CERTIFICATION

WHEREAS, the provisions of § 4-202.1 of the Environment Article of the Annotated Code of Maryland require Baltimore City 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 City'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 December 8, 2022;
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/Municipal Mayor or Chief Financial Officer

12/13/22
Date

Brandon M. Scott
Printed Name of County Executive/Municipal Mayor or Chief Financial Officer

Mayor
Title

Baltimore City– Fiscal Year 2022
Financial Assurance Plan
as required under the
Watershed Protection and Restoration Program
December 2022

Executive Summary

The submission of Baltimore City's Financial Assurance Plan (FAP) to the Maryland Department of the Environment (MDE) fulfills requirements specified in the Maryland Article – Environment, Section 4-202.1. This plan is being filed with MDE in order to document all actions implemented by Baltimore City to comply with its National Pollutant Discharge Elimination System (NPDES) municipal separate storm sewer system (MS4) permit and demonstrate the City's ability to pay for these activities through the Watershed Protection and Restoration Fund.

An MS4 permit was issued to Baltimore City on November 5, 2021, replacing the previous MS4 permit that had been administratively extended since December 27, 2018. Annual reports for Fiscal Years (FY) 2014 through 2021 have been submitted to MDE by the City and are available on the City's website https://publicworks.baltimorecity.gov/regulatory-mandates-plans-and-reports. The FY 2022 Annual Report will be submitted to MDE by December 31, 2022, and will include the Watershed Protection and Restoration Program (WPRP) report for FY 2022. These annual reports are based on the City's fiscal year (FY) and include updates on the City's MS4 programs and impervious surface area restoration. Baltimore City has continued implementing its MS4 program. This Executive Summary documents achievements used to meet the current permit, which occurs between FY 2022 and FY 2027.

In compliance with the Maryland Article Section 4-202.1, the following FAP includes all activities that have been completed in compliance with Baltimore City's current MS4 permit and five-year projections for the implementation of its stormwater program and best management practices (BMPs) necessary for meeting specific permit requirements. The following FAP documents implementation and financial data for operations since the beginning of the current permit (FY 2022) and for capital projects since the expiration of the previous permit (FY 2019).

A major tenet of the FAP is to demonstrate the financial wherewithal for meeting the current MS4 permit impervious surface area restoration requirements. In order to document this ability, Baltimore City is providing MS4 program implementation projections for FY 2023 through 2027, although the current permit technically expires on November 5, 2026. The sections in this Executive Summary follow the order of Baltimore City's MS4 permit found in Part IV, Standard Permit Conditions, and highlight the major achievements for each program element.

- **Part IV.C. Source Identification** – The City initiated the migration of the source identification data to the revised geodatabase schema, per MDE's "Draft Supplement User's Guide to the Database", dated November 2021, in addition to addressing comments from MDE regarding previously submitted records. The FY 2022 MS4 Annual Report included all planned restoration BMPs and all constructed BMPs, except for impervious area removal / land conversion and the stream restoration protocols. The City plans to complete those records in FY 2023. This effort was primarily completed by in-house resources within the Department of Public Works (DPW). Funding to comply with the permit condition is provided by the City's storming utility (also known as the Watershed Protection and Restoration fund or WPR fund).

- **Part IV.D.1 and 2. Stormwater Management and Erosion and Sediment Control**– By FY 2023, the City funded 21 full-time, dedicated positions within DPW Plans Review and Inspection Section to fulfill both the plan review and inspection obligations of these permit conditions. The City still allowed a 3rd party expeditor, upon request by the applicant, for plan reviews. On February 22, 2022, the City launched an on-line plan review system for programs under Article 7 (Natural Resources) of the City Code, allowing concurrent, transparent reviews for stormwater management; erosion and sediment control; critical area management; floodplain management; and forest conservation. Funding to comply with the permit condition is provided WPR, with revenues from the stormwater remediation fee (initiated in FY 2014) and miscellaneous fees related to plans reviews and penalty fines from enforcement.

- **Part IV.D.3. Illicit Discharge Detection and Elimination (IDDE)–** By FY 2023, the City funded 12 full-time, dedicated positions within DPW- Water Quality Monitoring and Investigations Section to fulfill this permit condition (and Part IV.F. Assessment of Controls). Currently, the City measures nitrogen-ammonia, chloride, and other field parameters at 130 locations (outfalls, streams, and manholes) on a weekly basis as part of the Ammonia Screening program. Additionally, the City tests surface waters for bacteria, metals, and nutrients at 25 locations on a monthly basis. All test data is posted quarterly on-line. Since 2015, the City found over 150 illicit discharges to the storm sewer system, a result of investments in technology (camera, IPad applications, new probes, etc.) om field investigations. Funding to comply with the permit condition is provided by the WPR fund, plus the City's water and wastewater utilities.

  IDDE activities resulting in the reduction of sanitary direct connections, sewage pipe exfiltration, drinking water transmission loss will be used towards meeting equivalent impervious surface restoration (ISR) requirements of the permit. Per the MS4 Accounting Guidance, an individual discharge credit cannot exceed10 years. The credit at the end of the permit is based on the final ISR amount at the end of the permit (FY 2027). The costs listed for IDDE in the "All Actions" table only reflect

detection efforts; abatement efforts (performed by the DPW Utility Maintenance Division or private property owners) were not included.

- **Part IV.D.4. Property Management and Maintenance** –
  - **Part IV.D.4.a NPDES Industrial Permits:** The City-owned facilities covered under Maryland's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity remained the same as originally identified in FY 2014; the City has no plans to build more public facilities requiring this regulatory permit. Compliance with the NPDES permits is the responsible of the agency managing the facility and is incorporated into their operational budget / staff. Funding is not specifically designated for compliance with the permit condition and is therefore not listed in the FAP.
  - **Part IV.D.4.b. Good Housekeeping Plan (GHP)** The City worked with MDE and other MS4 jurisdictions regarding the format and content requirements of a standard GHP for all City-owned properties not required to be covered under the Maryland's NPDES General Permit for Discharges of Stormwater Associated with Industrial Activity. The final format and content of the standard GHP are still pending; the GHPs will be submitted in the FY 2024 Annual Report. Development of the GHPs is planned to be completed by in-house staff. No additional staff is proposed to comply with this permit condition.
  - **Part IV.D.4.c.i, c.ii and e. Street Sweeping and Inlet Cleaning:** As of FY 2023, the City funded 36 full-time positions within DPW- Bureau of Solid Waste for street sweeping operations and 60 full-time positions within the DPW-Bureau of Water and Wastewater- Utility Maintenance Division to fulfill this permit condition. These operational programs are specifically required to continue at levels reported under the previous permit (as an alternative and at expanded levels proposed in this current permit to achieve the impervious surface restoration goals. The equivalent impervious surface restoration (ISR) and implementation costs for these operations are listed in the "All Actions" table of the FAP. The method for calculating the equivalent ISR for street sweeping to meet the previous permit was based on the former MS4 Accounting Guidance (2014); however, the calculations for street sweeping efforts to meet additional restoration requirements in the new permit are based on the current MS4 Accounting Guidance (2021). The street sweeping operations credited to the new permit include monthly street sweeping in the outer portions of the City plus anticipated operational efficiencies due to parking enforcement and new routing software implementation. Additional staffing for inlet cleaning proposed in FY 2025 will increase the productivity of this effort (i.e. allow more inlets to be cleaned), targeting areas prone to litter, flooded street complaints, and choked inlet service requests. Although these operations are listed as obligations from

the previous permit and restoration for the new permit, the total cost of the operations are only listed under Obligations section of the "All Actions" table of the FAP. Funding to comply with the permit condition is provided by the WPR fund.

In addition to nutrient and sediment reduction associated with ISR; these two routine operations are significant in the addressing the City's trash TMDL and reducing potential roadway flooding. Both of these operations were impacted (suspended or minimalized) due to COVID starting in Spring 2020, to allow residents to quarantine at home. Street sweeping operations did not fully resume until July 2022 (FY 2023).

- **Part IV.D.4.c.ii Pollutant reduction associated with vegetation management** Although many City agencies are responsible for ground maintenance; herbicide and pesticide applications are primarily performed the City's Department of Recreation and Parks (BCRP), who employed five (5) employees certified by Maryland Department of Agriculture as public agency applicators. BCRP Forestry Division plans to expand its capacity as part of its integrated vegetation management program via staff, contracted resources, volunteers (Treekeeper and Weed Warrior programs); however, the specific details have not been finalized so this effort is not included in the FAP. Funding for this effort is provided by the City's general fund and grants.

- **Part IV.D.6. Public Education** - In addition to website modifications and participations in various public outreach events, the City continued to host pop-up events and workshop under the GROW Center program. GROW Centers are an incentive program to connect property owners with resources (technical expertise, materials, and equipment) to promote the installation of green practices on their private property or vacant lots, while diverting re-usable materials from the solid waste disposal stream. The GROW Center program is managed by DPW, but several state and city agencies participate in the events. The City plans to expand the GROW Center program with dedicated staff and resources, in addition to creating a dedicated volunteer coordination program focused on litter reduction in FY 2023. The revenue listed in the FAP are related to the efforts by manage the GROW Center and expand the volunteer coordination program. Funding to comply with the permit condition is provided by the WPR fund.

- **Part IV. E. 1. Watershed Restoration**— By FY 2023, the City funded the operations of the DPW Watershed Planning and Partnership Section and the DPW Office of Engineering and Construction (OEC) to fulfill planning, design, and construction of capital projects to meet this permit condition. OEC staff also implement flood reduction and storm sewer rehabilitation capital projects, which are not applicable to meeting the MS4 permit. Between August 2019 and May 2020, the City submitted a Restoration Portfolio of capital projects and operational programs.

This portfolio was the basis of the current permit conditions for ISR from continuing operations (5,701 acres) and new efforts completed under the current permit (3,696 acres). The current permit's requirement for continuing operations exceeds the ISR requirement from the previous permit: 20% of the baseline impervious area (4,291 acres). The City's plan to meet the ISR requirement is listed in the "All Actions" table of the FAP. Funding to comply with the permit condition is provided by the WPR fund, plus grants and debt service mechanisms associated with the fund.

All ISR estimates (acreage) listed under "Restoration for the New Permit" are based the current MS4 Accounting Guidance (2021). BMPs installed after the expiration of the previous permit (December 2018) as redevelopment projects or volunteer restoration projects are listed in that table under category of "Other" and costs were listed as zero since funding obligations were not considered as the City's responsibility.

The capital projects include restoration projects completed after December 2018. The cost estimates for capital projects only include contracted costs for design and construction services, plus land acquisition, permit fees, and mitigation efforts. The costs listed in the FAP for ISR actions do not include maintenance. Annual escalation (2%) was assumed for operational costs.

The City is on track to meet the Annual Restoration Benchmark Schedule (Table 1 of the current permit), which will occur in the middle of FY 2027. The implementation schedule listed in the "All Actions" table included the following modifications from the 2020 Restoration Portfolio:

- Increased implementation costs projects currently in design based on updated engineer's estimates and the impacts on supply chains in the last 3 years due to COVID.
- Delays in stream restoration projects to modify design and maintenance plans with respect to forest impacts.
- Reduced street sweeping operations due to COVID, impacting both continuing operations and new restoration. The City resumed operations in July 2022 and does not plan to replace the annual operations with any capital projects.
- Replacement of district level rainwater harvesting projects with urban soil restoration projects and a shoreline management project, plus increased tree planting and ESD projects. The shoreline project will be in the Middle Branch, implemented by the South Baltimore Gateway Partnership, who used funding from the WPR fund as match for grant funding.

- **Part IV.F. City-wide TMDL Compliance** –
  - **Nutrients and Sediment**: Nutrient and sediment TMDL compliance is aligned with the watershed restoration conditions of the permit. Starting with the FY 2022 MS4 Annual Report, the City will be reporting compliance with

both Chesapeake Bay TMDL goals and regional TMDL goals using MDE's TMDL Implementation Progress and Planning (TIPP) Tool.

- **Trash**: The Trash TMDL implementation plan was submitted in FY 2016, efforts for compliance will primarily be addressed with street sweeping, inlet cleaning, enforcement activities, public education / engagement campaigns, and private collection efforts like the four trash wheels managed by the Waterfront Partnership. In FY 2021, the City launched the distribution of large recycling bins with lids to all single-family residential properties. This coincided with a reduced recycling collection frequency (bi-weekly) to address staffing shortages due to COVID impacts. DPW plans to increase volunteer coordination and public education efforts to reduce litter, starting in FY 2023. Only the efforts for street sweeping, inlet cleaning, and public education were included in the FAP; funding for these specific efforts are provided by WPR fund.

- **Bacteria:** The City's implementation plan for addressing the bacteria TMDL primarily relies on the City' efforts to comply with the Modified Consent Decree (MCD) for sanitary sewer overflows (Civil Action JFM-02-1524) by 2031. Although none of the City's waterways meet the state's criteria for recreation, the City's stream impact sampling program shows decreasing trends in bacteria concentrations over the last 15 years. Furthermore, quarterly reports for the MCD show a decrease in both the number and volumes associated with wet weather SSOs. Only the costs and funding associated with the IDDE program are included in the FAP. Costs associated directly with capital projects and operation programs for the MCD were not included in the FAP, since they are already reported to MDE as part of the quarterly MCD reports, which are posted on-line.

- **PCB**: In November 2022, the City submitted its plan to address the PCB TMDL, following MDE's "Guidance for Developing Local PCB TMDL (Total Maximum Daily Load) Stormwater Wasteload Allocation (SW-WLA) Watershed Implementation Plans (WIPs)", issued in August 2022. The City had already partnered with USGS on a study in the Back River watershed; the results were published in June 2022 as "USGS Scientific Investigations Report (SIR) 2022–5012: Refining Sources of Polychlorinated Biphenyls in the Back River Watershed, Baltimore, Maryland, 2018–2020". In addition to the proposed efforts of backtracking PCB sources, the City has partnered again with USGS to conduct a 2-year follow-up study in the Back River watershed to assess potential relationships between PCB concentrations and sediment sources. The efforts associated with these studies and field investigations are only shown in the Fund Sources table of the FAP, since these efforts are not directly associated with ISR activities.

- **Part IV.G. Assessment of Controls** – The efforts associated with these studies and field investigations are only shown in the Fund Sources table of the FAP, since these efforts are not directly associated with ISR activities.

    - **Part IV.G.1 BMP Effectiveness Monitoring:** The City will be meeting this permit condition by providing $100,000 / year to the Chesapeake Bay Trust's Pooled Monitoring Program. Funding to comply with the permit condition is provided by the WPR fund.

    - **Part IV.G.2 Watershed Assessment Monitoring:** The City will submit a comprehensive plan for watershed assessment and trend monitoring in March 2023, following MDE's 2021 Monitoring Guideline. The plan will include minor modifications to the current stream impact sampling program and annual biological assessments conducted by DPW-Water Quality Monitoring and Investigations Section, with no proposed staffing requirements. Chloride assessments (continuous monitoring) will be implemented as part of the City's Flood ALERT system upgrade. Funding to comply with the permit condition is provided by the stormwater remediation fee.

    - **Part IV.G.2 PCB Source Tracking:** This effort will include both field investigations conducted by DPW-Water Quality Monitoring and Investigations Section and a partnered study with USGS, previously described under the City-wide TMDL compliance. Funding to comply with the permit condition is provided by the stormwater remediation fee.

- **Other FAP information:**
    - The FAP assumed 70 percent of stormwater remediation fee revenue being available for NPDES compliance. This assumed amount is less than previous years since the City has increased its efforts and thus demand of the other portions of the revenue:
        - BMP maintenance;
        - Flood reduction capital projects;
        - Repairs (including emergencies) and asset management of the public storm sewer system;
        - Development of a district level H & H Model;
        - Flood ALERT system enhancements;
        - Research support (excluding the CBT Pooled Monitoring Program) related to climate change, flooding, and innovative technologies; and
        - Customer assistance programs, based on hardship.

    - The stormwater fee rates were approved by the City's Board of Estimates on June 15, 2022 for FY 23-25 at an annual adjustment of 3%. To be conservative, the FAP assumed a no rates adjustments for FY 2026-2027.

- Bond amounts listed in the "Fund Sources Table" of the FAP are based on currently approved bond appropriations. To be conservative, the FAP assumes no additional bond sales or applications to WIFIA or other federal loan programs are proposed to meet this current permit.

- State revolving loan fund amounts listed in the "Fund Sources Table" of the FAP include both approved and potential amounts, based on demand and applicability to the state's current criteria.

- The City will continue to pursue grants from both state and federal agencies to implement the proposed compliance efforts of this permit; however, to be conservative, the FAP assumed only the single grant associated with the Middle Branch shoreline project.

MS4 Information	
Jurisdiction	Baltimore City
Contact Name	Kimberly Grove
Phone	410-396-0732
Address	3001 Druid Park Drive
City	Baltimore
State	MD
Zip	21215
Email	kimberly.grove@baltimorecity.gov
Continued Annual Alternative ISR (ac)	5701.00
Required ISR New Permit (ac)	3696.00
Total ISR (ac)	9,397
Permit Num	20-DP-3315 MD0068292
Permit Period (FY)	2022-2027
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 annnual alternative ISR and required ISR new permit should match MS4 Permit condition E. Stormrwater 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)	**5,701**	**61%**
Required ISR New Permit (ac):	**3,696**	
Total ISR (ac):	**9,397**	

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]						
VSS	A	3,657	64%	$5,386,406	COMPLETE	2022
VSS	A	5,475	96%	$5,945,483	UNDER CONST	2023
VSS	A	5,475	96%	$8,964,393	PLANNING	2024
VSS	A	5,475	96%	$9,143,681	PLANNING	2025
VSS	A	5,475	96%	$9,326,554	PLANNING	2026
VSS	A	5,475	96%	$8,063,085	PLANNING	2027
CBC	A	230	4%	$4,798,576	COMPLETE	2022
CBC	A	226	4%	$4,904,995	UNDER CONST	2023
CBC	A	226	4%	$5,003,095	PLANNING	2024
CBC	A	226	4%	$6,368,600	PLANNING	2025
CBC	A	226	4%	$5,930,972	PLANNING	2026
CBC	A	226	4%	$6,049,591	PLANNING	2027
Operations Next Two Years (FY23-24)[4]		5,701	100%	$24,817,966		
Operations Next Five Years (FY23-27)[4]		5,701	100%	$69,700,448		
Operations Permit Term (FY22-27)[4]		5,701	100%	$65,772,754		
Capital Projects (Completed to Replace Annual Obligations)[2,3]						
			0%			
			0%			
Subtotal Capital Next Two Years		0	0%	$0		
Subtotal Capital Next Five Years (FY23-27)		0	0%	$0		
Subtotal Capital Permit Term (FY22-26)		0	0%	$0		
Other (Completed to Replace Annual Obligations)[2,3]						
			0%			
			0%			
Subtotal Other Next Two Years (FY23-24)		0	0%	$0		
Subtotal Other Next Five Years (FY23-27)		0	0%	$0		
Subtotal Other Permit Term (FY22-26)		0	0%	$0		
Total Continued Obligations Next Two Years (FY23-24)		**5,701**	**100%**	**$24,817,966**		
Total Continued Obligations Next Five Years (FY23-27)		**5,701**	**100%**	**$69,700,448**		

REST BMP TYPE[1]	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Total Continued Obligations Permit Term (FY22-27)		**5,701**	**100%**	**$65,772,754**		
Restoration for the New Permit						
Operational Programs[3,5]						
VSS	A	2,027	55%	$0	UNDER CONST	2023
VSS	A	2,806	76%	$0	PLANNING	2024
VSS	A	2,806	76%	$0	PLANNING	2025
VSS	A	2,806	76%	$0	PLANNING	2026
VSS	A	2,806	76%	$0	PLANNING	2027
CBC	A	25	1%	$0	UNDER CONST	2023
SDV	A	90	2%	$0	UNDER CONST	2023
CBC	A	25	1%	$0	PLANNING	2024
SDV	A	90	2%	$0	PLANNING	2024
CBC	A	25	1%	$0	PLANNING	2025
SDV	A	90	2%	$0	PLANNING	2025
CBC	A	49	1%	$0	PLANNING	2026
SDV	A	197	5%	$0	PLANNING	2026
CBC	A	49	1%	$0	PLANNING	2027
SDV	A	197	5%	$0	PLANNING	2027
DGI	A	239	6%	$1,630,625	UNDER CONST	2022
DGI	A	249	7%	$1,629,264	PLANNING	2023
DGI	A	235	6%	$1,661,849	PLANNING	2024
DGI	A	201	5%	$1,695,086	PLANNING	2025
DGI	A	194	5%	$1,728,988	PLANNING	2026
DGI	A	155	4%	$1,763,568	PLANNING	2027
Operations Next Two Years (FY23-24)[4,6]		2,767	75%	$3,291,113		
Operations Next Five Years (FY23-27)[4,6]		2,973	80%	$8,478,755		
Operations Permit Term (FY22-27)[4,6]		2,973	80%	$10,109,380		
Capital Projects[3,5]						
STR	A	332	9%	$26,393,299	COMPLETE	2022
STR	A	314	8%	$30,112,333	PLANNING	2025
STR	A	211	6%	$24,900,000	PROPOSED	2027
IMPP	A	4.1	0%	$1,033,677	COMPLETE	2022
IMPP	A	1.6	0%	$1,083,667	PLANNING	2023
IMPP	A	0.9	0%	$522,850	PLANNING	2025
IMPP	A	5	0%	$1,299,000	PROPOSED	2026
FBIO	S	6.7	0%	$3,903,362	PLANNING	2024
FBIO	S	5.9	0%	$2,014,252	PLANNING	2025
MMBR	E	4.2	0%	$2,065,195	PLANNING	2023
MMBR	E	2	0%	$1,037,603	PLANNING	2024
MMBR	E	4.7	0%	$1,124,962	PLANNING	2025
MMBR	E	23.5	1%	$6,160,000	PROPOSED	2025
MENF	E	2.1	0%	$1,088,072	PLANNING	2025
WPWS	S	0.8	0%	$150,909	PLANNING	2025
UTC	A	0.5	0%	$708,950	PLANNING	2023
UTC	A	3	0%	$90,500	PROPOSED	2025
STCI	A	5.3	0%	$160,000	PROPOSED	2025
UTC	A	3	0%	$90,500	PROPOSED	2026
STCI	A	5.3	0%	$160,000	PROPOSED	2026
OUT	A	60	2%	$5,685,000	PROPOSED	2026

REST BMP TYPE[1]	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
OUT	A	60	2%	$5,685,000	PROPOSED	2027
USRP	A	7.5	0%	$428,800	PROPOSED	2024
USRP	A	7.5	0%	$428,800	PROPOSED	2025
USRI	A	2.4	0%	$211,200	PROPOSED	2024
USRI	A	2.4	0%	$211,200	PROPOSED	2025
SPSD	A	3.5	0%	$1,367,629	PLANNING	2024
SHST	A	105	3%	$8,600,000	PLANNING	2025
Subtotal Capital Next Two Years (FY23-24)		28	1%	$10,806,406		
Subtotal Capital Next Five Years (FY23-27)		848	23%	$99,289,784		
Subtotal Capital Permit Term (FY22-27)		1,184	32%	$126,716,760		
Other[3,5]						
IMPP	A	2.3	0%	$0	COMPLETE	2022
MMBR	E	23.7	1%	$0	COMPLETE	2022
FSND	S	30.8	1%	$0	COMPLETE	2022
WPWS	S	6.1	0%	$0	COMPLETE	2022
STCI	A	77.1	2%	$0	COMPLETE	2022
UTC	A	76.2	2%	$0	COMPLETE	2022
IMPP	A	6	0%	$0	PROPOSED	2026
MMBR	E	82	2%	$0	PROPOSED	2026
FSND	S	41	1%	$0	PROPOSED	2026
WPWS	S	26	1%	$0	PROPOSED	2026
IMPP	A	1	0%	$250,000	PROPOSED	2026
MMBR	E	10	0%	$750,000	PROPOSED	2026
Subtotal Other Next Two Years (FY23-24)		0	0%	$0		
Subtotal Other Next Five Years (FY23-27)		166	4%	$1,000,000		
Subtotal Other Permit Term (FY22-27)		382	10%	$1,000,000		
Total Next Two Years (FY23-24)		**2,795**	**76%**	**$14,097,519**		
Total Next Five Years (FY23-27)		**3,986**	**108%**	**$108,768,539**		
Total Permit Term (FY22-27)		**4,539**	**123%**	**$137,826,140**		

Check with MDE Geodatabase:

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

Notes

1. Use BMP domains from 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 last five fiscal years of the permit term. Implementation Costs are totaled.
5. % ISR Complete compared to ISR new permit.
6. ISR for IDDE is only the amount of the last year of the time period, not an average.

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	PREVIOUS YEAR 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	$4,956,363	$5,386,406	$5,945,483	$8,964,393	$9,143,681	$9,326,554	$8,063,085	$51,785,964
Inlet Cleaning	$5,092,014	$4,798,576	$4,904,995	$5,003,095	$6,368,600	$5,930,972	$6,049,591	$38,147,843
IDDE	$1,630,625	$1,629,264	$1,661,849	$1,695,086	$1,728,988	$1,763,568	$1,798,839	$11,908,219
Support of Capital Projects	$561,270	$1,229,846	$1,254,443	$1,279,532	$1,305,122	$1,331,225	$1,357,849	$8,319,287
Debt Service Payment[1]	$2,755,494	$2,180,701	$2,760,962	$3,392,610	$4,373,068	$4,373,068	$4,373,068	$24,208,972
Other (please stipulate program expenditure)[2]	-	-	-	-	-	-	-	$0
Capital Expenditures (costs)[3]								
General Fund (Paygo)								$0
WPR Fund (Paygo)	$2,030,904	$170,411	$200,971	$4,264,061	$6,986,913	$8,008,797	$5,800,659	$27,462,716
Debt Service	$24,082,043	$5,346,590	$8,189,121	$12,643,760	$23,893,388	$12,894,194	$8,061,885	$95,110,980
Grants & Partnerships		$477,898		$2,871,619				$3,349,517
Other (please stipulate capital expenditure)[2]	-	-	-	-	-	-	-	$0
Subtotal operation and paygo:	$17,026,670	$15,395,204	$16,728,703	$24,598,776	$29,906,372	$30,734,184	$27,443,092	$161,833,001
Total expenditures:	**$41,108,713**	**$21,219,692**	**$24,917,824**	**$40,114,155**	**$53,799,760**	**$43,628,378**	**$35,504,977**	**$260,293,498**

Total ISRP costs except debt service:	**$236,084,527**
Compare ISRP costs (except debt service) / total ISRP proposed actions for permit term:	**171%**
Total capital expenditures:	**$125,923,213**
Compare total capital expenditures / total ISRP proposed actions capital costs for permit term:	**99%**

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 yea
4. Total permit cycle includes FY 2021 (costs associated with capital projects attributed to the current permit) to FY 2026

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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 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	$155,048,545	$19,724,793	$38,366,732	$55,201,716	$22,919,459	$22,725,387	$21,642,433	$93,568,448	$335,629,064
Annual Costs towards ISRP[3]	$41,108,713	$21,219,692	$24,917,824	$40,114,155	$53,799,760	$43,628,378	$35,504,977	$65,031,979	$260,293,498
							Compare revenue appropriated / annual costs:	**144%**	
							Reporting Criteria:	**100%**	

Note

1. Article 4-202.1(j)(2): Demonstration that county or municipality has sufficient funding in the current fiscal year and subsequent fiscal year budgets to meet its estimated cost for the 2-year period immediately following the filing date of the FAP. Note that the appropriations and expenditures include time period up to FY 22.
2. 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 23 at the time of FAP reporting.
3. See table of ISRP Cost.

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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[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)	$ 25,736,242	$ 28,016,285	$ 28,856,773	$ 29,722,477	$ 30,614,151	$ 30,614,151	$ 30,614,151	$ 173,560,079
Miscellaneous Fees (WPR Fund)	$ 286,704	$ 203,508	$ 220,000	$ 220,000	$ 220,000	$ 220,000	$ 220,000	$ 1,370,212
General Fund								$ -
Other Funds 1 (W/ WW)	$ 1,351,245	$ 1,481,946	$ 1,511,585	$ 1,541,817	$ 1,572,653	$ 1,604,106	$ 1,636,188	$ 9,063,351
Other Funds 2 (please stipulate funding source)								$ -
Other Funds 3 (please stipulate funding source)								$ -
Subtotal Paygo Sources	$ 27,374,191	$ 29,701,739	$ 30,588,358	$ 31,484,293	$ 32,406,804	$ 32,438,257	$ 32,470,339	$ 183,993,642
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	$ 1,621,757							$ 1,621,757
General Obligation Bonds	$ -							$ -
Revenue (Utility) Bonds	$ 71,181,805	$ 1,000,000	$ 21,839,000	$ 27,219,000	$ -	$ -	$ -	$ 121,239,805
State Revolving Loan Fund	$ 21,655,730			$ 6,680,000				$ 28,335,730
Public-private partnership (debt service)								$ -
Subtotal Debt Service	$ 94,459,292	$ 1,000,000	$ 21,839,000	$ 33,899,000	$ -	$ -	$ -	$ 151,197,292
Grants and Partnerships (no payment is expected)								
State funded grants								$ -
Federal funded grants								$ -
Public-private partnership (matched grant)		$ 3,500,000						$ 3,500,000
Subtotal Grants and Partnerships	$ -	$ 3,500,000	$ -	$ -	$ -	$ -	$ -	$ 3,500,000
Total Annual Sources of Funds	**$ 121,833,483**	**$ 34,201,739**	**$ 52,427,358**	**$ 65,383,293**	**$ 32,406,804**	**$ 32,438,257**	**$ 32,470,339**	**$ 273,845,874**
Percent of Funds Directed Toward ISRP								

Compare total permit term paygo ISRP costs / subtotal permit term paygo sources: 88%

Compare total ISRP expenditures / total permit term annual sources of funds: 86%

* 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.

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 I Municipal Separate Storm Sewer System Permit.

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
Obligations from Previous Permit That Must Be Continued or Met				**5,701**					
Operational Programs[2,3]									
					0%				
					0%				
					0%				
					0%				
					0%				
Subtotal Operations[4]			0	-	0%	$0			
Capital Projects (Completed to Replace Annual Obligations)[2,3]									
					0%				
					0%				
					0%				
					0%				
Subtotal Capital			0	0	0%	$0			
Other (Completed to Replace Annual Obligations)[2,3]									
					0%				
					0%				
Subtotal Other			0	0	0%	$0			
Total Continued Obligations from Previous Permit			**0**	**0**	**0%**	**$0**			

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
Restoration for the New Permit				**3,696**					
Operational Programs[3,5]									
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
Subtotal Operations[4]			0	#DIV/0!	#DIV/0!	$0			
Capital Projects[3,5]									
BC21ALN001	STR	A	1	254	7%	$ 12,492,000	12/8/2021	COMPLETE	Chinquapin Run
BC22ALN002	STR	A	1	78	2%	$ 10,942,099	4/28/2022	COMPLETE	Powder Mill Run
BC22BMP001	IMPP	A	14	4.1	0%	$ 1,033,677	12/13/2019	COMPLETE	ER-4125
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
					0%				
Subtotal Capital			16	336.1	9%	$24,467,776			

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
Other[3,5]									
					0%		6/30/2022		
					0%		6/30/2022		
					0%		6/30/2022		
					0%		6/30/2022		
					0%		6/30/2022		
					0%		6/30/2022		
Subtotal Other			0	0	0%	$0			
Total Additional Restoration			**16**	**#DIV/0!**	**#DIV/0!**	**$24,467,776**			

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.

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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 Sweeping)	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