

FINANCIAL ASSURANCE PLAN AND WPRP ANNUAL REPORT

Frederick County

NPDES MS4 Permit No. 11-DP-3321, MD0068357

December 30, 2014 to December 29, 2019 (Unless Administratively Extended)

Submittal/Report Date: June 28, 2016

EXECUTIVE SUMMARY

INTRODUCTION

As required by the Annotated Code of Maryland ENV §4-202.1, Frederick County (County) has prepared the attached Financial Assurance Plan (FAP) and Watershed Protection and Restoration Program (WPRP) Annual Report. Both documents provide the five-year funding strategy for addressing the County's NPDES MS4 Permit No. 11-DP-3321, MD0068357 (Permit), effective date December 30, 2014. The FAP and WPRP Annual Report documents were prepared by County staff in the Office of Sustainability and Environmental Resources (OSER) and will be submitted to the Maryland Department of the Environment (MDE) on or before July 1, 2016. The County Council, as the "local governing body" will also hold a public hearing and vote on approval of the financial assurance plan. The attached FAP and WPRP Annual Report include all activities that have been completed in compliance with the Permit, and five-year projections to Fiscal Year 2020 for the implementation of its stormwater program and best management practices (BMPs) necessary for meeting Permit requirements.

BACKGROUND

Maryland House Bill 987, "Stormwater Management - Watershed Protection and Restoration Program", was passed by the Maryland General Assembly in 2012 and codified into State law. This bill required all counties and municipalities that are subject to a Phase I NPDES MS4 Permit to establish a stormwater remediation fee; develop a Watershed Protection and Restoration Fund; and to submit a biennial report beginning July 1, 2014.

Frederick County developed a fee to be fully compliant with HB987. The Board of County Commissioners (BOCC), on May 30, 2013, approved Ordinance 13-06-634 effective July 1, 2013 to create a one cent fee per eligible property to be charged on tax bills issued July 1. The County submitted its first report to MDE by July 1, 2014. Proceeds from the fee were put into a Watershed Protection and Restoration Fund. The BOCC chose at that time to fund the majority of its compliance program for NPDES MS4 Permit No. 11-DP-3321, MD0068357 separately through the County General Fund. The Permit active at that time was issued March 11, 2002,

and was administratively extended by MDE from its initial end date of March 11, 2007 until the new Permit was issued, effective December 30, 2014. The County ended its last Permit cycle in compliance, having completed restoration of over 10% (672.5 acres) of the County's untreated urban impervious acres and all of programmatic elements of the Permit.

Maryland Senate Bill 863, "Watershed Protection and Restoration Programs - Revisions", which was passed in 2015 and codified into State law, amended the Environment Code most notably by (1) removing the requirement to establish a stormwater remediation fee under certain circumstances; (2) modifying the requirement for each jurisdiction to file a Watershed Protection and Restoration Program Report; and (3) adding the requirement to file a Financial Assurance Plan.

The completion and submission of the FAP is required every two years on the anniversary date of the Permit issuance, with this first submittal due on July 1, 2016. The FAP and WPRP Annual Reports demonstrate the financial wherewithal for meeting MS4 Permit impervious surface area restoration requirements. In order to document this ability, Frederick County is providing MS4 program implementation numbers for FY'15 and FY'16, with projections for FY17, FY18, FY19, and FY20. The second half of FY'15 and the first half of FY'20 are in the current Permit cycle.

The County expressly reserves the right to make future changes to the WPRP Annual Report and FAP based on new information, additional information, or based on funding consistent with an adaptive management approach.

Frederick County recognizes the need to address water quality in the Chesapeake Bay and local County streams. We also recognize through the NPDES MS4 permitting program, the role of local governments to play in participating in the restoration of our waters.

Frederick County reiterated throughout the Permit issuance process leading to the December 30, 2014 reissuance of the MS4 Permit that its requirements exceed Frederick County's maximum extent practicable (MEP), considering both limited financial capabilities and short timeframes for implementation. MEP is the legal compliance standard for MS4s established by the Clean Water Act.

This FAP should be read in the context of the County's continuing concern that its current Permit demands a level of effort beyond legal requirements. The County expressly reserves its right to a Permit that imposes no more than an MEP level of effort. In particular, the County provides a discussion of the Impervious Area Assessment in this document.

COSTS AND REVENUES

The County has made a substantial commitment to comply with its Permit, has adequately funded the Permit to the MEP, and is on track programmatically to comply with the Permit to the Maximum Extent Practicable. Funding for the Impervious Surface Restoration Plan by Fiscal Year 2020 is projected to be \$52,384,445. This funding is reflected in the past and current budgets, and is in the programmed CIP. This represents 100% of the MEP cost to implement

the Permit to the MEP; furthermore, the County has funded its first two years of the Permit at 100%, exceeding the 75% minimum compliance benchmark. All proceeds from the stormwater remediation fee go to the Watershed Protection and Restoration Fund. In the previous fiscal year this amounted to \$493.86.

The Frederick County Council (Frederick County changed to Charter Government on December 1, 2014) has continued to authorize the collection of one cent per eligible property, and is funding the majority of the Permit through General Funds, and to a lesser extent, bonds.

Funding information comes from past operating and Capital Improvement Program (CIP) budgets from the Watershed Management Program within OSER and from numbers provided by County Divisions with stormwater management functions; the current FY16 budgets from the same sources; projections based on the current FY16 budget for future operating expenses and the programmed Capital Improvement Project budget from the same sources; and revenue from the stormwater remediation fee tracked by the Finance Division. Where cost numbers for past projects were not available, estimates from Brown and Caldwell were used. Their estimates are based on the King and Hagen study commissioned by MDE for publicly procured stormwater retrofit projects.

COMPLIANCE WITH OTHER SECTIONS OF THE PERMIT

The following sections follow the order of the Permit found in Part IV, Standard Permit Conditions, and highlight the major achievements for each program element. Current efforts do not negate the County's concern about the long-term achievability of this requirement.

PART IV.C. SOURCE IDENTIFICATION

The County migrated its Permit information into MDE's new geodatabase in its first Permit year and was one of the first jurisdictions to complete the task. This task took two years and was a major effort on the part of several Divisions and a consultant. Data managed for the Permit includes but is not limited to:

- A Geographic Information System (GIS) of stormwater management inventory for all categories of infrastructure including culverts, storm drains, structures, ditches, outfalls, and ponds. The County recently provided data to MDE and EPA for the Historical BMP Cleanup;
- A storm drain and structure inventory which includes pipes (approx. 14,082 records), pond outlines (approx. 397 records), and structures (approx. 14,051 records);
- Locations of the total number of industrial and commercial facilities that the County has determined may have the potential to contribute significant pollutants;
- A GIS of Urban Best Management Practices;
- The MS4 service area (as properly defined under Federal law) and impervious surfaces by era of construction;

- An inventory of biological and chemical monitoring sites; and
- Water Quality Improvement Projects.
- Frederick County GIS distributes countywide base maps and Orthophotography. In addition, Frederick County GIS offers a free GIS data download service that includes GIS Base Data, Orthophotography, Contour-Planimetric Data, and Parcel Data. This service can be found at <http://www.frederickcountymd.gov/5450/GIS-Data-Products> under “Download GIS Data”.

PART IV.D.1. STORMWATER MANAGEMENT

Frederick County maintains its current Stormwater Management Program in pursuant to Environmental Article, Title 4, Subtitle 2, Annotated Code of Maryland. The County will continue to do so through plan review and inspection of developer projects using the 2000 Maryland Stormwater Design Manual (Effective October 2000, Revised May 2009; MDE 2000).

The Department of Permits and Inspections, Environmental Compliance Section (ECS) conducts a program of preventative maintenance inspections of constructed and functioning stormwater management facilities.

Responsible parties of noncompliant facilities receive notices that outline the failings observed by the inspector, what has to be completed to correct the failings and a timeframe in which the corrections should be completed. Appropriate follow-up inspections and escalating enforcement techniques, as necessary, are completed until compliance is obtained.

Frederick County implemented the stormwater management design policies, principles, methods, and practices of the 2000 Maryland Stormwater Design Manual Volumes I and II and subsequent changes to the Code of Maryland Regulations through the County's Stormwater Management Ordinance and its Design Manual, on June 5, 2001. These changes effective July 1, 2001. The Board of County Commissioners adopted the County's Storm Drainage and Stormwater Management Design Manual effective January 2, 2003. This document helps address safe conveyance of runoff in channels, pipes, swales, culverts, etc. to stormwater management facilities and/or receiving channels. The County updated to address the new ESD requirements adopted by MDE in the 2009 timeframe.

PART IV.D.2. EROSION AND SEDIMENT CONTROL

Frederick County's Erosion and Sediment Control Program is administered by the Department of Permits and Inspections, Environmental Compliance Section (ECS). ECS utilizes inspectors that are specifically knowledgeable in Environmental Compliance inspection and enforcement in order to maintain an acceptable Erosion and Sediment Control Program pursuant to

Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland. The County's program was evaluated by MDE during the winter of 2013 and the result of the evaluation was a full two-year renewal with a new delegation awarded by the end of 2015.

Frederick County ECS provides quarterly reports of all grading activities disturbing more than one acre to MDE to cross reference against their NOI records. The data submitted includes site name, site owner and address, the amount of disturbed area, the local grading permit number, site location, and the type of development (e.g., residential, commercial, etc.).

PART IV.D.3. ILLICIT DISCHARGE DETECTION AND ELIMINATION

Frederick County continues to implement its Illicit Discharge Detection and Elimination (IDDE) Program. The County's IDDE Program identifies potential illicit discharges in three ways: (1) through dry weather screenings completed during as-built inspections and/or triennial maintenance inspections; (2) visual surveys; and, (3) through citizen and/or agency reporting.

ECS field inspectors note evidence of dry weather flows, if present, at all Stormwater Management Structure "As-Built" inspections and at every triennial maintenance inspection. If water is present, inspectors report this information to the County's Office of Sustainability and Environmental Resources (OSER), Watershed Management Section (WMS) within 24 hours of the original inspection. WMS then checks to see if the site has been previously investigated for an illicit discharge due to dry weather flow. If it has not, or if it has but for other indicators like color, odor or suds present, OSER sends an investigation request to Versar, Inc., the consultant on contract to conduct IDDE screenings. If water quality test results or inspections indicate potential illicit connections, pollutant sources are investigated, identified, as possible, and appropriate measures are taken to abate violations. In addition, ECS Inspectors investigate complaints alleging violations. Follow-up actions to resolve all suspected water quality problems are documented in the County's field inspection databases. Field screening results are recorded in the County's facilities database to ensure proper tracking and to follow up when potential problems are detected.

As part of the IDDE program, there is a new requirement to conduct annual visual surveys of commercial and industrial areas for discovering, documenting, and eliminating pollutant sources. A final number of 119 industrial and commercial facilities were identified as priority sites. Surveys will be conducted each year at 24 out of the 119 sites, a fifth of the total number of properties to be visited throughout the 5-year Permit.

Information about how citizens can report illicit discharges is available online on Frederick County Government's Citizen Request Tracker web page at <http://www.frederickcountymd.gov/requesttracker.aspx> under "Water Pollution Issues". A

reporting link is also available at <http://www.frederickcountymd.gov/index.aspx?NID=518>. In addition, citizens may report a problem through the Monocacy and Catoctin Watershed Alliance website: http://www.watershed-alliance.com/mcwa_problem.html.

Frederick County continues to implement a successful program to respond to illegal dumping and spills. Hazardous spill response calls are forwarded to 911; first responders are trained to respond to hazardous spills. Non-hazardous spill responses, including environmental releases, are forwarded to the Watershed Management Section (WMS). When significant, WMS forwards this information to MDE for investigation.

WMS has developed a standard set of procedures for responding to all citizen complaints of spills and illicit discharges, as part of the County's IDDE protocol. The procedures help citizens to report spills to the correct agencies with a minimum of internal transfers. OSER maintains standard procedures for consistent reporting, referral, and addressing of potential illicit discharges, dumping, and spills. These procedures are periodically updated.

The County and other agencies also report spills to the National Response Center.

PART IV.D.4. LITTER AND FLOATABLES

The following litter control programs throughout Frederick County are presented below.

- Potomac River Watershed Cleanup (PRWC) - Yearly
 - The event is an annual watershed-wide effort to clean up trash along the Potomac River. Partners include the Alice Ferguson Foundation and Frederick County Government. A local cleanup was organized by the Monocacy Scenic River Citizens' Advisory Board at Rivermist Park on Monocacy Blvd.
- Catoctin Creek Park and Nature Center Cleanup - Yearly
 - Annual event to clean up trash within the Park's creek bed and banks that is promoted through the Catoctin Creek Park and Nature Center blog.
- Frederick County "Adopt-a-Road" Program - Ongoing
 - The Office of Highway Operations coordinates an "Adopt-a-Road" Program to help control litter along County roads. Approximately 84.04 miles of road are maintained by 36 groups across the County.
- Road Maintenance Activities - Ongoing
 - The Office of Highway Operations removes trash as part of road maintenance. The Office of Highway Operations also conducts street sweeping and inlet cleaning.
- Recycling Outreach (conducted by the Recycling Outreach Program Coordinator under the Frederick County Department of Solid Waste Management) - Ongoing

- Community Engagement: meet with community groups and provide speaking/presentations; present displays at public events
- Digital Media: Facebook; e-newsletter; mobile app (MyWaste)
- Print Media: direct mail; newspaper and other advertising media (bus, billboard, etc.); press releases; articles for publications
- Schools: work directly with Frederick County Public Schools (FCPS) to increase awareness among staff and students of waste and recycling issues; include private and home schools in any contests or promotions
- Special Events: conduct contests, drop-off events, award programs and other campaigns to bring attention to and increase support of County programs and goals

OSER staff is using, and will be using, the following strategies as methods to address litter and floatables throughout Frederick County’s MS4.

- Increased litter prevention education and outreach
- Roadside and stream cleanups – promote and increase participation; promote and support new cleanups
- Adopt-a-Road program – promote and increase participation
- Office of Highway Operations – continue with current road maintenance efforts
- Recycling - continue with current efforts by the Recycling Outreach Program Coordinator

In mid-2015, County Executive Jan Gardner created a solid waste initiative called What’s Next that is designed to look at waste management options including waste reduction and recycling. This effort will help comply with MS4 requirement to identify opportunities for overall improvements.

PART IV.D.5. PROPERTY MANAGEMENT AND MAINTENANCE

The following eleven (11) Frederick County-owned and operated facilities are currently covered by the 12-SW [General Permit for Discharges from Stormwater Associated with Industrial Activities](#) (12-SW Permits):

NOIs with Permit Coverage through December 31, 2018

Facility Name	Permit Number	NOI Submitted	SWPPP Developed	Status of SWPPP	Annual Review by MDE
Jefferson Copperfield Wastewater Treatment Plant	12SW2283	Yes	Yes	Yes	Yes
Ballenger McKinney Wastewater Treatment Plant	12SW1878	Yes	Yes	Yes	Yes

Reich's Ford Landfill	12SW2366	Yes	Yes	Yes	Yes
331 Montevue Lane (Frederick) Highway Operations Yard	12SW1890	Yes	Yes	Yes	Yes
Thurmont Highway Operations Yard	12SW1892	Yes	Yes	Yes	Yes
Johnsville Highway Operations Yard	12SW1891	Yes	Yes	Yes	Yes
Myersville Highway Operations Yard	12SW2285	Yes	Yes	Yes	Yes
Jefferson Highway Operations Yard	12SW2291	Yes	Yes	Yes	Yes
Urbana Highway Operations Yard	12SW1893	Yes	Yes	Yes	Yes
Law Enforcement Center	12SW1942	Yes	Yes	Yes	Yes
Transit	12SW1888	Yes	Yes	Yes	Yes

The County originally submitted twelve (12) NOIs, all which were accepted by MDE resulting in permit coverage through December 31, 2018. However, New Market Wastewater Treatment Plant (12SW2282) was subsequently decommissioned and permit coverage was terminated on April 10, 2105.

All facilities currently covered by the 12-SW Permits have Stormwater Pollution Prevention Plans (SWPPPs) that were last updated in May/June 2016. These facilities have identified SWPPP team members who perform quarterly inspections and visual monitoring. Annual training has been scheduled for Fall 2016. Spills are reported and documented internally and MDE is notified as appropriate. Maryland Environmental Service has been contracted to assist, as necessary, with spill response and other 12-SW related tasks.

The County continues to implement a program to reduce pollutants associated with maintenance activities at County-owned facilities including parks, roadways, and parking lots.

The County continues to move ahead with several of the recommendations developed in the June 2002 evaluation report, including street sweeping, changes in deicing practices and associated reporting. Inlet cleaning, and changes in the use of pesticides, herbicides, fertilizers, and other pollutants. We will continue to address the requirements of our Permit over the next two years.

PART IV.D.6. PUBLIC EDUCATION

OSER continues to make impacts through the County's public outreach and education program. Frederick County addressed Permit-suggested outreach topics and met its own goals and objectives from The Strategic Plan to Improve Water Quality through Public Outreach in

Frederick County, Maryland. Outreach activities are used to educate citizens, to direct the course of watershed plans, and to identify landowners for potential restoration activities.

PART IV.E.1. WATERSHED ASSESSMENTS

There are five 8-digit watersheds within Frederick County:

- Upper Monocacy River
- Lower Monocacy River
- Double Pipe Creek
- Catoctin Creek
- Potomac River – Frederick County

Frederick County is currently conducting watershed assessments for the Lower and Upper Monocacy River Watersheds and has programmed CIP funding to complete the remaining three watersheds. Assessments will be ongoing throughout the Permit term.

In addition, Frederick County completed an assessment for watershed restoration opportunities in the Point of Rocks neighborhood. The area studied is located within the Potomac Direct watershed, catchment area F and is an established residential neighborhood primarily developed prior to 1990. An unnamed tributary to the Potomac River conveys the majority of runoff from the neighborhood drainage area into a stormwater management pond. This area has experienced significant erosion from high water volume in recent years.

PART IV.E.2. RESTORATION PLANS

As a requirement of PART IV.E.2.b of the NPDES MS4 Discharge Permit issued by MDE to Frederick County, the County must develop restoration plans for each stormwater wasteload allocation (SW-WLA) for all Total Maximum Daily Loads approved by the Environmental Protection Agency (EPA) prior to the effective date of the Permit. Any new TMDLs approved by EPA must be addressed within one year of approval. There are currently 12 final approved TMDLs within Frederick County with either an individual or aggregate SW-WLA.

As part of PART IV.E.2.b, the County must also prepare an Impervious Cover Restoration Plan that plans for the Permit requirement to restore 20% of the County's untreated urban impervious area (area where water cannot percolate) using best management practices for stormwater.

OSER prepared a Stormwater Restoration Plan to meet the requirements of the Permit. The Restoration Plan was posted to the website on May 30, 2016. Public notice was published in the Frederick News Post on May 31 and June 1. The thirty day review period went from May 31 to

June 30. The report was submitted to MDE on June 30, 2016. A summary will be published in the Annual Report for Fiscal Year 2016 to be issued December 30, 2016.

The County has 5,063 acres estimated in its baseline of untreated urban impervious area within the Federally-defined MS4 service area. 20% of this number is 1,013 acres. At least half of this number, or 506.5 acres, must be met through restoration projects approved in MDE’s stormwater accounting guidance (2014). The County has completed 160.5 acres of restoration towards its impervious cover restoration requirements, and has an additional 906.5 acres programmed. The County anticipates completing 596.7 additional acres of physical restoration towards the Permit requirement by the end of the Permit cycle on December 30, 2019. Per MDE, 10% of the requirement can be met through credit exchanges during the current Permit cycle. The County plans to address the remaining impervious surface restoration obligation of 255.8 acres through trading. The County will continue to work to address the impervious cover restoration requirement of 1,013 acres.

The Chesapeake Bay TMDL for nitrogen includes all best management practices required to meet all other TMDLs with the exception of some programmatic BMPs for *E. coli*. For this reason the Chesapeake Bay TMDL Restoration Plan for Nitrogen governs the schedules and costs for all other TMDLs. The Chesapeake Bay TMDLs for Nitrogen and Phosphorus include aggregate SW-WLAs for stormwater, which include Frederick County Government’s MS4.

Frederick County Chesapeake Bay TMDL Baseline and Target Loads

Baseline and Target	TN EOS lbs/yr	TN DEL lbs/yr	TP EOS lbs/yr	TP DEL lbs/yr
Calibrated 2010 Baseline Load	1,096,458.45	556,694.68	46,994.58	22,046.67
Target Percent Reduction	10.2%	10.9%	20.7%	20.7%
Calibrated Target Reduction	111,838.76	60,679.72	9,727.88	4,563.66
Calibrated Bay TMDL WLA	984,619.69	496,015.00	37,266.70	17,483.01

The loads achieved under the Chesapeake Bay TMDL Restoration Plan for Nitrogen also meet all other local nutrient and sediment TMDL SW-WLAs for the MS4.

IMPERVIOUS SURFACE AREA ASSESSMENT

Frederick County submitted an Impervious Surface Area Assessment in accordance with Part IV.E.2.a of its Permit with its first Annual Report submission on December 30, 2015. This Assessment was based on the Permit Area established in Part I.B of the Permit. However, as the County noted in its submittal, it makes no representations that 20% of the acreage identified

can be restored in the manner provided in Part IV.E.2.a. considering the County's financial capability and the short timeframe specified in Part IV.E.2.a for that magnitude of work, which the County maintains exceeds the legally-authorized "maximum extent practicable" level of effort for the term of the Permit.

MDE provided the County with a review of the County's Impervious Area Assessment on April 15, 2016 that is inconsistent with the County's Permit requirements. The Permit correctly defines the Permit Area: "This permit covers all stormwater discharges from the municipal separate storm sewer system (MS4) owned or operated by Frederick County, Maryland. (Permit, Part I.B). Part IV.E.2 (Restoration Plans) is consistent with this definition. MDE's review is also inconsistent with federal law and its jurisdictional authority.

Frederick County has prepared a response to MDE's April 15, 2016 review that will be mailed under separate cover.

PART IV.E.3. PUBLIC PARTICIPATION

As required by Part IV.E.3 of the Permit, public participation is required for Frederick County's watershed assessments and restoration plans. The specific requirements include:

1. Notice in a local newspaper indicating a 30-day public comment period for each watershed assessment and restoration plan,
2. Notice in a local newspaper announcing that public information procedures are provided on the County's website for each watershed assessment and restoration plan, and
3. A summary in the Annual Report on public participation activities for each of the watershed assessments and restoration plans.

As noted above, the County provided public notice of its Restoration Plans, and will do so again in the future as additional plans are developed.

PART IV.E.4. TMDL COMPLIANCE

According to the Permit, "Frederick County shall evaluate and document its progress toward meeting all applicable stormwater WLAs included in EPA approved TMDLs. An annual TMDL assessment report with tables shall be submitted to MDE." The first Annual Report showed the baselines as calibrated and disaggregated for all TMDLs in Frederick County. Future reports will be filed and progress noted as appropriate.

PART IV.F.1. WATERSHED RESTORATION ASSESSMENT

The County has had an active stream monitoring program in place since 1999. We have changed the focus of our approach three times since its inception. Most recently, in 2008, the County officially redesigned its monitoring program to include two separate monitoring efforts: (1) targeted restoration monitoring and (2) probability-based stream monitoring, with sites selected randomly and stratified by watershed. The targeted restoration monitoring effort for 2015 involved stream sampling in Bennett Creek, Fishing Creek, Hunting Creek, and Lower Linganore Creek, in support of on-going and potential future restoration and community outreach efforts; restoration monitoring efforts from Lower Bush Creek in 2015 are presented in a separate report. In 2015, the County surveyed stream conditions at 10 targeted locations.

The County's targeted stream restoration monitoring program is an assessment of physical, chemical, and biological data, collected during designated index periods (Southerland et al. 1999, Morgan and Roth 2005). Year 2015 sampling included collection of water quality data, benthic macro invertebrate and fish sampling, and quantitative physical habitat assessment using MBSS habitat and geomorphic data collection methods. Biological and physical monitoring methods employed in this survey are described in detail in the Quality Assurance Project Plan for Biological and Physical Monitoring in Peter Pan Run and Other Selected Watersheds (Morgan and Roth 2005). The geomorphic data collected provide a follow-up to previous surveys for existing stations, monitoring changes over time, in comparison with baseline data collected in the initial year. Cross-sections, established at each site in a previous sampling year, were re-surveyed in 2015. MBSS habitat evaluations performed during spring and summer sampling provide a scored assessment.

PART IV.F.2. STORMWATER MANAGEMENT ASSESSMENT

In May 1999, the County initiated a long-term monitoring program for the Peter Pan Run study area to establish baseline, pre-construction conditions in the catchment and subsequently to monitor conditions as development progresses within the Peter Pan Run watershed in order to assess potential long-term impacts associated with the new land use. The program involves monitoring flow volumes and water quality from both instream and SWM pond outfall stations, as well as collecting physical and biological data from four permanent stream monitoring stations on the mainstem and its tributaries. In particular, monitoring is focused on the long-term problems commonly associated with residential development, which could occur within Peter Pan Run. These potential problems include sedimentation and erosion resulting from increased runoff from impervious surfaces, pollutant runoff from roads and parking lots, elevated nutrient loading caused by the application of lawn fertilizers, and the illegal disposal of oil and other household chemicals via storm drains. This long-term monitoring program is on-going, consistent with the MS4 Permit.

CONCLUSION

The County has made a substantial commitment to comply with its NPDES MS4 Permit No. 11-DP-3321, MD0068357 and is on track to comply with the Permit to the MEP. Funding for the Impervious Surface Restoration Plan by Fiscal Year 2020 is projected to be \$52,384,445, with the understanding that future funding years are not yet approved by the County Council. This funding is reflected in the past and current budgets, and is in the programmed CIP. This represents 100% of the MEP cost to implement the Permit; furthermore, the County has funded its first two years of the Permit at 100%, meeting the SB863 compliance benchmark. All proceeds from the stormwater remediation fee go to the Watershed Protection and Restoration Fund. In the previous fiscal year this amounted to \$493.86. The Permit is funded to date largely by general funds and through bonds. The County is proceeding with plans to restore 20% of the untreated urban impervious area in the Federally-defined MS4 service area to the MEP. The estimate of the untreated urban impervious area within the MS4 boundary is estimated to be 5063 acres, with the 20% at 1,013 acres. The County has already restored 160.5 acres of untreated impervious surface and has plans to physically restore an additional 596.7 acres by the end of 2020. The County also plans to take advantage of MDE's offer to let it use trading to meet up to 50% of its impervious surface restoration requirement. There will be a public hearing and vote on the FAP.

MS4 Information

Jurisdiction	Frederick County
Contact Name	Shannon Moore
Phone	301-600-1413
Address	30 North Market Street
City	Frederick
State	Maryland
Zip	21701
Email	smoore@frederickcountymd.gov
Baseline Acres	5063.00
Permit Num	11-DP-3321 MD0068357
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 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:

5,063

Requirement:

20%

REST BMP TYPE*	BMP CLASS	IMP ACRES	IMPL COST	% ISRP COMPLETE	IMPL STATUS**	PROJECTED IMPL YR
Operation Programs						
VSS	A	0	\$41,126	0.0%	COMPLETE	2015
VSS	A	0	\$42,153	0.0%	UNDER CONSTRUCTION	2016
VSS	A	0	\$43,208	0.0%	PLANNING	2017
VSS	A	0	\$44,287	0.0%	PLANNING	2018
VSS	A	0	\$45,395	0.0%	PLANNING	2019
VSS	A	0	\$46,530	0.0%	PLANNING	2020
SDV	A	0	\$378,109	0.0%	PLANNING	2015
SDV	A	0	\$387,561	0.0%	PLANNING	2016
SDV	A	0	\$397,250	0.0%	PLANNING	2017
SDV	A	0	\$407,182	0.0%	PLANNING	2018
SDV	A	0	\$417,361	0.0%	PLANNING	2019
SDV	A	0	\$427,795	0.0%	PLANNING	2020
Average Operations Next Two Years (FY2017-FY2018)***		0.0	\$891,927	0.0%		
Average Operations Permit Term (FY2015-FY2018)***		0.0	\$2,294,526	0.0%		
Average Operations Permit Term and Projected Years (FY2015-FY2020)***		0.0	\$3,231,607	0.0%		
Capital Projects						
WP	ST	13.7	\$681,300	0.3%	UNDER CONSTRUCTION	2017
EDSW	ST	3.77	\$305,252	0.1%	PLANNING	2017
IB	RR	4.61	\$344,869	0.1%	PLANNING	2017
WP	ST	4.46	\$350,102	0.1%	PLANNING	2017
EDSW	ST	72.45	\$6,774,075	1.4%	PLANNING	2017
PPKTSF	ST	1.38	\$103,500	0.0%	PLANNING	2017
EDSW	ST	19.47	\$1,752,250	0.4%	PLANNING	2017
IMPF	A	1.3	\$583,053	0.0%	PLANNING	2017

FPU	A	4.18	\$137,940	0.1%	PLANNING	2017
FPU	A	7.22	\$238,260	0.1%	PLANNING	2018
FPU	A	11.6	\$382,553	0.2%	PLANNING	2018
STRE	A	18	\$1,660,351	0.4%	PLANNING	2018
FPU	A	2.39	\$0	0.0%	PLANNING	2018
WSHW	A	12.21	\$0	0.2%	PLANNING	2018
BR	RR	10.56	\$559,159	0.2%	PLANNING	2018
EDSW	ST	103.5	\$1,287,667	2.0%	PLANNING	2018
EDSW	ST	8	\$870,695	0.2%	PLANNING	2019
STRE	A	40	\$4,428,179	0.8%	PLANNING	2019
STRE	A	9.4	\$1,598,593	0.2%	PLANNING	2019
FPU	A	1.06	\$0	0.0%	PLANNING	2019
FPU	A	43.73	\$1,443,250	0.9%	PLANNING	2019
FPU	A	41.8	\$1,379,400	0.8%	PLANNING	2019
STRE	A	31.15	\$1,598,593	0.6%	PLANNING	2020
FPU	A	3.11	\$0	0.1%	PLANNING	2020
FPU	A	18.7	\$615,299	0.4%	PLANNING	2020
FPU	A	19	\$627,000	0.4%	PLANNING	2020
FPU	A	32.3	\$1,065,900	0.6%	PLANNING	2020
Subtotal Capital Next Two Years (FY2017-FY2018)		290.8	\$15,160,331	5.7%		
Subtotal Capital Permit Term (FY2015-FY2018)		357	\$19,527,777	7.1%		
Subtotal Capital Permit Term and Projected Years (FY2015-FY2020)		605	\$33,154,686	12.0%		
Other						
Nutrient Trading with WWTP	A	255.8	\$0	5.1%	PLANNING	2020
SEPD	A	9.6	\$132,480	0.2%	COMPLETE	2015
SEPD	A	9.6	\$132,480	0.2%	UNDER CONSTRUCTION	2016
SEPD	A	9.6	\$132,480	0.2%	PLANNING	2017
SEPD	A	9.6	\$132,480	0.2%	PLANNING	2018
SEPD	A	9.6	\$132,480	0.2%	PLANNING	2019
SEPD	A	9.6	\$132,480	0.2%	PLANNING	2020
Operating Support of CIP		0	\$41,000	0.0%	COMPLETE	2015
Operating Support of CIP		0	\$618,489	0.0%	UNDER CONSTRUCTION	2016
Operating Support of CIP		0	\$78,794	0.0%	PLANNING	2017
Operating Support of CIP		0	\$475,648	0.0%	PLANNING	2018
Operating Support of CIP		0	\$288,548	0.0%	PLANNING	2019
Operating Support of CIP		0	\$1,034,308	0.0%	PLANNING	2020

Subtotal Other Next Two Years		29	\$1,570,371	0.57%		
Subtotal Other Permit Term (FY2015-FY2018)		388	\$7,015,271	7.7%		
Subtotal Other Permit Term and Projected Years (FY2015-FY2020)		408	\$8,603,087	8.1%		
Total Next Two Years (FY2017-FY2018)		319.6	\$17,622,629	6.3%		
Total Permit Term (FY2015-FY2018)		745.5	\$28,837,574	14.7%		
Total Permit Term and Projected Years (FY2015-FY2020)		1013.0	\$44,989,380	20.0%		

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.

Note that this spreadsheet does not include permit operating costs per MDE's instructions and example.

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 Separate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 2014	CURRENT/PROJECTED YEAR 1 FY 2015	PROJECTED YEAR 2 FY 2016	PROJECTED YEAR 3 FY 2017	PROJECTED YEAR 4 FY 2018	PROJECTED YEAR 5 FY 2019	PROJECTED YEAR 5 FY 2020	TOTAL COSTS
Operating Expenditures (costs)								
Street Sweeping Program	\$184,764	\$38,081	\$39,033	\$40,010	\$41,009	\$42,035	\$43,086	\$428,018
Inlet Cleaning	\$368,886	\$378,109	\$387,561	\$397,250	\$407,182	\$417,361	\$427,795	\$2,784,144
Bridge Deck Cleaning		\$3,045	\$3,120	\$3,198	\$3,278	\$3,360	\$3,444	\$19,445
Support of Capital Projects ¹		\$41,000	\$618,489	\$78,794	\$475,648	\$288,548	\$1,034,308	\$2,536,787
Debt Service Payment								
Other (please stipulate program expenditure)	\$5,271,420	-	-	-	-	-	-	
Capital Expenditures (costs)								
General Fund (Paygo) ²	\$4,367,446	\$4,241,314	\$4,533,258	\$4,185,741	\$5,405,023	\$6,945,969	\$7,863,800	\$37,542,551
WPR Fund (Paygo)								
Debt Service ³					\$106,000	\$106,000	\$256,000	\$468,000
Grants & Partnerships ⁴	\$2,539,200	\$132,480	\$132,480	\$132,480	\$132,480	\$132,480	\$132,480	\$3,334,080
Other (please stipulate capital expenditure)								
Subtotal operation and paygo:	\$10,192,516	\$4,701,549	\$5,581,461	\$4,704,993	\$6,332,140	\$7,697,273	\$9,372,433	\$48,582,365
Total expenditures:	\$12,731,716	\$4,834,029	\$5,713,941	\$4,837,473	\$6,570,620	\$7,935,753	\$9,760,913	\$52,384,445

Total ISRP costs except debt service: **\$52,384,445**

Compare ISRP costs (except debt service) / total ISRP proposed actions⁵: **116.44%**

¹Support of Capital Project equals Assessments + Monitoring costs (operating impacts from Budget) for FY14, FY15, FY16 and FY17. For FY18, FY19, and FY20, it equals O&M (MEP) costs.

²General Fund Paygo - FY15 and 16 are Actuals from Budget. FY17 to FY20 are projected D&C from MEP.

³Estimate 20 year payback at 4% interest rate for FY16 and FY18 budgeted general obligation bonds. Estimated 106K payment for 20 years at 4% interest for FY16 bonds and 150K for FY18 and FY20 bonds. Payment begins the 2nd year after the bonds are issued. For FY15 FAP, these numbers are estimates and will be revised based on actuals as bonds are issued.

⁴Other Septic Denitrification from BRF Grant goes to Canaan Valley Institute

⁵The "Compare ISRP costs" number can not be 100% for the following reasons: the ISRP Cost 4-202.1(j)(1)(i)2 spreadsheet includes O&M and the All Actions 4-202.1(j)(i)1 spreadsheet does not. The CIP costs in the All Actions spreadsheet are grouped by completion year where the ISRP Cost spreadsheet shows costs by year.

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.

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 2014	CURRENT/PROJECTED YEAR 1 FY 2015	PROJECTED YEAR 2 FY 2016	PROJECTED YEAR 3 FY 2017	PROJECTED YEAR 4 FY 2018	PROJECTED YEAR 5 FY 2019	PROJECTED YEAR 5 FY 2020	TOTAL NEXT 2-YEARS FY 17-18*	TOTAL CURRENT + PROJECTED
Annual Revenue** Appropriated for ISRP	\$12,731,716	\$4,834,029	\$5,713,941	\$4,837,473	\$6,570,620	\$7,935,753	\$9,760,913	\$11,408,093	\$52,384,445
Annual Costs towards ISRP***	\$12,731,716	\$4,834,029	\$5,713,941	\$4,837,473	\$6,570,620	\$7,935,753	\$9,760,913	\$11,408,093	\$52,384,445

Compare annual costs / revenue appropriated: **100%**
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.

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 2015	PROJECTED YEAR 2 FY 2016	PROJECTED YEAR 3 FY 2017	PROJECTED YEAR 4 FY 2018	PROJECTED YEAR 5 FY 2019	PROJECTED YEAR 5 FY 2020	TOTAL PERMIT CYCLE
Paygo Sources							
Stormwater Remediation Fees (WPR Fund) ¹	985	\$ 497	\$ 500	\$ 503	\$ 505	\$ 507	\$ 3,496
Miscellaneous Fees (WPR Fund)							\$ -
General Fund CIP ²	8,608,760	\$ 4,533,258	\$ 4,185,741	\$ 5,405,023	\$ 6,945,969	\$ 7,863,800	\$ 37,542,551
Other Funds 1 General Fund Operating	\$ 6,285,305	\$ 1,048,203	\$ 519,252	\$ 927,117	\$ 751,304	\$ 1,508,633	\$ 11,039,814
Other Funds 2 (please stipulate funding source)							\$ -
Other Funds 3 (please stipulate funding source)							\$ -
Subtotal Paygo Sources	\$ 14,895,050	\$ 5,581,958	\$ 4,705,493	\$ 6,332,643	\$ 7,697,778	\$ 9,372,940	\$ 48,585,861
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 2014).							
County Transportation Bonds							\$ -
General Obligation Bonds ³		\$ 1,459,125		\$ 2,000,000		\$ 2,000,000	\$ 5,459,125
Revenue (Utility) Bonds							\$ -
State Revolving Loan Fund							\$ -
Public-private partnership (debt service)							\$ -
Subtotal Debt Service	\$ -	\$ 1,459,125	\$ -	\$ 2,000,000	\$ -	\$ 2,000,000	\$ 5,459,125
Grants and Partnerships (no payment is expected)							
State funded grants ⁴	\$ 2,671,680	\$ 132,480	\$ 132,480	\$ 132,480	\$ 132,480	\$ 132,480	\$ 3,334,080
Federal funded grants							\$ -
Public-private partnership (matched grant)							\$ -
Subtotal Grants and Partnerships	\$ 2,671,680	\$ 132,480	\$ 132,480	\$ 132,480	\$ 132,480	\$ 132,480	\$ 3,334,080
Total Annual Sources of Funds	\$ 17,566,730	\$ 7,173,563	\$ 4,837,973	\$ 8,465,123	\$ 7,830,258	\$ 11,505,420	\$ 57,379,066
Percent of Funds Directed Toward ISRP	99.99%	99.99%	99.99%	99.99%	99.99%	100.00%	99.99%

Compare total permit term paygo ISRP costs / subtotal permit term paygo sources: **100%**

Compare total permit term ISRP costs / total permit term annual sources of funds: **91%**

¹ WPR Fund: Watershed Protection and Restoration Fund. Note these funds are stored in an account and have not been expended.

² General Fund equals CIP (county programmed)

³ General Obligation Bonds for CIP project (Budget Office). Estimated 106K payment for 20 years at 4% interest for FY16 bonds and 150K for FY18 and FY20 bonds. Payment begins the 2nd year after the bonds are issued. For FY15 FAP, these numbers are estimates and will be revised based on actuals as bonds are issued.

⁴ Bay Restoration Funds go to Canaan Valley Institute

Check with MDE Geodatabase:

The total sources related to WPR Funds in Current FY 2015 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:

5,063

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									
Street Sweeping	MSS	A	1	0	12/29/2014	\$184,764	0.0%	COMPLETE	Not counted for credit at
Inlet Cleaning	CBC	A	1	0	12/29/2014	\$368,886	0.0%	COMPLETE	Not counted for credit at
Subtotal Op Complete To Date*			1	0		\$553,650	0.0%		
Capital Projects									
Urbana High School Retrofit	BIO	ST	1	2.83	10/1/2007	\$249,069	0.1%	COMPLETE	
Ballenger Creek Stream Rest	STRE	A	1	6.05	5/1/2007	\$406,986	0.1%	COMPLETE	
Pinecliff Park Stream Rest	STRE	A	1	10	11/12/2010	\$427,658	0.2%	COMPLETE	
Public Safety Training Facility	WP	A	1	15	1/1/2010	\$989,970	0.3%	COMPLETE	
Citizens Care and Rehab	WP	ST	1	25.16	1/1/2012	\$1,660,509	0.5%	COMPLETE	
Englandtowne Stream Rest	STRE	A	1	7.3	12/1/2014	\$633,254	0.1%	COMPLETE	
Subtotal Capital Complete To Date			6	66.34		\$4,367,446	1.31%		
Other									
Septic Denitrification (BRF)	SEPD	A	184	47.84	12/29/2014	\$2,539,200.00	0.9%	COMPLETE	
Septic Connections to WWTP	SEPC	A	7	2.73	12/29/2014	\$350,000.00	0.1%	COMPLETE	
Brunswick High School	FPU	A	1	0.37	4/6/2010	\$12,210.00	0.0%	COMPLETE	
Catoctin Mountain Park	PP	A	1	0.1	11/12/2012	\$23,958.00	0.0%	COMPLETE	
Catoctin Mountain Park	FPU	A	1	2.15	4/1/2010	\$70,950.00	0.0%	COMPLETE	
Catoctin Mountain Park	GMB	ESD	1	0	4/1/2010	\$0.00	0.0%	COMPLETE	
Cloverhill	FPU	A	1	0.51	5/1/2007	\$16,830.00	0.0%	COMPLETE	
Cooperative Extension Building	FPU	A	1	0	8/1/2005	\$0.00	0.0%	COMPLETE	
Myersville Elementary School	FPU	A	1	0	4/1/2006	\$0.00	0.0%	COMPLETE	
New Forest Society Nursery	FPU	A	1	0	4/16/2007	\$0.00	0.0%	COMPLETE	
New Market Middle School	FPU	A	1	1.22	5/1/2006	\$40,260.00	0.0%	COMPLETE	
Oakdale Elementary School	FPU	A	1	0	4/22/2009	\$0.00	0.0%	COMPLETE	
Old National Pike Park	FPU	A	1	1.83	4/1/2011	\$60,390.00	0.0%	COMPLETE	
Orchard Grove Elementary School	FPU	A	1	0.32	5/15/2013	\$10,560.00	0.0%	COMPLETE	
Parkway Elementary School	FPU	A	1	0	9/1/2012	\$0.00	0.0%	COMPLETE	
Pinecliff Park	FPU	A	1	0.79	8/1/2012	\$26,070.00	0.0%	COMPLETE	
Rivermist Park	FPU	A	1	0	7/1/2011	\$0.00	0.0%	COMPLETE	
Spring Ridge Elementary School	FPU	A	1	1.05	4/1/2013	\$34,650.00	0.0%	COMPLETE	
St. Peter the Apostle Church	FPU	A	1	0.2	10/31/2006	\$6,600.00	0.0%	COMPLETE	
Thurmont Middle School	FPU	A	1	0	5/1/2004	\$0.00	0.0%	COMPLETE	
Tuscarora Elementary School	FPU	A	1	0	11/1/2007	\$0.00	0.0%	COMPLETE	
Urbana Community Park	FPU	A	1	0.9	4/27/2009	\$29,700.00	0.0%	COMPLETE	
Urbana Elementary School	FPU	A	1	0.13	8/30/2011	\$4,290.00	0.0%	COMPLETE	
Urbana High School	FPU	A	1	0	11/1/2007	\$0.00	0.0%	COMPLETE	
Urbana Middle School	FPU	A	1	0.46	5/31/2008	\$15,180.00	0.0%	COMPLETE	
Cunningham Fall State Park	FPU	A	1	0	4/29/2010	\$0.00	0.0%	COMPLETE	
Deer Crossing Elementary School	FPU	A	1	1.09	5/20/2007	\$35,970.00	0.0%	COMPLETE	
Emmitsburg Elementary School	FPU	A	1	0	5/1/2009	\$0.00	0.0%	COMPLETE	
Fred Archibald Sanctuary	FPU	A	1	2.58	4/1/2007	\$85,140.00	0.1%	COMPLETE	
GTJ Middle School	FPU	A	1	0	5/1/2010	\$0.00	0.0%	COMPLETE	
Holly Hills Country Club	FPU	A	1	5.79	10/10/2007	\$191,070.00	0.1%	COMPLETE	
Holly Hills HOA	FPU	A	1	0.44	10/10/2007	\$14,520.00	0.0%	COMPLETE	
Kemptown Elementary School	FPU	A	1	0	1/1/2009	\$0.00	0.0%	COMPLETE	
Liberty Village	FPU	A	1	0.7	5/15/2008	\$23,100.00	0.0%	COMPLETE	
Libertytown Park	FPU	A	1	1.56	4/1/2007	\$51,480.00	0.0%	COMPLETE	
Middletown High School	FPU	A	1	0.16	4/7/2009	\$5,280.00	0.0%	COMPLETE	
Monocacy Elementary School	FPU	A	1	0.04	1/1/2007	\$1,320.00	0.0%	COMPLETE	
Monocacy National Battlefield	FPU	A	1	4.95	11/26/2012	\$163,350.00	0.1%	COMPLETE	
Mountain Village HOA	FPU	A	1	1.22	11/1/2007	\$40,260.00	0.0%	COMPLETE	
Mt. Airy East West Park	FPU	A	1	1.43	3/31/2007	\$47,190.00	0.0%	COMPLETE	
Mt. Airy Village Gate Park	FPU	A	1	1	4/12/2008	\$33,000.00	0.0%	COMPLETE	
Mt. Airy Windy Ridge Park	FPU	A	1	0	10/31/2008	\$0.00	0.0%	COMPLETE	
Mt. Saint Mary's Run	FPU	A	1	0	4/1/2007	\$0.00	0.0%	COMPLETE	
Valley Elementary School	FPU	A	1	0.79	4/1/2008	\$26,070.00	0.0%	COMPLETE	
Walkersville Community Park	FPU	A	1	0	4/1/2007	\$0.00	0.0%	COMPLETE	
Walkersville High and Elem	FPU	A	1	0	10/22/2007	\$0.00	0.0%	COMPLETE	
Waterford Park	FPU	A	1	0	4/1/2006	\$0.00	0.0%	COMPLETE	
West Frederick Middle	FPU	A	1	0	9/1/2010	\$0.00	0.0%	COMPLETE	
Windsor Knolls Elementary	FPU	A	1	4.7	5/1/2010	\$155,100.00	0.1%	COMPLETE	
Wolfsville Elementary	FPU	A	1	0.41	4/1/2007	\$13,530.00	0.0%	COMPLETE	
Woodsboro Community Park	FPU	A	1	0	3/30/2012	\$0.00	0.0%	COMPLETE	
Woodsboro Elementary School	FPU	A	1	0	5/15/2012	\$0.00	0.0%	COMPLETE	
Worthington Manor Golf Course	FPU	A	1	0	7/1/2010	\$0.00	0.0%	COMPLETE	
Utica Park	FPU	A	1	0.29	4/26/2007	\$9,570.00	0.0%	COMPLETE	
Crestwood Middle School	FPU	A	1	0.79	4/1/2013	\$26,070.00	0.0%	COMPLETE	
Ballenger Creek Elementary School	FPU	A	1	0.58	11/1/2007	\$19,140.00	0.0%	COMPLETE	
Windsor Knolls Middle School	FPU	A	2	4.56	12/1/2011	\$150,480.00	0.1%	COMPLETE	
Urbana Community Park	ESDSW	RR	1	0.26	12/1/2013	\$11,440.00	0.0%	COMPLETE	
Cooperative Extension Building	ESDRG	RR	1	0.25	12/1/2013	\$750	0.0%	COMPLETE	
Septic Pumping	SEPP	A	0	0	12/29/2014	NA	0.0%	COMPLETE	Data is not available.
Urbana Elementary School	ESDSW	RR	1	0.004	12/1/2001	\$176	0.0%	COMPLETE	
Support of Capital Projects			0	0	Through 2014	\$926,566	0.0%	COMPLETE	
Subtotal Other Complete To Date			250	94		\$5,271,420	1.9%		
Total Complete to Date			257	160.5		\$10,192,516	3.2%		

Check with MDE Geodatabase:

Rest BMP ID, type, class, number of BMPs, impervious acres, built date, implementation cost and implementation status

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.

Watershed Protection and Restoration Program Annual Report Table

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

Program Element	Cost	Percent of WPRF
Capital Improvements for Stormwater Management	\$0.00	0.00%
O & M of SWM Systems and Facilities	\$0.00	0.00%
Public Education and Outreach	\$0.00	0.00%
Stormwater Management Planning (see Md. Environment Code Ann. § 4-202.1(h)(4)(iv))	\$0.00	0.00%
Review of Stormwater Management Plans and Permit Applications for New Development	\$0.00	0.00%
Grants to Nonprofit Organizations	\$0.00	0.00%
Adminstration of WPRF	\$0.00	0.00%
TOTAL	\$0.00	0.00%
Number of Properties Subject to Fee	49,394	
Reporting Year	2015	
Permit Number	11-DP-3321 MD0068357	
Comments:		

VERSION 4-7-16

Jurisdiction	Agency	Local Ordinance Submitted to MDE	MDE Approval of Fee Reduction Policy	Fee Reduction Amount	Rate Structures						Additional Sources of Funds			Estimated Annual Revenue	Notes		
					Annual Single Family Residential Rate	Annual Commercial Rate	Equivalent Residential Unit (ERU) impervious	Commercial Capped Rates	Non-profits, Religious Organizations	Exemptions	Federal Facilities Status	Federal Facility Fee(s)/Rate(s)	Additional Source 1			Additional Source 2	Additional Source 3
Frederick County	Planning and Permitting Division, Office of Sustainability and Environmental Resources	Yes	3/26/2015	30% or 60% for homeowners based on documented practices	\$0.01	0.01	NA	NA	NA	NA	Charged	NA	NA	NA	NA	\$445.00	

Use: Yes or No Use the approval date or N/A Reduction amount(s), if any, with reason for reduction(s) Use: N/A, amount of flat rate, rate amount per ERU, etc. General description of exemption(s), if any Use: No Facilities, Exempt, or Charged Use: N/A or the fee and rate structures for federal facilities

Directions:
 Notes:
 ERU = Equivalent residential unit

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

Source		Amount
Annual Single Family Residential Fees Collected	\$	444.58
Annual Commercial Fees Collected	\$	47.31
Non-profits, Religious Orgs Fees Collected	\$	1.97
Unnamed Additional Source 1	\$	-
	\$	493.86

VERSION 4-7-16

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

REST BMP ID	REST BMP TYPE	BMP CLASS	NUM BMP	IMP ACRES	BUILT DATE	IMPL COST	IMPL STATUS	IMPL COMP YEAR
Operation Programs								
Street Sweeping	MSS	A	1	0	12/29/2014	\$184,764	COMPLETE	2014
Inlet Cleaning	CBC	A	1	0	12/29/2014	\$368,886	COMPLETE	2014
Average Operations Complete To Date*			1	0		\$553,650		
Capital Projects								
Urbana High School Retrofit	BIO	ST	1	2.83	10/1/2007	\$249,069	COMPLETE	2007
Ballenger Creek Stream Rest	STRE	A	1	6.05	5/1/2007	\$406,986	COMPLETE	2007
Pinecliff Park Stream Rest	STRE	A	1	10	11/12/2010	\$427,658	COMPLETE	2010
Public Safety Training Facility	WP	A	1	15	1/1/2010	\$989,970	COMPLETE	2010
Citizens Care and Rehab	WP	ST	1	25.16	1/1/2012	\$1,660,509	COMPLETE	2012
Englandtowne Stream Rest	STRE	A	1	7.3	12/1/2014	\$633,254	COMPLETE	2014
Subtotal Capital Complete To Date			6	66.34		\$4,367,446		
Other								
Septic Denitrification (BRF)	SEPD	A	184	47.84	12/29/2014	\$2,539,200.00	COMPLETE	2014
Septic Connections to WWTP	SEPC	A	7	2.73	12/29/2014	\$350,000.00	COMPLETE	2014
Brunswick High School	FPU	A	1	0.37	4/6/2010	\$12,210.00	COMPLETE	2010
Catoctin Mountain Park	PP	A	1	0.1	11/12/2012	\$23,958.00	COMPLETE	2012
Catoctin Mountain Park	FPU	A	1	2.15	4/1/2010	\$70,950.00	COMPLETE	2010
Catoctin Mountain Park	GMB	ESD	1	0	4/1/2010	\$0.00	COMPLETE	2010
Cloverhill	FPU	A	1	0.51	5/1/2007	\$16,830.00	COMPLETE	2007
Cooperative Extension Building	FPU	A	1	0	8/1/2005	\$0.00	COMPLETE	2005
Myersville Elementary School	FPU	A	1	0	4/1/2006	\$0.00	COMPLETE	2006
New Forest Society Nursery	FPU	A	1	0	4/16/2007	\$0.00	COMPLETE	2007
New Market Middle School	FPU	A	1	1.22	5/1/2006	\$40,260.00	COMPLETE	2006
Oakdale Elementary School	FPU	A	1	0	4/22/2009	\$0.00	COMPLETE	2009
Old National Pike Park	FPU	A	1	1.83	4/1/2011	\$60,390.00	COMPLETE	2011
Orchard Grove Elementary School	FPU	A	1	0.32	5/15/2013	\$10,560.00	COMPLETE	2013
Parkway Elementary School	FPU	A	1	0	9/1/2012	\$0.00	COMPLETE	2012
Pinecliff Park	FPU	A	1	0.79	8/1/2012	\$26,070.00	COMPLETE	2012
Rivermist Park	FPU	A	1	0	7/1/2011	\$0.00	COMPLETE	2011
Spring Ridge Elementary School	FPU	A	1	1.05	4/1/2013	\$34,650.00	COMPLETE	2013
St. Peter the Apostle Church	FPU	A	1	0.2	10/31/2006	\$6,600.00	COMPLETE	2006
Thurmont Middle School	FPU	A	1	0	5/1/2004	\$0.00	COMPLETE	2004
Tuscarora Elementary School	FPU	A	1	0	11/1/2007	\$0.00	COMPLETE	2007
Urbana Community Park	FPU	A	1	0.9	4/27/2009	\$29,700.00	COMPLETE	2009
Urbana Elementary School	FPU	A	1	0.13	8/30/2011	\$4,290.00	COMPLETE	2011
Urbana High School	FPU	A	1	0	11/1/2007	\$0.00	COMPLETE	2007
Urbana Middle School	FPU	A	1	0.46	5/31/2008	\$15,180.00	COMPLETE	2008
Cunningham Fall State Park	FPU	A	1	0	4/29/2010	\$0.00	COMPLETE	2010
Deer Crossing Elementary School	FPU	A	1	1.09	5/20/2007	\$35,970.00	COMPLETE	2007
Emmitsburg Elementary School	FPU	A	1	0	5/1/2009	\$0.00	COMPLETE	2009
Fred Archibald Sanctuary	FPU	A	1	2.58	4/1/2007	\$85,140.00	COMPLETE	2007
GTJ Middle School	FPU	A	1	0	5/1/2010	\$0.00	COMPLETE	2010
Holly Hills Country Club	FPU	A	1	5.79	10/10/2007	\$191,070.00	COMPLETE	2007
Holly Hills HOA	FPU	A	1	0.44	10/10/2007	\$14,520.00	COMPLETE	2007
Kempton Elementary School	FPU	A	1	0	1/1/2009	\$0.00	COMPLETE	2009
Liberty Village	FPU	A	1	0.7	5/15/2008	\$23,100.00	COMPLETE	2008
Libertytown Park	FPU	A	1	1.56	4/1/2007	\$51,480.00	COMPLETE	2007
Middletown High School	FPU	A	1	0.16	4/7/2009	\$5,280.00	COMPLETE	2009
Monocacy Elementary School	FPU	A	1	0.04	1/1/2007	\$1,320.00	COMPLETE	2007
Monocacy National Battlefield	FPU	A	1	4.95	11/26/2012	\$163,350.00	COMPLETE	2012
Mountain Village HOA	FPU	A	1	1.22	11/1/2007	\$40,260.00	COMPLETE	2007
Mt. Airy East West Park	FPU	A	1	1.43	3/31/2007	\$47,190.00	COMPLETE	2007
Mt. Airy Village Gate Park	FPU	A	1	1	4/12/2008	\$33,000.00	COMPLETE	2008
Mt. Airy Windy Ridge Park	FPU	A	1	0	10/31/2008	\$0.00	COMPLETE	2008
Mt. Saint Mary's Run	FPU	A	1	0	4/1/2007	\$0.00	COMPLETE	2007
Valley Elementary School	FPU	A	1	0.79	4/1/2008	\$26,070.00	COMPLETE	2008
Walkersville Community Park	FPU	A	1	0	4/1/2007	\$0.00	COMPLETE	2007
Walkersville High and Elem	FPU	A	1	0	10/22/2007	\$0.00	COMPLETE	2007
Waterford Park	FPU	A	1	0	4/1/2006	\$0.00	COMPLETE	2006
West Frederick Middle	FPU	A	1	0	9/1/2010	\$0.00	COMPLETE	2010
Windsor Knolls Elementary	FPU	A	1	4.7	5/1/2010	\$155,100.00	COMPLETE	2010
Wolfsville Elementary	FPU	A	1	0.41	4/1/2007	\$13,530.00	COMPLETE	2007
Woodsboro Community Park	FPU	A	1	0	3/30/2012	\$0.00	COMPLETE	2012
Woodsboro Elementary School	FPU	A	1	0	5/15/2012	\$0.00	COMPLETE	2012
Worthington Manor Golf Course	FPU	A	1	0	7/1/2010	\$0.00	COMPLETE	2010
Utica Park	FPU	A	1	0.29	4/26/2007	\$9,570.00	COMPLETE	2007
Crestwood Middle School	FPU	A	1	0.79	4/1/2013	\$26,070.00	COMPLETE	2013
Ballenger Creek Elementary School	FPU	A	1	0.58	11/1/2007	\$19,140.00	COMPLETE	2007
Windsor Knolls Middle School	FPU	A	2	4.56	12/1/2011	\$150,480.00	COMPLETE	2011
Urbana Community Park	ESDSW	RR	1	0.26	12/1/2013	\$11,440.00	COMPLETE	2013
Cooperative Extension Building	ESDRG	RR	1	0.25	12/1/2013	\$750	COMPLETE	2013
Septic Pumping	SEPP	A	0	0	12/29/2014	NA	COMPLETE	2014
Urbana Elementary School	ESDSW	RR	1	0.004	12/1/2010	\$176	COMPLETE	2010
Subtotal Other Complete To Date			250	94		\$4,344,854		
Total Complete to Date			257	160.5		\$9,265,950		