County Council of Howard County, Maryland

2016 Legislative Session Legislative Day No. **7**

Resolution No 92-2016

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; indicating certain endorsement by the County Executive; and requiring certain copies be sent to the Maryland Department of the Environment.

Introduced and read first time _____, 2016.

By order _____
Jessica Feldmark, Administrator

Read for a second time at a public hearing on _____, 2016.

By order _____
Jessica Feldmark, Administrator

This Resolution was read the third time and was Adopted___, Adopted with amendments___, Failed___, Withdrawn___, by the County Council on _____, 2016.

Certified By _____
Jessica Feldmark, Administrator

Approved by the County Executive on _____, 2016.

_____
Allan H. Kittleman, 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

WHEREAS, related to the Watershed Protection and Restoration Fee, Howard County is required to file a financial assurance plan ("Plan"), approved by the local governing bodies, with the Maryland Department of the Environment ("MDE"), in accordance with § 4-202.1 of the Environment Article of the Annotated Code of Maryland (the "State Law"); and

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

WHEREAS, the State law requires that the County file a Plan with MDE and that the governing bodies of the County approve the Plan prior to filing with MDE.

NOW, THEREFORE, BE IT RESOLVED by the County Council of Howard County, Maryland, this _____ day of _____, 2016, that it hereby approves the Plan, substantially in the form attached, as a projection of actions, funding, and costs of Howard County's stormwater management program over the two-year period following the filing date of the Plan,

AND BE IT FURTHER RESOLVED, that the County Executive be, and is hereby, requested to endorse this Resolution, thereby indicating his approval of the Plan.

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

Howard County Financial Assurance Plan 2016: Executive Summary

Permit Overview

The National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit issued to Howard County, hereinafter "the 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. In December 2015, the County submitted its *Countywide Implementation Strategy* (CIS) which included a detailed impervious surface area assessment and restoration plan that calculated the Countywide impervious surface area not restored to the MEP as 10,222 acres. Thus, the County's target 20% restoration requirement is 2,044 acres. State law requires that the County approve and file a financial assurance plan (Plan) with the Maryland Department of the Environment (MDE) that describes actions, revenues, and costs required to meet the 20% restoration requirement.

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. As detailed in the CIS, all restoration projects implemented following July 1, 2013 are considered restoration that applies to the County's 20% restoration goal. From July 2013 through December 2015, the County has restored approximately 157 acres, leaving the total amount of impervious acreage needed to be restored at approximately 1,887 acres by December 17, 2019.

The County received comments on the CIS from MDE on May 27, 2016. The County requested that MDE delay the deadline for the filing of the Plan so that the County could address MDE's comments on the CIS in the Plan, but MDE denied this request. The Plan has been developed based on the impervious surface area assessment and strategies outlined in the December 2015 CIS and MDE has assured the County that the development of its Plan has been laudatory.

Actions Required to Meet Permit

The County will continue to implement the numerous programs required by the MS4 permit, including development of restoration plans that will identify projects to restore impervious surface area. Best management practices (BMPs) will continue to be utilized to complete the restoration work and improve water quality, including stream restoration, outfall stabilization, tree planting, construction of new BMPs, and retrofitting existing BMPs. 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.

The work required by the MS4 permit will be difficult to complete within the allotted timeframe due to the sheer volume of design and construction required, the large resource demand related to maintaining current BMPs, and the necessity of utilizing private property to meet the 20% requirement. There is not enough public land to meet the impervious acreage requirement. Private property owners are not required to work with the County in meeting the 20% requirement and there are currently few incentives for them to do so. The County is proactively pioneering Public-Private Partnerships in order to complete some of the work, but in the end, this will not completely solve the larger issue of gaining access to private land, a fundamental weakness of MDE's stormwater management approach that may require legislative action by the General Assembly to address.

Total Permit Cost and Fund Sources

The County appreciates the importance of working to meet the restoration requirement of its permit. Utilizing current project cost estimates for restoring impervious acreage, as well as including the acres calculated in the CIS, the County believes that the 20% restoration requirement of its MS4 permit will cost approximately $137,948,680 beginning in Fiscal Year (FY) 2015 through FY 2020. Over the next two fiscal years, FY 2017 and FY 2018, the cost to the County will be approximately $40,760,000. These cost estimates include the engineering design, construction, and monitoring costs associated with commencing and completing the implementation of the 20% restoration requirement.

The County will use the following revenue sources for FY 2017 and FY 2018 in funding the costs of the MS4 permit over the next two fiscal years:

Grants- The County typically receives funding from various State and Federal grant programs to conduct stormwater restoration work. There is also the potential to work with private entities in conducting stormwater restoration work.

Watershed Protection and Restoration Fee- The County currently collects approximately $10.8 million from the Watershed Protection and Restoration Fee. This amount will decrease steadily over the next three years, as the Fee for commercial properties begins to decline, as specified in Council Resolution 37-2016.

Transfer Tax- Of the transfer tax that the County currently collects, a quarter is awarded to the County's Agricultural Land Preservation Program. The County believes that this program is reaching its peak and the Agricultural Land Preservation Fund will grow a significant positive balance in the near future. The County believes that allocating $1 million in FY 2018 to the Watershed Protection and Restoration Fund from the portion of the proceeds that the Agricultural Land Preservation Program currently receives is appropriate, but State legislation is required for this to occur.

General Fund- The County will utilize its General Fund to absorb operating costs in administering stormwater restoration projects and also to provide debt service for General Obligation Bonds issued to fund the stormwater restoration projects.

General Obligation Bonds- The County will issue General Obligation Bonds to fund necessary stormwater restoration projects required by the MS4 permit.

Future Considerations

The Plan describes projected actions, revenues, and costs to meet stormwater management requirements based on the current policy and regulatory environment established by MDE. As the County moves forward in its program, it will continue to gain a better understanding of the costs associated with completing the necessary stormwater restoration work. In addition, the County expects that several factors to be determined at the State level will influence the costs of meeting the MS4 permit:

New Crediting Methods - There is an expectation that new crediting methods related to outfall stabilization, street sweeping, inlet cleaning, public education, and more will allow the County credits for treating impervious acres based on existing and developing programs.

Nutrient Trading Program- MDE and the Maryland Department of Agriculture are dedicating considerable resources to the expansion of existing nutrient trading programs that should allow nutrient trades that will help the County meet its 20% restoration requirement in a cost-effective manner.

Summary

The Plan presented is a projected spending plan that will assist the County in meeting its MS4 permit restoration requirement.

MS4 Information	
Jurisdiction	Howard County
Contact Name	Mark S. Richmond, P.E., Chief
Phone	410-313-6413
Address	Howard County Government, Department of Public Works, Bureau of Environmental Services, Stormwater Management Division, 6751 Columbia Gateway Drive, Suite 514
City	Columbia
State	MD
Zip	21046
Email	msrichmond@howardcountymd.gov
Baseline Acres	10221.60
Permit Num	11-DP-3318
Reporting Year	2016

Check with MDE Geodatabase:

Should match Permit info table of Geodatabase, except for Impervious Acre Baseline--that should match Impervious Surface Table.

VERSION 4-7-16

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 Seperate Storm Sewer System Permit.

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

Baseline: 10,222 **Requirement:** 20%

REST BMP TYPE*, #	BMP CLASS	IMP ACRES	IMPL COST ##	% ISRP COMPLETE	IMPL STATUS**	PROJECTED IMPL YR
Operation Programs						
Source ID		0	$ 95,000	0.0%	Planning	2016
SW Management		0	$ 5,253,473	0.0%	Planning	2016
IDDE	A	0	$ 80,000	0.0%	Planning	2016
Inlet Cleaning	A	0	$ 10,000	0.0%	Planning	2016
Street Sweeping	A	0	$ 400,000	0.0%	Planning	2016
Public Education		0	$ 1,102,000	0.0%	Planning	2016
Watershed Assessment		0	$ 1,169,370	0.0%	Planning	2016
TMDL Assessment Monitoring		0	$ 417,000	0.0%	Planning	2016
Chemical Monitoring		0	$ 37,000	0.0%	Planning	2016
Biomonitoring		0	$ 125,000	0.0%	Planning	2016
Physical Stream Assessment		0	$ 37,000	0.0%	Planning	2016
Design Manual Monitoring		0	$ 64,000	0.0%	Planning	2016
Source ID		0	$ 100,000	0.0%	Proposed	2017
SW Management		0	$ 5,780,687	0.0%	Proposed	2017
IDDE	A	0	$ 85,000	0.0%	Proposed	2017
Inlet Cleaning	A	0	$ 10,000	0.0%	Proposed	2017
Street Sweeping	A	0	$ 400,000	0.0%	Proposed	2017
Public Education		0	$ 1,110,000	0.0%	Proposed	2017
Watershed Assessment		0	$ 500,000	0.0%	Proposed	2017
TMDL Assessment Monitoring		0	$ 500,000	0.0%	Proposed	2017
Chemical Monitoring		0	$ 40,000	0.0%	Proposed	2017
Biomonitoring		0	$ 125,000	0.0%	Proposed	2017
Physical Stream Assessment		0	$ 50,000	0.0%	Proposed	2017
Design Manual Monitoring		0	$ 64,000	0.0%	Proposed	2017
Source ID		0	$ 100,000	0.0%	Proposed	2018
SW Management		0	$ 5,954,108	0.0%	Proposed	2018

IDDE	A	0	$ 85,000	0.0%	Proposed	2018
Inlet Cleaning	A	0	$ 10,000	0.0%	Proposed	2018
Street Sweeping	A	0	$ 400,000	0.0%	Proposed	2018
Public Education		0	$ 1,150,000	0.0%	Proposed	2018
Watershed Assessment		0	$ 500,000	0.0%	Proposed	2018
TMDL Assessment Monitoring		0	$ 500,000	0.0%	Proposed	2018
Chemical Monitoring		0	$ 40,000	0.0%	Proposed	2018
Biomonitoring		0	$ 125,000	0.0%	Proposed	2018
Physical Stream Assessment		0	$ 100,000	0.0%	Proposed	2018
Design Manual Monitoring		0	$ 64,000	0.0%	Proposed	2018
Source ID		0	$ 100,000	0.0%	Proposed	2019
SW Management		0	$ 6,132,731	0.0%	Proposed	2019
IDDE	A	0	$ 85,000	0.0%	Proposed	2019
Inlet Cleaning	A	0	$ 10,000	0.0%	Proposed	2019
Street Sweeping	A	0	$ 400,000	0.0%	Proposed	2019
Public Education		0	$ 1,150,000	0.0%	Proposed	2019
Watershed Assessment		0	$ 500,000	0.0%	Proposed	2019
TMDL Assessment Monitoring		0	$ 500,000	0.0%	Proposed	2019
Chemical Monitoring		0	$ 40,000	0.0%	Proposed	2019
Biomonitoring		0	$ 125,000	0.0%	Proposed	2019
Physical Stream Assessment		0	$ 150,000	0.0%	Proposed	2019
Design Manual Monitoring		0	$ 64,000	0.0%	Proposed	2019
Source ID		0	$ 100,000	0.0%	Proposed	2020
SW Management		0	$ 6,316,713	0.0%	Proposed	2020
IDDE	A	0	$ 85,000	0.0%	Proposed	2020
Inlet Cleaning	A	0	$ 10,000	0.0%	Proposed	2020
Street Sweeping	A	0	$ 400,000	0.0%	Proposed	2020
Public Education		0	$ 1,150,000	0.0%	Proposed	2020
Watershed Assessment		0	$ 500,000	0.0%	Proposed	2020
TMDL Assessment Monitoring		0	$ 500,000	0.0%	Proposed	2020
Chemical Monitoring		0	$ 40,000	0.0%	Proposed	2020
Biomonitoring		0	$ 125,000	0.0%	Proposed	2020
Physical Stream Assessment		0	$ 200,000	0.0%	Proposed	2020
Design Manual Monitoring		0	$ 64,000	0.0%	Proposed	2020
Subtotal Operations Next Two Years (FY2017-FY2018)***		0.0	$ 17,792,795	0.0%		
Subtotal Operations Permit Term (FY2015-FY2019)***		0.0	$46,294,369	0.0%		

Subtotal Operations Permit Term and Projected Years (FY2015-FY2020)***		0.0	$55,785,082	0.0%		
Capital Projects						
BR	S	1.0	$ 187,342	0.01%	Planning	2016
EDSW	S	2.9	$ 380,000	0.03%	Planning	2016
FPU	A	5	$ 163,000	0.05%	Construction	2016
OUTS	A	2.0	$ 240,000	0.02%	Planning	2016
OUTS	A	1.0	$ 60,000	0.01%	Planning	2016
OUTS	A	1.8	$ 311,000	0.02%	Planning	2016
OUTS	A	2.0	$ 460,000	0.02%	Planning	2016
Pond Conversion	S	7	$ 250,000	0.07%	Construction	2016
Pond Conversion	S	6.7	$ 350,000	0.07%	Construction	2016
Pond Maintenance	S	0	$ 350,000	0.00%	Construction	2016
Pond Maintenance	S	0	$ 600,000	0.00%	Construction	2016
Pond Maintenance	S	0	$ 400,000	0.00%	Construction	2016
Pond Maintenance	S	0	$ 1,350,000	0.00%	Construction	2016
Pond Maintenance	S	0	$ 350,000	0.00%	Construction	2016
SF	S	3.5	$ 233,660	0.03%	Planning	2016
STRE	A	10.0	$ 650,000	0.10%	Planning	2016
STRE	A	3.0	$ 656,484	0.03%	Planning	2016
STRE	A	3.5	$ 830,000	0.03%	Planning	2016
STRE	A	5.0	$ 365,000	0.05%	Planning	2016
STRE	A	7.0	$ 541,202	0.07%	Planning	2016
STRE	A	17.0	$ 965,000	0.17%	Planning	2016
STRE	A	7.0	$ 576,430	0.07%	Planning	2016
STRE	A	11.1	$ 650,000	0.11%	Planning	2016
STRE	A	0	$ 650,000	0.00%	Planning	2016
WP	S	1.0	$ 400,000	0.01%	Planning	2016
WP	S	7.5	$ 80,000	0.07%	Planning	2016
WP	S	6.4	$ 71,172	0.06%	Planning	2016
WP	S	5.8	$ 316,995	0.06%	Planning	2016
ESDRG	E	5	$ 500,000	0.05%	Construction	2017
OUTS	A	2	$ 100,000	0.02%	Planning	2017
Pond Conversion	S	13.8	$ 700,000	0.14%	Construction	2017
Pond Conversion	S	4.7	$ 500,000	0.05%	Construction	2017
Pond Conversion	S	5	$ 300,000	0.05%	Construction	2017

Pond Maintenance	S	0	$ 400,000	0.00%	Construction	2017
Pond Maintenance	S	0	$ 350,000	0.00%	Construction	2017
Pond Maintenance	S	2	$ 600,000	0.02%	Construction	2017
Pond Maintenance	S	0	$ 400,000	0.00%	Construction	2017
SPSC	A	7.2	$ 90,000	0.07%	Planning	2017
SPSC	A	3.89	$ 230,000	0.04%	Planning	2017
SPSC	A	5.5	$ 300,000	0.05%	Construction	2017
STRE	A	64	$ 3,200,000	0.63%	Planning	2017
STRE	A	2	$ 100,000	0.02%	Planning	2017
STRE	A	14	$ 600,000	0.14%	Construction	2017
STRE	A	18	$ 1,000,000	0.18%	Construction	2017
STRE	A	18	$ 1,000,000	0.18%	Construction	2017
STRE	A	126	$ 900,000	1.23%	Construction	2017
STRE	A	20	$ 950,000	0.20%	Construction	2017
STRE	A	7	$ 350,000	0.07%	Construction	2017
STRE	A	17	$ 950,000	0.17%	Construction	2017
STRE	A	1	$ 350,000	0.01%	Construction	2017
STRE	A	10	$ 900,000	0.10%	Planning	2017
STRE	A	1	$ 200,000	0.01%	Construction	2017
STRE	A	1	$ 50,000	0.01%	Planning	2017
STRE	A	1	$ 350,000	0.01%	Construction	2017
BMP Conversions	S	27.7	$ 1,764,493	0.27%	Proposed	2018
FPU	A	17.2	$ 1,962,677	0.17%	Proposed	2018
New BMPs	S	10.0	$ 1,609,386	0.10%	Proposed	2018
OUTS	A	5.2	$ 788,608	0.05%	Proposed	2018
SPSC	A	19.8	$ 972,619	0.19%	Proposed	2018
STRE	A	18	$ 1,350,075	0.18%	Planning	2018
STRE	A	12.8	$ 1,047,045	0.13%	Planning	2018
STRE	A	10	$ 1,500,000	0.10%	Planning	2018
STRE	A	10	$ 803,081	0.10%	Proposed	2018
STRE	A	10.7	$ 824,195	0.10%	Proposed	2018
STRE	A	60	$ 2,000,000	0.59%	Planning	2018
STRE	A	3	$ 500,000	0.03%	Planning	2018
STRE	A	20	$ 1,000,000	0.20%	Planning	2018
STRE	A	161.4	$ 12,389,091	1.58%	Proposed	2018
BMP Conversions	S	30.9	$ 1,939,383	0.30%	Proposed	2019
FPU	A	17.9	$ 2,041,769	0.18%	Proposed	2019

New BMPs	S	11.4	$ 1,823,970	0.11%	Proposed	2019
OUTS	A	5.9	$ 900,475	0.06%	Proposed	2019
SPSC	A	20.8	$ 1,023,276	0.20%	Proposed	2019
STRE	A	11.9	$ 998,490	0.12%	Planning	2019
STRE	A	17.9	$ 1,344,810	0.18%	Planning	2019
STRE	A	318.0	$ 24,599,374	3.11%	Proposed	2019
BMP Conversions	S	35.6	$ 2,216,204	0.35%	Proposed	2020
FPU	A	16.4	$ 1,873,403	0.16%	Proposed	2020
New BMPs	S	15.4	$ 2,467,726	0.15%	Proposed	2020
OUTS	A	4.7	$ 747,939	0.05%	Proposed	2020
SPSC	A	36.9	$ 1,818,321	0.36%	Proposed	2020
STRE	A	296.8	$ 22,986,965	2.90%	Proposed	2020
Subtotal Capital Next Two Years (FY2017-FY2018)		734.89	$43,881,270	7.2%		
Subtotal Capital Permit Term (FY2015-FY2019)		1,362.53	$103,828,122	13.3%		
Subtotal Capital Permit Term and Projected Years (FY2015-FY2020)		1,768.33	$135,938,680	17.3%		
Other						
SEPD	A	7.8	$ 390,000	0.08%	Proposed	2016
SEPD	A	7.8	$ 390,000	0.08%	Proposed	2017
SEPD	A	7.8	$ 390,000	0.08%	Proposed	2018
SEPD	A	7.8	$ 390,000	0.08%	Proposed	2019
SEPP	A	270	$ 450,000	2.64%	Proposed	2019
Subtotal Other Next Two Years (FY2017-FY2018)		16	$780,000	0.15%		
Subtotal Other Permit Term (FY2015-FY2019)		382	$2,010,000	3.7%		
Subtotal Operations Permit Term and Projected Years (FY2015-FY2020)		382	$2,010,000	3.7%		
Total Next Two Years (FY2017-FY2018)		**750.5**	**$62,454,065**	**7.3%**		
Total Permit Term (FY2015-FY2019)		**1744.7**	**$152,132,491**	**17.1%**		

Total Permit Term and Projected Years (FY2015-FY2020)		**2150.5**	**$193,733,762**	**21.0%**		

Check with MDE Geodatabase:

Type, class, impervious acres, implementation cost and implementation status should match the various geodatabase tables for BMPs (AltBMPLine, AltBMPPoint,

*Use BMP domains from MDE Geodatabase.

**Complete, Under Construction, Planning, or Proposed

***IMPL COST is a summation and not an average.

General REST BMP TYPES are included for future projects for which the specific BMP TYPE has yet to be determined designed

Costs of $0 are for restoration projects implemented in Howard County by other non-government groups

Street Sweeping and Inlet cleaning are currently not performed at the frequency required to qualify for credit.

VERSION 4-7-16

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 Seperate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 2015	CURRENT/PROJECTED YEAR 1 FY 2016	PROJECTED YEAR 2 FY 2017	PROJECTED YEAR 3 FY 2018	PROJECTED YEAR 4 FY 2019	PROJECTED YEAR 5 FY 2020	TOTAL COSTS
Operating Expenditures (costs)*							
Capital Expenditures (costs)**							
Stream Restoration BMPs	$1,576,862	$6,425,318	$10,900,000	$21,413,487	$26,942,674	$22,986,965	$90,245,306
Outfall Stabilization BMPs	$0	$1,071,000	$100,000	$788,608	$900,475	$747,939	$3,608,022
Other BMPs	$5,872,589	$10,719,536	$4,760,000	$6,699,175	$7,668,398	$8,375,654	$44,095,352
Subtotal operation and paygo:	$7,449,451	$18,215,854	$15,760,000	$28,901,270	$35,511,547	$32,110,558	$137,948,680
Total expenditures:	**$7,449,451**	**$18,215,854**	**$15,760,000**	**$28,901,270**	**$35,511,547**	**$32,110,558**	**$137,948,680**

Total ISRP costs except debt service: $137,948,680

Compare ISRP costs (except debt service) / total NPDES MS4 proposed actions: 71%

*The County currently does not receive ISRP credit for operating expenditures

**See All Actions and Specific Actionsfor a full list of BMPs

Check with MDE Geodatabase:

The total current FY 2015 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 FY 2016 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 necessary.

VERSION 4-7-16

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 Seperate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 2015	CURRENT/PROJECTED YEAR 1 FY 2016	PROJECTED YEAR 2 FY 2017	PROJECTED YEAR 3 FY 2018	PROJECTED YEAR 4 FY 2019	PROJECTED YEAR 5 FY 2020	TOTAL NEXT 2-YEARS FY 17-18*	TOTAL CURRENT + PROJECTED
Annual Revenue** Appropriated for ISRP	$7,449,451	$18,215,854	$15,760,000	$25,000,000	$34,900,000	$36,623,375	$40,760,000	$137,948,680
Annual Costs towards ISRP***	$7,449,451	$18,215,854	$15,760,000	$28,901,270	$35,511,547	$32,110,558	$44,661,270	$137,948,680

Compare annual costs / revenue appropriated: 91%

WPRP 2016 Reporting Criteria 75%

ISRP = Impervious Surface Restoration Program, or 20% Restoration Requirement

* 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. Note that the appropriations and expenditures include time period up to FY 2018.

** Revenue means "dedicated revenues, funds, or sources of funds (per Article 4-202.1(j)(4)(ii). Note that budget appropriations have only been approved by governing bodies through FY 2016 at the time of FAP reporting.

*** See table of ISRP Cost.

VERSION 4-7-16

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 Seperate Storm Sewer System Permit.

SOURCE	PAST UP THRU FY 2015	CURRENT/PROJECTED YEAR 1 FY 2016	PROJECTED YEAR 2 FY 2017	PROJECTED YEAR 3 FY 2018	PROJECTED YEAR 4 FY 2019	PROJECTED YEAR 5 FY 2020	TOTAL PERMIT CYCLE
Paygo Sources							
Stormwater Remediation Fees for Capital (WPR Fund)	$ 10,012,839	$ 7,811,883	$ 7,980,000	$ 6,000,000	$ 3,110,000	$ 3,173,813	$ 38,088,535
General Fund (Operating)	$ 3,600,000	$ 1,800,000	$ 1,800,000	$ 1,854,000	$ 1,909,620	$ 1,966,909	$ 12,930,529
Transfer Tax				$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 3,000,000
Stormwater Remediation Fees for Operating (WPR Fund)	$ 4,798,693	$ 3,435,473	$ 3,980,687	$ 4,100,108	$ 4,223,111	$ 4,349,804	$ 24,887,876
Subtotal Paygo Sources	$ 18,411,532	$ 13,047,356	$ 13,760,687	$ 12,954,108	$ 10,242,731	$ 10,490,526	$ 78,906,939
Bonds Issued							
General Obligation Bonds	$ 11,627,908	$ 9,679,100	$ 7,413,000	$ 17,000,000	$ 16,400,000	$ 17,300,000	$ 79,420,008
Revenue (Utility) Bonds					$ 13,000,000	$ 14,483,625	$ 27,483,625
State Revolving Loan Fund			$ 3,200,000				$ 3,200,000
Subtotal Bonds Issued	$ 11,627,908	$ 9,679,100	$ 10,613,000	$ 17,000,000	$ 29,400,000	$ 31,783,625	$ 110,103,633
Grants and Partnerships (no payment is expected)							
State funded grants	$ 2,791,279	$ 1,777,400	$ 1,450,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 9,018,679
Public-private partnership (matched grant)			$ 500,000				$ 500,000
Subtotal Grants and Partnerships	$ 2,791,279	$ 1,777,400	$ 1,950,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 9,518,679
Total Annual Sources of Funds	**$ 32,830,719**	**$ 24,503,856**	**$ 26,323,687**	**$ 30,954,108**	**$ 40,642,731**	**$ 43,274,151**	**$ 198,529,251**
Percent of Funds Directed Toward ISRP		**74.34%**	**59.87%**	**80.76%**	**85.87%**	**84.63%**	

****Compare total permit term paygo ISRP costs / subtotal permit term paygo sources: 69%**

Compare total permit term ISRP costs / total permit term annual sources of funds: 69%

* WPR Fund: Watershed Protection and Restoration Fund.

**All funding sources are included

Check with MDE Geodatabase:

The total sources related to WPR Funds in Current FY 2015 should march the "WPR_Fund" field of the geodatabase.

Howard County Notes

PAST UP THRU 2015 includes actions between July 1, 2013 and June 30, 2015

FY14 and FY15: WPR Fund, General Obligation Bonds, and State Funded Grants were calculated for all encumbered funds in FY14 and FY15 for Capital Projects D-1148, D-1158, D-1159, D-1160, D-1164, D-1165, C-0331 and C-0337

FY16: WPR Fund, General Obligation Bonds, and State Funded Grants were calculated for all encumbered funds and unencumbered funds in FY16 for Capital Projects D-1148, D-1158, D-1159, D-1160, D-1164, D-1165, C-0331 and C-0337

FY17: WPR Fund, General Obligation Bonds, and State Funded Grants were calculated for all unencumbered funds planned in the FY17 budget as of March 21, 2016 for Capital Projects D-1148, D-1158, D-1159, D-1160, D-1164, D-1165, C-0331 and C-0337

FY17: $3.2M is included in the State Revolving Loan Fund - in the FY17 Budget this funding is listed as "Water Quality Loans" for Capital Project D-1158 Patrick Farm Restoration Project

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 Seperate Storm Sewer System Permit.

Baseline: 10,222 **Requirement:** 20%

REST BMP ID #	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST ##	% ISRP Complete	IMPL STATUS	GEN COMMENTS
Operation Programs									
Source ID			0	0	2014	$ 79,000	0.0%	Complete	
SW Management			0	0	2014	$ 2,517,000	0.0%	Complete	
IDDE		A	0	0	2014	$ 95,000	0.0%	Complete	
Inlet Cleaning		A	0	0	2014	$ 10,000	0.0%	Complete	not performed at the frequency required to qualify for credit
Street Sweeping		A	0	0	2014	$ 400,000	0.0%	Complete	not performed at the frequency required to qualify for credit
Public Education			0	0	2014	$ 668,000	0.0%	Complete	
Watershed Assessment			0	0	2014	$ 494,000	0.0%	Complete	
TMDL Assessment			0	0	2014	$ 185,000	0.0%	Complete	
Chemical Monitoring			0	0	2014	$ 40,000	0.0%	Complete	
Biomonitoring			0	0	2014	$ 108,000	0.0%	Complete	
Physical Stream Assessment			0	0	2014	$ 27,000	0.0%	Complete	
Design Manual Monitoring			0	0	2014	$ 47,000	0.0%	Complete	
Source ID			0	0	2015	$ 89,000	0.0%	Complete	
SW Management			0	0	2015	$ 2,665,000	0.0%	Complete	
IDDE		A	0	0	2015	$ 67,000	0.0%	Complete	
Inlet Cleaning		A	0	0	2015	$ 10,000	0.0%	Complete	not performed at the frequency required to qualify for credit
Street Sweeping		A	0	0	2015	$ 400,000	0.0%	Complete	not performed at the frequency required to qualify for credit
Public Education			0	0	2015	$ 443,000	0.0%	Complete	
Watershed Assessment			0	0	2015	$ 1,572,000	0.0%	Complete	
TMDL Assessment			0	0	2015	$ 318,000	0.0%	Complete	
Chemical Monitoring			0	0	2015	$ 44,000	0.0%	Complete	
Biomonitoring			0	0	2015	$ 96,000	0.0%	Complete	
Physical Stream Assessment			0	0	2015	$ 28,000	0.0%	Complete	
Design Manual Monitoring			0	0	2015	$ 53,000	0.0%	Complete	
Complete To Date*			0	0		$10,455,000	0.0%		
Capital Projects									
Under Ground Filter	FUND	S	1	12.75	2016	$ 1,256,553	0.1%	Complete	D-1160 Wilde Lake High School Retrofit
HO220006	MMBR	E	1	0.66	2016	$ 3,590,814	0.0%	Complete	
Stream Restoration	STRE	A	1	7.0	2016	$ 541,202	0.1%	Complete	D-1163 Trotter Road Stream Stabilization
HO320001	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320002	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320003	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320004	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320005	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320006	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320007	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320008	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320009	XOTH	S	1	0.00	1/1/2014	$5,202	0.000%	Complete	READY FY14
HO320010	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320011	XOTH	S	1	0.00	1/1/2014	$5,202	0.000%	Complete	READY FY14
HO320012	XOTH	S	1	0.00	1/1/2014	$5,202	0.000%	Complete	READY FY14
HO320013	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320014	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320015	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320016	XOTH	S	1	0.00	1/1/2014	$5,202	0.000%	Complete	READY FY14
HO320017	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14

HO320018	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320019	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320020	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320021	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320022	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320023	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320024	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320025	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320026	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320027	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320028	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320029	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320030	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320031	MRNG	E	1	0.15	1/1/2014	$5,202	0.001%	Complete	READY FY14
HO320032	XOTH	S	1	0.00	1/1/2014	$5,202	0.000%	Complete	READY FY14
HO320033	XOTH	S	1	0.00	1/1/2014	$5,202	0.000%	Complete	READY FY14
HO230021	STRE	A	1	3.39	1/21/2014	$283,113	0.033%	Complete	D-1158 Tuscany Road Stream Restoration
HO220042	IBAS	S	1	2.58	1/30/2014	$321,887	0.025%	Complete	D-1160 Ashmede Road Pond Retrofit
HO230017	STRE	A	1	6.93	3/11/2014	$477,055	0.068%	Complete	D-1158 Whiterock Court Stream Restortion
HO230018	STRE	A	1	2.58	6/16/2014	$295,931	0.025%	Complete	D-1158/D-1159 Tiller Drive Stream Restoration Phase 2
HO210004	FBIO	S	1	0.09	9/4/2014	$446,772	0.001%	Complete	D-1164 Savage Library Water Quality Enhancements
HO210010	MENF	E	1	0.18	9/4/2014	$446,772	0.002%	Complete	D-1164 Savage Library Water Quality Enhancements
HO210011	APRP	E	1	0.66	9/4/2014	$446,772	0.006%	Complete	D-1164 Savage Library Water Quality Enhancements
HO220037	MSWB	E	1	0.27	9/30/2014	$70,213	0.003%	Complete	D-1160 Stevens Forest Elementary School - Bioswale
HO220038	MMBR	E	1	0.23	9/30/2014	$70,213	0.002%	Complete	D-1160 Stevens Forest Elementary School - MB-1
HO220039	MMBR	E	1	0.13	9/30/2014	$70,213	0.001%	Complete	D-1160 Stevens Forest Elementary School - MB-2A
HO220040	MMBR	E	1	0.09	9/30/2014	$70,213	0.001%	Complete	D-1160 Stevens Forest Elementary School - MB-2B
HO210016	XDED	S	1	0.00	11/18/2014	$367,499	0.000%	Complete	D-1159 Old Mill Road Pond Repair
HO240006	FPU	A	1	0.74	1/1/2015	$22,212	0.007%	Complete	D-1160 SBO Folly Quarter MS
HO240008	FPU	A	1	0.22	1/1/2015	$7,491	0.002%	Complete	D-1160 SBO Waterloo MS
HO240009	FPU	A	1	2.83	1/1/2015	$86,101	0.028%	Complete	D-1160 SBO Glenwood MS, Bushy Park ES
HO240010	FPU	A	1	0.70	1/1/2015	$25,081	0.007%	Complete	D-1160 SBO Dunloggin MS, Northfield ES
HO240011	FPU	A	1	1.21	1/1/2015	$35,941	0.012%	Complete	D-1160 SBO BOE
HO240012	FPU	A	1	0.85	1/1/2015	$25,563	0.008%	Complete	D-1160 SBO Harpers Choice MS
HO240013	FPU	A	1	0.85	1/1/2015	$27,434	0.008%	Complete	D-1160 SBO Lisbon ES
HO240014	FPU	A	1	0.46	1/1/2015	$16,928	0.005%	Complete	D-1160 SBO Patapsco MS
HO320034	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320035	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320036	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320037	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320038	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320039	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320040	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320041	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320042	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320043	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320044	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320045	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320046	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320047	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320048	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320049	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320050	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320051	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320052	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320053	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15

HO320054	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320055	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320056	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320057	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320058	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320059	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320060	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320061	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320062	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320063	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320064	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320065	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320066	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320067	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320068	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320069	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320070	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320071	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320072	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320073	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320074	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320075	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320076	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320077	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320078	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320079	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320080	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320081	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320082	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO320083	MRNG	E	1	0.15	1/1/2015	$5,202	0.001%	Complete	READY FY15
HO210029	SPSC	A	1	3.06	4/20/2015	$302,285	0.030%	Complete	D-1159 Towering Oak Path Pond Repair
HO230006	STRE	A	1	10.54	5/1/2015	$520,762.84	0.103%	Complete	D-1158 Pinehurst Court Stream Restoration
HO220007	WSHW	S	1	1.57	6/1/2015	$520,762.84	0.015%	Complete	D-1158 Pinehurst Court Shallow Wetland Marsh
HO210030	XDPD	S	1	0.00	6/3/2015	$538,438	0.000%	Complete	D-1159 Glenshire Town Pond Repair
HO220001	SPSC	A	1	3.63	6/30/2015	$1,522,008	0.036%	Complete	D-1159/1160 Dorsey Hall Outfall and Stream Restoration
Subtotal Capital Complete To Date			111	75.74		$12,838,020	0.74%		
Other									
Planting Trees	FPU	A	1	1.38	2016	$ -	0.0%	Complete	
Planting Trees	FPU	A	1	0.75	2016	$ -	0.0%	Complete	
Planting Trees	FPU	A	1	0.40	2016	$ -	0.0%	Complete	
Rain Garden	MRNG	E	1	0.15	2016	$ -	0.0%	Complete	
Rain Garden	MRNG	E	1	0.15	2016	$ -	0.0%	Complete	
Rain Garden	MRNG	E	1	0.15	2016	$ -	0.0%	Complete	
HO342652	FPU	A	1	0.40	9/11/2013	$0	0.004%	Complete	DRP Project
HO341381	FPU	A	1	0.39	10/7/2013	$0	0.004%	Complete	DRP Project
HO105109	ODSW	S	1	0.22	10/9/2013	$0	0.002%	Complete	Development
HO105712	MIDW	E	1	0.03	10/9/2013	$0	0.000%	Complete	Development
HO105713	MIDW	E	1	0.02	10/9/2013	$0	0.000%	Complete	Development
HO105714	MIDW	E	1	0.01	10/9/2013	$0	0.000%	Complete	Development
HO106078	MMBR	E	1	0.15	10/12/2013	$0	0.001%	Complete	Development
HO342108	FPU	A	1	0.49	11/22/2013	$0	0.005%	Complete	DRP Project
HO101719	PWED	S	1	2.64	12/9/2013	$0	0.026%	Complete	Development
HO340179	FPU	A	1	0.88	12/17/2013	$0	0.009%	Complete	DRP Project
HO342010	FPU	A	1	1.64	12/17/2013	$0	0.016%	Complete	DRP Project
HO310001	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites

HO310002	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310003	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310004	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310005	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310006	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310007	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310008	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310009	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310010	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310011	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310012	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310013	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310014	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310015	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310016	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310017	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310018	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310019	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310020	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310021	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310022	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310023	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310024	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310025	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310026	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310027	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310028	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310029	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310030	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310031	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310032	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310033	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310034	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310035	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310036	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310037	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310038	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310039	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310040	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310041	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310042	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310043	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310044	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310045	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310046	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310047	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310048	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310049	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310050	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310051	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310052	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310053	MRNG	E	1	0.15	1/1/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO340098	FPU	A	1	1.36	1/8/2014	$0	0.013%	Complete	DRP Project
HO105764	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105765	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105769	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development

HO105770	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105771	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105783	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105791	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105792	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105793	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105809	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105914	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105916	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105917	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105918	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105919	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO105920	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO106128	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO106148	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO106160	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO106212	MRWH	E	1	0.11	1/11/2014	$0	0.001%	Complete	Development
HO310069	MRNG	E	1	0.15	4/9/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310060	MRNG	E	1	0.15	4/16/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO342665	FPU	A	1	3.75	4/30/2014	$0	0.037%	Complete	DRP Project
HO310076	MRNG	E	1	0.15	5/8/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310056	MRNG	E	1	0.15	5/21/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310070	MRNG	E	1	0.15	5/23/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO340784	FPU	A	1	0.49	6/25/2014	$0	0.005%	Complete	DRP Project
HO310062	MRNG	E	1	0.15	7/2/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310061	MRNG	E	1	0.15	7/3/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310090	MRNG	E	1	0.15	7/9/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310083	MRNG	E	1	0.15	8/12/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310072	MRNG	E	1	0.15	10/2/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310086	MRNG	E	1	0.15	10/10/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310071	MRNG	E	1	0.15	10/15/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310081	MRNG	E	1	0.15	10/15/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310085	MRNG	E	1	0.15	10/29/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310082	MRNG	E	1	0.15	10/31/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310058	MRNG	E	1	0.15	11/5/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310066	MRNG	E	1	0.15	11/14/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310091	MRNG	E	1	0.15	11/14/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310067	MRNG	E	1	0.15	11/25/2014	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO330009	MSWG	E	1	0.34	1/1/2015	$0	0.003%	Complete	CA Project
HO340956	FPU	A	1	0.38	1/20/2015	$0	0.004%	Complete	DRP Project
HO342424	FPU	A	1	0.85	1/20/2015	$0	0.008%	Complete	DRP Project
HO342735	FPU	A	1	0.42	1/20/2015	$0	0.004%	Complete	DRP Project
HO342787	FPU	A	1	2.29	1/20/2015	$0	0.022%	Complete	DRP Project
HO343044	FPU	A	1	1.50	1/20/2015	$0	0.015%	Complete	DRP Project
HO343075	FPU	A	1	0.38	1/20/2015	$0	0.004%	Complete	DRP Project
HO343077	FPU	A	1	2.97	1/20/2015	$0	0.029%	Complete	DRP Project
HO310065	MRNG	E	1	0.15	2/5/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO341408	FPU	A	1	0.69	4/13/2015	$0	0.007%	Complete	DRP Project
HO310087	MRNG	E	1	0.15	4/16/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310077	MRNG	E	1	0.15	4/22/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310080	MRNG	E	1	0.15	4/22/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310054	MRNG	E	1	0.15	4/23/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310073	MRNG	E	1	0.15	4/23/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310075	MRNG	E	1	0.15	4/28/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310079	MRNG	E	1	0.15	5/7/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310063	MRNG	E	1	0.15	5/13/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites

HO310089	MRNG	E	1	0.15	5/18/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310074	MRNG	E	1	0.15	6/10/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO341237	FPU	A	1	2.20	6/16/2015	$0	0.021%	Complete	DRP Project
HO310078	MRNG	E	1	0.15	6/18/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO310064	MRNG	E	1	0.15	6/23/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
HO343116	FPU	A	1	0.72	6/25/2015	$0	0.007%	Complete	DRP Project
HO343117	FPU	A	1	0.48	6/25/2015	$0	0.005%	Complete	DRP Project
HO343118	FPU	A	1	2.64	6/25/2015	$0	0.026%	Complete	DRP Project
HO343119	FPU	A	1	1.03	6/25/2015	$0	0.010%	Complete	DRP Project
HO310055	MRNG	E	1	0.15	6/25/2015	$0	0.001%	Complete	Volunteer - Smart Tool Sites
Rain Barrels	MRWH	E	171	0.26	6/30/2015	$0	0.003%	Complete	Rain Barrels
Septic Upgrades	SEPD	A	128	33.28	6/30/2015	$0	0.326%	Complete	Septic Upgrades
Subtotal Other Complete To Date			439	81		$0	0.8%		
Total Complete to Date			**550**	**156.8**		**$23,293,020**	**1.5%**		

Check with MDE Geodatabase:
Rest BMP ID, type, class, number of BMPs, impervious acres, built date, implementation cost and implementation

Notes:
For street sweeping indicate the annual frequency that the streets are swept and for inlet cleaning indicate the number of inlets cleaned-out.
*IMPL COST is a summation and not an average.
General REST BMP IDs are included where the REST BMP ID per the MDE Geodatabase has yet to be assigned
Costs of $0 are for restoration projects impelmented in Howard County by other non-government groups

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