

M E M O R A N D U M

March 1, 2023

TO: Transportation & Environment Committee

FROM: Keith Levchenko, Senior Legislative Analyst

SUBJECT: 2022 National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit Financial Assurance Plan

PURPOSE: To discuss Montgomery County's NPDES-MS4 Permit 2022 Financial Assurance Plan Draft and make recommendations to the Council

Council Staff Recommendation: Approve the 2022 Financial Assurance Plan

Expected Participants

Vicky Wan, Acting Deputy Director, Department of Environmental Protection (DEP)
Frank Dawson, Chief, Watershed Management Division, DEP
Amy Stevens, Manager, Stormwater Facility Inspection and Maintenance

This report contains:

CE Transmittal Letter	©1-3
Draft Resolution	©4-5
Financial Assurance Plan FY22	©6-24
DEP NPDES-MS4 Permit/FAP Presentation Slide Deck	©25-41

On February 1, 2023, the County Executive transmitted Montgomery County's NPDES-MS4 Permit 2022 Financial Assurance Plan (FAP) for Council approval (see ©4-22).¹ A draft resolution (see ©4-5) and certification (see ©24) are attached.

A public hearing was held on February 28, 2023. There were no speakers. [Written testimony](#) was received from Kenneth Bawer, conveying opposition to stream restoration projects from the Montgomery Coalition to Stop Stream Destruction, arguing that these projects are environmentally damaging and the resources would be better used for upland stormwater controls.

¹ A listing of the Best Management Practices (BMPs) and their abbreviations used in the FAP is attached on ©22-23.

Background

Maryland law (Md. Code Ann., Envir. §4-202.1(j)(4)(ii)) (SB 863, enacted in 2015) requires that each NPDES Phase I MS4 jurisdiction submit a FAP to the Maryland Department of the Environment (MDE) every two years. The County submitted its FY20 FAP in April 2021.

The required FAP reporting template was developed by MDE. The FAP demonstrates:

- Actions required to meet MS4 permit requirements;
- Annual and projected 5-year costs to meet the impervious surface restoration plan (ISRP) requirement, more commonly known as the restoration requirement in the County's current permit;
- Annual and projected 5-year revenues or other funds that will be used toward meeting the restoration requirement;
- Any and all sources of funds used toward meeting MS4 permit requirements; and
- All specific actions and expenditures undertaken in the previous fiscal years to meet the restoration requirement.

The Montgomery County Department of Environmental Protection completed the FY22 FAP based on the Approved FY23 Operating Budget and the Approved FY23-28 Capital Improvements Program.

Discussion

Permit Status

The county's current [National Pollution Discharge Elimination System Municipal Separate Storm Sewer System \(NPDES-MS4\) Permit](#) was issued in November 2021. The Department of Environmental Protection (DEP) is the lead department responsible for coordinating a multi-department/agency effort to meet the NPDES-MS4 permit requirements. DEP staff will provide a presentation on the permit (see slide deck on ©25-41).

The permit includes many requirements that are beyond the scope of the FAP.² Most relevant to the FAP is the permit's impervious surface restoration plan (ISRP) requirement. For Montgomery County, the requirement is 1,814 acres over five years (with annual milestones). The County can meet this requirement through different actions as described later.

² The permit requirements also include the inspection and maintenance of existing facilities and other efforts included in prior permits. There are also new requirements (some involving other County departments as noted below) including:

- New data reporting and geodatabase requirements
- New requirements for Illicit Discharge, Detection, and Elimination
- New restoration goal and TMDL implementation plan update
- New prevention of flooding requirements: inspection & maintenance of conveyance and public education
- Salt management plan –DOT, DGS, DEP
- Good housekeeping plans –DGS
- New monitoring requirements

FAP Report Sections

The FAP's structure (i.e., the five tables) was designed by MDE to be used by all applicable NPDES-MS4 jurisdictions in Maryland. An Executive Summary (see ©6-8) provides an overview of the FAP. A glossary of required abbreviations for the various actions reported in the FAP is included at the end of the report (see ©22-23)

- **Table 1: All Actions (©10-14):** This table is divided into two sections: FY22 and beyond actions to meet the prior permit (not relevant to Montgomery County) and FY22 and beyond actions to meet the current permit. The actions are broken down by:
 - Operational programs includes storm drain vacuuming (SDV) and street sweeping (VSS), which must be done on a regular basis to be counted as providing ISRP credits. **The FAP projects that Montgomery County will spend a total of about \$3.1 million for a credit of 48 impervious acres.**
 - Capital projects include best management practices such as green streets, stream restoration work, and stormwater management pond upgrades. **The FAP projects that Montgomery County will spend about \$134.7 million over the permit term for a credit of 1755 impervious acres.³**
 - “Other” programs include Tree Montgomery (UTC), DOT Street Trees (STCI), and Rainscapes (ESD/RR) and Watershed grants (various codes). **The FAP projects that Montgomery County will spend about \$25.1 million over the permit term for a credit of 108 impervious acres.**

In total DEP estimates achieving 1,911 impervious acres of work or about 105% of the permit goal at a total cost of \$163 million.

- **Table 2: Projected Costs (©15):** This table shows all projected costs by type and fund to meet the impervious area goals of the permit. These costs go beyond the project implementation costs captured in Table 1. **Total costs (Capital and Operating) excluding debt service total \$272.2 million.**
- **Table 3: Projected Revenue and Costs (©16):** This table pulls numbers from Table 2 to show revenues and expenditures balancing to meet the ISRP requirements.
- **Table 4: Sources of Funding (©17):** This table includes Actuals for FYs19-22 and then projected revenue for FYs23-27 based on the County's Water Quality Protection Fund Fiscal Plan (which includes spending on programs beyond the County's permit; such as Storm Drains). For the permit term, total sources of funds = \$506.6 million.
- **Table 5: Specific Actions Before the Current Permit (©18-21):** This table is divided into two sections: Obligations from the previous permit (not relevant to Montgomery County) and completed work under the current permit. Because there was a significant gap of time between when the County met its prior permit requirements (December 2018) and the start date of the current permit (November 2021), restoration work completed which went beyond the requirements in the prior permit is credited to the new permit.

³ Major Structural Repair maintenance work (PWET) and Facility Planning (OTH) costs are listed in Table #1. However, no impervious area credits are received for this work.

- Operational Programs completed = 40 impervious acres or 2.0 percent of the permit total at an annual average cost of \$1.2 million.
- Capital Programs completed = 987.22 impervious acres or 54 percent of the permit total at a total cost of \$48.3 million.
- Other Programs completed = 40 impervious acres or 2.0 percent of the permit total at a total cost of \$12.8 million.

In total DEP has completed 1,067 acres of impervious acres of work or about 59 percent of the permit goal at a total cost of \$62.3 million. These credits and costs are folded into the totals noted earlier for Table 1.


Council Staff Recommendation

The FAP process is primarily intended to show how a jurisdiction will meet its ISRP requirements in its MS4 permit and that it has sufficient resources planned/programmed to do so. This FAP shows that the County has sufficient resources to meet (and slightly exceed) the ISRP requirement. **Council Staff recommends approval of the attached resolution (see ©4-5) approving the FY22 Financial Assurance Plan as transmitted by the County Executive.**

MEMORANDUM

February 1, 2023

TO: Evan Glass, President
Montgomery County Council

FROM: Marc Elrich, County Executive 

SUBJECT: Fiscal Year 2022 National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Permit Financial Assurance Plan

The purpose of this memorandum is to recommend the transmission of Montgomery County's Fiscal Year 2022 (FY22) Financial Assurance Plan (FAP) for County Council approval. This FAP demonstrates that the County had sufficient funding to complete the impervious surface restoration plan (ISRP), as required in the 2021 Maryland Phase I National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit. In addition, this FAP demonstrates that the County has dedicated revenues, funds, or sources of funds to continue to meet requirements associated with improving water quality in the County.

In May 2015, revisions to Section 4-202.1 (*Watershed Protection and Restoration Programs*) of the Environment Article, Annotated Code of Maryland, were signed into law. Previously, the law required each Phase I NPDES MS4 jurisdiction to establish a stormwater remediation fee. These revisions removed that requirement (although jurisdictions still have the option of establishing a stormwater remediation fee). However, jurisdictions are still responsible for generating the necessary funds to ensure that all MS4 permit requirements are satisfied.

The 2015 revisions to Section 4-202.1 of the Environment Article require all Phase I MS4 Permit jurisdictions to submit a FAP demonstrating that they will have adequate funding to meet their permit requirements for impervious surface restoration. Each of those jurisdictions was required to submit its initial FAP to the Maryland Department of the Environment (MDE) by July 1, 2016, and a subsequent FAP every two- years after that on the anniversary date of their MS4 permit. Each FAP must detail the following:

- All actions required to meet MS4 Permit requirements.

- Annual and projected five-year costs necessary to meet the ISRP requirement, commonly known as the restoration requirement in current permits.
- Annual and projected five-year revenues that will be used toward meeting the restoration requirement.
- Any and all sources of funds used toward meeting MS4 Permit requirements; and
- All specific actions and expenditures are undertaken in the previous fiscal years to meet the restoration requirement.

The County's current permit was issued on November 5, 2021, with a requirement to restore 1,814 acres of uncontrolled impervious surfaces in the County's MS4 service area. The County has continued to implement restoration projects since meeting its 2010 MS4 permit restoration goal in December 2018. This FAP and FY22 MS4 Annual Report shows that the County has completed 59% of the restoration goal in the permit. The FAP also indicates that the County met the restoration goal in the 2021 MS4 on time and as required.

The FAP format is an excel workbook developed by the Maryland Department of Environment (MDE) to capture the information needed to meet the law requirements. The information provided to MDE in the workbooks covers the costs of implementing the restoration goal in the current permit, and expenditures and revenues for the completed and ongoing work from FY19 to FY27. The expenditures cover the ongoing operational responsibilities of the existing permit, such as street sweeping and inlet cleaning, as well as the debt service payments for the two water quality protection bonds and state revolving loan issued to fund the implementation of the restoration work. The Department of Environment Protection completed the FAP using the final expenditures for FY19-FY22 and approved the FY23 Operating budget and the amended FY23-FY28 CIP budget. These budgets requested the total amount to complete the restoration goal in the current permit, ongoing operational responsibilities, and continued restoration work.

Environment Article Section 4-202.1(j)(3) requires a jurisdiction's local governing body to hold a public hearing and approve the FAP before it can be submitted to MDE. Attached, please find the Resolution xx-xxxx to introduce the FAP.

Once the Council approves it, the County Executive or Chief Administrative Officer must sign the attached FAP Certification page to verify the Council approval following a public hearing and that the FAP is true, accurate, and complete.

If you have any questions concerning this statutory mandate or require additional information, please contact Vicky Wan, Acting Deputy Director of the Department of Environmental Protection, at 240-777-7722.

Enclosures: Draft Resolution XX Approval of Montgomery County's Fiscal Year 2022
Montgomery County's NPDES MS4 Permit Fiscal Year 2022 Financial Assurance
Plan and Executive Summary
Financial Assurance Plan

Financial Assurance Plan Certification

cc: Richard S. Madaleno, Chief Administrative Officer, Office of the County Executive
Michael Coveyou, Director, Department of Finance
Jennifer Bryant, Director, Office of Management and Budget
John Markovs, Office of the County Attorney
Dale Tibbitts, Special Assistant to the County Executive
Debbie Spielberg, Special Assistant to the County Executive

Resolution No.: _____
Introduced: _____
Adopted: _____

**COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND**

By: Council President at the Request of the County Executive

SUBJECT: Financial Assurance Plan to Meet the Requirements of the National Pollution Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit

Background

1. The Financial Assurance Plan (FAP) is required by amendments to Section 4-202.1 (*Watershed protection and restoration program*) of the Environment Article, Annotated Code of Maryland, which were added in 2015 to ensure that each National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Separate Storm Sewer System (MS4) jurisdiction will have adequate funding to meet its Phase I MS4 permit requirement for impervious surface restoration.
2. Each NPDES Phase I MS4 jurisdiction must submit a FAP to the Maryland Department of the Environment (MDE) by July 1, 2016, and every two years thereafter on the anniversary date of its MS4 permit, that details the following:
 - a. Actions required to meet MS4 permit requirements;
 - b. Annual and projected 5-year costs to meet the impervious surface restoration plan (ISRP) requirement, more commonly known as the restoration requirement in the County's current permit;
 - c. Annual and projected 5-year revenues or other funds that will be used toward meeting the restoration requirement;
 - d. Any and all sources of funds used toward meeting MS4 permit requirements; and
 - e. All specific actions and expenditures are undertaken in the previous fiscal years to meet the restoration requirement.
3. The County is required to submit the information for the FAP using a template provided by MDE.
4. The Montgomery County Department of Environmental Protection completed the FY22 FAP using the FY19-FY22 expenditures, the approved FY23 operating budget, and the approved and amended FY23-28 CIP budget.

5. MDE will determine whether the FAP demonstrates sufficient funding within 90 days after County filing.
6. The first FAP was filed on June 30, 2016, as required by law, and showed sufficient funding to meet the projected costs of compliance with the impervious surface restoration requirements under the County's 2010 MS4 permit.
7. Subsequent FAPs are filed biennially by December 31st, the annual report deadline in the County's 2021 MS4 Permit.
8. This FAP demonstrates sufficient funding to meet the Impervious Surface Restoration Plan (ISRP) requirements under the County's 2021 MS4 permit.
9. This FAP demonstrates that the County has dedicated revenues, funds, or sources of funds to continue to meet requirements associated with improving water quality in the County.

Action

The County Council for Montgomery County, Maryland, approves the FY22 Financial Assurance Plan, which shows the County has met the ISRP requirements under the 2021 MS4 Permit.

This is a correct copy of the Council action.

Judy Rupp, Clerk of the Council

**Montgomery County's Fiscal Year 2022
Draft Financial Assurance Plan
December 23, 2022**

Executive Summary

The submission of Montgomery County's fourth Financial Assurance Plan (FAP) to the Maryland Department of the Environment (MDE) fulfills requirements specified in Section 4-202.1 of the Environment Article, Maryland Code. This plan is being filed with MDE in order to document all actions implemented by Montgomery County to comply with its National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit (20-DP-3320 MD0068349, effective November 5, 2022) and demonstrate the County's ability to pay for these activities through the Water Quality Protection Charge (WQPC).

In compliance with the Maryland Article Section 4-202.1, the FAP includes all activities that have been completed in compliance with Montgomery County's MS4 permit, and five-year projections for the implementation of its stormwater program and best management practices (BMPs) necessary for meeting permit requirements. Specifically, this FAP includes implementation and financial data for fiscal years 2019 – 2027, and implementation cost and revenue estimated for the permit term fiscal years 2022-2026.

A major tenet of the FAP is to demonstrate the financial wherewithal for meeting MS4 permit impervious surface area restoration requirements. To document this ability, Montgomery County is providing MS4 program implementation for work completed between fiscal year (FY)2019 through FY2022, and projections for FY2023, FY2024, FY2025, and FY2026. The next FAP will be submitted in two years on the anniversary date of the County's MS4 permit issuance.

The MDE requires the FAP be submitted using a template document that includes the following:

- All Actions, Article 4-202.1(j)(1)(i)1: Actions that will be required of the county or municipality to meet the requirements of its NPDES MS4 Permit.
- ISRP Costs, 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 (ISRP) requirements of its NPDES MS4 Permit
- ISRP Revenue, 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 ISRP requirements under the NPDES MS4 Permit.
- Fund Sources, 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 NPDES MS4 Permit
- Comp Actions, 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 NPDES MS4 Permit

Montgomery County's 2021 MS4 permit covers stormwater discharges from the MS4 in the County. The FAP includes expenditures and fund sources for the following major requirements of the permit: stormwater best management practice (BMP) inspection and maintenance, illicit discharge detection and elimination program, watershed assessment monitoring, planning and implementation for stormwater restoration, and total maximum daily load implementation planning. Furthermore, the permit requires impervious surface restoration of 1,814 impervious acres that have not been treated to the maximum extent practicable (MEP) by implementing stormwater BMPs, programmatic initiatives, or alternative control practices in accordance with the 2021 Accounting Guidance.

According to the requirements for completing the FAP, the actual expenditures are reported for all restoration activities that are credited toward the impervious surface restoration (ISR) goal in the 2021 MS4 permit, including planning, monitoring, inspection, and operation and maintenance. These activities include a variety of projects with a variety of funding sources as described below.

- Capital Improvements Program (CIP) projects funded by the WQPC
- CIP projects funded by Water Quality Protection Revenue Bonds
- CIP projects partially funded by State and Federal Grants
- CIP projects funded by Maryland Water Quality Revolving Loans
- WQPC operational programs including street sweeping, inlet cleaning, planning monitoring, and inspection and maintenance
- General Funded operational program for street trees
- WQPC funding for voluntary BMP implementation made available through the County's Watershed Management Grants and RainScapes programs
- Tree Montgomery trees funded through the Tree Canopy Conservation Fund

It is important to note that the FAP, by design, does not capture all the expenditures associated with implementation of the County's entire MS4 program. The FAP is focused mainly on expenditures related to ISR.

When reviewing the FAP, please consider the following specific guidance and notes regarding the information presented in the FAP tables:

- MDE template for the FAP includes information for jurisdictions to include obligations from previous permit that must be continued or met. Montgomery County completed all of its impervious surface restoration obligations from the previous permit and does not have continuing obligations. Therefore, the County has left these rows blank in the All Actions, table 1 and Comp Actions, table 5 as it is not applicable.
- All Actions, table 1 includes a list of all actions that are planned for FY2023-FY2026 to meet the ISR goal. Operational programs implemented by the County include street sweeping (VSS) and inlet cleaning (SDV). The capital projects include restoration work completed by Department of Environmental Protection (DEP), Department of Transportation (DOT), and Maryland National Capital Park and Planning Commission (MNCPPC). The other projects include voluntary BMPs implemented through RainScapes and Watershed Restoration Grants, and trees planted through Tree Montgomery and DOT street tree program. The subtotal and total operational, capital, and other programs for the permit term includes the impervious surface, percent ISRP goal, and implementation costs from All Actions table 1 and Comp Actions, table five, which is meant to show the total permit term impervious

surface, percent ISRP goal, and implementation cost for meeting the 2021 MS4 Permit. In addition, this table includes implementation costs for major structural repair CIP projects and watershed assessment and planning for future ISR restoration.

- The operation and capital expenditures in ISPR Cost, table 2 include planning, personnel, operation and maintenance, and project management expenditures that are not captured in the project implementation costs. Therefore, the total expenditures in table 2 exceeds the total implementation costs in table 1 and 5. The expenditures included in this table are all costs associated with restoration goal, including operating and maintenance for BMPs and stream restoration, debt service payments for loans and bonds, and actual expenditures and approved CIP budgets for stormwater management planning, stormwater managements countywide, storm drain outfalls, and major structural repair. Table 2 calculates the permit cycle costs, which are FY2019-FY2026, although the table also include projected expenditures for FY2027.
- Fund sources provided in for Fund Sources table 4 are provided for the entire fund source and will include programs that are not included in table 2. Therefore, the total paygo, debt and grant fund sources in table 4 exceeds the total expenditures in table 2. In addition, the CIP paygo, debt, and grants fund sources include stormwater management planning, stormwater management countywide, major structural repair, Wheaton flooding mitigation, and storm drain planning, storm drain general, outfalls, and storm drain culverts.
- Completed Actions, table 5, includes the specific actions and expenditures the County implemented between FY2019 to FY2022 to meet the impervious surface restoration goal. This also includes 6 projects that were completed in 2018 and were carried over for ISR credit to 2021 permit. Like table 1, the operational programs implemented by the County include street sweeping and inlet cleaning. Because street sweeping is an annual practice and credit is calculated as a running 5-year average, the impervious area credit is only shown for FY2022. The impervious area credit for FY2019-FY2021 has been averaged into FY2022.

The capital projects include restoration work completed by DEP, DOT, and MNCPPC. The other projects include voluntary BMPs implemented through RainScapes and Watershed Restoration Grants, and trees planted through Tree Montgomery and DOT street tree program.

MS4 Information

Jurisdiction	Montgomery County
Contact Name	Amy Stevens
Phone	240-777-7766
Address	2425 Reddie Dr, 4thFloor
City	Wheaton
State	MD
Zip	20902
Email	amy.stevens@montgomerycountymd.gov
Continued Annual Alternative ISR (ac)	0.00
Required ISR New Permit (ac)	1814
Total ISR (ac)	1814
Permit Num	20-DP-3320 MD0068349
Permit Period (FY)	2022
Reporting FY	2022

Check with MDE Geodatabase:

Should match Permit info table of Geodatabase, except for ISR requirements for continuing alternative controls and additional- that should match permit language of E.1.b and E.3

Check with Permit Language:

Continued annual alternative ISR and required ISR new permit should match MS4 Permit condition E. Stormwater Restoration.

Version 6-22-22

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.

Continued Annual Alternative ISR (ac) - **0%**
Required ISR New Permit (ac): **1,814**
Total ISR (ac): **1,814**

REST BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Obligations from Previous Permit That Must Be Continued or Met						
Operational Programs^{2,3}						
NOT APPLICABLE		0	#DIV/0!			
Operations Next Two Years (FY23-24) ⁴		0	#DIV/0!	\$0		
Operations Next Five Years (FY23-27) ⁴		0	#DIV/0!	\$0		
Operations Permit Term (FY22-26) ⁴		0	#DIV/0!	\$0		
Capital Projects (Completed to Replace Annual Obligations)^{2,3}						
NOT APPLICABLE			#DIV/0!			
Subtotal Capital Next Two Years		0	#DIV/0!	\$0		
Subtotal Capital Next Five Years (FY23-27)		0	#DIV/0!	\$0		
Subtotal Capital Permit Term (FY22-26)		0	#DIV/0!	\$0		
Other (Completed to Replace Annual Obligations)^{2,3}						
NOT APPLICABLE			#DIV/0!			

REST BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Subtotal Other Next Two Years (FY23-24)		0	#DIV/0!	\$0		
Subtotal Other Next Five Years (FY23-27)		0	#DIV/0!	\$0		
Subtotal Other Permit Term (FY22-26)		0	#DIV/0!	\$0		
Total Continued Obligations Next Two Years (FY23-24)		0	#DIV/0!	\$0		
Total Continued Obligations Next Five Years (FY23-27)		0	#DIV/0!	\$0		
Total Continued Obligations Permit Term (FY22-26)		0	#DIV/0!	\$0		
Restoration for the New Permit						
Operational Programs^{3,5}						
VSS	A	46.61	2.6%	\$ 231,160.00	Under Construction	2023
VSS	A	46.61	2.6%	\$ 285,000.00	Planning	2024
VSS	A	46.61	2.6%	\$ 285,000.00	Planning	2025
VSS	A	46.61	2.6%	\$ 285,000.00	Planning	2026
SDV	A	3.90	0.2%	\$ 226,251.00	Under Construction	2023
SDV	A	3.90	0.2%	\$ 226,251.00	Planning	2024
SDV	A	3.90	0.2%	\$ 226,251.00	Planning	2025
SDV	A	3.90	0.2%	\$ 226,251.00	Planning	2026
Operations Next Two Years (FY23-24) ⁴		51	3%	\$968,662		
Operations Next Five Years (FY23-27) ⁴		40	2%	\$1,991,164		

REST BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Operations Permit Term (FY22-26) ⁴		48	3%	\$3,179,043		
Capital Projects^{3,5}						
FBIO	E	1.2	0.1%	\$ 476,956.08	Under Construction	2023
MMBR	E	5.4	0.3%	\$ 794,926.80	Under Construction	2023
MRNG	E	1.1	0.1%	\$ 794,926.80	Under Construction	2023
PWET	S	5.3	0.3%	\$ 517,000.00	Under Construction	2023
OUT	A	3.8	0.2%	\$ 75,000.00	Under Construction	2023
STRE	A	28.3	1.6%	\$ 1,547,538.00	Under Construction	2023
PWET	S	8.4	0.5%	\$ 1,638,000.00	Planning	2024
PWED	S	151.4	8.3%	\$ 7,209,477.00	Planning	2024
STRE	A	34.6	1.9%	\$ 1,144,942.00	Planning	2024
STRE	A	52.5	2.9%	\$ 5,597,000.00	Planning	2025
PWED	S	25.0	1.4%	\$ 2,091,000.00	Planning	2025
PWET	S	29.0	1.6%	\$ 2,020,000.00	Planning	2025
ESD/RR	A	3	0.2%	\$ 1,250,000.00	Planning	2025
PWET	S	35.0	1.9%	\$ 2,828,142.00	Planning	2026
ESD/RR	E	58	3.2%	\$ 13,682,681.19	Planning	2026
STRE/OUT	A	325	17.9%	\$ 25,239,782.88	Planning	2026
PWET^	S	0	0%	\$ 1,342,000.00	Complete	2022
PWET^	S	0	0%	\$ 6,802,000.00	Under Construction	2023
PWET^	S	0	0%	\$ 726,000.00	Planning	2024
XDPD^	S	0	0%	\$ 1,143,000.00	Planning	2024
XDPD^	S	0	0%	\$ 1,250,000.00	Planning	2025
PWET^	S	0	0%	\$ 700,000.00	Planning	2025
PDWTED^	S	0	0%	\$ 600,000.00	Planning	2025
XDPD^	S	0	0%	\$ 2,720,000.00	Planning	2026
OTH*	[blank]	0	0%	\$ 1,018,000.00	Under Construction	2023
OTH*	[blank]	0	0%	\$ 1,037,000.00	Planning	2024
OTH*	[blank]	0	0%	\$ 1,057,000.00	Planning	2025
OTH*	[blank]	0	0%	\$ 1,077,000.00	Planning	2026

REST BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Subtotal Capital Next Two Years (FY23-24)		239	13%	\$24,924,767		
Subtotal Capital Next Five Years (FY23-27)		767	42%	\$85,037,373		
Subtotal Capital Permit Term (FY22-26)		1,755	97%	\$134,686,578		
Other^{3,5}						
UTC	A	8.40	0.46%	\$ 1,117,796.00	Under Construction	2023
UTC	A	8.40	0.46%	\$ 1,117,796.00	Planning	2024
UTC	A	8.40	0.46%	\$ 1,117,796.00	Planning	2025
UTC	A	8.40	0.46%	\$ 1,117,796.00	Planning	2026
STCI	A	5.90	0.33%	\$ 690,000.00	Under Construction	2023
STCI	A	5.90	0.33%	\$ 690,000.00	Planning	2024
STCI	A	5.90	0.33%	\$ 690,000.00	Planning	2025
STCI	A	5.90	0.33%	\$ 690,000.00	Planning	2026
ESD/RR**	E	2.70	0.15%	\$ 1,275,288.00	Under Construction	2023
ESD/RR**	E	2.70	0.15%	\$ 1,275,288.00	Planning	2024
ESD/RR**	E	2.70	0.15%	\$ 1,275,288.00	Planning	2025
ESD/RR**	E	2.70	0.15%	\$ 1,275,288.00	Planning	2026
Subtotal Other Next Two Years (FY23-24)		34	2%	\$6,166,168		
Subtotal Other Next Five Years (FY23-27)		68	4%	\$12,332,336		
Subtotal Other Permit Term (FY22-26)		108	6%	\$25,127,701		
Total Next Two Years (FY23-24)		324	18%	\$32,059,597		
Total Next Five Years (FY23-27)		876	48%	\$99,360,873		
Total Permit Term (FY22-26)		1,911	105%	\$162,993,321		

REST BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
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Check with MDE Geodatabase:

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

Notes

1. Use BMP domains from MDE Geodatabase.
2. % ISR Complete compared to continued annual alternative ISR.
3. Insert additional rows as necessary.
4. Impervious Acres are the average for the time period, Implementation Costs are totaled.
5. % ISR Complete compared to ISR new permit.

*Watershed Assessment & Restoration Planning

^ Major Structural Repair Project

**Voluntary projects

Version 6-22-22

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	FY19 UP THRU FY 2021	CURRENT YEAR FY 2022	PROJECTED YEAR 1 FY 2023	PROJECTED YEAR 2 FY 2024	PROJECTED YEAR 3 FY 2025	PROJECTED YEAR 4 FY 2026	PROJECTED YEAR 5 FY 2027	TOTAL PERMIT CYCLE ⁴
Operating Expenditures (costs)								
Street Sweeping Program	\$713,744	\$247,884	\$231,160	\$231,160	\$231,160	\$231,160	\$231,160	\$1,886,268
Inlet Cleaning	\$0	\$226,251	\$226,251	\$226,251	\$226,251	\$226,251	\$226,251	\$1,131,255
IDDE	\$984,746	\$303,705	\$303,000	\$303,000	\$303,000	\$303,000	\$303,000	\$2,803,451
Support of Capital Projects and Planning	\$4,479,051	\$1,988,621	\$1,783,029	\$1,783,029	\$1,783,029	\$1,783,029	\$1,783,029	\$13,599,788
Debt Service Payment ¹	\$20,620,692	\$9,549,820	\$11,441,845	\$14,167,565	\$16,273,849	\$17,574,279	\$17,441,551	\$89,628,051
Tree Montgomery	\$2,711,463	\$1,232,386	\$1,117,796	\$1,117,796	\$1,117,796	\$1,117,796	\$1,117,796	\$8,415,033
Street Tree	\$1,945,853	\$691,741	\$690,000	\$690,000	\$690,000	\$690,000	\$690,000	\$5,397,594
DEP Clean Water Montgomery Grants	\$863,607	\$511,038	\$295,000	\$295,000	\$295,000	\$295,000	\$295,000	\$2,554,645
SWM BMP Inspection and Maintenance**	\$29,791,097	\$13,453,769	\$11,206,111	\$11,206,111	\$11,206,111	\$11,206,111	\$11,206,111	\$88,069,310
Stream Inspection and Maintenance~	\$81,657	\$57,064	\$191,000	\$191,000	\$191,000	\$191,000	\$191,000	\$902,721
RainScapes	\$3,293,713	\$1,324,636	\$1,275,288	\$1,275,288	\$1,275,288	\$1,275,288	\$1,275,288	\$9,719,501
Capital Expenditures (costs)³								
Stormwater Management Waiver Fee (Paygo)	\$200,000	\$200,000	\$380,000	\$380,000	\$400,000	\$400,000	\$400,000	\$1,960,000
WPR Fund [WQPC] (Paygo)	\$13,902,486	\$2,163,961	\$2,664,000	\$2,717,000	\$2,597,000	\$2,794,000	\$2,795,000	\$26,838,447
Intergovernmental (Paygo)	\$156,005	\$0	\$0	\$0	\$0	\$0	\$0	\$156,005
State Grants	\$3,594,082	\$0	\$2,130,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$11,724,082
WQPC Revenue Bonds	\$5,141,383	\$0	\$4,593,000	\$5,725,000	\$4,360,000	\$5,320,000	\$5,830,000	\$25,139,383
State SRF Loans	\$20,988,253	\$5,070,995	\$11,681,000	\$5,984,000	\$19,594,000	\$8,864,000	\$6,000,000	\$72,182,248
Subtotal operation and paygo:	\$79,744,115	\$31,950,875	\$31,804,480	\$34,583,200	\$36,589,484	\$38,086,914	\$37,955,186	\$252,759,068
Total expenditures:	\$109,467,833	\$37,021,870	\$50,208,480	\$48,292,200	\$62,543,484	\$54,270,914	\$51,785,186	\$361,804,782

Total ISRP costs except debt service: **\$272,176,731**

Compare ISRP costs (except debt service) / total ISRP proposed actions for permit term: **167%**

Total capital expenditures: **\$138,000,165**

Compare total capital expenditures / total ISRP proposed actions capital costs for permit term: **102%**

Check with MDE Geodatabase:

The total current FY 2022 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 2023 expenditure should be less than the combined total of the "OP_budget" and "CAP_budget" fields in the fiscal analyses table of the geodatabase.

Notes:

1. Debt service payments include debt service used to support capital projects from current and previous permit.
2. Insert additional rows as necessary.
3. Capital costs shown in FY 2021 include costs in FY 2021 and previous years, spent on capital projects attributed to the current permit. Total permit cycle includes the previous year.
4. Total permit cycle includes FY 2021 (costs associated with capital projects attributed to the current permit) to FY 2026

** BMP Maintenance

~ Stream Maintenance

NOTE: The County met the restoration requirement for the 2010 Permit by December 2018. Restoration work began on 2021 Permit in January 2019.

Version 6-22-22

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	FY19 UP THRU FY 21	CURRENT YEAR FY 22	PROJECTED YEAR 1 FY 23	PROJECTED YEAR 2 FY 24	PROJECTED YEAR 3 FY 25	PROJECTED YEAR 4 FY 26	PROJECTED YEAR 5 FY 27	TOTAL NEXT 2-YEARS FY 23-24 ¹	TOTAL
Annual Revenue ² Appropriated for ISRP	\$109,467,833	\$37,021,870	\$50,208,480	\$48,292,200	\$62,543,484	\$54,270,914	\$51,785,186	\$98,500,680	\$413,589,968
Annual Costs towards ISRP ³	\$109,467,833	\$37,021,870	\$50,208,480	\$48,292,200	\$62,543,484	\$54,270,914	\$51,785,186	\$98,500,680	\$413,589,968

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

Note

- 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 22.
- 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 FY23 at the time of FAP reporting.
- See table of ISRP Cost.

NOTE: The County met the restoration requirement for the 2010 Permit by December 2018. Restoration work began on 2021 Permit in January 2019.

Version 6-22-22

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	FY19 UP THRU ¹ FY 21	CURRENT YEAR FY 22	PROJECTED YEAR 1 FY 23	PROJECTED YEAR 2 FY 24	PROJECTED YEAR 3 FY 25	PROJECTED YEAR 4 FY 26	PROJECTED YEAR 5 FY 27	TOTAL PERMIT CYCLE
Paygo Sources								
Stormwater Remediation Fees (WPR Fund) [WQPC]	\$ 116,472,949	\$ 42,569,355	\$ 43,206,880	\$ 43,939,200	\$ 45,770,000	\$ 45,770,000	\$ 45,770,000	\$ 337,728,384
Miscellaneous	\$ 242,277	\$ 138,862	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 381,139
General Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Investment Income	\$ 1,615,956	\$ 58,383	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 3,674,339
BMP Monitoring Fee	\$ 460,367	\$ 533,864	\$ 97,500	\$ 97,500	\$ 97,500	\$ 97,500	\$ 97,500	\$ 1,384,231
Bag Tax Revenue	\$ 7,939,803	\$ 2,993,028	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 2,500,000	\$ 20,932,831
Tree Canopy Fees	\$ 1,937,000	\$ 807,250	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 750,000	\$ 5,744,250
Stormwater Waiver Fee	\$ 519,935	\$ 200,000	\$ 380,000	\$ 380,000	\$ 400,000	\$ 400,000	\$ 400,000	\$ 2,279,935
Subtotal Paygo Sources	\$ 129,188,286	\$ 47,300,743	\$ 47,434,380	\$ 48,166,700	\$ 50,017,500	\$ 50,017,500	\$ 50,017,500	\$ 372,125,109
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 2021).								
County Transportation Bonds								\$ -
General Obligation Bonds								\$ -
Revenue (WQPC) Bonds	\$ 5,977,182	\$ 2,369,220	\$ 7,502,000	\$ 11,295,000	\$ 8,060,000	\$ 9,020,000	\$ 9,530,000	\$ 44,223,402
State Revolving Loan Fund	\$ 27,313,222	\$ 5,070,995	\$ 11,681,000	\$ 5,984,000	\$ 19,594,000	\$ 8,864,000	\$ 6,000,000	\$ 78,507,217
Public-private partnership (debt service)								\$ -
Subtotal Debt Service	\$ 33,290,404	\$ 7,440,215	\$ 19,183,000	\$ 17,279,000	\$ 27,654,000	\$ 17,884,000	\$ 15,530,000	\$ 122,730,619
Grants and Partnerships (no payment is expected)								
State funded grants	\$ 3,594,082		\$ 2,130,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 11,724,082
Federal funded grants								\$ -
Public-private partnership (matched grant)								\$ -
Subtotal Grants and Partnerships	\$ 3,594,082	\$ -	\$ 2,130,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 11,724,082
Total Annual Sources of Funds	\$ 166,072,772	\$ 54,740,958	\$ 68,747,380	\$ 67,445,700	\$ 79,671,500	\$ 69,901,500	\$ 67,547,500	\$ 506,579,810
Percent of Funds Directed Toward ISRP								

Compare total permit term paygo ISRP costs / subtotal permit term paygo sources: **68%**
 Compare total ISRP expenditures / total permit term annual sources of funds: **71%**

* WPR Fund: Watershed Protection and Restoration Fund.

Check with MDE Geodatabase:

The total sources related to WPR Funds in Current FY 22 should march the "WPR_Fund" field of the geodatabase.

Note

1. Previous accumulated revenue should be specifically designated for use for this current permit.

NOTE: The County met the restoration requirement for the 2010 Permit by December 2018. Restoration work began on 2021 Permit in January 2019.

Version 6-22-22

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

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMENTATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
Obligations from Previous Permit That Must Be Continued or Met				0.00					
Operational Programs^{2,3}									
NOT APPLICABLE									
Subtotal Operations ⁴			0	0	#DIV/0!	\$0			
Capital Projects (Completed to Replace Annual Obligations)^{2,3}									
NOT APPLICABLE									
Subtotal Capital			0	0	#DIV/0!	\$0			
Other (Completed to Replace Annual Obligations)^{2,3}									
NOT APPLICABLE									
Subtotal Other			0	0	#DIV/0!	\$0			
Total Continued Obligations from Previous Permit			0	0	#DIV/0!	\$0			

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMENTATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
Restoration for the New Permit				1814.00					
Operational Programs^{3,5}									
Street Sweeping	VSS	A	1	0.00	3%	\$260,393	2019	COMPLETE	EIA credited for FY22*
Street Sweeping	VSS	A	1	0.00	2%	\$229,220	2020	COMPLETE	EIA credited for FY22*
Street Sweeping	VSS	A	1	0.00	2%	\$224,131	2021	COMPLETE	EIA credited for FY22*
Street Sweeping	VSS	A	1	36.07	2%	\$247,884	2022	COMPLETE	EIA Average for FY19-FY22*
Storm Drain Cleaning	SDV	A	1	3.90	0.2%	\$226,251	2022	COMPLETE	
Subtotal Operations ⁴			5	40.0	2%	\$1,187,879			
Capital Projects^{3,5}									
10205 Hatherleigh Drive	OUT	A	1	1.10	0.06%	\$43,724	2019	Complete	
10617 Stable Lane	OUT	A	1	2.60	0.14%	\$185,771	2019	Complete	
614 Bennington Drive	OUT	A	1	1.40	0.08%	\$79,427	2019	Complete	
9100 Charred Oak Drive (Site 2)	OUT	A	1	2.00	0.11%	\$181,092	2018	Complete	
9124 Charred Oak Drive (Site 1)	OUT	A	1	2.94	0.16%	\$143,193	2018	Complete	
928 Windmill Lane	OUT	A	1	0.38	0.02%	\$100,358	2019	Complete	
Avenel Golf Course (TPC at Avenel)	PWED	S	1	86.10	4.75%	\$5,881,826	2018	Complete	
Bedfordshire pond	PWED	S	1	25.44	1.40%	\$3,104,397	2018	Complete	
Berkshire Drive @ Aubinoe Farm Drive	OUT	A	1	0.80	0.04%	\$53,076	2019	Complete	
B'Nai Israel Regional Pond	PWET	S	1	88.90	4.90%	\$6,599,831	2020	Complete	
Broad Run Stream Restoration	STRE	A	1	217.00	11.96%	\$5,546,517	2020	Complete	
Fallsreach Stream Restoration	STRE	A	1	20.00	1.10%	\$1,075,180	2019	Complete	
Fallsreach Stormwater Pond Upgrades	PWED	S	1	25.44	1.40%	\$1,534,144	2020	Complete	
Flints Grove pond	PWED	S	1	31.73	1.75%	\$1,564,712	2020	Complete	
Flints Grove Stream Restoration	STRE	A	1	24.00	1.32%	\$1,053,105	2019	Complete	
Glen Road	OUT	A	1	4.00	0.22%	\$267,432	2020	Complete	
Glenstone Stream Restoration - Greenbriar Branch (Phase 2)	STRE	A	1	157.30	8.67%	\$1,987,406	2019	Complete	
Glenstone Stream Restoration - Sandy Branch (Phase 3)	STRE	A	1	82.38	4.54%	\$1,242,333	2020	Complete	
Greencastle Lakes (Ballinger Drive)	PWET	S	1	33.88	1.87%	\$1,474,969	2019	Complete	
Grosvenor Tributary - Luxmanor Stream Restoration	STRE	A	1	12.85	0.71%	\$517,070	2021	Complete	
Hampden Street	OUT	A	1	4.00	0.22%	\$256,802	2020	Complete	
Hunters Woods III	PWED	S	1	11.39	0.63%	\$1,889,120	2019	Complete	
Kemp Mill	WSHW	S	1	12.14	0.67%	\$1,015,910	2019	Complete	
Kemp Mill Road	OUT	A	1	2.00	0.11%	\$30,859	2018	Complete	
Little Falls Library	BBIO	E	1	0.78	0.04%	\$482,676	2018	Complete	
Lockridge Drive	OUT	A	1	2.68	0.15%	\$120,552	2019	Complete	
Margate Road	OUT	A	1	2.72	0.15%	\$167,603	2020	Complete	
Montgomery Village/Horizon Run	PWED	S	1	10.97	0.60%	\$2,832,560	2018	Complete	
Northwood Presbyterian Church Stormwater Retrofits	MMBR	E	1	0.56	0.03%	\$309,064	2018	Complete	
Potomac Chase	PWED	S	1	36.65	2.02%	\$1,149,256	2018	Complete	
Quail Valley 2	FSND	S	1	6.29	0.35%	\$778,069	2018	Complete	
Quail Valley 2 Stream Restoration	STRE	A	1	3.60	0.20%	\$438,132	2018	Complete	
RC-74 Basin 1 (east) Derwood Station Crabbs Branch	PWED	S	1	5.26	0.29%	\$0	2018	Complete	
RC-74 Basin 2 (west) Derwood Station Crabbs Branch	PWED	S	1	4.98	0.27%	\$0	2018	Complete	
Sherwood Elementary School	MMBR	E	1	0.02	0.00%	\$200,448	2018	Complete	

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN-TATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
Sherwood Elementary School	MSWB	E	1	0.03	0.00%	\$119,087	2018	Complete	
The Plantations (Plantations Two CA)	PWED	S	1	33.77	1.86%	\$1,660,233	2018	Complete	
University Towers Stormwater Retrofits	APRP	E	3	1.29	0.07%	\$711,950	2018	Complete	
University Towers Stormwater Retrofits	MMBR	E	9	2.86	0.16%	\$1,580,640	2018	Complete	
Watkins Meadow	PWED	S	1	18.55	1.02%	\$1,609,053	2020	Complete	
Whisperwood Lane	OUT	A	1	2.84	0.16%	\$163,954	2021	Complete	
Woodbine Drive at Beach Drive	OUT	A	1	3.60	0.20%	\$155,670	2019	Complete	
Subtotal Capital			52	987.22	54%	\$48,307,205			
Other^{3,5}									
DOT Street Trees, multiple locations	STCI	A	1948	5.45	0.301%	\$649,388	2019	Complete	
DOT Street Trees, multiple locations	STCI	A	1823	5.10	0.281%	\$686,848	2020	Complete	
DOT Street Trees, multiple locations	STCI	A	1709	4.79	0.264%	\$609,618	2021	Complete	
DOT Street Trees, multiple locations	STCI	A	1668	4.67	0.257%	\$691,741	2022	Complete	
Tree Montgomery, multiple locations	UTC	A	524	1.28	0.071%	\$638,358	2019	Complete	
Tree Montgomery, multiple locations	UTC	A	1161	3.17	0.175%	\$846,180	2020	Complete	
Tree Montgomery, multiple locations	UTC	A	1785	4.92	0.271%	\$1,226,925	2021	Complete	
Tree Montgomery, multiple locations	UTC	A	1651	4.62	0.255%	\$1,232,386	2022	Complete	
RainScapes, multiple locations	AGRE	E	1	0.04	0.002%	\$6,160	2019	Complete	
RainScapes, multiple locations	AGRE	E	1	0.00	0.000%	\$6,690	2022	Complete	
RainScapes, multiple locations	APRP	E	21	0.31	0.017%	\$129,369	2019	Complete	
RainScapes, multiple locations	APRP	E	14	0.05	0.003%	\$110,944	2020	Complete	
RainScapes, multiple locations	APRP	E	43	0.60	0.033%	\$170,916	2021	Complete	
RainScapes, multiple locations	APRP	E	35	0.63	0.035%	\$234,153	2022	Complete	
RainScapes, multiple locations	APRP	E	7	0.08	0.004%	\$43,123	2019	Complete	
RainScapes, multiple locations	IMPP	A	7	0.07	0.004%	\$55,472	2020	Complete	
RainScapes, multiple locations	IMPP	A	8	0.18	0.010%	\$31,798	2021	Complete	
RainScapes, multiple locations	IMPP	A	5	0.04	0.002%	\$33,450	2022	Complete	
RainScapes, multiple locations	IMPP	A	85	0.16	0.009%	\$523,636	2019	Complete	
RainScapes, multiple locations	MRNG	E	108	0.05	0.003%	\$855,850	2020	Complete	
RainScapes, multiple locations	MRNG	E	200	0.22	0.012%	\$794,958	2021	Complete	
RainScapes, multiple locations	MRNG	E	124	0.62	0.034%	\$829,570	2022	Complete	
RainScapes, multiple locations	MRNG	E	18	0.50	0.028%	\$110,888	2019	Complete	
RainScapes, multiple locations	MRNG	E	19	0.07	0.004%	\$150,566	2020	Complete	
RainScapes, multiple locations	MRWH	E	78	0.39	0.021%	\$310,034	2021	Complete	
RainScapes, multiple locations	MRWH	E	33	0.30	0.016%	\$220,773	2022	Complete	

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMENTATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
Watershed grants	APRP	E	1	0.07	0.004%	\$58,275	2019	Complete	
Watershed grants	APRP	E	1	0.16	0.009%	\$54,000	2020	Complete	
Watershed grants	APRP	E	2	0.22	0.012%	\$136,250	2021	Complete	
Watershed grants	MIDW	E	1	0.003	0.000%	\$30,000	2019	Complete	
Watershed grants	MIDW	E	1	0.03	0.002%	\$20,000	2020	Complete	
Watershed grants	MRNG	E	7	0.51	0.028%	\$216,067	2019	Complete	
Watershed grants	MRNG	E	6	0.34	0.018%	\$296,980	2020	Complete	
Watershed grants	MRNG	E	5	0.02	0.001%	\$430,000	2022	Complete	
Watershed grants	MRWH	E	3	0.03	0.002%	\$270,000	2022	Complete	
Watershed grants	MSWG	E	2	0.000	0.000%	\$84,000	2019	Complete	
Subtotal Other			13,105	40	2%	\$12,795,365			
Total Additional Restoration			13,162	1,067	59%	\$62,290,449			

Check with MDE Geodatabase:

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

Notes:

1. Use BMP domains from MDE Geodatabase.
2. % ISR Complete compared to continued annual alternative ISR.
3. Insert additional rows as necessary.
4. Impervious Acres are the average for the time period, Implementation Costs are totaled.
5. % ISR Complete compared to ISR new permit.

Version 6-22-22

*Because street sweeping is an annual practice and credit is calculated as a running 5 year average, the IA credit is only shown for FY22. The IA credit for FY19-FY21 has been averaged into FY22.

Code Description	Code	Class
Ponds		
Micro-Pool Extended Detention Pond	PMED	S
Multiple Pond	PMPS	S
Pocket Pond	PPKT	S
Wet Extended Detention Pond	PWED	S
Wet Pond	PWET	S
Wetlands		
ED Shallow Wetland	WEDW	S
Pocket Wetland	WPKT	S
Pond Wetland System	WPWS	S
Shallow Marsh	WSHW	S
Infiltration		
Infiltration Basin	IBAS	S
Infiltration Trench	ITRN	S
Landscape Infiltration	MILS	E
Infiltration Berm	MIBR	E
Dry Well	MIDW	E
Filtering Systems		
Surface Sand Filter	FSND	S
Underground Filter	FUND	S
Perimeter Filter	FPER	S
Organic Filter	FORG	S
Pocket Filter	FPKT	S
Bioretention	FBIO	S
Submerged Gravel Wetland	MSGW	E
Micro-Bioretention	MMBR	E
Rain Garden	MRNG	E
Enhanced Filter	MENF	E
Open Channel Systems		
Dry Swale	ODSW	S
Wet Swale	OWSW	S
Bio-Swale	MSWB	E
Grass Swale	MSWG	E
Wet Swale	MSWW	E
Alternative Surfaces		
Green Roof - Extensive	AGRE	E
Green Roof - Intensive	AGRI	E
Permeable Pavement	APRP	E
Reinforced Turf	ARTF	E
Nonstructural Techniques		
Non-Rooftop Disconnect	NDNR	E
Rooftop Disconnect	NDRR	E
Sheetflow to Conservation Area	NSCA	E
Other Systems		
Rainwater Harvesting	MRWH	E

Other Practices		
Extended Detention Structure, Dry	XDED	S
Detention Structure (Dry Pond)	XDPD	S
Flood Management Area	XFLD	S
Oil Grit separator	XOGS	S
Other	OTH	
Alternative BMP		
Mechanical Street Sweeping	MSS	A
Regenerative/Vacuum Street Sweeping (i.e., Advanced Street	VSS	A
Catch Basin Cleaning	CBC	A
Storm Drain Vacuuming (i.e., Storm Drain Cleaning)	SDV	A
Stream Restoration	STRE	A
Outfall Stabilization	OUT	A
Shoreline Management	SHST	A
Septic Connections to WWTP	SEPC	A
Septic Denitrification	SEPD	A
Septic Pumping	SEPP	A
Elimination of Discovered Nutrient Discharges from Grey Infrastructure	DGI	A
Floating Treatment Wetlands	XFTW	A
Impervious Surface Reduction (i.e., impervious to pervious)	IMPP	A
Impervious Surface to Forest (i.e., IMPP + FPU)	IMPF	A
Forestation on Pervious Urban (i.e., Forest Planting)	FPU	A
Conservation Landscaping	CLTM	A
Forest Conservation	FCO	A
Riparian Conservation Landscaping	RCL	A
Riparian Forest Planting	RFP	A
Street Trees	STCI	A
Urban Soil Restoration (Compacted Pervious Surfaces)	USRP	A
Urban Soil Restoration (Removed Impervious Surfaces)	USRI	A
Urban Tree Canopy (i.e., Pervious Turf to Tree Canopy over Turf)	UTC	A
Dry Channel Regenerative Step Pool Stormwater Conveyance System	SPSD	A

CERTIFICATION

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

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

NOW, THEREFORE, I certify that:

1. A public hearing was held on the financial assurance plan on [insert month and date], 2023;
2. The local governing body approves the aforementioned financial assurance plan; and
3. Under penalty of law, the information in this financial assurance plan is, to the best of my knowledge and belief, true, accurate, and complete.

Signature of County Executive

Date

Marc Elrich

Printed Name of County Executive

FY22 Financial Assurance Plan

Presentation to Council T&E Committee

March 6, 2023



Craig Carlson NBCCmd.org



DEPARTMENT OF
**ENVIRONMENTAL
PROTECTION** (25)
MONTGOMERY COUNTY • MARYLAND



MISSION STATEMENT

The Department of Environmental Protection (DEP) works to enhance the quality of life in our community by protecting and improving Montgomery County's air, water and land in a sustainable way while fostering smart growth, a thriving economy and healthy communities.

Today's Agenda

- What is National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit?
- What is the Financial Assurance Plan (FAP)?
- Briefly describe the 5 FAP tables

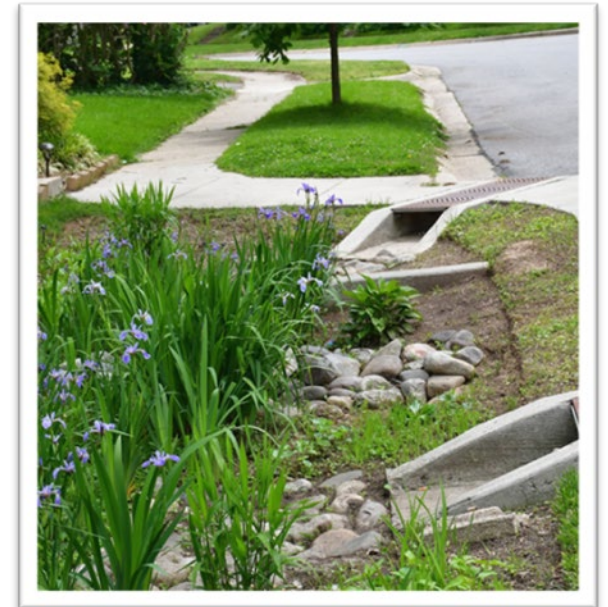


What is NPDES MS4 Permit?

- NPDES = National Pollutant Discharge Elimination System
- MS4 = Municipal Separate Storm Sewer System
- MS4 is a system of conveyances (aka storm drains) owned by the County that discharge to waters of the US.
- Permit issued to the County from State of MD – MD Dept of Environment (MDE) – to prevent pollutants from being washed/conveyed into the MS4.
- Current MS4 Permit Effective November 5, 2021 to November 4, 2026

MS4 Permit –Water Quality Objectives

- Prohibit pollutants in stormwater discharges or other unauthorized discharges into, through, or from the MS4
- Increase the treatment of untreated impervious surfaces
- Attain applicable stormwater pollutant reductions for each Total Maximum Daily Load (Sediment, Nutrients, Bacteria, Trash, PCBs)
- Comply with all other provisions and requirements



MS4 Permit Elements and Lead Agencies

- Stormwater Management (DEP & DPS)
- Erosion and Sediment Control Program (DPS)
- Illicit Discharge Detection and Elimination (DEP)
- Property Management and Maintenance (DEP, DOT, DGS, MCPS)
- Public education (DEP, DPS, DOT)
- Stormwater Restoration (DEP, DOT)
- Countywide Total Maximum Daily Load Stormwater Implementation Plan (DEP)
- Assessment of Controls (Monitoring, DEP)
- Program Funding (DEP, DOT, DGS, DPs, MCPS)

What is Financial Assurance Plan (FAP)?

- Required by Maryland Environment Article, Watershed Protection and Restoration Programs, Section 4-202.1
- All Maryland Phase I NPDES MS4 Permit jurisdictions must submit a FAP
- FAP demonstrates that the County has adequate funding to meet the MS4 permit requirement for impervious surfaces restoration.
- Submitted every 2 years
- FY22 is Montgomery County's 4th FAP

What is Financial Assurance Plan (FAP)?

- Template Spreadsheet, developed by MDE, with required formulas
- FAP must be approved by County Council
- FAP must be certified by CE or CAO
- Final FAP will be posted on MC and MDE website

- Required Impervious Surface Restoration goal for this permit is 1,814 IA
- FAP includes actual costs/funding for FY19-FY22, approved/appropriated costs/funding for FY23 to FY27
- Tables 1 and 5 provide information on the impervious acre credit and percent, costs, implementation status, and implementation FY.
- Tables 2, 3, and 4 – provide expenditures, revenue, and funding for operation and capital budgets

Table 1– All Actions–Article 4 202.1(j)(1)(i)1

- Future work - all operational, Capital, other actions planned from FY23-FY26 to meet the 1,814 IA goal
- Estimated costs, using approved appropriation for FY23, and projection for FY24-26
- Costs for work being done by DEP and DOT, includes operating and capital costs
- Operational = Street Sweeping (DEP) and Storm drain vacuuming/Inlet Cleaning (DOT)
- Capital = stormwater pond retrofit, green infrastructure, stream restoration, outfall stabilization, major structural repair, planning
- Other = Tree Montgomery, Street Tree Planting, RainScapes, Watershed Grants

Why are there blank cells on Tables 1 and 5 ?

REST BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Obligations from Previous Permit That Must Be Continued or Met						
Operational Programs^{2,3}						
NOT APPLICABLE		0	#DIV/0!			
Operations Next Two Years (FY23-24) ⁴		0	#DIV/0!	\$0		
Operations Next Five Years (FY23-27) ⁴		0	#DIV/0!	\$0		
Operations Permit Term (FY22-26) ⁴		0	#DIV/0!	\$0		
Capital Projects (Completed to Replace Annual Obligations)^{2,3}						
NOT APPLICABLE			#DIV/0!			
Subtotal Capital Next Two Years		0	#DIV/0!	\$0		
Subtotal Capital Next Five Years (FY23-27)		0	#DIV/0!	\$0		
Subtotal Capital Permit Term (FY22-26)		0	#DIV/0!	\$0		
Other (Completed to Replace Annual Obligations)^{2,3}						
NOT APPLICABLE			#DIV/0!			

Table 1 All Actions - Article 4 202.1(j)(1)(i)1

Estimated Impervious Acres, Percentage, and Implementation Costs for FY23-26

Program	Impervious Acres	% ISR Goal	Implementation Costs
Operational	40	2%	\$1,991,164
Capital	767	42%	\$85,037,373
Other	68	4%	\$12,332,336
Total	876	48%	\$99,360,873

Estimated Impervious Acres, Percentage, and Implementation Costs for Permit Term

Program	Impervious Acres	% ISR Goal	Implementation Costs
Operational	48	3%	\$3,179,043
Capital	1,755	97%	\$134,686,578
Other	108	6%	\$25,127,701
Total	1,911	105%	\$162,993,321

Table 2 Costs - Article 4-202.1(j)(1)(i)2

- Operational costs for restoration work
 - Street Sweeping (DEP)
 - Inlet Cleaning (DOT)
 - Tree Montgomery (DEP)
 - Street Tree (DOT)
 - Clean Water Montgomery Grants (DEP)
 - SWM BMP & Stream Inspection and Maintenance (DEP)
 - RainScapes (DEP)
- Capital restoration work costs includes paygo (cash) and grant, bond, loan funded work
- Totals in table are for the permit cycle (FY19-26)
- Table includes debt service payments, which is not included in the total

	FY19 up thru FY21	Current Year FY22	Projected Year 1 FY23	Projected Year 2 FY24	Projected Year 3 FY25	Projected Year 4 FY26	Projected Year 5 FY27	Total Permit Cycle (FY19-26)
Total Expend	\$109,467,833	\$37,021,870	\$50,208,480	\$48,292,200	\$62,543,484	\$54,270,914	\$51,785,186	\$361,804,782 (36)

Table 3 Revenue - Article 4-202.1(j)(1)(i)3

- Revenues or other funds that will be used to meet the cost for the county to meet the impervious surface restoration plan requirements under the NPDES Phase I MS4.
- Shows that the County has 100% of the revenue appropriated to meet the current MS4 permit
- Actual and appropriated revenue rows are same as the total expenditures from Table 2
- Total is for FY19-FY27

	FY19 up thru FY21	Current Year FY22	Projected Year 1 FY23	Projected Year 2 FY24	Projected Year 3 FY25	Projected Year 4 FY26	Projected Year 5 FY27	Total (FY19-27)
Annual Revenue / Costs	\$109,467,833	\$37,021,870	\$50,208,480	\$48,292,200	\$62,543,484	\$54,270,914	\$51,785,186	\$413,589,968

Table 4 Fund Sources - Article 4-202.1(j)(1)(i)4

- Paygo fund sources
 - WQPC
 - BMP Monitoring Fee
 - Bag Tax Revenue
 - Tree Canopy Fees
 - Stormwater Waiver fees
 - Investment Income

Capital debt funded sources

- WQPC Bonds
- State Revolving Loan Fund

Grants

- State grants
- Federal grants

	FY19 up thru FY21	Current Year FY22	Projected Year 1 FY23	Projected Year 2 FY24	Projected Year 3 FY25	Projected Year 4 FY26	Projected Year 5 FY27	Total Permit Cycle (FY19-26)
Total Annual Source of Funds	\$166,072,772	\$54,740,958	\$68,747,380	\$67,445,700	\$79,671,500	\$69,901,500	\$67,547,500	\$506,579,810

Table 5 Completed Actions Article 4-202.1(j)(1)(i)5

- Completed actions and expenditures that the county implemented in the FY19-22 to meet its impervious surface restoration plan requirements under its NPDES Phase I MS4 Permit.
- All operational, capital, other actions completed from FY19-FY22 to meet the 1,814 IA goal
- Includes six capital projects that were completed in 2018 that carried over from 2010 Permit
- Actual costs for work done by DEP and DOT, includes operating and capital costs
- Operational = Street Sweeping (DEP) and Storm drain vacuuming/Inlet Cleaning (DOT)
- Capital = stormwater pond retrofit, green infrastructure, stream restoration, outfall stabilization, major structural repair, planning
- Other = Tree Montgomery, Street Tree Planting, RainScapes, Watershed Grants

Table 5 Completed Actions

Completed Impervious Acres, Percentage, and Implementation Costs for FY19-FY22

Program	Impervious Acres	% ISR Goal	Implementation Costs
Operational	40	2%	\$1,187,879
Capital (52 BMPs)	987	54%	\$48,307,205
Other (13,105 BMPs/Trees)	40	2%	\$12,795,365
Total	1,067	59%	\$62,290,449

Questions?

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Section Chief, Planning, Outreach, Monitoring

Watershed Restoration Division

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