Morgan, Michael
Subject: RE: Lindbergh Park - Storm Water

Dear Mr. Wilson,

We have an association that is governed by the rules of the Maryland Condominium Act.

Here is what is on your web site.

Multi-family Residential and Non-Residential Property Owners:

- A reduction of up to 50% of the charge will be awarded based on the volume of water treated by a combination of environmental site design and other stormwater management systems; or 80% reduction based on the volume of water treated, if the property is completely treated by environmental site design practices alone. (Not sure what this means? Email us at WQPC.Credits@montgomerycountymd.gov)
- Only one application needs to be completed for the condominium regime (e.g. condo association). If the stormwater practice applies to all property owners within the condominium, then a list of tax accounts qualified for the credit must be included.
- **Deadline:** The credit application is due by September 30th in order to be applied towards your current tax bill.
- Having trouble? Contact DEP at WQPC.Credits@montgomerycountymd.gov

Are you telling us that our Association is not subject to the Condominium Act?

Devin Battley,
President JPOA

Attachment 2

Devin Battley

From: Leventhal's Office, Councilmember <Councilmember.Leventhal@montgomerycountymd.gov>
Sent: Friday, November 06, 2015 12:43 PM
To: Devin Battley
Cc: Feldt, Lisa; Levchenko, Keith; #CCL.Leventhal Staff
Subject: Fw: Credit Application Response /WQPC/Lindbergh Park
Attachments: Lindberg -Response.pdf

Importance: High

Dear Devin,

Thank you for keeping me informed regarding your dispute with DEP over credits for your investment in Lindberg Park's storm water facilities. DEP is developing a list of issues that need to be resolved regarding Water Quality Protection Charges, which it expects to provide the County Council early in 2016. The County Council can then consider any other changes we think should be made.

As we have discussed, you have persuaded me that we should consider granting a credit to joint owners of a common ownership arrangement for their investment in storm water facilities that serve the shared property, even if the specific facility does not lie on the property owner's specific plot. I will make this sure we take a serious look at this issue when we consider revisions to the Water Quality Protection Charge next year.

All the best,
George

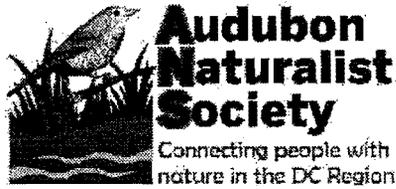
From: Devin Battley <DBattley@battley.com>
Sent: Tuesday, November 3, 2015 8:47 AM
To: Leventhal's Office, Councilmember
Cc: County Council
Subject: FW: Credit Application Response /WQPC/Lindbergh Park

Dear George,

Thank you for meeting with me last week.
Please see the attached letter.
Now I only have a few days for an appeal.
As I predicted there are errors and omissions in this decision.
Besides all the properties that have ownership in the facilities, a contiguous property was omitted.
This law and this process proves that this program is all about collecting money and not about giving proper credit for storm water management.

Sincerely,
Devin Battley
President LPOA

From: Wan, Vicky [Vicky.Wan@montgomerycountymd.gov]
Sent: Monday, November 02, 2015 3:29 PM
To: Devin Battley
Subject: Credit Application Response



Council President Nancy Floreen and Councilmembers
Montgomery County Council
100 Maryland Ave.
Rockville, MD 20850

May 3, 2016

Re: Bill 11-16, to amend the Water Quality Protection Charge

Dear Council President Floreen and Councilmembers,

Audubon Naturalist Society has long partnered with Montgomery County to protect and restore our streams. We were early advocates of establishing our Water Quality Protection Charge, and have promoted its evolution over time to support the mandates in the County's stormwater (MS4) permit. All built areas of the County depend upon the maintenance of a large inventory of stormwater facilities. These facilities include ponds and filters, and green infrastructure facilities such as rain gardens and tree plantings that capture and infiltrate runoff.

We write today to express our support for the elements of Bill 11-16 related to WQPC credits for facility maintenance. We also urge the County to maintain the small but important additional fee reduction for Environmental Site Design (ESD) stormwater facilities – a.k.a. green infrastructure devices like rain gardens and green roofs. Bill 11-16 would revise the County's framework for providing stormwater fee credits for stormwater management facilities on a given site. The bill would change the credit award (the fee reduction) from being dependent on the type of stormwater management facility, to now be based on the proportion of the volume of water treated by the storm water management system. The Bill would also allow owners of private airports that meet certain criteria, to apply for grants to offset the fees from the Water Quality Protection Charge.

We support the change toward granting credit based on the proportion of volume of water treated, and additionally request that site owners who adopt and maintain ESD practices be given higher fee reduction credits than owners of stormwater ponds and other conventional facilities. Granting higher fee credits to ESD facilities is based on two facts: 1) ESD practices capture and reduce runoff through infiltration and other means that promote water quality, not merely treat and release it; and 2) ESD practices often bring higher total benefits, such as increase in tree canopy cover, to the County and local community, than do conventional stormwater ponds.

We support Bill 11-16 because it embodies three principles of sound stormwater program management and funding:

- (1) Stormwater management is a System – comprised of a large and diverse network of facilities.
- (2) Everyone must do their fair share, including paying into the WQPC, to support this system.
- (3) Ongoing inspection and maintenance of this system must be performed according to sound protocols.

Thank you for considering our views on this matter.

A handwritten signature in black ink, appearing to read "Lisa Alexander".

Lisa Alexander
Executive Director