


CERTIFICATION

WHEREAS, the provisions of § 4-202.1 of the Environment Article of the Annotated Code of Maryland require **Howard County** to file a financial assurance plan to the Maryland Department of the Environment that demonstrates that it has sufficient funding to meet the impervious surface restoration plan requirements of **Howard County's** National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit; and

WHEREAS, the provisions of this law require that "a county or municipality may not file a financial assurance plan under this subsection until the local governing body of the county or municipality: (i) Holds a public hearing on the financial assurance plan; and (ii) Approves the financial assurance plan."

NOW, THEREFORE, I certify that:

1. A public hearing was held on the financial assurance plan on **March 15, 2021**;
2. The local governing body approves the aforementioned financial assurance plan; and
3. Under penalty of law, the information in this financial assurance plan is, to the best of my knowledge and belief, true, accurate, and complete.

DocuSigned by:

 743208700EE4DF
 Signature of County Executive/Municipal Mayor or Chief Financial Officer 6/22/2021
Date

Calvin Ball

Printed Name of County Executive/Municipal Mayor or Chief Financial Officer

County Executive
Title

County Council of Howard County, Maryland

2021 Legislative Session

Legislative Day No. 5

Resolution No. 41 -2021

Introduced by: The Chairperson at the request of the County Executive

A RESOLUTION approving a Financial Assurance Plan for Howard County’s National Pollutant Discharge Elimination System, Municipal Separate Storm Sewer System permit programs, in accordance with Section 4-202.1 of the Environment Article of the Annotated Code of Maryland; and requiring certain copies be sent to the Maryland Department of the Environment.

Introduced and read first time March 1, 2021.

By order Michelle Harrod
Theo Wimberly, Acting Administrator

Read for a second time at a public hearing on March 15, 2021.

By order Michelle Harrod
Theo Wimberly, Acting Administrator

This Resolution was read the third time and was Adopted , Adopted with amendments ____, Failed ____, Withdrawn ____, by the County Council on April 5, 2021.

Certified By Michelle Harrod
Theo Wimberly, Acting Administrator

Approved by the County Executive on April 6, 2021.

Calvin Ball
Calvin Ball, County Executive

NOTE: [[text in brackets]] indicates deletions from existing law; TEXT IN SMALL CAPITALS indicates additions to existing law; Strike-out indicates material deleted by amendment; Underlining indicates material added by amendment

1 **WHEREAS**, related to the Watershed Protection and Restoration Fee, Howard County is
2 required to file a Financial Assurance Plan (“Plan”), approved by the local governing body, with
3 the Maryland Department of the Environment (“MDE”), in accordance with § 4-202.1 of the
4 Environment Article of the Annotated Code of Maryland (the “State Law”); and
5

6 **WHEREAS**, the County has worked with MDE over the past several months to craft a Plan
7 that projects and describes actions and financial resources and costs related to stormwater
8 management in Howard County over the two-year period following the filing date of the Plan; and
9

10 **WHEREAS**, previous Plans have been approved by the passage of Council Resolution No.
11 92-2016, Council Resolution No. 185-2015, and Council Resolution No. 45-2019; and
12

13 **WHEREAS**, the State law requires that the County file a Plan with MDE and that the
14 governing body of the County approve the Plan prior to filing with MDE.
15

16 **NOW, THEREFORE, BE IT RESOLVED** by the County Council of Howard County,
17 Maryland, this 5 day of April, 2021, that it hereby approves the
18 Plan, substantially in the form attached, as a projection of actions, funding, and costs of Howard
19 County’s stormwater management program over the two-year period following the filing date of
20 the Plan.
21

22 **AND BE IT FURTHER RESOLVED** that a copy of this Resolution and the Plan be
23 sent to the Maryland Department of the Environment, 1800 Washington Boulevard, Baltimore,
24 MD 21230.

MS4 Information	
Jurisdiction	Howard County
Contact Name	Mark S. Richmond
Phone	410-313-6413
Address	9801 Broken Land Parkway
City	Columbia
State	MD
Zip	21046
Email	msrichmond@howardcountymd.gov
Impervious Acre Baseline (Untreated Acres)	2,204
Permit Number	MD0068322, 11-DP-3318
Reporting Year	2020

Check with MS4 Geodatabase:

Should match Permit Info table of Geodatabase.

These data reflect the 4th generation NPDES MS4 Permit.

VERSION 8/20/20

Howard County Financial Assurance Plan 2020: Executive Summary

The National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit issued to Howard County on December 18, 2014, mandated that the County implement restoration efforts for 20% of its total impervious surface area that has not already been restored to the maximum extent practicable (MEP) by December 17, 2019. The submission of Howard County's Financial Assurance Plan (FAP) to the Maryland Department of the Environment (MDE) fulfills requirements specified in the Maryland Article – Environment, Section 4-202.1. This plan is being filed to MDE in order to document all actions implemented by Howard County to comply with the NPDES MS4 permit and demonstrate the County's ability to pay for these activities through the Watershed Protection and Restoration Fund.

Howard County implemented its stormwater utility fee, the Watershed Protection and Restoration Fee (WPRF), on July 1, 2013, as required by state law. Upon implementation of the Fee and the Watershed Protection and Restoration Fund, the County increased existing efforts to plan, design, construct, and monitor restoration projects necessary to meet the NPDES MS4 permit's 20% restoration goal. Per MDE guidance, all restoration projects implemented following June 10, 2010 are considered restoration that applies to the County's 20% restoration goal. In comments dated August 7, 2020, MDE acknowledges that Howard County's restoration requirement for the 2014-2019 permit term is 20% of its 11,019-acre baseline, or 2,204 acres. MDE also acknowledges that the County has exceeded its 20% requirement by completing additional impervious acres of restoration and "...is commended for this significant achievement."

This FAP reflects completed actions taken by the County during the 2014-2019 permit term and planned actions projected to meet the estimated restoration requirement of the next permit term, which MDE has stated is scheduled to begin sometime in calendar year 2021. Based on the [Maryland's Phase III Watershed Implementation Plan \(WIP\)](#), the estimated restoration requirement over the five-year permit term is 10% of the impervious surface area that has not already been restored to the MEP, implemented at a rate of 2% per year.

The County's current permit, which expired on December 17, 2019, is administratively continued and remains in effect until a new permit is issued. Therefore, the County continues to implement the numerous programs required by the MS4 permit. Best management practices (BMPs) will continue to be utilized to complete additional restoration work and improve water quality, including stream restoration, outfall stabilization, tree planting, construction of new BMPs, retrofitting existing BMPs, street sweeping, inlet cleaning, and septic system upgrades, pump-outs, and connections to the sanitary sewer system. Per MDE direction, any restoration credit for projects completed after the County met the restoration requirement for the 2014-2019 permit term will be recalculated using the Draft "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated: Guidance for National Pollutant Discharge Elimination System Stormwater Permits" document (June 2020) and will apply to the restoration requirements in the next permit term. The County also continues to research and develop the voluminous electronic data necessary to meet the ever-expanding geodatabase reporting requirements of the MS4 permit.

Article 4-202-10(1)(1): Actions that will be required of the county or municipality to meet the requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

Note: To identify all "actions" required under the MS4 permit, provide an executive summary of the jurisdiction's MS4 programs. See MBE's FAP Guidance. For proposed actions to meet the impervious surface restoration plan, fill in the table below.

Baseline: 1,102 **This is the estimated 10% impervious surface restoration requirement for the 5th generation NPDES MS4 Permit.**

REST BMP TYPE ¹	BMP CLASS	IMP ACRES	IMPL COST	% ISRP COMPLETE	IMPL STATUS ²	PROJECTED IMPL YR ³
Operational Programs⁴						
MSS	A	20	\$400,000	1.8%	Complete	FY2020 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Under Construction	FY2021 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Proposed	FY2022 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Proposed	FY2023 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Proposed	FY2024 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Proposed	FY2025 - 806 miles swept
SDV	A	17	\$100,000	1.5%	Complete	FY2020 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Under Construction	FY2021 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Proposed	FY2022 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Proposed	FY2023 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Proposed	FY2024 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Proposed	FY2025 - 200,000 pounds
Average Operations Next Two Years (FY2021-FY2022) ⁵		37	\$1,000,000	3%		
Average Operations Next Five Years (FY2021-FY2025) ⁵		37	\$2,500,000	3%		
Average Operations All Years ⁵		292	\$3,000,000	3%		
Capital Projects						
Various Types	Various Classes	300	\$14,015,000	27.2%	Complete	FY19
Various Types	Various Classes	200	\$11,150,000	18.1%	Complete	FY20
Various Types	Various Classes	100	\$5,500,000	9.1%	Under Construction	FY21
Various Types	Various Classes	100	\$5,500,000	9.1%	Proposed	FY22
Various Types	Various Classes	100	\$5,500,000	9.1%	Proposed	FY23
Various Types	Various Classes	100	\$5,500,000	9.1%	Proposed	FY24
Various Types	Various Classes	100	\$5,500,000	9.1%	Proposed	FY25
Subtotal Capital Next Two Years (FY2021-FY2022)		200	\$11,000,000	18%		
Subtotal Capital Next Five Years (FY2021-FY2025)		500	\$27,500,000	45%		
Subtotal Capital All Years		1,000	\$52,665,000	91%		
Other						
SEPP	A	18	\$0	1.6%	Complete	FY20
SEPP	A	18	\$0	1.6%	Under Construction	FY21
SEPP	A	18	\$0	1.6%	Proposed	FY22
SEPP	A	18	\$0	1.6%	Proposed	FY23
SEPP	A	18	\$0	1.6%	Proposed	FY24

SEPP	A	18	\$0	1.6%	Proposed	FY25
Subtotal Other Next Two Years (FY2021-FY2022)		36	\$0	3.3%		
Subtotal Other Next Five Years (FY2021-FY2025)		90	\$0	8.2%		
Subtotal Other All Years		108	\$0	9.8%		
Total Next Two Years (FY2021-FY2022)		273	\$12,000,000	24.8%		
Total Next Five Years (FY2021-FY2025)		627	\$30,000,000	56.9%		
Total All Years		1,400	\$55,665,000	103.9%		

Check with MS4 Geodatabase: Type, class, impervious acres, implementation cost and implementation status should match the various geodatabase tables for BMPs (AltBMPLine, AltBMPPoint, AltBMPPoly, and RestBMP) - aggregated by type and status.

Notes:

1. Use BMP domains from the MS4 Geodatabase.
2. Complete, Under Construction, Planning, or Proposed.
3. Use Fiscal Year (FY)
4. For street sweeping indicate the annual frequency that the streets are swept, and for storm drain or catch basin cleaning report the pounds of material removed.
5. Average IMP ACRES for Operational BMPs should be the average of BMP 1 + the average of BMP 2, etc.

IMPL COST is a summation and not an average.

Article 4-202.1(f)(1)(i)2: Projected annual and 5-year costs for the county or municipality to meet the impervious surface restoration plan requirements of its National Pollutant Discharge Elimination System Phase 1 Municipal Separate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 2019	CURRENT YEAR FY 2020	PROJECTED YEAR 1 FY 2021	PROJECTED YEAR 2 FY 2022	PROJECTED YEAR 3 FY 2023	PROJECTED YEAR 4 FY 2024	PROJECTED YEAR 5 FY 2025	TOTAL COSTS
Operating Expenditures (costs)								
Street Sweeping Program	\$3,295,239	\$400,000	\$400,000	\$400,000				\$4,495,239
Inlet Cleaning	\$226,535	\$100,000	\$100,000	\$100,000				\$526,535
Support of Capital Projects	\$0	\$0	\$0	\$0				\$0
Debt Service Payment	\$110,992	\$352,226	\$1,265,834	\$1,265,733				\$2,994,785
Other (please stipulate program expenditure)*								\$0
Capital Expenditures (costs)								
General Fund (Paygo)								\$0
WPR Fund (Paygo)	\$45,057,000	\$3,950,000	\$3,700,000	\$0				\$52,707,000
Debt Service		\$245,540						\$245,540
Grants & Partnerships		\$933,991						\$933,991
Other: Stormwater Bonds	\$20,150,000	\$7,000,000	\$2,800,000	\$6,300,000				\$36,250,000
Subtotal Operation and Paygo:	\$68,839,766	\$11,802,226	\$8,265,834	\$8,065,733	\$0	\$0	\$0	\$96,973,559
Total Expenditures:	\$68,839,766	\$12,981,757	\$8,265,834	\$8,065,733	\$0	\$0	\$0	\$95,158,305

Total ISRP costs except debt service: \$95,158,305

Compare ISRP costs (except debt service) / total ISRP proposed actions: 171%

Check with MS4 Geodatabase:

The total current FY2020 expenditure should be less than the combined total of the "OP_COST" and "CAP_COST" fields in the Fiscal Analyses table of the geo database
 The total projected FY2021 expenditure should be less than the combined total of the "OP_BUDGET" and "CAP_BUDGET" fields in the Fiscal Analyses table of the geo database

*Insert additional rows as needed.

Article 4-202.1(j)(1)(i)3: Projected annual and 5-year revenues or other funds that will be used to meet the cost for the county or municipality to meet the impervious surface restoration plan requirements under the National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 2019	CURRENT YEAR FY 2020	PROJECTED YEAR 1 FY 2021	PROJECTED YEAR 2 FY 2022	PROJECTED YEAR 3 FY 2023	PROJECTED YEAR 4 FY 2024	PROJECTED YEAR 5 FY 2025	TOTAL NEXT 2-YEARS FY 21-22 ¹	TOTAL
Annual Revenue ² Appropriated for ISRP	\$85,818,000	\$12,981,757	\$8,265,834	\$8,065,733	\$0	\$0	\$0	\$16,331,567	\$115,131,324
Annual Costs towards ISRP ³	\$68,839,766	\$12,981,757	\$8,265,834	\$8,065,733	\$0	\$0	\$0	\$16,331,567	\$98,153,090

Compare revenue appropriated / annual costs:
WPRP 2020 Reporting Criteria: 100% 100%

ISRP = Impervious Surface Restoration Program

Notes:

1. Article 4-202.1(j)(2): Demonstration that county or municipality has sufficient funding in the current fiscal year and subsequent fiscal year budgets to meet its estimated cost for the 2-year period immediately following the filing date of the FAP.
2. Revenue means "dedicated revenues, funds, or sources of funds (per Article 4-202.1(j)(4)(ii)).
3. See table of ISRP Cost.

Article 4-202.1(j)(1)(i)4: Any sources of funds that will be utilized by the county or municipality to meet the requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

SOURCE	PAST UP THRU FY 2019	CURRENT YEAR FY 2020	PROJECTED YEAR 1 FY 2021	PROJECTED YEAR 2 FY 2022	PROJECTED YEAR 3 FY 2023	PROJECTED YEAR 4 FY 2024	PROJECTED YEAR 5 FY 2025	TOTAL NEXT FIVE YEARS
Paygo Sources								
Stormwater Remediation Fees for Capital (WPR Fund) OPERATING	\$ 43,557,000	\$ 3,950,000	\$ 3,700,000	\$ -	\$ -	\$ -	\$ -	\$ 3,700,000
TRANSFER OUT	\$ 16,470,000	\$ 1,271,489	\$ 1,300,000	\$ 1,300,000	\$ -	\$ -	\$ -	\$ 2,600,000
General Fund (Operating)	\$ 24,968,497	\$ 5,574,255	\$ 6,526,279	\$ 9,700,000	\$ -	\$ -	\$ -	\$ 15,226,279
Stormwater Remediation Fees for Operating (WPR Fund)	\$ 2,650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General Fund (Capital)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Funds 2 (please stipulate funding source)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Funds 3 (please stipulate funding source)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Paygo Sources	\$ 87,645,497	\$ 10,795,744	\$ 7,826,279	\$ 11,000,000	\$ -	\$ -	\$ -	\$ 22,526,279
Debt Service (paygo sources will be used to pay off debt service. Note that previous appropriations for debt service used for ISRP is listed in FY 2017).								
County Transportation Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General Obligation Bonds	\$ 26,121,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stormwater Revenue (Utility) Bonds	\$ 20,150,000	\$ 7,000,000	\$ 2,800,000	\$ 6,300,000	\$ -	\$ -	\$ -	\$ 9,100,000
State Revolving Loan Fund	\$ 4,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public-private partnership (debt service)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Debt Service	\$ 50,471,000	\$ 7,000,000	\$ 2,800,000	\$ 6,300,000	\$ -	\$ -	\$ -	\$ 9,100,000
Grants and Partnerships (no payment is expected)								
State funded grants	\$ 16,910,000	\$ 2,100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Federal funded grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public-private partnership (matched grant)	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Grants and Partnerships	\$ 17,410,000	\$ 2,100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Annual Sources of Funds	\$ 155,526,497	\$ 19,895,744	\$ 10,626,279	\$ 17,300,000	\$ -	\$ -	\$ -	\$ 27,926,279
Percent of Funds Directed Toward ISRP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	73%

Compare total permit term paygo ISRP costs / subtotal permit term paygo sources: 58%
 Compare total permit term ISRP costs / total permit term annual sources of funds: 73%

DRAFT
 * WPR Fund: Watershed Protection and Restoration Fund

Check with MS4 Geodatabase:
 The total sources related to WPR Funds in Current FY2020 should match the "WPR_FUND" field of the geodatabase.

Article 4-202.1(j)(1)(j): Specific actions and expenditures that the county or municipality implemented in the previous fiscal years to meet its impervious surface restoration plan requirements under its National Pollutant Discharge Elimination System Phase 1 Municipal Separate Storm Sewer System Permit.

Baseline: 2,204 This is the 20% restoration requirement for the 4th generation NPDES MS4 Permit. Requirement: 20%

REST BMP ID	REST BMP TYPE ¹	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	% ISRP Complete	IMPL STATUS ²	GEN COMMENTS
Operational Programs ³									
	MSS	A	7	546	6/30/2011	\$440,068	24.8%	Complete	2011 total - 806 miles swept 4 times per year
	MSS	A	7	423	6/30/2012	\$411,755	19.2%	Complete	2012 total - 806 miles swept 4 times per year
	MSS	A	7	337	6/30/2013	\$358,619	15.3%	Complete	2013 total - 806 miles swept 4 times per year
	MSS	A	7	220	6/30/2014	\$329,843	10.0%	Complete	2014 total - 806 miles swept 4 times per year
	MSS	A	7	398	6/30/2015	\$400,000	18.1%	Complete	2015 total - 806 miles swept 4 times per year
	MSS	A	7	372	6/30/2016	\$400,000	16.9%	Complete	2016 total - 806 miles swept 4 times per year
	MSS	A	7	293	6/30/2017	\$332,580	13.3%	Complete	2017 total - 806 miles swept 4 times per year
	MSS	A	7	287	6/30/2018	\$227,074	13.0%	Complete	2018 total - 806 miles swept 4 times per year
	MSS	A	7	284	6/30/2019	\$395,300	12.9%	Complete	2019 total - 806 miles swept 4 times per year
	SDV	A	85	42.9	6/30/2017	\$119,970	1.9%	Complete	2017 total - 214,569 pounds of material removed
	SDV	A	87	34.9	6/30/2018	\$96,657	1.6%	Complete	2018 total - 174,666 pounds of material removed
	SDV	A	108	125.4	6/30/2019	\$9,908	5.7%	Complete	2019 total - 635,925 pounds of material removed
Average Operations Complete To Date ⁴			343	419		\$3,521,774	19.0%		
Capital Projects									
HO10RST900044	WHSW	S	1	3.9	8/1/2010	\$165,569	0.2%	Complete	VRH Shallow Marsh
HO10ALN000168	STRE	A	1	20.8	8/31/2010	\$409,063	0.9%	Complete	Paul Mill Road
HO10RST900038	FBIO	S	2	1.0	9/1/2010	\$153,745	0.0%	Complete	Cedar Lane Park - North
HO10ALN000014	OUT	A	1	0.7	12/15/2010	\$50,000	0.0%	Complete	Hickory Ridge
HO11ALN000015	STRE	A	1	13.4	1/31/2011	\$521,967	0.6%	Complete	Old Willow Way
HO11ALN000049	STRE	A	1	15.3	3/22/2011	\$500,000	0.7%	Complete	Beechwood
HO11ALN000016	STRE	A	1	4.3	3/25/2011	\$50,000	0.2%	Complete	Great Drum Circle
HO11RST900356	FBIO	S	1	0.7	4/1/2011	\$100,000	0.0%	Complete	Savage Park
HO11RST900357	FBIO	S	1	0.5	4/1/2011	\$100,000	0.0%	Complete	Savage Park
HO11ALN000048	STRE	A	1	3.3	4/4/2011	\$104,839	0.1%	Complete	Autumn Harvest - Phase 2

HO11RST900062	FBIO	S	1	4.6	5/1/2011	\$100,000	0.2%	Complete	Savage Park
HO11RST900043	FSND	S	1	3.4	5/1/2011	\$290,547	0.2%	Complete	Stratford Downs
HO11RST900037	FBIO	S	1	0.6	6/1/2011	\$206,792	0.0%	Complete	Atholton Park
HO11RST900056	FBIO	S	1	0.9	9/1/2011	\$188,922	0.0%	Complete	Dorsey Bldg Parking Lot
HO11ALN000056	STRE	A	1	18.0	11/30/2011	\$100,000	0.8%	Complete	Savage Park
HO11RST900059	PWED	S	1	3.8	12/1/2011	\$61,289	0.2%	Complete	Saint John's Green
HO11ALN000045	STRE	A	1	27.4	12/16/2011	\$216,775	1.2%	Complete	Hi Tech Road
HO12ALN000669	OUT	A	1	0.4	2/17/2012	\$50,000	0.0%	Complete	Meadowbrook Park
HO12ALN000070	OUT	A	1	0.3	2/17/2012	\$50,000	0.0%	Complete	Meadowbrook Park
HO12ALN000051	STRE	A	1	45.5	2/17/2012	\$1,232,322	2.1%	Complete	Meadowbrook Park
HO12ALN000075	STRE	A	1	45.2	2/20/2012	\$869,669	2.0%	Complete	Threshold Stream
HO12ALN000057	STRE	A	1	11.7	2/21/2012	\$1,529,717	0.5%	Complete	Red Hill Branch
HO12ALN000088	STRE	A	1	14.3	2/29/2012	\$200,000	0.6%	Complete	LPII
HO13ALN000091	STRE	A	1	9.8	2/29/2012	\$200,000	0.4%	Complete	LPII
HO12RST900063	PWED	S	1	4.2	3/1/2012	\$216,336	0.2%	Complete	Waverly Woods
HO12ALN000052	STRE	A	1	0.9	3/2/2012	\$82,103	0.0%	Complete	Great Oaks
HO12ALN000087	OUT	A	1	0.4	3/4/2012	\$50,000	0.0%	Complete	Edmunds Way
HO12ALN000167	STRE	A	1	35.9	3/23/2012	\$1,077,365	1.6%	Complete	Bramhope Lane
HO12ALN000029	STRE	A	1	6.1	6/30/2012	\$100,000	0.3%	Complete	Trotter Road
HO12RST900060	PWED	S	1	2.1	7/1/2012	\$400,000	0.1%	Complete	Salterforth
HO12RST900061	PWED	S	1	2.9	7/1/2012	\$398,130	0.1%	Complete	Salterforth
HO12ALN000082	OUT	A	1	0.2	8/16/2012	\$50,000	0.0%	Complete	Bonnie Brae
HO12RST900041	XDED	S	1	0.0	9/1/2012	\$231,060	0.0%	Complete	Mount Hebron HS
HO12ALN000084	OUT	A	1	0.3	10/19/2012	\$50,000	0.0%	Complete	Cromwell Court
HO13ALN000054	STRE	A	1	5.5	1/1/2013	\$234,277	0.3%	Complete	Dower Drive
HO13ALN000050	STRE	A	1	18.9	1/9/2013	\$500,000	0.9%	Complete	Allview
HO13ALN000085	OUT	A	1	0.2	1/24/2013	\$50,000	0.0%	Complete	Cypress Bay
HO13ALN000089	OUT	A	1	0.1	1/24/2013	\$50,000	0.0%	Complete	Ilchester Point Court
HO13RST900059	PWED	S	1	6.3	1/24/2013	\$303,010	0.3%	Complete	Cypress Bay
HO13RST900318	SPSC	A	1	1.2	2/15/2013	\$578,896	0.1%	Complete	Oak West Drive
HO13RST900054	IBAS	S	1	4.9	3/1/2013	\$495,040	0.2%	Complete	Country Lane Pond #1
HO13RST900055	IBAS	S	1	3.3	3/1/2013	\$495,039	0.1%	Complete	Country Lane
HO13ALN000083	STRE	A	1	7.6	3/16/2013	\$50,000	0.3%	Complete	Chestnut Farms
HO13ALN000067	STRE	A	1	0.8	3/18/2013	\$50,000	0.0%	Complete	Elmmede Road
HO13ALN000068	STRE	A	1	31.9	3/18/2013	\$715,509	1.4%	Complete	Elmmede Road
HO13ALN000053	STRE	A	1	53.1	3/21/2013	\$1,031,583	2.4%	Complete	Stone Trail Stream
HO13ALN000074	OUT	A	1	0.3	4/10/2013	\$50,000	0.0%	Complete	Wheatfield Way
HO13ALN000019	STRE	A	1	26.1	4/10/2013	\$299,036	1.2%	Complete	Wheatfield Way
HO13RST900057	FSND	S	1	2.4	5/1/2013	\$578,896	0.1%	Complete	Oak West
HO13RST900052	IMPP	A	1	9.8	5/1/2013	\$218,828	0.4%	Complete	Dower Drive
HO13ALN000020	STRE	A	1	50.6	5/13/2013	\$668,920	2.3%	Complete	Windflower Drive
HO13RST900045	APRP	E	1	0.2	8/23/2013	\$17,751	0.0%	Complete	Ellicott City Lot B Pymt
HO13ALN000090	STRE	A	1	3.1	10/10/2013	\$50,000	0.1%	Complete	Furnace Ave

HO14ALN000021	STRE	A	1	10.2	1/23/2014	\$291,112	0.5%	Complete	Tuscany Road
HO14RST900053	IBAS	S	1	2.4	1/30/2014	\$321,887	0.1%	Complete	Ashmade
HO14RST900032	WPWS	S	1	0.0	2/25/2014	\$718,740	0.0%	Complete	Shadow Lane
HO14ALN000017	STRE	A	1	29.8	3/11/2014	\$482,471	1.4%	Complete	Whiterock Court
HO14ALN000081	OUT	A	1	0.3	3/26/2014	\$50,000	0.0%	Complete	Bill Lilly Court
HO14ALN000088	OUT	A	1	0.2	4/25/2014	\$50,000	0.0%	Complete	Falling Waters
HO14ALN000018	STRE	A	1	8.3	6/16/2014	\$144,512	0.4%	Complete	Tiller Drive Phase 2
HO14ALN000092	OUT	A	1	0.3	7/14/2014	\$50,000	0.0%	Complete	Rhode Valley
HO14RST900034	WSHW	S	1	1.0	7/17/2014	\$309,255	0.0%	Complete	Wimbleton
HO14RST900049	MMBR	E	1	0.2	9/30/2014	\$70,212	0.0%	Complete	SFES MB-1
HO14RST900050	MMBR	E	1	0.1	9/30/2014	\$70,213	0.0%	Complete	SFES MB-2
HO14RST900051	MMBR	E	1	0.1	9/30/2014	\$70,213	0.0%	Complete	SFES MB-2B
HO14RST900048	MSWB	E	1	0.0	9/30/2014	\$70,212	0.0%	Complete	SFES Bioswale
HO14RST900013	XDED	S	1	0.9	11/18/2014	\$363,355	0.0%	Complete	Old Mill Pond Retrofit
HO15RST900014	FBCO	S	1	0.1	4/20/2015	\$250,000	0.0%	Complete	Towering Oaks
HO15RST900017	SPSC	A	1	3.3	4/20/2015	\$50,000	0.1%	Complete	Towering Oaks SPSC
HO15ALN000139	STRE	A	1	3.6	4/20/2015	\$41,905	0.2%	Complete	Towering Oaks
HO15ALN000006	STRE	A	1	31.6	5/1/2015	\$528,929	1.4%	Complete	Pinehurst Court
HO15RST900017	PWET	S	1	40.7	5/8/2015	\$1,275,340	1.8%	Complete	Red Cravat
HO15RST900035	WSHW	S	1	1.6	6/1/2015	\$528,929	0.1%	Complete	Pinehurst Shallow Marsh
HO15RST900027	WEDW	S	1	2.1	6/8/2015	\$292,190	0.1%	Complete	Pebble Beach Pond 2
HO15RST900013	FBCO	S	1	1.0	7/21/2015	\$100,000	0.0%	Complete	Ellicott City Lot E
HO15RST9000315	FBCO	S	1	0.8	7/21/2015	\$100,000	0.0%	Complete	Ellicott City Lot E
HO15ALN000030	STRE	A	1	6.5	9/3/2015	\$100,000	0.3%	Complete	D-1163 Trotter Road
HO15ALN000093	OUT	A	1	0.2	9/17/2015	\$50,000	0.0%	Complete	Townhomes of Timberland
HO15RST9000319	SPSC	A	1	1.5	11/3/2015	\$100,000	0.1%	Complete	Dorsey Hall Outfall B
HO15RST9000320	SPSC	A	1	1.5	11/3/2015	\$100,000	0.1%	Complete	Dorsey Hall Outfall C
HO15RST9000321	SPSC	A	1	1.5	11/3/2015	\$100,000	0.1%	Complete	Dorsey Hall Outfall E
HO15RST9000322	SPSC	A	1	1.5	11/3/2015	\$100,000	0.1%	Complete	Dorsey Hall Outfall D
HO16ALN000095	OUT	A	1	0.4	2/10/2016	\$50,000	0.0%	Complete	Southview Road
HO16ALN000099	OUT	A	1	0.2	2/10/2016	\$50,000	0.0%	Complete	Southview Road
HO16ALN000096	STRE	A	1	83.5	2/10/2016	\$1,419,801	3.8%	Complete	Southview Road
HO16ALN000097	STRE	A	1	0.2	2/10/2016	\$50,000	0.0%	Complete	Southview Road
HO16ALN000098	STRE	A	1	0.7	2/10/2016	\$50,000	0.0%	Complete	Southview Road
HO16RST900018	WSHW	S	1	8.4	2/29/2016	\$649,515	0.4%	Complete	Whitworth Way
HO16ALN000100	STRE	A	1	7.1	3/1/2016	\$50,000	0.3%	Complete	Shallow Run
HO16ALN000101	STRE	A	1	3.1	3/1/2016	\$50,000	0.1%	Complete	Deep Run
HO16RST900400	PWET	S	1	2.1	3/22/2016	\$533,409	0.1%	Complete	Townhomes of Timberland
HO16ALN000094	OUT	A	1	0.2	5/6/2016	\$50,000	0.0%	Complete	Wetherburn
HO16RST900020	WPWS	S	1	3.3	6/24/2016	\$916,674	0.1%	Complete	TVO #3 Excelsior
HO17ALN000008	STRE	A	1	1.5	6/29/2016	\$50,000	0.1%	Complete	Turf Valley #3 Excelsior
HO16RST900026	PWET	S	1	3.1	7/15/2016	\$600,000	0.1%	Complete	Longridge Knolls

Project ID	Category	Priority	Score	Value	Completion Date	Completion %	Status	Notes
HO16RST900030	FBIO	1	2.1	\$418,438	8/10/2016	0.1%	S	Rusty Rim Pond Retrofit
HO17ALN000060	OUT	1	0.1	\$50,000	9/16/2016	0.0%	A	Greenway 1
HO17ALN000061	OUT	1	0.2	\$50,000	9/16/2016	0.0%	A	Greenway 1
HO16RST900024	PWET	1	0.8	\$85,047	10/5/2016	0.0%	S	Montgomery Run Pond 2
HO16ALN000001	STRE	1	27.3	\$719,801	10/31/2016	1.2%	A	Bonnie Branch
HO16RST900021	PWET	1	0.6	\$338,934	11/22/2016	0.0%	S	Mary Lee Lane
HO16RST900022	WSHW	1	17.5	\$680,353	11/22/2016	0.8%	S	Deep Earth Lane
HO17RST9000421	PWET	1	0.7	\$513,445	11/30/2016	0.0%	S	Lynwood Manor
HO16RST900023	FBIO	1	0.7	\$200,000	12/6/2016	0.0%	S	Rockburn Park Retrofit
HO15ALN000002	STRE	1	39.0	\$1,178,220	12/6/2016	1.8%	A	Dorsey Hall
HO15ALN000065	STRE	1	1.7	\$100,000	12/6/2016	0.1%	A	Dorsey G
HO15ALN000066	STRE	1	0.5	\$100,000	12/6/2016	0.0%	A	Dorsey F
HO15ALN000080	OUT	1	0.6	\$50,000	1/20/2017	0.0%	A	Harper's Choice Outfall
HO16ALN000004	STRE	1	3.1	\$59,781	3/1/2017	0.1%	A	Swansfield
HO17ALN000005	STRE	1	92.1	\$974,897	3/1/2017	4.2%	A	Davis Branch
HO17ALN000064	STRE	1	81.2	\$1,147,050	3/1/2017	3.7%	A	Rockburn Branch Park
HO17ALN000065	STRE	1	1.9	\$50,000	3/1/2017	0.1%	A	Rockburn Branch E
HO17ALN000066	STRE	1	2.0	\$50,000	3/1/2017	0.1%	A	Rockburn Branch G
HO18ALN000037	STRE	1	61.0	\$1,025,518	3/29/2017	2.8%	A	HCC
HO17ALN000133	OUT	1	0.3	\$50,000	5/19/2017	0.0%	A	Golden Star 2
HO18ALN000090	OUT	1	0.3	\$50,000	5/19/2017	0.0%	A	Linden Chapel
HO17RST900492	PWET	1	3.8	\$290,609	5/19/2017	0.2%	S	Linden Chapel
HO17RST900493	PWET	1	0.4	\$428,314	5/19/2017	0.0%	S	Golden Star #2
HO18RST901536	FSND	1	6.3	\$1,668,194	5/24/2017	0.3%	S	Rec and Parks
HO17ALN000068	OUT	1	2.0	\$50,000	5/24/2017	0.1%	A	Crestleigh Drainage
HO17ALN000134	OUT	1	0.5	\$50,000	5/24/2017	0.0%	A	Murray Hill 2
HO18ALN000003	STRE	1	1.5	\$231,592	6/13/2017	0.1%	A	Churchill Way
HO17RST900029	SPSC	1	4.4	\$719,114	6/16/2017	0.2%	A	Long Meadow 2
HO17RST900513	FSND	1	1.4	\$662,636	7/26/2017	0.1%	A	Velvet Path
HO18ALN000009	STRE	1	4.4	\$50,000	7/26/2017	0.2%	A	Velvet Path
HO17RST900515	PWET	1	1.1	\$401,077	8/23/2017	0.0%	S	Fairest Dream
HO17ALN000062	STRE	1	2.5	\$50,000	8/29/2017	0.1%	A	Fairest Dreams
HO17ALN000067	STRE	1	44.5	\$1,088,692	9/1/2017	2.0%	A	Dunloggin MS
HO17ALN000131	OUT	1	0.5	\$50,000	12/10/2017	0.0%	A	Beech Creek
HO17ALN000132	OUT	1	0.6	\$50,000	12/10/2017	0.0%	A	Garrard Road
HO17RST900347	PWET	1	5.6	\$633,715	12/10/2017	0.3%	S	Garand
HO17RST900348	PWET	1	2.0	\$1,220,925	12/10/2017	0.1%	S	Beech Creek
HO18ALN000095	STRE	1	10.2	\$289,339	2/12/2018	0.5%	A	Red Hill Way 2
HO18ALN000094	STRE	1	47.7	\$1,283,855	3/1/2018	2.2%	A	Timbers at Troy
HO18ALN000117	STRE	1	54.0	\$1,274,633	3/1/2018	2.5%	A	Heatherland
HO18ALN000118	STRE	1	0.8	\$50,000	3/1/2018	0.0%	A	Heatherland
HO18ALN000119	STRE	1	0.6	\$50,000	3/1/2018	0.0%	A	Heatherland
HO18ALN000011	STRE	1	15.7	\$527,839	3/19/2018	0.7%	A	Longview Drive

Project ID	Category	Phase	Value	Start Date	End Date	Completion %	Status	Notes
HO18ALN000135	OUT	A	\$50,000	3/20/2018	3/20/2018	0.0%	Complete	Junction Industrial
HO18RST901535	PWET	S	\$723,235	3/20/2018	3/20/2018	0.2%	Complete	Junction Industrial
HO18ALN000123	OUT	A	\$50,000	3/30/2018	3/30/2018	0.1%	Complete	Starling Road
HO18ALN000129	STRE	A	\$969,880	3/30/2018	3/30/2018	2.1%	Complete	Starling Road
Subtotal Capital Complete To Date			\$48,747,002			63.06%		
Other								
HO11RST900342	SEPP	A	\$0	2015	2015	1.5%	Complete	2015 total
HO13ALN000033	SEPP	A	\$0	2016	2016	1.5%	Complete	2016 total
HO13ALN000031	SEPP	A	\$0	2017	2017	1.5%	Complete	2017 total
HO13ALN000032	SEPP	A	\$0	2018	2018	1.4%	Complete	2018 total
HO13ALN000034	SEPP	A	\$0	2019	2019	0.5%	Complete	2019 total
HO13ALN000033	OUT	S	\$0	4/23/2011	4/23/2011	0.0%	Complete	A3-02
HO13ALN000031	STRE	A	\$0	2/17/2013	2/17/2013	0.0%	Complete	Queen Maria Court
HO13ALN000032	STRE	A	\$0	2/17/2013	2/17/2013	0.2%	Complete	Bugledrum Way
HO13ALN000034	STRE	A	\$1,000,000	2/17/2013	2/17/2013	0.3%	Complete	Dobbin Road
HO19RST902763	PWED	S	\$0	2/17/2013	2/17/2013	0.0%	Complete	Spinning Seed Road
HO15RST902521	MIDW	E	\$0	5/11/2013	5/11/2013	0.4%	Complete	Pond Retrofit Board of Ed
HO14RST900334	APRP	E	\$600	8/11/2014	8/11/2014	0.0%	Complete	Richard White
HO14RST900335	APRP	E	\$0	10/16/2014	10/16/2014	0.0%	Complete	A1-05
HO14RST900364	APRP	E	\$0	10/16/2014	10/16/2014	0.0%	Complete	A1-05
HO14RST900365	APRP	E	\$0	10/16/2014	10/16/2014	0.0%	Complete	PERMIP 1
HO14RST900336	FBIO	S	\$0	10/16/2014	10/16/2014	0.0%	Complete	PERMIP 2
HO14RST900338	FBIO	S	\$0	10/16/2014	10/16/2014	0.0%	Complete	A1-05
HO14RST900367	FBIO	S	\$0	10/16/2014	10/16/2014	0.0%	Complete	A1-05
HO14RST900368	FBIO	S	\$0	10/16/2014	10/16/2014	0.0%	Complete	BIO 2
HO14RST900337	ODSW	S	\$0	10/16/2014	10/16/2014	0.0%	Complete	BIO 1
HO14RST900366	ODSW	S	\$0	10/16/2014	10/16/2014	0.2%	Complete	A1-05
HO15RST902568	MIDW	E	\$0	6/24/2015	6/24/2015	0.2%	Complete	SW
HO15RST900343	MIMBR	E	\$600	6/30/2015	6/30/2015	0.0%	Complete	Stephen Purcell
HO15RST900393	MIMBR	E	\$0	6/30/2015	6/30/2015	0.0%	Complete	R2-01
HO15RST900005	MIMBR	E	\$0	6/30/2015	6/30/2015	0.0%	Complete	MB
HO16RST902591	APRP	E	\$0	7/16/2015	7/16/2015	0.0%	Complete	MB14
HO19APY100318	IMPP	A	\$1,200	9/3/2015	9/3/2015	0.0%	Complete	James Brenza
HO15RST900074	MIDW	E	\$2,200	10/15/2015	10/15/2015	0.0%	Complete	TC1148
HO16RST902586	APRP	E	\$2,500	10/15/2015	10/15/2015	0.0%	Complete	Heritage Museum
HO16RST900309	FBIO	S	\$0	10/27/2015	10/27/2015	0.0%	Complete	Carl Uhrmacher
HO16RST900310	FBIO	S	\$106	4/30/2016	4/30/2016	0.1%	Complete	Bethel Bioretention 1
HO16RST900311	FBIO	S	\$47	4/30/2016	4/30/2016	0.0%	Complete	Bethel Bioretention 2
HO16RST900312	FBIO	S	\$74	5/31/2016	5/31/2016	0.0%	Complete	Harvester Bioretention
HO17RST900405	FBIO	S	\$133	5/31/2016	5/31/2016	0.0%	Complete	Seventh Day Bioretention
HO16RST901515	PWED	S	\$12,170	7/19/2016	7/19/2016	0.0%	Complete	Lakeside Associates
			\$0	10/5/2016	10/5/2016	0.1%	Complete	POND

MMBR	E	1	0.2	11/5/2016	\$0	0.0%	Complete	MB
HO16RST900008	MMBR	1	0.2	11/5/2016	\$0	0.0%	Complete	MB
HO16RST901516	PWET	1	0.0	11/30/2016	\$0	0.0%	Complete	PCND
HO17RST900009	MMBR	1	0.2	1/27/2017	\$0	0.0%	Complete	MB
HO17RST900010	MMBR	1	0.2	2/9/2017	\$0	0.0%	Complete	MB 1
HO17RST900011	MMBR	1	0.2	2/9/2017	\$0	0.0%	Complete	MB 2
HO17RST900012	MMBR	1	0.2	3/17/2017	\$0	0.0%	Complete	MB
HO19RST901556	FBO	1	0.1	4/10/2017	\$0	0.0%	Complete	GreenleafBio3
HO17RST902159	FSND	1	2.1	5/3/2017	\$308,499	0.1%	Complete	First Evangelical
HO17RST900494	FBO	1	0.0	5/19/2017	\$0	0.0%	Complete	Green Leaf Community
HO17RST900499	APRP	2	0.0	5/25/2017	\$0	0.0%	Complete	PP
HO17RST900501	MISWG	2	0.0	5/25/2017	\$0	0.0%	Complete	SW 4
HO17RST900500	MISWG	2	0.0	5/25/2017	\$0	0.0%	Complete	SW 3
HO17RST901517	WSHW	1	10.2	6/27/2017	\$0	0.5%	Complete	SM
HO17RST900511	FBO	1	0.3	7/1/2017	\$0	0.0%	Complete	Long Look Bioretention
HO17ALN000070	STRE	1	5.1	8/1/2017	\$0	0.2%	Complete	Route 1
HO17RST900514	FSND	1	9.8	8/8/2017	\$478,652	0.4%	Complete	Howard Co General Hospita
HO17RST902158	FSND	1	1.0	11/10/2017	\$212,849	0.0%	Complete	Liberty Baptist
HO17RST900344	FBO	2	0.0	12/10/2017	\$0	0.0%	Complete	BIO
MRWH	E	4	0.0	FY 2010	\$112	0.0%	Complete	FY 2010 total
FPU	A	11	1.8	FY 2011	\$297,589	0.1%	Complete	FY 2011 total
SEPD	A	3	0.8	FY 2011	\$0	0.0%	Complete	FY 2011 total
MRWH	E	175	0.3	FY 2011	\$5,992	0.0%	Complete	FY 2011 total
MIRNG	E	1	0.2	FY 2011	\$0	0.0%	Complete	FY 2011 total
FPU	A	63	7.2	FY 2012	\$774,879	0.3%	Complete	FY 2012 total
SEPD	A	3	0.8	FY 2012	\$0	0.0%	Complete	FY 2012 total
MRWH	E	119	0.2	FY 2012	\$4,090	0.0%	Complete	FY 2012 total
MIRNG	E	4	0.6	FY 2012	\$6,513	0.0%	Complete	FY 2012 total
FPU	A	47	7.4	FY 2013	\$102,493	0.3%	Complete	FY 2013 total
SEPD	A	2	0.5	FY 2013	\$0	0.0%	Complete	FY 2013 total
MRWH	E	198	0.3	FY 2013	\$4,306	0.0%	Complete	FY 2013 total
MIRNG	E	116	7.5	FY 2013	\$60,633	0.3%	Complete	FY 2013 total
FPU	A	879	5.8	FY 2014	\$90,438	0.3%	Complete	FY 2014 total
SEPD	A	27	7.0	FY 2014	\$0	0.3%	Complete	FY 2014 total
MRWH	E	171	0.3	FY 2014	\$4,377	0.0%	Complete	FY 2014 total
MIRNG	E	118	17.7	FY 2014	\$193,802	0.8%	Complete	FY 2014 total
FPU	A	388	8.8	FY 2015	\$62,721	0.4%	Complete	FY 2015 total
SEPD	A	101	26.3	FY 2015	\$0	1.2%	Complete	FY 2015 total
MRWH	E	117	0.2	FY 2015	\$5,734	0.0%	Complete	FY 2015 total
MIRNG	E	118	17.7	FY 2015	\$155,616	0.8%	Complete	FY 2015 total
FPU	A	23	4.0	FY 2016	\$9,359	0.2%	Complete	FY 2016 total
SEPD	A	5	2.0	FY 2016	\$0	0.1%	Complete	FY 2016 total
MRWH	E	31	8.1	FY 2016	\$0	0.4%	Complete	FY 2016 total
MRWH	E	127	0.2	FY 2016	\$6,852	0.0%	Complete	FY 2016 total

MRNG	E	100	14.2	FY 2016	\$155,788	Complete	FY 2016 total
FPU	A	38	5.7	FY 2017	\$147,393	Complete	FY 2017 total
SEPC	A	6	2.3	FY 2017	\$0	Complete	FY 2017 total
SEPD	A	64	16.6	FY 2017	\$131,544	Complete	FY 2017 total
MRWH	E	117	0.2	FY 2017	\$6,296	Complete	FY 2017 total
MRNG	E	108	14.5	FY 2017	\$76,622	Complete	FY 2017 total
FPU	A	24	3.4	FY 2018	\$40,911	Complete	FY 2018 total
SEPC	A	11	2.3	FY 2018	\$157,780	Complete	FY 2018 total
SEPD	A	3	0.8	FY 2018	\$0	Complete	FY 2018 total
MRWH	E	101	0.1	FY 2018	\$4,003	Complete	FY 2018 total
MRNG	E	88	8.8	FY 2018	\$42,004	Complete	FY 2018 total
Subtotal To Date		8,241	399		\$4,567,475		
Total Complete to Date		8,728	2,208		\$56,836,251	100.2%	

Check with MS4 Geodatabase:
 Rest BMP ID, type, class, number of BMPs, impervious acres, built date, implementation cost and implementation status should match the various geodatabase tables for BMPs (AIBMPLine, AltBMPPoint, AltBMPPoly, and RestBMP) – aggregated by type and status.

Notes:

1. Use BMP domains from the MS4 Geodatabase.
2. Complete, Under Construction, Planning, or Proposed.
3. For street sweeping indicate the annual frequency that the streets are swept, and for storm drain or catch basin cleaning report the pounds of material removed.
4. Average IMP ACRES for Operational BMPs should be the average of BMP 1 + the average of BMP 2, etc.
 IMPL COST is a summation and not an average.

- APRP Permeable Pavements
- FB Forest Buffer
- FBIO Bioretention
- FSND Sand Filter
- FUND Underground Filter
- IBAS Infiltration Basin
- MIBR Infiltration Berm
- IMPV Impervious Surface Elimination (to pervious)
- MIDW Dry Well
- MMBR Micro-Bioretention
- MRNG Rain Gardens
- MRWH Rainwater Harvesting
- MSWB Bio-Swale

MSWG
ODSW
WEDW
PWED
PWET
WPWS
SPSC
UGS
WSHW
XDED
SEPP
SEPD
SEPC
MSS
SDV
FPU
STRE
OUT

Grass Swale
Dry Swale
Extended Detention - Wetland
Extended Detention Structure, Wet
Retention Pond (Wet Pond)
Wet Pond - Wetland
Step Pool Storm Conveyance
Underground Storage
Shallow Marsh
Extended Detention Structure, Dry
Septic Pumping
Septic Denitrification
Septic Connections to WWTP
Mechanical Street Sweeping
Storm Drain Vacuuming
Planting Trees or Forestation on Previous Urban
Stream Restoration
Outfall Stabilization

BY THE COUNCIL

This Bill, having been approved by the Executive and returned to the Council, stands enacted on April 6, 2021.

Michelle Harrod
Michelle Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, having been passed by the yeas and nays of two-thirds of the members of the Council notwithstanding the objections of the Executive, stands enacted on _____, 2021.

Michelle Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, having received neither the approval nor the disapproval of the Executive within ten days of its presentation, stands enacted on _____, 2021.

Michelle Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, not having been considered on final reading within the time required by Charter, stands failed for want of consideration on _____, 2021.

Michelle Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, having been disapproved by the Executive and having failed on passage upon consideration by the Council stands failed on _____, 2021.

Michelle Harrod, Administrator to the County Council

BY THE COUNCIL

This Bill, the withdrawal of which received a vote of two-thirds (2/3) of the members of the Council, is withdrawn from further consideration on _____, 2021.

Michelle Harrod, Administrator to the County Council

MS4 Information		
Jurisdiction	Howard County	
Contact Name	Mark S. Richmond	
Phone	410-313-6413	
Address	9801 Broken Land Parkway	
City	Columbia	
State	MD	
Zip	21046	
Email	msrichmond@howardcountymd.gov	
Impervious Acre Baseline (Untreated Acres)		2,204
Permit Number	MD0068322, 11-DP-3318	
Reporting Year	2020	

Check with MS4 Geodatabase:

Should match Permit Info table of Geodatabase.

These data reflect the 4th generation NPDES MS4 Permit.

VERSION 8/20/20

Article 4-202.1(j)(1)(i)1: Actions that will be required of the county or municipality to meet the requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

Note: To identify all "actions" required under the MS4 permit, provide an executive summary of the jurisdiction's MS4 programs. See MDE's FAP Guidance. For proposed actions to meet the impervious surface restoration plan, fill in the table below.

Baseline: 1,102 *This is the estimated 10% impervious surface restoration requirement for the 5th generation NPDES MS4 Permit.*

REST BMP TYPE ¹	BMP CLASS	IMP ACRES	IMPL COST	% ISRP COMPLETE	IMPL STATUS ²	PROJECTED IMPL YR ³
Operational Programs⁴						
MSS	A	20	\$400,000	1.8%	Complete	FY2020 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Under Construction	FY2021 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Proposed	FY2022 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Proposed	FY2023 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Proposed	FY2024 - 806 miles swept
MSS	A	20	\$400,000	1.8%	Proposed	FY2025 - 806 miles swept
SDV	A	17	\$100,000	1.5%	Complete	FY2020 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Under Construction	FY2021 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Proposed	FY2022 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Proposed	FY2023 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Proposed	FY2024 - 200,000 pounds
SDV	A	17	\$100,000	1.5%	Proposed	FY2025 - 200,000 pounds
Average Operations Next Two Years (FY2021-FY2022) ⁵		37	\$1,000,000	3%		
Average Operations Next Five Years (FY2021-FY2025) ⁵		37	\$2,500,000	3%		
Average Operations All Years ⁵		292	\$3,000,000	3%		
Capital Projects						
Various Types	Various Classes	300	\$14,015,000	27.2%	Complete	FY19
Various Types	Various Classes	200	\$11,150,000	18.1%	Complete	FY20
Various Types	Various Classes	100	\$5,500,000	9.1%	Under Construction	FY21
Various Types	Various Classes	100	\$5,500,000	9.1%	Proposed	FY22
Various Types	Various Classes	100	\$5,500,000	9.1%	Proposed	FY23
Various Types	Various Classes	100	\$5,500,000	9.1%	Proposed	FY24
Various Types	Various Classes	100	\$5,500,000	9.1%	Proposed	FY25
Subtotal Capital Next Two Years (FY2021-FY2022)		200	\$11,000,000	18%		
Subtotal Capital Next Five Years (FY2021-FY2025)		500	\$27,500,000	45%		

Subtotal Capital All Years		1,000	\$52,665,000	91%		
Other						
SEPP	A	18	\$0	1.6%	Complete	FY20
SEPP	A	18	\$0	1.6%	Under Construction	FY21
SEPP	A	18	\$0	1.6%	Proposed	FY22
SEPP	A	18	\$0	1.6%	Proposed	FY23
SEPP	A	18	\$0	1.6%	Proposed	FY24
SEPP	A	18	\$0	1.6%	Proposed	FY25
Subtotal Other Next Two Years (FY2021-FY2022)		36	\$0	3.3%		
Subtotal Other Next Five Years (FY2021-FY2025)		90	\$0	8.2%		
Subtotal Other All Years		108	\$0	9.8%		
Total Next Two Years (FY2021-FY2022)		273	\$12,000,000	24.8%		
Total Next Five Years (FY2021-FY2025)		627	\$30,000,000	56.9%		
Total All Years		1,400	\$55,665,000	103.9%		

Check with MS4 Geodatabase:

Type, class, impervious acres, implementation cost and implementation status should match the various geodatabase tables for BMPs (AltBMPLine, AltBMPPoint, AltBMPPoly, and RestBMP) - aggregated by type and status.

Notes:

1. Use BMP domains from the MS4 Geodatabase.
2. Complete, Under Construction, Planning, or Proposed.
3. Use Fiscal Year (FY)
4. For street sweeping indicate the annual frequency that the streets are swept, and for storm drain or catch basin cleaning report the pounds of material removed.
5. Average IMP ACRES for Operational BMPs should be the average of BMP 1 + the average of BMP 2, etc.
IMPL COST is a summation and not an average.

Article 4-202.1(j)(1)(i)2: Projected annual and 5-year costs for the county or municipality to meet the impervious surface restoration plan requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 2019	CURRENT YEAR FY 2020	PROJECTED YEAR 1 FY 2021	PROJECTED YEAR 2 FY 2022	PROJECTED YEAR 3 FY 2023	PROJECTED YEAR 4 FY 2024	PROJECTED YEAR 5 FY 2025	TOTAL COSTS
Operating Expenditures (costs)								
Street Sweeping Program	\$3,295,239	\$400,000	\$400,000	\$400,000				\$4,495,239
Inlet Cleaning	\$226,535	\$100,000	\$100,000	\$100,000				\$526,535
Support of Capital Projects	\$0	\$0	\$0	\$0				\$0
Debt Service Payment	\$550,000	\$650,000	\$660,000	\$634,000				\$2,494,000
Other (please stipulate program expenditure)*	-	-	-	-				\$0
Capital Expenditures (costs)								
General Fund (Paygo)								\$0
WPR Fund (Paygo)	\$48,747,002	\$775,687	\$0	\$0				\$49,522,689
Debt Service		\$245,540						\$245,540
Grants & Partnerships		\$933,991.00						\$933,991
Other: Stormwater Bonds	-	\$2,997,228	\$6,300,000	\$6,300,000	-	-	-	\$15,597,228
Subtotal Operation and Paygo:	\$52,818,776	\$4,922,915	\$7,460,000	\$7,434,000	\$0	\$0	\$0	\$72,635,691
Total Expenditures:	\$52,818,776	\$6,102,446	\$7,460,000	\$7,434,000	\$0	\$0	\$0	\$73,815,222

Total ISRP costs except debt service: **\$71,321,222**

Confirmed in SAP - Total encumbered from all funds in FY20 for Capital Projects D-1158, D-1160, D-1164, D-1176 and D-1178

Compare ISRP costs (except debt service) / total ISRP proposed actions: **128%**

Check with MS4 Geodatabase:

The total current FY2020 expenditure should be less than the combined total of the "OP_COST" and "CAP_COST" fields in the Fiscal Analyses table of the geodatabase.

The total projected FY2021 expenditure should be less than the combined total of the "OP_BUDGET" and "CAP_BUDGET" fields in the Fiscal Analyses table of the geodatabase.

*Insert additional rows as needed.

Article 4-202.1(j)(1)(i)3: Projected annual and 5-year revenues or other funds that will be used to meet the cost for the county or municipality to meet the impervious surface restoration plan requirements under the National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 2019	CURRENT YEAR FY 2020	PROJECTED YEAR 1 FY 2021	PROJECTED YEAR 2 FY 2022	PROJECTED YEAR 3 FY 2023	PROJECTED YEAR 4 FY 2024	PROJECTED YEAR 5 FY 2025	TOTAL NEXT 2-YEARS FY 21-22 ¹	TOTAL
Annual Revenue ² Appropriated for ISRP	\$85,818,000	\$6,102,446	\$7,460,000	\$7,434,000	\$0	\$0	\$0	\$14,894,000	\$106,814,446
Annual Costs towards ISRP ³	\$52,818,776	\$6,102,446	\$7,460,000	\$7,434,000	\$0	\$0	\$0	\$14,894,000	\$73,815,222

Compare revenue appropriated / annual costs: **100%**
WPRP 2020 Reporting Criteria: **100%**

ISRP = Impervious Surface Restoration Program

Notes:

- Article 4-202.1(j)(2): Demonstration that county or municipality has sufficient funding in the current fiscal year and subsequent fiscal year budgets to meet its estimated cost for the 2-year period immediately following the filing date of the FAP.
- Revenue means "dedicated revenues, funds, or sources of funds (per Article 4-202.1(j)(4)(ii)).
- See table of ISRP Cost.

Article 4-202.1(j)(1)(i)4: Any sources of funds that will be utilized by the county or municipality to meet the requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

SOURCE	PAST UP THRU FY 2019	CURRENT YEAR FY 2020	PROJECTED YEAR 1 FY 2021	PROJECTED YEAR 2 FY 2022	PROJECTED YEAR 3 FY 2023	PROJECTED YEAR 4 FY 2024	PROJECTED YEAR 5 FY 2025	TOTAL NEXT FIVE YEARS
Paygo Sources								
Stormwater Remediation Fees for Capital (WPR Fund) OPERATING TRANSFER OUT	\$ 51,607,000	\$ 4,122,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General Fund (Operating)	\$ 16,470,000	\$ 1,271,489	\$ 1,300,000	\$ 1,300,000	\$ -	\$ -	\$ -	\$ 2,600,000
Stormwater Remediation Fees for Operating (WPR Fund)	\$ 24,968,497	\$ 5,574,255	\$ 9,700,000	\$ 9,700,000	\$ -	\$ -	\$ -	\$ 19,400,000
General Fund (Capital)	\$ 2,650,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Funds 2 (please stipulate funding source)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Other Funds 3 (please stipulate funding source)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Paygo Sources	\$ 95,695,497	\$ 10,968,144	\$ 11,000,000	\$ 11,000,000	\$ -	\$ -	\$ -	\$ 22,000,000
Debt Service (paygo sources will be used to pay off debt service. Note that previous appropriations for debt service used for ISRP is listed in FY 2017).								
County Transportation Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General Obligation Bonds	\$ 26,121,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Stormwater Revenue (Utility) Bonds	\$ 19,400,000	\$ 9,000,000	\$ 6,300,000	\$ 6,300,000	\$ -	\$ -	\$ -	\$ 12,600,000
State Revolving Loan Fund	\$ 4,200,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public-private partnership (debt service)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Debt Service	\$ 49,721,000	\$ 9,000,000	\$ 6,300,000	\$ 6,300,000	\$ -	\$ -	\$ -	\$ 12,600,000
Grants and Partnerships (no payment is expected)								
State funded grants	\$ 16,910,000	\$ 2,100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Federal funded grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public-private partnership (matched grant)	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Grants and Partnerships	\$ 17,410,000	\$ 2,100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Annual Sources of Funds	\$ 162,826,497	\$ 22,068,144	\$ 17,300,000	\$ 17,300,000	\$ -	\$ -	\$ -	\$ 34,600,000
Percent of Funds Directed Toward ISRP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	

Compare total permit term paygo ISRP costs / subtotal permit term paygo sources: **68%**

Compare total permit term ISRP costs / total permit term annual sources of funds: **43%**

DRAFT

* WPR Fund: Watershed Protection and Restoration Fund

Check with MS4 Geodatabase:

The total sources related to WPR Funds in Current FY2020 should match the "WPR_FUND" field of the geodatabase.

Article 4-202.1(j)(1)(i)5: Specific actions and expenditures that the county or municipality implemented in the previous fiscal years to meet its impervious surface restoration plan requirements under its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

Baseline:

2,204 *This is the 20% restoration requirement for the 4th generation NPDES MS4 Permit.*

Requirement:

20%

REST BMP ID	REST BMP TYPE ¹	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	% ISRP Complete	IMPL STATUS ²	GEN COMMENTS
Operational Programs³									
	MSS	A	7	546	6/30/2011	\$440,068	24.8%	Complete	2011 total - 806 miles swept 4 times per year
	MSS	A	7	423	6/30/2012	\$411,755	19.2%	Complete	2012 total - 806 miles swept 4 times per year
	MSS	A	7	337	6/30/2013	\$358,619	15.3%	Complete	2013 total - 806 miles swept 4 times per year
	MSS	A	7	220	6/30/2014	\$329,843	10.0%	Complete	2014 total - 806 miles swept 4 times per year
	MSS	A	7	398	6/30/2015	\$400,000	18.1%	Complete	2015 total - 806 miles swept 4 times per year
	MSS	A	7	372	6/30/2016	\$400,000	16.9%	Complete	2016 total - 806 miles swept 4 times per year
	MSS	A	7	293	6/30/2017	\$332,580	13.3%	Complete	2017 total - 806 miles swept 4 times per year
	MSS	A	7	287	6/30/2018	\$227,074	13.0%	Complete	2018 total - 806 miles swept 4 times per year
	MSS	A	7	284	6/30/2019	\$395,300	12.9%	Complete	2019 total - 806 miles swept 4 times per year
	SDV	A	85	42.9	6/30/2017	\$119,970	1.9%	Complete	2017 total - 214,569 pounds of material removed
	SDV	A	87	34.9	6/30/2018	\$96,657	1.6%	Complete	2018 total - 174,666 pounds of material removed
	SDV	A	108	125.4	6/30/2019	\$9,908	5.7%	Complete	2019 total - 635,925 pounds of material removed
Average Operations Complete To Date ⁴			343	419		\$3,521,774	19.0%		
Capital Projects									
HO10RST900044	WSHW	S	1	3.9	8/1/2010	\$165,569	0.2%	Complete	VRH Shallow Marsh
HO10ALN000168	STRE	A	1	20.8	8/31/2010	\$409,063	0.9%	Complete	Paul Mill Road
HO10RST900038	FBIO	S	2	1.0	9/1/2010	\$153,745	0.0%	Complete	Cedar Lane Park - North
HO10ALN000014	OUT	A	1	0.7	12/15/2010	\$50,000	0.0%	Complete	Hickory Ridge
HO11ALN000015	STRE	A	1	13.4	1/31/2011	\$521,967	0.6%	Complete	Old Willow Way
HO11ALN000049	STRE	A	1	15.3	3/22/2011	\$500,000	0.7%	Complete	Beechwood
HO11ALN000016	STRE	A	1	4.3	3/25/2011	\$50,000	0.2%	Complete	Great Drum Circle
HO11RST900356	FBIO	S	1	0.7	4/1/2011	\$100,000	0.0%	Complete	Savage Park
HO11RST900357	FBIO	S	1	0.5	4/1/2011	\$100,000	0.0%	Complete	Savage Park
HO11ALN000048	STRE	A	1	3.3	4/4/2011	\$104,839	0.1%	Complete	Autumn Harvest - Phase 2
HO11RST900062	FBIO	S	1	4.6	5/1/2011	\$100,000	0.2%	Complete	Savage Park

HO11RST900043	FSND	S	1	3.4	5/1/2011	\$290,547	0.2%	Complete	Stratford Downs
HO11RST900037	FBIO	S	1	0.6	6/1/2011	\$206,792	0.0%	Complete	Atholton Park
HO11RST900056	FBIO	S	1	0.9	9/1/2011	\$188,922	0.0%	Complete	Dorsey Bldg Parking Lot
HO11ALN000056	STRE	A	1	18.0	11/30/2011	\$100,000	0.8%	Complete	Savage Park
HO11RST900059	PWED	S	1	3.8	12/1/2011	\$61,289	0.2%	Complete	Saint John's Green
HO11ALN000045	STRE	A	1	27.4	12/16/2011	\$216,775	1.2%	Complete	Hi Tech Road
HO12ALN000069	OUT	A	1	0.4	2/17/2012	\$50,000	0.0%	Complete	Meadowbrook Park
HO12ALN000070	OUT	A	1	0.3	2/17/2012	\$50,000	0.0%	Complete	Meadowbrook Park
HO12ALN000051	STRE	A	1	45.5	2/17/2012	\$1,232,322	2.1%	Complete	Meadowbrook Park
HO12ALN000075	STRE	A	1	45.2	2/20/2012	\$869,669	2.0%	Complete	Threshfield Stream
HO12ALN000057	STRE	A	1	11.7	2/21/2012	\$1,529,717	0.5%	Complete	Red Hill Branch
HO12ALN000088	STRE	A	1	14.3	2/29/2012	\$200,000	0.6%	Complete	LPPI
HO13ALN000091	STRE	A	1	9.8	2/29/2012	\$200,000	0.4%	Complete	LPPI
HO12RST900063	PWED	S	1	4.2	3/1/2012	\$216,336	0.2%	Complete	Waverly Woods
HO12ALN000052	STRE	A	1	0.9	3/2/2012	\$82,103	0.0%	Complete	Great Oaks
HO12ALN000087	OUT	A	1	0.4	3/4/2012	\$50,000	0.0%	Complete	Edmunds Way
HO12ALN000167	STRE	A	1	35.9	3/23/2012	\$1,077,365	1.6%	Complete	Bramhope Lane
HO12ALN000029	STRE	A	1	6.1	6/30/2012	\$100,000	0.3%	Complete	Trotter Road
HO12RST900060	PWED	S	1	2.1	7/1/2012	\$400,000	0.1%	Complete	Salterforth
HO12RST900061	PWED	S	1	2.9	7/1/2012	\$398,130	0.1%	Complete	Salterforth
HO12ALN000082	OUT	A	1	0.2	8/16/2012	\$50,000	0.0%	Complete	Bonnie Brae
HO12RST900041	XDED	S	1	0.0	9/1/2012	\$231,060	0.0%	Complete	Mount Hebron HS
HO12ALN000084	OUT	A	1	0.3	10/19/2012	\$50,000	0.0%	Complete	Cromwell Court
HO13ALN000054	STRE	A	1	5.5	1/1/2013	\$234,277	0.3%	Complete	Dower Drive
HO13ALN000050	STRE	A	1	18.9	1/9/2013	\$500,000	0.9%	Complete	Allview
HO13ALN000085	OUT	A	1	0.2	1/24/2013	\$50,000	0.0%	Complete	Cypress Bay
HO13ALN000089	OUT	A	1	0.1	1/24/2013	\$50,000	0.0%	Complete	Ilchester Point Court
HO13RST900039	PWED	S	1	6.3	1/24/2013	\$303,010	0.3%	Complete	Cypress Bay
HO13RST900318	SPSC	A	1	1.2	2/15/2013	\$578,896	0.1%	Complete	Oak West Drive
HO13RST900054	IBAS	S	1	4.9	3/1/2013	\$495,040	0.2%	Complete	Country Lane Pond #1
HO13RST900055	IBAS	S	1	3.3	3/1/2013	\$495,039	0.1%	Complete	Country Lane
HO13ALN000083	STRE	A	1	7.6	3/6/2013	\$50,000	0.3%	Complete	Chestnut Farms
HO13ALN000067	STRE	A	1	0.8	3/18/2013	\$50,000	0.0%	Complete	Elmmede Road
HO13ALN000068	STRE	A	1	31.9	3/18/2013	\$715,509	1.4%	Complete	Elmmede Road
HO13ALN000053	STRE	A	1	53.1	3/21/2013	\$1,031,583	2.4%	Complete	Stone Trail Stream
HO13ALN000074	OUT	A	1	0.3	4/10/2013	\$50,000	0.0%	Complete	Wheatfield Way
HO13ALN000019	STRE	A	1	26.1	4/10/2013	\$299,036	1.2%	Complete	Wheatfield Way
HO13RST900057	FSND	S	1	2.4	5/1/2013	\$578,896	0.1%	Complete	Oak West
HO13RST900052	IMPP	A	1	9.8	5/1/2013	\$218,828	0.4%	Complete	Dower Drive
HO13ALN000020	STRE	A	1	50.6	5/13/2013	\$668,920	2.3%	Complete	Windflower Drive
HO13RST900045	APRP	E	1	0.2	8/23/2013	\$17,751	0.0%	Complete	Ellicott City Lot B Pvmt
HO13ALN000090	STRE	A	1	3.1	10/10/2013	\$50,000	0.1%	Complete	Furnace Ave
HO14ALN000021	STRE	A	1	10.2	1/21/2014	\$291,112	0.5%	Complete	Tuscany Road
HO14RST900053	IBAS	S	1	2.4	1/30/2014	\$321,887	0.1%	Complete	Ashmede
HO14RST900032	WPWS	S	1	0.0	2/25/2014	\$718,740	0.0%	Complete	Shadow Lane

HO14ALN000017	STRE	A	1	29.8	3/11/2014	\$482,471	1.4%	Complete	Whiterock Court
HO14ALN000081	OUT	A	1	0.3	3/26/2014	\$50,000	0.0%	Complete	Bill Lilly Court
HO14ALN000088	OUT	A	1	0.2	4/25/2014	\$50,000	0.0%	Complete	Falling Waters
HO14ALN000018	STRE	A	1	8.3	6/16/2014	\$144,512	0.4%	Complete	Tiller Drive Phase 2
HO14ALN000092	OUT	A	1	0.3	7/14/2014	\$50,000	0.0%	Complete	Rhode Valley
HO14RST900034	WSHW	S	1	1.0	7/17/2014	\$309,255	0.0%	Complete	Wimbledon
HO14RST900049	MMBR	E	1	0.2	9/30/2014	\$70,212	0.0%	Complete	SFES MB-1
HO14RST900050	MMBR	E	1	0.1	9/30/2014	\$70,213	0.0%	Complete	SFES MB-2
HO14RST900051	MMBR	E	1	0.1	9/30/2014	\$70,213	0.0%	Complete	SFES MB-2B
HO14RST900048	MSWB	E	1	0.0	9/30/2014	\$70,212	0.0%	Complete	SFES Bioswale
HO14RST900013	XDED	S	1	0.9	11/18/2014	\$363,355	0.0%	Complete	Old Mill Pond Retrofit
HO15RST900014	FBIO	S	1	0.1	4/20/2015	\$250,000	0.0%	Complete	Towering Oaks
HO15RST900317	SPSC	A	1	3.3	4/20/2015	\$50,000	0.1%	Complete	Towering Oaks SPSC
HO15ALN000139	STRE	A	1	3.6	4/20/2015	\$41,905	0.2%	Complete	Towering Oaks
HO15ALN000006	STRE	A	1	31.6	5/1/2015	\$528,929	1.4%	Complete	Pinehurst Court
HO15RST900017	PWET	S	1	40.7	5/8/2015	\$1,275,340	1.8%	Complete	Red Cravat
HO15RST900035	WSHW	S	1	1.6	6/1/2015	\$528,929	0.1%	Complete	Pinehurst Shallow Marsh
HO15RST900027	WEDW	S	1	2.1	6/8/2015	\$292,190	0.1%	Complete	Pebble Beach Pond 2
HO15RST900313	FBIO	S	1	1.0	7/21/2015	\$100,000	0.0%	Complete	Ellicott City Lot E
HO15RST900315	FBIO	S	1	0.8	7/21/2015	\$100,000	0.0%	Complete	Ellicott City Lot E
HO15RST900316	FBIO	S	1	0.8	7/21/2015	\$100,000	0.0%	Complete	Ellicott City Lot E
HO15ALN000030	STRE	A	1	6.5	9/3/2015	\$100,000	0.3%	Complete	D-1163Trotter Road
HO15ALN000093	OUT	A	1	0.2	9/17/2015	\$50,000	0.0%	Complete	Townhomes of Timberland
HO15RST900319	SPSC	A	1	1.5	11/3/2015	\$100,000	0.1%	Complete	Dorsey Hall Outfall B
HO15RST900320	SPSC	A	1	1.5	11/3/2015	\$100,000	0.1%	Complete	Dorsey Hall Outfall C
HO15RST900321	SPSC	A	1	1.5	11/3/2015	\$100,000	0.1%	Complete	Dorsey Hall Outfall E
HO15RST900322	SPSC	A	1	1.5	11/3/2015	\$100,000	0.1%	Complete	Dorsey Hall Outfall D
HO16ALN000095	OUT	A	1	0.4	2/10/2016	\$50,000	0.0%	Complete	Southview Road
HO16ALN000099	OUT	A	1	0.2	2/10/2016	\$50,000	0.0%	Complete	Southview Road
HO16ALN000096	STRE	A	1	83.5	2/10/2016	\$1,419,801	3.8%	Complete	Southview Road
HO16ALN000097	STRE	A	1	0.2	2/10/2016	\$50,000	0.0%	Complete	Southview Road
HO16ALN000098	STRE	A	1	0.7	2/10/2016	\$50,000	0.0%	Complete	Southview Road
HO16RST900018	WSHW	S	1	8.4	2/29/2016	\$649,515	0.4%	Complete	Whitworth Way
HO16ALN000100	STRE	A	1	7.1	3/1/2016	\$50,000	0.3%	Complete	Shallow Run
HO16ALN000101	STRE	A	1	3.1	3/1/2016	\$50,000	0.1%	Complete	Deep Run
HO16RST900400	PWET	S	1	2.1	3/22/2016	\$533,409	0.1%	Complete	Townhomes of Timberland
HO16ALN000094	OUT	A	1	0.2	5/6/2016	\$50,000	0.0%	Complete	Wetherburn
HO16RST900020	WPWS	S	1	3.3	6/24/2016	\$916,674	0.1%	Complete	TVO #3 Excelsior
HO17ALN000008	STRE	A	1	1.5	6/29/2016	\$50,000	0.1%	Complete	Turf Valley #3 Excelsior
HO16RST900026	PWET	S	1	3.1	7/15/2016	\$600,000	0.1%	Complete	Longridge Knolls
HO16RST900030	FBIO	S	1	2.1	8/10/2016	\$418,438	0.1%	Complete	Rusty Rim Pond Retrofit
HO17ALN000060	OUT	A	1	0.1	9/16/2016	\$50,000	0.0%	Complete	Greenway 1
HO17ALN000061	OUT	A	1	0.2	9/16/2016	\$50,000	0.0%	Complete	Greenway 1
HO16RST900024	PWET	S	1	0.8	10/5/2016	\$85,047	0.0%	Complete	Montgomery Run Pond 2
HO16ALN000001	STRE	A	1	27.3	10/31/2016	\$719,801	1.2%	Complete	Bonnie Branch

	SEPP	A	1093	32.8	2015	\$0	1.5%	Complete	2015 total
	SEPP	A	1081	32.4	2016	\$0	1.5%	Complete	2016 total
	SEPP	A	1096	32.9	2017	\$0	1.5%	Complete	2017 total
	SEPP	A	1022	30.7	2018	\$0	1.4%	Complete	2018 total
	SEPP	A	385	11.5	2019	\$0	0.5%	Complete	2019 total
HO11RST900342	FBIO	S	1	0.2	4/23/2011	\$0	0.0%	Complete	A3-02
HO13ALN000033	OUT	A	1	0.2	2/17/2013	\$0	0.0%	Complete	Queen Maria Court
HO13ALN000031	STRE	A	1	3.5	2/17/2013	\$0	0.2%	Complete	Bugledrum Way
HO13ALN000032	STRE	A	1	6.0	2/17/2013	\$1,000,000	0.3%	Complete	Dobbin Road
HO13ALN000034	STRE	A	1	0.9	2/17/2013	\$0	0.0%	Complete	Spinning Seed Road
HO19RST902763	PWED	S	1	8.5	5/11/2013	\$0	0.4%	Complete	Pond Retrofit Board of Ed
HO15RST902521	MIDW	E	1	0.2	8/11/2014	\$600	0.0%	Complete	Richard White
HO14RST900334	APRP	E	1	0.2	10/16/2014	\$0	0.0%	Complete	A1-05
HO14RST900335	APRP	E	1	0.2	10/16/2014	\$0	0.0%	Complete	A1-05
HO14RST900364	APRP	E	1	0.2	10/16/2014	\$0	0.0%	Complete	PERMP 1
HO14RST900365	APRP	E	1	0.2	10/16/2014	\$0	0.0%	Complete	PERMP 2
HO14RST900336	FBIO	S	1	0.2	10/16/2014	\$0	0.0%	Complete	A1-05
HO14RST900338	FBIO	S	1	0.1	10/16/2014	\$0	0.0%	Complete	A1-05
HO14RST900367	FBIO	S	1	0.0	10/16/2014	\$0	0.0%	Complete	BIO 2
HO14RST900368	FBIO	S	1	0.0	10/16/2014	\$0	0.0%	Complete	BIO 1
HO14RST900337	ODSW	S	1	5.0	10/16/2014	\$0	0.2%	Complete	A1-05
HO14RST900366	ODSW	S	1	5.0	10/16/2014	\$0	0.2%	Complete	SW
HO15RST902568	MIDW	E	1	0.2	6/24/2015	\$600	0.0%	Complete	Stephen Purcell
HO15RST900343	MMBR	E	1	0.2	6/30/2015	\$0	0.0%	Complete	R2-01
HO15RST900393	MMBR	E	1	0.2	6/30/2015	\$0	0.0%	Complete	MB
HO15RST900005	MMBR	E	1	0.2	7/16/2015	\$0	0.0%	Complete	MB14
HO16RST902591	APRP	E	1	0.2	9/3/2015	\$1,200	0.0%	Complete	James Brenza
HO19APY100318	IMPP	A	1	0.0	10/15/2015	\$2,200	0.0%	Complete	TC1148
HO15RST900074	MIDW	E	1	0.2	10/15/2015	\$2,500	0.0%	Complete	Heritage Museum
HO16RST902586	APRP	E	1	0.2	10/27/2015	\$0	0.0%	Complete	Carl Uhrmacher
HO16RST900309	FBIO	S	1	2.5	4/30/2016	\$106	0.1%	Complete	Bethel Bioretention 1
HO16RST900310	FBIO	S	1	0.0	4/30/2016	\$47	0.0%	Complete	Bethel Bioretention 2
HO16RST900311	FBIO	S	1	0.0	5/31/2016	\$74	0.0%	Complete	Harvester Bioretention
HO16RST900312	FBIO	S	1	0.0	5/31/2016	\$133	0.0%	Complete	Seventh Day Bioretention
HO17RST900405	FBIO	S	1	0.0	7/19/2016	\$12,170	0.0%	Complete	Lakeside Associates
HO16RST901515	PWED	S	1	1.6	10/5/2016	\$0	0.1%	Complete	POND
HO16RST900008	MMBR	E	1	0.2	11/5/2016	\$0	0.0%	Complete	MB
HO16RST901516	PWET	S	1	0.0	11/30/2016	\$0	0.0%	Complete	POND
HO17RST900009	MMBR	E	1	0.2	1/27/2017	\$0	0.0%	Complete	MB
HO17RST900010	MMBR	E	1	0.2	2/9/2017	\$0	0.0%	Complete	MB 1
HO17RST900011	MMBR	E	1	0.2	2/9/2017	\$0	0.0%	Complete	MB 2
HO17RST900012	MMBR	E	1	0.2	3/17/2017	\$0	0.0%	Complete	MB
HO19RST901556	FBIO	S	1	0.1	4/10/2017	\$0	0.0%	Complete	GreenleafBio3
HO17RST902159	FSND	S	1	2.1	5/3/2017	\$308,499	0.1%	Complete	First Evangelical
HO17RST900494	FBIO	S	1	0.0	5/19/2017	\$0	0.0%	Complete	Green Leaf Community

HO17RST900499	APRP	E	2	0.0	5/25/2017	\$0	0.0%	Complete	PP
HO17RST900501	MSWG	E	2	0.0	5/25/2017	\$0	0.0%	Complete	SW 4
HO17RST900500	MSWG	E	2	0.0	5/25/2017	\$0	0.0%	Complete	SW 3
HO17RST901517	WSHW	S	1	10.2	6/27/2017	\$0	0.5%	Complete	SM
HO17RST900511	FBIO	S	1	0.3	7/1/2017	\$0	0.0%	Complete	Long Look Bioretention
HO17ALN000070	STRE	A	1	5.1	8/1/2017	\$0	0.2%	Complete	Route 1
HO17RST900514	FSND	S	1	9.8	8/8/2017	\$478,652	0.4%	Complete	Howard Co General Hospita
HO17RST902158	FSND	S	1	1.0	11/10/2017	\$212,849	0.0%	Complete	Liberty Baptist
HO17RST900344	FBIO	S	2	0.0	12/10/2017	\$0	0.0%	Complete	BIO
	MRWH	E	4	0.0	FY 2010	\$112	0.0%	Complete	FY 2010 total
	FPU	A	11	1.8	FY 2011	\$297,589	0.1%	Complete	FY 2011 total
	SEPD	A	3	0.8	FY 2011	\$0	0.0%	Complete	FY 2011 total
	MRWH	E	175	0.3	FY 2011	\$5,992	0.0%	Complete	FY 2011 total
	MRNG	E	1	0.2	FY 2011	\$0	0.0%	Complete	FY 2011 total
	FPU	A	63	7.2	FY 2012	\$774,879	0.3%	Complete	FY 2012 total
	SEPD	A	3	0.8	FY 2012	\$0	0.0%	Complete	FY 2012 total
	MRWH	E	119	0.2	FY 2012	\$4,090	0.0%	Complete	FY 2012 total
	MRNG	E	4	0.6	FY 2012	\$6,513	0.0%	Complete	FY 2012 total
	FPU	A	47	7.4	FY 2013	\$102,493	0.3%	Complete	FY 2013 total
	SEPD	A	2	0.5	FY 2013	\$0	0.0%	Complete	FY 2013 total
	MRWH	E	198	0.3	FY 2013	\$4,306	0.0%	Complete	FY 2013 total
	MRNG	E	116	7.5	FY 2013	\$60,633	0.3%	Complete	FY 2013 total
	FPU	A	879	5.8	FY 2014	\$90,438	0.3%	Complete	FY 2014 total
	SEPD	A	27	7.0	FY 2014	\$0	0.3%	Complete	FY 2014 total
	MRWH	E	171	0.3	FY 2014	\$4,377	0.0%	Complete	FY 2014 total
	MRNG	E	118	17.7	FY 2014	\$193,802	0.8%	Complete	FY 2014 total
	FPU	A	388	8.8	FY 2015	\$62,721	0.4%	Complete	FY 2015 total
	SEPD	A	101	26.3	FY 2015	\$0	1.2%	Complete	FY 2015 total
	MRWH	E	117	0.2	FY 2015	\$5,734	0.0%	Complete	FY 2015 total
	MRNG	E	118	17.7	FY 2015	\$155,616	0.8%	Complete	FY 2015 total
	FPU	A	23	4.0	FY 2016	\$9,359	0.2%	Complete	FY 2016 total
	SEPC	A	5	2.0	FY 2016	\$0	0.1%	Complete	FY 2016 total
	SEPD	A	31	8.1	FY 2016	\$0	0.4%	Complete	FY 2016 total
	MRWH	E	127	0.2	FY 2016	\$6,852	0.0%	Complete	FY 2016 total
	MRNG	E	100	14.2	FY 2016	\$155,788	0.6%	Complete	FY 2016 total
	FPU	A	38	5.7	FY 2017	\$147,393	0.3%	Complete	FY 2017 total
	SEPC	A	6	2.3	FY 2017	\$0	0.1%	Complete	FY 2017 total
	SEPD	A	64	16.6	FY 2017	\$131,544	0.8%	Complete	FY 2017 total
	MRWH	E	117	0.2	FY 2017	\$6,296	0.0%	Complete	FY 2017 total
	MRNG	E	108	14.5	FY 2017	\$76,622	0.7%	Complete	FY 2017 total
	FPU	A	24	3.4	FY 2018	\$40,911	0.2%	Complete	FY 2018 total
	SEPC	A	11	2.3	FY 2018	\$157,780	0.1%	Complete	FY 2018 total
	SEPD	A	3	0.8	FY 2018	\$0	0.0%	Complete	FY 2018 total
	MRWH	E	101	0.1	FY 2018	\$4,003	0.0%	Complete	FY 2018 total
	MRNG	E	88	8.8	FY 2018	\$42,004	0.4%	Complete	FY 2018 total

Subtotal Other Complete To Date			8,241	399		\$4,567,475	18.1%		
Total Complete to Date			8,728	2,208		\$56,836,251	100.2%		

Check with MS4 Geodatabase:

Rest BMP ID, type, class, number of BMPs, impervious acres, built date, implementation cost and implementation status should match the various geodatabase tables for BMPs (AltBMPLine, AltBMPPoint, AltBMPPoly, and RestBMP)-- aggregated by type and status.

Notes:

1. Use BMP domains from the MS4 Geodatabase.
2. Complete, Under Construction, Planning, or Proposed.
3. For street sweeping indicate the annual frequency that the streets are swept, and for storm drain or catch basin cleaning report the pounds of material removed.
4. Average IMP ACRES for Operational BMPs should be the average of BMP 1 + the average of BMP 2, etc.
IMPL COST is a summation and not an average.

VERSION 8/20/20

APRP	Permeable Pavements
FB	Forest Buffer
FBIO	Bioretention
FSND	Sand Filter
FUND	Underground Filter
IBAS	Infiltration Basin
MIBR	Infiltration Berm
IMPP	Impervious Surface Elimination (to pervious)
MIDW	Dry Well
MMBR	Micro-Bioretention
MRNG	Rain Gardens
MRWH	Rainwater Harvesting
MSWB	Bio-Swale
MSWG	Grass Swale
ODSW	Dry Swale
WEDW	Extended Detention - Wetland
PWED	Extended Detention Structure, Wet
PWET	Retention Pond (Wet Pond)
WPWS	Wet Pond - Wetland
SPSC	Step Pool Storm Conveyance
UGS	Underground Storage
WSHW	Shallow Marsh
XDED	Extended Detention Structure, Dry
SEPP	Septic Pumping
SEPD	Septic Denitrification
SEPC	Septic Connections to WWTP

MSS	Mechanical Street Sweeping
SDV	Storm Drain Vacuuming
FPU	Planting Trees or Forestation on Previous Urban
STRE	Stream Restoration
OUT	Outfall Stabilization