Christopher Heyn, P.E., Director 410-386-2949, fax 410-386-2924 Toll-free 1-888-302-8978 MD Relay service 7-1-1/1-800-735-2258 LRM@carrollcountymd.gov



Department of Land and Resource Management Carroll County Government 225 North Center Street Westminster, Maryland 21157

December 21, 2022

Raymond P. Bahr
Deputy Program Manager
Sediment, Stormwater, and Dam Safety Program
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

Re:

2022 Carroll County Financial Assurance Plan Watershed Protection and Restoration Program

Dear. Ray:

The attached Carroll County 2022 Financial Assurance Plan (FAP) is being submitted per requirements of the Code of Maryland Regulations (COMAR) subsection 4-202-1. The FAP has been prepared per the Maryland Department of the Environment developed spreadsheets and approved per the requirements of subsection 4-201.1(J)(3). The Board of County Commissioners of Carroll County held three public venues regarding the FAP:

- 1. An October 27, 2022, briefing by staff to the Board regarding the FAP, which included Board approval to move forward to a public hearing.
- 2. A November 3, 2022, public hearing by the Board regarding the FAP.
- 3. A November 17, 2022, Board Session in which the FAP was approved

The Carroll County 2022 FAP demonstrates sufficient funding in the current fiscal year and subsequent budgets to meet its anticipated costs per requirements with this 2022 submittal. Also included in this submittal is the Watershed Protection and Restoration Program Annual Report Table.

While the FAP reflects current conditions related to impervious surface assessment and stormwater waste load allocations, the County expressly reserves the right to modify and amend such numbers as may be necessary based on new permit requirements, budget constraints, or other unforeseen circumstances.

Finally, I would like to extend the County's sincere appreciation to you and your staff for your continued support and assistance. I look forward to MDE and the County continuing to work jointly on any issues through the review and reporting process.

Sincerely

Christopher P. Heyn, P.E.

Director

CPH/mlb

CC:

Board of County Commissioner Timothy C. Burke, County Attorney Water Resource Coordination Council Janet O'Meara, Bureau Chief, Bureau of Resource Management

MS4 Information	MS4 Information								
Jurisdiction	Carroll County								
Contact Name	Christopher Heyn, PE								
Phone	410-386-2639								
Address	225 N Center Street								
City	Westminster								
State	Maryland								
Zip	21157								
Email	cheyn@carrollcountymd.gov								
Continued Annual Alternative ISR (ac)	0.00								
Required ISR New Permit (ac)	1217.00								
Total ISR (ac)	1,217								
Permit Num	11-FP-3319								
Permit Period (FY)	2022								
Reporting FY	2022								

Check with MDE Geodatabase:

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

Check with Permit Language:

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

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) 17
Required ISR New Permit (ac): 1,217

Total ISR (ac): 1,234

REST BMP TYPE ¹	BMP CLASS	IMPERVIOU S ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)	
Obligations from Previous Pe	ermit That Must	t Be Continued	l or Met				1
Operational Programs ^{2,3}							
CBC	А	16	94%	\$0	COMPLETE	2019	
VSS	Α	1	6%	\$0	COMPLETE	2019	
Operations Next Two Years (FY23-24) ⁴		0	0%	\$0			
Operations Next Five Years (FY23-27) ⁴		0	0%	\$0			
Capital Projects (Completed	to Replace Ann	ual Obligations	s) ^{2,3}				188
FSND	S	19.61		\$1,085,397	COMPLETE	2020	Shiloh Middle
			0%				
Subtotal Capital Next Two Years		0	0%	\$0			
Subtotal Capital Next Five Years (FY23-27)		0	0%	\$0			

\$ 199,855.00 \$ 885,541.94 \$ 1,085,396.94

REST BMP TYPE ¹	BMP CLASS	IMPERVIOU S ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)									
Other (Completed to Replace	Annual Obliga	tions) ^{2,3}					1								
			0%				1								
			0%				7								
Subtotal Other Next Two Years (FY23-24)		0	0%	\$0											
Subtotal Other Next Five Years (FY23-27)		0	0%	\$0											
Total Continued Obligations Next Two Years (FY23-24)		0	0%	\$0						FY22 W	ork Complete				
Total Continued Obligations Next Five Years (FY23-27)		0	0%	\$0			Project	Grant 8	د Partnership	Cash		Bond		Total	
Restoration for the New Pern	nit						Trevanion Terrace Retrofit	\$	632,010.00			ċ	644,254.10	ė	1,276,264.10
O												ې د			
Operational Programs ^{3,5}			00/				Woodsyde One Retrofit	\$	829,195.00			\$	732,449.91	\$ ¢	1,561,644.91
			0%				Woodsyde Two Retrofit	\$	1,470,000.00	۲	543,773.62			\$ ¢	- 2,013,773.62
Operations Next Two Years (FY23-24) ⁴		0	0%	\$0			Mayberry SR Woodsyde SR	,	1,470,000.00	,	343,773.02			\$	2,013,773.02
Operations Next Five Years (FY23-27) ⁴		0	0%	\$0			Total	Ś	2,931,205.00	Ś	543,773.62	\$	1,376,704.01	\$	4,851,682.63
Capital Projects ^{3,5}							Project	Grant	&Partnership	Cash	,	Bond	_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Total	.,,
MSGW	S	2.05	0%	\$111,108	COMPLETE	2020	Benjamins Claim - Jacobs		ar arthership	Casii		\$	111,108.00		111,108.00
PWED	S	91.8	8%	\$3,507,367	COMPLETE	2020	Roberts Mill	⊢ s	1,660,090.05			\$	1,847,277.03		3,507,367.08
RFP	A	36.1	3%	\$190,339	COMPLETE	2021	Tree Plantings	⊢ 's	230,215.07		24,000.00	\$	148,694.93		402,910.00
FPU	Α	29.6	2%	\$212,571	COMPLETE	2021	Tree Plantings	- '	,	•	,	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$	-
FSND	S	16.41	1%	\$799,844	COMPLETE	2021	Greens of Westminster	\$	347,340.00			\$	452,503.70	\$	799,843.70
PWED	S	93.64	8%	\$3,169,828	COMPLETE	2021	Langdon (Jantz)	\$	1,879,941.00			\$	1,289,887.12		3,169,828.12
PWED	S	106.09	9%	\$2,670,400	COMPLETE	2021	Willow Pond Retrofit	\$	1,900,000.00			\$	1,370,400.17		3,270,400.17
STRE	А	28.2	2%	\$600,000	COMPLETE	2021	Willow Pond SR		. ,			-		\$	-
STRE	А	279.31	23%	\$2,013,774	COMPLETE	2022	Mayberry SR	\$	1,470,000.00	\$	543,773.62			\$	2,013,773.62
PWED	S	47.78	4%	\$1,276,264	COMPLETE	2022	Trevanion Terrace Retrofit	\$	632,010.00		•	\$	644,254.10	\$	1,276,264.10
FSND	S	21.03	2%	\$761,645	COMPLETE	2022	Woodsyde One Retrofit	\$	829,195.00			\$	732,449.91		1,561,644.91
STRE	A	59.57	5%	\$700,000	COMPLETE	2022	Woodsyde SR		.,			•	, - , -	\$	-
	•			. ,			•								

REST BMP TYPE ¹	BMP CLASS	IMPERVIOU S ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)						
RFP	А	3.66	0%	\$7,949	COMPLETE	2022	Tree Plantings	\$	31,000.00		\$ 24,550.00	\$ 55,550.00
FPU	А	6.73	1%	\$47,601	COMPLETE	2022	Tree Plantings					\$ -
STRE	А	65.75	5%	\$1,300,000	PLANNING	2023	Brynwood SR	\$	103,771.50 \$	94,432.50		\$ 198,204.00
WPKT	S	22.5	2%	\$953,398	UNDER CONST	2023	Locust Wetland				\$ 783,313.00	\$ 783,313.00
MSGW	S	0.19	0%	\$450,000	PLANNING	2023	North Carroll Library				\$ 23,643.00	\$ 23,643.00
FSND	S	4.14	0%	\$192,460	UNDER CONST	2023	Patapsco Valley Overlook				\$ 192,460.00	\$ 192,460.00
FSND	S	7.5	1%	\$540,200	PLANNING	2023	St George's Gate Retrofit				\$ 40,200.00	\$ 40,200.00
MSGW	S	8.44	1%	\$322,606	UNDER CONST	2023	Stone Manor Retrofit				\$ 314,980.00	\$ 314,980.00
FSND	S	5.92	0%	\$551,580	PLANNING	2023	Sun Valley II Retrofit				\$ 47,620.00	\$ 47,620.00
FPU	А	12.5	1%	\$100,000	PROPOSED	2023	Tree Plantings					\$ -
FSND	S	22.53	2%	\$1,100,000	PLANNING	2024	Century High School Retrofit				\$ 93,750.00	\$ 93,750.00
FSND	S	12.66	1%	\$1,500,000	PLANNING	2024	Hampstead Valley 1 Retrofit				\$ 83,790.00	\$ 83,790.00
STRE	А	13.5	1%	\$1,150,000	PROPOSED	2024	Hampstead Valley 2 & 3 SR					\$ -
STRE	А	20	2%		PLANNING	2024	Oklahoma Sediment					
FSND	S	2.3	0%	\$1,500,000	PLANNING	2024	Melstone Valley Retrofit				\$ 75,000.00	\$ 75,000.00
PWED	S	9.18	1%	\$1,500,000	PROPOSED	2024	Squires					\$ -
FPU	А	12.5	1%	\$100,000	PROPOSED	2024	Tree Plantings					\$ -
PWED	S	6.96	1%	\$825,000	PLANNING	2025	CC Health Dept				\$ 78,900.00	\$ 78,900.00
WPKT	S	23.45	2%	\$1,100,000	PLANNING	2025	New Windsor Wetland				\$ 93,600.00	\$ 93,600.00
MSGW	S	30.81	3%	\$3,500,000	PLANNING	2025	Roberts Field Wet Pond Retrofit	\$	50,000.00		\$ 149,791.00	\$ 199,791.00
STRE	А	17.5	1%	\$600,000	PROPOSED	2025	Roberts Field Wet Pond SR					\$ -
FPU	А	12.5	1%	\$100,000	PROPOSED	2025	Tree Plantings					\$ -
FSND	S	20.76	2%	\$1,500,000	PROPOSED	2026	Hampstead Valley 4		\$	99,880.00		\$ 99,880.00
STRE	А	7.18	1%	\$107,103	PROPOSED	2026	Hampstead Valley 4 SR					\$ -
FSND	S	36.6	3%	\$1,100,000	PROPOSED	2026	Manchester East	7				\$ -
FSND	S	5.73	0%	\$850,000	PROPOSED	2026	Meadow Ridge (2)					\$ -
FSND	S	8.3	1%	\$850,000	PROPOSED	2026	Piney Ridge Village					\$ -
FPU	А	12.5	1%	\$100,000	PROPOSED	2026	Tree Plantings					\$ -
PWED	S	36.63	3%	\$1,600,000	PROPOSED	2027	Winters Street					\$ -
PWED	S	19.94	2%	\$1,100,000	PROPOSED	2027	Winters Mill HS					\$ -
FPU	А	12.5	1%	\$100,000	PROPOSED	2027	Tree Plantings					\$ -
PWED	S	46.35	4%	\$1,650,000	PROPOSED	2028	BTR (Black and Decker)					\$ -
FSND	S	5.13	0%	\$250,000	PROPOSED	2028	Candice Estates					\$ -
FSND	S	5.1	0%	\$650,000	PROPOSED	2028	North Carroll Farms 4	7				\$ -
PWED	S	11.76	1%	\$1,325,000	PROPOSED	2028	Windsong Estates	1				\$ -
FPU	А	12.5	1%	\$100,000	PROPOSED	2028	Tree Plantings					\$ -

REST BMP TYPE ¹	BMP CLASS	IMPERVIOU S ACRES	% ISR GOAL	IMPLEMENTATION COSTS	IMPLEMENTATION STATUS	IMPLEMENTATION COMPLETION YEAR (FY)
Subtotal Capital Next Two Years (FY23-24)		220	18%	\$11,260,244		
Subtotal Capital Next Five Years (FY23-27)		471	39%	\$24,692,347		
Other ^{3,5}						
			0%			
			0%			
Subtotal Other Next Two Years (FY23-24)		0	0%	\$0		
Subtotal Other Next Five Years (FY23-27)		0	0%	\$0		
Total Next Two Years (FY23-24)		220	18%	\$11,260,244		
Total Next Five Years (FY23-27)		471	39%	\$24,692,347		

Check with MDE Geodatabase:

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

Notes

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

ON EAR			
n 22			
22-22			

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

	PREVIOUS YEAR	CURRENT YEAR	PROJECTED YEAR 1	PROJECTED YEAR 2	PROJECTED YEAR 3	PROJECTED YEAR 4	PROJECTED YEAR 5	TOTAL ⁴
DESCRIPTION	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	
Operating Expenditures (costs)								
Street Sweeping Program								\$0
Inlet Cleaning								\$0
IDDE								\$0
Support of Capital Projects		\$1,291,712	\$1,363,970	\$1,438,141	\$1,517,143	\$1,601,329	\$1,684,887	\$8,897,182
Debt Service Payment ¹		\$1,748,212	\$2,139,050	\$2,278,450	\$2,543,210	\$2,766,010	\$3,094,600	\$14,569,532
Other (please stipulate program expenditure) ²	-	-	-	-	-	-	-	\$0
Capital Expenditures (costs) ³								
General Fund (Paygo)		\$543,774	\$1,450,000	\$750,000	\$250,000	\$2,550,000	\$225,000	\$5,768,774
WPR Fund (Paygo)								\$0
Municipalities								\$0
Debt Service		\$1,376,704	\$2,240,000	\$8,350,000	\$6,050,000	\$4,950,000	\$3,400,000	\$26,366,704
Grants & Partnerships		\$2,931,205	\$31,000					\$2,962,205
Other (please stipulate capital expenditure) ²		-			-		-	\$0
Subtotal operation and paygo:	\$0	\$3,583,698	\$4,953,020	\$4,466,591	\$4,310,353	\$6,917,339	\$5,004,487	\$29,235,488
Total expenditures:	\$0	\$7,891,607	\$7,224,020	\$12,816,591	\$10,360,353	\$11,867,339	\$8,404,487	\$58,564,397

Total ISRP costs except debt service: \$43,994,865

Compare ISRP costs (except debt service) / total ISRP proposed actions for next five years: 1.781720669

Total capital expenditures:

\$35,097,683

Compare total capital expenditures / total ISRP proposed actions capital costs for next five years:

1.42139923

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 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 county or municipality to meet the impervious surface restoration plan requirements under the National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 21	CURRENT YEAR FY 22	PROJECTED YEAR 1 FY 23	PROJECTED YEAR 2 FY 24	PROJECTED YEAR 3 FY 25	PROJECTED YEAR 4 FY 26	PROJECTED YEAR 5 FY 27	TOTAL NEXT 2-YEARS FY 22-24 ¹	TOTAL
Annual Revenue ²									
Appropriated for									
ISRP		\$7,265,352	\$16,015,082	\$7,614,998	\$7,917,963	\$8,357,349	\$8,903,987	\$23,630,080	\$56,074,731
Annual Costs									
towards ISRP ³	\$0	\$7,891,607	\$7,224,020	\$12,816,591	\$10,360,353	\$11,867,339	\$8,404,487	\$20,040,611	\$58,564,397

Compare revenue appropriated / annual costs:

118%

Reporting Criteria:

100%

Note

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

^{2.} Revenue means "dedicated revenues, funds, or sources of funds (per Article 4-202.1(j)(4)(ii). Note that budget appropriations have only been approved by governing bodies through FY 23 at the time of FAP reporting.

^{3.} See table of ISRP Cost.

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.

	PAST		CURRENT		PROJECTED		PROJECTED		PROJECTED	PROJECTED	PROJECTED	TOTAL
	UP THRU ¹		YEAR		YEAR 1		YEAR 2		YEAR 3	YEAR 4	YEAR 5	
SOURCE	FY 21		FY 22		FY 23		FY 24		FY 25	FY 26	FY 27	
Paygo Sources												
Stormwater Remediation Fees (WPR Fund)												\$ -
Miscellaneous Fees (WPR Fund)												\$ -
General Fund				\$	2,716,323							\$ 2,716,323
Other Funds 1 (Property Tax)		\$	2,667,545	\$	3,379,140	\$	3,586,191	\$	3,922,773	\$ 4,222,179	\$ 4,627,117	\$ 22,404,945
Other Funds 2 (Municipalities)		\$	114,299	\$	122,600	\$	129,400	\$	136,580	\$ 144,160	\$ 151,370	\$ 798,409
Other Funds 3 (Interest)		\$	3,192	\$	1,280	\$	1,000	\$	1,000	\$ 1,000	\$ 1,000	\$ 8,472
Other Funds 4 (Developer Contribution)		\$	172,407	\$	172,407	\$	172,407					\$ 517,221
Other Funds 5 (Municipal - Capital)				\$	331,290	\$	347,850	\$	365,850	\$ 383,510	\$ 402,680	
Other Funds 6 (Special Revenue Transfer)				\$	264,710	\$	278,150	\$	291,760	\$ 306,500	\$ 321,820	
Other Fund 7 (General Fund Transfer)				\$	104,673							
Subtotal Paygo Sources	\$ -	\$	2,957,443	\$	7,092,423	\$	4,514,998	\$	4,717,963	\$ 5,057,349	\$ 5,503,987	\$ 26,445,370
Debt Service (paygo sources will be used to pay off	debt service. No	te tha	t previous appr	opri	ations for debt s	ervi	ice used for ISRP is	s lis	ted in FY 2021).			
County Transportation Bonds												\$ -
General Obligation Bonds		\$	1,376,704	\$	8,891,659	\$	3,100,000	\$	3,200,000	\$ 3,300,000	\$ 3,400,000	\$ 23,268,363
Revenue (Utility) Bonds												\$ -
State Revolving Loan Fund												\$ -
Public-private partnership (debt service)												\$ -
Subtotal Debt Service	\$ -	\$	1,376,704	\$	8,891,659	\$	3,100,000	\$	3,200,000	\$ 3,300,000	\$ 3,400,000	\$ 23,268,363
Grants and Partnerships (no payment is expected)												
State funded grants		\$	2,931,205	\$	31,000							\$ 2,962,205
Federal funded grants												\$ -
Public-private partnership (matched grant)												\$
Subtotal Grants and Partnerships	\$ -	\$	2,931,205	\$	31,000	\$	-	\$		\$ -	\$ -	\$ 2,962,205
Total Annual Sources of Funds	\$ -	\$	7,265,352	\$	16,015,082	\$	7,614,998	\$	7,917,963	\$ 8,357,349	\$ 8,903,987	\$ 56,074,731
Percent of Funds Directed Toward ISRP												

Compare total permit term paygo ISRP costs / subtotal permit term paygo sources: 92%

Compare total ISRP expenditures / total permit term annual sources of funds: 104%

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.

^{*} WPR Fund: Watershed Protection and Restoration Fund.

Article 4-202.1(j)(1)(i)5: Specific actions and expenditures that the county or municipality implemented in the previous fiscal years to meet its impervious surface restoration plan requirements under its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMPERVIOUS ACRES	% ISRP COMPLETE	IMPLEMEN- TATION COST	BUILT DATE	IMPLEMENTATION STATUS	GENERAL COMMENTS
Obligations from Previous Pe	ermit That Must Be Contin	ued or Met		17.00					
Operational Programs ^{2,3}									
					0%				
Subtotal Operations ⁴			0	0	0%	\$0			
Capital Projects (Completed	to Replace Annual Obligat	ions) ^{2,3}							
CR18RST000005	FSND	S	2	19.61	115%	\$1,085,397			Shiloh Middle
Subtotal Capital			2	20	115%	\$1,085,397			
Other (Completed to Replace	e Annual Obligations) ^{2,3}								
					0%				
Subtotal Other			0	0	0%	\$0			
Total Continued Obligations from Previous Permit			2	20	115%	\$1,085,397			

Restoration for the New Per	rmit			1217.00					
Operational Programs ^{3,5}									
Multiple	CBC	А	9	5.96	0%			COMPLETE	Inlet Cleaning (Increase over last permit)
Multiple	VSS	А	11	10.70	1%			COMPLETE	Advanced Street Sweeping (Increase over last permit)
Multiple	MSS	А	2	0.02	0%			COMPLETE	Mechanical Street Sweeping (Increase over last permit)
Subtotal Operations ⁴			22	0	0%	\$0			
Capital Projects ^{3,5}									
CR21RST000001	MSGW	S	1	2.05	0%	\$111,108	7/24/2020	Complete	Benjamins Claim - Jacobs
CR16RST000016	PWED	S	1	91.8	8%	\$3,507,367	9/25/2020	Complete	Roberts Mill
CR16RST000025	FSND	S	1	16.41	1%	\$799,844	5/24/2021	Complete	Greens of Westminster
CR16RST000013	PWED	S	1	93.64	8%	\$3,169,828	9/15/2021	Complete	Langdon (Jantz)
CR18RST000006	PWED	S	1	106.09	9%	\$2,670,400	7/28/2021	Complete	Willow Pond Retrofit
CR19ALN000003	STRE	Α	1	28.2	2%	\$600,000	7/28/2021	Complete	Willow Pond SR
CR19ALN000005	STRE	Α	1	279.31	23%	\$2,013,774	5/23/2022	Complete	Mayberry SR
CR16RST000022	PWED	S	1	46.14	4%	\$1,276,264	5/25/2022	Complete	Trevanion Terrace Retrofit
CR18RST000007	FSND	S	1	21.03	2%	\$761,645	3/3/2020	Complete	Woodsyde One Retrofit
CR19ALN000004	STRE	Α	1	59.57	5%	\$700,000	3/31/2022	Complete	Woodsyde SR
CR18RST000008	FSND	S	1	1.17	0%	\$100,000	3/3/2020	Complete	Woodsyde Two Retrofit
Multiple	RFP	Α	1	36.1	3%	\$190,339	6/30/2021	Complete	2021 Tree Plantings
Multiple	FPU	Α	1	29.6	2%	\$212,571	6/30/2021	Complete	2021 Tree Plantings
Multiple	RFP	Α	1	3.66	0%	\$7,949	6/30/2022	Complete	2022 Tree Plantings
Multiple	FPU	Α	1	6.73	1%	\$47,601	6/30/2022	Complete	2022 Tree Plantings
Subtotal Capital			15	821.5	68%	\$16,168,690			

Other ^{3,5}								
CR20APY000021	IMPP	Α	1	0.22	0%	\$0	Complete	Manchester Impervious Removal
Multiple	FCB	Α	27	17.9	1%	\$0	Complete	Forest Conservation Buffer
Multiple	RCL	Α	21	8.3	0%	\$0	Complete	Riparian Conservation Landscaping
Multiple	NCL	Α	20	7.43	0%	\$0	Complete	Non-Riparian Conservation Landscaping
Multiple	SEPD	Α	47	7.52	0%	\$0	Complete	Septic Upgrades
Subtotal Other			116	41	3%	\$0		
Total Additional Restoration			153	863	71%	\$16,168,690		

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, AltBMPPoint, AltBMPPoint, AltBMPPoint, 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.

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	Е
Infiltration Berm	MIBR	E
Dry Well	MIDW	E
Filtering Systems	•	<u>.</u>
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	Е
Grass Swale	MSWG	E
Wet Swale	MSWW	Е
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	А
Regenerative/Vacuum Street Sweeping (i.e., Advanced Street Sweeping)	VSS	А
Catch Basin Cleaning	СВС	Α
Storm Drain Vacuuming (i.e., Storm Drain Cleaning)	SDV	Α
Stream Restoration	STRE	Α
Outfall Stabilization	OUT	Α
Shoreline Management	SHST	Α
Septic Connections to WWTP	SEPC	Α
Septic Denitrification	SEPD	А
Septic Pumping	SEPP	А
Elimination of Discovered Nutrient Discharges from Grey Infrastructure	DGI	А
Floating Treatment Wetlands	XFTW	А
Impervious Surface Reduction (i.e., impervious to pervious)	IMPP	А
Impervious Surface to Forest (i.e., IMPP + FPU)	IMPF	А
Forestation on Pervious Urban (i.e., Forest Planting)	FPU	А
Conservation Landscaping	CLTM	А
Forest Conservation	FCO	А
Riparian Conservation Landscaping	RCL	А
Riparian Forest Planting	RFP	А
Street Trees	STCI	А
Urban Soil Restoration (Compacted Pervious Surfaces)	USRP	Α
Urban Soil Restoration (Removed Impervious Surfaces)	USRI	Α
Urban Tree Canopy (i.e., Pervious Turf to Tree Canopy over Turf)	UTC	Α
Dry Channel Regenerative Step Pool Stormwater Conveyance System	SPSD	Α