



**MARYLAND DEPARTMENT OF THE ENVIRONMENT
WATER AND SCIENCE ADMINISTRATION**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT FOR DISCHARGES FROM
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

**GENERAL DISCHARGE PERMIT NO. 13-IM-5500
GENERAL NPDES NO. MDR055500**

Final Determination: April 27, 2018
Effective Date: October 31, 2018
Expiration Date: October 30, 2023

This National Pollutant Discharge Elimination System (NPDES) general permit covers small municipal separate storm sewer systems (MS4s) in certain portions of the State of Maryland. MS4 owners and operators to be regulated under this general permit must submit a Notice of Intent (NOI) to MDE by October 31, 2018. An NOI serves as notification that the MS4 owner or operator intends to comply with the terms and conditions of this general permit.

APPENDIX D

Municipal Small MS4 Progress Report

Maryland Department of the Environment (MDE)

**National Pollutant Discharge Elimination System (NPDES)
Small Municipal Separate Storm Sewer Systems (MS4) General Permit**

This Progress Report is required for those jurisdictions covered under General Discharge Permit No. 13-IM-5500. Progress Reports must be submitted to:

Maryland Department of the Environment, Water and Science Administration
Sediment, Stormwater, and Dam Safety Program
1800 Washington Boulevard, Suite 440, Baltimore, MD 21230-1708
Phone: 410-537-3543 FAX: 410-537-3553
Web Site: www.mde.maryland.gov

Contact Information

Permittee Name:	City of Takoma Park MD
Responsible Personnel:	Daryl Braithwaite
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Email address:	alik@takomaparkmd.gov

Signature of Responsible Personnel

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Daryl Braithwaite		10-30-202
Printed Name	Signature	Date

Reporting Period (State Fiscal Year): 10-1-2020 to 10-1-2021

Due Date: 10/31/2021 **Date of Submission:** 11/3/2021

Type of Report Submitted:

Impervious Area Restoration Progress Report (Annual): ☒

Six Minimum Control Measures Progress (Years 2 and 4): ☐

Both: ☐

Permittee Information:

Renewal Permittee: ☒

New Permittee: ☐

Compliance with Reporting Requirements

Part VI of the Small MS4 General Discharge Permit (No. 13-IM-5500) specifies the reporting information that must be submitted to MDE to demonstrate compliance with permit conditions. The specific information required in this MS4 Progress Report includes:

1. Annual: Progress toward compliance with impervious area restoration requirements in accordance with Part V of the general permit. All requested information and supporting documentation must be submitted as specified in Section I of the Progress Report.
2. Years 2 and 4: Progress toward compliance with the six minimum control measures in accordance with Part IV of the general permit. All requested information and supporting documentation shall be reported as specified in Section II of the Progress Report. MDE may request more frequent reporting and/or a final report in year 5 if additional information is needed to demonstrate compliance with the permit.

Instructions for Completing Appendix D Reporting Forms

The reporting forms provided in Appendix D allow the user to electronically fill in answers to questions. Users may enter quantifiable information (e.g., number of outfalls inspected) in text boxes. When a more descriptive explanation is requested, the reporting forms will expand as the user types to allow as much information needed to fully answer the question. The permittee must indicate in the forms when attachments are included to provide sufficient information required in the MS4 Progress Report.

Section I: Impervious Area Restoration Reporting Form

Section I: Impervious Area Restoration Reporting

1. a. Was the impervious area baseline assessment submitted in year 1?

☒ Yes ☐ No

b. If No, describe the status of completing the required information and provide a date at which all information required by MDE will be submitted:

- c. Has the baseline been adjusted since the previous reporting year?

☐ Yes ☒ No

2. Complete the information below based on the most recent data:

Total impervious acres of jurisdiction covered under this permit: 546.9

Total impervious acres treated by stormwater water quality best management practices (BMPs): 116.38

Total impervious acres treated by BMPs providing partial water quality treatment (multiply acres treated by percent of water quality provided): 4.4

Total impervious acres treated by nonstructural practices (i.e., rooftop disconnections, non-rooftop disconnections, or vegetated swales): 0.1

Total impervious acres untreated in the jurisdiction: 430.54

Twenty percent of this total area (this is the restoration requirement): 109.38

Verify that all impervious area draining to BMPs with missing inspection records is not considered treated. Describe how this information was incorporated into the overall analysis:

We include BMPs with passing inspection for credits in RAS. For permitted BMPs only Redevelopment Projects with adjusted credit were included.

2. Has an Impervious Area Restoration Work Plan been developed and submitted to MDE in accordance with Part V.B, Table 1 of the permit or other format?

☒ Yes ☐ No

Has MDE approved the work plan?

☒ Yes ☐ No

Section I: Impervious Area Restoration Reporting

If the answer to either question is No, describe the status of submitting (or resubmitting) the work plan to MDE and provide a date at which all outstanding information will be available:

The review comments from MDE received on December 23, 2019, and April 30, 2021, have been addressed. In our 2020 report, we updated the Geodatabase and described our Impervious area reassessment. For the 2021 report, the restoration work plan has been updated using the new template. The RAS now includes BMPs constructed since 2006.

Describe progress made toward restoration planning, design, and construction efforts and describe adaptive management strategies necessary to meet restoration requirements by the end of the permit term:

Adaptive management strategies necessary for implementing the restoration program consist of renewed focus on alternative BMPs. Outfall stabilization and stream restoration are the focus of our implementation strategy. The restoration activity schedule identifies future projects planned by the City.

In the current reporting period, the City has secured a contract for BMP inspection and maintenance for the facilities using Modular Wetland™ and Filteras® media. Those inspections are currently underway. The City is also updating the infrastructure's GIS layer maps. The City has also created a more agile electronic reporting system for our BMP scheduled inspection and maintenance reporting.

3. Has a Restoration Schedule been completed and submitted to MDE in accordance with Part V.B, Table 2 of the permit?

☒ Yes ☐ No

In year 5, has a complete restoration schedule been submitted including a complete list of projects and implementation dates for all BMPs needed to meet the twenty percent restoration requirement?

☒ Yes ☐ No

Are the projected implementation years for completion of all BMPs no later than 2025?

☒ Yes ☐ No

Describe actions planned to provide a complete list of projects in order to achieve compliance by the end of the permit term:

Our emphasis will be to improve outfalls and restore stream channels that are susceptible to erosion in the upcoming years.

Section I: Impervious Area Restoration Reporting

Describe the progress of restoration efforts (attach examples and photos of proposed or completed projects when available):

For the project on Glenside Drive, four (4) Rain Gardens totaling 816 SF of filtering surfaces were installed along with three (3) locations where outfall stabilization totaling 92 LF was implemented to address severe erosion issues. This residential street is adjacent to Long Branch Creek and had been developed without sufficient stormwater infrastructure. The stormwater drainage improvements in conjunction with the outfall stabilization on highly eroded steep slopes were completed in 2020.

The Flower Avenue Green Street Project, a one-mile-long collaborative effort between SHA, Montgomery County, and the City of Takoma Park, was completed in 2021. This project adds seven (7) Bioretention facilities with a total of 2,906 SF of filter surfaces to our inventory.

The restoration efforts in this period also included a 500SF surface area bioretention pond and an approximately 1500 SF of permeable paver installation which is currently underway.

4. Has the BMP database been submitted to MDE in Microsoft Excel format in accordance with Appendix B, Tables B.1.a, b, and c?
☒ Yes ☐ No

Is the database complete?
☒ Yes ☐ No

If either answer is No, describe efforts underway to complete all data fields, and a date that MDE will receive the required information:

5. Provide a summary of impervious area restoration activities planned for the next reporting cycle (attach additional information if necessary):
Planning and permitting for a bioretention facility at Hillwood Manor Park is completed and construction plan and contracting is underway. This facility will be a collaborative project between the City and MNCPPC. It provides approximately 1500 SF filter surface for a drainage area with an Impervious area Credit of approximately 1 Acre.

A project at Brashear's Run, an outfall to Sligo Creek will include 90 LF of outfall stabilization. The project is planned and permitted through MNCPPC and executed by the City of Takoma Park.

Takoma Branch Stream Restoration Project consisting of 100 linear feet of outfall and stream bank restoration has a complete design and has been permitted.

Section I: Impervious Area Restoration Reporting

Additional Projects under plan development include two slope stabilization for erosion control near the shores of Sligo Creek and installation of Filteras®(s) for water quality treatment in a residential neighborhood.

6. Describe coordination efforts with other agencies regarding the implementation of impervious area restoration activities:

As described in #6 above the City will be sharing the cost of a Bioretention facility for Hillwood Manor Park with MNCPPC. The Takoma Branch Stream restoration and out-fall stabilization project is a joint effort with MNCPPC in that the land is owned by MNCPPC, but managed by Takoma Park. The City will be covering the costs of the project, but the design development was a collaborative effort between Montgomery Parks and the City.

Similarly, the Brashear's Run outfall stabilization was collaboratively designed by the City and MNCPPC but will be financed by the City

The City plans to install erosion control measures in the Sligo Mill/Poplar Mill natural area in collaboration with MNCPPC.

7. List total cost of developing and implementing the impervious area restoration program during the permit term:

Installation of BMP's since 2007 to date incurred an estimated total cost of \$4,261,429.66 for both structural and alternative measures.

Currently, the annual stormwater management budget is approximately \$700,000. The funds are expended to implement impervious area restoration projects and cover staff salaries for the .75 FTE who oversee the program. The fund is also used to maintain and expand the City's storm drainage infrastructure.

Each year about \$250,000 is budgeted for Capital Projects, \$150,000 for maintenance and repairs, \$120,000 for video inspections, pipe cleaning, and IDDE, and \$80,000 for engineering assistance. The remainder is personnel costs. In addition to the dedicated stormwater budget, the City funds several programs through the Public Works operating budget that supplements the stormwater program (leaf collection, street sweeping, and tree planting), The City anticipates the budget to remain similarly allocated through the permit term.

Phase II MS4 Restoration Activity Schedule(Takoma Park No. 13-IM-5500)

Total Acreage (1337.6); Impervious Acre Baseline (546.9); 20% Restoration BASETarget (109.4 acres) -restored to date 119.9 acres

Type of Restoration Project	BMP Code ¹	BMP ID (Optional)	Cost (\$K) ²	Imperv Acres Treated	Imperv Acre Target and Balance	Project Status ³	Year Complete or Projected Implementation Year (by 2025)	MD Grid Coordinates (Northing/Easting)	
					109				
5 Cleveland Avenue- Bioretention	FBIO	TP07BMP000001	\$ 30	0.20	108.80	C	2007	478982.56	1307647.203
Holly Grant	MMBR	TP08BMP000002	\$ 19	0.08	108.72	C	2008	479650.53	1308869.207
12 Cleveland Avenue Rainstore Storage Basin	MENF	TP07BMP000003	\$ 61	0.37	108.35	C	2008	478993.56	1307567.881
Philadelphia City Parking	MMBR	TP09BMP000005	\$ 13	0.18	108.18	C	2009	478777.22	1309070.735
Green Roof- City Building	AGRE	TP10BMP000006	\$ 700	0.06	108.12	C	2010	478981.04	1310915.585
Hancock Step pool	MMBR	TP10BMP000007	\$ 36	0.18	107.94	C	2010	478964.92	1310949.710
Hancock Bioretention	SPSC	TP10BMP000008	\$ 23	0.24	107.70	C	2010	478939.00	1309508.521
Linden Avenue - Modular wetland	MENF	TP10BMP000009	\$ 216	0.00	107.70	C	2010	477495.53	1315521.404
Westmoreland Avenue - Bioretention	MMBR	TP10BMP000010	\$ 5	0.06	107.64	C	2010	476349.30	1309100.409
Kennewick & Kirklynn - Traffic Circle	MMBR	TP11BMP000011	\$ 76	0.40	107.24	C	2011	481248.59	1315344.747
Old Carroll Bioretention	MMBR	TP11BMP000012	\$ 12	0.09	107.15	C	2011	479168.25	1312157.643
Anne & Kennewick 1-SE LOC 15	MMBR	TP11BMP000013	\$ 9	0.09	107.06	C	2011	481962.58	1314887.278
Anne & Kennewick 2-NE LOC14	MMBR	TP11BMP000014	\$ 9	0.16	106.90	C	2011	481983.72	1314839.357
Anne & Wildwood 2 NE	MMBR	TP12BMP000015	\$ 7	0.02	106.88	C	2012	481644.18	1314443.254
Anne & Wildwood 1SW	MMBR	TP12BMP000016	\$ 7	0.27	106.61	C	2012	481521.09	1314459.285
Columbia & Poplar	MMBR	TP12BMP000017	\$ 15	0.21	106.39	C	2012	477118.30	1310516.485
Kirklynn & Lockney	MMBR	TP12BMP000018	\$ 9	0.11	106.28	C	2012	481114.54	1315114.107
Manor Circle triangle	MMBR	TP12BMP000019	\$ 24	0.50	105.78	C	2012	477849.26	1311071.095
Tulip Bio Swale	MMBR	TP12BMP000020	\$ 18	0.10	105.69	C	2012	477291.53	1308241.886
Wabash 1	MMBR	TP12BMP000021	\$ 21	0.10	105.59	C	2012	483507.99	1311462.347
Wabash 2	MMBR	TP12BMP000022	\$ 20	0.22	105.37	C	2012	483479.45	1311441.142
Wabash 3 Swale Filter	MMBR	TP12BMP000023	\$ 9	0.04	105.33	C	2012	483550.21	1311385.041
Wildwood & Haverford	MMBR	TP12BMP000024	\$ 4	0.10	105.23	C	2012	479374.70	1315261.790
Grant dead-end	FBIO	TP12BMP000025	\$ 94	0.30	104.94	C	2012	480414.66	1315810.274
Holton Lane	MMBR	TP13BMP000026	\$ 24	0.17	104.77	C	2013	482880.21	1311096.779
Hudson Avenue 1	MMBR	TP13BMP000027	\$ 27	0.21	104.56	C	2013	482865.59	1311571.651
Hudson Avenue 2	MMBR	TP13BMP000028	\$ 14	0.08	104.48	C	2013	482830.92	1311196.992
Hudson Avenue 3	MMBR	TP13BMP000029	\$ 14	0.23	104.25	C	2013	478463.44	1312150.699
Jackson & Lincoln 1	MMBR	TP14BMP000030	\$ 14	0.11	104.14	C	2014	478401.58	1312145.179
Jackson & Lincoln 2	MMBR	TP14BMP000031	\$ 30	0.10	104.04	C	2014	478349.48	1312110.342
Jackson & Lincoln 3	MMBR	TP14BMP000032	\$ 18	0.15	103.90	C	2014	477130.19	1313307.807
Elm & Lincoln	MMBR	TP14BMP000033	\$ 20	0.12	103.77	C	2014	475856.69	1312862.658
Prince Georges & Belford Pl	MMBR	TP14BMP000034	\$ 23	0.09	103.68	C	2014	480447.96	1309839.640
Ritchie Avenue - 1	MMBR	TP14BMP000035	\$ 21	0.13	103.55	C	2014	480461.80	1309862.791
Ritchie Avenue - 2	MMBR	TP14BMP000036	\$ 14	0.06	103.49	C	2014	480478.26	1309900.797
Ritchie Avenue - 3	MMBR	TP14BMP000037	\$ 12	0.05	103.45	C	2014	480522.15	1309829.767
Ritchie Avenue - 4	MMBR	TP14BMP000038	\$ 11	0.03	103.41	C	2014	480523.38	1309870.392
Ritchie Avenue - 5	MMBR	TP14BMP000039	\$ 18	0.03	103.39	C	2014	477906.39	1311987.939
Boyd & Jackson	MMBR	TP14BMP000040	\$ 20	0.11	103.28	C	2014	480683.39	1311332.725
Maple- Modular Wetland System	MENF	TP14BMP000041	\$ 57	1.75	101.53	C	2014	476158.84	1312676.869
Prince George & Circle Pond	FBIO	TP14BMP000042	\$ 122	0.15	101.38	C	2014	483243.72	1311041.212
Roanoke Avenue - 8312- Filter	FUND	TP14BMP000043	\$ 33	0.40	100.98	C	2014	479459.53	1307355.975
Baltimore Ave Wet Pond	WPWS	TP15BMP000044	\$ 42	0.60	100.37	C	2015	474793.95	1311646.966
Fourth Ave 6400	MMBR	TP15BMP000045	\$ 14	0.13	100.24	C	2015	474805.60	1311692.257
Fourth Ave 6404	MMBR	TP15BMP000046	\$ 13	0.07	100.18	C	2015	480651.87	1313284.549
Garland Avenue Bioretention	MMBR	TP15BMP000047	\$ 16	0.17	100.01	C	2015	480014.36	1310247.469
Ritchie & PW	MMBR	TP15BMP000048	\$ 17	0.15	99.85	C	2015	483363.91	1311410.006
Roanoke and Eastridge	MMBR	TP15BMP000049	\$ 46	0.27	99.59	C	2015	477561.39	1314395.737
Glazewood Larch1	MMBR	TP16BMP000050	\$ 36	0.25	99.34	C	2016	477527.03	1314424.175
Glazewood Larch2	MMBR	TP16BMP000051	\$ 31	0.25	99.09	C	2016	477577.71	1314442.031
Glazewood Larch3	MMBR	TP16BMP000052	\$ 6	0.04	99.05	C	2016	477577.71	1314442.031
Maple Avenue Permeable Pavers	APRP	TP16BMP000054	\$ 87	0.21	98.84	C	2016	478981.04	1310915.585
Dog Park - Trench Drain & SWALE	MSWG	TP17BMP000055	\$ 66	0.12	98.72	C	2017	480087.69	1309078.539
Hayward Swale	MSWB	TP17BMP000056	\$ 15	0.39	98.32	C	2017	477779.93	1313547.350
Hayward - Permeable Pavers & S	APRP	TP17BMP000057	\$ 15	0.33	97.99	C	2017	477779.93	1313547.350
End of Colby: Permeable Paver & S	FUND	TP17BMP000058	\$ 74	0.12	97.87	C	2017	478259.19	1312764.210
Filtera 1 Cherry & Colby FILTER	MENF	TP18BMP000059	\$ 23	0.15	97.72	C	2018	478034.57	1313035.130
Filtera 2 Cherry & Colby	MENF	TP18BMP000060	\$ 23	0.15	97.57	C	2018	478097.50	1313008.740
Devonshire & Glazewood BIO #2	FBIO	TP19BMP000061	\$ 17	0.19	97.38	C	2019	477230.58	1313961.180
Devonshire & Glazewood BIO #1	FBIO	TP19BMP000062	\$ 44	0.29	97.09	C	2019	477262.51	1313936.820
MWS#1 Lincoln and Larch	MENF	TP19BMP000063	\$ 48	0.00	97.09	C	2019	477530.00	1313100.000
MWS#2 Lincoln and Larch	MENF	TP19BMP000064	\$ 73	0.00	97.09	C	2019	477570.00	1313100.000
MWS#3 Lincoln and Larch	MENF	TP19BMP000065	\$ 53	0.00	97.09	C	2019	477710.00	1313500.000
MWS#4 Lincoln & Elm CB1131	MENF	TP19BMP000066	\$ 36	0.11	96.98	C	2019	477750.00	1313500.000
MWS#4 Larch & Hayward at CB833	MENF	TP19BMP000067	\$ 38	0.12	96.86	C	2019	477180.00	1313300.000
Flower & Sligo Creek bioretention	FBIO	TP19BMP000068	\$ 169	0.05	96.81	C	2019	478162.80	1312372.920
GRANT & HOLLY BIO #2	MMBR	TP19BMP000070	\$ 25	0.08	96.73	C	2021	479678.29	1308822.600
Elson St Dead End to Sligo Creek	APRP	TP22BMP000128	\$ 80			C	2022		
TOTAL CREDIT				12.27					

PERMITTED FACILITIES										
Lincoln Aspen Bioretention	MMBR	TP19BMP000069	\$	109	0.00	96.73	C	2019	478160.00	1312400.000
Flower Avenue ESD#1 sha151229	MMBR	TP19BMP000110	\$	20	0.00	96.73	C	2021	483680.32	1311666.65
Flower Avenue ESD#2@STA113+00	MMBR	TP19BMP000111	\$	15	0.06	96.67	C	2021	483680.32	1311666.65
Flower AvenueESD#4@sta116+75	MMBR	TP19BMP000112	\$	10	0.02	96.65	C	2021	483336.37	1311728.52
Flower AvenueESD#5	MMBR	TP19BMP000113	\$	10	0.02	96.63	C	2021	483280.00	1311700.00
Flower AvenueESD#6	MMBR	TP19BMP000114	\$	10	0.03	96.60	C	2021	483190.00	1311700.00
Flower Avenue ESD#18	MMBR	TP19BMP000115	\$	35	0.11	96.49	C	2021	481220.00	1312200.00
Flower AvenueESD#20	MMBR	TP19BMP000116	\$	100	0.00	96.49	C	2021	480300.00	1312500.00
Ethan Allen SWM-01A SHA BMP 150970 ST303	MMBR	TP19BMP000117	\$	50	0.20	96.29	C	2021	476683.12	1313738.56
Ethan Allen SWM-03 SHA BMP 150971 ST 313	MMBR	TP19BMP000118	\$	50	0.15	96.14	C	2021	476601.66	1314426.64
Glenside and Jackson RG0201	MMBR	TP19BMP000119	\$	12	0.05	96.08	C	2021	480350.00	1314400.00
Glenside and Haverford RG501	MMBR	TP19BMP000120	\$	10	0.04	96.04	C	2021	479120.00	131490.000
Glenside and Merwood Drive RG401	MMBR	TP19BMP000121	\$	12	0.03	96.02	C	2021	479458.00	131470.00
Glenside and Ann Street Mbio	MMBR	TP19BMP000127	\$	11	0.38	95.64	C	2021	481214.06	1314166.41
Takoma Park Middle School	FBIO	TP19BMP000072	\$	131	0.00	95.64	C	2019	480094	1308572
6506 Kansas Lane	FBIO	TP19BMP000073	\$	29	0.00	95.64	C	2019	474749	1311362
7305 Jackson Avenue	FBIO	TP18BMP000074	\$	8	0.00	95.64	C	2018	477657	1312086
7303 Jackson Avenue	FBIO	TP18BMP000075	\$	8	0.00	95.64	C	2018	477588	1311974
17 Lee Avenue-Resubmission CCPC	FBIO	TP18BMP000076	\$	5	0.00	95.64	C	2018	478779	1310189
7-11 Takoma Park	FBIO	TP18BMP000077	\$	10	0.10	95.54	C	2018	476696	1313921
36 Philadelphia Avenue	MILS	TP18BMP000078	\$	7	0.00	95.54	C	2018	478240	1309700
Sligo Mill Overlook Playground	MMBR	TP17BMP000079	\$	25	0.00	95.54	C	2017	474000	1311800
Washington Adventist Hospital 7600 Carroll Ave	MSWB	TP15BMP000080	\$	2	0.00	95.54	C	2015	479860	1312300
Washington Adventist University 7600 Flower	MSWB	TP16BMP000082	\$	18	0.15	95.39	C	2016	480050	1312600
Taco Bell Takoma Park	MMBR	TP16BMP000083	\$	25	0.28	95.11	C	2016	481350	1315900
Colby Avenue Park	MMBR	TP16BMP000084	\$	19	0.07	95.04	C	2016	478060	1313000
121 Grant Avenue	MILS	TP16BMP000085	\$	10	0.00	95.04	C	2016	478500	1310000
7020 New Hampshire Avenue	MIDW	TP15BMP000086	\$	3	0.00	95.04	C	2015	477390	1314500
Montgomery College Pavilion	MMBR	TP14BMP000087	\$	41	0.13	94.92	C	2014	479560	1306300
6882 New Hampshire Avenue	MMBR	TP13BMP000088	\$	20	0.00	94.92	C	2013	476130	1313400
127 Ritchie Avenue	MIDW	TP13BMP000089	\$	3	0.00	94.92	C	2013	480700	1309400
6608 Poplar Avenue	MIDW	TP13BMP000090	\$	4	0.00	94.92	C	2013	474910	1312000
Montgomery Housing (MHP) - Aspen Court	MIDW	TP12BMP000091	\$	27	0.00	94.92	C	2013	478410	1312800
MNCPCC- 7515 Hancock	MILS	TP12BMP000092	\$	50	0.00	94.92	C	2013	478950	1311000
6507 Highland Avenue	MIDW	TP13BMP000093	\$	4	0.00	94.92	C	2013	474850	1311100
Cristo Ray High School	MMBR	TP13BMP000094	\$	20	0.13	94.79	C	2013	477380	1314900
Gateway Properties-8435 Piney Branch	APRP	TP11BMP000095	\$	30	0.08	94.71	C	2012	484810	1311300
Walgreen's - 1329 E University	AGRE	TP10BMP000096	\$	95	0.20	94.51	C	2010	481080	1316200
Public Works Facility	MENF	TP10BMP000097	\$	45	0.44	94.06	C	2010	479940	1309800
Montgomery Housing (MHP)- 7610 Maple	MENF	TP11BMP000098	\$	16	0.14	93.92	C	2011	479670	1310300
Washington Adventist University-7707 Greenwood	MENF	TP10BMP000099	\$	20	0.07	93.85	C	2010	480110	1313000
Takoma Park Elementary School	MENF	TP08BMP000100	\$	30	0.74	93.11	C	2008	479340	1308700
Urciolo Properties	MENF	TP08BMP000101	\$	49	0.27	92.83	C	2008	476040	1308800
Cristo Rey H.S. 1010 Larch	MSWB	TP08BMP000102	\$	20	0.11	92.73	C	2008	477240	1315100
MNCPCC-Piney Branch Park	MSWB	TP08BMP000103	NA		0.00	92.73	C	2008	479760	1309400
121 Ritchie Avenue	MIDW	TP07BMP000104	\$	4	0.00	92.73	C	2007	480580	1309600
Talahi of MD -1 (6432 5TH Ave.)	MIDW	TP07BMP000105	\$	5	0.00	92.73	C	2007	474020	1311400
Talahi of MD -2 (6428 5TH Ave.)	MIDW	TP07BMP000106	\$	5	0.00	92.73	C	2007	474010	1311400
123 Ritchie Avenue (125)	MIDW	TP07BMP000107	\$	4	0.00	92.73	C	2007	480610	1309500
Montgomery County -Carroll Avenue Fire Station	FSND	TP07BMP000108	NA		0.36	92.37	C	2007	477420	1310300
6411 Orchard Avenue	MMBR	TP07BMP000109	NA		0.04	92.33	C	2007	474190	1311800
Street Sweeping	VVS	TP17BMP000110	\$	10	4.68	87.65	C	2017		
Street Sweeping	VVS	TP18BMP000111	\$	10	4.68	82.97	C	2018		
Street Sweeping	VVS	TP19BMP000112	\$	10	6.25	76.72	C	2019		
Street Sweeping	VVS	TP20BMP000113	\$	10	13.25	63.47	C	2020		
Street Sweeping	VVS	TP21BMP000114	\$	10	11.63	51.84	C	2021		
Storm Drain - Vacuum	SDV	TP16BMP000114	\$	30	8.92	42.92	C	2016		
Storm Drain - Vacuum	SDV	TP17BMP000115	\$	30	5.57	37.35	C	2017		
Storm Drain - Vacuum	SDV	TP18BMP000116	\$	87	4.03	33.32	C	2018		
Storm Drain - Vacuum	SDV	TP19BMP000117	\$	64	10.30	23.02	C	2019		
Storm Drain - Vacuum	SDV	TP20BMP000118	\$	65	4.12	18.90	C	2020		
Storm Drain - Vacuum	SDV	TP21BMP000119	\$	60	5.54	13.36	C	2021		
Stream Restoration - Hayward	STRE	TP16BMP000119	\$	67	8.00	5.36	C	2016	477903.94	1313549.610
Stream Restoration -Circlewood	STRE	TP13BMP000120	\$	39	7.90	-2.54	C	2013	475400.64	1311192.640
Stream Restoration - Mississippi	STRE	TP08BMP000121	\$	43	1.20	-3.74	C	2008	481264.39	1309338.500
Stream Restoration - New York & Baltimore	STRE	TP05BMP000122	\$	45	1.90	-5.64	C	2005	479674.08	1306992.730
Glenside and Haverford Outfall Stabilization	STER	TP19BMP000122	\$	69	0.03	-5.67	C	2021	479011.00	1314893.54
Glenside and Merwood swale & outfall stablization	STER	TP19BMP000123	\$	74	1.04	-6.71	C	2021	479430.00	1314629.64
Glenside and Jackson Swale and outfall stab	STER	TP19BMP000124	\$	61	0.38	-7.09	C	2021	480249.93	1314247.39
Tree Planting	SDV	TP17BMP000123	\$	30	0.04	-7.13	C	2017		
Tree Planting	FPU	TP18BMP000124	\$	30	0.04	-7.17	C	2018		
Tree Planting	FPU	TP19BMP000125	\$	30	0.06	-7.24	C	2019		
Tree Planting	FPU	TP20BMP000126	\$	30	0.09	-7.33	C	2020		
Tree Planting	FPU	TP21BMP000126	\$	25	0.05	-7.38	C	2021		
TOTAL CREDIT					104.11					

Attachment B: BMP Codes

Urban Best Management Practice (BMP) Database and Codes

The BMP database below will tabulate a list of all BMPs within a jurisdiction. BMPs may be entered as a single structure or as a system of practices. For example, the ESD to the MEP mandate requires numerous ESD practices to be installed throughout a site in order to meet stormwater requirements. In these cases, local jurisdictions may enter the system of ESD practices by specifying the number and type of BMPs used to meet the target rainfall requirements (PE_REQ). This data may be entered in the NUM_BMPS and ESD_MEP fields shown below. Data for the Maryland grid coordinates should report the location of the downstream most practice.

Column Name	Data Type	Size	Description
YEAR	NUMBER	4	Annual report year
BMP_ID	TEXT	13	BMP ID code ¹
MD_NORTH	NUMBER	8	Maryland grid coordinate (NAD 83 meters) Northing
MD_EAST	NUMBER	8	Maryland grid coordinate (NAD 83 meters) Easting
WATERSHED8DGT	NUMBER	8	Maryland 8-digit hydrologic unit code
WATERSHED12DGT	NUMBER	12	USGS 12-digit hydrologic unit code
BMP_NAME	TEXT	50	Name of BMP
BMP_CLASS	TEXT	1	BMP classification category (see list of BMPs: E, S, or A)
BMP_TYPE	TEXT	5	Type of BMP (see list of BMP classifications: enter code) ²
NUM_BMPS	NUMBER	2	Number of all BMPs used to meet PE_REQ
ESD_MEP	TEXT	75	Type of all BMPs used to meet PE_REQ
LAND_USE	NUMBER	3	Predominant land use ³
PERMIT_NUM	TEXT	11	MDE permit number
ADDRESS	TEXT	25	BMP address
CITY	TEXT	15	BMP City
STATE	TEXT	2	BMP State
ZIP	NUMBER	10	BMP zip code
ON_OFF_SITE	TEXT	10	On or offsite structure
CON_PURPOSE	TEXT	4	New development (NEWD), Redevelopment (REDE), or Restoration (REST)
CONVERTED_FROM	TEXT	5	If conversion of existing BMP then prior BMP type is required
BMP_STATUS	TEXT	10	Status of BMP (active, removed)
DRAIN_AREA	NUMBER	6	Structure drainage area (acres) ⁴
IMP_ACRES	NUMBER	8	Structure impervious drainage area (acres) ⁴
PE_REQ	NUMBER	8	P _E required ⁵
PE_ADR	NUMBER	8	P _E addressed ⁶
IMP_ACRES_REST	NUMBER	4	Equals IMP_ACRES when PE_ADR = 1 inch (for restoration only)
RCN_PRE	NUMBER	2	Runoff curve number (weighted) ⁷
RCN_POST	NUMBER	2	Runoff curve number (weighted) ⁷
RCN_WOODS	NUMBER	2	Runoff curve number (weighted) ⁷
APPR_DATE	DATE/TIME	8	Permit approval date
BUILT_DATE	DATE/TIME	8	As Built completion date (MM/DD/YYYY)
GEN_COMNT	TEXT	60	General comments

ADDITIONAL DATA REQUIREMENTS FOR ALL ALTERNATIVE BMPs			
PROJECT_NAME	TEXT	25	Name of project
PROJECT_DESCR	TEXT	75	Description of project
PROJECT_LENGTH	NUMBER	6	For stream restoration, shoreline stabilization, or outfall stab in feet
ACRES_SWEPT	NUMBER	6	Acres swept for street sweeping
TIMES_SWEPT	NUMBER	6	Number of times per year area is swept
ACRES_PLANTED	NUMBER	6	Acres of trees planted on urban impervious (IMPF)
ACRES_PLANTED	NUMBER	6	Acres of trees planted on pervious (FPU)
IMPERV_ACR_ELIM	NUMBER	6	Impervious acres removed to pervious land (IMPP)
EQ_IMP_ACRES	NUMBER	6	Equivalent impervious acres treated by alternative BMP (Table B.2)
INSPECTION/MAINTENANCE DATA REQUIRED FOR ALL NEW, REDEVELOPMENT, RETROFIT, AND ALTERNATIVE BMPs			
BMP_STATUS	TEXT	4	Pass/Fail
LAST_INSP_DATE	DATE/TIME	8	Last inspection date
MAIN_DATE	DATE	8	Last date maintenance was performed (MM/DD/YYYY)
REINSP_STATUS	DATE/TIME	4	Pass/Fail
REINSP_DATE	DATE/TIME	8	Next planned inspection date (MM/DD/YYYY)
REPORTING_YEAR	TEXT	4	State fiscal year (YYYY)
GEN_COMNT	TEXT	60	General comments

MDE Approved BMP Classifications

ESD BMPs		
Category	Code	Code Description
Alternative Surfaces (A)		
E	AGRE	Green Roof -- Extensive
E	AGRI	Green Roof -- Intensive
E	APRP	Permeable Pavements
E	ARTF	Reinforced Turf
Nonstructural Techniques (N)		
E	NDRR	Disconnection of Rooftop Runoff
E	NDNR	Disconnection of Non-Rooftop Runoff
E	NSCA	Sheetflow to Conservation Areas
Micro-Scale Practices (M)		
E	MRWH	Rainwater Harvesting
E	MSGW	Submerged Gravel Wetlands
E	MILS	Landscape Infiltration
E	MIBR	Infiltration Berms
E	MIDW	Dry Wells
E	MMBR	Micro-Bioretenion
E	MRNG	Rain Gardens
E	MSWG	Grass Swale
E	MSWW	Wet Swale
E	MSWB	Bio-Swale
E	MENF	Enhanced Filters
Structural BMPs		
Ponds (P)		
S	PWED	Extended Detention Structure, Wet
S	PWET	Retention Pond (Wet Pond)
S	PMPS	Multiple Pond System
S	PPKT	Pocket Pond

S	PMED	Micropool Extended Detention Pond
Wetlands (W)		
S	WSHW	Shallow Marsh
S	WEDW	ED – Wetland
S	WPWS	Wet Pond – Wetland
S	WPKT	Pocket Wetland
Infiltration (I)		
S	IBAS	Infiltration Basin
S	ITRN	Infiltration Trench
Filtering Systems (F)		
S	FBIO	Bioretention
S	FSND	Sand Filter
S	FUND	Underground Filter
S	FPER	Perimeter (Sand) Filter
S	FORG	Organic Filter (Peat Filter)
S	FBIO	Bioretention
Open Channels (O)		
S	ODSW	Dry Swale
S	OWSW	Wet Swale
Other Practices (X)		
S	XDPD	Detention Structure (Dry Pond)
S	XDED	Extended Detention Structure, Dry
S	XFLD	Flood Management Area
S	XOGS	Oil Grit Separator
S	XOTH	Other

MDE Approved Alternative BMP Classifications

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

Notes:

1. Use unique BMP identification codes listed below
2. For ESD to MEP, enter the most predominant BMP type
3. Use Maryland Office of Planning (MDP) land use codes listed below
4. GIS shapefile optional
5. Rainfall target (from Table 5.3, Design Manual pp.5.21-22) used to determine ESD goals and size practices (for new development or redevelopment). If practice is for restoration, then PE_REQ is 1 inch.
6. Rainfall addressed (using both ESD techniques and practices, and structural practices) by the BMPs within the drainage area
7. Optional - information should be submitted if available