

Harford County NPDES Phase I MS4 Financial Assurance Plan

December 2024

As required by the Annotated Code of Maryland ENV §4-202.1(j), Harford County has prepared the following Financial Assurance Plan (“FAP”) which demonstrates the County’s projected strategy for addressing the County’s NPDES Phase I MS4 permit. By its nature, the FAP is a planning document. The County expressly reserves the right to make future changes to the FAP based on new or additional information or based on available funding consistent with an adaptive management approach.

Background

The Clean Water Act, significantly revised in 1972, established the National Pollutant Discharge Elimination System program (“NPDES”) for facilities that discharge pollutants into navigable waters. Before discharging pollutants from a point source (for example, a pipe or outfall), a facility must apply for and receive an NPDES permit.

The 1987 Clean Water Act amendments updated the law to require permits for discharges from certain Municipal Separate Storm Sewer Systems (“MS4s”). Per federal regulations, MS4s serving a population over 100,000 were required to submit a two-phase application for an individual five-year NPDES MS4 permit. This group of MS4s is called Phase I MS4s.

Maryland has been delegated the authority to administer the NPDES program by the U.S. Environmental Protection Agency (“EPA”). The Maryland Department of the Environment (“MDE”) is the state agency that oversees this delegated authority. Harford County received its first MS4 permit on May 17, 1994, and received reissued permits on August 13, 1999, November 1, 2004 and December 30, 2014. MDE administratively extended the County’s permit which expired December 29, 2019. On December 30, 2022, MDE reissued the County’s current permit. This FAP is the second submittal for this permit and is based on the newly issued permit conditions and restoration requirements.

Maryland House Bill 987, *“Stormwater Management – Watershed Protection and Restoration Program”*, was approved in 2012 and codified into State law. This bill required all counties and municipalities subject to a Phase I MS4 permit to establish a stormwater remediation fee to fund the implementation of each jurisdiction’s MS4 permit. Maryland Senate Bill 863, *“Watershed Protection and Restoration Programs – Revisions”*, was approved in 2015 and codified into State law. This bill amended the Environment Code by (1) removing the requirement for each jurisdiction subject to a Phase I MS4 permit to establish a stormwater remediation fee and (2) adding the requirement for each jurisdiction to file a financial assurance plan.

In March 2015, the County Council passed Resolution 005-15 to dedicate a portion of the County's recordation tax in the amount of \$1.10 per \$1,000 of consideration beginning with fiscal year 2016 ("FY2016") to be dedicated to the implementation of watershed protection and restoration projects. Most of the dedicated funds will be used to pay debt services for future bonds.

Prior to FY2016, the County had no dedicated funding source for the implementation of capital improvement projects for the MS4 program. With the establishment of a dedicated funding source in 2015 and a commitment to issue bonds, the County was able to develop a systematic strategy for addressing the requirements of the MS4 program. This level of dedicated funding also allows for the design and construction of larger scale restoration projects that can benefit from economies of scale to maximize restoration benefits for the project cost spent.

A summary of the capital budgets for the implementation of the MS4 permit for approved FY2024 and FY2025 and proposed FY2026 is listed below.

	Approved FY2024	Approved FY2025	Proposed FY2026
Paygo ¹	\$1.25 M	\$1.5 M	\$4 M
Future Bonds ²	\$8.6 M	\$8.7M	\$8.8 M
Proposed Grants	\$2 M	\$2 M	\$2 M
Total	\$11.85 M	\$12.2 M	\$14.75 M

Footnotes:

¹ Source of funding is recordation tax

² Debt services on future bonds to be paid from recordation tax

The budgets discussed above do not include the full costs to implement the MS4 permit. Many of the programs required under the MS4 permit exist within other county departments and divisions such as property management, pollution prevention, and litter and floatables, to mention a few. In addition, future grants have not been secured but are rather estimates of grant awards based on projected availability of funding and project completion.

Program Capacity

Harford County is committed to the need to improve water quality in the Chesapeake Bay and in impaired local Harford County streams. We also recognize through the NPDES MS4 permitting program, the responsibility of local governments to participate in the restoration of our waters.

Since the reissuance of Harford County's MS4 permit, the County has increased both staff(pins) and financial capacity for the implementation of the MS4 program.

The MS4 program is administered through the Department of Public Works, Office of Watershed Protection and Restoration, with support from other departments throughout the County government, and supplemental staff from consultants. Additionally, Harford County utilizes various partnerships with outside agencies such as Maryland Department of Natural Resources and U.S. Geological Survey to accomplish permit requirements.

In addition to increased staff capacity, Harford County continues to utilize and expand the use of open-end contracts for design, monitoring and maintenance in order to complete watershed restoration projects as quickly as is practicable. Focusing watershed restoration projects on County-owned properties has likewise assisted in this regard. However, these project locations are running out, making it harder to meet our obligations and requirements.

Impervious Surfaces

Compliance for traditional NPDES permits is measured at the end of a discharge pipe. Specific metrics must be met daily to maintain compliance. Because MS4 permits cover thousands of stormdrain pipes, daily measurement of discharge is impractical. Therefore, MDE has selected untreated impervious surfaces as a surrogate parameter to measure MS4 permit compliance. Untreated impervious surfaces are hard surfaces constructed without stormwater management controls for water quality. Those areas were constructed prior to stormwater management water quality regulations adopted in Harford County in 2002, or areas that were constructed with stormwater management waivers or exemptions.

As required in Part IV E.2.a. of the previous MS4 permit, the County submitted an impervious surface assessment consistent with the methods described in the MDE document *"Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits"* (MDE, June 2014). Subsequently, MDE approved the requested baseline for untreated impervious surfaces at 10,928 acres.

Watershed Restoration

Through permit expiration, or December 2019, Harford County completed watershed restoration for 719.5 acres of impervious surfaces through design and construction of capital improvement projects including upgrading existing stormwater management facilities, constructing new stormwater management facilities, constructing stream restorations, and planting trees.

Septic Systems

MDE's Guidance allows for alternative impervious surface restoration credits for septic systems. Through permit expiration, or December 2019, Harford County received additional credits for pumping of septic systems (153.4 acres), connecting septic systems to the wastewater treatment plant (34.2 acres) and upgrading septic systems for denitrification (63.2 acres). Credits for pumping septic systems are based on pumpouts completed by residents and businesses. Credits must be maintained annually or replaced with a watershed restoration as discussed above.

Nutrient Trading

In 2018, MDE adopted the Maryland Water Quality Trading Program regulations, which includes guidelines for MS4s to participate in nutrient trading to comply with impervious surface restoration permit requirements. One scenario includes trading with the County's wastewater treatment plant (WWTP). This type of trade is temporary until the County is able to complete the watershed restoration. Harford County's draft permit includes provisions to complete, by the end of the next permit term, all watershed restoration traded with the WWTP, or 1,215 acres.

Summary

As of the end of the previous MS4 permit term, December 29, 2019, Harford County completed a capital improvement program which addressed watershed restoration for 6.6% of the untreated impervious surface. An additional 0.9% was achieved from septic upgrades or connection to the wastewater treatment plant and 1.4% from annual septic pumping. An additional 11% has been provided through nutrient trading with the County's wastewater treatment plant.

The County's newly reissued permit requires the restoration of 2,461 acres of untreated impervious surfaces or (1) continued annual credits for septic pumping (153.4 acres), (2) replacement of the nutrient trade with watershed restoration (1,215 acres), and (3) new watershed restoration (1,093 acres).

Enclosed are the spreadsheets developed by MDE for submittal of the financial assurance plan. The FAP covers fiscal years before 2023 through 2029. The newly reissued permit expires December 29, 2027, midway through fiscal year 2028.

As of the completion of FY24 the County has continued its annual septic pumping program for an average 77 acres of credit and completed 942 acres of restoration credit for a total of 1,019 acres of treatment (or 41.4% of our new permit requirement).

MS4 Information	
Jurisdiction	Harford County
Contact Name	Danielle Hankins
Phone	(410) 638-3217 x1176
Address	212 South Bond Street
City	Bel Air
State	MD
Zip	21014
Email	dhankins@harfordcountymd.gov
Continued Annual Alternative Impervious Surface Restoration (ISR) acres	1368.50
Required ISR in Permit (acres)	1093.00
Permit Number	22-DP-3310 MD0068268
Permit Term Fiscal Years (FY)	2023-2028
Reporting FY	2024

Note:

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

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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.

Continued Annual Alternative ISR (acres) 1,369
Required ISR New Permit (acres): 1,093

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}						
Septic System Pumping	A	70	5%	\$25,000	Planning	2025
Septic System Pumping	A	70	5%	\$25,000	Planning	2026
Septic System Pumping	A	70	5%	\$25,000	Planning	2027
Septic System Pumping	A	70	5%	\$25,000	Planning	2028
Septic System Pumping	A	70	5%	\$25,000	Planning	2029
Operations Next Two Years (FY25-26) ⁴		70	5%	\$50,000		
Operations Next Five Years (FY25-29) ⁴		70	5%	\$125,000		
Operations Permit Term (FY23-28) ⁴		71	5%	\$225,000		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Capital Projects (Completed to Replace Annual Obligations)^{2,3}						
Stream Restoration	A	68.14	5%	\$3,000,000	Under Construction	2025
Stream Restoration	A	15	1%	\$300,000	Under Construction	2025
Tree Planting	A	12.04	1%	\$375,000	Under Construction	2025
Stormwater (New)	S	3.34	0%	\$400,000	Under Construction	2025
Tree Planting	A	1.64	0%	\$125,000	Under Construction	2025
Tree Planting	A	7.64	1%	\$300,000	Under Construction	2025
Tree Planting	A	3.28	0%	\$200,000	Under Construction	2025
Tree Planting	A	3.72	0%	\$245,000	Planning	2025
Septic Connections	A	5	0%	\$45,000	Planning	2025
Stream Restoration	A	127.43	9%	\$3,000,000	Planning	2026
Stream Restoration	A	44	3%	\$2,000,000	Planning	2026
Tree Planting	A	16.24	1%	\$1,000,000	Planning	2026
Outfall Stabilization	A	48.94	4%	\$450,000	Planning	2026
Subtotal Capital Next Two Years (FY25-26)		356.41	26%	\$11,440,000		
Subtotal Capital Next Five Years (FY25- 29)		356	26%	\$11,440,000		
Subtotal Capital Permit Term (FY23-28)		1,298	95%	\$29,147,500		
Other (Completed to Replace Annual Obligations)^{2,3}						
Nutrient Trade			0%	\$0	Planning	2025
Subtotal Other Next Two Years (FY25- 26)		0	0%	\$0		
Subtotal Other Next Five Years (FY25- 29)		0	0%	\$0		
Subtotal Other Permit Term (FY23-28)		0	0%	\$0		
Total Continued Obligations Next Two Years (FY25-26)		426	31%	\$11,490,000		

BMP TYPE¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Total Continued Obligations Next Five Years (FY25-29)		426	31%	\$11,565,000		
Total Continued Obligations Permit Term (FY23-28)		1,369	100%	\$29,372,500		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Restoration for the Current Permit						
Operational Programs ^{3,5}						
Septic System Pumping	A	70	5%	\$25,000	Planning	2025
Septic System Pumping	A	70	5%	\$25,000	Planning	2026
Septic System Pumping	A	70	5%	\$25,000	Planning	2027
Septic System Pumping	A	70	5%	\$25,000	Planning	2028
Septic System Pumping	A	70	5%	\$25,000	Planning	2029
Operations Next Two Years (FY25-26) ⁴		70	6%	\$50,000		
Operations Next Five Years (FY25-29) ⁴		70	6%	\$125,000		
Operations Permit Term (FY23-28) ⁴		70	6%	\$125,000		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Capital Projects^{3,5}						
Septic Connections	A	4	0%	\$45,000	Planning	2026
Septic Connections	A	4	0%	\$45,000	Planning	2027
Septic Connections	A	4	0%	\$45,000	Planning	2028
Septic Connections	A	4	0%	\$45,000	Planning	2029
Stream Restoration	A	11	1%	\$2,000,000	Planning	2026
Stream Restoration	A	12.04	1%	\$1,000,000	Planning	2026
Stream Restoration	A	69	6%	\$3,000,000	Planning	2026
Stream Restoration	A	139.1	13%	\$3,500,000	Planning	2026
Conservation Landscaping	A	20	2%	\$1,000,000	Planning	2026
Stormwater Retrofit	S	1.5	0%	\$500,000	Planning	2026
Stream Restoration	A	60.56	6%	\$5,000,000	Planning	2027
Stream Restoration	A	95.1	9%	\$2,500,000	Planning	2027
Stream Restoration	A	43.77	4%	\$2,500,000	Planning	2027
Stream Restoration	A	6.8	1%	\$750,000	Planning	2027
Tree Planting	A	20	2%	\$1,300,000	Planning	2027
Conservation Landscaping	A	50	5%	\$1,000,000	Planning	2027
Stream Restoration	A	40	4%	\$2,000,000	Planning	2028
Stream Restoration	A	24	2%	\$1,200,000	Planning	2028
Stream Restoration	A	20	2%	\$1,000,000	Planning	2028
Stream Restoration	A	40	4%	\$2,000,000	Planning	2028
Stream Restoration	A	67	6%	\$3,350,000	Planning	2028
Stream Restoration	A	70	6%	\$3,500,000	Planning	2028
Tree Planting	A	20	2%	\$1,300,000	Planning	2028
Conservation Landscaping	A	50	5%	\$1,000,000	Planning	2028
Outfall Stabilization	A	75	7%	\$1,875,000	Planning	2028
Subtotal Capital Next Two Years (FY25-26)		257	23%	\$11,045,000		
Subtotal Capital Next Five Years (FY25- 29)		951	87%	\$41,455,000		

BMP TYPE¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Subtotal Capital Permit Term (FY23-28)		947	87%	\$41,410,000		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Other^{3,5}						
Nutrient Trade		100	9%	\$0		2028
Subtotal Other Next Two Years (FY25-26)		0	0%	\$0		
Subtotal Other Next Five Years (FY25-29)		100	9%	\$0		
Subtotal Other Permit Term (FY23-28)		100	9%	\$0		
Total Next Two Years (FY25-26)		327	30%	\$11,095,000		
Total Next Five Years (FY25-29)		1,121	103%	\$41,580,000		
Total Permit Term (FY23-28)		1,117	102%	\$41,535,000		

Notes:

*To identify all "actions" required under the MS4 permit, provide an executive summary of the jurisdiction's MS4 programs. For proposed actions to meet the impervious surface restoration plan, complete the above table.

1. Use BMP domains from MDE MS4 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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**Article 4-202.1(j)(1)(i)2: Projected annual and 5-year costs for the county or municipality to meet the impervious surface restoration plan requirements of its
National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.**

DESCRIPTION	PAST UP THRU YEAR FY 2023 ¹	CURRENT YEAR FY 2024	PROJECTED YEAR 1 FY 2025	PROJECTED YEAR 2 FY 2026	PROJECTED YEAR 3 FY 2027	PROJECTED YEAR 4 FY 2028	PROJECTED YEAR 5 FY 2029	TOTAL PERMIT TERM ² FY 2023-2028
Operating Expenditures (costs)								
Street Sweeping Program								\$0
Inlet Cleaning								\$0
IDDE								\$0
Support of Capital Projects	\$5,370,966	\$2,004,251	\$3,207,970	\$ 3,370,000	\$ 3,540,000	\$ 3,720,000	\$ 3,910,000	\$21,213,187
Payments to Municipalities	\$3,305,905	\$800,000	\$800,000	\$ 840,000	\$ 890,000	\$ 940,000	\$ 990,000	\$7,575,905
Debt Service Payment ³	\$4,571,616	\$1,951,749	\$2,221,030	\$ 2,340,000	\$ 2,460,000	\$ 2,590,000	\$ 2,720,000	\$16,134,395
Other (please stipulate program expenditure) ⁴	-	-	-	-	-	-	-	\$0
Capital Expenditures (costs)								
General Fund (Paygo)	\$2,850,000	\$1,250,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,600,000	\$1,700,000	\$11,900,000
WPR Fund (Paygo)								\$0
Debt Service	\$28,000,000	\$8,600,000	\$8,700,000	\$8,800,000	\$8,900,000	\$9,000,000	\$9,100,000	\$81,100,000
Grants & Partnerships	\$14,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$24,000,000
Other (please stipulate capital expenditure) ⁴	\$1,222,850	-	-	-	-	-	-	\$1,222,850
Total expenditures:	\$59,321,337	\$16,606,000	\$18,429,000	\$18,850,000	\$19,290,000	\$19,850,000	\$20,420,000	\$152,346,337

Notes:

1. Includes costs since expiration date of previous permit up to and including FY 2023.
2. Total permit term includes costs associated with the current permit expiring in FY 2027.
3. Debt service payments include debt service used to support capital projects from current and previous permit.
4. Insert additional rows as necessary.

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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 2023 ¹	CURRENT YEAR FY 2024	PROJECTED YEAR 1 FY 2025	PROJECTED YEAR 2 FY 2026	PROJECTED YEAR 3 FY 2027	PROJECTED YEAR 4 FY 2028	PROJECTED YEAR 5 FY 2029	TOTAL NEXT 2-YEARS FY 2025-2026 ²	TOTAL PERMIT TERM FY 2023-2028
Annual Revenue Appropriated for ISRP ³	\$57,494,481	\$16,606,000	\$18,429,000	\$18,905,000	\$19,395,000	\$19,905,000	\$20,445,000	\$37,334,000	\$150,734,481
Annual Costs towards ISRP ⁴	\$59,321,337	\$16,606,000	\$18,429,000	\$18,850,000	\$19,290,000	\$19,850,000	\$20,420,000	\$37,279,000	\$152,346,337

Compare revenue appropriated / annual costs: 100%

Requirement in Article 4-202.1(j)(4)(iii)⁵: 100%

Notes:

1. Includes revenue since expiration date of previous permit up to and including FY 2023.

2. Article 4-202.1(j)(2): "A financial assurance plan shall demonstrate that the 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 financial assurance plan."

3. Revenue means "dedicated revenues, funds, or sources of funds" (per Article 4-202.1(j)(4)(iii)).

4. See ISRP Cost spreadsheet.

5. Article 4-202.1(j)(4)(iii): "For the filing of a second and subsequent financial assurance plan, funding in the financial assurance plan is sufficient if the financial assurance plan demonstrates that the county or municipality has dedicated revenues, funds, or sources of funds to meet, for the 2-year period immediately following the filing date of the financial assurance plan, 100% of the projected costs of compliance with the impervious surface restoration plan requirements of the county or municipality under its national pollutant discharge elimination system Phase I municipal separate storm sewer system permit over the 2-year period."

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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 2023	CURRENT YEAR FY 2024	PROJECTED YEAR 1 FY 2025	PROJECTED YEAR 2 FY 2026	PROJECTED YEAR 3 FY 2027	PROJECTED YEAR 4 FY 2028	PROJECTED YEAR 5 FY 2029	TOTAL PERMIT TERM FY 2023-2028
Paygo Sources								
Stormwater Remediation Fees (WPR Fund)								\$ -
Miscellaneous Fees (WPR Fund)								\$ -
General Fund Transfer					\$ 5,150,000	\$ 5,410,000	\$ 5,690,000	\$ 10,560,000
Watershed Fund Balance	\$ 1,182,935	\$ 2,646,000	\$ 4,659,000	\$ 4,900,000		\$ -	\$ -	\$ 13,387,935
Investment Income	\$ 496,158	\$ 360,300	\$ 380,000	\$ 380,000	\$ 380,000	\$ 380,000	\$ 380,000	\$ 2,376,458
Recordation Tax - operating	\$ 13,815,388	\$ 2,999,700	\$ 2,665,000	\$ 2,800,000	\$ 2,940,000	\$ 3,090,000	\$ 3,250,000	\$ 28,310,088
Fines & Forfeitures			\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 100,000
Subtotal Paygo Sources	\$ 15,494,481	\$ 6,006,000	\$ 7,729,000	\$ 8,105,000	\$ 8,495,000	\$ 8,905,000	\$ 9,345,000	\$ 54,734,481
Debt Service²								
County Transportation Bonds								\$ -
General Obligation Bonds	\$ 28,000,000	\$ 8,600,000	\$ 8,700,000	\$ 8,800,000	\$ 8,900,000	\$ 9,000,000	\$ 9,100,000	\$ 81,100,000
Revenue (Utility) Bonds								\$ -
State Revolving Loan Fund								\$ -
Public-private partnership (debt service)								\$ -
Subtotal Debt Service	\$ 28,000,000	\$ 8,600,000	\$ 8,700,000	\$ 8,800,000	\$ 8,900,000	\$ 9,000,000	\$ 9,100,000	\$ 81,100,000
Grants and Partnerships³								
State funded grants	\$ 14,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 26,000,000
Federal funded grants								\$ -
Public-private partnership (matched grant)								\$ -
Subtotal Grants and Partnerships	\$ 14,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 26,000,000
Total Annual Sources of Funds	\$ 57,494,481	\$ 16,606,000	\$ 18,429,000	\$ 18,905,000	\$ 19,395,000	\$ 19,905,000	\$ 20,445,000	\$ 150,734,481
Percent of Funds Directed Toward ISRP								

Notes:

1. Previous accumulated revenue should be specifically designated for use for this current permit.
2. Paygo sources will be used to pay off debt service. Note that previous appropriations for debt service used for ISRP are listed in FY 2023.
3. No payment is expected.

* WPR Fund: Watershed Protection and Restoration Fund.

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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.

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Obligations from Previous Permit That Must Be Continued or Met				1368.50					
Operational Programs ^{2,3}									
Septic System Pumping	SEPP	A		136	10%	\$25,000	2020	Complete	
Septic System Pumping	SEPP	A		96	7%	\$25,000	2021	Complete	
Septic System Pumping	SEPP	A		62	5%	\$25,000	2022	Complete	
Septic System Pumping	SEPP	A		44	3%	\$25,000	2023	Complete	
Septic System Pumping	SEPP	A		50	4%	\$25,000	2024	Complete	Estimated
Subtotal Operations ⁴			0	77	28%	\$125,000			

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Capital Projects (Completed to Replace Annual Obligations)^{2,3}									
Septic Connection	SEPC	A	13	5.07	0%	\$58,500	2020	Complete	
Septic Connection	SEPC	A	9	3.51	0%	\$40,500	2021	Complete	
Septic Connection	SEPC	A	16	6.24	0%	\$72,000	2022	Complete	
Septic Connection	SEPC	A	9	2.07	0%	\$40,500	2023	Complete	
Septic Connection	SEPC	A	8	1.84	0%	\$36,000	2024	Complete	Estimated
WP000104	MMBR	S	1	0.7	0%	\$170,000	2020	Complete	
HA20ALN000018	STRE	A	3	151.5	11%	\$1,900,000	2020	Complete	
WP000033	WPWS	S	1	6.6	0%		2020	Complete	Cost included in HA20ALN000018
WP000033	IBAS	S	1	3.5	0%		2020	Complete	Cost included in HA20ALN000018
WP000033	PWET	S	1	2.2	0%		2020	Complete	Cost included in HA20ALN000018
HA22ALN000023	STRE	A	1	82.6	6%	\$3,400,000	2020	Complete	
WP000039	PWET	S	1	6.2	0%		2020	Complete	Cost included in HA22ALN000023
WP000039	FBIO	S	1	0.6	0%		2020	Complete	Cost included in HA22ALN000023
WP000039	WPWS	S	1	0.4	0%		2020	Complete	Cost included in HA22ALN000023
WP000039	PWET	S	1	1	0%		2020	Complete	Cost included in HA22ALN000023
WP000039	WPWS	S	1	1.6	0%		2020	Complete	Cost included in HA22ALN000023
HA20ALN000016	STRE	A	1	97.7	7%	\$750,000	2020	Complete	
	FPU	A	1	1.14	0%		2020	Complete	Cost included in HA20ALN000016
HA20ALN000017	STRE	A	1	8.6	1%	\$125,000	2020	Complete	
HA22APY000023	UTC	A	1	0.3	0%	\$80,000	2020	Complete	
HA21ALN000019	STRE	A	1	58.5	4%	\$790,000	2021	Complete	
HA22ALN000020	STRE	A	1	45.6	3%	\$1,500,000	2022	Complete	
HA22ALN000021	STRE	A	1	28.5	2%	\$1,100,000	2022	Complete	
WP000037	SDSP	A	1	4.4	0%		2022	Complete	Cost included in HA22ALN000021
HA22ALN000022	STRE	A	1	73.3	5%	\$1,900,000	2022	Complete	
WP0000102	FBIO	S	1	1.5	0%	\$300,000	2022	Complete	
HA23APY000001	FPU	A		2.7	0%	\$70,000	2023	Complete	
HA23APY000002	FPU	A		2.4	0%	\$115,000	2023	Complete	
HA23APY000003	RFP	A		1.4	0%	\$50,000	2023	Complete	
WP0000122	CLTM	A	3	0.94	0%	\$325,000	2024	Complete	Estimated
WP0000122	FPU	A	2	2.55	0%		2024	Complete	Cost included in WP0000122
WP0000122	UTC	A	2	0.24	0%		2024	Complete	Cost included in WP0000122
	FPU	A		1.2	0%	\$30,000	2024	Complete	
WP000034	STRE	A	1	123.1	9%	\$2,100,000	2024	Complete	Estimated
WP000034	MSGW	S	1	3.9	0%		2024	Complete	Cost included in WP000034
	FPU	A		3.55	0%	\$175,000	2024	Complete	
	FPU	A		1.26	0%	\$80,000	2024	Complete	

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
	SHST	A	1	58	4%	\$2,500,000	2024	Complete	HdG trade
Alliance (CF)	FPU	A		37.43	3%		2024	Complete	
Alliance (2021)	FPU	A		56.76	4%		2024	Complete	
Alliance (2022)	FPU	A		28.27	2%		2024	Complete	
Alliance (2023)	FPU	A		22.35	2%		2024	Complete	
SWS	FPU	A	2	0.28	0%		2024	Complete	
Subtotal Capital			88	942	58%	\$17,707,500			
Other (Completed to Replace Annual Obligations)^{2,3}									
Nutrient Trade	Nutrient Trade				0%	\$0	2020	Complete	
Nutrient Trade	Nutrient Trade				0%	\$0	2021	Complete	
Nutrient Trade	Nutrient Trade				0%	\$0	2022	Complete	
Nutrient Trade	Nutrient Trade				0%	\$0	2023	Complete	
Nutrient Trade	Nutrient Trade				0%	\$0	2024	Complete	To be completed on Calendar year
Subtotal Other			0	0	0%	\$0			
Total Continued Obligations from Previous Permit			88	1,019	74%	\$17,832,500			

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Restoration for the New Permit				1093.00					
Operational Programs ^{3,5}									
				0	0%			Complete	
					0%			Complete	
Subtotal Operations ⁴			0	0	0%	\$0			

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Capital Projects ^{3,5}									
					0%			Complete	
					0%			Complete	
Subtotal Capital			0	0	0%	\$0			

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Other ^{3,5}									
					0%			Complete	
					0%			Complete	
Subtotal Other			0	0	0%	\$0			
Total Additional Restoration			0	0	0%	\$0			

Notes:

- 1. Use BMP IDs, types, classes, impervious acres, built dates, etc. from MS4 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 4-26-24

COUNTY COUNCIL

OF

HARFORD COUNTY, MARYLAND

Resolution No. 040-24

Legislative Session Day 24-031

December 3, 2024

Introduced by Council President Vincenti at
the request of the County Executive

A RESOLUTION providing for the approval of the Financial Assurance Plan, a copy of which is attached hereto, for the Harford County national pollutant discharge elimination system Phase I municipal separate storm sewer system permit and for submission of the Plan to the Maryland Department of the Environment for its review.

1 WHEREAS, Harford County has been issued a national pollutant discharge elimination
2 system Phase I municipal separate storm sewer system permit ("Permit") for discharges from its
3 storm drain outfalls; and

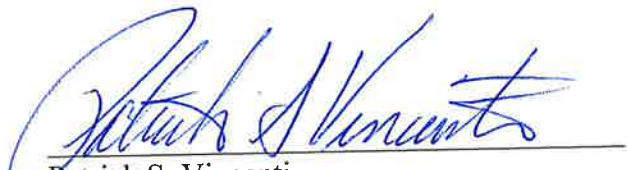
4 WHEREAS, the Annotated Code of Maryland, Environment Article, §4-202.1(j)(1)
5 requires that on or before July 1, 2016, and every 2 years thereafter on the anniversary of the date
6 of issuance of its Permit, a county must file a Financial Assurance Plan describing its projected
7 program for meeting permit requirements, including sources of revenue for the program; and


8 WHEREAS, the Annotated Code of Maryland, Environment Article, §4-202.1(j)(3)
9 provides that the Financial Assurance Plan may not be filed until the local governing body of the
10 county has held a public hearing and approved the Financial Assurance Plan.

11 NOW, THEREFORE, BE IT RESOLVED by the County Council of Harford County,
12 Maryland, that the Financial Assurance Plan is hereby approved and shall be submitted to the
13 Maryland Department of the Environment for its review.

ATTEST:


Mylia Dixon
Council Administrator


Patrick S. Vincenti
President of the Council


Robert G. Cassilly
County Executive

ADOPTED: January 14, 2025

Harford County NPDES Phase I MS4 Financial Assurance Plan

December 2024

As required by the Annotated Code of Maryland ENV §4-202.1(j), Harford County has prepared the following Financial Assurance Plan (“FAP”) which demonstrates the County’s projected strategy for addressing the County’s NPDES Phase I MS4 permit. By its nature, the FAP is a planning document. The County expressly reserves the right to make future changes to the FAP based on new or additional information or based on available funding consistent with an adaptive management approach.

Background

The Clean Water Act, significantly revised in 1972, established the National Pollutant Discharge Elimination System program (“NPDES”) for facilities that discharge pollutants into navigable waters. Before discharging pollutants from a point source (for example, a pipe or outfall), a facility must apply for and receive an NPDES permit.

The 1987 Clean Water Act amendments updated the law to require permits for discharges from certain Municipal Separate Storm Sewer Systems (“MS4s”). Per federal regulations, MS4s serving a population over 100,000 were required to submit a two-phase application for an individual five-year NPDES MS4 permit. This group of MS4s is called Phase I MS4s.

Maryland has been delegated the authority to administer the NPDES program by the U.S. Environmental Protection Agency (“EPA”). The Maryland Department of the Environment (“MDE”) is the state agency that oversees this delegated authority. Harford County received its first MS4 permit on May 17, 1994, and received reissued permits on August 13, 1999, November 1, 2004 and December 30, 2014. MDE administratively extended the County’s permit which expired December 29, 2019. On December 30, 2022, MDE reissued the County’s current permit. This FAP is the second submittal for this permit and is based on the newly issued permit conditions and restoration requirements.

Maryland House Bill 987, *“Stormwater Management – Watershed Protection and Restoration Program”*, was approved in 2012 and codified into State law. This bill required all counties and municipalities subject to a Phase I MS4 permit to establish a stormwater remediation fee to fund the implementation of each jurisdiction’s MS4 permit. Maryland Senate Bill 863, *“Watershed Protection and Restoration Programs – Revisions”*, was approved in 2015 and codified into State law. This bill amended the Environment Code by (1) removing the requirement for each jurisdiction subject to a Phase I MS4 permit to establish a stormwater remediation fee and (2) adding the requirement for each jurisdiction to file a financial assurance plan.

In March 2015, the County Council passed Resolution 005-15 to dedicate a portion of the County's recordation tax in the amount of \$1.10 per \$1,000 of consideration beginning with fiscal year 2016 ("FY2016") to be dedicated to the implementation of watershed protection and restoration projects. Most of the dedicated funds will be used to pay debt services for future bonds.

Prior to FY2016, the County had no dedicated funding source for the implementation of capital improvement projects for the MS4 program. With the establishment of a dedicated funding source in 2015 and a commitment to issue bonds, the County was able to develop a systematic strategy for addressing the requirements of the MS4 program. This level of dedicated funding also allows for the design and construction of larger scale restoration projects that can benefit from economies of scale to maximize restoration benefits for the project cost spent.

A summary of the capital budgets for the implementation of the MS4 permit for approved FY2024 and FY2025 and proposed FY2026 is listed below.

	Approved FY2024	Approved FY2025	Proposed FY2026
Paygo ¹	\$1.25 M	\$1.5 M	\$4 M
Future Bonds ²	\$8.6 M	\$8.7M	\$8.8 M
Proposed Grants	\$2 M	\$2 M	\$2 M
Total	\$11.85 M	\$12.2 M	\$14.75 M

Footnotes:

¹ Source of funding is recordation tax

² Debt services on future bonds to be paid from recordation tax

The budgets discussed above do not include the full costs to implement the MS4 permit. Many of the programs required under the MS4 permit exist within other county departments and divisions such as property management, pollution prevention, and litter and floatables, to mention a few. In addition, future grants have not been secured but are rather estimates of grant awards based on projected availability of funding and project completion.

Program Capacity

Harford County is committed to the need to improve water quality in the Chesapeake Bay and in impaired local Harford County streams. We also recognize through the NPDES MS4 permitting program, the responsibility of local governments to participate in the restoration of our waters.

Since the reissuance of Harford County's MS4 permit, the County has increased both staff(pins) and financial capacity for the implementation of the MS4 program.

The MS4 program is administered through the Department of Public Works, Office of Watershed Protection and Restoration, with support from other departments throughout the County government, and supplemental staff from consultants. Additionally, Harford County utilizes various partnerships with outside agencies such as Maryland Department of Natural Resources and U.S. Geological Survey to accomplish permit requirements.

In addition to increased staff capacity, Harford County continues to utilize and expand the use of open-end contracts for design, monitoring and maintenance in order to complete watershed restoration projects as quickly as is practicable. Focusing watershed restoration projects on County-owned properties has likewise assisted in this regard. However, these project locations are running out, making it harder to meet our obligations and requirements.

Impervious Surfaces

Compliance for traditional NPDES permits is measured at the end of a discharge pipe. Specific metrics must be met daily to maintain compliance. Because MS4 permits cover thousands of stormdrain pipes, daily measurement of discharge is impractical. Therefore, MDE has selected untreated impervious surfaces as a surrogate parameter to measure MS4 permit compliance. Untreated impervious surfaces are hard surfaces constructed without stormwater management controls for water quality. Those areas were constructed prior to stormwater management water quality regulations adopted in Harford County in 2002, or areas that were constructed with stormwater management waivers or exemptions.

As required in Part IV E.2.a. of the previous MS4 permit, the County submitted an impervious surface assessment consistent with the methods described in the MDE document *"Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits"* (MDE, June 2014). Subsequently, MDE approved the requested baseline for untreated impervious surfaces at 10,928 acres.

Watershed Restoration

Through permit expiration, or December 2019, Harford County completed watershed restoration for 719.5 acres of impervious surfaces through design and construction of capital improvement projects including upgrading existing stormwater management facilities, constructing new stormwater management facilities, constructing stream restorations, and planting trees.

Septic Systems

MDE's Guidance allows for alternative impervious surface restoration credits for septic systems. Through permit expiration, or December 2019, Harford County received additional credits for pumping of septic systems (153.4 acres), connecting septic systems to the wastewater treatment plant (34.2 acres) and upgrading septic systems for denitrification (63.2 acres). Credits for pumping septic systems are based on pumpouts completed by residents and businesses. Credits must be maintained annually or replaced with a watershed restoration as discussed above.

Nutrient Trading

In 2018, MDE adopted the Maryland Water Quality Trading Program regulations, which includes guidelines for MS4s to participate in nutrient trading to comply with impervious surface restoration permit requirements. One scenario includes trading with the County's wastewater treatment plant (WWTP). This type of trade is temporary until the County is able to complete the watershed restoration. Harford County's draft permit includes provisions to complete, by the end of the next permit term, all watershed restoration traded with the WWTP, or 1,215 acres.

Summary

As of the end of the previous MS4 permit term, December 29, 2019, Harford County completed a capital improvement program which addressed watershed restoration for 6.6% of the untreated impervious surface. An additional 0.9% was achieved from septic upgrades or connection to the wastewater treatment plant and 1.4% from annual septic pumping. An additional 11% has been provided through nutrient trading with the County's wastewater treatment plant.

The County's newly reissued permit requires the restoration of 2,461 acres of untreated impervious surfaces or (1) continued annual credits for septic pumping (153.4 acres), (2) replacement of the nutrient trade with watershed restoration (1,215 acres), and (3) new watershed restoration (1,093 acres).

Enclosed are the spreadsheets developed by MDE for submittal of the financial assurance plan. The FAP covers fiscal years before 2023 through 2029. The newly reissued permit expires December 29, 2027, midway through fiscal year 2028.

As of the completion of FY24 the County has continued its annual septic pumping program for an average 77 acres of credit and completed 942 acres of restoration credit for a total of 1,019 acres of treatment (or 41.4% of our new permit requirement).

MS4 Information	
Jurisdiction	Harford County
Contact Name	Danielle Hankins
Phone	(410) 638-3217 x1176
Address	212 South Bond Street
City	Bel Air
State	MD
Zip	21014
Email	dhankins@harfordcountymd.gov
Continued Annual Alternative Impervious Surface Restoration (ISR) acres	1368.50
Required ISR in Permit (acres)	1093.00
Permit Number	22-DP-3310 MD0068268
Permit Term Fiscal Years (FY)	2023-2028
Reporting FY	2024

Note:

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

Version 4-26-24

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.

Continued Annual Alternative ISR (acres) 1,359
Required ISR New Permit (acres): 1,093

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Continued from Previous Permit. This Must Be Considered in Next						
Operational Programs^{2,3}						
Septic System Pumping	A	70	5%	\$25,000	Planning	2025
Septic System Pumping	A	70	5%	\$25,000	Planning	2026
Septic System Pumping	A	70	5%	\$25,000	Planning	2027
Septic System Pumping	A	70	5%	\$25,000	Planning	2028
Septic System Pumping	A	70	5%	\$25,000	Planning	2029
Operations Next Two Years (FY25-26) ⁴		70	5%	\$50,000		
Operations Next Five Years (FY25-29) ⁴		70	5%	\$125,000		
Operations Permit Term (FY23-28) ⁴		71	5%	\$225,000		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Capital Projects (Completed to Replace Annual Obligations)^{2,3}						
Stream Restoration	A	68.14	5%	\$3,000,000	Under Construction	2025
Stream Restoration	A	15	1%	\$300,000	Under Construction	2025
Tree Planting	A	12.04	1%	\$375,000	Under Construction	2025
Stormwater (New)	S	3.34	0%	\$400,000	Under Construction	2025
Tree Planting	A	1.64	0%	\$125,000	Under Construction	2025
Tree Planting	A	7.64	1%	\$300,000	Under Construction	2025
Tree Planting	A	3.28	0%	\$200,000	Under Construction	2025
Tree Planting	A	3.72	0%	\$245,000	Planning	2025
Septic Connections	A	5	0%	\$45,000	Planning	2025
Stream Restoration	A	127.43	9%	\$3,000,000	Planning	2026
Stream Restoration	A	44	3%	\$2,000,000	Planning	2026
Tree Planting	A	16.24	1%	\$1,000,000	Planning	2026
Outfall Stabilization	A	48.94	4%	\$450,000	Planning	2026
Subtotal Capital Next Two Years (FY25-26)		356.41	26%	\$11,440,000		
Subtotal Capital Next Five Years (FY25- 29)		356	26%	\$11,440,000		
Subtotal Capital Permit Term (FY23-28)		1,298	95%	\$29,147,500		
Other (Completed to Replace Annual Obligations)^{2,3}						
Nutrient Trade			0%	\$0	Planning	2025
Subtotal Other Next Two Years (FY25- 26)		0	0%	\$0		
Subtotal Other Next Five Years (FY25- 29)		0	0%	\$0		
Subtotal Other Permit Term (FY23-28)		0	0%	\$0		
Total Continued Obligations Next Two Years (FY25-26)		426	31%	\$11,490,000		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Total Continued Obligations Next Five Years (FY25-29)		426	31%	\$11,565,000		
Total Continued Obligations Permit Term (FY23-28)		1,369	100%	\$29,372,500		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Operational Programs^{3,5}						
Septic System Pumping	A	70	5%	\$25,000	Planning	2025
Septic System Pumping	A	70	5%	\$25,000	Planning	2026
Septic System Pumping	A	70	5%	\$25,000	Planning	2027
Septic System Pumping	A	70	5%	\$25,000	Planning	2028
Septic System Pumping	A	70	5%	\$25,000	Planning	2029
Operations Next Two Years (FY25-26) ⁴		70	6%	\$50,000		
Operations Next Five Years (FY25-29) ⁴		70	6%	\$125,000		
Operations Permit Term (FY23-28) ⁴		70	6%	\$125,000		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Capital Projects^{3,5}						
Septic Connections	A	4	0%	\$45,000	Planning	2026
Septic Connections	A	4	0%	\$45,000	Planning	2027
Septic Connections	A	4	0%	\$45,000	Planning	2028
Septic Connections	A	4	0%	\$45,000	Planning	2029
Stream Restoration	A	11	1%	\$2,000,000	Planning	2026
Stream Restoration	A	12.04	1%	\$1,000,000	Planning	2026
Stream Restoration	A	69	6%	\$3,000,000	Planning	2026
Stream Restoration	A	139.1	13%	\$3,500,000	Planning	2026
Conservation Landscaping	A	20	2%	\$1,000,000	Planning	2026
Stormwater Retrofit	S	1.5	0%	\$500,000	Planning	2026
Stream Restoration	A	60.56	6%	\$5,000,000	Planning	2027
Stream Restoration	A	95.1	9%	\$2,500,000	Planning	2027
Stream Restoration	A	43.77	4%	\$2,500,000	Planning	2027
Stream Restoration	A	6.8	1%	\$750,000	Planning	2027
Tree Planting	A	20	2%	\$1,300,000	Planning	2027
Conservation Landscaping	A	50	5%	\$1,000,000	Planning	2027
Stream Restoration	A	40	4%	\$2,000,000	Planning	2028
Stream Restoration	A	24	2%	\$1,200,000	Planning	2028
Stream Restoration	A	20	2%	\$1,000,000	Planning	2028
Stream Restoration	A	40	4%	\$2,000,000	Planning	2028
Stream Restoration	A	67	6%	\$3,350,000	Planning	2028
Stream Restoration	A	70	6%	\$3,500,000	Planning	2028
Tree Planting	A	20	2%	\$1,300,000	Planning	2028
Conservation Landscaping	A	50	5%	\$1,000,000	Planning	2028
Outfall Stabilization	A	75	7%	\$1,875,000	Planning	2028
Subtotal Capital Next Two Years (FY25-26)		257	23%	\$11,045,000		
Subtotal Capital Next Five Years (FY25- 29)		951	87%	\$41,455,000		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Subtotal Capital Permit Term (FY23-28)		947	87%	\$41,410,000		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Other^{3,5}						
Nutrient Trade		100	9%	\$0		2028
Subtotal Other Next Two Years (FY25-26)		0	0%	\$0		
Subtotal Other Next Five Years (FY25-29)		100	9%	\$0		
Subtotal Other Permit Term (FY23-28)		100	9%	\$0		
Total Next Two Years (FY25-26)		327	30%	\$11,095,000		
Total Next Five Years (FY25-29)		1,121	103%	\$41,580,000		
Total Permit Term (FY23-28)		1,117	102%	\$41,535,000		

Notes:

*To identify all "actions" required under the MS4 permit, provide an executive summary of the jurisdiction's MS4 programs. For proposed actions to meet the impervious surface restoration plan, complete the above table.

1. Use BMP domains from MDE MS4 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 8-24

**Article 4-202.1(j)(1)(i)2: Projected annual and 5-year costs for the county or municipality to meet the impervious surface restoration plan requirements of its
National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.**

DESCRIPTION	PAST UP THRU YEAR FY 2023 ¹	CURRENT YEAR FY 2024	PROJECTED YEAR 1 FY 2025	PROJECTED YEAR 2 FY 2026	PROJECTED YEAR 3 FY 2027	PROJECTED YEAR 4 FY 2028	PROJECTED YEAR 5 FY 2029	TOTAL PERMIT TERM ² FY 2023-2028
Operating Expenditures (costs)								\$0
Street Sweeping Program								\$0
Inlet Cleaning								\$0
IDDE								
Support of Capital Projects	\$5,370,966	\$2,004,251	\$3,207,970	\$ 3,370,000	\$ 3,540,000	\$ 3,720,000	\$ 3,910,000	\$21,213,187
Payments to Municipalities	\$3,305,905	\$800,000	\$800,000	\$ 840,000	\$ 890,000	\$ 940,000	\$ 990,000	\$7,575,905
Debt Service Payment ³	\$4,571,616	\$1,951,749	\$2,221,030	\$ 2,340,000	\$ 2,460,000	\$ 2,590,000	\$ 2,720,000	\$16,134,395
Other (please stipulate program expenditure) ⁴	-	-	-	-	-	-	-	\$0
Capital Expenditures (costs)								
General Fund (Paygo)	\$2,850,000	\$1,250,000	\$1,500,000	\$1,500,000	\$1,500,000	\$1,600,000	\$1,700,000	\$11,900,000
WPR Fund (Paygo)								\$0
Debt Service	\$28,000,000	\$8,600,000	\$8,700,000	\$8,800,000	\$8,900,000	\$9,000,000	\$9,100,000	\$81,100,000
Grants & Partnerships	\$14,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$24,000,000
Other (please stipulate capital expenditure) ⁴	\$1,222,850	-	-	-	-	-	-	\$1,222,850
Total expenditures:	\$59,321,337	\$16,606,000	\$18,429,000	\$18,850,000	\$19,290,000	\$19,850,000	\$20,420,000	\$152,346,337

Notes:

1. Includes costs since expiration date of previous permit up to and including FY 2023.
2. Total permit term includes costs associated with the current permit expiring in FY 2027.
3. Debt service payments include debt service used to support capital projects from current and previous permit.
4. Insert additional rows as necessary.

Notes: 10 of 21

Article 4-202.1(j)(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 2023 ¹	CURRENT YEAR FY 2024	PROJECTED YEAR 1 FY 2025	PROJECTED YEAR 2 FY 2026	PROJECTED YEAR 3 FY 2027	PROJECTED YEAR 4 FY 2028	PROJECTED YEAR 5 FY 2029	TOTAL NEXT 2-YEARS FY 2025-2026 ²	TOTAL PERMIT TERM FY 2023-2028
Annual Revenue Appropriated for ISRP ³	\$57,494,481	\$16,606,000	\$18,429,000	\$18,905,000	\$19,395,000	\$19,905,000	\$20,445,000	\$37,334,000	\$150,734,481
Annual Costs towards ISRP ⁴	\$59,321,337	\$16,606,000	\$18,429,000	\$18,850,000	\$19,290,000	\$19,850,000	\$20,420,000	\$37,279,000	\$152,346,337

Compare revenue appropriated / annual costs: 100%
Requirement in Article 4-202.1(j)(4)(iii)⁵: 100%

Notes:

1. Includes revenue since expiration date of previous permit up to and including FY 2023.
2. Article 4-202.1(j)(2): "A financial assurance plan shall demonstrate that the 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 financial assurance plan."
3. Revenue means "dedicated revenues, funds, or sources of funds" (per Article 4-202.1(j)(4)(iii)).
4. See ISRP Cost spreadsheet.
5. Article 4-202.1(j)(4)(iii): "For the filing of a second and subsequent financial assurance plan, funding in the financial assurance plan is sufficient if the financial assurance plan demonstrates that the county or municipality has dedicated revenues, funds, or sources of funds to meet, for the 2-year period immediately following the filing date of the financial assurance plan, 100% of the projected costs of compliance with the impervious surface restoration plan requirements of the county or municipality under its national pollutant discharge elimination system Phase I municipal separate storm sewer system permit over the 2-year period."

**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 2023	CURRENT YEAR FY 2024	PROJECTED YEAR 1 FY 2025	PROJECTED YEAR 2 FY 2026	PROJECTED YEAR 3 FY 2027	PROJECTED YEAR 4 FY 2028	PROJECTED YEAR 5 FY 2029	TOTAL PERMIT TERM FY 2023-2028
Paygo Sources								
Stormwater Remediation Fees (WPR Fund)								\$ -
Miscellaneous Fees (WPR Fund)								\$ -
General Fund Transfer					\$ 5,150,000	\$ 5,410,000	\$ 5,690,000	\$ 10,560,000
Watershed Fund Balance	\$ 1,182,935	\$ 2,646,000	\$ 4,659,000	\$ 4,900,000		\$ -	\$ -	\$ 13,387,935
Investment Income	\$ 496,158	\$ 360,300	\$ 380,000	\$ 380,000	\$ 380,000	\$ 380,000	\$ 380,000	\$ 2,376,458
Recordation Tax - operating	\$ 13,815,388	\$ 2,999,700	\$ 2,665,000	\$ 2,800,000	\$ 2,940,000	\$ 3,090,000	\$ 3,250,000	\$ 28,310,088
Fines & Forfeitures			\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 100,000
Subtotal Paygo Sources	\$ 15,494,481	\$ 6,006,000	\$ 7,729,000	\$ 8,105,000	\$ 8,495,000	\$ 8,905,000	\$ 9,345,000	\$ 54,734,481
Debt Service²								
County Transportation Bonds								\$ -
General Obligation Bonds	\$ 28,000,000	\$ 8,600,000	\$ 8,700,000	\$ 8,800,000	\$ 8,900,000	\$ 9,000,000	\$ 9,100,000	\$ 81,100,000
Revenue (Utility) Bonds								\$ -
State Revolving Loan Fund								\$ -
Public-private partnership (debt service)								\$ -
Subtotal Debt Service	\$ 28,000,000	\$ 8,600,000	\$ 8,700,000	\$ 8,800,000	\$ 8,900,000	\$ 9,000,000	\$ 9,100,000	\$ 81,100,000
Grants and Partnerships³								
State funded grants	\$ 14,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 26,000,000
Federal funded grants								\$ -
Public-private partnership (matched grant)								\$ -
Subtotal Grants and Partnerships	\$ 14,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 26,000,000
Total Annual Sources of Funds	\$ 57,494,481	\$ 16,606,000	\$ 18,429,000	\$ 18,905,000	\$ 19,395,000	\$ 19,905,000	\$ 20,445,000	\$ 150,734,481
Percent of Funds Directed Toward ISRP								

Notes:

1. Previous accumulated revenue should be specifically designated for use for this current permit.
 2. Paygo sources will be used to pay off debt service. Note that previous appropriations for debt service used for ISRP are listed in FY 2023.
 3. No payment is expected.
- * WPR Fund: Watershed Protection and Restoration Fund.

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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.

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Obligations from Previous Permit That Must Be Continued or Met									
Operational Programs ^{2,3}									
Septic System Pumping	SEPP	A		136	10%	\$25,000	2020	Complete	
Septic System Pumping	SEPP	A		96	7%	\$25,000	2021	Complete	
Septic System Pumping	SEPP	A		62	5%	\$25,000	2022	Complete	
Septic System Pumping	SEPP	A		44	3%	\$25,000	2023	Complete	
Septic System Pumping	SEPP	A		50	4%	\$25,000	2024	Complete	Estimated
Subtotal Operations ⁴			0	77	28%	\$125,000			

BMP ID or NAME¹	BMP TYPE¹	BMP CLASS¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN-TATION COST	BUILT DATE	IMPLEMEN-TATION STATUS	GENERAL COMMENTS
Capital Projects (Completed to Replace Annual Obligations)²,³									
Septic Connection	SEPC	A	13	5.07	0%	\$58,500	2020	Complete	
Septic Connection	SEPC	A	9	3.51	0%	\$40,500	2021	Complete	
Septic Connection	SEPC	A	16	6.24	0%	\$72,000	2022	Complete	
Septic Connection	SEPC	A	9	2.07	0%	\$40,500	2023	Complete	
Septic Connection	SEPC	A	8	1.84	0%	\$36,000	2024	Complete	Estimated
WP000104	MMBR	S	1	0.7	0%	\$170,000	2020	Complete	
HA20ALN000018	STRE	A	3	151.5	11%	\$1,900,000	2020	Complete	
WP000033	WPWS	S	1	6.6	0%		2020	Complete	Cost included in HA20ALN000018
WP000033	IBAS	S	1	3.5	0%		2020	Complete	Cost included in HA20ALN000018
WP000033	PWET	S	1	2.2	0%		2020	Complete	Cost included in HA20ALN000018
HA22ALN000023	STRE	A	1	82.6	6%	\$3,400,000	2020	Complete	
WP000039	PWET	S	1	6.2	0%		2020	Complete	Cost included in HA22ALN000023
WP000039	FBIO	S	1	0.6	0%		2020	Complete	Cost included in HA22ALN000023
WP000039	WPWS	S	1	0.4	0%		2020	Complete	Cost included in HA22ALN000023
WP000039	PWET	S	1	1	0%		2020	Complete	Cost included in HA22ALN000023
WP000039	WPWS	S	1	1.6	0%		2020	Complete	Cost included in HA22ALN000023
HA20ALN000016	STRE	A	1	97.7	7%	\$750,000	2020	Complete	
	FPU	A	1	1.14	0%		2020	Complete	Cost included in HA20ALN000016
HA20ALN000017	STRE	A	1	8.6	1%	\$125,000	2020	Complete	
HA22APY000023	UTC	A	1	0.3	0%	\$80,000	2020	Complete	
HA21ALN000019	STRE	A	1	58.5	4%	\$790,000	2021	Complete	
HA22ALN000020	STRE	A	1	45.6	3%	\$1,500,000	2022	Complete	
HA22ALN000021	STRE	A	1	28.5	2%	\$1,100,000	2022	Complete	
WP000037	SDSP	A	1	4.4	0%		2022	Complete	Cost included in HA22ALN000021
HA22ALN000022	STRE	A	1	73.3	5%	\$1,900,000	2022	Complete	
WP0000102	FBIO	S	1	1.5	0%	\$300,000	2022	Complete	
HA23APY000001	FPU	A		2.7	0%	\$70,000	2023	Complete	
HA23APY000002	FPU	A		2.4	0%	\$115,000	2023	Complete	
HA23APY000003	RFP	A		1.4	0%	\$50,000	2023	Complete	
WP0000122	CLTM	A	3	0.94	0%	\$325,000	2024	Complete	Estimated
WP0000122	FPU	A	2	2.55	0%		2024	Complete	Cost included in WP0000122
WP0000122	UTC	A	2	0.24	0%		2024	Complete	Cost included in WP0000122
	FPU	A		1.2	0%	\$30,000	2024	Complete	
WP000034	STRE	A	1	123.1	9%	\$2,100,000	2024	Complete	Estimated
WP000034	MSGW	S	1	3.9	0%		2024	Complete	Cost included in WP000034
	FPU	A		3.55	0%	\$175,000	2024	Complete	
	FPU	A		1.26	0%	\$80,000	2024	Complete	

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN-TATION COST	BUILT DATE	IMPLEMEN-TATION STATUS	GENERAL COMMENTS
	SHST	A	1	58	4%	\$2,500,000	2024	Complete	HdG trade
Alliance (CF)	FPU	A		37.43	3%		2024	Complete	
Alliance (2021)	FPU	A		56.76	4%		2024	Complete	
Alliance (2022)	FPU	A		28.27	2%		2024	Complete	
Alliance (2023)	FPU	A		22.35	2%		2024	Complete	
SWS	FPU	A	2	0.28	0%		2024	Complete	
Subtotal Capital			88	942	58%	\$17,707,500			
Other (Completed to Replace Annual Obligations)^{2,3}									
Nutrient Trade	Nutrient Trade				0%	\$0	2020	Complete	
Nutrient Trade	Nutrient Trade				0%	\$0	2021	Complete	
Nutrient Trade	Nutrient Trade				0%	\$0	2022	Complete	
Nutrient Trade	Nutrient Trade				0%	\$0	2023	Complete	
Nutrient Trade	Nutrient Trade				0%	\$0	2024	Complete	To be completed on Calendar year
Subtotal Other			0	0	0%	\$0			
Total Continued Obligations from Previous Permit			88	1,019	74%	\$17,832,500			

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Restoration for the New Permit				1093.00					
Operational Programs ^{3,5}									
				0	0%			Complete	
					0%			Complete	
Subtotal Operations ⁴			0	0	0%	\$0			

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ²	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Capital Projects ^{3,5}									
					0%			Complete	
					0%			Complete	
Subtotal Capital			0	0	0%	\$0			

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMEN- TATION STATUS	GENERAL COMMENTS
Other ^{3,5}									
					0%			Complete	
					0%			Complete	
Subtotal Other			0	0	0%	\$0			
Total Additional Restoration			0	0	0%	\$0			

- Notes:
- 1. Use BMP IDs, types, classes, impervious acres, built dates, etc. from MS4 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.

1/25/2024