



**Annual Report on Financial Assurance Plans and
the Watershed Protection and Restoration
Program
-2018-**

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Prepared for:
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The Senate Education, Health, and Environmental Affairs Committee
The House Environment and Transportation Committee

February 2020

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I. Introduction

Maryland's stormwater management (SWM) program includes fiscal reporting requirements for Maryland's 10 Largest urban jurisdictions, which are Baltimore City and Anne Arundel, Baltimore, Carroll, Charles, Frederick, Harford, Howard, Montgomery, and Prince George's counties. One of these reporting requirements, financial assurance plans (FAPs), needs to demonstrate how stormwater restoration projects are going to be funded. These plans, submitted every two years, are to be completed by each National Pollutant Discharge Elimination System (NPDES) Phase I municipal separate storm sewer system (MS4) jurisdiction. The plans must include the following: all actions required to meet MS4 permit requirements; annual and projected 5-year costs and revenues necessary to meet the impervious surface restoration plan (ISRP) requirements; any and all sources of funds used toward meeting MS4 permit requirements; and all specific actions and expenditures undertaken in the previous fiscal years to meet the ISRP requirement.

FAPs due between December 2018 and February 2019 for all 10 jurisdictions are required to demonstrate sufficient funding for meeting 100% of the projected ISRP costs for the 2-year period immediately following the filing of the plan. Local governing bodies are required to hold public hearings and sign the plans for accuracy prior to submitting them to the Maryland Department of the Environment (MDE) for review. The law requires that MDE shall: post FAPs on its website within 14 days of receipt; make a decision regarding the adequacy of these plans within 90 days of receipt; and submit an annual evaluation of these plans to the governor and the General Assembly by Sept. 1 each year.

A second reporting requirement for each MS4 jurisdiction, excluding Montgomery County, is to submit a Watershed Protection and Restoration Program (WPRP) Annual Report on the anniversary date of its MS4 permit. The Annual Report requires the following items:

- The number of properties, if any, subject to a stormwater remediation fee
- Any funding structure developed, if any, including the amount of money collected
- The amount of money deposited into the Watershed Protection and Restoration Fund (WPRF) in the previous fiscal year by source
- The percentage and amount of funds in the WPRF spent on purposes defined in the law
- All SWM projects implemented in the previous fiscal year for the ISRP requirement

This Annual Report on Financial Assurance Plans and the Watershed Protection and Restoration Program, 2018, (FAP Annual Report), fulfills the requirement of § 4-202.1(j)(7), Environment Article of the Annotated Code of Maryland. MDE's Executive Summary is included below, followed by a statewide analysis of BMPs. Next are summaries of each MS4's current implementation status. Because FAPs are only required biennially, implementation updates in this report come from the most recent MS4 annual reports submitted to MDE. Finally, MDE provides a summary of where Maryland's stormwater community stands in relation to milestones and the challenges ahead. The citizens of Maryland, and local, state, and federal partners are commended for their effort in developing and implementing these very important environmental programs for improving local water resources and restoring the Chesapeake Bay.

II. Primary Information

Table 1: Significant Dates for Financial Assurance Plans (FAPs) and Watershed Protection and Restoration Program (WPRP) Annual Reports

MS4 Jurisdiction	FAP Submission Date	WPRP Annual Report Submission Date	Date of Public Hearing for FAP	FAP Approved by Local Governing Body (Y/N)	MDE Determination of Sufficient Funding (75%)
Anne Arundel County	6/28/2016	2/12/2018	7/5/2016	Y	10/17/2016
Baltimore City	7/1/2016	12/27/2017	6/8/2016	Y	10/17/2016
Baltimore County	7/13/2016	12/22/2017	9/13/2016	Y	10/17/2016
Carroll County	6/30/2016	12/15/2017	6/9/2016	Y	10/17/2016
Charles County	6/29/2016	12/21/2017	6/7/2016	Y	10/17/2016
Frederick County	6/28/2016	12/29/2017	8/15/2016	Y	10/17/2016
Harford County	6/24/2016	7/2/2018	6/14/2016	Y	10/17/2016
Howard County	7/1/2016	12/18/2017	6/20/2016	Y	10/17/2016
Montgomery County	7/1/2016	n/a	6/14/2016	Y	10/17/2016
Prince George's County	6/30/2016	6/18/2018	10/11/2016	Y	10/17/2016

III. Executive Summary

Anne Arundel, Baltimore, Carroll, Charles, Frederick, Harford, Howard, Montgomery, and Prince George’s counties, and Baltimore City submitted comprehensive information on local projects for meeting ISRP requirements, including:

- Upland Practices: wet ponds, swales, infiltration, dry wells, rain gardens, green roofs, permeable pavement, rainwater harvesting, submerged gravel wetlands
- In-Stream Practices: shoreline management, outfall stabilization, stream restoration
- Programmatic Practices: street sweeping, inlet cleaning, storm drain vacuuming

MDE approved each MS4’s impervious acre baseline analysis which sets the 20% level of restoration required under the stormwater permits. MDE also determined that each MS4’s FAP had sufficient revenue for funding at least 75% of the ISRP requirements during state fiscal years (FY) 2017 and 2018.

Current Implementation

- Statewide, the specific actions implemented by the MS4s for meeting ISRP requirements through FY17 are 39% completed (see Table 2).

Table 2: Specific Actions Completed Through FY17 to Meet ISRP Permit Requirements

MS4	Impervious Acre (IA) Baseline ¹	Acres Restored as of		Restoration Complete ³
		FY16 ²	FY17 ³	
Anne Arundel County	5,862	912	1,680	28.7%
Baltimore City	4,291	3,624	3,953	92.1%
Baltimore County	6,036	983	1,033	17.1%
Carroll County	2,032	1,247	1,369	67.4%
Charles County	1,480	253	310	21.0%
Frederick County	2,620	161	186	7.1%
Harford County	2,218	453	478	21.6%
Howard County	2,460	1,028	1,434	58.3%
Montgomery County	3,778	1,918	2,927	77.5%
Prince George's County	6,105	225	937	15.3%
Totals:	36,882	10,804	14,307	38.8%

1. Updated baseline from FY16 MS4 Annual Reports. All impervious acre baselines have been approved.
2. Restoration data from FY16 MS4 Annual Reports (covering the end of the previous permit term up to June 30, 2016). Some FY16 data has been updated to reflect annual report review findings.
3. Restoration data from FY17 MS4 Annual Reports (covering the end of the previous permit term up to June 30, 2017).

- Overall, the MS4s are projecting completion of 91% of the ISRP requirement by the end of their permits’ 5-year terms.

Closing the Implementation Gap

- The next FAP submittals to MDE, due between December - February FY19, must show how each jurisdiction can fund 100% of its ISRP requirement by the end of its permit term.
- On July 16, 2018, trading regulations were officially adopted that have the potential of lowering MS4 implementation costs through the purchase of less expensive nutrient credits from the agriculture and wastewater treatment sectors.
- MS4s that have projected trading with local wastewater treatment plants in their FAPs have shown that the cost per impervious acre treated can be reduced from \$42,092 to \$25,383 (see Table 3 below).
- While innovative strategies and pollutant trading show great promise in closing the MS4 permit implementation gap, there are other rising costs on the horizon. These include the long-term maintenance of BMPs and the eventual replacement of BMPs (facility life spans average 20 to 30 years). These costs will need to be accounted for in future FAPs.

Table 3: Cost per Acre for Counties With and Without Proposed Trading*

MS4	Projected Permit Term Restoration (Acres) ¹	Cost	Cost per Acre	
Trading Proposed	Anne Arundel County	4,682	\$94,117,808	\$20,102
	Baltimore County	6,061	\$148,596,014	\$24,519
	Charles County	1,500	\$34,902,646	\$23,261
	Frederick County	746	\$28,837,574	\$38,680
	Harford County	2,279	\$46,388,000	\$20,354
Subtotal Trading	15,268	\$352,842,042	\$25,383	
No Proposed Trading	Baltimore City	4,588	\$112,040,918	\$24,420
	Carroll County	1,964	\$30,386,235	\$15,468
	Howard County	1,745	\$105,838,122	\$60,661
	Montgomery County	3,629	\$230,814,187	\$63,604
	Prince George's County	6,211	\$287,603,535	\$46,309
Subtotal No Trading	18,137	\$766,682,997	\$42,092	

* Trading regulations to allow for this treatment option were officially adopted on July 16, 2018.

1. Restoration data obtained from the 2016 FAPs. Only 75% funding was required. More restoration and funding will be submitted with the next FAP submissions.

IV. Statewide BMP Analysis

BMPs

MDE has encouraged MS4s to implement a wide range of BMPs that are effective for pollutant removal and meeting restoration requirements. Restoration may be achieved by a suite of practices that fall into one of three general categories: upland, in-stream, and programmatic. Figure 1 shows an analysis of the BMPs being implemented in the 10 Phase I MS4s during the current 5-year permit term. Based on the impervious acres restored, there are similar rates of implementation for programmatic and upland practices, 39% and 38%, respectively, while 23% is being restored through in-stream practices.

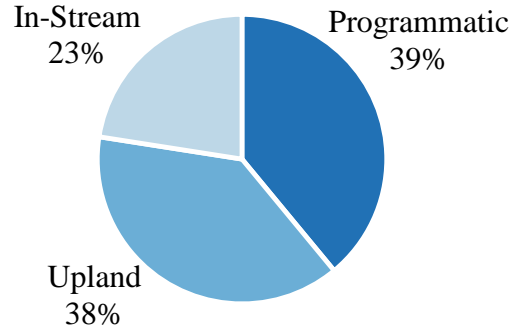


Figure 1: BMP Implementation by Category during the Permit Term (Completed and Projected)

The following is an analysis of the BMP diversity within each category of BMP.

Upland BMPs

- The three groups of upland BMPs with the greatest sum of impervious area treated are ponds (2,628 acres), filtering practices (1,842 acres), and wetlands (1,526 acres).
- Environmental site design (ESD) practices (i.e., micro-scale practices, nonstructural techniques, and alternative surfaces) only account for approximately 3% of the total impervious acres treated in the 10 Phase I MS4s.

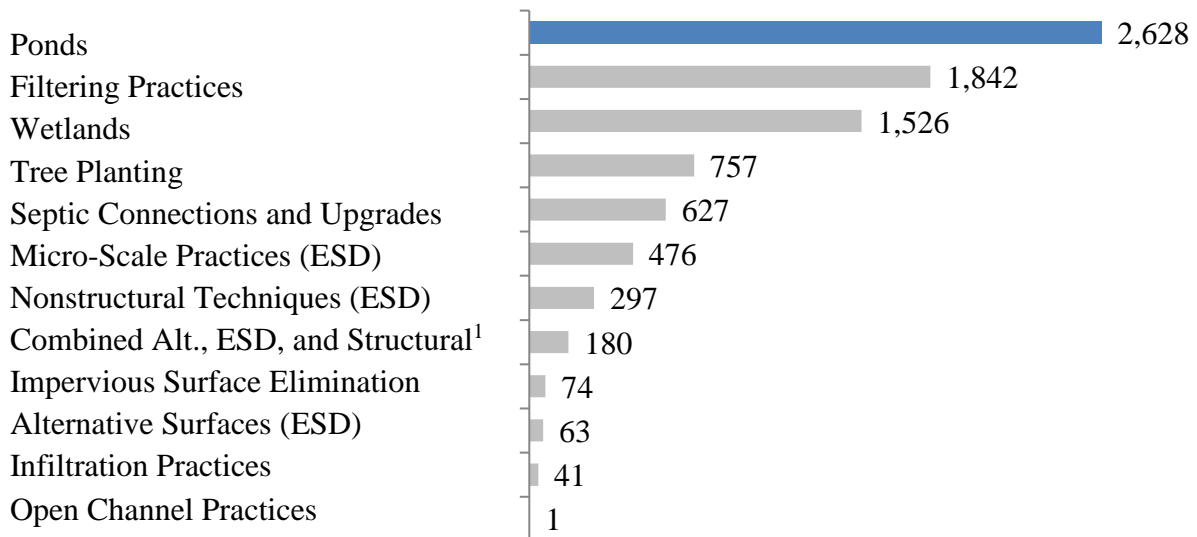


Figure 2: Impervious Acres to be Restored by Upland BMPs*

* Restoration data obtained from FY16 FAPs.

** A total of 3,591 acres of restoration were reported as unspecified upland practices that are part of volunteer, retrofit, conversion, redevelopment, and new BMP projects.

¹ “Combined [Alternative], ESD, and Structural” practices were reported as projects with different combinations of BMPs and could not be separated into individual groups.

In-Stream BMPs

- Stream restoration is the most abundant in-stream practice and accounts for 4,725 acres of restored acres in the 10 jurisdictions. This is equivalent to approximately 15% of the treated impervious acres in the 10 MS4s.

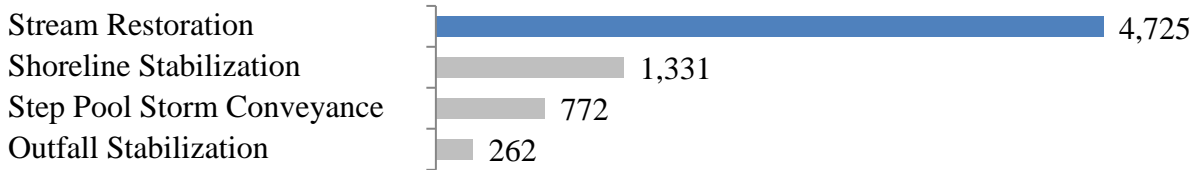


Figure 3: Impervious Acres to be Restored by In-Stream BMPs*

*Restoration data obtained from FY16 FAPs.

Programmatic BMPs

- Street sweeping is the most widely used programmatic BMP and accounts for approximately 6,024 of the impervious acres being treated throughout the 10 MS4s. This is equivalent to 19% of the treated impervious acres in the 10 MS4s.

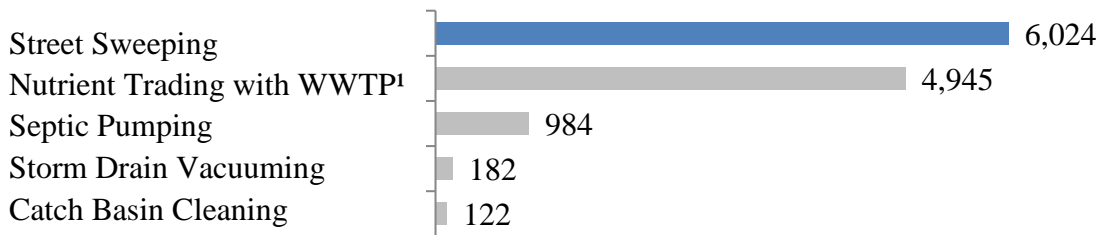


Figure 4: Impervious Acres to be Restored by Programmatic BMPs*

*Restoration data obtained from FY16 FAPs.

1. Trading regulations were officially adopted to allow for this treatment option.

V. County Analyses

Anne Arundel County

Impervious Acre Baseline: 5,862 **Restored Acres:** 1,680 **Remaining Restoration Acres:** 4,182

- Percent of restoration requirement met to date: 29%
- Projected acres to be restored by the county by the end of permit: 4,682
- Projected restoration cost for entire permit term: \$94,117,808
- Cost per acre for completed and projected projects during the entire permit term: \$20,102
- Projected impervious acre restoration requirement met by end of permit term: 80%
- Estimated funding gap to complete MS4 restoration requirements: \$22,959,635

Current Implementation

MDE determined that Anne Arundel County's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. The county is required to submit a FAP to MDE on Feb. 12, 2019 that shows sufficient funding for implementing 100% of its ISRP. While the county is still experiencing significant implementation and funding gaps toward meeting 100% of its ISRP, the next FAP should detail how these gaps will be met.



Figure 5: Outfall Stabilization - Anne Arundel County
(Anne Arundel County WPRP)

Baltimore City

Impervious acre baseline: 4,291

Restored acres: 3,953

Remaining Restoration Acres: 338

- Percent of restoration requirement met to date: 92%
- Projected acres to be restored by the city by the end of permit: 4,588
- Projected restoration cost for entire permit term: \$112,040,918
- Cost per acre for completed and projected projects during the entire permit term: \$24,420
- Projected impervious acre requirement met by end of permit term: 107%
- Estimated funding gap to meet MS4 restoration requirements: None

Current Implementation

MDE determined that Baltimore City's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. The city is required to submit a FAP to MDE on Dec. 27, 2018 that shows sufficient funding for implementing 100% of its ISRP. The city appears to have the wherewithal to meet 100% of its ISRP, which is attributable to an aggressive street sweeping program.



Figure 6: Micro-Bioretention at Library Square

Baltimore County

Impervious acre baseline: 6,036 **Restored acres:** 1,033 **Remaining Restoration Acres:** 5,003

- Percent of restoration requirement met to date: 17%
- Projected acres to be restored by the county by the end of permit: 6,061
- Projected restoration cost for entire permit term: \$148,596,014
- Cost per acre for completed and projected projects during the entire permit term: \$24,519
- Projected impervious acre requirement met by end of permit term: 100%
- Existing funding gap to meet MS4 restoration requirements: None

Current Implementation

MDE determined that Baltimore County's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. While the county appears to have the fiscal wherewithal to meet its ISRP, the county is required to submit a FAP to MDE on Dec. 23, 2018 that confirms sufficient funding for implementing 100% of its ISRP.



Figure 7: Essex Skypark Shoreline Stabilization (Before and After)

Carroll County

Impervious Acre Baseline: 2,032 **Restored Acres:** 1,369 **Remaining Restoration Acres:** 663

- Percent of restoration requirement met to date: 67%
- Projected acres to be restored by the county by the end of permit: 1,964
- Projected restoration cost for entire permit term: \$30,386,235
- Cost per acre for completed and projected projects during the entire permit term: \$15,468
- Projected impervious acre requirement met by end of permit term: 97%
- Existing funding gap to meet MS4 restoration requirements: \$701,923

Current Implementation

MDE determined that Carroll County's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. The county has largely met its ISRP through an aggressive stormwater management pond retrofit program. The county is required to submit a FAP to MDE on Dec. 29, 2018 that shows sufficient funding for implementing 100% of its ISRP. This FAP should detail how funding gaps will be reduced.



Figure 8: Westminster Community Pond (Before and After)

Charles County

Impervious Acre Baseline: 1,480 **Restored Acres:** 310 **Remaining Restoration Acres:** 1,170

- Percent of restoration requirement met to date: 21%
- Projected acres to be restored by the county by the end of permit: 1,500
- Projected restoration cost for entire permit term: \$34,902,646
- Cost per acre for completed and projected projects during the entire permit term: \$23,268
- Projected impervious acre requirement met by end of permit term: 101%
- Existing funding gap to meet MS4 restoration requirements: \$3,242,200

Current Implementation

MDE determined that Charles County's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. The county is required to submit a FAP to MDE on Dec. 26, 2018 that shows sufficient funding for implementing 100% of its ISRP. While the county is still experiencing a significant implementation and funding gap toward meeting 100% of its ISRP, it continues to explore how alternative strategies may help to increase efficiencies and further drive costs down. The next FAP is expected to detail how these and other projects are expected to meet the restoration requirement while eliminating the funding gap.



Figure 9: Shallow Marsh, Dr. Gustavus Brown Elementary School

Frederick County

Impervious Acre Baseline: 2,620 **Restored Acres:** 186 **Remaining Restoration Acres:** 2,434

- Percent of restoration requirement met to date: 7%
- Projected acres to be restored by the county by the end of permit: 746
- Projected restoration cost for entire permit term: \$28,837,574
- Cost per acre for completed and projected projects during the entire permit term: \$38,860
- Projected impervious acre requirement met by end of permit term: 28%
- Existing funding gap to meet MS4 restoration requirements: \$72,486,320

Current Implementation

MDE determined that Frederick County's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. The county is required to submit a FAP to MDE on Dec. 30, 2018 that shows sufficient funding for implementing 100% of its ISRP. While the county is still experiencing a significant implementation and funding gap toward meeting 100% of its ISRP, the next FAP should document increased funding and planning.



Figure 10: Englandtowne Stream Restoration (Before and After)

Harford County

Impervious Acre Baseline: 2,218 **Restored Acres:** 478 **Remaining Restoration Acres:** 1,740

- Percent of restoration requirement met to date: 22%
- Projected acres to be restored by the county by the end of permit: 2,279
- Projected restoration cost for entire permit term: 46,388,000
- Cost per acre for completed and projected projects during the entire permit term: \$20,354
- Projected impervious acre requirement met by end of permit term: 103%
- Existing funding gap to meet MS4 restoration requirements: \$2,920,000

Current Implementation

MDE determined that Harford County's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. The county is required to submit a FAP to MDE on Dec. 30, 2018 that shows sufficient funding for implementing 100% of its ISRP. While the county is still experiencing a significant implementation and funding gap toward meeting 100% of its ISRP, it continues to explore how innovative procurement practices may help to increase efficiencies and further drive costs down.



Figure 11: Laurel Valley Restoration
(Harford County Bureau of Stormwater Management)

Howard County

Impervious Acre Baseline: 2,460 **Restored Acres:** 1,434 **Remaining Restoration Acres:** 1,027

- Percent of restoration requirement met to date: 58%
- Projected acres to be restored by the county by the end of permit: 1,745
- Projected restoration cost for entire permit term: \$105,838,122
- Cost per acre for completed and projected projects during the entire permit term: \$60,661
- Projected impervious acre requirement met by end of permit term: 71%
- Existing funding gap to meet MS4 restoration requirements: \$39,471,345

Current Implementation

MDE determined that Howard County's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. The county has made significant progress toward meeting its restoration goals through the construction of wet ponds, ESD facilities, filtering practices, and swales. The county is required to submit a FAP to MDE on Dec. 18, 2018 that not only shows a reduced funding gap but also details sufficient funding for implementing 100% of its ISRP.



Figure 12: Bioretention in Ellicott City, MD

Montgomery County

Impervious Acre Baseline: 3,778 **Restored Acres:** 2,927 **Remaining Restoration Acres:** 851

- Percent of restoration requirement met to date: 77%
- Projected 5-year acres to be restored by the county: 3,629
- Projected 5-year restoration cost: \$230,814,187
- Cost per acre for completed and projected projects: \$63,604
- Projected 5-year impervious acre requirement met: 96%
- Existing funding gap to meet MS4 restoration requirements: \$9,476,996

Current Implementation

Montgomery County did not meet the 20% ISRP by the end of its 5-year permit term on Feb. 15, 2015. The county restored 1,744 impervious acres resulting in a restoration deficit of 2,004 impervious acres. Subsequently, MDE and Montgomery County entered into a court-sanctioned Consent Decree on April 13, 2018 formally establishing implementation schedules and annual milestones, subject to penalties of \$2,000 per violation per day if missed, for the completion of the county's ISRP by Dec. 31, 2020. Additionally, a judgment in favor of MDE against the county, in the amount of \$300,000 is due on Dec. 31, 2020, unless the county completes supplemental environmental projects (SEPs) at a cost of \$300,000 by this date. To achieve these significant requirements and to remain in compliance with the Consent Decree, the county is utilizing new contracting methods for increasing cost and implementation efficiencies.



Figure 13: Bioretention, Denis Avenue Green Streets

Prince George's County

Impervious Acre Baseline: 6,105 **Restored Acres:** 937 **Remaining Restoration Acres:** 5,168

- Percent of restoration requirement met to date: 15%
- Projected acres to be restored by the county by the end of permit: 6,211
- Projected restoration cost for entire permit term: \$287,603,535
- Cost per acre for completed and projected projects during the entire permit term: \$46,309
- Projected impervious acre requirement met by end of permit term: 102%
- Existing funding gap to meet MS4 restoration requirements: \$40,444,420

Current Implementation

MDE determined that Prince George's County's FAP demonstrated sufficient funding to meet 75% of its projected ISRP costs for FY17 and FY18. The county is required to submit a FAP to MDE on Jan. 2, 2019 that shows sufficient funding for implementing 100% of its ISRP. While the county is still experiencing a significant implementation and funding gap toward meeting 100% of its ISRP, the next FAP should show how these gaps will be reduced.



Figure 14: ESD Practice Installed Through the Partnership
(Clean Water Partnership)

VI. Watershed Protection and Restoration Program Annual Reports

- Stormwater remediation fees are now optional for MS4 jurisdictions.
- Eight MS4 jurisdictions have fees; two obtain funds through taxes.
- Residential fees range from \$0.01 to \$170.
- For the jurisdictions that have a fee, the number of properties subject to fees range from 48,746 to 262,650.

Table 4: FY17 Sources of Funds for the WPRF

Jurisdiction	Properties Subject to a Stormwater Remediation Fee	Total Stormwater Remediation Fees	Total Additional Sources of Funds	Total
Anne Arundel County	212,980	\$20,968,236	\$1,958,118	\$22,926,353
Baltimore City	223,623	30,895,440	106,010	31,001,450
Baltimore County ¹	259,737	10,895,147	21,071,453	31,966,601
Carroll County	0	0	2,160,120	2,160,120
Charles County	51,204	1,981,534	293,475	2,275,009
Frederick County	48,746	487	0	487
Harford County ²	0	0	0	0
Howard County	107,774	11,287,333	0	11,287,333
Montgomery County ³	n/a	n/a	n/a	n/a
Prince George's County	262,650	14,567,923	0	14,567,923
Total	1,166,714	\$90,596,101	\$25,589,176	\$116,185,277

*For further details on the WPRP, refer to the WPRP Annual Reports in the Appendix D.

1. Baltimore County provided estimates of fees collected.
2. Harford County does not collect a stormwater remediation fee and does not maintain a separate WPRF. Funds are obtained from other sources.
3. Montgomery County was not required to report this data.

VII. Summary

Maryland's MS4 permits and ISRP requirements are an integral part of the state's strategy to ensure that all pollution control measures needed to restore the Chesapeake Bay are in place by 2025. Maryland's 10 largest urban jurisdictions have been tasked with reducing their stormwater pollutant loads even as their communities continue to grow. Indeed, the restoration requirements in the MS4 permits have stretched these local jurisdictions to the fullest extent of their capabilities. Even so, Maryland's MS4s in aggregate have completed 39% of their ISRP requirement and are projecting to meet 91% of the ISRP requirement by permits' end.

A critical concept for each of these jurisdictions to meet their restoration goal is adaptive management, which requires making an informed projection of what is required to achieve the final goal. As implementation progresses, goal achievement should be evaluated by each jurisdiction and its ISRP should be modified in accordance with a better understanding of what is working and what is not.

MDE, in coordination with a broad stakeholder work group, is embarking upon nutrient trading as a new mechanism for meeting the significant pollutant load reductions needed for the restoration of the Chesapeake Bay. In fact, on July 16, 2018, MDE officially adopted trading regulations that will have the potential of lowering MS4 implementation costs through the purchase of less expensive nutrient credits from the agriculture and wastewater treatment sectors. While innovative strategies and nutrient trading show great promise in closing the MS4 permit implementation gap, there are other rising costs on the horizon. These include the long-term maintenance and eventual replacement of BMPs. These costs will need to be accounted for in future FAPs and strategies for maintaining Chesapeake Bay water quality.

VIII. Definitions

Annual escalation: The practice of adjusting current values to account for future increases. Annual escalation can account for increases in value of labor and materials.

Appropriation: Authorization from the legislation to spend money from a specific funding source for the purposes allowed by law. Appropriations specify both the amount and funding source. Appropriations must be approved before a contract mechanism can be approved.

BMP: Best Management Practice; these include structural practices (e.g., filters, ponds, wetlands), ESD (e.g., grass swales, rain barrels, green roofs), and alternative practices (e.g., outfall stabilization, septic pumping, street sweeping, tree planting).

Budget: Plan or authorization for revenues and expenditures within a fixed period of time.

CIP: Capital improvement plan; A project must cost more than \$250,000 and be associated with a specific asset which will depreciate over time.

Debt service: Portion of capital expenditures which is paid using mechanisms to extend the payment over a specified period of time. Debt service mechanisms include bonds and loans, which include costs for administration and interest.

Encumbrance: Commitment of money to meet an obligation for goods and services. Once a contract or agreement is approved, the money is encumbered into the budget to secure those funds.

EPA: United States Environmental Protection Agency

ESD: Environmental site design (also referred to as Low Impact Development / LID), comprehensive strategy for maintaining pre-development runoff characteristics by integrating site design, natural hydrology, and smaller controls to capture and treat runoff at the source, like micro-bioretenion.

Expenditure: The amount of money that is actually spent.

FAP: Financial Assurance Plan; state required 5-year projection of funding and expenses related to the MS4 permit and impervious surface restoration requirements. These plans also require the reporting of specific actions and expenditures undertaken in previous fiscal years to meet impervious surface restoration requirements.

Fiscal year: July 1 to June 30

Grant: an amount of money given by an entity for a specific purpose, with no obligation of repayment. Grants can also be known as a gift. Grant agreements include matching commitments, either by cash or by in-kind services.

Impervious surface: a surface that does not allow stormwater to infiltrate into the ground. "Impervious surface" includes rooftops, driveways, sidewalks, or pavement.

ISRP: Impervious Surface Restoration Plan; can also mean MS4 WIP or implementation plan for qualitative controls. For the current MS4 permit, the impervious surface restoration requirement is 20% of the county or municipality's total impervious area that has not already been treated or restored to the MEP.

Loan: A debt service mechanism in which a governing body receives money from an external source with a commitment to repay both the principal and interest within a specific time frame.

MDE: Maryland Department of Environment

MEP: Maximum Extent Practicable

MS4: Municipal Separate Storm Sewer System

NPDES: National Pollutant Discharge Elimination System

Nutrients: Total phosphorus and total nitrogen

Paygo: Portion of capital expenditures which is paid directly when the expenditure is incurred.

Public-private partnership (P3s): An agreement between one or more public and private entities to do something better together than could be done individually. In many of these agreements, the local government provides one or a combination of tax incentives, public assets, or financing assistance. The private entity may contribute land, capital investments, a commitment to provide local jobs, or development expertise and usually, but not always, assumes most of the financial risk for the ultimate project outcomes.

Qualitative Control: A system of practices that reduces or eliminates pollutants that might otherwise be carried by surface runoff. Design parameters include water quality volume and recharge volume. Water quality volume can be converted into equivalent acreage of impervious surface restored.

Quantitative Control: A system of practices that controls the increased volume and rate of surface runoff caused by man-made changes to the land. Design parameters include channel protection volume and flood protection volumes.

Reserve: Amount of revenue held to demonstrate ability to repay a debt service mechanism or to hedge against an unforeseen economic downturn.

Revenue: Cash received from external sources to supply specific funds.

Revenue bond: An official document authorized by a governing body to complete CIP projects using a debt service, with a specific enterprise fund used as collateral.

Request for Proposal: a document used by a company or organization to procure a good or service, typically through a bidding process.

Runoff: The portion of water during a storm that runs over the land instead of evaporating or being soaked through the ground surface.

SRLF: State revolving loan fund

TMDL: Total Maximum Daily Load, the maximum amount of a pollutant a water body can receive and still meet water quality standards; “pollution diet”. Developed when a substance exceeds water quality standards.

Watershed: An area of land that drains down slope to the lowest point, discharging to a river or other body of water

WIP: Watershed Implementation Plan; document that sets the way an agency will meet the regulatory requirements.

WPRP Fund: Watershed Protection and Restoration Program Fund.

WQA: Water Quality Analysis, developed when supplemental data indicates the water body is meeting water quality standards for that substance

*Some definitions obtained from Baltimore City Department of Public Works Glossary of Terms

IX. Appendices

Appendix A: Abbreviations and Classifications of BMPs

Table A-1: BMP Classes

Code	Code Description
A	Alternative BMP
E	ESD
S	Structural BMP

Table A-2: Alternative BMPs

Code	Code Description	Category
CBC	Catch Basin Cleaning	Programmatic
FPU	Planting Trees or Forestation on Previous Urban	Upland
IMPF	Impervious Surface Elimination (to forest)	Upland
IMPP	Impervious Surface Elimination (to pervious)	Upland
MSS	Mechanical Street Sweeping	Programmatic
OUT	Outfall Stabilization	In-Stream
SDV	Storm Drain Vacuuming	Programmatic
SEPC	Septic Connections to WWTP	Upland
SEPD	Septic Denitrification	Upland
SEPP	Septic Pumping	Programmatic
SHST	Shoreline Stabilization	In-Stream
SPSC	Step Pool Storm Conveyance	In-Stream
STRE	Stream Restoration	In-Stream
VSS	Regenerative/Vacuum Street Sweeping	Programmatic

Table A-3: Environmental Site Design (ESD) BMPs

Code	Code Description	Category
Alternative Surfaces		
AGRE	Green Roof – Extensive	Upland
AGRI	Green Roof – Intensive	Upland
APRP	Permeable Pavements	Upland
ARTF	Reinforced Turf	Upland
Micro-Scale Practices		
MENF	Enhanced Filters	Upland
MIBR	Infiltration Berms	Upland
MIDW	Dry Well	Upland
MILS	Landscape infiltration	Upland
MMBR	Micro-Bioretenion	Upland
MRNG	Rain Gardens	Upland
MRWH	Rainwater Harvesting	Upland
MSGW	Submerged Gravel Wetlands	Upland
MSWB	Bioswale	Upland
MSWG	Grass Swale	Upland
MSWW	Wet Swale	Upland
Nonstructural Techniques		
NDNR	Disconnection of Non-Rooftop Runoff	Upland
NDRR	Disconnection of Rooftop Runoff	Upland
NSCA	Sheetflow to Conservation Areas	Upland

Table A-4: Structural BMPs

Code	Code Description	Category
Filtering Systems		
FBIO	Bioretention	Upland
FORG	Organic Filter (Peat Filter)	Upland
FPER	Perimeter (Sand) Filter	Upland
FSND	Sand Filter	Upland
FUND	Underground Filter	Upland
Infiltration		
IBAS	Infiltration Basin	Upland
ITRN	Infiltration Trench	Upland
Open Channels		
ODSW	Dry Swale	Upland
OWSW	Wet Swale	Upland
Ponds		
PMED	Micropool Extended Detention Pond	Upland
PMPS	Multiple Pond System	Upland
PPKT	Pocket Pond	Upland
PWED	Extended Detention Structure, Wet	Upland
PWET	Retention Pond (Wet Pond)	Upland
Wetlands		
WEDW	Extended Detention - Wetland	Upland
WPKT	Pocket Wetland	Upland
WPWS	Wet Pond – Wetland	Upland
WSHW	Shallow Marsh	Upland
Other Practices		
XDED	Extended Detention Structure, Dry	Upland
XDPD	Detention Structure (Dry Pond)	Upland
XFLD	Flood Management Area	Upland
XOGS	Oil Grit separator	Upland
OTH	Other	Upland

Appendix B: Calculations

General

Impervious Acre Baseline = (total impervious acres not treated to the MEP jurisdiction-wide) * (20% MS4 permit restoration requirement)

Table 2: Restoration complete was determined by dividing the total acres restored (gathered from FY17 MS4 Annual Reports) by the total updated impervious acre baseline.

Percent of project completion by the end of the 5-year permit term was determined by dividing the total acres completed and projected to be restored (using the FY16 FAP data) by the total updated impervious acre baseline.

Tables 3: Cost per Acre = Cost/Total Projected Permit Term Restoration

Funding Gap Analysis

- Anne Arundel County
 - \$135,002,537 = FY19 - FY20 revenue (from FAP ISRP Revenue worksheet)
 - \$134,241,812 = FY19 - FY20 cost
 - \$760,725 = FY19 - FY20 remaining funds after cost
 - 1,180 = Remaining impervious acres to meet ISRP requirement (impervious acre baseline – projected acres to be restored)
 - \$20,102 = County restoration cost per impervious acre
 - \$23,720,360 = Funding gap for remaining acres (number of remaining acres * restoration cost/acre)
 - \$22,959,635 = Funding gap (funding gap for remaining acres - remaining funds)
- Baltimore City
 - \$64,514,600 = FY19 - FY20 revenue (from FAP ISRP Revenue worksheet)
 - \$43,036,901 = FY19 - FY20 cost
 - \$21,477,699 = FY19 - FY20 remaining funds after cost
- Baltimore County
 - \$37,187,525 = FY19 - FY20 revenue (from FAP ISRP Revenue worksheet)
 - \$37,187,525 = FY19 - FY20 cost
 - \$0 = FY19 - FY20 remaining funds after cost
- Carroll County
 - \$12,590,741 = FY19 - FY20 revenue (from FAP ISRP Revenue worksheet)
 - \$12,240,840 = FY19 - FY20 cost
 - \$349,901 = FY19 - FY20 remaining funds after cost
 - 68 = Remaining impervious acres to meet ISRP requirement (impervious acre baseline – projected acres to be restored)
 - \$15,468 = County restoration cost per impervious acre
 - \$1,051,824 = Funding gap for remaining acres (number of remaining acres * restoration cost/acre)
 - \$701,923 = Funding gap (funding gap for remaining acres - remaining funds)

- Charles County
 - \$29,775,400 = FY19 - FY20 revenue
 - \$33,017,600 = FY19 - FY20 cost
 - -\$3,242,200 = FY19 - FY20 remaining funds after cost
- Frederick County
 - \$17,696,666 = FY19 - FY20 revenue
 - \$17,696,666 = FY19 - FY20 cost
 - \$0 = FY19 - FY20 remaining funds after cost
 - 1,874 = Remaining impervious acres to meet ISRP requirement (impervious acre baseline – projected acres to be restored)
 - \$38,680 = County restoration cost per impervious acre
 - \$72,486,320 = Funding gap for remaining acres (number of remaining acres * restoration cost/acre)
 - \$72,486,320 = Funding gap (funding gap for remaining acres - remaining funds)
- Harford County
 - \$23,700,000 = FY19 - FY20 revenue
 - \$26,620,000 = FY19 - FY20 cost
 - -\$2,920,000 = FY19 - FY20 remaining funds after cost
- Howard County
 - \$71,523,375 = FY19 - FY20 revenue
 - \$67,622,105 = FY19 - FY20 cost
 - \$3,901,270 = FY19 - FY20 remaining funds after cost
 - 715 = Remaining impervious acres to meet ISRP requirement (impervious acre baseline – projected acres to be restored)
 - \$60,661 = County restoration cost per impervious acre
 - \$43,372,615 = Funding gap for remaining acres (number of remaining acres * restoration cost/acre)
 - \$39,471,345 = Funding gap (funding gap for remaining acres - remaining funds)
- Montgomery County
 - \$150,791,470 = FY19 - FY20 revenue
 - \$150,791,470 = FY19 - FY20 cost
 - \$0 = FY19 - FY20 remaining funds after cost
 - 149 = Remaining impervious acres to meet ISRP requirement (impervious acre baseline – projected acres to be restored)
 - \$63,604 = County restoration cost per impervious acre
 - \$9,476,996 = Funding gap for remaining acres (number of remaining acres * restoration cost/acre)
 - \$9,476,996 = Funding gap (funding gap for remaining acres - remaining funds)
- Prince George's County
 - \$139,181,119 = FY19 - FY20 revenue
 - \$179,625,539 = FY19 - FY20 cost
 - -\$40,444,420 = FY19 - FY20 remaining funds after cost

BMP Analysis

- The pie chart for implemented BMPs was created using the total impervious acres restored during the reported permit term. If necessary, the impervious acres used factored in corrections for formula errors and/or improperly placed BMPs.
- Permit term implementation amounts for the specific types, or groups, of BMPs were calculated by using the total impervious area treated and total cost of each BMP type/group implemented in all 10 MS4s. When a project was reported with multiple BMP types and/or classes but only a single cost and impervious acres treated, the project cost and impervious acres treated were not separated for each specific BMP. Instead, the groups were reported as “Combined [Alternative], ESD, and Structural” practices.
- Specific corrections for the BMP and funding analyses were:
 - Anne Arundel County
 - Removed BMP type “BASE” for FY16 and FY17 as this was not a valid BMP.
 - Excluded duplicate restoration projects that were reported in both the All Actions and Specific Actions worksheets.
 - Baltimore County
 - Used the average impervious acres for septic pumping instead of the sum. Septic pumping is an annual practice and may not be summed.
 - Carroll County
 - Practices that do not provide water quality treatment (i.e., XFLD) were excluded from the analysis.
 - Charles County
 - When single projects included multiple BMPs, the project was reported as “Combined ESD and Structural Practices”, “Combined Structural Practices”, or “Micro-scale Practices”.
 - One project, reported as “PWED, ODSW, FPU”, treats 26 impervious acres and was placed in the “Combined Structural Practices” category.
 - Frederick County
 - Removed BMP “Operating Support of CIP” from restoration cost since a specific BMP type was not identified.
 - Street sweeping costs were excluded from the restoration analysis since no credit was claimed.
 - Howard County
 - Excluded MS4 Program data costs not associated with the ISRP. These costs were subtracted from the county ISRP costs to bring it into alignment with the other jurisdictions and the formulas used.
 - Costs associated with practices that do not provide water quality treatment (e.g., XDED, XOTH) were excluded from the analysis.
 - Used the average implementation for Septic pumping instead of the sum. Septic pumping is an annual practice and may not be summed.

- Montgomery County
 - Practices that do not provide water quality treatment (e.g., XDED, XDPD) were not included in the analysis.
 - Costs for future street sweeping efforts were excluded from the restoration analysis since no credit was claimed.
 - Operating costs for debt service payments and the RainScapes program were excluded from the analysis since they are associated with a specific BMP and no impervious acres were claimed.
- Prince George's County
 - A BMP that does not provide water quality treatment, i.e., XDED, was not included in the analysis.
 - For the funding analysis, debt service installments were subtracted.

Appendix C: Additional Tables from Analysis

Table C-1: Impervious Acres Completed and Projected to be Restored by Upland BMPs

BMP Type ¹	Total Impervious Acres Treated ¹	Total Cost ¹	Cost/Acre ²
Generic BMPs ³	3591	\$140,522,127	\$47,196
Ponds	2628	\$106,609,086	\$42,141
Filtering Practices	1842	\$128,949,150	\$73,756
Wetlands	1526	\$38,102,126	\$26,445
Tree Planting	757	\$25,554,288	\$36,312
Septic Connections and Upgrades	627	\$8,738,534	\$19,292
Micro-scale Practices	476	\$41,277,601	\$111,749
Nonstructural Techniques	297	\$357,604	\$67,109
Combined ESD and Structural Practices	88	\$11,709,476	\$132,355
Impervious Surface Elimination	74	\$789,267	\$321,459
Combined Structural Practices	63	\$1,382,217	\$21,909
Alternative Surfaces	63	\$27,442,140	\$449,831
Infiltration Practices	41	\$1,441,837	\$39,212
Combined Alt., ESD, and Structural Practices	25	\$6,367,508	\$254,741
Combined Alt. and ESD Practices	3	\$846,279	\$278,932
Open Channel Practices	1	\$119,814	\$164,129
<hr/>			
12,103			

1. Restoration data obtained from FY16 FAPs. BMPs were grouped based on their class, type, and function.
2. The cost per acre was calculated by dividing the total cost of the specific BMP type in the 10 MS4s by the total impervious acres treated by the specific BMP type in the 10 MS4s. Impervious acres treated from BMPs with a cost of \$0 were excluded from the cost per acre analysis. Therefore, the total impervious acres treated reflects all of the acres treated by a specific BMP type while the cost per acre represents the cost per acre for only those BMPs with actual costs.
3. Generic BMPs includes unspecified Alternative, ESD, and Structural practices that are part of retrofit, conversion, redevelopment, watershed association, and new BMP projects.

Table C-2: Impervious Acres Completed and Projected to be Restored by In-Stream BMPs

BMP Type ¹	Total Impervious Acres Treated ¹	Total Cost ¹	Cost/Acre ²
Stream Restoration ³	4,725	\$312,002,733	\$66,354
Shoreline Stabilization	1,331	\$15,828,261	\$23,226
Step Pool Storm Conveyance ⁴	772	\$52,556,681	\$68,116
Outfall Stabilization	262	\$11,675,083	\$47,229
	7,090		

1. Restoration data obtained from FY16 FAPs. BMPs were grouped based on their class, type, and function.
2. The cost per acre was calculated by dividing the total cost of the specific BMP type in the 10 MS4s by the total impervious acres treated by the specific BMP type in the 10 MS4s. Impervious acres treated from BMPs with a cost of \$0 were excluded from the cost per acre analysis. Therefore, the total impervious acres treated reflects all of the acres treated by a specific BMP type while the cost per acre represents the cost per acre for only those BMPs with actual costs.
3. Includes projects reported as a combination of STRE and FPU
4. Includes projects reported as a combination of SPSC and MENF, MRNG, or STRE.

Table C-3: Impervious Acres Completed and Projected to be Restored by Programmatic BMPs

BMP Type ¹	Total Impervious Acres Treated ¹	Total Cost ¹	Cost/Acre ²
Street Sweeping ³	6,024	\$32,370,189	\$5,373
Nutrient Trading with WWTP ⁴	4,945	\$0	\$0
Septic Pumping	984	\$1,048,755	\$3,556
Storm Drain Vacuuming	182	\$17,253,432	\$94,756
Catch Basin Cleaning	122	\$1,562,764	\$12,810
	12,257		

1. Restoration data obtained from FY16 FAPs. BMPs were grouped based on their class, type, and function.
2. The cost per acre was calculated by dividing the total cost of the specific BMP type in the 10 MS4s by the total impervious acres treated by the specific BMP type in the 10 MS4s. Except for nutrient trading with WWTP, impervious acres treated from BMPs with a cost of \$0 were excluded from the cost per acre analysis. Therefore, the total impervious acres treated reflects all of the acres treated by a specific BMP type while the cost per acre represents the cost per acre for only those BMPs with actual costs.
3. Street sweeping includes regenerative/vacuum and mechanical street sweeping as well as an unspecified type of street sweeping.
4. While proposed by several MS4s, trading regulations were officially adopted to allow for this treatment option

**Appendix D: FY17 *Watershed Protection and Restoration*
*Program Annual Reports***

Watershed Protection and Restoration Program Annual Report Table

Article 4-201.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element	Cost	Percent of WPRF
Capital Improvements for Stormwater Management	\$6,470,043.43	39.84%
Property Management	\$5,700,717.10	35.11%
Public Education and Outreach	\$405,633.80	2.50%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$3,133,496.36	19.30%
Review of Stormwater Management Plans and Permit Applications for New Development		0.00%
Grants to Nonprofit Organizations	\$77,328.95	0.48%
Adminstration of WPRF	\$451,058.12	2.78%
TOTAL	\$16,238,277.76	100.00%

Number of Properties Subject to Fee 212,980
 Reporting Year 2017
 Permit Number 11-DP-3316 MD0068306
 Comments:

Jurisdiction	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy
Anne Arundel County	Department of Public Works	Yes	
<p>Directions:</p> <p>Notes:</p> <p>ERU = Equivalent residential unit</p>		<p>Use: Yes or No</p>	<p>Use the approval date or N/A</p>
			<p>N/A</p>

Fee Reduction Amount	Annual Single Family Residential Rate	Annual Commercial Rate	Equivalent Residential Unit (ERU) impervious	Commercial Capped Rates
80% phase in for FY15	34-170	\$85 per ERU	2,940	25% of property tax

Reduction amount(s), if any, with reason for reduction(s)

Use: N/A, amount of flate rate, rate amount per ERU, etc.

Rate Structures		
Non-profits, Religious Organizations	Exemptions	Federal Facilities Status
\$1		

General description of exemption(s), if any

Use: No Facilities,
Exempt, or Charged

	Additional Sources of Funds	
Federal Facility Fee(s)/Rate(s)	Additional Source 1	Additional Source 2

Use: N/A or the fee and rate structures for federal facilities

Additional Source 3	Estimated Annual Revenue
	\$22,029,455.33

Notes

Article 4-201.1(i)(3): The amount of money deposited into the watershed protection and restoration fund in the previous fiscal year by source

Source	Amount
Annual Single Family Residential Fees Collected	\$ 12,588,909.73
Annual Commercial Fees Collected	\$ 8,378,572.84
Non-profits, Religious Orgs Fees Collected	\$ 752.94
Additional Source 1-HOA, multifamily, private roads	\$ 853,566.10
Additional Source 2-Interfund recoveries*	\$ 767,730.83
Additional Source 3- Investment income	\$ 336,820.72
	\$ 22,926,353.16

All SWM Projects Implemented in Previous FY for the 20% Restoration Requirement

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	PROJECTED IMPL YR	IMPL STATUS	IMPL COMP YR
AA17RST000051	SPSC	A		3.1	6/30/2014	\$114,083	2017	Complete	
AA17RST000050	SPSC	A		4.84	7/16/2017	\$425,189	2017	Complete	
AA17RST000033	FBIO	S		0.46	2/1/2012	\$72,585	2017	Complete	
AA17RST000034	FBIO	S		3.78	2/1/2012	\$72,585	2017	Complete	
AA17RST000035	PWET	S		11.19	8/13/2013	\$324,787	2017	Complete	
AA17RST000049	SPSC	A		3.9	7/25/2013	\$267,992	2017	Complete	
AA16RST000072	SPSC	A		2.7	12/9/2016	\$310,117	2017	Complete	
AA16RST000036	PWET	S		13.7	10/22/2016	\$455,727	2017	Complete	
AA16RST000037	IBAS	S		5.7	3/10/2017	\$471,842	2017	Complete	
AA17RST000012	MRNG	E		0.3	7/1/2016	\$14,360	2017	Complete	
AA17RST000013	MRNG	E		0.5	7/1/2016	\$14,360	2017	Complete	
AA17RST000014	MRNG	E		0.3	7/1/2016	\$14,360	2017	Complete	
AA16RST000045	IBAS	S		4.5	11/22/2016	\$187,063	2017	Complete	
AA17RST000026	PWET	S		3.6	7/30/2016	\$249,583	2017	Complete	
AA16RST000041	IBAS	S		5.4	1/6/2017	\$282,566	2017	Complete	
AA17RST000027	FSND	S		0.3	1/2/2017	\$161,026	2017	Complete	
AA17RST000029	ITRN	S		0.2	3/7/2017	\$161,026	2017	Complete	
AA17RST000017	SPSC	A		0.3	1/1/2017	\$55,255	2017	Complete	
AA16RST000070	PWET	S		17	8/3/2016	\$400,681	2017	Complete	
AA16RST000067	WEDW	S		13.4	1/31/2017	\$589,841	2017	Complete	
AA17RST000020	MSWB	E		0.61	8/17/2016	\$45,000	2017	Complete	
AA16RST000075	MSWB	E		0.4	9/1/2016		2017	Complete	NGO Project
AA16RST000078	APRP	E		0.8	9/1/2016		2017	Complete	NGO Project
AA16RST000079	APRP	E		1.2	9/1/2016		2017	Complete	NGO Project
AA16RST000080	APRP	E		1.4	9/1/2016		2017	Complete	NGO Project
AA16RST000081	APRP	E		0.3	9/1/2016		2017	Complete	NGO Project
AA17RST000030	APRP	E		1.5	9/1/2016		2017	Complete	NGO Project
AA17RST000031	MRNG	E		0.04	9/1/2016		2017	Complete	NGO Project
AA16RST000040	WEDW	S		4.4	1/6/2017	\$776,740	2017	Complete	
AA16RST000086	SPSC	A		8.82	4/15/2017	\$485,312	2017	Complete	
AA17RST000025	PWET	S		4.6	10/24/2016	\$312,398	2017	Complete	
AA16RST000068	IBAS	S		7.0	4/28/2017	\$370,778	2017	Complete	
AA16RST000038	PWET	S		4.6	7/19/2016	\$339,092	2017	Complete	
AA17RST000016	SPSC	A		0.4	3/1/2017	\$102,390	2017	Complete	
AA17RST000019	MRNG	E		0.4	3/1/2017	\$15,000	2017	Complete	
AA17RST000028	FBIO	S		0.3	11/21/2016	\$161,026	2017	Complete	
AA16RST000035	PWET	S		36.5	4/28/2017	\$754,381	2017	Complete	
AA17ALN000006	STRE	A		1.50	2/21/2017	\$336,490	2017	Complete	
AA17ALN000005	STRE	A		10.11	4/2/2017		2017	Complete	NGO Project
	SHST	A	45	318.12			2017	Complete	Shoreline Restoration
	MSS	S		239.81		\$224,527	2017	Complete	Street Sweeping

	SEPD	A	190	40.56			2017	Complete	Septic Conversion Septic Pump Out Inlet Cleaning
	SEPC	A	32	12.48			2017	Complete	
	SEPP	A		171.50			2017	Complete	
	VSS	S		96.50		\$59,739	2017	Complete	
	OUT	A	4	2.50		\$213,608	2017	Complete	
				1,061.1		\$8,841,511.16			

Watershed Protection and Restoration Program Annual Report Table

Article 4-202.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element	Cost	Percent of WPRF
Capital Improvements for Stormwater Management	\$7,249,705.00	35.37%
Operation and maintenance of stormwater management systems and facilities	\$10,602,486.00	51.72%
Public Education and Outreach	\$414,161.00	2.02%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$739,208.00	3.61%
Review of Stormwater Management Plans and Permit Applications for New Development	\$1,121,548.00	5.47%
Grants to Nonprofit Organizations	\$101,341.00	0.49%
Administration of WPRF	\$270,039.00	1.32%
TOTAL	\$20,498,488.00	100.00%

Number of Properties Subject to Fee 223,623
 Reporting Year 207
 Permit Number 11-DP-3315
 Comments: Includes payment of debt service.

VERSION 3-8-16

Jurisdiction	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy
Baltimore City	Department of Public Works	Yes	NA
<p style="text-align: right;">Use: Yes or No Use the approval date or N/A</p> <p>Directions:</p> <p>Notes:</p> <p>ERU = Equivalent residential unit</p> <p>2 - SFR Rate structure is 3 tiered based on impervious area: \$40 / yr for less than 820 sf IA, \$60 / yr for 820 to 1,500 sf IA, \$120 / yr for more than 1,500</p> <p>3 -Estimated annual revenue listed includes the amount billed for the stormwater fee, plus the miscellaneous fees collected.</p> <p>Fee structure and rate established in July 2013 to remain constant for at least 4 years (July 2017).</p> <p>VERSION 3-8-16</p>			

Fee Reduction Amount	Annual Single Family Residential Rate	Annual Commercial Rate	Equivalent Residential Unit (ERU) impervious	Commercial Capped Rates
NA	\$30 - 120 ²	\$60 / ERU	1,050 sf	Capped at 20% of all State and local property taxes

Reduction amount(s), if any, with reason for reduction(s)

Use: N/A, amount of flate rate, rate amount per ERU, etc.

sf IA

Rate Structures		
Non-profits, Religious Organizations	Exemptions	Federal Facilities Status
\$12 / ERU on religious and K-12 education structures	IA permitted to public ww system; streets privately maintained and open to public in SFR communities, IA requires as a superfund cap, solar panel bases.	Charged

General description of exemption(s), if any

Use: No Facilities,
Exempt, or Charged

Federal Facility Fee(s)/Rate(s)	Additional Sources of Funds	
	Additional Source 1	Additional Source 2
\$60 / yr / ERU	SWM/ESC Misc. Fees for permitting and penalties: \$50,000	

Use: N/A or the fee and rate structures for federal facilities

Additional Source 3	Estimated Annual Revenue
	\$ 31,001,450.00

Notes

Article 4-202.1(i)(3): "The amount of money deposited into the watershed protection and restoration fund in the previous fiscal year by source;"

Source	Amount
Stormwater Remediation Fee	\$30,895,440.00
SWM/ ESC Miscellaneous Fees	\$ 106,010.00
	<hr/>
	\$ 31,001,450.00

VERSION 3-8-16

All SWM Projects Implemented in Previous FY for the 20% Restoration Requirement

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	IMPL STATUS	IMPL COMP YR
BC16APY000036	VSS	A	1	3,400	6/30/2017	\$4,942,590	79.2%	2016
				3,400		\$4,942,590		

VERSION 3-8-16

Baltimore County

Watershed Protection and Restoration Program Annual Report Table

Article 4-202.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element	Cost	Percent of WPRF
Capital Improvements for Stormwater Management	\$12,366,794	38.69%
O & M of SWM Systems and Facilities	\$523,976	1.64%
Public Education and Outreach	\$0	0.00%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$1,362,114	4.26%
Review of Stormwater Management Plans and Permit Applications for New Development	\$0	0.00%
Grants to Nonprofit Organizations	\$240,646	0.75%
Adminstration of WPRF	\$0	0.00%
TOTAL	\$14,493,531	45.34%

Number of Properties Subject to Fee 259,737
 Reporting Year 2017
 11-DP-3317
 Permit Number MD0068314

Comments:
 Cost information is FY2017.
 Percent of WPRF calculated as FY2017 cost divided by FY2017 funds deposited.

Jurisdiction	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy
Baltimore County	Department of Environmental Protection and Sustainability	Yes	N/A

Use: Yes or No Use the approval date or N/A

Directions:

Notes:

ERU = Equivalent residential unit

VERSION 4-7-16

Fee Reduction Amount

1. SWM BMPs: Impervious treated by SWM BMPs discharge less pollution into water bodies, and require expenditures for construction and maintenance. In recognition of the water quality benefits and financial costs of SWM BMPs, impervious surfaces draining to a SWM BMP are discounted. The rate of discount based on SWM BMP efficiencies used by the Chesapeake Bay Program at the time the fee program was developed. This SWM BMP reduction is only available to Commercial and Institutional properties. SWM BMPs constructed and maintained with exclusively County or State funding do not provide a discount. Discount for a property cannot exceed 74% of ERUs, as 26% of the impervious surfaces in Baltimore County are on public land and every property should help pay for those shared impervious surfaces.

- 1.1. Detention or Hydrodynamic Structures: 8.3% reduction of ERUs.
- 1.2. Extended Detention: 33.3% reduction of ERUs.
- 1.3. Wet Ponds and Wetlands: 41.6% reduction of ERUs.
- 1.4. Infiltration Practices: 88.6% reduction of ERUs.
- 1.5. Filtration Practices: 60.0% reduction of ERUs.
- 1.6. ESD Practices: 66.6% reduction of ERUs.

2. Clean Marina participation: The DNR Clean Marina program reduces pollution that is discharged directly into the Chesapeake Bay through direct and indirect mechanisms. To encourage and reward Clean Marina participation, certified Clean Marinas receive a 50% reduction of ERUs.

3. Commercial-Residential primary residence credit: When a property supports both the owner's primary residence and a commercial business, it is unfair to bill the single family dwelling at the higher commercial rate. Therefore, the fee is reduced by an amount equal to the difference between 1 ERU at the commercial rate and 1 single family dwelling rate, subject to a minimum fee of 1 single family dwelling.

4. Mobile Home Parks: Instead of billing based on the impervious surface on site, mobile home parks are billed by tallying the number of mobile homes in the park and multiplying by the single family detached fee rate.

Reduction amount(s), if any, with reason for reduction(s)

Rate				
Annual Single Family Residential Rate	Annual Commercial Rate	Equivalent Residential Unit (ERU) impervious	Commercial Capped Rates	Non-profits, Religious Organizations
Detached: \$17.00 per dwelling Attached: \$9.00 per dwelling Condo: \$15.00 per dwelling unit	\$31.00 per ERU Note that commercial includes non-condo multifamily dwellings (e.g. apartment buildings).	2000 sq ft	N/A	\$9.00 per ERU

Use: N/A, amount of flate rate, rate amount per ERU, etc.

Structures			
Exemptions	Federal Facilities Status	Federal Facility Fee(s)/Rate(s)	Additional Source 1: Interest
1. Agricultural land without a dwelling is exempt. 2. Single Family Residential with no dwelling is exempt. 3. Financial Hardship exemption: primary residence of a person who receives one or more of the following: <ul style="list-style-type: none"> • the Local Supplement to the Homeowner's Tax Credit (section 9-104 of Tax-Property Article of the Annotated Code of Maryland), • the property tax exemption for a disabled veteran or the surviving spouse of a disabled veteran (Section 7-208 of the Tax-Property Article of the Annotated Code of Maryland), • the property tax credit for surviving spouses of fallen law enforcement officers or rescue workers (section 11-2-109 of the Baltimore County Code 2003), or • the property tax credit for disabled law enforcement officers or rescue workers (section 11-2-109.1 of the Baltimore County Code 2003). 	Charged	\$9.00 per ERU	\$ 206,453

General description of exemption(s), if any	Use: No Facilities, Exempt, or Charged	Use: N/A or the fee and rate structures for federal facilities

Additional Sources of Funds				Estimated Annual Revenue
Additional Source 2: Metro Funds	Additional Source 3: General Obligation Bonds	Additional Source 4: State Aid	Additional Source 5: General Funds	
\$ 10,000,000	\$ 2,115,000	\$ 6,650,000	\$ 2,100,000	\$ 31,966,601

Notes

Estimated Annual Revenue is actual total cash collection of fees in FY2017, plus the additional sources.

Article 4-202.1(i)(3): "The amount of money deposited into the watershed protection and restoration fund in the previous fiscal year by source;"

Source	Amount
Cash Collections of Fee to Fund	\$ 10,895,147
Estimated Annual Single Family Detached Fees Collected	\$ 2,718,454
Estimated Annual Single Family Attached Fees Collected	\$ 599,964
Estimated Annual Single Family Condo Fees Collected	\$ 302,499
Estimated Annual Commercial Fees Collected	\$ 7,025,889
Estimated Non-profits, Religious Orgs Fees Collected	\$ 248,341
Estimated Interest	\$ 206,453
Metro Funds Made Available	\$ 10,000,000
General Funds (9331R)	\$ -
Reallocated General Funds (9339R)	\$ 2,100,000
Current/Future G O Bonds (9441R)	\$ -
Reallocated G O Bonds (9449R)	\$ 2,115,000
Storm Water Waiver Fee (9650R)	\$ -
State Aid (9229R)	\$ 6,650,000
Reallocated State Aid (9236R)	\$ -
St Waterway Improve Fund (9226R)	\$ -
Department Natural Resources (9222R)	\$ -
Federal/State Aid (9119R)	\$ -
Other (9679R)	\$ -
	\$ 31,966,601

Estimates calculated as percent of fees billed per category multiplied by cash collections of fee to fund.

This is an environmental fund as per Article 4-202.1(h)(5). Some of these funds are to be expended on purposes other than those authorized in 4-202.1(h)(4).

All SWM Projects Implemented in Previous FY for the 20% Restoration Requirement

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	IMPL STATUS	IMPL COMP YR
Reforestation at Dulaney Springs Park	FPU	A		2.01	3/31/2016	\$50,419.00	Complete	2017
Reforestation at Heller Property	FPU	A		1.18	3/31/2016	\$31,794.00	Complete	2017
BA-10408.01: Conversion of Pond #408	SF	S	1	4.25	5/4/16	\$95,701.93	Complete	2017
BA-11112.01: Conversion of Pond #1112	SF	S	1	2.90	5/4/16	\$63,120.86	Complete	2017
BA-10270.01: Conversion of Pond #270	SF	S	1	2.80	5/4/16	\$62,080.52	Complete	2017
BA-10157.01: Conversion of Pond #157	SF	S	1	11.69	5/4/16	\$70,069.02	Complete	2017
BA-13478.01: Conversion of Pond #3478	SF	S	1	1.10	6/22/16	\$130,209.84	Complete	2017
BA-10850.01: Conversion of Pond #850	SF	S	1	8.80	7/11/16	\$60,500.15	Complete	2017
Conversion of Pond #1054	SF	S	1	4.20	7/11/16	\$91,013.46	Complete	2017
Part of facility #5529	IMPP	A	1	0.02	8/12/2016		Complete	2017
Part of facility #4199	IMPP	A	1	0.07	8/15/2016		Complete	2017
Part of facility #5498	IMPP	A	1	0.02	8/30/2016		Complete	2017
Reforestation at Tufon Springs	FPU	A		0.53	9/15/2016	\$39,900.00	Complete	2017
Part of facility #5549	IMPP	A	1	0.03	9/22/2016		Complete	2017
Part of facility #4816	IMPP	A	1	0.02	10/13/2016		Complete	2017
Part of facility #5445	IMPP	A	1	0.41	10/13/2016		Complete	2017
Part of facility #5428.5	IMPP	A	1	0.11	10/24/2016		Complete	2017
Reforestation at Cromwell	FPU	A		0.72	10/28/2016	\$245,420.00	Complete	2017
Reforestation at Cromwell	FPU	A		9.23	10/28/2016		Complete	2017
Reforestation at Rost Property	FPU	A		0.68	11/4/2016	\$19,000.00	Complete	2017
Reforestation at Foreston Rd2	FPU	A		0.61	11/5/2016	\$16,796.00	Complete	2017
Reforestation at Shaper Property	FPU	A		1.38	11/7/2016	\$42,795.00	Complete	2017
Reforestation at Rollins-Frank Property2	FPU	A		1.66	11/11/2016	\$46,575.00	Complete	2017
BA-56081 & 56106: Reforestation at Hernwood ES	FPU	A	1	1.31	11/19/16	\$24,046.00	Complete	2017
Reforestation at Foxhall Sec 1	FPU	A		0.48	11/22/2016	\$15,400.00	Complete	2017
Part of facility #5427	IMPP	A	1	0.25	11/28/2016		Complete	2017
Reforestation at Strathy Property	FPU	A		0.26	11/30/2016	\$8,081.00	Complete	2017
BA-57132 & 57144: Reforestation at Charlestown Retirement Community (not part of 2017 NPDES Report)	FPU	A	1	0.20	12/1/16	\$18,191.53	Complete	2017
BA-57134 & 57145: Reforestation at Evergreen at Putty Hill (not part of 2017 NPDES Report)	FPU	A	1	0.10	12/2/16	\$9,936.81	Complete	2017

Reforestation at Brooke Property	FPU	A		0.41	12/2/2016	\$10,308.00	Complete	2017 Reforestation at Brooke Property
BA-57244: Reforestation at Ballards Garden	FPU	A		0.05	12/3/16	\$9,916.00	Complete	2017 Reforestation at Ballards Garden
BA-56086: Reforestation at Page Property	FPU	A	1	0.38	12/5/16	\$12,659.00	Complete	2017 Reforestation at Page Property
Reforestation at Seventh District and Warnick Property	FPU	A		0.48	12/5/2016	\$13,544.00	Complete	2017 Reforestation at Seventh District and Warnick Property
Reforestation at Clemments	FPU	A		0.07	12/7/2016	\$2,198.00	Complete	2017 Reforestation at Clemments
Reforestation at Coats	FPU	A		0.14	12/7/2016	\$1,681.00	Complete	2017 Reforestation at Coats
BA-11732.01: Conversion of Pond #1732	SF	S	1	2.90	12/9/16	\$183,778.24	Complete	2017 Conversion of Pond #1732
BA-11744.01: Conversion of Pond #1744	SF	S	1	2.28	12/27/16	\$99,773.00	Complete	2017 Conversion of Pond #1744
Part of facility #5125	IMPP	A	1	1.02	1/9/17		Complete	2017 Part of facility #5125
Part of facility #5150	IMPP	A	1	0.00	1/24/17		Complete	2017 Part of facility #5150
Part of facility #5150	IMPP	A	1	0.01	1/24/2017		Complete	2017 Part of facility #5150
Reforestation at Burton	FPU	A		0.17	3/29/2017	\$4,751.00	Complete	2017 Reforestation at Burton
Reforestation at Stead	FPU	A		0.21	3/29/2017	\$4,751.00	Complete	2017 Reforestation at Stead
Reforestation at Meadowcroft	FPU	A		0.38	3/31/2017	\$9,484.00	Complete	2017 Reforestation at Meadowcroft
Part of facility #5303	IMPP	A	1	0.07	3/31/2017		Complete	2017 Part of facility #5303
BA-56025: Reforestation at Brich Property	FPU	A	1	0.08	4/7/17	\$1,596.00	Complete	2017 Reforestation at Brich Property
BA-56037: Reforestation at Seligson Property	FPU	A		0.19	4/7/17	\$2,362.00	Complete	2017 Reforestation at Seligson Property
Part of facility #4593	IMPP	A	1	0.28	4/12/2017		Complete	2017 Part of facility #4593
Reforestation at Harris Mill Property (Wood)	FPU	A		0.38	4/22/2017	\$11,410.00	Complete	2017 Reforestation at Harris Mill Property (Wood)
Part of facility #5479	IMPP	A	1	0.40	4/26/2017		Complete	2017 Part of facility #5479
Part of facility #5479	IMPP	A	1	0.15	4/26/2017		Complete	2017 Part of facility #5479
Reforestation at Springfield Farm	FPU	A		1.22	4/28/2017	\$23,283.00	Complete	2017 Reforestation at Springfield Farm
Reforestation at FOP Lodge #34	FPU	A		0.45	5/1/2017	\$16,611.00	Complete	2017 Reforestation at FOP Lodge #34
Part of facility #5568	IMPP	A	1	0.02	5/10/2017		Complete	2017 Part of facility #5568
BA-56083: Reforestation at Joppa View ES	FPU	A	1	0.48	5/16/17	\$12,316.00	Complete	2017 Reforestation at Joppa View ES
5 giveaways in FY17, last giveaway date used	FPU	A	2,590	9.84	5/19/17	\$0.00	Complete	2017 5 giveaways in FY17, last giveaway date used
BA-10596.01: Conversion of Pond #596	SF	S	1	3.80	5/24/17	\$173,044.07	Complete	2017 Conversion of Pond #596
Reforestation at Cogan	FPU	A		0.56	6/9/2017	\$13,804.00	Complete	2017 Reforestation at Cogan
Part of facility #5483	IMPP	A	1	0.13	6/20/2017		Complete	2017 Part of facility #5483
IMPP	IMPP	A	1	0.06	6/20/2017		Complete	2017 IMPP

Part of facility #4911	IMPP	A	1	0.05	6/21/2017	Complete	2017 Part of facility #4911
Watershed Association Projects (mixed types)		A					Watershed Association Projects
Septic Connections	SEPC	A	103	40.17	6/30/17	\$240,000.00 Complete	2017 (mixed types)
Septic Denitrifying Systems	SEPD	A	19	4.94	6/30/17	\$410,000.00 Complete	2017 Septic Connections
BA_00244: Long Quarter @ Shetland Stream Restoration	STRE	A				\$180,000.00 Complete	2017 Septic Denitrifying Systems
BA-56079 & 57247: Reforestation at Hebbville ES	FPU	A	1	15.00	7/5/17	\$1,748,081.00 Complete	2017 Septic Denitrifying Systems Long Quarter @ Shetland Stream
Reforestation at Collins Property	FPU	A				\$15,554.00 Complete	2017 Restoration
REDE: Based on one project completed and analyzed in FY17	REDE			0.24	11/11/2017	\$7,490.00 Complete	2017 Reforestation at Hebbville ES
			1	0.08		\$0.00 Complete	2017 Reforestation at Collins Property
							Based on one project completed 2017 and analyzed in FY17
				151.68		\$4,349,444.43	

VERSION 12-21-2017

NOTE:

Other capital projects have allotments, allocations or encumbrances and are in progress. Due to field evaluations, engineering design, permitting and construction restrictions and timelines, these projects will be reported in future years but are funded by carryover funds from FY2017 and/ or prior years.

Watershed Protection and Restoration Program Annual Report Table

Article 4-202.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element	Cost	Percent of WPRF	
Capital Improvements for Stormwater Management	\$911,992.45	42.50%	589102/589202
Property Management	\$124,786.80	5.81%	544304/566501/566603/566449
Public Education and Outreach	\$4,943.86	0.23%	566486/566499
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$65,543.03	3.05%	544323/544608/566439
Review of Stormwater Management Plans and Permit Applications for New Development		0.00%	
Grants to Nonprofit Organizations		0.00%	
Adminstration of WPRF	\$1,038,813.63	48.41%	Salaries/Etc./577503
TOTAL	\$2,146,079.77	100.00%	
Number of Properties Subject to Fee	0		
Reporting Year	2017		
Permit Number	11-DP-3319		
Comments:			

VERSION12/5/17

Jurisdiction	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy	Fee Reduction Amount

Use: Yes or No

Use the approval date or N/A

Reduction amount(s), if any, with reason for reduction(s)

Directions:

Notes:

ERU = Equivalent residential unit

VERSION 12/5/17

NOT APPLICABLE TO CARROLL COUNTY

Article 4-202.1(i)(3): "The amount of money deposited into the watershed protection and restoration fund in the previous fiscal year by source;"

Source	Amount
Dedicated Property Tax	\$2,160,120

\$2,160,120

VERSION 12/5/17

All SWM Projects Implemented in Previous FY for the 20% Restoration Requirement

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	IMPL STATUS	IMPL COMP YR
CR16RST000007	FBIO	S	1	0.5	6/21/2016	\$78,471.00	Complete	2016
CR16RST000002	PWED	S	1	35.24	11/22/2016	\$1,253,668.00	Complete	2017
CR16RST000003	FSND	S	1	34.44	12/9/2016	\$876,727.00	Complete	2017
CR17RST000001	FBIO	S	1	2.55	6/2/2017	\$174,000.00	Complete	2017
CR17RST000002	MRNG	E	1	0.05	6/2/2017	\$8,000.00	Complete	2017
CR17RST000003	MILS	E	1	0.06	6/2/2017	\$25,000.00	Complete	2017
CR17RST000004	MIDW	E	1	0.03	6/2/2017	\$6,000.00	Complete	2017
CR17RST000005	MRWH	E	1	0.01	6/2/2017	\$1,250.00	Complete	2017
CR16RST000001	PWED	S	1	22.34	7/10/2017	\$2,470,982.00	Complete	2017
				95.22		\$4,894,098.00		

VERSON 12/6/17

Watershed Protection and Restoration Program Annual Report - TABLE 1

Article 4-202.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element	Cost	Percent of WPRF
Capital Improvements for Stormwater Management	\$895,379.00	36.86%
O & M of SWM Systems and Facilities	\$468,404.31	19.28%
Public Education and Outreach	\$62,998.34	2.59%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$950,544.87	39.13%
Review of Stormwater Management Plans and Permit Applications for New Development	0	0.00%
Grants to Nonprofit Organizations	\$38,512.48	1.59%
Adminstration of WPRF	\$13,400.00	0.55%
TOTAL	\$2,429,239.00	100.00%
Number of Properties Subject to Fee	51,204	
Reporting Year	Fiscal Year 2017	
Permit Number	11-DP-3322	
Comments:		

Watershed Protection and Restoration Program Annual Report - TABLE 2

Juris	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy	Fee Reduction Amount	Rate Structures for Fiscal Year 2017								Additional Sources of Funds		Estimated Annual Revenue
					Annual Single Family Residential Rate	Annual Commercial Rate	Equivalent Residential Unit (ERU) Impervious	Commercial Capped Rates	Non-profits, Religious Organizations	Exemptions	Federal Facilities Status	Federal Facility Fee(s)/Rate(s)	Additional Source 1	Additional Source 2	
Charles County	Charles County Gov	Yes	4/2/2014	50% reduction of fee for properties that meet or exceed the 2000 MD Stormwater Design Manual; or covered by an approved Soil Conservation & Water Quality Plan or Forest Management Plan.	\$39	\$39	N/A	N/A	\$39	Exempt properties are: owned by federal, state, county or municipal government; within a municipality if has a stormwater fee; owned by a disabled veteran; with no impervious surface; subject to an industrial stormwater permit; or owned by person(s) demonstrating financial hardship.	Exempt	N/A	Lot Recordation Fee: \$138 per new lot recorded in the Development District.	Miscellaneous: includes interest and stormwater facility maintenance fees.	\$1,981,534.00

Watershed Protection and Restoration Program Annual Report - TABLE 3

Article 4-202.1(i)(3): "The amount of money deposited into the watershed protection and restoration fund in the previous fiscal year by source;"

Fiscal Year 2017	
Source	Amount
Stormwater Remediation Fees Collected	\$ 1,981,534.25
Additional Source 1 - General Fund Subsidy	\$ 236,579.26
Additional Source 2 - Lot Recordation Fees	\$ 50,094.00
Additional Source 3 - Miscellaneous	\$ 6,801.81
	\$ 2,275,009.32

Watershed Protection and Restoration Program Annual Report - TABLE 4

All stormwater projects implemented in Fiscal Year 2017 to meet the impervious surface restoration plan.

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ²	NUM BMP	IMP ACRES ³	BUILT DATE	IMPL COST ⁴	IMPL STATUS	IMPL COMP YR
Mechanical Street Sweeping	MSS	A	1	76.8	6/30/2017	\$50,705	Complete	2017
Storm Drain Vacuuming	SDV	A	121	12.24	6/30/2017	\$78,104	Complete	2017
Septic Pump-Out	SEPP	A	649	19.47	6/30/2017	\$82,261	Complete	2017
Septic Denitrification	SEPD	A	35	9.1	6/30/2017	\$375,008	Complete	2017
White Plains (8034)	MSGW	S	1	5.8	1/5/2017	\$522,169	Complete	2017
Tanglewood (8050)	SPSC	S	1	21.32	8/31/2016	\$1,297,360	Complete	2017
Tenth District VFD (8052)	MSGW	S	1	2.6	5/18/207	\$97,239.00	Complete	2017
Totals			1,293	147.33		\$2,502,846.00		

¹ See attached list of Restoration BMP Type Codes.

² BMP CLASSES are: A - Alternative BMP, E - Environmental Site Design, or S - Structural BMP.

³ IMP ACRES per MDE guide "Accounting for Stormwater Wasteload Allocations & Imp Acres Treated, Guidance for NPDES Stormwater Permits" (Aug 2014).

⁴ When multiple capital projects under one budget, multiply total cost by percent acres treated for each project.

Frederick County

Watershed Protection and Restoration Program Annual Report Table

Article 4-202.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element	Cost	Percent of WPRF
Capital Improvements for Stormwater Management	\$0.00	0.00%
O & M of SWM Systems and Facilities	\$0.00	0.00%
Public Education and Outreach	\$0.00	0.00%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$0.00	0.00%
Review of Stormwater Management Plans and Permit Applications for New Development	\$0.00	0.00%
Grants to Nonprofit Organizations	\$0.00	0.00%
Adminstration of WPRF	\$0.00	0.00%
TOTAL	\$0.00	0.00%

Number of Properties Subject to Fee 48,746
 Reporting Year 2017
 Permit Number 11-DP-3321 MD0068357
 Comments:

VERSION 4-7-16

Jurisdiction	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy
Frederick County	Planning and Permitting Division, Office of Sustainability and Environmental Resources	Yes	3/26/2015
<p style="text-align: right;">Use: Yes or No Use the approval date or N/A</p>			
<p>Directions:</p> <p>Notes:</p> <p>ERU = Equivalent residential unit</p> <p>VERSION 4-7-16</p>			

Fee Reduction Amount	Annual Single Family Residential Rate	Annual Commercial Rate	Equivalent Residential Unit (ERU) impervious	Commercial Capped Rates
30% or 60% for homeowners based on documented practices	\$0.01	0.01	NA	NA

Reduction amount(s), if any, with reason for reduction(s)

Use: N/A, amount of flate rate, rate amount per ERU, etc.

Rate Structures		
Non-profits, Religious Organizations	Exemptions	Federal Facilities Status
NA	NA	Charged

General description of exemption(s), if any

Use: No Facilities,
Exempt, or Charged

Federal Facility Fee(s)/Rate(s)	Additional Sources of Funds	
	Additional Source 1	Additional Source 2
NA	NA	NA

Use: N/A or the fee and rate structures for federal facilities

Additional Source 3	Estimated Annual Revenue
NA	\$487.46

Notes

Article 4-202.1(i)(3): "The amount of money deposited into the watershed protection and restoration fund in the previous fiscal year by source;"

Source	Amount
Annual Single Family Residential Fees Collected	\$ 448.16
Annual Commercial Fees Collected	\$ 37.10
Non-profits, Religious Orgs Fees Collected	\$ 2.20
Unnamed Additional Source 1	\$ -
	\$ 487.46

VERSION 4-7-16

All SWM Projects Implemented in Previous FY for the 20% Restoration Requirement

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	IMPL STATUS	IMPL COMP YEAR
Operation Programs								
Street Sweeping	VSS	A	1	12.52	6/30/2015	\$184,764	C	2015
Street Sweeping	VSS	A	1	27.45	6/30/2016	\$42,153	C	2016
Street Sweeping	VSS	A	1	28.73	6/30/2017	\$34,956	C	2017
Inlet Cleaning	CBC	A	1	0	6/30/2015	\$368,886	C	2015
Inlet Cleaning	CBC	A	1	0	6/30/2016	\$387,561	C	2016
Inlet Cleaning	CBC	A	1	0	6/30/2017	\$276,636	C	2017
Septic Pumping	SEPP	A				N/A	C	2014
Average Operations Complete To Date*				25.00		\$1,294,956		
Capital Projects								
Ballenger Stream Restoration	STRE	A	1	6.05	5/1/2007	\$355,832	C	2007
Englandtowne Stream Restoration	STRE	A	1	7.3	12/1/2014	\$247,920	C	2015
Pinecliff Stream Stabilization	STRE	A	1	10	11/12/2010	\$312,520	C	2011
FC - Englandtowne SWM - Retrofit	WPWS	S	1	12.10	3/17/2017	\$584,645	C	2017
Subtotal Capital Complete To Date				35.45		\$1,500,916		
Other								
OSER - Urbana Community Park - Bioretention	FBIO	S	1	1.70	12/1/2013	\$11,440	C	2014
OSER - Urbana Elementary School - Stormwater	MSWB	E	1	3.30	12/1/2001	\$176	C	2002
OSER - Urbana High School - Bioretentions & R	FBIO	E	2	2.30	10/1/2007	\$249,069	C	2008
Trout Unlimited Stream Restoration	STRE	A	1	11.2	1/1/2013	\$0	C	2013
Little Tuscarora Creek	STRE	A	1	15	10/15/2015	\$0	C	2016
Cooperative Extension Building - Tree Planting	FPU	A	1	0.35	1/1/2005	\$0	C	2005
Cloverhill - Urban Forest Buffer	FPU	A	1	0.51	1/1/2006	\$16,830	C	2006
Liberty Village Cohousing Community - Urban	FPU	A	1	1.08	1/1/2006	\$23,100	C	2006
Libertytown Park - Tree Planting	FPU	A	1	2.67	1/1/2006	\$25,740	C	2006
Libertytown Park - Urban Forest Buffer	FPU	A	1	0.78	1/1/2006	\$25,740	C	2006
St. Peter the Apostle Roman Catholic Church -	FPU	A	1	0.47	1/1/2006	\$6,600	C	2006

Ballenger Creek Elementary School - Urban Forest Buffer	FPU	A	1	0.58	1/1/2007	\$19,140	C	2007
Fred Archibald Sanctuary - Urban Forest Buffer	FPU	A	1	2.58	1/1/2007	\$85,140	C	2007
Holly Hills Country Club - Urban Forest Buffer	FPU	A	1	5.79	1/1/2007	\$191,070	C	2007
Holly Hills HOA - Urban Forest Buffer	FPU	A	1	0.44	1/1/2007	\$14,520	C	2007
Utica Park - Urban Forest Buffer	FPU	A	1	0.29	1/1/2007	\$9,570	C	2007
Urbana Community Park - Riparian Forest Buffer	FPU	A	1	0.9	1/1/2009	\$29,700	C	2009
Urbana Middle School - Tree Planting	FPU	A	1	0.46	1/1/2009	\$15,180	C	2009
Valley Elementary School - Tree Planting	FPU	A	1	0.79	1/1/2009	\$26,070	C	2009
Pinecliff Park - Urban Forest Buffer	FPU	A	1	0.51	1/1/2010	\$27,000	C	2010
Wolfsville Elementary School - Tree Planting	FPU	A	1	0.41	1/1/2010	\$13,530	C	2010
Old National Pike Park - Riparian Forest Buffer	FPU	A	1	1.83	1/1/2011	\$60,390	C	2011
Urbana Elementary School - Urban Forest Buffer	FPU	A	1	0.13	1/1/2011	\$4,290	C	2011
Windsor Knolls Middle School - Tree Planting	FPU	A	1	1.41	1/1/2011	\$75,240	C	2011
Windsor Knolls Middle School - Urban Forest Buffer	FPU	A	1	3.29	1/1/2011	\$75,240	C	2011
Worthington Manor Golf Course - Urban Forest Buffer	FPU	A	1	3.47	1/1/2011	\$0	C	2011
New Market Middle School - Tree Planting	FPU	A	1	1.22	1/1/2012	\$40,260	C	2012
Pinecliff Park - Riparian Forest Buffer	FPU	A	1	0.28	1/1/2012	\$26,070	C	2012
Crestwood Middle School - Urban Forest Buffer	FPU	A	1	0.79	1/1/2013	\$26,070	C	2013
Deer Crossing Elementary School - Tree Planting	FPU	A	1	1.09	1/1/2013	\$35,970	C	2013
Orchard Grove Elementary School - Tree Planting	FPU	A	1	0.32	1/1/2013	\$10,560	C	2013
Spring Ridge Elementary School - Tree Planting	FPU	A	1	1.05	1/1/2013	\$34,650	C	2013
Monocacy Elementary School - Urban Forest Buffer	FPU	A	1	0.19	1/1/2014	\$1,320	C	2014
Mountain Village HOA - Urban Forest Buffer	FPU	A	1	1.22	1/1/2014	\$40,260	C	2014
Englandtowne Retrofit Project Tree Planting	FPU	A	1	0.28	3/17/2017	\$18,787	C	2017
Septic Denitrification (BRF)	SEPD	A	184	47.84	6/30/2016	\$2,539,200	C	2016
Septic Denitrification (BRF)	SEPD	A	26	6.76	6/30/2017	\$364,000	C	2017
Septic Connections to WWTP	SEPC	A	7	2.73	6/30/2016	\$350,000	C	2016
Subtotal Other Complete to Date				126.01		\$4,491,922		
Total Complete to Date				186.46		\$7,287,794		

*The County is conservatively estimating credit of street sweeping activities for this reporting year based on average tons swept in FY15-FY17.

VERSION 4-7-16

Watershed Protection and Restoration Program Annual Report Table

Article 4-202.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element	Cost	Percent of WPRF
Capital Improvements for Stormwater Management	\$3,018,000.00	66%
O & M of SWM Systems and Facilities	\$347,000.00	8%
Public Education and Outreach	\$9,000.00	0%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$1,211,000.00	26%
Review of Stormwater Management Plans and Permit Applications for New Development	\$0.00	
Grants to Nonprofit Organizations	\$0.00	
Adminstration of WPRF	\$0.00	
TOTAL	\$4,585,000.00	100.00%
Number of Properties Subject to Fee	-	
Reporting Year	2017	
Permit Number	11-DP3310	
Comments:	-	

1. Expenditures above represent dedicated capital funds for WPRP
2. An additional \$1.3 M is allocated from General Funds for operating expenditures including salaries
3. Expenditures for education and outreach were not included in the 2017 Annual Report program funding
4. \$688,132 of the expenditures were from grants

VERSION 2-28-18

Jurisdiction	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy

Use: Yes or No

Use the approval date or N/A

Directions:

Notes:

ERU = Equivalent residential unit

VERSION 2-28-18

Fee Reduction Amount	Annual Single Family Residential Rate	Annual Commercial Rate	Equivalent Residential Unit (ERU) impervious	Commercial Capped Rates

Reduction amount(s), if any, with reason for reduction(s)

Use: N/A, amount of flate rate, rate amount per ERU, etc.

Rate Structures		
Non-profits, Religious Organizations	Exemptions	Federal Facilities Status
	General description of exemption(s), if any	Use: No Facilities, Exempt, or Charged

	Additional Sources of Funds	
Federal Facility Fee(s)/Rate(s)	Additional Source 1	Additional Source 2

Use: **N/A** or the fee and rate structures for federal facilities

Additional Source 3	Estimated Annual Revenue	
		Notes

Article 4-202.1(i)(3): "The amount of money deposited into the watershed protection and restoration fund in the previous fiscal year by source;"

Source	Amount
Annual Single Family Residential Fees Collected	\$ -
Annual Commercial Fees Collected	\$ -
Non-profits, Religious Orgs Fees Collected	\$ -
Unnamed Additional Source 1	\$ 8,100,000.00
	\$ 8,100,000.00

VERSION 2-28-18

comments:

1. \$6.1 M (\$0.2 M paygo / \$5.9 M bonds)
2. \$2.0 M grant award Trust Fund 14-17-2178 TRF 15

All SWM Projects Implemented in Previous FY for the 20% Restoration Requirement

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	IMPL STATUS	IMPL COMP YR
CIP0036	STRE	A	1	20.9	4/1/2017	\$903,000.00	COMPLETE	2017
CIP0097	WPKT	E	1	0.3	4/1/2017	\$13,000.00	COMPLETE	2017
CIP0025	PPKT	S	1	3.66	6/1/2017	\$530,000.00	COMPLETE	2017
				24.86		\$1,446,000.00		

VERSION 2-28-28

Howard County

15-Dec-17 Howard County Watershed Protection and Restoration Program Annual Report

Notes:

Howard County's first WPRP Annual Report submitted in July 2016 reflected Fiscal Year 2015.

This WPRP Annual Report includes reporting for Fiscal Years 2016 and 2017.

The ISRP BMPs Implemented table includes all restoration BMPs implemented between June of 2010 and the end of Fiscal Year 2017.

Watershed Protection and Restoration Program Annual Report Table

Article 4-202.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element	Cost	Percent of WPRF
Capital Improvements for Stormwater Management - Expended	\$ 6,829,239	60.50%
Capital Improvements for Stormwater Management - Encumbered	\$ 769,055	6.81%
O & M of SWM Systems and Facilities*	\$ 2,030,730	17.99%
Public Education and Outreach	\$ 382,468	3.39%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$ -	-
Review of Stormwater Management Plans and Permit Applications for New Development*	\$ -	0.00%
Grants to Nonprofit Organizations*	\$ 713,342	6.32%
Administration of WPRF	\$ 128,450	1.14%
Fund Balance	\$ 434,049	3.85%
TOTAL	\$ 11,287,333	100.00%
Number of Properties Subject to Fee	107,774	
Reporting Year	FY 2017	
Permit Number	11-DP-3318	
Comments:		

Notes

- *This includes inspections, enforcement, and other contingencies for operating the programs
- *This function is performed by Dept of Planning and Zoning and no WPRF Funds are allocated to this department
- *This also includes reimbursements issued as part of our residential programs, such as rain gardens and septic maintenance

VERSION 12-12-17

Jurisdiction	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy
Howard County	Department of Public Works, Office of Community Sustainability	Yes	N/A
<p style="text-align: right;">Use: Yes or No Use the approval date or N/A</p> <p>Directions:</p>			

VERSION 12-12-17

Fee Reduction Amount	Annual Single Family Residential Rate	Annual Commercial Rate	Equivalent Residential Unit (ERU) impervious	Commercial Capped Rates
N/A	\$15, \$45, \$90 based on lot size	\$15 per 500 sf impervious	NA	Capped at 20% of all State and local property taxes for FY 16, decreasing by 5% each fiscal year (15% cap in FY 17). The final cap is 5% in FY 19 and beyond.

Reduction amount(s), if any, with reason for reduction(s)

Use: N/A, amount of flate rate, rate amount per ERU, etc.

Rate Structures

Non-profits, Religious Organizations	Exemptions	Federal Facilities Status
100% credit if in the Nonprofit Partnership, otherwise charged at the commercial rate	Financial Hardship	Not Exempt

General description of exemption(s), if any

Use: No Facilities,
Exempt, or Charged

Federal Facility Fee(s)/Rate(s)	Additional Sources of Funds	
	Additional Source 1	Additional Source 2
subject to the commercial rate and the commercial tax cap. Since most don't pay taxes, most don't have a fee.		

Use: N/A or the fee and rate structures for federal facilities

Additional Source 3	Estimated Annual Revenue
	\$11,105,687.00

Notes

Article 4-202.1(i)(3): "The amount of money deposited into the watershed protection and restoration fund in the previous fiscal year by source;"

Source	Fiscal Year 2017 Fees Collected
Single Family Residential	\$4,552,290
Commercial	\$5,406,050
Non- Profits / Religious Organizations	\$415,272
Agricultural Properties	\$148,766
Apartments	\$278,145
Condominium	\$111,960
Townhomes	\$374,850
Total	\$11,287,333

All SWM Projects Implemented for the 20% Restoration Requirement
See the Howard County FY2017 MS4 Geodatabase for Individual BMP Details

Baseline: 12,299

Requirement: 20% 2460 acres

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	% ISRP Complete	IMPL STATUS	IMPL COMP YR	GEN COMMENTS
Operation Programs										
5-year Average Street Sweeping	MSS	A	1	324.00	6/30/2017	\$400,000	2.6%	Complete	2017	Average of 2013-2017 Street Sweeping
FY17 Inlet Cleaning	SDV	A	70	34.65	1/1/2017	\$97,650	0.3%	Complete	2017	Inlet Cleaning
Subtotal Operations Complete To Date*			71	358.65		\$497,650	2.9%			
Capital Projects										
HO13RST000060	APRP	E	1	0.20	8/23/2013	\$17,751	0.0%	Complete	2014	Ellicott City Lot B Permeable Pavement Construction
HO15RST000312	APRP	E	1	0.15	11/10/2015	\$1,300	0.0%	Complete	2016	Permeable pavers
HO15RST000306	APRP	E	1	0.15	12/5/2015	\$1,300	0.0%	Complete	2016	Impervious surface removal, permeable pavers
HO10RST000053	FBIO	S	1	1.06	9/1/2010	\$153,725	0.0%	Complete	2011	Cedar Lane Park - North
HO11RST000052	FBIO	S	1	0.42	6/1/2011	\$206,792	0.0%	Complete	2011	Atholton Park
HO10RST000053	FBIO	S	1	1.06	9/1/2010	\$153,725	0.0%	Complete	2011	Cedar Lane Park - North
HO11RST000071	FBIO	S	1	2.27	9/1/2011	\$188,922	0.0%	Complete	2012	Dorsey Building Parking Lot
HO15RST000401	FBIO	S	1	1.02	7/21/2015	\$100,000	0.0%	Complete	2016	Ellicott City Parking Lot E
HO15RST000402	FBIO	S	1	0.22	7/21/2015	\$100,000	0.0%	Complete	2016	Ellicott City Parking Lot E
HO15RST000403	FBIO	S	1	0.76	7/21/2015	\$100,000	0.0%	Complete	2016	Ellicott City Parking Lot E
HO15RST000404	FBIO	S	1	0.76	7/21/2015	\$100,000	0.0%	Complete	2016	Ellicott City Parking Lot E
HO16RST000025	FBIO	S	1	0.73	12/6/2016	\$62,541	0.0%	Complete	2017	Rockburn Park Retrofit
HO16RST000036	FBIO	S	1	2.07	8/10/2016	\$433,580	0.0%	Complete	2017	Rusty Rim Pond Retrofit
HO11RST000077	FBIO	S	3	3.82	5/1/2011	\$300,000	0.0%	Complete	2011	Savage Park
HO11RST000058	FSND	S	1	3.25	5/1/2011	\$290,548	0.0%	Complete	2011	Stratford Downs
HO13RST000072	FSND	S	1	2.37	5/1/2013	\$291,090	0.0%	Complete	2013	Oak West Dr SW Pond Retro Retrofit from dry pond to sand filter
MTBMP4	FSND	S	1	4.58	7/26/2017	\$721,655	0.0%	Complete	2018	Velvet Path Pond Principal Spillway Replacement
RestBMP_1	FSND	S	1	12.92	8/8/2017	\$478,652	0.1%	Complete	2018	Howard County General Hospital
HO13RST000069	IBAS	S	1	5.70	3/1/2013	\$247,520	0.0%	Complete	2013	Country Lane Pond #1
HO13RST000070	IBAS	S	1	3.28	3/1/2013	\$247,520	0.0%	Complete	2013	Country Ln Pond Enhance Retrofit WQ enhance, forebays, add'l infiltr, new r*
HO14RST000068	IBAS	S	1	2.43	1/30/2014	\$219,557	0.0%	Complete	2014	Ashmede Road
HO13RST000067	IMPP	A	1	9.82	5/1/2013	\$228,392	0.1%	Complete	2013	Dower Drive
HO14RST000064	MMBR	E	1	0.18	9/30/2014	\$70,213	0.0%	Complete	2015	Stevens Forest Elementary School - MB-1
HO14RST000065	MMBR	E	1	0.14	9/30/2014	\$70,213	0.0%	Complete	2015	Stevens Forest Elementary School - MB-2A
HO14RST000066	MMBR	E	1	0.08	9/30/2014	\$70,213	0.0%	Complete	2015	Stevens Forest Elementary School - MB-2B
HO14RST000063	MSWB	E	1	0.02	9/30/2014	\$70,213	0.0%	Complete	2015	Stevens Forest Elementary School - Bioswale
FY11 Outfall Stabilization	OUT	A	3	0.65	1/1/2011	\$150,000	0.0%	Complete	2011	Outfall Stabilization
FY12 Outfall Stabilization	OUT	A	6	2.17	1/1/2012	\$300,000	0.0%	Complete	2012	Outfall Stabilization
FY13 Outfall Stabilization	OUT	A	7	2.54	1/1/2013	\$350,000	0.0%	Complete	2013	Outfall Stabilization
FY14 Outfall Stabilization	OUT	A	2	0.50	1/1/2014	\$100,000	0.0%	Complete	2014	Outfall Stabilization
FY15 Outfall Stabilization	OUT	A	1	0.28	1/1/2015	\$50,000	0.0%	Complete	2015	Outfall Stabilization
FY16 Outfall Stabilization	OUT	A	6	1.78	1/1/2016	\$300,000	0.0%	Complete	2016	Outfall Stabilization
FY17 Outfall Stabilization	OUT	A	9	8.41	1/1/2017	\$450,000	0.1%	Complete	2017	Outfall Stabilization
HO11RST000074	PWED	S	1	3.85	12/1/2011	\$45,541	0.0%	Complete	2012	Saint John's Green
HO12RST000078	PWED	S	1	4.18	3/1/2012	\$184,142	0.0%	Complete	2012	Waverly Woods
HO12RST000075	PWED	S	1	3.28	7/1/2012	\$443,506	0.0%	Complete	2013	Salterforth PI Pond Enh Retrofit both ponds for WQ, new riser for Cpv, all*
HO12RST000076	PWED	S	1	4.11	7/1/2012	\$354,624	0.0%	Complete	2013	Salterforth PI Pond Enh Retrofit both ponds for WQ, new riser for Cpv, all*

HO15RST000005	PWED	S	1	43.29	5/8/2015	\$1,275,340	0.4%	Complete	2015	Red Cravat Pond Repair and Retrofit
HO17RST000022	PWED	S	1	9.15	11/22/2016	\$345,789	0.1%	Complete	2017	Mary Lee Lane Pond Repair
HO15RST000002	PWET	S	1	3.26	4/20/2015	\$305,652	0.0%	Complete	2015	Towering Oaks Pond Repair
MTBMP3	PWET	S	1	5.10	3/22/2016	\$194,698	0.0%	Complete	2016	Townhomes of Timberland
HO17RST000029	PWET	S	1	3.14	7/15/2016	\$66,827	0.0%	Complete	2017	Longridge Knolls Pond Repair
HO16RST000027	PWET	S	1	0.77	10/5/2016	\$560,283	0.0%	Complete	2017	Montgomery Run Pond 2 Repair
PWET1	PWET	S	1	5.17	11/30/2016	\$504,678	0.0%	Complete	2017	Lynnwood Manor Retrofit
MTBMP2	PWET	S	1	13.02	5/19/2017	\$473,333	0.1%	Complete	2017	Golden Star Pond Retrofit #2
HO16RST000034	PWET	S	1	16.38	6/29/2017	\$718,487	0.1%	Complete	2017	Long Meadow Pond Repair 1
MTBMP6	PWET	S	1	6.87	8/23/2017	\$505,890	0.1%	Complete	2018	Fairest Dreams Pond Retrofit
HO15RST000322	SPSC	A	1	3.04	2/15/2013	\$291,090	0.0%	Complete	2013	Oak West Drive
HO15RST000405	SPSC	A	1	3.26	4/20/2015	\$305,652	0.0%	Complete	2015	Towering Oaks SPSC
HO15RST000323	SPSC	A	1	0.00	11/3/2015	\$290,743	0.0%	Complete	2016	Dorsey Hall VC Outfall B Stabilization
HO15RST000324	SPSC	A	1	0.00	11/3/2015	\$290,743	0.0%	Complete	2016	Dorsey Hall VC Outfall C Stabilization
HO15RST000325	SPSC	A	1	0.00	11/3/2015	\$290,743	0.0%	Complete	2016	Dorsey Hall VC Outfall E Stabilization
HO15RST000326	SPSC	A	1	0.00	11/3/2015	\$290,743	0.0%	Complete	2016	Dorsey Hall VC Outfall D Stabilization
HO16RST000035	SPSC	A	1	10.13	6/16/2017	\$844,796	0.1%	Complete	2017	Long Meadow Pond Repair 2
HO10ALN000071	STRE	A	1	4.79	8/31/2010	\$309,064	0.0%	Complete	2011	Paul Mill Road
HO10ALN000014	STRE	A	1	0.68	12/15/2010	\$50,000	0.0%	Complete	2011	Hickory Ridge Village Center
HO11ALN000015	STRE	A	1	4.45	1/31/2011	\$521,967	0.0%	Complete	2011	Old Willow Way
HO11ALN000049	STRE	A	1	5.00	3/22/2011	\$500,000	0.0%	Complete	2011	LPPSI Stream Mitigation - A
HO11ALN000048	STRE	A	1	1.00	4/4/2011	\$94,650	0.0%	Complete	2011	Autumn Harvest - Phase 2
HO11ALN000056	STRE	A	1	6.00	11/30/2011	\$100,000	0.0%	Complete	2012	Savage Park
HO11ALN000045	STRE	A	1	2.55	12/16/2011	\$216,776	0.0%	Complete	2012	Hi Tech Road
HO12ALN000051	STRE	A	1	13.00	2/17/2012	\$1,232,322	0.1%	Complete	2012	Meadowbrook Park
HO12ALN000075	STRE	A	1	15.05	2/20/2012	\$869,669	0.1%	Complete	2012	Threshfield Stream Rest
HO12ALN000057	STRE	A	1	16.61	2/21/2012	\$1,584,055	0.1%	Complete	2012	Red Hill Branch
HO12ALN000058	STRE	A	1	16.61	2/21/2012		0.1%	Complete	2012	Red Hill Branch
HO12ALN000088	STRE	A	1	4.75	2/29/2012	\$200,000	0.0%	Complete	2012	Little Patuxent Parallel Interceptor
HO12ALN000052	STRE	A	1	0.88	3/2/2012	\$82,104	0.0%	Complete	2012	Great Oaks Way
HO12ALN000046	STRE	A	1	10.86	3/23/2012	\$927,366	0.1%	Complete	2012	Bramhope Lane
HO12ALN000029	STRE	A	1	2.05	6/30/2012	\$100,000	0.0%	Complete	2012	Trotter Road
HO13ALN000054	STRE	A	1	1.84	1/1/2013	\$234,278	0.0%	Complete	2013	Dower Drive
HO13ALN000050	STRE	A	1	6.30	1/9/2013	\$500,000	0.1%	Complete	2013	LPPSI Stream Mitigation - B
HO13ALN000091	STRE	A	1	3.25	1/17/2013	\$200,000	0.0%	Complete	2013	Little Patuxent Parallel Interceptor
HO13ALN000031	STRE	A	1	1.15	2/17/2013	\$0	0.0%	Complete	2013	Bugledrum Way
HO13ALN000032	STRE	A	1	2.01	2/17/2013	\$0	0.0%	Complete	2013	Dobbin Road
HO13ALN000033	STRE	A	1	0.32	2/17/2013	\$0	0.0%	Complete	2013	Queen Maria Court
HO13ALN000034	STRE	A	1	0.86	2/17/2013	\$0	0.0%	Complete	2013	Spinning Seed Road
HO13ALN000068	STRE	A	1	11.50	3/18/2013	\$715,509	0.1%	Complete	2013	Elmmede Road
HO13ALN000053	STRE	A	1	14.20	3/21/2013	\$1,031,583	0.1%	Complete	2013	Stone Trail Court Stream Restoration
HO13ALN000019	STRE	A	1	4.67	4/10/2013	\$322,458	0.0%	Complete	2013	Wheatfield Way
HO13ALN000020	STRE	A	1	15.65	5/13/2013	\$659,141	0.1%	Complete	2013	Windflower Drive
HO13ALN000090	STRE	A	1	1.86	10/10/2013	\$50,000	0.0%	Complete	2014	Furnace Ave Sewer Siphon Improvements
HO14ALN000021	STRE	A	1	3.39	1/21/2014	\$291,113	0.0%	Complete	2014	Tuscany Road Stream Restoration
HO14ALN000017	STRE	A	1	6.93	3/11/2014	\$485,934	0.1%	Complete	2014	Whiterock Court Stream Restoration
HO14ALN000018	STRE	A	1	2.58	6/16/2014	\$206,852	0.0%	Complete	2014	Tiller Drive Phase 2
HO15ALN000006	STRE	A	1	10.54	5/1/2015	\$1,057,858	0.1%	Complete	2015	Pinehurst Court Stream Rehabilitation
HO15ALN000030	STRE	A	1	2.13	9/3/2015	\$100,000	0.0%	Complete	2016	Trotter Road Stream Stabilization - Phase 2
HO16ALN000096	STRE	A	1	28.12	2/10/2016	\$1,357,294	0.2%	Complete	2016	Southview Road Stream Restoration
HO16ALN000100	STRE	A	1	2.09	3/1/2016	\$50,000	0.0%	Complete	2016	Shallow Run Sewer Relocation & Stream Restoration
HO16ALN000101	STRE	A	1	1.03	3/1/2016	\$50,000	0.0%	Complete	2016	Deep Run Sewer Relocation & Stream Restoration
HO16ALN000001	STRE	A	1	6.50	10/31/2016	\$719,801	0.1%	Complete	2017	Bonnie Branch Stream Restoration
HO15ALN000002	STRE	A	1	14.25	12/6/2016	\$1,301,086	0.1%	Complete	2017	Dorsey Hall Village Center Stream Restoration

HO16ALN000004	STRE	A	1	1.02	3/1/2017	\$330,780	0.0%	Complete	2017	Swansfield Road Trail Stream Restoration
HO17ALN000005	STRE	A	1	19.71	3/1/2017	\$963,797	0.2%	Complete	2017	Woodstock Park (Davis Branch) Stream Restoration
HO17ALN000064	STRE	A	1	27.08	3/1/2017	\$1,246,061	0.2%	Complete	2017	Rockburn Branch Park - Mainstem and Tributary
HO18ALN000037	STRE	A	1	16.86	3/29/2017	\$1,019,340	0.1%	Complete	2017	Howard Community College Stream Restoration
HO15RST000031	WEDW	S	1	2.08	6/8/2015	\$296,949	0.0%	Complete	2015	Pebble Beach Pond #2 Retrofit
HO14RST000044	WPWS	S	1	97.88	2/25/2014	\$831,073	0.8%	Complete	2014	Shadow Ln Pond Dredging - Pond Retrofit
HO17RST000012	WPWS	S	1	10.97	6/24/2016	\$52,569	0.1%	Complete	2016	Turf Valley Overlook Pond #3 Retrofit / Excelsior Springs Court
HO10RST000059	WSHW	S	1	3.85	8/1/2010	\$114,194	0.0%	Complete	2011	Village of River Hill Shallow Marsh
HO13RST000054	WSHW	S	1	6.43	1/24/2013	\$303,010	0.1%	Complete	2013	Cypress Bay Clogged Dry Pond Restoration/Conversion to Shallow Marsh Wetla*
HO14RST000047	WSHW	S	1	0.98	7/17/2014	\$309,255	0.0%	Complete	2015	Wimbledon Dry Pond Restoration/Conversion to Shallow Marsh
HO15RST000049	WSHW	S	1	1.69	6/1/2015	\$1,041,526	0.0%	Complete	2015	Pinehurst Court Shallow Marsh
HO16RST000006	WSHW	S	1	17.86	2/29/2016	\$117,436	0.1%	Complete	2016	Whitworth Way Pond Enhancements
HO16RST000023	WSHW	S	1	17.46	11/22/2016	\$745,868	0.1%	Complete	2017	Deep Earth Lane Repair and Retrofit
HO12RST000056	XDED	S	1	3.68	9/1/2012	\$231,060	0.0%	Complete	2013	Mount Hebron HS
HO14RST000001	XDED	S	1	1.80	11/18/2014	\$367,499	0.0%	Complete	2015	Old Mill Pond Retrofit
Subtotal Capital Complete To Date			135	688.58		\$39,300,021	5.60%			
Other										
HO14RST600521	APRP	E	1	0.15	10/16/2014	\$0	0.0%	Complete	2015	A1-05
HO14RST600523	APRP	E	1	0.15	10/16/2014	\$0	0.0%	Complete	2015	A1-05
HO14RST600524	FBIO	S	1	0.18	10/16/2014	\$0	0.0%	Complete	2015	A1-05
HO14RST600527	FBIO	S	1	0.09	10/16/2014	\$0	0.0%	Complete	2015	A1-05
HO16RST600339	FBIO	S	1	0.76	7/1/2016	\$0	0.0%	Complete	2017	A2-06
HO16RST600340	FBIO	S	1	0.76	7/1/2016	\$0	0.0%	Complete	2017	A2-06
HO16RST600341	FBIO	S	1	1.02	7/1/2016	\$0	0.0%	Complete	2017	A2-06
HO16RST600343	FBIO	S	1	0.22	7/1/2016	\$0	0.0%	Complete	2017	A2-06
HO11RST600877	FBIO	S	1	0.20	4/23/2011	\$0	0.0%	Complete	2011	A3-02
GRNT0107	FBIO	S	1	0.00	5/19/2017	\$0	0.0%	Complete	2017	Green Leaf Community Assoc Inc
RDY0097	FBIO	S	1	0.00	7/19/2016	\$12,170	0.0%	Complete	2017	Lakeside Associates
CA_1	FBIO	S	1	1.05	7/1/2017	\$0	0.0%	Complete	2018	Long Look Bioretention
CA_2	FBIO	S	1	0.42	7/1/2017	\$0	0.0%	Complete	2018	Snowy Reach Bioretention
HO16RST000325	FBIO	S	1	1.38	4/30/2016	\$106	0.0%	Complete	2016	
HO16RST000326	FBIO	S	1	0.40	4/30/2016	\$47	0.0%	Complete	2016	
HO16RST000327	FBIO	S	1	0.33	5/31/2016	\$74	0.0%	Complete	2016	
HO16RST000328	FBIO	S	1	1.99	5/31/2016	\$133	0.0%	Complete	2016	
FY2011 Stream Buffer Planting	FPU	A	53	2.79	1/1/2011	\$18,340	0.0%	Complete	2011	Stream Buffer Planting
FY2012 Stream Buffer Planting	FPU	A	10	0.27	1/1/2012	\$4,832	0.0%	Complete	2012	Stream Buffer Planting
FY2013 Stream Buffer Planting	FPU	A	68	4.73	1/1/2013	\$41,778	0.0%	Complete	2013	Stream Buffer Planting
FY2014 Stream Buffer Planting	FPU	A	42	3.58	1/1/2014	\$39,660	0.0%	Complete	2014	Stream Buffer Planting
FY2015 Stream Buffer Planting	FPU	A	24	1.69	1/1/2015	\$17,065	0.0%	Complete	2015	Stream Buffer Planting
FY13 Tree Canopy	FPU	A	597	2.14	1/1/2013	\$35,820	0.0%	Complete	2013	Tree Canopy
FY14 Tree Canopy	FPU	A	372	1.37	1/1/2014	\$22,320	0.0%	Complete	2014	Tree Canopy
FY15 Tree Canopy	FPU	A	455	55.70	1/1/2015	\$26,526	0.5%	Complete	2015	Tree Canopy
FY11 Reforestation	FPU	A	31	7.80	1/1/2011	\$1,458,839	0.1%	Complete	2011	Reforestation
FY12 Reforestation	FPU	A	40	6.05	1/1/2012	\$2,681,956	0.0%	Complete	2012	Reforestation
FY13 Reforestation	FPU	A	43	10.57	1/1/2013	\$1,834,296	0.1%	Complete	2013	Reforestation
FY14 Reforestation	FPU	A	65	11.31	1/1/2014	\$712,903	0.1%	Complete	2014	Reforestation
FY15 Reforestation	FPU	A	67	15.96	1/1/2015	\$1,887,377	0.1%	Complete	2015	Reforestation
FY16 Reforestation	FPU	A	23	4.02	1/1/2016	\$163,669	0.0%	Complete	2016	Reforestation
FY17 Reforestation	FPU	A	13	2.05	1/1/2017	\$50,773	0.0%	Complete	2017	Reforestation
HO15RST000287	MIDW	E	1	0.15	1/2/2015	\$1,300	0.0%	Complete	2015	Dry wells
HO15RST000248	MIDW	E	1	0.15	2/10/2015	\$1,040	0.0%	Complete	2015	Dry wells

HO15RST00090	MIDW	E	1	0.15	10/15/2015	\$2,500	0.0%	Complete	2016	
HO15RST600962	MIBR	E	1	0.15	6/30/2015	\$0	0.0%	Complete	2015	R2-01
FY12 Voluntary Rain Gardens	MRNG	E	2	0.30	1/1/2012	\$5,800	0.0%	Complete	2012	Voluntary Rain Gardens
FY13 Voluntary Rain Gardens	MRNG	E	15	2.25	1/1/2013	\$58,000	0.0%	Complete	2013	Voluntary Rain Gardens
FY14 Voluntary Rain Gardens	MRNG	E	32	4.80	1/1/2014	\$373,153	0.0%	Complete	2014	Voluntary Rain Gardens
FY15 Voluntary Rain Gardens	MRNG	E	71	10.65	1/1/2015	\$160,206	0.1%	Complete	2015	Voluntary Rain Gardens
FY16 Voluntary Rain Gardens	MRNG	E	135	20.25	1/1/2016	\$254,205	0.2%	Complete	2016	Voluntary Rain Gardens
FY17 Voluntary Rain Gardens	MRNG	E	45	6.75	1/1/2017	\$57,924	0.1%	Complete	2017	Voluntary Rain Gardens
FY10 Rain Barrels	MRWH	E	41	0.08	6/30/2010	\$4,000	0.0%	Complete	2010	Rain Barrels
FY11 Rain Barrels	MRWH	E	175	0.35	6/30/2011	\$4,000	0.0%	Complete	2011	Rain Barrels
FY12 Rain Barrels	MRWH	E	48	0.10	6/30/2012	\$4,000	0.0%	Complete	2012	Rain Barrels
FY13 Rain Barrels	MRWH	E	199	0.40	6/30/2013	\$4,000	0.0%	Complete	2013	Rain Barrels
FY14 Rain Barrels	MRWH	E	170	0.34	6/30/2014	\$4,000	0.0%	Complete	2014	Rain Barrels
FY15 Rain Barrels	MRWH	E	119	0.24	6/30/2015	\$4,000	0.0%	Complete	2015	Rain Barrels
FY16 Rain Barrels	MRWH	E	128	0.26	6/30/2016	\$4,000	0.0%	Complete	2016	Rain Barrels
FY17 Rain Barrels	MRWH	E	117	0.23	6/30/2017	\$4,000	0.0%	Complete	2017	Rain Barrels
HO14RST600526	ODSW	S	1	5.00	10/16/2014	\$0	0.0%	Complete	2015	A1-05
FY14 Other	OTH	E	5	5.00	1/1/2014	\$0	0.0%	Complete	2014	Other
FY15 Other	OTH	E	3	3.00	1/1/2015	\$0	0.0%	Complete	2015	Other
FY6 Other	OTH	E	2	2.00	1/1/2016	\$1,918	0.0%	Complete	2016	Other
FY16 Septic Connections to WWTP	SEPC	A	5	1.95	1/1/2016	\$0	0.0%	Complete	2016	Septic Connections to WWTP
FY17 Septic Connections to WWTP	SEPC	A	6	2.34	1/1/2017	\$0	0.0%	Complete	2017	Septic Connections to WWTP
FY11 Septic Denitrification	SEPD	A	3	0.78	1/1/2011	\$0	0.0%	Complete	2011	Septic Denitrification
FY12 Septic Denitrification	SEPD	A	3	0.78	1/1/2012	\$0	0.0%	Complete	2012	Septic Denitrification
FY13 Septic Denitrification	SEPD	A	2	0.52	1/1/2013	\$0	0.0%	Complete	2013	Septic Denitrification
FY14 Septic Denitrification	SEPD	A	27	7.02	1/1/2014	\$0	0.1%	Complete	2014	Septic Denitrification
FY15 Septic Denitrification	SEPD	A	101	26.26	1/1/2015	\$0	0.2%	Complete	2015	Septic Denitrification
FY16 Septic Denitrification	SEPD	A	31	8.06	1/1/2016	\$0	0.1%	Complete	2016	Septic Denitrification
FY17 Septic Denitrification	SEPD	A	64	16.64	1/1/2017	\$0	0.1%	Complete	2017	Septic Denitrification
FY12 Septic Pumping	SEPP	A	1	0.03	1/1/2012	\$0	0.0%	Complete	2012	Septic Pumping
FY13 Septic Pumping	SEPP	A	835	25.05	1/1/2013	\$0	0.2%	Complete	2013	Septic Pumping
FY14 Septic Pumping	SEPP	A	2268	68.04	1/1/2014	\$0	0.6%	Complete	2014	Septic Pumping
FY15 Septic Pumping	SEPP	A	1299	38.97	1/1/2015	\$0	0.3%	Complete	2015	Septic Pumping
FY16 Septic Pumping	SEPP	A	1086	32.58	1/1/2016	\$0	0.3%	Complete	2016	Septic Pumping
FY17 Septic Pumping	SEPP	A	1275	38.25	1/1/2017	\$0	0.3%	Complete	2017	Septic Pumping
HO16RST600752	XOGS	S		1.50	6/20/2016	\$0	0.0%	Complete	2016	BR3
HO16RST600754	XOGS	S		1.50	6/20/2016	\$0	0.0%	Complete	2016	BR3
Subtotal Other Complete To Date			10238	472.01		\$9,956,730	3.8%			
Total Complete to Date			10,444	1519.25		\$49,754,401	12.4%			

VERSION 12-15-17



Prince George's County, Maryland



WPRP FY2017 Annual Report	
Jurisdiction	Prince George's County, Maryland
Contact Name	Jerry Maldonado
Phone	(301) 883-5943
Address	1801 McCormick Dr., Suite 500
City	Landover
State	Maryland
Zip	20774
Email	jgmalconado@co.pg.md.us
Baseline Acres	30,524
Permit Num	11-DP-3314
Reporting Year	FY2017 (July 1, 2016 through June 30, 2017)



Prince George's County, Maryland



WPRP FY2017 Annual Report

Article 4-202.1(i)(4): "The percentage and amount of funds in the local watershed protection and restoration fund spent on each of the purposes provided in subsection (h)(4) of this section;"

Program Element (Restoration)	Cost	Percent of WPRF
Capital Improvements for Stormwater Management ¹	\$31,183,711.35	10.84%
Property Management ²	\$9,088,150.59	3.16%
Public Education and Outreach ³	\$3,874,382.00	1.35%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv)) ⁴	\$2,858,831.65	0.99%
Review of Stormwater Management Plans and Permit Applications for New Development ⁵	\$8,518,700.00	2.96%
Grants to Nonprofit Organizations	\$722,718.00	0.25%
Administration of WPRF	\$875,512.00	0.30%
TOTAL	\$57,122,005.59	19.86%
Number of Properties Subject to Fee	262,650	
Reporting Year	2017	
Permit Number	11-DP-3314	
Total Restoration Costs Projected to Permit Term (Jan 2, 2017 to Jan 1, 2019)	\$287,603,535 (Source: FAP 2016)	

Note:

¹ Capital improvement cost represents the total expenditure for FY2017 that includes completed projects (including completion certification) and active projects under planning, design, and construction.

² Total cost for tree maintenance including tree planting, litter control, and storm drain maintenance vacuuming.

³ Includes cost for public outreach and education and social economic development.

⁴ Stormwater management planning include mapping and assessment of impervious surfaces and monitoring, inspection, and enforcement activities to carry out the purposes of the watershed protection and restoration fund.

⁵ Department of Permitting, Inspection, and Enforcement staff salary.



Prince George's County, Maryland

WPRP FY2017 Annual Report



WPRP FY2017 Annual Report	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy	Fee Reduction Amount	Rate Structures							Additional Sources of Funds					Estimated Annual Revenue		
					Annual Single Family Residential Rate Teir 1	Annual Single Family Residential Rate Teir 2	Annual Single Family Residential Rate Teir 3	Annual Commercial Rate/ ESU* (Administrative Fee = \$20.58 and Impact Fee \$20.90)	Equivalent Service Unit (ESU) Impervious (in square feet)	Commercial Not Capped: Impact Fee is applied per ESU rate*	Non-profits, Religious Organizations/ ESU*	Exemptions**	Federal Facilities Status	Federal Facility Fee(s)/Rate(s)	Additional Source 1 (Grants)	Additional Source 2 (Clean Water Act Fees)		Additional Source 3 (State Revolving Loans and Bonds)	Additional Source 4 (State Ad valorem Enterprise Fund)
Prince George's County	Department of the Environment	Yes	6-Jul-2014	\$ 1,032.00	\$33.12	\$41.48	\$62.38	41.48	2,665	41.48	41.48	See notes below	Exempt	N/A	\$849,503	\$14,867,923	\$0.00	\$51,892,891	\$67,310,227.00
		Use: Yes or No	Use the approval date or N/A	Reduction amount(s), if any, with reason for reduction(s)***				Use: N/A, amount of rate rate, rate amount per ERU, etc.				General description of exemption(s), if any	Use: No Facilities, Exempt, or Charged	Use: N/A or the fee and rate structures for federal facilities					

Directions:
 Notes:
 ESU* = Equivalent Service Unit = 2465 square feet untreated impervious surface
 ** Exemptions list (City of Bowie, Volunteer Fire Departments, State, Federal, County, and Municipal owned properties)
 *** DoE has established policies and procedures to allow County property owners to reduce the Clean Water Act fees. These policies account for on-site and off-site systems, facilities, services, or activities that reduce the quantity or improve the quality of stormwater discharged from County properties.



Prince George's County, Maryland



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2017 Source	Amount
Annual Single Family Residential Fees Collected	\$ 8,504,763.00
Annual Commercial Fees Collected	\$ 5,516,877.00
Non-profits, Religious Orgs Fees Collected	\$ 546,283.00
Unnamed Additional Source 1	\$ 14,567,923.00



Prince George's County, Maryland



WPRP FY2017 Annual Report

List of Completed Projects in FY2017

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST*	IMPL STATUS	IMPL COMP YR
PG17RST000079	PWET	S	1	42.94	02/01/17	\$446,000	Complete	2017
PG17RST000081	PWET	S	1	11.70	06/24/17	\$336,432	Complete	2017
PG17RST000123	PWET	S	1	26.24	06/28/17	\$676,000	Complete	2017
PG16RST101662	MMBR	E	1	0.22	03/13/17	\$252,317	Complete	2017
PG16RST100030	NDNR	E	1	0.02	10/12/16	\$1,849	Complete	2016
PG16RST100022	MMBR	E	1	0.28	10/03/16	\$197,772	Complete	2016
PG16RST107130	MMBR	E	1	0.23	04/13/17	\$119,125	Complete	2017
PG16RST100100	PWET	S	1	1.05	06/19/17	\$58,212	Complete	2017
PG16RST103150	MMBR	E	1	0.23	08/04/16	\$59,361	Complete	2016
PG16RST109160	PWET	S	1	82.04	06/30/17	\$4,202,351	Complete	2017
PG16RST100065	MMBR	E	1	0.55	08/08/16	\$90,874	Complete	2016
PG16RST103970	MSGW	E	1	1.49	12/12/16	\$81,693	Complete	2016
PG16RST100043	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST101660	MMBR	E	1	0.20	03/13/17	\$252,317	Complete	2017
PG16RST101550	FSND	S	1	0.61	04/07/17	\$167,322	Complete	2017
PG16RST103070	PWET	S	1	10.63	06/02/17	\$847,161	Complete	2017
PG16RST103480	MMBR	E	1	0.41	12/21/16	\$100,783	Complete	2016
PG16RST100042	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST100044	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST107948	NDRR	E	1	0.01	10/12/16	\$6,935	Complete	2016
PG16RST101010	MMBR	E	1	0.20	09/12/16	\$74,500	Complete	2016
PG16RST100023	MMBR	E	1	0.45	10/03/16	\$197,772	Complete	2016
PG16RST106091	FSND	S	1	0.87	03/20/17	\$281,308	Complete	2017
PG16RST106141	FSND	S	1	0.40	11/28/16	\$136,422	Complete	2016
PG16RST107090	MMBR	E	1	0.19	05/18/17	\$131,775	Complete	2017
PG16RST102100	NDNR	E	1	0.02	09/08/16	\$1,896	Complete	2016

*The zero cost indicates that the project was implemented by others with no expense to the County. However, the project was reported for crediting under NPDES.



Prince George's County, Maryland



WPRP FY2017 Annual Report

List of Completed Projects in FY2017

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST*	IMPL STATUS	IMPL COMP YR
PG16RST102321	MMBR	E	1	0.12	11/29/16	\$128,707	Complete	2016
PG16RST106071	FSND	S	1	1.34	03/06/17	\$409,397	Complete	2017
PG16RST106072	FSND	S	1	2.01	03/06/17	\$409,397	Complete	2017
PG16RST100085	MMBR	E	1	0.26	11/03/16	\$44,105	Complete	2016
PG16RST100086	MMBR	E	1	0.23	11/03/16	\$44,105	Complete	2016
PG16RST100087	MMBR	E	1	0.30	11/03/16	\$44,105	Complete	2016
PG16RST102230	NDNR	E	1	0.02	09/08/16	\$1,580	Complete	2016
PG16RST102231	NDNR	E	1	0.02	09/08/16	\$1,580	Complete	2016
PG16RST102232	NDNR	E	1	0.02	09/08/16	\$1,580	Complete	2016
PG16RST102233	NDNR	E	1	0.02	09/08/16	\$1,580	Complete	2016
PG16RST102234	NDNR	E	1	0.02	09/08/16	\$1,580	Complete	2016
PG16RST102235	NDNR	E	1	0.02	09/08/16	\$1,580	Complete	2016
PG16RST106101	MMBR	E	1	0.35	12/12/16	\$132,807	Complete	2016
PG16RST106160	MMBR	E	1	0.35	04/04/17	\$190,671	Complete	2017
PG16RST106081	MMBR	E	1	0.31	12/21/16	\$190,097	Complete	2016
PG16RST103481	MMBR	E	1	0.37	12/21/16	\$100,783	Complete	2016
PG16RST107949	NDRR	E	1	0.01	10/12/16	\$6,935	Complete	2016
PG16RST107950	NDRR	E	1	0.01	10/12/16	\$6,935	Complete	2016
PG16RST101551	MMBR	E	1	0.14	04/07/17	\$167,322	Complete	2017
PG16RST124551	MMBR	E	1	0.20	04/07/17	\$2,000	Complete	2017
PG16RST107000	NDNR	E	1	0.02	01/17/17	\$6,221	Complete	2017
PG16RST107001	NDNR	E	1	0.02	01/17/17	\$6,221	Complete	2017
PG16RST107002	NDNR	E	1	0.02	01/17/17	\$6,221	Complete	2017
PG16RST107003	NDRR	E	1	0.01	01/17/17	\$6,221	Complete	2017
PG16RST107004	NDRR	E	1	0.01	01/17/17	\$6,221	Complete	2017
PG16RST107005	NDRR	E	1	0.01	01/17/17	\$6,221	Complete	2017
PG16RST107006	NDRR	E	1	0.01	01/17/17	\$6,221	Complete	2017

*The zero cost indicates that the project was implemented by others with no expense to the County. However, the project was reported for crediting under NPDES.



Prince George's County, Maryland



WPRP FY2017 Annual Report

List of Completed Projects in FY2017

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST*	IMPL STATUS	IMPL COMP YR
PG16RST107007	NDRR	E	1	0.01	01/17/17	\$6,221	Complete	2017
PG16RST107008	NDNR	E	1	0.02	01/17/17	\$6,221	Complete	2017
PG16RST107009	NDNR	E	1	0.02	01/17/17	\$6,221	Complete	2017
PG16RST107940	NDNR	E	1	0.02	01/17/17	\$8,886	Complete	2017
PG16RST107941	NDNR	E	1	0.02	01/17/17	\$8,886	Complete	2017
PG16RST102103	NDNR	E	1	0.02	09/08/16	\$1,896	Complete	2016
PG16RST102104	NDNR	E	1	0.02	09/08/16	\$1,896	Complete	2016
PG16RST106156	NDNR	E	1	0.01	09/12/16	\$18,259	Complete	2016
PG16RST106953	NDNR	E	1	0.02	09/12/16	\$45,647	Complete	2016
PG16RST107942	NDNR	E	1	0.02	01/17/17	\$8,886	Complete	2017
PG16RST107943	NDNR	E	1	0.02	01/17/17	\$8,886	Complete	2017
PG16RST107944	NDNR	E	1	0.02	01/17/17	\$8,886	Complete	2017
PG16RST107945	NDNR	E	1	0.02	01/17/17	\$8,886	Complete	2017
PG16RST107946	NDNR	E	1	0.01	01/17/17	\$8,886	Complete	2017
PG16RST107951	NDRR	E	1	0.01	10/12/16	\$6,935	Complete	2016
PG16RST124550	MMBR	E	1	0.06	04/07/17	\$2,000	Complete	2017
PG16RST114190	PWET	S	1	4.20	06/22/17	\$206,000	Complete	2017
PG16RST124560	SPSC	E	1	4.83	04/07/17	\$5,500	Complete	2017
PG16RST124561	MSWB	E	1	0.31	04/07/17	\$5,500	Complete	2017
PG16RST102320	FBIO	S	1	0.52	11/29/16	\$128,707	Complete	2016
PG16RST106952	NDNR	E	1	0.02	09/12/16	\$45,647	Complete	2016
PG16RST106951	NDNR	E	1	0.02	09/12/16	\$45,647	Complete	2016
PG16RST106950	NDNR	E	1	0.02	09/12/16	\$45,647	Complete	2016
PG16RST106159	NDNR	E	1	0.02	09/12/16	\$18,259	Complete	2016
PG16RST106158	NDNR	E	1	0.01	09/12/16	\$18,259	Complete	2016
PG16RST106157	NDNR	E	1	0.02	09/12/16	\$18,259	Complete	2016
PG16RST106155	NDNR	E	1	0.02	09/12/16	\$18,259	Complete	2016

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PG16RST106154	NDNR	E	1	0.01	09/12/16	\$18,259	Complete	2016
PG16RST106153	NDNR	E	1	0.02	09/12/16	\$18,259	Complete	2016
PG16RST106151	NDNR	E	1	0.02	09/12/16	\$18,259	Complete	2016
PG16RST106152	NDNR	E	1	0.02	09/12/16	\$18,259	Complete	2016
PG16RST106030	MMBR	E	1	0.15	11/08/16	\$95,534	Complete	2016
PG16RST106040	MMBR	E	1	0.18	11/04/16	\$72,293	Complete	2016
PG16RST106050	FSND	S	1	4.89	03/06/17	\$417,942	Complete	2017
PG16RST106130	FSND	S	1	0.57	10/21/16	\$274,155	Complete	2016
PG16RST106150	NDNR	E	1	0.02	09/12/16	\$18,259	Complete	2016
PG16RST106100	MMBR	E	1	0.44	12/12/16	\$132,807	Complete	2016
PG16RST106161	MSWG	E	1	0.58	04/04/17	\$190,671	Complete	2017
PG16RST106090	FSND	S	1	2.12	03/20/17	\$281,308	Complete	2017
PG16RST106140	MMBR	E	1	0.31	11/28/16	\$136,422	Complete	2016
PG16RST106170	FSND	S	1	3.68	12/21/16	\$700,065	Complete	2016
PG16RST106080	MMBR	E	1	0.31	12/21/16	\$190,097	Complete	2016
PG16RST106070	FSND	S	1	0.89	03/06/17	\$409,397	Complete	2017
PG16RST115340	PWET	S	1	7.06	06/28/17	\$260,000	Complete	2017
PG16RST100031	NDNR	E	1	0.02	10/12/16	\$1,849	Complete	2016
PG16RST100032	NDNR	E	1	0.02	10/12/16	\$1,849	Complete	2016
PG16RST100033	NDNR	E	1	0.02	10/12/16	\$1,849	Complete	2016
PG16RST100034	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST100035	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST100036	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST100037	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST100038	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST100039	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST100040	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST100041	NDRR	E	1	0.01	10/12/16	\$1,849	Complete	2016
PG16RST103450	PWET	S	1	27.50	04/07/17	\$207,759	Complete	2017

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PG16RST103151	MMBR	E	1	0.09	08/04/16	\$59,361	Complete	2016
PG16RST106033	MMBR	E	1	0.37	11/08/16	\$95,534	Complete	2016
PG16RST106031	MMBR	E	1	0.41	11/08/16	\$95,534	Complete	2016
PG16RST106041	MMBR	E	1	0.13	11/04/16	\$72,293	Complete	2016
PG16RST106042	MMBR	E	1	0.26	11/04/16	\$72,293	Complete	2016
PG16RST106043	MMBR	E	1	0.39	11/04/16	\$72,293	Complete	2016
PG16RST106021	NDNR	E	1	0.02	10/21/16	\$34,992	Complete	2016
PG16RST106022	NDNR	E	1	0.02	10/21/16	\$34,992	Complete	2016
PG16RST106023	NDNR	E	1	0.02	10/21/16	\$34,992	Complete	2016
PG16RST106024	NDNR	E	1	0.02	10/21/16	\$34,992	Complete	2016
PG16RST106025	NDNR	E	1	0.02	10/21/16	\$34,992	Complete	2016
PG16RST106026	NDNR	E	1	0.01	10/21/16	\$34,992	Complete	2016
PG16RST106020	MMBR	E	1	0.28	10/21/16	\$34,992	Complete	2016
PG16RST102101	NDNR	E	1	0.02	09/08/16	\$1,896	Complete	2016
PG16RST102102	NDNR	E	1	0.02	09/08/16	\$1,896	Complete	2016
PG16RST109100	PWET	S	1	241.00	11/09/16	\$1,841,654	Complete	2016
PG17ALN000005	OUT	A	1	1.50	05/17/17	\$280,512	Complete	2017
PG17ALN000007	STRE	A	1	3.71	05/24/17	\$504,690	Complete	2017
PG17ALN000024	STRE	A	1	6.04	06/24/17	\$265,725	Complete	2017
PG16ALN000028	STRE	A	1	2.05	09/01/16	\$0	Complete	2016
PG16ALN000054	STRE	A	1	1.49	09/01/16	\$0	Complete	2016
PG16ALN000055	STRE	A	1	0.75	08/01/16	\$0	Complete	2016
PG16ALN000063	STRE	A	1	1.48	08/01/16	\$0	Complete	2016
PG16ALN000064	STRE	A	1	3.84	08/01/16	\$0	Complete	2016
PG17ALN000065	STRE	A	1	6.62	01/01/17	\$0	Complete	2017
PG17ALN000068	STRE	A	1	3.61	03/01/17	\$0	Complete	2017
PG16ALN000069	STRE	A	1	1.13	08/01/16	\$0	Complete	2016
PG17ALN000073	STRE	A	1	1.50	03/01/17	\$0	Complete	2017
PG17ALN000077	STRE	A	1	4.00	03/01/17	\$0	Complete	2017

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PG16ALN000080	STRE	A	1	1.25	08/01/16	\$0	Complete	2016
PG17ALN000086	STRE	A	1	1.25	02/01/17	\$0	Complete	2017
PG17ALN000089	STRE	A	1	6.00	01/01/17	\$0	Complete	2017
PG16ALN000092	STRE	A	1	4.25	12/01/16	\$0	Complete	2016
PG16ALN000095	STRE	A	1	3.50	10/01/16	\$0	Complete	2016
PG16ALN000097	STRE	A	1	2.00	12/01/16	\$0	Complete	2016
PG16ALN000101	STRE	A	1	3.00	10/01/16	\$0	Complete	2016
PG16ALN000106	STRE	A	1	3.00	10/01/16	\$0	Complete	2016
PG17ALN000107	STRE	A	1	6.50	04/01/17	\$0	Complete	2017
PG17ALN000110	STRE	A	1	9.00	03/01/17	\$0	Complete	2017
PG16ALN000112	STRE	A	1	0.50	09/01/16	\$0	Complete	2016
PG16ALN000119	STRE	A	1	0.75	08/01/16	\$0	Complete	2016
PG16ALN000120	STRE	A	1	1.00	10/01/16	\$0	Complete	2016
PG16ALN000121	STRE	A	1	0.75	10/01/16	\$0	Complete	2016
PG16APT000085	SEPC	A	1	0.39	08/09/16	\$0	Complete	2016
PG16APT000137	SEPC	A	1	0.39	09/23/16	\$0	Complete	2016
PG16APT000138	SEPC	A	1	0.39	08/24/16	\$0	Complete	2016
PG16APT000147	SEPC	A	1	0.39	09/20/16	\$0	Complete	2016
PG16APT000148	SEPC	A	1	0.39	08/01/16	\$0	Complete	2016
PG16APT000151	SEPC	A	1	0.39	08/10/16	\$0	Complete	2016
PG16APT000152	SEPC	A	1	0.39	08/12/16	\$0	Complete	2016
PG16APT000155	SEPC	A	1	0.39	08/17/16	\$0	Complete	2016
PG16APT000156	SEPC	A	1	0.39	09/23/16	\$0	Complete	2016
PG16APT000157	SEPC	A	1	0.39	08/17/16	\$0	Complete	2016
PG16APT000158	SEPC	A	1	0.39	08/04/16	\$0	Complete	2016
PG16APT000159	SEPC	A	1	0.39	08/19/16	\$0	Complete	2016
PG16APT000160	SEPC	A	1	0.39	08/31/16	\$0	Complete	2016
PG16APT000161	SEPD	A	1	0.26	09/14/16	\$0	Complete	2016
PG16APT000162	SEPD	A	1	0.26	08/08/16	\$0	Complete	2016

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PG16APT000163	SEPD	A	1	0.26	08/03/16	\$0	Complete	2016
PG16APT000221	SEPD	A	1	0.26	09/09/16	\$0	Complete	2016
PG16APT000222	SEPD	A	1	0.26	08/03/16	\$0	Complete	2016
PG16APT000223	SEPD	A	1	0.26	08/08/16	\$0	Complete	2016
PG16APT000224	SEPD	A	1	0.26	10/19/16	\$0	Complete	2016
PG16APT000225	SEPD	A	1	0.26	09/23/16	\$0	Complete	2016
PG16APT000226	SEPD	A	1	0.26	11/28/16	\$0	Complete	2016
PG16APT000227	SEPD	A	1	0.26	12/28/16	\$0	Complete	2016
PG17APT000228	SEPD	A	1	0.26	03/02/17	\$0	Complete	2017
PG16APT000229	SEPD	A	1	0.26	10/07/16	\$0	Complete	2016
PG16APT000230	SEPD	A	1	0.26	09/28/16	\$0	Complete	2016
PG16APT000231	SEPD	A	1	0.26	12/13/16	\$0	Complete	2016
PG16APT000232	SEPD	A	1	0.26	09/09/16	\$0	Complete	2016
PG17APT000233	SEPD	A	1	0.26	01/10/17	\$0	Complete	2017
PG16APT000234	SEPD	A	1	0.26	09/09/16	\$0	Complete	2016
PG16APT000235	SEPD	A	1	0.26	09/14/16	\$0	Complete	2016
PG17APY000001	FPU	A	1	0.76		\$36,000	Complete	2017
PG17APY000002	FPU	A	1	1.14		\$65,000	Complete	2017
PG17APY000003	FPU	A	1	2.28		\$101,000	Complete	2017
PG17APY000004	FPU	A	1	8.74		\$380,600	Complete	2017
PG17APY000005	FPU	A	1	4.56		\$182,000	Complete	2017
PG16APY000006	IMPF	A	1	0.42		\$68,918	Complete	2016
PG17APY000007	FPU	A	1	1.00		\$160,000	Complete	2017
PG17APY000008	IMPP	A	1	0.00		\$0	Complete	2017
PG17APY000009	IMPP	A	1	0.04		\$0	Complete	2017
PG17APY000010	IMPP	A	1	0.00		\$0	Complete	2017
PG17APY000011	IMPP	A	1	0.02		\$0	Complete	2017
PG17APY000012	IMPP	A	1	0.06		\$0	Complete	2017
PG16APY000013	IMPP	A	1	0.04		\$7,000	Complete	2016

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PG17APY000014	SDV	A	1	0.23		\$3,147	Complete	2017
PG17APY000015	SDV	A	1	0.68		\$9,266	Complete	2017
PG17APY000016	SDV	A	1	3.69		\$50,350	Complete	2017
PG17APY000017	SDV	A	1	1.51		\$20,629	Complete	2017
PG17APY000018	SDV	A	1	1.82		\$24,825	Complete	2017
PG17APY000019	SDV	A	1	0.33		\$4,545	Complete	2017
PG17APY000020	SDV	A	1	0.04		\$524	Complete	2017
PG17APY000021	SDV	A	1	1.04		\$14,161	Complete	2017
PG17APY000022	SDV	A	1	1.76		\$23,951	Complete	2017
PG17APY000023	SDV	A	1	0.92		\$12,587	Complete	2017
PG17APY000024	SDV	A	1	0.55		\$7,517	Complete	2017
PG17APY000025	SDV	A	1	1.14		\$15,559	Complete	2017
PG17APY000026	SDV	A	1	1.78		\$24,301	Complete	2017
PG17APY000027	SDV	A	1	0.53		\$7,168	Complete	2017
PG17APY000028	SDV	A	1	2.29		\$31,294	Complete	2017
PG17APY000029	SDV	A	1	3.28		\$44,755	Complete	2017
PG17APY000030	SDV	A	1	0.99		\$13,462	Complete	2017
PG17APY000031	SDV	A	1	1.88		\$25,699	Complete	2017
PG17APY000032	SDV	A	1	1.54		\$20,979	Complete	2017
PG17APY000033	SDV	A	1	3.01		\$41,084	Complete	2017
PG17APY000034	SDV	A	1	0.85		\$11,538	Complete	2017
PG17APY000035	SDV	A	1	0.04		\$524	Complete	2017
PG17APY000036	SDV	A	1	1.77		\$24,126	Complete	2017
PG17APY000037	SDV	A	1	0.04		\$524	Complete	2017
PG17APY000038	SDV	A	1	0.03		\$350	Complete	2017
PG17APY000039	SDV	A	1	1.38		\$18,881	Complete	2017
PG17APY000040	SDV	A	1	0.31		\$4,196	Complete	2017
PG17APY000041	SDV	A	1	2.29		\$31,294	Complete	2017
PG17APY000042	SDV	A	1	4.18		\$56,993	Complete	2017

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PG17APY000043	SDV	A	1	0.19		\$2,622	Complete	2017
PG17APY000044	SDV	A	1	4.19		\$57,168	Complete	2017
PG17APY000045	SDV	A	1	0.76		\$10,315	Complete	2017
PG17APY000046	SDV	A	1	1.00		\$13,636	Complete	2017
PG17APY000047	SDV	A	1	1.31		\$17,832	Complete	2017
PG17APY000048	SDV	A	1	0.06		\$874	Complete	2017
PG17APY000049	SDV	A	1	0.41		\$5,594	Complete	2017
PG17APY000050	SDV	A	1	1.33		\$18,182	Complete	2017
PG17APY000051	SDV	A	1	1.63		\$22,203	Complete	2017
PG17APY000052	SDV	A	1	2.14		\$29,196	Complete	2017
PG17APY000053	SDV	A	1	0.47		\$6,469	Complete	2017
PG17APY000054	SDV	A	1	1.92		\$26,224	Complete	2017
PG17APY000055	SDV	A	1	2.04		\$27,797	Complete	2017
PG17APY000056	SDV	A	1	0.85		\$11,538	Complete	2017
PG17APY000057	SDV	A	1	0.69		\$9,441	Complete	2017
PG17APY000058	SDV	A	1	1.45		\$19,755	Complete	2017
PG17APY000059	SDV	A	1	0.01		\$175	Complete	2017
PG17APY000060	SDV	A	1	0.59		\$8,042	Complete	2017
PG17APY000061	SDV	A	1	0.13		\$1,748	Complete	2017
PG17APY000062	SDV	A	1	0.94		\$12,762	Complete	2017
PG17APY000063	SDV	A	1	1.17		\$15,909	Complete	2017
PG17APY000064	SDV	A	1	1.91		\$26,049	Complete	2017
PG17APY000065	SDV	A	1	0.95		\$12,937	Complete	2017
PG17APY000066	SDV	A	1	2.68		\$36,538	Complete	2017
PG17APY000067	SDV	A	1	2.09		\$28,497	Complete	2017
PG17APY000068	SDV	A	1	0.36		\$4,895	Complete	2017
PG17APY000069	SDV	A	1	0.24		\$3,322	Complete	2017
PG17APY000070	SDV	A	1	1.13		\$15,385	Complete	2017
PG17APY000097	FPU	A	1	0.11		\$10,892	Complete	2017

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PG17APY000098	FPU	A	1	0.60		\$61,462	Complete	2017
PG17APY000099	FPU	A	1	0.34		\$35,010	Complete	2017
PG17APY000100	FPU	A	1	1.17		\$119,423	Complete	2017
PG17APY000101	FPU	A	1	0.78		\$79,745	Complete	2017
PG17APY000102	FPU	A	1	1.01		\$103,863	Complete	2017
PG17APY000103	FPU	A	1	0.54		\$54,849	Complete	2017
PG17APY000104	FPU	A	1	1.78		\$182,441	Complete	2017
PG17APY000105	FPU	A	1	0.04		\$4,279	Complete	2017
PG17APY000106	FPU	A	1	0.11		\$10,892	Complete	2017
PG17APY000107	FPU	A	1	0.49		\$50,181	Complete	2017
PG17APY000108	FPU	A	1	1.21		\$123,702	Complete	2017
PG17APY000109	FPU	A	1	0.63		\$64,185	Complete	2017
PG17APY000110	FPU	A	1	0.60		\$61,462	Complete	2017
PG17APY000111	FPU	A	1	1.11		\$113,199	Complete	2017
PG17APY000112	FPU	A	1	1.46		\$149,765	Complete	2017
PG17APY000113	FPU	A	1	1.46		\$149,765	Complete	2017
PG17APY000114	FPU	A	1	0.14		\$14,004	Complete	2017
PG17APY000115	FPU	A	1	0.13		\$12,837	Complete	2017
PG17APY000116	FPU	A	1	1.35		\$138,095	Complete	2017
PG17APY000117	FPU	A	1	0.33		\$33,454	Complete	2017
PG17APY000118	FPU	A	1	0.15		\$15,560	Complete	2017
PG17APY000119	FPU	A	1	0.60		\$61,073	Complete	2017
PG17APY000120	FPU	A	1	0.59		\$60,295	Complete	2017
PG17APY000121	FPU	A	1	0.14		\$14,004	Complete	2017
PG17APY000122	FPU	A	1	0.29		\$29,564	Complete	2017
PG17APY000123	FPU	A	1	0.57		\$58,350	Complete	2017
PG17APY000124	FPU	A	1	0.30		\$31,120	Complete	2017
PG17APY000125	FPU	A	1	0.27		\$27,230	Complete	2017
PG17APY000126	FPU	A	1	0.19		\$19,061	Complete	2017

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PG17APY000127	FPU	A	1	0.21		\$21,784	Complete	2017
PG17APY000128	FPU	A	1	0.46		\$46,680	Complete	2017
PG17APY000129	FPU	A	1	0.08		\$8,558	Complete	2017
PG17APY000130	FPU	A	1	0.05		\$5,446	Complete	2017
PG17APY000131	FPU	A	1	0.36		\$36,955	Complete	2017
PG17APY000132	FPU	A	1	0.05		\$4,668	Complete	2017
PG17APY000133	FPU	A	1	0.24		\$24,118	Complete	2017
PG17APY000134	FPU	A	1	1.66		\$169,993	Complete	2017
PG17APY000135	FPU	A	1	0.22		\$22,951	Complete	2017
PG17APY000136	FPU	A	1	0.49		\$49,792	Complete	2017
PG17APY000137	FPU	A	1	1.57		\$160,657	Complete	2017
PG17APY000138	FPU	A	1	0.34		\$34,621	Complete	2017
PG17APY000139	FPU	A	1	0.17		\$17,505	Complete	2017
PG17APY000140	FPU	A	1	0.55		\$56,016	Complete	2017
PG17APY000141	FPU	A	1	0.87		\$89,081	Complete	2017
PG17APY000142	FPU	A	1	0.50		\$50,959	Complete	2017
PG17APY000143	FPU	A	1	0.80		\$81,690	Complete	2017
PG16APY000179	IMPP	A	1	0.00		\$3,000	Complete	2016
PG16APY000181	IMPP	A	1	0.02		\$89,000	Complete	2016
PG16APY000182	IMPP	A	1	0.38		\$127,000	Complete	2016
PG16APY000183	IMPP	A	1	0.01		\$10,000	Complete	2016
PG16APY000184	IMPP	A	1	0.01		\$2,000	Complete	2016
PG16APY000185	IMPP	A	1	0.01		\$2,000	Complete	2016
PG16APY000186	IMPP	A	1	0.01		\$3,000	Complete	2016
PG16APY000187	IMPP	A	1	0.03		\$1,000	Complete	2016
PG16APY000188	IMPP	A	1	0.02		\$1,000	Complete	2016
PG16APY000189	IMPP	A	1	0.09		\$45,000	Complete	2016
PG16APY000190	IMPP	A	1	0.02		\$19,000	Complete	2016
PG16APY000191	IMPP	A	1	0.03		\$17,000	Complete	2016

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Prince George's County, Maryland



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List of Completed Projects in FY2017

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST*	IMPL STATUS	IMPL COMP YR
PG17APY000192	SDV	A	1	2.42		\$33,042	Complete	2017
PG17APY000193	SDV	A	1	0.41		\$5,594	Complete	2017
PG17APY000194	SDV	A	1	2.94		\$40,035	Complete	2017
PG17APY000195	SDV	A	1	1.99		\$27,098	Complete	2017
PG17APY000196	SDV	A	1	0.69		\$9,441	Complete	2017
PG17APY000197	SDV	A	1	0.26		\$3,497	Complete	2017
PG17APY000198	SDV	A	1	0.54		\$7,343	Complete	2017
PG17APY000199	SDV	A	1	1.77		\$24,126	Complete	2017
PG17APY000200	SDV	A	1	0.87		\$11,888	Complete	2017
PG17APY000201	SDV	A	1	1.10		\$15,035	Complete	2017
PG17APY000202	SDV	A	1	0.21		\$2,797	Complete	2017
PG17APY000203	SDV	A	1	1.35		\$18,357	Complete	2017
PG17APY000204	SDV	A	1	0.65		\$8,916	Complete	2017
PG17APY000205	SDV	A	1	0.17		\$2,273	Complete	2017
PG17APY000206	SDV	A	1	0.09		\$1,224	Complete	2017
PG17APY000207	FPU	A	1	0.08		\$8,169	Complete	2017
PG17APY000208	FPU	A	1	0.92		\$94,527	Complete	2017
PG17APY000209	FPU	A	1	1.31		\$134,205	Complete	2017
PG17APY000210	FPU	A	1	0.46		\$47,458	Complete	2017
PG17APY000211	FPU	A	1	2.35		\$240,402	Complete	2017
PG17APY000212	FPU	A	1	0.14		\$14,004	Complete	2017
PG17APY000213	FPU	A	1	1.53		\$156,767	Complete	2017
PG17APY000214	FPU	A	1	0.33		\$34,232	Complete	2017
PG17APY000215	FPU	A	1	0.17		\$17,894	Complete	2017
PG17APY000216	FPU	A	1	0.23		\$23,729	Complete	2017
PG17APY000217	FPU	A	1	1.09		\$112,032	Complete	2017
PG17APY000218	FPU	A	1	0.67		\$68,464	Complete	2017
PG17APY000219	FPU	A	1	1.04		\$106,586	Complete	2017
PG17APY000220	FPU	A	1	1.04		\$106,197	Complete	2017

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Prince George's County, Maryland



WPRP FY2017 Annual Report

List of Completed Projects in FY2017

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST*	IMPL STATUS	IMPL COMP YR
PG16RST100021	IMPP	A	1	0.03		\$7,000	Complete	2016
PG16RST103152	IMPP	A	1	0.01		\$3,000	Complete	2016
PG16RST106142	IMPP	A	1	0.02		\$89,000	Complete	2016
PG16RST106171	IMPP	A	1	0.37		\$127,000	Complete	2016
PG16RST101011	IMPP	A	1	0.02		\$10,000	Complete	2016
PG16RST100088	IMPP	A	1	0.01		\$2,000	Complete	2016
PG16RST103971	IMPP	A	1	0.02		\$2,000	Complete	2016
PG16RST106102	IMPP	A	1	0.01		\$3,000	Complete	2016
PG16RST103482	IMPP	A	1	0.03		\$2,000	Complete	2016
PG16RST103483	IMPP	A	1	0.01		\$1,000	Complete	2016
PG16RST101661	IMPP	A	1	0.01		\$1,000	Complete	2017
PG16RST101663	IMPP	A	1	0.01		\$1,000	Complete	2017
PG16RST106027	IMPP	A	1	0.09		\$45,000	Complete	2016
PG16RST102322	IMPP	A	1	0.03		\$19,000	Complete	2016
PG16RST100024	IMPP	A	1	0.04		\$17,000	Complete	2016
PG16RST106073	IMPP	A	1	0.17		\$81,000	Complete	2017

TOTAL (Impervious Surface Removal, Tree Planting, Storm Drain Vacuuming, ESD and Structural BMPs) = 726.88 IA \$25,323,428

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