

Anne Arundel County Financial Assurance Plan to Meet the Requirements of the NPDES Municipal Separate Storm Sewer System (MS4) Permit

September 6, 2024

Executive Summary

Introduction

Anne Arundel County's NPDES MS4 permit, issued November 5, 2021, requires that the County complete restoration efforts to achieve the equivalent of treating 2,998 acres of impervious surfaces not previously restored to the maximum extent practicable. In addition, the County must continue the same level of programmatic implementation for its annual alternative control practices, equivalent to 199 acres of impervious surface restored, to maintain compliance with the prior MS4 permit's restoration requirement.

The submission of Anne Arundel County's Financial Assurance Plan (FAP), as well as the submission of the Bureau of Watershed Protection and Restoration (BWPR) annual report, is required for compliance with Maryland Environment Article §4-202.1. The attached FAP is submitted to show that the County has the financial means to achieve the permit requirements. This FAP addresses the activities completed by the County's BWPR from FY22 through FY24, and the planned and programmed activities from FY25 through FY29.

The completion and submission of the FAP is required every two years. This, the first FAP under the County's new MS4 permit, is to be submitted on or before the December 31, 2024 due date for the MS4 permit annual progress report.

According to the requirements for completing the attached FAP, all restoration activities completed by June 30, 2024 are classified as completed and their actual costs are reported. These activities include a variety of projects with a variety of funding sources, as described below.

- CIP projects from the BWPR class that were completed from FY22 through FY24 were funded by WPRF bonds. Additionally, supplemental funding was provided for various projects through grants and a select number of shoreline stabilization projects were funded through general fund County bonds.
- Street sweeping and inlet cleaning were funded out of the BWPR operating budget.

Other restoration actions include septic system connections to water reclamation facilities (WRFs), septic system upgrades to denitrification systems, and restoration projects completed by non-governmental organizations (NGO). Septic system connections to WRFs and septic system upgrades to denitrification systems are funded through Bay Restoration Fund (BRF) grants. Funding for restoration projects completed by NGOs include both County WPRF funds made available through the ongoing BWPR grant program, and grant funding to the NGOs from other entities resulting in no cost to the County. Private individuals or communities also funded

restoration projects. Comments are included in the FAP to denote the funding sources for completed projects where the implementation costs are noted as \$0.

Projections are also made for planned projects that will be completed by June 30, 2029 (end of FY29). Planned projects not completed by June 30, 2024 are classified as either under construction or planning. Projects considered “under construction” were in the construction phase as of the end of FY24, and are anticipated to be complete at the end of FY25. “Planning” are those activities where a design contract has been issued by June 30, 2024, but may also include some projects that have been identified by County project managers but for which design work has not been initiated. Projections are also included for the ongoing operating activities and other restoration actions, as well as the addition of septic pumping performed by local contractors. Septic pumping can provide credit for the County and requires no general fund or WPRF fund expenditures.

Included in the FAP are cost and revenue information. Costs identified include the operating costs for the BWPR, debt service on WPRF bonds, and the County’s BWPR grant program to fund restoration projects completed by NGOs for which the County takes equivalent impervious treatment credit. Actual costs are reported for FY22 through FY24, and budgeted costs are included for FY25 through FY29. These budgeted costs were obtained from the County Budget Office’s WPRF Affordability Model and Capital Budget Program.

Sources of Funds to Meet the MS4:

A variety of funding sources (revenue) are recognized in this FAP. WPRF revenues include actual stormwater fee revenue amounts for FY22 through FY24, and projected revenues for FY25 through FY29. These revenue projections assume 5% annual stormwater fee increases over this time frame and include an adjustment for a 1% increase in ERU due to development.

Grant sources include State-funded grants for CIP restoration projects (e.g., MD DNR Chesapeake Bay Trust Fund) as well as BRF grants. BWPR is actively pursuing additional grant opportunities for future projects, and it is anticipated that the use of grant funds will allow for the implementation of CIP restoration projects that are not currently included as part of this FAP.

The attached FAP indicates that approximately 3,989 acres, or 133%, of the County’s restoration will be completed by the end of FY27, one year beyond the end of the current NPDES MS4 permit term. The restoration completed in an apparent exceedance of the County’s goal is primarily due to planning already underway for restoration activities that extend beyond the current permit term.

Projected Annual and 5-Year Costs and Revenues to Meet the MS4:

Total program projected restoration and MS4 compliance activity costs through FY27 are \$447 million, and \$460 million in revenue is expected, which demonstrates that the funding sources enumerated in the FAP are adequate to meet the permit requirements, treating approximately 3,989 impervious acres, which is estimated to be sufficient to cover the restoration requirements of the current MS4 permit and beyond.

MS4 Information	
Jurisdiction	Anne Arundel County
Contact Name	Erik Michelsen
Phone	410-222-7520
Address	2662 Riva Road
City	Annapolis
State	MD
Zip	21401
Email	pwmich20@aacounty.org
Continued Annual Alternative Impervious Surface Restoration (ISR) acres	199.00
Required ISR in Permit (acres)	2998.00
Permit Number	20-DP-331 (MD0068306)
Permit Term Fiscal Years (FY)	2022-2027
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)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	IMPLEMENTATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
Obligations from Previous Permit That Must Be Continued or Met				199.00					
Operational Programs^{2,3}									
FY22 CBC	CBC	A	140	29	15%	\$144,831	6/31/2022	Complete	Assumes 50% organic and 50% inorganic material collected.
FY 23 CBC	CBC	A	334	70	35%	\$173,162	6/31/2023	Complete	Assumes 50% organic and 50% inorganic material collected.
FY 24 CBC	CBC	A	301	63	32%	\$206,862	6/31/2024	Complete	Assumes 50% organic and 50% inorganic material collected.
FY22 SEPP	SEPP	A	20,747	415	209%	\$0	6/31/2022	Complete	Funding Source: Private septic tank owners.
FY23 SEPP	SEPP	A	19,760	395	199%	\$0	6/31/2023	Complete	Funding Source: Private septic tank owners.
FY24 SEPP	SEPP	A	21,736	435	218%	\$0	6/31/2024	Complete	Funding Source: Private septic tank owners.
FY 22 VSS	VSS	A	256	40	20%	\$325,714	6/31/2022	Complete	256 lane miles swept.
FY 23 VSS	VSS	A	256	40	20%	\$346,189	6/31/2023	Complete	256 lane miles swept.
FY 24 VSS	VSS	A	256	40	20%	\$331,726	6/31/2024	Complete	256 lane miles swept.
Subtotal Operations⁴			63786	170	768%	\$1,528,484			
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	0%	\$0			
Subtotal Other			0	0	0%	\$0			
Total Continued Obligations from Previous Permit			63,786	170	85%	\$1,528,484			
Restoration for the New Permit				2998.00					
Operational Programs^{3,5}									
			0	0	0%	\$0			
Subtotal Operations⁴			0	0	0%	\$0			
Capital Projects^{3,5}									
AA24APY000002	FPU	A	1	10.05	0.34%	\$87,299	11/27/2023	Complete	
AA19RST000024	IBAS	S	1	12.99	0.43%	\$1,390,551	3/20/2023	Complete	
AA23RST000001	IBAS	S	1	8.88	0.30%	\$762,212	3/17/2023	Complete	
AA23RST000002	IBAS	S	1	4.56	0.15%	\$391,406	8/30/2022	Complete	
AA21APY000002	IMPP	A	1	0.02	0.00%	\$1,092	5/5/2023	Complete	
AA17RST000002	ITRN	S	1	2.64	0.09%	\$517,454	1/5/2022	Complete	

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMENTATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
AA17RST000007	MIBR	E	1	7.72	0.26%	\$1,207,827	7/1/2023	Complete	
AA24RST000002	MSWB	E	1	0.33	0.01%	\$31,514	11/29/2023	Complete	
AA21RST000002	MSWG	E	1	0.05	0.00%	\$7,692	10/26/2023	Complete	
AA21RST000003	MSWG	E	1	0.07	0.00%	\$12,308	10/26/2023	Complete	
AA20ALN000001	OUT	A	1	19.8	0.66%	\$2,017,564	7/11/2023	Complete	
AA21ALN000003	OUT	A	1	100.84	3.36%	\$275,659	2/27/2024	Complete	
AA21ALN000017	OUT	A	1	4.13	0.14%	\$274,880	10/21/2022	Complete	
AA22ALN000007	OUT	A	1	100.63	3.36%	\$1,249,524	9/6/2021	Complete	
AA22ALN000014	OUT	A	1	80.34	2.68%	\$743,142	6/15/2024	Complete	
AA22ALN000015	OUT	A	1	3.98	0.13%	\$102,355	4/27/2022	Complete	
AA22ALN000017	OUT	A	1	45.17	1.51%	\$1,113,257	8/1/2023	Complete	
AA24ALN000001	OUT	A	1	2.51	0.08%	\$149,117	7/1/2023	Complete	
AA24ALN000024	OUT	A	1	0.94	0.03%	\$168,742	11/6/2023	Complete	
AA19RST000010	PWED	S	1	45.65	1.52%	\$2,145,860	10/31/2022	Complete	
AA19RST000015	PWED	S	1	14.37	0.48%	\$360,866	6/13/2022	Complete	
AA20RST000002	PWED	S	1	26.47	0.88%	\$72,359	2/27/2024	Complete	
AA23RST000003	PWET	S	1	12.8	0.43%	\$111,937	1/1/2024	Complete	
AA24RST000004	PWET	S	1	1.75	0.06%	\$151,391	8/10/2023	Complete	
AA21APY000001	RCL	A	1	0.15	0.01%	\$8,190	5/5/2023	Complete	
AA17ALN000008	SHST	A	1	9.78	0.33%	\$1,909,045	2/28/2022	Complete	
AA17ALN000017	SHST	A	1	10.24	0.34%	\$2,070,593	2/28/2022	Complete	
AA20ALN000016	SHST	A	1	30.05	1.00%	\$647,113	11/16/2021	Complete	
AA20ALN000017	SHST	A	1	110.12	3.67%	\$2,369,719	11/16/2021	Complete	
AA23ALN000007	SHST	A	1	3.99	0.13%	\$177,427	7/1/2023	Complete	
AA17RST000001	SPSD	A	1	4.77	0.16%	\$934,946	9/23/2021	Complete	
AA17RST000005	SPSD	A	1	4.52	0.15%	\$707,173	7/1/2023	Complete	
AA17RST000011	SPSD	A	1	12.62	0.42%	\$311,032	8/1/2023	Complete	
AA17RST000022	SPSD	A	1	8.32	0.28%	\$1,142,946	2/7/2024	Complete	
AA18RST000023	SPSD	A	1	5.42	0.18%	\$67,300	9/6/2021	Complete	
AA19RST000003	SPSD	A	1	0.96	0.03%	\$19,692	11/18/2021	Complete	
AA21RST000001	SPSD	A	1	0.8	0.03%	\$7,650	1/24/2023	Complete	
AA22RST000003	SPSD	A	1	0.24	0.01%	\$2,220	6/15/2024	Complete	
AA24RST000003	SPSD	A	1	0.24	0.01%	\$14,258	7/1/2023	Complete	
AA24RST000007	SPSD	A	1	12.68	0.42%	\$278,505	4/1/2024	Complete	
AA18ALN000001	STRE	A	1	34.61	1.15%	\$1,936,679	11/15/2021	Complete	
AA18ALN000002	STRE	A	1	32.65	1.09%	\$1,827,003	9/1/2023	Complete	
AA19ALN000001	STRE	A	1	33.32	1.11%	\$2,860,012	7/11/2023	Complete	

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMENTATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
AA19ALN000008	STRE	A	1	13.7	0.46%	\$1,239,023	1/14/2022	Complete	
AA19ALN000020	STRE	A	1	19.85	0.66%	\$407,166	11/18/2021	Complete	
AA20ALN000004	STRE	A	1	29.81	0.99%	\$221,960	7/5/2022	Complete	
AA20ALN000011	STRE	A	1	235.37	7.85%	\$643,414	2/27/2024	Complete	
AA20ALN000013	STRE	A	1	116.15	3.87%	\$364,225	12/31/2022	Complete	
AA21ALN000006	STRE	A	1	30.84	1.03%	\$294,919	1/24/2023	Complete	
AA21ALN000018	STRE	A	1	5.3	0.18%	\$289,383	5/5/2023	Complete	
AA21ALN000026	STRE	A	1	138.29	4.61%	\$1,642,000	5/3/2023	Complete	
AA22ALN000003	STRE	A	1	136.61	4.56%	\$1,263,638	6/15/2024	Complete	
AA24RST000010	WSHW	S	1	1.42	0.05%	\$580,978	5/7/2024	Complete	
Subtotal Capital			53	1549.51	52%	\$37,584,219			
Other^{3,5}									
AA23APY000003	FPU	A	1	39.6	1.32%	\$0	7/1/2022	Complete	Funding Source: Alliance for the Chesapeake Bay (NGO).
AA24RST000001	MMBR	E	1	0.41	0.01%	\$0	5/31/2024	Complete	Funding Source: private landowner.
FY22 SEPC	SEPC	A		50	1.67%	\$574,641	6/30/2022	Complete	Aggregated records. Funding Source: BWPR Full Delivery, Bay Restoration Fund Grant, private homeowners.
FY23 SEPC	SEPC	A		49.91	1.66%	\$565,820	6/30/2023	Complete	Aggregated records. Funding Source: BWPR Full Delivery, Bay Restoration Fund Grant, private homeowners.
FY24 SEPC	SEPC	A		45.38	1.51%	\$528,014	6/30/2024	Complete	Aggregated records. Funding Source: BWPR Full Delivery, Bay Restoration Fund Grant, private homeowners.
FY22 SEPD	SEPD	A		35.52	1.18%	\$0	6/30/2022	Complete	Aggregated records. Funding Source: Bay Restoration Fund Grant, private homeowners.
FY23 SEPD	SEPD	A		25.44	0.85%	\$0	6/30/2023	Complete	Aggregated records. Funding Source: Bay Restoration Fund Grant, private homeowners.
FY24 SEPD	SEPD	A		21.92	0.73%	\$0	6/30/2024	Complete	Aggregated records. Funding Source: Bay Restoration Fund Grant, private homeowners.
AA21ALN000010	SHST	A		11.06	0.37%	\$0	8/3/2021	Complete	Funding Source: Alliance for the Chesapeake Bay (NGO).
AA19ALN000043	SHST	A		42.4	1.41%	\$0	4/28/2023	Complete	Funding Source: Arundel Rivers Federation (NGO).
AA21ALN000014	SHST	A		14.33	0.48%	\$0	1/30/2023	Complete	Funding Source: Deale Beach Citizens Association.
AA23ALN000006	SHST	A		7	0.23%	\$0	9/25/2023	Complete	Funding Source: Longview Civic Association.
AA23ALN000002	SHST	A		13.5	0.45%	\$0	10/7/2022	Complete	Funding Source: private developer.
AA23ALN000001	SHST	A		0.54	0.02%	\$0	7/22/2022	Complete	Funding Source: private developer.
AA21RST000005	SPSD	A		0.7	0.02%	\$0	8/3/2021	Complete	Funding Source: Alliance for the Chesapeake Bay (NGO).
AA21RST000006	SPSD	A		0.66	0.02%	\$0	8/3/2021	Complete	Funding Source: Alliance for the Chesapeake Bay (NGO).
AA21ALN000025	STRE	A		26.35	0.88%	\$0	6/15/2024	Complete	Funding Source: Severn Riverkeeper.
Subtotal Other			2	385	13%	\$1,668,475			

BMP ID or NAME ¹	BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMENTATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
Total Additional Restoration			55	1,934	65%	\$39,252,694			

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.

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) 199
Required ISR New Permit (acres): 2,998

BMP TYPE¹	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}						
CBC	A	38	19%	\$309,096	Planning	2025
CBC	A	38	19%	\$318,369	Planning	2026
CBC	A	38	19%	\$327,920	Planning	2027
CBC	A	38	19%	\$337,286	Planning	2028
CBC	A	38	19%	\$346,698	Planning	2029
SEPP	A	124.3	62%	\$0	Planning	2025
SEPP	A	124.3	62%	\$0	Planning	2026
SEPP	A	124.3	62%	\$0	Planning	2027
SEPP	A	124.3	62%	\$0	Planning	2028
SEPP	A	124.3	62%	\$0	Planning	2029
VSS	A	37.6	19%	\$394,987	Planning	2025
VSS	A	37.6	19%	\$406,837	Planning	2026
VSS	A	37.6	19%	\$419,042	Planning	2027
VSS	A	37.6	19%	\$431,010	Planning	2028
VSS	A	37.6	19%	\$443,038	Planning	2029
Operations Next Two Years (FY25-26) ⁴		199	100%	\$1,429,289		
Operations Next Five Years (FY25-29) ⁴		199	100%	\$3,734,283		
Operations Permit Term (FY22-27) ⁴		425	214%	\$3,704,735		
Capital Projects (Completed to Replace Annual Obligations)^{2,3}						
		0	0%	\$0		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Subtotal Capital Next Two Years (FY25-26)		0	0%	\$0		
Subtotal Capital Next Five Years (FY25-29)		0	0%	\$0		
Subtotal Capital Permit Term (FY22-27)		0	0%	\$0		
Other (Completed to Replace Annual Obligations)^{2,3}						
		0	0%	\$0		
Subtotal Other Next Two Years (FY25-26)		0	0%	\$0		
Subtotal Other Next Five Years (FY25-29)		0	0%	\$0		
Subtotal Other Permit Term (FY22-27)		0	0%	\$0		
Total Continued Obligations Next Two Years (FY25-26)		199	100%	\$1,429,289		
Total Continued Obligations Next Five Years (FY25-29)		199	100%	\$3,734,283		
Total Continued Obligations Permit Term (FY22-27)		425	214%	\$3,704,735		
Restoration for the Current Permit						
Operational Programs^{3,5}						
		0	0%	\$0		
Operations Next Two Years (FY25-26) ⁴		0	0%	\$0		
Operations Next Five Years (FY25-29) ⁴		0	0%	\$0		

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Operations Permit Term (FY22-27) ⁴		0	0%	\$0		
Capital Projects^{3,5}						
STRE	A	81.5	2.72%	\$3,795,650	Under Construction	2025
IBAS	S	6.4	0.21%	\$684,036	Planning	2025
IMPP	A	0.2	0.01%	\$837,974	Planning	2025
OUT	A	12.1	0.40%	\$807,427	Planning	2025
PWED	S	22.5	0.75%	\$1,546,576	Planning	2025
PWET	S	5.1	0.17%	\$654,456	Planning	2025
SHST	A	177.6	5.93%	\$7,090,129	Planning	2025
SPSD	A	21.8	0.73%	\$2,898,012	Planning	2025
STRE	A	57.7	1.92%	\$1,945,300	Planning	2025
WEDW	S	18.1	0.60%	\$663,023	Planning	2025
FSND	S	21.2	0.71%	\$1,723,083	Planning	2026
MMBR	E	0.3	0.01%	\$40,479	Planning	2026
OUT	A	40.8	1.36%	\$2,475,876	Planning	2026
SHST	A	33.4	1.11%	\$4,501,268	Planning	2026
SPSD	A	39.1	1.30%	\$2,571,366	Planning	2026
STRE	A	572.5	19.10%	\$34,431,415	Planning	2026
STRE	A	738.6	24.64%	\$56,488,686	Planning	2027
STRE	A	593.9	19.81%	\$26,380,207	Planning	2028
OUT	A	386.8	12.90%	\$2,001,430	Planning	2029
SPSD	A	4.7	0.16%	\$498,843	Planning	2029
STRE	A	122.6	4.09%	\$8,211,928	Planning	2029
Subtotal Capital Next Two Years (FY25-26)		1,110	37%	\$66,666,070		
Subtotal Capital Next Five Years (FY25-29)		2,957	99%	\$160,247,164		
Subtotal Capital Permit Term (FY22-27)		3,398	113%	\$160,738,975		
Other^{3,5}						

BMP TYPE ¹	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
IMPF	A	0.28	0.01%	\$30,614	Planning	2025
IMPP	A	0.03	0.00%	\$63,676	Planning	2025
OUT	A	24.96	0.83%	\$246,359	Planning	2025
SHST	A	80.44	2.68%	\$532,505	Planning	2025
SPSD	A	1.53	0.05%	\$312,081	Planning	2025
STRE	A	93.15	3.11%	\$60,167	Planning	2025
WPWS	S	5.45	0.18%	\$53,792	Planning	2025
OUT	A	68.33	2.28%	\$239,723	Planning	2028
SHST	A	128.91	4.30%	\$0	Planning	2029
Subtotal Other Next Two Years (FY25-26)		206	7%	\$1,299,194		
Subtotal Other Next Five Years (FY25-29)		403	13%	\$1,538,917		
Subtotal Other Permit Term (FY22-27)		591	20%	\$2,967,669		
Total Next Two Years (FY25-26)		1,316	44%	\$67,965,265		
Total Next Five Years (FY25-29)		3,360	112%	\$161,786,081		
Total Permit Term (FY22-27)		3,989	133%	\$163,706,645		

Notes:

*To identify all "actions" required under the MS4 permit, provide an executive summary of the jurisdiction's MS4 programs. For planned 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.

**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 2023¹	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 TERM² FY 2022-2027
Operating Expenditures (costs)								
Street Sweeping Program	\$671,903	\$331,726	\$346,868	\$357,274	\$367,993	\$379,032	\$390,403	\$2,075,764
Inlet Cleaning	\$317,983	\$206,862	\$316,545	\$326,041	\$335,822	\$345,897	\$356,274	\$1,503,253
IDDE	\$155,097	\$80,382	\$82,577	\$84,229	\$85,913	\$87,632	\$89,384	\$488,198
Support of Capital Projects	\$23,212,239	\$13,419,230	\$13,554,710	\$13,818,520	\$14,087,407	\$14,361,467	\$14,640,798	\$78,092,106
Debt Service Payment ³	\$22,649,898	\$12,924,242	\$13,425,700	\$18,941,702	\$21,994,775	\$25,380,075	\$27,263,266	\$89,936,317
Pro Rata Shares (Indirect Costs) ⁴	\$3,729,600	\$1,546,300	\$1,642,200	\$1,691,466	\$1,742,210	\$1,794,476	\$1,848,311	\$10,351,776
Capital Expenditures (costs)								
General Fund (Paygo)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WPR Fund (Paygo)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt Service	\$69,000,000	\$39,000,000	\$45,000,000	\$50,000,000	\$55,000,000	\$31,922,300	\$34,117,000	\$258,000,000
Grants & Partnerships	\$2,000,000	\$1,000,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$1,200,000	\$6,600,000
Other (please stipulate capital expenditure) ⁴	-	-	-	-	-	-	-	\$0
Total expenditures:	\$121,736,720	\$68,508,742	\$75,568,600	\$86,419,232	\$94,814,120	\$75,470,879	\$79,905,436	\$447,047,414

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 permit.
4. Insert additional rows as necessary.

Article 4-202.1(j)(1)(i)3: Projected annual and 5-year revenues or other funds that will be used to meet the cost for the county or municipality to meet the impervious surface restoration plan requirements under the National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 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 2022-2027
Annual Revenue Appropriated for ISRP ³	\$128,154,167	\$69,621,972	\$81,108,403	\$86,752,424	\$93,959,399	\$67,007,229	\$71,153,998	\$167,860,827	\$459,596,365
Annual Costs towards ISRP ⁴	\$121,736,720	\$68,508,742	\$75,568,600	\$86,419,232	\$94,814,120	\$75,470,879	\$79,905,436	\$161,987,832	\$447,047,414

Compare revenue appropriated / annual costs: **104%**
Requirement in Article 4-202.1(j)(4)(iii)⁵: **100%**

- Notes:**
- Includes revenue since expiration date of previous permit up to and including FY 2023.
 - 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."
 - Revenue means "dedicated revenues, funds, or sources of funds" (per Article 4-202.1(j)(4)(iii)).
 - See ISRP Cost spreadsheet.
 - 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 THRU¹ 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 2022-2027
Paygo Sources								
Stormwater Remediation Fees (WPR Fund)	\$ 48,102,779	\$ 25,586,486	\$ 27,300,300	\$ 28,951,929	\$ 30,704,653	\$ 32,560,998	\$ 34,532,237	\$ 160,646,147
Miscellaneous Revenues	\$ 173,414	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 173,414
General Fund	\$ 3,979,638	\$ 2,623,620	\$ 6,443,903	\$ 4,632,150	\$ 4,979,766	\$ -	\$ -	\$ 22,659,077
Investment Income	\$ 1,124,354	\$ 791,660	\$ 534,200	\$ 430,920	\$ 387,556	\$ 328,837	\$ 243,826	\$ 3,268,689
Interfund Recoveries	\$ 1,804,282	\$ 1,120,206	\$ 1,350,000	\$ 1,500,000	\$ 1,650,000	\$ 957,669	\$ 1,023,510	\$ 7,424,488
Other Funds 3 (please stipulate funding source)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Paygo Sources	\$ 55,184,467	\$ 30,121,972	\$ 35,628,403	\$ 35,514,999	\$ 37,721,974	\$ 33,847,504	\$ 35,799,573	\$ 194,171,815
Debt Service²								
County Transportation Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General Obligation Bonds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Revenue (Utility) Bonds	\$ 69,000,000	\$ 39,000,000	\$ 45,000,000	\$ 50,000,000	\$ 55,000,000	\$ 31,922,300	\$ 34,117,000	\$ 258,000,000
State Revolving Loan Fund	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public-private partnership (debt service)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Debt Service	\$ 69,000,000	\$ 39,000,000	\$ 45,000,000	\$ 50,000,000	\$ 55,000,000	\$ 31,922,300	\$ 34,117,000	\$ 258,000,000
Grants and Partnerships³								
State funded grants	\$ 3,969,700	\$ 500,000	\$ 480,000	\$ 1,237,425	\$ 1,237,425	\$ 1,237,425	\$ 1,237,425	\$ 7,424,550
Federal funded grants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Public-private partnership (matched grant)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Subtotal Grants and Partnerships	\$ 3,969,700	\$ 500,000	\$ 480,000	\$ 1,237,425	\$ 1,237,425	\$ 1,237,425	\$ 1,237,425	\$ 7,424,550
Total Annual Sources of Funds	\$ 128,154,167	\$ 69,621,972	\$ 81,108,403	\$ 86,752,424	\$ 93,959,399	\$ 67,007,229	\$ 71,153,998	\$ 459,596,365
Percent of Funds Directed Toward ISRP	94.99%	98.40%	93.17%	99.62%	100.91%	112.63%	112.30%	97.27%

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.

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

COUNTY COUNCIL OF ANNE ARUNDEL COUNTY, MARYLAND

Legislative Session 2024, Legislative Day No. 18

Resolution No. 39-24

Introduced by Ms. Pickard, Chair
(by request of the County Executive)

By the County Council, October 7, 2024

1 RESOLUTION approving Anne Arundel County’s 2024 Financial Assurance Plan for
2 compliance with the National Pollutant Discharge Elimination System Phase I Municipal
3 Separate Storm Sewer System Permit

4
5 WHEREAS, § 4-202.1(j)(1) of the Environment Article of the State Code requires
6 that every two years on the anniversary date of the issuance of a county’s National
7 Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer
8 System Permit (“NPDES MS4 Permit”), a county shall file a financial assurance
9 plan with the Maryland Department of the Environment (“MDE”) regarding
10 compliance with the county’s NPDES MS4 Permit; and

11
12 WHEREAS, the anniversary date of the County’s NPDES MS4 Permit is
13 November 5, 2024; and

14
15 WHEREAS, § 4-202.1(j)(3) of the Environment Article of the State Code provides
16 that a county may not file a financial assurance plan with the MDE until the local
17 governing body of the county holds a public hearing on the financial assurance plan
18 and approves the financial assurance plan; and

19
20 WHEREAS, § 4-202.1(j)(1) of the Environment Article of the State Code requires
21 that a financial assurance plan shall clearly identify: (1) actions that will be required
22 by the county to meet the requirements of the NPDES MS4 Permit; (2) projected
23 annual and five-year costs for the county to meet the impervious surface restoration
24 plan requirements of its NPDES MS4 Permit; (3) projected annual and five-year
25 revenues or other funds that will be used to meet the costs for the county to meet
26 the impervious surface restoration plan requirements of its NPDES MS4 Permit;
27 (4) any sources of funds that will be utilized by the county to meet the requirements
28 of its NPDES MS4 Permit; and (5) specific actions and expenditures that the county
29 implemented in the previous fiscal years to meet its impervious surface restoration
30 plan requirements under its NPDES MS4 Permit; and

31
32 WHEREAS, § 4-202.1(j)(4)(iii) of the Environment Article of the State Code
33 provides that funding in the financial assurance plan is sufficient if it demonstrates
34 that the county has dedicated revenues, funds, or sources of funds to meet, for the
35 two-year period immediately following the filing date of the financial assurance
36 plan, 100% of the projected costs of compliance with the impervious surface
37 restoration plan requirements of the county under its NPDES MS4 Permit over that
38 two-year period; and

1 WHEREAS, Anne Arundel County's 2024 Financial Assurance Plan, which
2 addresses the requirements of § 4-202.1(j) of the Environment Article of the State
3 Code has been prepared at the direction of and approved by the County Executive
4 and is incorporated herein by reference as if fully set forth, and a certified copy of
5 the "Anne Arundel County's 2024 Financial Assurance Plan" shall be permanently
6 kept on file at the Department of Public Works; now, therefore, be it
7

8 *Resolved by the County Council of Anne Arundel County, Maryland,* That Anne
9 Arundel County's 2024 Financial Assurance Plan is hereby approved; and be it further
10

11 *Resolved,* That a copy of this Resolution be sent to County Executive Steuart Pittman
12 and Stewart R. Comstock, Chief of Program Review at the Maryland Department of the
13 Environment.

READ AND PASSED this 4th day of November, 2024

By Order:



Kaley Schultze
Administrative Officer

I HEREBY CERTIFY THAT RESOLUTION NO. 39-24 IS TRUE AND CORRECT AND DULY
ADOPTED BY THE COUNTY COUNCIL OF ANNE ARUNDEL COUNTY.



Allison Pickard
Chair