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MS4 Information

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Email	<a href="mailto:pwmich20@aacounty.org">pwmich20@aacounty.org</a>
Continued Annual Alternative ISR (ac)	199
Required ISR New Permit (ac)	2,998
Total ISR (ac)	3,197
Permit Num	20-DP-3316 MD0068306
Permit Period (FY)	2022-2027
Reporting FY	2022

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**Check with MDE Geodatabase:**

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

**Check with Permit Language:**

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

Version 6-22-22

**Article 4-202.1(j)(1)(i)1: Actions that will be required of the county or municipality to meet the requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.**

Note: To identify all "actions" required under the MS4 permit, provide an executive summary of the jurisdiction's MS4 programs. See MDE's FAP Guidance. For proposed actions to meet the impervious surface restoration plan, fill in the table below.

**Continued Annual Alternative ISR (ac) 199 6%**  
**Required ISR New Permit (ac): 2,998**  
**Total ISR (ac): 3,197**

REST BMP TYPE <sup>1</sup>	BMP CLASS	IMPERVIOUS ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
<b>Obligations from Previous Permit That Must Be Continued or Met</b>						
<b>Operational Programs<sup>2,3</sup></b>						
CBC	A	37.5	19%	\$291,353	PLANNING	2023
CBC	A	37.5	19%	\$300,093	PROPOSED	2024
CBC	A	37.5	19%	\$309,096	PROPOSED	2025
CBC	A	37.5	19%	\$318,369	PROPOSED	2026
CBC	A	37.5	19%	\$327,920	PROPOSED	2027
SEPP	A	124.3	62%	\$0	PLANNING	2023
SEPP	A	124.3	62%	\$0	PROPOSED	2024
SEPP	A	124.3	62%	\$0	PROPOSED	2025
SEPP	A	124.3	62%	\$0	PROPOSED	2026
SEPP	A	124.3	62%	\$0	PROPOSED	2027
VSS	A	37.6	19%	\$372,313	PLANNING	2023
VSS	A	37.6	19%	\$383,483	PROPOSED	2024
VSS	A	37.6	19%	\$394,987	PROPOSED	2025
VSS	A	37.6	19%	\$406,837	PROPOSED	2026
VSS	A	37.6	19%	\$419,042	PROPOSED	2027
Operations Next Two Years (FY23-24) <sup>4</sup>		199	100%	\$1,347,242		
Operations Next Five Years (FY23-27) <sup>4</sup>		199	100%	\$3,523,493		
Operations Permit Term (FY22-26) <sup>4,6</sup>		249	125%	\$4,060,997		
<b>Capital Projects (Completed to Replace Annual Obligations)<sup>2,3</sup></b>						
		0	0%			
Subtotal Capital Next Two Years (FY23-24)		0	0%	\$0		
Subtotal Capital Next Five Years (FY23-27)		0	0%	\$0		
Subtotal Capital Permit Term (FY22-26) <sup>5</sup>		0	0%	\$0		
<b>Other (Completed to Replace Annual Obligations)<sup>2,3</sup></b>						
		0	0%			
Subtotal Other Next Two Years (FY23-24)		0	0%	\$0		
Subtotal Other Next Five Years (FY23-27)		0	0%	\$0		
Subtotal Other Permit Term (FY22-26) <sup>5</sup>		0	0%	\$0		
<b>Total Continued Obligations Next Two Years (FY23-24)</b>		<b>199</b>	<b>100%</b>	<b>\$1,347,242</b>		
<b>Total Continued Obligations Next Five Years (FY23-27)</b>		<b>199</b>	<b>100%</b>	<b>\$3,523,493</b>		
<b>Total Continued Obligations Permit Term (FY22-26)<sup>5</sup></b>		<b>249</b>	<b>125%</b>	<b>\$4,060,997</b>		
<b>Restoration for the New Permit</b>						
<b>Operational Programs<sup>3,5</sup></b>						
		0	0%			
Operations Next Two Years (FY23-24) <sup>4</sup>		0	0%	\$0		
Operations Next Five Years (FY23-27) <sup>4</sup>		0	0%	\$0		
Operations Permit Term (FY22-26) <sup>4,6</sup>		0	0%	\$0		
<b>Capital Projects<sup>3,5</sup></b>						
PWED	S	45.85	1.529%	\$3,923,270	UNDER CONST	2023
SEPC	A	113.50	3.786%	\$1,705,707	UNDER CONST	2023
FSND	S	25.94	0.865%	\$1,505,082	PLANNING	2023
IBAS	S	19.44	0.648%	\$1,951,031	PLANNING	2023
IMPP	A	0.02	0.001%	\$1,123	PLANNING	2023
MIBR	E	7.72	0.258%	\$1,261,438	PLANNING	2023
MSWG	E	0.13	0.004%	\$2,292,709	PLANNING	2023
PWET	S	5.07	0.169%	\$687,785	PLANNING	2023
SHST	A	12.95	0.432%	\$1,995,443	PLANNING	2023
SPSC	A	48.29	1.611%	\$11,917,917	PLANNING	2023
STRE	A	146.50	4.887%	\$5,683,024	PLANNING	2023
WEDW	S	18.13	0.605%	\$249,653	PLANNING	2023
WPWS	S	22.76	0.759%	\$2,064,584	PLANNING	2023
QUIT	A	88.04	2.937%	\$3,056,516	PLANNING	2024

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

DESCRIPTION	PREVIOUS YEAR FY 2021	CURRENT YEAR FY 2022	PROJECTED YEAR 1 FY 2023	PROJECTED YEAR 2 FY 2024	PROJECTED YEAR 3 FY 2025	PROJECTED YEAR 4 FY 2026	PROJECTED YEAR 5 FY 2027	TOTAL PERMIT CYCLE <sup>4</sup>
<b>Operating Expenditures (costs)</b>								
Street Sweeping Program	\$338,087	\$361,469	\$372,313	\$383,483	\$394,987	\$406,137	\$419,042	\$2,256,476
Inlet Cleaning	\$259,084	\$282,867	\$291,353	\$300,093	\$309,096	\$318,369	\$327,920	\$1,760,862
IDDE	\$92,719	\$78,529	\$76,568	\$76,568	\$76,568	\$76,568	\$79,586	\$477,519
Support of Capital Projects	\$11,505,110	\$11,822,935	\$11,417,966	\$11,638,568	\$11,865,321	\$12,097,104	\$12,328,879	\$70,347,005
Debt Service Payment <sup>1</sup>	\$8,567,100	\$10,445,000	\$11,455,600	\$13,526,443	\$15,818,619	\$18,381,739	\$21,251,817	\$78,194,501
Other (please stipulate program expenditure) <sup>2</sup>	-	-	-	-	-	-	-	\$0
<b>Capital Expenditures (costs)<sup>3</sup></b>								
General Fund (Paygo)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
WPR Fund (Paygo)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Debt Service	\$25,000,000	\$33,000,000	\$36,000,000	\$39,000,000	\$45,000,000	\$50,000,000	\$55,000,000	\$228,000,000
Grants & Partnerships	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$6,000,000
Other (please stipulate capital expenditure) <sup>2</sup>	-	-	-	-	-	-	-	\$0
Subtotal operation and paygo:	\$20,762,100	\$22,990,800	\$23,613,800	\$25,925,155	\$28,464,591	\$31,279,917	\$34,407,244	\$153,036,363
<b>Total expenditures:</b>	<b>\$46,762,100</b>	<b>\$56,990,800</b>	<b>\$60,613,800</b>	<b>\$65,925,155</b>	<b>\$74,464,591</b>	<b>\$82,279,917</b>	<b>\$90,407,244</b>	<b>\$387,036,363</b>

Total ISRP costs except debt service:	\$308,841,862
Compare ISRP costs (except debt service) / total ISRP proposed actions for permit term:	231%
Total capital expenditures:	\$234,000,000
Compare total capital expenditures / total ISRP proposed actions capital costs for permit term:	175%

**Check with MDE Geodatabase:**

The total current FY 2022 expenditure should be less than the combined total of the "OP\_cost" and "CAP\_Cost" fields in the fiscal analyses table of the geodatabase.

The total projected FY 2023 expenditure should be less than the combined total of the "OP\_budget" and "CAP\_budget" fields in the fiscal analyses table of the geodatabase.

**Notes:**

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

**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	PREVIOUS YEAR FY 2021	CURRENT YEAR FY 22	PROJECTED YEAR 1 FY 23	PROJECTED YEAR 2 FY 24	PROJECTED YEAR 3 FY 25	PROJECTED YEAR 4 FY 26	PROJECTED YEAR 5 FY 27	TOTAL NEXT 2-YEARS FY 23-24 <sup>1</sup>	TOTAL
Annual Revenue <sup>2</sup> Appropriated for ISRP	\$53,362,247	\$64,442,985	\$65,302,443	\$67,054,874	\$73,443,728	\$78,760,753	\$84,028,981	\$132,357,317	\$486,396,011
Annual Costs towards ISRP <sup>3</sup>	\$46,762,100	\$56,990,800	\$60,613,800	\$65,925,155	\$74,464,591	\$82,279,917	\$90,407,244	\$126,538,955	\$477,443,607

Compare revenue appropriated / annual costs: 105%  
Reporting Criteria: 100%

Note

1. Article 4-202.1(j)(2): Demonstration that county or municipality has sufficient funding in the current fiscal year and subsequent fiscal year budgets to meet its estimated cost for the 2-year period immediately following the filing date of the FAP. Note that the appropriations and expenditures include time period up to FY 22.
2. Revenue means "dedicated revenues, funds, or sources of funds (per Article 4-202.1(j)(4)(ii)). Note that budget appropriations have only been approved by governing bodies through FYXX at the time of FAP reporting.
3. See table of ISRP Cost.

**Article 4-202.1(j)(1)(i)4: Any sources of funds that will be utilized by the county or municipality to meet the requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.**

<b>SOURCE</b>	<b>PREVIOUS YEAR FY 2021</b>	<b>CURRENT YEAR FY 22</b>	<b>PROJECTED YEAR 1 FY 23</b>	<b>PROJECTED YEAR 2 FY 24</b>	<b>PROJECTED YEAR 3 FY 25</b>	<b>PROJECTED YEAR 4 FY 26</b>	<b>PROJECTED YEAR 5 FY 27</b>	<b>TOTAL PERMIT CYCLE</b>
<b>Paygo Sources</b>								
Stormwater Remediation Fees (WPR Fund)	\$ 23,619,255	\$ 23,906,821	\$ 24,033,400	\$24,273,741	\$24,516,478	\$24,761,643	\$25,009,259	\$ 145,111,338
Miscellaneous Fees (WPR Fund)	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
General Fund	\$ 2,874,354	\$ 3,979,639	\$ 1,995,443	\$-	\$-	\$-	\$-	\$ 8,849,436
Investment Income	\$ 132,468	\$ 108,512	\$ 443,600	\$861,133	\$827,250	\$749,110	\$619,722	\$ 3,122,073
Interfund Recoveries	\$ 909,170	\$ 720,313	\$ 1,080,000	\$ 1,170,000	\$ 1,350,000	\$ 1,500,000	\$ 1,650,000	\$ 6,729,483
Other Funds 3 (please stipulate funding source)	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
Subtotal Paygo Sources	\$ 27,535,247	\$ 28,715,285	\$ 27,552,443	\$ 26,304,874	\$ 26,693,728	\$ 27,010,753	\$ 27,278,981	\$ 163,812,330
<b>Debt Service (paygo sources will be used to pay off debt service. Note that previous appropriations for debt service used for ISRP is listed in FY 2021).</b>								
County Transportation Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
General Obligation Bonds	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
Revenue (WPRF/BWPR) Bonds	\$ 25,000,000	\$ 33,000,000	\$ 36,000,000	\$ 39,000,000	\$ 45,000,000	\$ 50,000,000	\$ 55,000,000	\$ 228,000,000
State Revolving Loan Fund	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
Public-private partnership (debt service)	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
Subtotal Debt Service	\$ 25,000,000	\$ 33,000,000	\$ 36,000,000	\$ 39,000,000	\$ 45,000,000	\$ 50,000,000	\$ 55,000,000	\$ 228,000,000
<b>Grants and Partnerships (no payment is expected)</b>								
State funded grants	\$ 827,000	\$ 2,727,700	\$ 1,750,000	\$ 1,750,000	\$ 1,750,000	\$ 1,750,000	\$ 1,750,000	\$ 10,554,700
Federal funded grants	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
Public-private partnership (matched grant)	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$ -
Subtotal Grants and Partnerships	\$ 827,000	\$ 2,727,700	\$ 1,750,000	\$ 1,750,000	\$ 1,750,000	\$ 1,750,000	\$ 1,750,000	\$ 10,554,700
<b>Total Annual Sources of Funds</b>	<b>\$ 53,362,247</b>	<b>\$ 64,442,985</b>	<b>\$ 65,302,443</b>	<b>\$ 67,054,874</b>	<b>\$ 73,443,728</b>	<b>\$ 78,760,753</b>	<b>\$ 84,028,981</b>	<b>\$ 250,162,549</b>
<b>Percent of Funds Directed Toward ISRP</b>								

Compare total permit term paygo ISRP costs / subtotal permit term paygo sources: 93%

Compare total ISRP expenditures / total permit term annual sources of funds: 92%

\* WPR Fund: Watershed Protection and Restoration Fund.

**Check with MDE Geodatabase:**

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

**Note**

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

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

REST BMP ID	REST BMP TYPE <sup>1</sup>	BMP CLASS <sup>1</sup>	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN-TATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
<b>Obligations from Previous Permit That Must Be Continued or Met</b>				<b>199</b>					
<b>Operational Programs<sup>2,3</sup></b>									
	CBC	A	167	35.1	18%	\$302,166	06/30/2021	COMPLETE	Assumes 50% organic and 50% inorganic material collected.
	CBC	A	75	15.8	8%	\$282,867	06/30/2022	COMPLETE	Full implementation for FY22 not available at time of FAP compilation; full credit will be included in the MS4 Annual Report and geodatabase. Assumes 50% organic and 50% inorganic material collected.
	SEPP	A	19,323	386.5	194%		\$0	06/30/2021	
	SEPP	A	18,864	377.3	190%	\$0	06/30/2022	COMPLETE	Full implementation for FY22 not available at time of FAP compilation; full credit will be included in the MS4 Annual Report and geodatabase. Funding Source: Private septic tank owners.
	VSS	A	256	39.9	20%		\$337,964	06/30/2021	
	VSS	A	256	39.9	20%	\$361,469	06/30/2022	COMPLETE	256 lanes miles swept.
Subtotal Operations <sup>4,6</sup>			38941	447	225%	\$1,284,466			
<b>Capital Projects (Completed to Replace Annual Obligations)<sup>2,3</sup></b>									
Subtotal Capital			0	0	0%	\$0			
<b>Other (Completed to Replace Annual Obligations)<sup>2,3</sup></b>									
Subtotal Other			0	0	0%	\$0			
<b>Total Continued Obligations from Previous Permit</b>			<b>38,941</b>	<b>447</b>	<b>225%</b>	<b>\$1,284,466</b>			
<b>Restoration for the New Permit</b>				<b>2,998</b>					
<b>Operational Programs<sup>3,5</sup></b>									
Subtotal Operations <sup>4</sup>			0	0.00	0%	\$0			
<b>Capital Projects<sup>3,5</sup></b>									
AA18RST000028	FBIO	S	1	5.08	0.169%	\$903,159	6/6/2021	COMPLETE	
AA16RST000063	FSND	S	1	6.45	0.215%	\$558,232	1/29/2021	COMPLETE	
AA21APY000003	IMPP	A	1	0.06	0.002%	\$1,504	4/30/2021	COMPLETE	
AA17RST000002	ITRN	S	1	2.64	0.088%	\$652,419	1/5/2022	COMPLETE	
AA21RST000012	MIBR	E	1	0.11	0.004%	\$5,265	4/30/2021	COMPLETE	
AA21RST000013	MIBR	E	1	0.11	0.004%	\$7,521	4/30/2021	COMPLETE	
AA21RST000014	MIBR	E	1	0.30	0.010%	\$24,068	4/30/2021	COMPLETE	
AA20RST000008	MRNG	E	1	0.12	0.004%	\$6,300	9/25/2020	COMPLETE	
AA20RST000009	MRNG	E	1	0.06	0.002%	\$3,150	9/25/2020	COMPLETE	
AA20RST000010	MRNG	E	1	0.18	0.006%	\$9,450	9/25/2020	COMPLETE	
AA19RST000013	PWED	S	1	19.34	0.645%	\$491,092	5/4/2021	COMPLETE	
AA19RST000014	PWED	S	1	44.24	1.476%	\$1,123,368	5/4/2021	COMPLETE	
AA18ALN000012	SHST	A	1	31.93	1.065%	\$231,709	8/27/2020	COMPLETE	
AA21ALN000013	SHST	A	1	18.28	0.610%	\$133,105	8/27/2020	COMPLETE	
AA20ALN000015	SHST	A	1	18.00	0.600%	\$129,034	10/27/2020	COMPLETE	
AA20ALN000006	SHST	A	1	134.33	4.481%	\$2,078,677	12/1/2020	COMPLETE	
AA20ALN000007	SHST	A	1	47.36	1.580%	\$733,023	12/1/2020	COMPLETE	
AA20ALN000014	SHST	A	1	1.59	0.053%	\$32,277	2/23/2021	COMPLETE	
AA19ALN000027	SHST	A	1	4.18	0.139%	\$639,981	3/21/2021	COMPLETE	
AA21ALN000004	SHST	A	1	6.06	0.202%	\$298,868	4/30/2021	COMPLETE	
AA20ALN000008	SHST	A	1	4.91	0.164%	\$751,882	6/30/2021	COMPLETE	

AA20ALN000017	SHST	A	1	110.12	3.673%	\$2,369,719	11/16/2021	COMPLETE	
AA20ALN000018	SHST	A	1	26.78	0.893%	\$2,002,664	12/31/2021	COMPLETE	
AA20ALN000016	SHST	A	1	30.05	1.002%	\$647,113	12/31/2021	COMPLETE	
AA17ALN000017	SHST	A	1	10.24	0.342%	\$2,070,593	2/28/2022	COMPLETE	
AA17ALN000008	SHST	A	1	9.78	0.326%	\$1,909,045	2/28/2022	COMPLETE	
AA18RST000014	SPSC	A	1	71.32	2.379%	\$2,178,172	8/21/2020	COMPLETE	Project has Protocol 1 or 5.
AA19RST000007	SPSC	A	1	1.81	0.060%	\$23,084	12/10/2020	COMPLETE	Project has Protocol 1 or 5.
AA19RST000008	SPSC	A	1	111.39	3.715%	\$1,420,606	12/10/2020	COMPLETE	Project has Protocol 1 or 5.
AA20RST000007	SPSC	A	1	1.02	0.034%	\$66,870	2/1/2021	COMPLETE	
AA19RST000004	SPSC	A	1	24.89	0.830%	\$383,915	2/7/2021	COMPLETE	Project has Protocol 1 or 5.
AA21RST000015	SPSC	A	1	0.95	0.032%	\$34,729	5/24/2021	COMPLETE	
AA16RST000069	SPSC	A	1	5.05	0.168%	\$722,643	5/30/2021	COMPLETE	
AA18RST000023	SPSC	A	1	106.05	3.537%	\$1,485,426	9/7/2021	COMPLETE	Project has Protocol 1 or 5.
AA17RST000001	SPSC	A	1	4.77	0.159%	\$1,178,803	9/23/2021	COMPLETE	
AA16RST000065	SPSC	A	1	7.46	0.249%	\$645,645	11/30/2021	COMPLETE	
AA19RST000003	SPSC	A	1	0.96	0.032%	\$24,911	12/1/2021	COMPLETE	
AA22RST000002	SPSC	A	1	3.98	0.133%	\$102,355	4/27/2022	COMPLETE	Project has Protocol 1 or 5.
AA19ALN000022	STRE	A	1	22.01	0.734%	\$7,293,014	9/3/2020	COMPLETE	
AA21ALN000001	STRE	A	1	7.40	0.247%	\$7,776,098	9/18/2020	COMPLETE	
AA18ALN000007	STRE	A	1	9.50	0.317%	\$645,192	12/1/2020	COMPLETE	
AA16ALN000008	STRE	A	1	40.74	1.359%	\$519,575	12/10/2020	COMPLETE	
AA19ALN000006	STRE	A	1	204.29	6.814%	\$378,487	1/15/2021	COMPLETE	
AA21ALN000009	STRE	A	1	19.48	0.650%	\$349,700	2/5/2021	COMPLETE	
AA21ALN000015	STRE	A	1	5.92	0.197%	\$158,211	3/4/2021	COMPLETE	
AA20ALN000009	STRE	A	1	42.63	1.422%	\$1,358,152	3/15/2021	COMPLETE	
AA20ALN000010	STRE	A	1	4.17	0.139%	\$145,471	3/15/2021	COMPLETE	
AA18ALN000005	STRE	A	1	6.11	0.204%	\$523,700	3/15/2021	COMPLETE	
AA19ALN000029	STRE	A	1	90.95	3.034%	\$1,834,936	3/19/2021	COMPLETE	
AA19ALN000021	STRE	A	1	40.90	1.364%	\$423,000	3/31/2021	COMPLETE	
AA19ALN000020	STRE	A	1	19.85	0.662%	\$515,089	11/28/2021	COMPLETE	
AA19ALN000008	STRE	A	1	13.70	0.457%	\$1,313,396	11/28/2023	COMPLETE	
AA19RST000009	WEDW	S	1	1.78	0.059%	\$22,701	12/10/2020	COMPLETE	
AA16RST000060	WSHW	S	1	12.44	0.415%	\$741,412	9/14/2020	COMPLETE	
Subtotal Capital			54	1,414	47%	\$50,078,512			
<b>Other<sup>3,5</sup></b>									
AA21RST000004	MMBR	E	1	0.34	0.0113%	\$0	6/30/2021	COMPLETE	Funding Source: Severn Riverkeeper Program (NGO).
AA19RST000018	MSGW	E	1	0.40	0.0133%	\$0	7/9/2020	COMPLETE	Funding Source: Private waterfront community.
AA19RST000019	MSGW	E	1	0.95	0.0317%	\$0	7/9/2020	COMPLETE	Funding Source: Private waterfront community.
AA21ALN000022	OUT	A	1	2.79	0.0931%	\$0	6/1/2021	COMPLETE	Funding Source: Anne Arundel Soil Conservation District.
	SEPC	A	25	8.10	0.2702%	\$0	6/30/2021	COMPLETE	Aggregated records. FY22 data not available at time of FAP compilation; full credit will be included in the MS4 Annual Report and geodatabase, showing FY21 only. Funding Source: Bay Restoration Fund Grant; private homeowners.
	SEPD	A	191	30.70	1.0240%	\$0	6/30/2021	COMPLETE	Aggregated records. FY22 data not available at time of FAP compilation; full credit will be included in the MS4 Annual Report and geodatabase, showing FY21 only. Funding Source: Bay Restoration Fund Grant; private homeowners.
AA21ALN000010	SHST	A	1	11.06	0.3689%	\$0	8/3/2021	COMPLETE	Funding Source: Alliance for the Chesapeake Bay (NGO).
AA21RST000005	SPSC	A	1	0.70	0.0233%	\$0	12/31/2021	COMPLETE	Funding Source: Alliance for the Chesapeake Bay (NGO).
AA21RST000006	SPSC	A	1	0.66	0.0220%	\$0	12/31/2021	COMPLETE	Funding Source: Alliance for the Chesapeake Bay (NGO).
AA21ALN000029	STRE	A	1	6.00	0.2001%	\$0	6/24/2021	COMPLETE	Funding Source: Private developer.
Subtotal Other			224	62	2%	\$0			
<b>Total Additional Restoration</b>			<b>278</b>	<b>1,476</b>	<b>49%</b>	<b>\$50,078,512</b>			

**Check with MDE Geodatabase:**

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

**Notes:**

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

Version 6-22-22

**Anne Arundel County Notes:**

6. Adjusted the formula for Subtotal Operations %ISRP Complete from adding annual percentages to calculating Subtotal Impervious Acres as a percent of Permit Obligation.



Code Description	Code	Class
<b>Ponds</b>		
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
<b>Wetlands</b>		
ED Shallow Wetland	WEDW	S
Pocket Wetland	WPKT	S
Pond Wetland System	WPWS	S
Shallow Marsh	WSHW	S
<b>Infiltration</b>		
Infiltration Basin	IBAS	S
Infiltration Trench	ITRN	S
Landscape Infiltration	MILS	E
Infiltration Berm	MIBR	E
Dry Well	MIDW	E
<b>Filtering Systems</b>		
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
<b>Open Channel Systems</b>		
Dry Swale	ODSW	S
Wet Swale	OWSW	S
Bio-Swale	MSWB	E
Grass Swale	MSWG	E
Wet Swale	MSWW	E
<b>Alternative Surfaces</b>		
Green Roof - Extensive	AGRE	E
Green Roof - Intensive	AGRI	E
Permeable Pavement	APRP	E
Reinforced Turf	ARTF	E
<b>Nonstructural Techniques</b>		
Non-Rooftop Disconnect	NDNR	E
Rooftop Disconnect	NDRR	E
Sheetflow to Conservation Area	NSCA	E
<b>Other Systems</b>		
Rainwater Harvesting	MRWH	E
<b>Other Practices</b>		
Extended Detention Structure, Dry	XDED	S
Detention Structure (Dry Pond)	XDPD	S

Flood Management Area	XFLD	S
Oil Grit separator	XOGS	S
Other	OTH	
<b>Alternative BMP</b>		
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