STORMWATER MANAGEMENT

Note: Projects with a $0 total funding are active capital projects funded in prior CIP's that do not require additional resources.

	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036
Stormwater Management												
Stormwater Management												
Braddock and West Flood Management	198,000	-	-	-	-	-	-	-	-	-	-	-
City Facilities Stormwater Best Management Practices (BMPs)	233,000	-	-	-	-	-	-	-	-	-	-	-
Flood Resilience Plan	700,000	-	-	-	-	-	-	-	-	-	-	-
Floodproofing Grant Program	3,117,000	851,000	873,000	895,000	918,000	941,000	965,000	900,000	923,000	950,000	969,000	9,185,000
Four Mile Run Channel Maintenance	4,711,881	-	1,251,000	2,900,000	-	300,000	300,000	300,000	300,000	300,000	300,000	5,951,000
Green Infrastructure	4,015,193	-	-	-	-	-	-	275,000	-	-	-	275,000
Hooffs Run Culvert Maintenance	7,203,374	-	-	-	-	2,510,000	-	-	-	-	2,786,000	5,296,000
Inlet Capacity Program	1,584,100	-	-	-	-	-	-	-	-	-	-	-
Inspection and Cleaning (State of Good Repair) CFMP	4,846,000	1,835,000	1,930,000	2,030,000	2,135,000	2,245,000	2,360,000	2,480,000	2,605,000	2,740,000	2,880,000	23,240,000
Large Capacity - Commonwealth Ave, E. Glebe Rd & Ashby St	72,137,898	7,112,000	-	-	-	-	-	-	-	-	-	7,112,000
Large Capacity - Hooffs Run Culvert Bypass	11,069,220	2,000,000	38,440,000	-	-	-	-	-	-	-	-	40,440,000
Mount Vernon Dual Culvert Upgrade	2,591,627	-	-	-	-	-	-	-	-	-	-	-
MS4-TDML Compliance Water Quality Improvements	4,842,169	713,000	2,000,000	2,575,000	1,500,000	500,000	500,000	1,000,000	500,000	1,000,000	500,000	10,788,000
NPDES / MS4 Permit	1,509,638	175,000	177,000	179,000	180,000	182,000	184,000	186,000	188,000	190,000	196,000	1,837,000
Small-Midsize Stormwater Maintenance Projects	2,344,300	724,000	766,000	809,000	854,000	901,000	923,000	945,000	967,000	992,000	1,011,000	8,892,000
Spot Project - Hume Avenue Bypass	5,641,711	-	-	-	-	-	-	-	-	-	-	-
Spot Project - Mt. Vernon Cul-de-sac and Alley	2,109,279	-	-	-	-	-	-	-	-	-	-	-
Storm Sewer Capacity Projects	11,415,908	2,829,000	1,623,000	2,429,000	2,435,000	12,939,000	8,485,000	7,803,000	10,518,000	2,450,000	490,000	52,001,000
Storm Sewer System Spot Improvements	21,930,439	4,223,000	4,426,000	4,606,000	4,688,000	4,812,000	4,937,000	5,060,000	5,187,000	5,317,000	5,423,000	48,679,000
Stormwater BMP Maintenance CFMP	2,684,800	1,354,000	327,000	336,000	347,000	357,000	1,792,000	366,000	375,000	385,000	397,000	6,036,000
Stormwater Utility Implementation	1,673,200	-	-	-	-	-	-	-	-	-	-	-
Stream & Channel Maintenance	10,870,508	510,000	540,000	1,052,000	1,086,000	1,116,000	1,150,000	1,178,000	1,205,000	1,235,000	1,259,000	10,331,000
Taylor Run Stream Restoration	2,508,363	-	-	-	-	-	-	-	-	-	-	-
Stormwater Management Total	*179,937,608*	*22,326,000*	*52,353,000*	*17,811,000*	*14,143,000*	*26,803,000*	*21,596,000*	*20,493,000*	*22,768,000*	*15,559,000*	*16,211,000*	*230,063,000*
Grand Total	179,937,608	22,326,000	52,353,000	17,811,000	14,143,000	26,803,000	21,596,000	20,493,000	22,768,000	15,559,000	16,211,000	230,063,000

Significant Project Changes in the Stormwater Management Section

This chart highlights any project funding that increased or decreased by more than 10%, or $1 million, since the last Approved CIP.

NOTE, the "Change ($) from Previous Approved CIP" and "Change (%) from Previous Approved CIP" calculations do not include Fiscal Year (FY) 2026 from the Approved FY 2026 – 2035 CIP, or FY 2036 from this Proposed FY 2027 – 2036 CIP, since FYs 2027 – 2035 are the years that can be directly compared between the two plans.

CIP Subsection	CIP Document Title	Proposed FY 2027 - FY 2036 Total	Change ($) from Previous Approved CIP	Change (%) from Previous Approved CIP
Stormwater Management	Storm Sewer Capacity Projects	52,001,000	(15,414,000)	-23.0%
Stormwater Management	Inspection and Cleaning (State of Good Repair) CFMP	23,240,000	(6,448,000)	-24.1%
Stormwater Management	MS4-TDML Compliance Water Quality Improvements	10,788,000	(3,287,000)	-24.2%
Stormwater Management	Stormwater BMP Maintenance CFMP	6,036,000	1,037,500	22.5%
Stormwater Management	Storm Sewer System Spot Improvements	48,679,000	3,999,600	10.2%
Stormwater Management	Large Capacity - Commonwealth Ave, E. Glebe Rd & Ashby St	7,112,000	7,112,000	New Funding; Not in Previous Approved CIP

Stormwater Utility 10-Year Plan: FY 2027 - FY 2036

Revenue Assumptions

Maintenance Fee	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Estimated Billing Units	61,056	61,300	61,550	61,800	62,050	62,300	62,550	62,800	63,050	63,300	63,550	
Year-over-Year Growth		*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*	*0.4%*	
Rate per Billing Unit	$ 340.30	$ 357.40	$ 380.80	$ 409.40	$ 436.00	$ 464.40	$ 494.60	$ 531.70	$ 571.70	$ 626.00	$ 663.50	
Year-over-Year Growth		*5.0%*	*6.5%*	*7.5%*	*6.5%*	*6.5%*	*6.5%*	*7.5%*	*7.5%*	*9.5%*	*6.0%*	
Stormwater Utility Revenue	20,777,000	21,909,000	23,438,000	25,301,000	27,054,000	28,932,000	30,937,000	33,391,000	36,046,000	39,626,000	42,165,000	308,799,000

Operating Budget Revenues

	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Stormwater Utility Revenue	20,777,000	21,909,000	23,438,000	25,301,000	27,054,000	28,932,000	30,937,000	33,391,000	36,046,000	39,626,000	42,165,000	308,799,000
General Fund Contribution for EDTR	185,780	193,000	201,000	209,000	217,000	226,000	235,000	244,000	254,000	264,000	275,000	2,318,000
Other Revenue Sources	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	21,000	210,000
Revenue Stream Reductions for Improvement Credits	(203,000)	(209,000)	(215,000)	(221,000)	(228,000)	(235,000)	(242,000)	(249,000)	(256,000)	(264,000)	(272,000)	(2,391,000)
Use of Fund Balance	-	-	-	-	-	-	-	-	-	-	-	-
Total Operating Revenue	20,780,780	21,914,000	23,445,000	25,310,000	27,064,000	28,944,000	30,951,000	33,407,000	36,065,000	39,647,000	42,189,000	308,936,000

Operating Budget Expenditures

	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Personnel												
Transportation & Environmental Services	5,141,391	5,280,117	5,439,000	5,602,000	5,770,000	5,943,000	6,121,000	6,305,000	6,494,000	6,689,000	6,890,000	60,533,117
Planning & Zoning	129,271	126,602	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	127,000	1,269,602
Operating & Maintenance												
Main Operating	428,007	441,000	454,000	468,000	482,000	496,000	511,000	526,000	542,000	558,000	575,000	5,053,000
BMP's Operation	297,000	306,000	315,000	324,000	334,000	344,000	354,000	365,000	376,000	387,000	399,000	3,504,000
Oronoco Outfall Maintenance	151,000	156,000	161,000	166,000	171,000	176,000	181,000	186,000	192,000	198,000	204,000	1,791,000
Additional operating impact from capital	73,000	76,000	78,000	80,000	82,000	84,000	87,000	90,000	93,000	96,000	99,000	865,000
Contingent Cash Funding	838,634	758,556	781,000	804,000	828,000	853,000	879,000	905,000	932,000	960,000	989,000	8,689,556
Indirect Costs (Transfer to G/F)	1,911,000	2,016,000	2,156,000	2,328,000	2,489,000	2,662,000	2,846,000	3,072,000	3,316,000	3,646,000	3,879,000	28,410,000
Transfers to Capital Program												
Stormwater Utility Cash Capital	9,770,800	10,997,000	11,376,000	10,718,000	9,636,000	8,933,000	7,490,000	6,843,000	6,426,000	6,822,000	6,921,000	86,162,000
Stormwater Utility Debt Service	1,390,677	1,756,725	2,552,099	4,691,990	7,140,082	9,325,045	12,352,866	14,983,792	17,565,118	20,163,226	22,103,437	112,634,380
Total Operating Expenditures	20,130,780	21,914,000	23,439,099	25,308,990	27,059,082	28,943,045	30,948,866	33,402,792	36,063,118	39,646,226	42,186,437	308,911,655

Stormwater Utility 10-Year Plan: FY 2027 - FY 2036 (continued)

Capital Program Sources

	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Stormwater Utility Cash Capital	9,770,800	10,997,000	11,376,000	10,718,000	9,636,000	8,933,000	7,490,000	6,843,000	6,426,000	6,822,000	6,921,000	86,162,000
Stormwater Utility GO Bonds	27,162,000	12,900,000	42,930,000	9,105,000	6,580,000	20,005,000	16,305,000	15,915,000	18,675,000	11,140,000	11,765,000	165,320,000
Total Planned Capital Sources	36,932,800	23,897,000	54,306,000	19,823,000	16,216,000	28,938,000	23,795,000	22,758,000	25,101,000	17,962,000	18,686,000	251,482,000

Capital Program Uses

	FY 2026 Approved	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	FY 2027 - FY 2036 Total
Four Mile Run Channel Maintenance	-	-	1,251,000	2,900,000	-	300,000	300,000	300,000	300,000	300,000	300,000	5,951,000
Green Infrastructure	-	-	-	-	-	-	-	275,000	-	-	-	275,000
MS4-TMDL Compliance Water Quality Improvements	-	713,000	2,000,000	2,575,000	1,500,000	500,000	500,000	1,000,000	500,000	1,000,000	500,000	10,788,000
NPDES / MS4 Permit	-	175,000	177,000	179,000	180,000	182,000	184,000	186,000	188,000	190,000	196,000	1,837,000
Storm Sewer Capacity Projects Program	-	-	-	-	-	-	-	-	-	-	-	-
Dewitt Ave	-	2,829,000	-	-	-	12,939,000	-	-	-	-	-	15,768,000
East Mason Ave	-	-	1,623,000	-	-	-	4,980,000	-	-	-	-	6,603,000
Mt. Vernon, E. Glendale, E. Luray, and E. Alexandria	-	-	-	1,839,000	-	-	-	7,803,000	-	-	-	9,642,000
E. Monroe and Wayne St.	-	-	-	590,000	-	-	3,505,000	-	-	-	-	4,095,000
Russell Rd. and W. Rosemont	-	-	-	-	2,435,000	-	-	-	10,518,000	-	-	12,953,000
Braddock and West Flood Mitigation	-	-	-	-	-	-	-	-	-	2,450,000	-	2,450,000
Commonwealth and Ashby North Culvert Extension	-	-	-	-	-	-	-	-	-	-	490,000	490,000
Commonwealth Ave & E. Glebe Rd / Ashby St & E. Glebe Rd	15,950,000	7,112,000	-	-	-	-	-	-	-	-	-	7,112,000
Hooffs Run Culvert Timber Branch Bypass	-	2,000,000	38,440,000	-	-	-	-	-	-	-	-	40,440,000
Storm Sewer System Spot Improvements	4,228,000	4,223,000	4,426,000	4,606,000	4,688,000	4,812,000	4,937,000	5,060,000	5,187,000	5,317,000	5,423,000	48,679,000
Stream and Channel Maintenance	962,700	510,000	540,000	1,052,000	1,086,000	1,116,000	1,150,000	1,178,000	1,205,000	1,235,000	1,259,000	10,331,000
Stormwater BMP Maintenance CFMP	-	1,354,000	327,000	336,000	347,000	357,000	1,792,000	366,000	375,000	385,000	397,000	6,036,000
Small-Midsize Stormwater Maintenance Projects	-	724,000	766,000	809,000	854,000	901,000	923,000	945,000	967,000	992,000	1,011,000	8,892,000
Inspection and Cleaning (State of Good Repair) CFMP	500,000	1,835,000	1,930,000	2,030,000	2,135,000	2,245,000	2,360,000	2,480,000	2,605,000	2,740,000	2,880,000	23,240,000
Floodproofing Grant Program	-	851,000	873,000	895,000	918,000	941,000	965,000	900,000	923,000	950,000	969,000	9,185,000
Hooffs Run Culvert Maintenance CFMP	1,616,000	-	-	-	-	2,510,000	-	-	-	-	2,786,000	5,296,000
Waterfont Stormwater Infrastructure	12,697,600	-	-	-	-	-	-	-	-	-	-	-
DPI Personnel	929,400	1,571,000	1,899,000	1,956,000	2,015,000	2,075,000	2,137,000	2,201,000	2,267,000	2,335,000	2,405,000	20,861,000
Capitalized Sustainability Coordinator	49,100	-	54,000	56,000	58,000	60,000	62,000	64,000	66,000	68,000	70,000	558,000
Total Planned Capital Uses	36,932,800	23,897,000	54,306,000	19,823,000	16,216,000	28,938,000	23,795,000	22,758,000	25,101,000	17,962,000	18,686,000	251,482,000

CITY FACILITIES STORMWATER BEST MANAGEMENT PRACTICES (BMPS)

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 21 - 25 Years

City Facilities Stormwater Best Management Practices (BMPs)													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**233,000**	**233,000**	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Cash Capital	125,000	125,000	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	108,000	108,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**233,000**	**233,000**	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This program targets City-owned facilities and properties for the installation of stormwater quality best management practices (BMPs) to meet the Chesapeake Bay (Bay) Total Maximum Daily Load (TMDL) enforced by the Virginia Department of Environmental Quality (DEQ) through the issuance of the City's Municipal Separate Storm Sewer System (MS4) Permit. The MS4 permit mandates City-specific stormwater nutrient (phosporus and nitrogen) reduction targets to clean up the Chesapeake Bay enforced through three 5-year MS4 permit cycles. The 2013-2018 MS4 permit required a 5% reduction, while the 2018-2023 required an additional 35% or 40% of the total. The remaining 60% or 100% of the reduction must be met on or before the end of the third 5-year permit cycle (2023-2028), no later than 2028. Upcoming planning and analysis efforts that look at new modeling data and water quality monitoring are likely to revise the nutrient mandates with goals beyond the 2028 MS4 permit.

In October 2022, the Chesapeake Bay Executive Council has charged the Principal Staff Committee with recommending a critical path forward to meeting the Bay TMDL. The report, "The Executive Council Charge to the Principals' Staff Committee: Charting a Course to 2025 and Beyond" was published on January 17, 2024. Additionally, planned Bay modeling updates must include Climate Change predictions and other new data. Early estimates show that the current mandates will be increased and therefore are likely required beyond the 2028 date in subsequent permits.

The City's Chesapeake Bay TMDL Action Plan identifies retrofitting of regional ponds, implementing new regional ponds, BMP retrofits on City properties, retrofits in the Right-of-Way, stream restoration, and other strategies towards meeting mandated pollutant reduction goals, with this project targeting BMPs on City properties to include the Right-of-Way.

Working closely with the General Services; Recreation, Parks and Cultural Activities; and Project Implementation departments, the following locations, among others, have been identified as potential locations for stormwater retrofits that include:

- T&ES/Recreation operations at 2900 Business Center Drive,
- City Fuel Island on Wheeler Avenue,
- ACPS Mount Vernon Elementary School and Recreation Center, and
- City Traffic Control Shop on Colvin Street.

The City has identified at least 16 potential locations in addition to the above list that may treat stormwater from a total of approximately 4-8 acres of impervious surface. These sites have been selected because of the facilities' operational stormwater impacts and their relatively high percentage of impervious acreage.

This project provides for the inspection and maintenance of existing and planned BMP retrofits to ensure proper functioning to continue achieving the City's mandated water quality goals to clean up the Chesapeake Bay.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Municipal Separate Storm Sewer System (MS4) General Permit, Program Plan and Year 5 Annual Report; Chesapeake Bay TMDL Action Plan; T&ES Strategic Plan; Eco-City Charter and Action Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

FLOOD RESILIENCE PLAN

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: Category 1
ESTIMATE USEFUL LIFE: 10

Flood Resilience Plan

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**700,000**	**700,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Financing Plan													
State/Federal Grants	525,000	525,000	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	175,000	175,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**700,000**	**700,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The purpose of this project is to develop a new Flood Resilience Plan for the City of Alexandria with the goal of addressing flood resilience needs in a comprehensive manner. Up until 2016, the City has relied on former studies focused on storm sewer capacity to help determine areas in need of improvement in addition to resident reports coming through the City's online reporting system (currently Alex311). Further information on areas of concern have been gained via windshield surveys and communications from residents to City elected officials and staff.

Several large storms in 2019, 2020 and 2021 prompted the immediate need for aggressive action pertaining to flood mitigation. Flood Action Alexandria formed in 2021 and, to date, has made significant progress on several fronts across the community. However, the development of a comprehensive Flood Resilience Plan remains outstanding. Through this project, the City intends to assess the scope and scale of the issue of flooding across the entire jurisdiction by identifying areas for further study and interventions, ultimately leading to future studies, design and funding for projects that provide flood prevention. The document that references various current City plans was submitted and approved by DCR, which expires September 1, 2026. Once completed, the new plan will be submitted to DCR for review and approval.

The new plan also needs to achieve the FRP strategies included within the City of Alexandria Energy and Climate Change Action Plan completed in May 2023, including hazard identification, flood mitigation, flood preparedness and response, policies and regulations, funding strategies, and communication/information dissemination.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter; Strategic Plan; Water Quality Management Supplement to the City's Master Plan; MS4 General Permit; Environmental Action Plan (EAP) 2040; City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

FLOODPROOFING GRANT PROGRAM

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 1
ESTIMATE USEFUL LIFE: Varies

Floodproofing Grant Program

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**20,517,500**	**3,117,000**	**1,702,000**	**1,746,000**	**1,790,000**	**1,836,000**	**1,882,000**	**1,930,000**	**1,800,000**	**1,845,500**	**1,900,000**	**969,000**	**17,400,500**
Financing Plan													
GO Bonds (Stormwater)	-	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	12,302,000	3,117,000	851,000	873,000	895,000	918,000	941,000	965,000	900,000	923,000	950,000	969,000	9,185,000
Financing Plan Total	**12,302,000**	**3,117,000**	**851,000**	**873,000**	**895,000**	**918,000**	**941,000**	**965,000**	**900,000**	**923,000**	**950,000**	**969,000**	**9,185,000**

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

The purpose of this project, initiated in FY 2022 under the Flood Action Alexandria program, is to provide grant funding to private property owners to mitigate flooding impacts to their primary residence because of recent climate change-induced flash flooding and cloudburst events. This project was recommended by the 2020 Interdepartmental Flooding Management Task Force and was supported in the City's 2020 legislative package, which was successful in revising the state code to provide clear authority to support localities dealing with the impacts of flooding to implement a jurisdictional-wide grant program to implement floodproofing measures on private property for the health and safety of the community.

The original pilot program launched in August 2021 targeted properties that had experienced past flooding by requiring documentation of past flooding. The City conducted an analysis that showed the pilot was effective at reaching property owners with prior flooding. In October 2023, the City updated the Flood Mitigation Grant Program to open eligibility to all property owners by removing the requirement to document past flooding. The update also included eligibility for associations to apply for a 50/50 matching grant, up to $25,000, on work completed on association common areas. Staff will continue to employ a continual improvement process by gathering data and information in consideration of any needed future adjustments. The program incentivizes implementation of flood mitigation measures and allows property owners to experience immediate benefits to mitigate flooding issues.

This program provides reimbursement for floodproofing installed to mitigate flooding issues in the near-term.

The Flooding Mitigation Pilot Program Manual document frames the program and policies, to include processes, funding level, and eligible reimbursable expenses. The grant program includes:

- Reimbursement for 50% of the cost of installed improvements, not to exceed $5,000 reimbursed to the property owner for individual applicants.
- Reimbursement for 50% of the cost of installed improvements, not to exceed $25,000 reimbursed to associations on behalf of work done for the association common area.
- Total funding for FY 2025: $830,000
- Eligible reimbursable practices and expenses include installation of floodproof doors and windows, and other measures to prevent water from entering a structure, with examples included in online materials

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter; Strategic Plan, MS4 General Permit; Environmental Action Plan (EAP) 2040; City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

FOUR MILE RUN CHANNEL MAINTENANCE

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Four Mile Run Stream/Channel
REPORTING AREA: Potomac West
PROJECT CATEGORY: 2
ESTIMATE USEFUL LIFE: 6 - 10 Years

Four Mile Run Channel Maintenance

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**16,314,181**	**4,711,881**	**-**	**2,502,300**	**5,800,000**	**-**	**600,000**	**600,000**	**600,000**	**600,000**	**600,000**	**300,000**	**11,602,300**
Financing Plan													
Cash Capital	315,281	315,281	-	-	-	-	-	-	-	-	-	-	-
GO Bonds	2,260,000	2,260,000	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	2,409,000	-	-	-	615,000	-	300,000	300,000	300,000	298,000	300,000	296,000	2,409,000
Stormwater Utility Fund	5,678,600	2,136,600	-	1,251,000	2,285,000	-	-	-	-	2,000	-	4,000	3,542,000
Financing Plan Total	**10,662,881**	**4,711,881**	**-**	**1,251,000**	**2,900,000**	**-**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**300,000**	**5,951,000**

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project reflects the City's share of the costs to maintain the federally funded stormwater flood control channel and system of flood walls and levees on Four Mile Run to reduce potential riverine flooding. The federal Four Mile Run Flood Control project was constructed by the U.S Army Corps of Engineers (USACE) in the late 1970's, which by mutual agreement requires the City to provide regular upgrades to associated capital infrastructure. The USACE annually inspects Four Mile Run and dictates the extent of the maintenance activities that are to be completed. The City has hired a consultant to perform a detailed inspection of the flood control system and to develop recommendations for corrections. Staff is working with USACE to determine exactly what improvements the City needs to do to bring the rating up to the upgraded post-Hurricane Katrina standards that the USACE now considers acceptable. The City is currently developing revised plans for USACE to review that includes maintenance repairs to the flood walls, embankments, outfalls, and gabions.

To date, over $4 million in City funding has been applied to the project. Funding is programmed in the near term to address maintenance items with funding in out-years of the CIP to address future capital infrastructure requirements. As Four Mile Run maintenance is a shared responsibility with Arlington County, it is necessary for the County and the City to engage in a joint decision-making process concerning some elements of maintenance activities. Staff collaborated with Arlington County to perform dredging of the channel to remove sediment to maintain the conveyance capacity of the flood control project in FY 2023. A grant application submitted in calendar year 2021 for FEMA's Build Resilient Infrastructure and Communities (BRIC) funding was not successful. The project progressed with City funds covering the agreed cost share of the project.

Additional operations and maintenance concerns that need to be addressed were uncovered during a routine inspection, including the need for maintenance of structures, updates to the operations and maintenance (O&M) manual, design and removal of accumulated sediment, and continued vegetation removal from the levee, as requested by USACE. Routine inspection and maintenance, including design and removal of significant accumulated sediment and routine vegetation maintenance, is necessary to get this flood control channel back into conditions considered acceptable by the federal government. Achieving federal acceptance ensures that the flood control project will perform as predicted, protects our communities – along with Arlington – and properties from flooding, and provides eligibility for federal assistance in repairing any damage to the channels that storms may cause.

To address USACE concerns for annual inspections, the vegetation management will be performed annually along the entire reach between I-395 and Rt-1.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Municipal Separate Storm Sewer System (MS4) General Permit, Program Plan and Year 5 Annual Report; Chesapeake Bay TMDL Action Plan; T&ES Strategic Plan; Eco-City Charter and Action Plan; Flood Action Alexandria initiative

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

GREEN INFRASTRUCTURE

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: Varies

Green Infrastructure

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**4,565,193**	**4,015,193**	**-**	**-**	**-**	**-**	**-**	**-**	**550,000**	**-**	**-**	**-**	**550,000**
Financing Plan													
GO Bonds (Stormwater)	1,469,000	1,195,000	-	-	-	-	-	-	274,000	-	-	-	274,000
Sanitary Sewer Fund	350,000	350,000	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	2,471,193	2,470,193	-	-	-	-	-	-	1,000	-	-	-	1,000
Financing Plan Total	**4,290,193**	**4,015,193**	**-**	**-**	**-**	**-**	**-**	**-**	**275,000**	**-**	**-**	**-**	**275,000**

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project is for the identification, study, design, and construction of green infrastructure projects to address water quality and reduce the risk of flooding. It is consistent with the objective of implementing a citywide approach by installing Green Infrastructure in the combined sewer system (CSS) area and the separate storm sewer area. Completed green infrastructure projects will help address regulatory requirements and help to mitigate flooding in conjunction with the co-benefits provided by the implementation of these practices. An initial identification and prioritization study will be conducted in planning for the next green infrastructure project. Funding for additional projects, if identified, may be supplemented with funding from the MS4 Water Quality Improvements project.

Completion of these projects will provide the following benefits: increase stormwater infiltration; reduce stormwater runoff; provide stormwater treatment (nutrients and sediment); decrease the volume of discharges; and provide co-benefits, including creating habitat, reducing heat island effect, and enhancing air quality.

Projects are identified through work related to the City's Chesapeake Bay TMDL Action Plan and the Green Infrastructure Program Policy Study commenced in FY 2019 which laid out a citywide approach to implementation. Further, green infrastructure projects may be implemented as stand-alone water quality projects or in conjunction with flood control projects to mitigate flooding and/or provide water quality benefits and included in the update to the Chesapeake Bay TMLD Action Plan to be completed for the 2023-2028 MS4 Permit. Funding for projects identified through these efforts will be used for future years and supplemented, as needed, through the MS4-TMDL Water Quality Improvement CIP. Consistent with the City's planning documents that include green infrastructure as a strategy, funding has been added to the City's 10-year capital plan to continue with the implementation of green infrastructure on a citywide basis.

Upcoming planning and analysis efforts that look at new modeling data and water quality monitoring are likely to revise the nutrient mandates with goals beyond the 2028 MS4 permit.

In October 2022, the Chesapeake Bay Executive Council has charged the Principal Staff Committee with recommending a critical path forward to meeting the Bay TMDL. The report, "The Executive Council Charge to the Principals' Staff Committee: Charting a Course to 2025 and Beyond" was published on January 17, 2024. Additionally, planned Bay modeling updates must include Climate Change predictions and other new data. Early estimates show that the current mandates will be increased and therefore are likely required beyond the 2028 date in subsequent permits.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

T&ES Strategic Plan 2012-2015; City of Alexandria Municipal Separate Storm Sewer System (MS4) General Permit, Program Plan, and PY5 Annual Report; Eco-City Charter City's Combined Sewer System Permit; City's Chesapeake Bay TMDL Action Plan; Old Town North Small Area Plan; Eisenhower West Small Area Plan; Landmark Van Dorn Small Area Plan; Flood Action Alexandria

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

HOOFFS RUN CULVERT MAINTENANCE

DOCUMENT SUBSECTION:	Stormwater Management	PROJECT LOCATION:	Areas west of Commonwealth Avenue and near W. Spring Street
MANAGING DEPARTMENT:	Transportation and Environmental Services	REPORTING AREA:	King Street Metro/Eisenhower Avenue; Northridge/Rosemont; Potomac West
		PROJECT CATEGORY:	1
		ESTIMATE USEFUL LIFE:	3-6 years

Hooffs Run Culvert Maintenance

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**15,009,374**	**7,203,374**	**-**	**-**	**-**	**-**	**5,020,000**	**-**	**-**	**-**	**-**	**2,786,000**	**7,806,000**
Financing Plan													
Cash Capital	5,016,291	5,016,291	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	7,259,901	1,963,901	-	-	-	-	2,510,000	-	-	-	-	2,786,000	5,296,000
Prior Capital Funding	-	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	223,182	223,182	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**12,499,374**	**7,203,374**	**-**	**-**	**-**	**-**	**2,510,000**	**-**	**-**	**-**	**-**	**2,786,000**	**5,296,000**

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project funds ongoing heavy cleaning of the Hooffs Run Culvert. This culvert conveys stormwater from a significant portion of Northridge, Del Ray, and Rosemont and has been subject to recurrent flooding for over 100 years. Recent climate-change induced flash flooding has placed greater emphasis on the importance of ongoing heavy cleaning of this culvert by maximizing the culvert capacity.

In Fall 2023, the City hired a contractor to conduct a detailed robotic inspection and survey of approximately 7,000 feet of the culvert. The survey identified overall debris levels to be minimal with s most of the debris accumulation at the Duke Street outfall. The City undertook a culvert repairs and heavy cleaning effort beginning in December 2024and completed mid-2025 from East Linden down to Duke Street. Subsequently, inspection of the northern portion of the culvert from East Maple to Braddock Road determined that portion did not require cleaning at the time.

While the City has Operating funding to provide some routine debris removal and maintenance, this project ensures funding is set aside for ongoing inspections, heavy cleaning, and/or other capital maintenance requirements that may be identified in future structural inspections. This funding was recommended by the Interdepartmental Flooding Management Task Force and the Flood Action Alexandria initiative.

FY 2026 funding was used for culvert design, repairs and maintenance for the upstream portion of the culvert from Maple Street to Braddock Road, and the next cycle of detailed inspection and cleaning of the culvert, which occurs every two years.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Flood Action Alexandria

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

INLET CAPACITY PROGRAM

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 1
ESTIMATE USEFUL LIFE: Varies

Inlet Capacity Program													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**1,584,100**	**1,584,100**	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
GO Bonds	201,151	201,151	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	562,849	562,849	-	-	-	-	-	-	-	-	-	-	-
State/Federal Grants	764,000	764,000	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	56,100	56,100	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**1,584,100**	**1,584,100**	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project consists of the formal development of the Inlet Capacity and New Inlet Program, which will build on existing efforts undertaken with the Flood Action Alexandria initiative, launched in 2021, to help improve the resiliency of the City against increased precipitation and flash flooding events caused by climate change. The Inlet Program will improve drainage through increased stormwater inlet capacity by enlarging existing inlets and building new inlets leading to pipes with adequate conveyance capacity. This approach allows for greater surface runoff to enter the pipe system and mitigate flooding. The Inlet Program seeks to identify undersized inlets and identify locations for new inlets that will improve the efficiency of the City's storm sewer system. The Inlet Program also will incorporate the design and construction of both upgrading existing storm sewer inlets and the installation of new inlets, within "pilot" neighborhoods.

The City will take an initial "watershed approach" to developing the Inlet Program by systematically identifying inlet capacity within two of the City's eight local watersheds: Hooff's Run and Four Mile Run. Based on the analysis, the City will implement new and/or enlarged inlets in those watersheds to address capacity issues.

The project will create an approach that will be applied to identify, design, and implement needed increases to the storm sewer inlet capacity for neighborhoods within these two watersheds. The approach memorialized in the Inlet Program will be replicable across the remaining six watersheds and corresponding neighborhoods. The initial project is being funded by the Stormwater Utility and received a Virginia Community Flood Preparedness Fund (CFPF) grant award of $764,000 to assist in creating the Inlet Program and implementing this approach in the Four Mile Run and Hooffs Run watersheds.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

INSPECTION AND CLEANING (STATE OF GOOD REPAIR) CFMP

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 1
ESTIMATE USEFUL LIFE: Varies

Inspection and Cleaning (State of Good Repair) CFMP													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**54,894,000**	**4,846,000**	**3,670,000**	**3,936,000**	**4,250,000**	**4,631,000**	**5,107,000**	**5,664,000**	**6,246,000**	**6,703,000**	**6,961,000**	**2,880,000**	**50,048,000**
Financing Plan													
Cash Capital	-	-	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	-	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	28,086,000	4,846,000	1,835,000	1,930,000	2,030,000	2,135,000	2,245,000	2,360,000	2,480,000	2,605,000	2,740,000	2,880,000	23,240,000
Financing Plan Total	**28,086,000**	**4,846,000**	**1,835,000**	**1,930,000**	**2,030,000**	**2,135,000**	**2,245,000**	**2,360,000**	**2,480,000**	**2,605,000**	**2,740,000**	**2,880,000**	**23,240,000**

CHANGES FROM PRIOR YEAR CIP

Project funding plan updated to reflect current rate of expenditure in the program, resulting in a overall reduction of $6.4 million over the 10-year plan. Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides funding annually for expanded and increased frequency of inspection and maintenance towards ensuring a state of good repair for 189 miles of pipe network and over 13,000 structures for the separate storm sewer system. Beginning in July 2020 under the Flood Action Alexandria initiative, staff expanded the inspection and repair portion of the storm sewer system. While initial expansion of the program is based on the inspections and requests from residents, staff is increasing proactive measures for inspection and cleaning based on timing and results of additional data sets to develop a Capital Facility Maintenance Program (CFMP) which will include a more detailed listing of projects with a prioritization based on these and other metrics. Some of the projects include, but are not limited to, tree and shrub removal blocking culverts and storm sewer inlets, storm sewer structure or pipe replacement or repair and video pipe inspection and debris removal in culverts and storm sewer pipes. The prioritized list of projects and areas will be addressed based on funding allocated within the CIP. These additional data will inform future budgeting decisions.

In June 2025, staff re-initiated the watershed CCTV, cleaning and repair program, beginning with the Four Mile Run Watershed. During CCTV inspections, the storm sewer system is cleaned, and necessary repairs are identified and prioritized. While the operating budget supports routine maintenance and inspections, this CIP reflects expanded video inspections and infrastructure repair activities (up to and including structure replacement) to ensure all conveyance and storage structures, and outfalls are functional and operating at maximum capacity.

Staff formalized the City's approach to State of Good Repair for the storm sewer system in support of Flood Action Alexandria through community engagement. Taking a proactive approach has proven improvement throughout the City's hot spot flooding areas and this expanded approach will be used to develop a more holistic program to perform preventative inspection and maintenance for the storm sewer system as part of the Flood Action Alexandria program.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

LARGE CAPACITY - COMMONWEALTH AVE, E. GLEBE RD, & ASHBY ST

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Four Mile Run Watershed
REPORTING AREA: Potomac West
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 50 – 75 years

Large Capacity - Commonwealth Ave, E. Glebe Rd & Ashby St													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**79,249,898**	**72,137,898**	**7,112,000**	-	-	-	-	-	-	-	-	-	**7,112,000**
Financing Plan													
GO Bonds (Stormwater)	67,527,150	60,415,150	7,112,000	-	-	-	-	-	-	-	-	-	7,112,000
State/Federal Grants	115,200	115,200	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	11,607,548	11,607,548	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**79,249,898**	**72,137,898**	**7,112,000**	-	-	-	-	-	-	-	-	-	**7,112,000**

CHANGES FROM PRIOR YEAR CIP

Funding totaling $7.1 million added for FY 2027. This funding, in addition to reprioritized stormwater balances totaling $8.1 million, have been added to this project, based on the most recent construction cost estimates for the project.

PROJECT DESCRIPTION & JUSTIFICATION

This project is for the design and implementation of the top two priority large-scale capital projects to address capacity and flooding issues at the intersection of Commonwealth Avenue and East Glebe Road and Ashby Street and East Glebe Road and the adjoining properties under the Flood Action Alexandria program. In the Four Mile Run Watershed, a series of smaller storm sewer systems converge at the intersections of Commonwealth Avenue and East Glebe Road, and Ashby Street and East Glebe Road. During high intensity storm events, the drainage network becomes over capacity and unable to accommodate heavy discharge from multiple upstream systems in tandem, that creates flooding impacts.

The City has been experiencing widespread flooding due to the increase in high intensity precipitation events associated with climate change and its inherent low-lying nature adjacent to the Potomac. The City's 2016 City of Alexandria Storm Sewer Capacity Analysis (CASSCA), service requests received through Alex311 during large storm events, and subsequent investigations have identified segments and junctions of the storm sewer system which could be improved to better convey storm flows and help to reduce surface flooding and impacts to properties.

The project concept and design being developed is considering a mixture of storage, capacity, and green infrastructure solutions to provide flood mitigation with consideration of scenarios under varying storm intensities, including more recent flash flooding events, to create design alternatives and cost-benefit estimates for different levels of service based on varying design storms.

The Communications Plan for robust civic engagement includes interaction with the Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group, the City Council, the community, and affected stakeholders to garner input, communicate expectations, and identify and report on project milestone achievements. Tools include but are not limited to a dedicated website with a project progress dashboard, frequent social media updates, inclusion in the Flood Action Alexandria eNewsletter, community meetings, and Council discussions.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter; Strategic Plan; Chesapeake Bay Preservation Plan in the City's Master Plan; MS4 General Permit; Environmental Action Plan (EAP) 2040; City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Flood Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

LARGE CAPACITY - HOOFFS RUN CULVERT BYPASS

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Northridge / Rosemont
REPORTING AREA: Northridge / Rosemont
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 50 – 75 years

Large Capacity - Hooffs Run Culvert Bypass

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**91,949,420**	**11,069,220**	**26,264,100**	**54,616,100**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**80,880,200**
Financing Plan													
GO Bonds	250,201	250,201	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	47,486,799	10,536,799	1,765,000	35,185,000	-	-	-	-	-	-	-	-	36,950,000
Stormwater Utility Fund	3,772,220	282,220	235,000	3,255,000	-	-	-	-	-	-	-	-	3,490,000
Financing Plan Total	**51,509,220**	**11,069,220**	**2,000,000**	**38,440,000**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**40,440,000**

CHANGES FROM PRIOR YEAR CIP

Project construction funding moved to FY 2028, based upon project readiness.

PROJECT DESCRIPTION & JUSTIFICATION

This project includes the design and implementation of the third prioritized large stormwater capital project under Flood Action Alexandria which will address capacity and flooding issues associated with the Hooffs Run Culvert by creating a new bypass culvert for Timber Branch to remove that flow from the existing Hooffs Run Culvert. The project concept and design will consider a new bypass culvert to carry flows from Timber Branch, generally along Russell Road to the south, and may include a mixture of storage, capacity, and green infrastructure solutions to provide flood mitigation with consideration of scenarios under varying storm intensities, including more recent flash flooding events, to create design alternatives and cost-benefit estimates for different levels of service based on varying design storms.

In the Timber Branch / Hooffs Run Watershed, the Timber Branch stream enters a culvert near the intersection of W. Glendale and W. Timber Branch Parkway. The culvert is situated along the backyards of the properties fronting W. Glendale Avenue and Summers Drive and W. Glendale Avenue and W. Spring Street and joins the lower portion of the Hooffs Run Culvert near E. Spring Street and leads south near Commonwealth Avenue in a single culvert. During high intensity storm events, the drainage network becomes over capacity and unable to accommodate heavy discharge from multiple upstream systems in tandem which creates flooding impacts.

The City has been experiencing widespread flooding due to the increase in high intensity precipitation events associated with Climate Change and its inherent low-lying nature adjacent to the Potomac. The City's 2016 City of Alexandria Storm Sewer Capacity Analysis (CASSCA), service requests received through Alex311 during large storm events, and subsequent investigations have identified segments and junctions of the storm sewer system which could be improved to better convey storm flows and help to reduce surface flooding and impacts to properties.

The Communications Plan for robust civic engagement will include interaction with the Ad Hoc Stormwater Utility and Flood Mitigation Advisory Group, the City Council, the community, and affected stakeholders to garner input, communicate expectations, and identify and report on project milestone achievements. Tools include, but are not limited to, a dedicated website with a project progress dashboard, frequent social media updates, inclusion in the Flood Action eNewsletter, community meetings, and Council discussions.

Staff has executed a contract for the consultant-led design services in spring FY 2023 in response to the request for qualifications (RFQU) for these services and planning and design is underway.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter; Strategic Plan; MS4 General Permit; Environmental Action Plan (EAP) 2040; City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Flood Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

MOUNT VERNON DUAL CULVERT UPGRADE

DOCUMENT SUBSECTION:	Stormwater Management	PROJECT LOCATION:	Mt. Vernon Ave north of W. Reed Ave, to the outfall east of Edison St.
MANAGING DEPARTMENT:	Transportation and Environmental Services	REPORTING AREA:	Arlandria/Chirilagua
		PROJECT CATEGORY:	1
		ESTIMATE USEFUL LIFE:	Varies

Mount Vernon Dual Culvert Upgrade

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**2,591,627**	**2,591,627**	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
GO Bonds (Stormwater)	203,100	203,100	-	-	-	-	-	-	-	-	-	-	-
State/Federal Grants	1,250,000	1,250,000	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	1,138,527	1,138,527	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**2,591,627**	**2,591,627**	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project will help mitigate flooding in the Arlandria neighborhood by conveying larger storm events within the pipes, eliminating the surcharging occurring on Mount Vernon Avenue and greatly improving the health and safety of the community in this equity area. The project will replace existing, deteriorating, undersized dual corrugated metal pipe (CMP) leading from Mount Vernon Avenue, under the Potomac West Apartments, and leading to the outfall east of Edison Street with a larger dual CMP to convey large flows of water. This work will include the relocation of the existing sanitary sewer line and replacement and upsizing four inlets on Edison Street.

The City applied for, and received, a Virginia Resources Authority Community Flood Preparedness Fund (CFPF) 50/50 matching grant for Round 3 (CFPF-22-03-28) of $1,250,000 based on the April 8, 2022 application and estimate for this work.

Recently, the design consultant has completed analysis which shows that relining the existing culvert would provide the same level of flood mitigation and flood attenuation protection, and enhance the integrity of the pipe, consistent with original scope. Early cost estimates for this proposed alternate scope are less than the original scoped work. Staff has discussed this with the state, provided a revised scope for the state to review, and the state has approved of the new approach.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

MS4-TMDL COMPLIANCE WATER QUALITY IMPRV.

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 30+ Years

MS4-TDML Compliance Water Quality Improvements

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**29,205,169**	**4,842,169**	**2,463,000**	**4,000,000**	**5,150,000**	**3,000,000**	**1,500,000**	**2,250,000**	**2,000,000**	**1,500,000**	**2,000,000**	**500,000**	**24,363,000**
Financing Plan													
GO Bonds (Stormwater)	5,190,950	1,139,950	-	1,696,000	-	-	-	-	355,000	500,000	1,000,000	500,000	4,051,000
Stormwater Utility Fund	10,439,219	3,702,219	713,000	304,000	2,575,000	1,500,000	500,000	500,000	645,000	-	-	-	6,737,000
Financing Plan Total	**15,630,169**	**4,842,169**	**713,000**	**2,000,000**	**2,575,000**	**1,500,000**	**500,000**	**500,000**	**1,000,000**	**500,000**	**1,000,000**	**500,000**	**10,788,000**

CHANGES FROM PRIOR YEAR CIP

Project funding for FY 2027 decreased by $1.0 million and reprioritized to the Stormwater BMP Maintenance CFMP. Funding for FY 2031 – FY 3024 reduced by a total of $2.3 million and reprioritized to other stormwater capital projects. Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

The Virginia Department of Environmental Quality (DEQ) issued the City's current Municipal Separate Storm Sewer System (MS4) Permit on July 1, 2013, that mandates City-specific stormwater nutrient and sediment reduction targets for the Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan required and enforced through three 5-year MS4 permit cycles. Accordingly, the permit requires the City to implement stormwater treatment best management practices (BMPs) sufficient to achieve 5% of the reduction targets during the first 5-year permit (2013-2018), to achieve an additional 35% or 40% of total reduction targets during the second 5-year permit (2018-2023) by 2023, and the remaining 60% or 100% of the reductions on or before the end of the third permit cycle (2023-2028), but no later than by 2028.

The City continues planning efforts and identifying projects from the list of strategies in the City's Bay TMDL Action Plan. These plans and options are discussed through the City's Water Quality Workgroup, and through meetings with other internal and external stakeholders. The City completed the Chesapeake Bay TMDL Compliance Analysis and Options report (August 2014) that considered options and alternatives for treating stormwater to meet the Bay TMDL regulatory mandates, along with the corresponding planning-level costs to implement these alternatives. These formed the basis of the strategies included in the City's Phase 1 Chesapeake Bay TMDL Action Plan for 5% targets and in the subsequent draft (June 1, 2018) and final Phase 2 Chesapeake Bay Action Plan, dated September 24, 2019, to meet a total 40% of the targets. The Draft Phase 3 Bay TMDL Action Plan was submitted with the new 2023-2028 MS4 permit. The Draft Phase 3 TMDL Action Plan was submitted for a 15-day public comment period and was presented to the City's Environmental Policy Commission during the comment period. The Final Phase 3 TMDL Action Plan was docketed and accepted by the City Council at the October 22, 2024 Legislative session, and the final was submitted to DEQ on November 1, 2024. This budget is based on funding that can be used to implement a diverse mix of strategies to include retrofit of regional stormwater management facilities, implementation of Green Infrastructure as stormwater quality retrofits of City facilities and right-of-way retrofits, and urban stream restoration. Funding is used as specific projects are identified and developed to achieve these reductions.

(Continued on Next Page)

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Municipal Separate Storm Sewer System (MS4) Permit, Program Plan, and Year 5 Annual Report; City's Chesapeake Bay TMDL Action Plan; T&ES Strategic Plan; Eco-City Charter; Eco-City Action Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

MS4-TMDL Compliance Water Quality Imprv. (continued)

Strategies implemented during the second permit cycle (2018 - 2023 permit) have already exceeded the Strategic Plan goal of 45% reductions by 2022 for a total of approximately 70% through June 30, 2023 to move towards more aggressive reductions to meet 100% of the current required reductions as mandated no later than 2028. Permit requirements and other regulatory expectations are adjusted with each successive MS4 permit and with each iteration of the state's Watershed Implementation Plan (WIP). The state is currently implementing the Phase III WIP (WIP III) with plans to develop a Phase IV WIP (WIP IV) likely in the 2025-2027 timeframe. Upcoming planning and analysis efforts that look at new modeling data and water quality monitoring are likely to revise the nutrient mandates with goals beyond the 2028 MS4 permit. In October 2022, the Chesapeake Bay Executive Council has charged the Principal Staff Committee with recommending a critical path forward to meeting the Bay TMDL. The report, "The Executive Council Charge to the Principals' Staff Committee: Charting a Course to 2025 and Beyond" was published on January 17, 2024. Additionally, planned Bay modeling updates must include Climate Change predictions and other new data. Early estimates show that the current mandates will be increased and therefore are likely required beyond the 2028 date in subsequent permits.

This project funds separate, discrete projects once identified and moved to the design phase. Past completed projects include the Lake Cook Retrofit and Ben Brenman Pond Retrofit and the soon to be completed Lucky Run Urban Stream Restoration. Potential new projects may include the following:

Potential City Properties for Retrofit	Estimated Pollutant Reductions (lbs./yr.)		
	TN	TP	TSS
Maintenance Facility / Luckett Field	11	2	1,496
TES / Recreation Operations	8	1	1,113
Traffic Control Shop	3	1	485

Potential Right-of-Way Projects	Estimated Pollutant Reductions (lbs./yr.)		
	TN	TP	TSS
Braddock Rd - North of I-395	12	2	1,547
Braddock Rd - South of I-395	27	4	3,537
King St - North of I-395	8	1	1,053
King St - South of I-395	21	3	2,480
Edsall Rd	9	1	1,078
Yoakum Pkwy	9	1	1,027

NPDES / MS4 PERMIT

DOCUMENT SUBSECTION:	Stormwater Management	PROJECT LOCATION:	Citywide
MANAGING DEPARTMENT:	Department of Transportation and Environmental Services	REPORTING AREA:	Citywide
		PROJECT CATEGORY:	3
		ESTIMATE USEFUL LIFE:	Varies

NPDES / MS4 Permit

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**4,996,238**	**1,509,638**	**350,200**	**354,000**	**357,700**	**360,500**	**364,200**	**369,900**	**371,900**	**378,200**	**384,000**	**196,000**	**3,486,600**
Financing Plan													
Cash Capital	250,000	250,000	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	-	-	-	-	-	-	-	-	-	-	-	-	-
Prior Capital Funding	-	-	-	-	-	-	-	-	-	-	-	-	-
Private Capital Contributions	187,938	187,938	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	2,908,700	1,071,700	175,000	177,000	179,000	180,000	182,000	184,000	186,000	188,000	190,000	196,000	1,837,000
Financing Plan Total	**3,346,638**	**1,509,638**	**175,000**	**177,000**	**179,000**	**180,000**	**182,000**	**184,000**	**186,000**	**188,000**	**190,000**	**196,000**	**1,837,000**

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides funding for the data collection, inspection and enforcement, public education and outreach, public involvement and citizen participation, GIS mapping, development of water qualtiy action plans, BMP database management, and reporting activities associated with implementation of the programs required by the National Pollution Discharge Elimination System (NPDES) permit regulations administered by the Virginia Department of Environmental Quality (DEQ) through the Virginia Stormwater Management Program (VSMP) General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Storm Water from Small Municipal Separate Storm Sewer Systems (MS4) per 9VAC25-890 et. seq.

The MS4 general permit has a duration of 5-year cycles that requires the City to develop, implement and enforce an MS4 Program Plan to reduce discharges of pollutants from the MS4, protect water quality, and satisfy the appropriate requirements of the Clean Water Act.

The City was originally issued General Permit VAR040057 on July 8, 2003, and the most recent permit was issued on November 1, 2018 and is effective through October 31, 2023. Each successive permit contains increased regulatory requirements which necessitate more resources. The 2018 – 2023 MS4 general permit was no exception, with increased requirements for public education and outreach, staff training, revisions to Total Maximum Daily Load (TMDL) plans, implementation of Stormwater Pollution Prevention Plans (SWPPPs), enhanced inspections, and additional reporting. The 2023-2028 follows suit with additional requirements under Pollution Prevention and Good Housekeeping and Post Construction Stormwater Management. The permits also continue to contain increasingly stringent mandates to address the Chesapeake Bay Total Maximum Daily Load (TMDL).

The 2023-2028 MS4 permit was promulgated effective November 1, 2023 with the required MS4 permit registration statement as an application for coverage to include a draft of the City's Phase 3 Chesapeake Bay Total Maximum Daily Load (TMDL) Action Plan containing strategies to achieve 100% of the reductions in nutrients and sediment. The Final Phase 3 Bay TMDL Action Plan was accepted by City Council at the October 22, 2024 Legislative session. The general permit requires additioanl standard operating procedures and new programmactic compliance, with MS4 annual reports covering compliance activities and other permit reporting requirements carried out for each fiscal year. Planned capital projects to meet the Bay TMDL reductions are budgeted as separate, specific projects under the "Stormwater Management" section of the CIP.

Finally, new broad requirements under the Virginia Watershed Implementation Plan Phase III (WIP III) and changes to guidance documents continue to translate into additional compliance activities.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Municipal Separate Storm Sewer System (MS4) Permit; MS4 Program Plan; MS4 Annual Report; City's Chesapeake Bay TMDL Action Plan; T&ES Strategic Plan; Eco-City Charter; Eco-City Action Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

PHOSPHORUS EXCHANGE BANK

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 30+ Years

Phosphorus Exchange Bank													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	-	-	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Private Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	-	-	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

Virginia Stormwater Management Program (VSMP) regulations, as incorporated into Article XIII of the Alexandria Zoning Ordinance - the Environmental Management Ordinance (EMO) – require properties that undergo development or redevelopment to reduce the amount of phosphorous in stormwater runoff that leaves the site in the post-construction condition. The amount of phosphorus that must be reduced is based upon several factors such as disturbed area, increases in impervious area, land cover types, etc. Owners of development sites may use applicable "offsite compliance options" to meet these requirements pursuant to 62.1-44.15:35 of the Code of Virginia and the attendant VSMP regulations per 9VAC25-875-610-. The City can 'exchange' phosphorus reductions between projects occurring on city-owned properties under the current VSMP regulations.

Small-scale City-funded construction projects and City projects with unfavorable site conditions face difficulties in meeting stormwater management requirements on-site through the installation of stormwater quality structural best management practices (BMPs) due to lack of space and/or cost of construction that make installation infeasible. As such, these projects regularly use offsite compliance options to meet their regulatory phosphorous reduction requirements. Most often, this requirement is met by purchasing nutrient credits from the state's Nutrient Credit Exchange for practices implemented outside the City within the Potomac River basin. In effect, these purchases send funds outside of the City and provide no benefit to local water quality.

The Transportation and Environmental Services, Stormwater Management Division (T&ES-SWM) created this policy alternative for City projects that allows offsite compliance options that provide benefits to local water quality and keep funds within the City. The policy was developed with input across city agencies, revised given that input, shared and approved by the Virginia Department of Environmental Quality, and executed via signature by the director of Transportation and Environmental Services. This project was initially seeded with $100,000 to supplement the installation of BMPs that go beyond stormwater quality requirements that may be used on other projects. The project seeding also includes five (5) pounds of phosphorus that may be purchased by other City departments for small capital projects where installation of BMPs are not feasible.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Municipal Separate Storm Sewer System (MS4) Permit, Program Plan and Year 5 Annual Report; City's Chesapeake Bay TMDL Action Plan; T&ES Strategic Plan; Eco-City Charter; Eco-City Action Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SMALL-MIDSIZE STORMWATER MAINTENANCE PROJECTS

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 1
ESTIMATE USEFUL LIFE: Varies

Small-Midsize Stormwater Maintenance Projects

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**19,117,900**	**2,344,300**	**1,448,400**	**1,531,800**	**1,618,100**	**1,708,200**	**1,802,400**	**1,845,900**	**1,889,900**	**1,934,400**	**1,983,500**	**1,011,000**	**16,773,600**
Financing Plan													
GO Bonds (Stormwater)	4,172,000	-	-	-	403,000	-	-	8,000	945,000	967,000	838,000	1,011,000	4,172,000
Stormwater Utility Fund	7,064,300	2,344,300	724,000	766,000	406,000	854,000	901,000	915,000	-	-	154,000	-	4,720,000
Financing Plan Total	**11,236,300**	**2,344,300**	**724,000**	**766,000**	**809,000**	**854,000**	**901,000**	**923,000**	**945,000**	**967,000**	**992,000**	**1,011,000**	**8,892,000**

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides annual funding for small and midsize stormwater maintenance projects to accelerate infrastructure repairs beyond maintenance. These small to mid-size stormwater maintenance projects would not be associated with other Spot Improvement projects and would not require in-depth design to mitigate flooding issues.

Typical small to midsize projects include repair/replacement of structure tops, inverts, gutter pans and pipe in the City's 189-mile storm sewer network and over 13,400 associated catch basin structures. Work may also include rehabilitation of pipe with trenchless technology or dig and replace based on the inspection and condition of the pipe. Work may also include cleaning or replacement of components of outfall structures and any other maintenance activity that keeps structures in satisfactory operating condition. Some projects have included small stream stabilization projects, flap gate valve replacement along the Potomac River, and pipe replacement projects.

Currently, the City is in the early stages of compiling data from the enhanced inspections. Based on the data that has been collected to date, it is anticipated that the projects will be completed will fall under the following areas:

Cleaning of Structures	50%
Repair of Structures	25%
Replacement of Structures	5%
Replacement of Pipe Sections	15%
Lining of Pipe Sections	5%

It is noted that these percentages may change, based on requests from citizens, findings from City Staff, findings from closed circuit television inspections, and prioritization of work.

This project was recommended by the City's Interdepartmental Flooding Management Task Force and performed under the Flood Action Alexandria initiative. A list of headline progress indicators is under development.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

N/A

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this

SPOT PROJECT - HUME AVENUE BYPASS

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Hume Avenue
REPORTING AREA: Potomac West
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 11 - 15 Years

Spot Project - Hume Avenue Bypass													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**5,641,711**	**5,641,711**	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Cash Capital	1,514,034	1,514,034	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	3,492,456	3,492,456	-	-	-	-	-	-	-	-	-	-	-
Sanitary Sewer Fund	500,000	500,000	-	-	-	-	-	-	-	-	-	-	-
State/Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	135,221	135,221	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**5,641,711**	**5,641,711**	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project included in the Flash Flooding and Spot Improvements project received funding from the American Rescue Plan Act (ARPA) and is being delivered under the City's Flood Action Alexandria initiative. Severe urban flash flooding occurred in this area on Hume Avenue during more recent severe storm events. The existing storm sewer trunk line passes through private property where the city has no access easements. Approximately 15 properties are impacted by flooding when this trunk line is surcharged. This storm sewer improvement re-routes a section of storm sewer away from private property to the right-of-way. Hume Ave will be resurfaced, and the curb & gutter will be replaced under the Flood Action Alexandria initiative.

The project will address a section of storm sewer pipe that does not have capacity to pass the city's 10-year design storm. The project will disconnect the trunk line at the point it enters private property, and the end will be capped. A new trunk line will traverse Dewitt Ave and continue down Hume Ave where it will re-enter the main line serving the area. The pipe on private property will remain in place and continue to serve the adjacent properties that have low yards with inlets connected to the pipe. At a minimum, the bypass pipe system will be designed to handle the 10-year standard design storm. The curb and gutter and pavement will also be replaced in Hume Ave to improve street drainage. However, additional data collection in the Four Mile Run watershed associated with the Commonwealth, Ashby, and E. Glebe large capacity projects that is adjacent to Hume Avenue has identified modeled deficiencies that may arise based on the current scope. Staff is working with the consulting team to explore further scope options to alleviate this modeled flooding for the larger storm events to be consistent with the design storm chosen for the large capacity project. Early cost estimates that expand the scope and extent of this project to the E. Raymond and Commonwealth area that may include another new bypass in that area, has increased the current cost estimate for this project by two-fold to around $3 to $5 million.

The neighborhood in this area was part of the Alexandria Flood Action neighborhood outreach program and is currently engaged by staff. Updates to progress is through the city Flood Action website, the Stormwater Utility and Flood Mitigation Advisory Group, and direct outreach to the affected properties.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Strategic Plan; MS4 General Permit; Environmental Action Plan (EAP) 2040; City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Flood Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

SPOT PROJECT - MT. VERNON CUL-DE-SAC AND ALLEY

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: 10-Block of Mt. Vernon Ave
REPORTING AREA: Potomac West
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 11 - 15 Years

Spot Project - Mt. Vernon Cul-de-sac and Alley

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**2,109,279**	**2,109,279**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Financing Plan													
Cash Capital	1,232,784	1,232,784	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	35,627	35,627	-	-	-	-	-	-	-	-	-	-	-
State/Federal Grants	-	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	840,868	840,868	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**2,109,279**	**2,109,279**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

This project included in the Flash Flooding and Spot Improvements project received funding from the American Rescue Plan Act (ARPA) and is being delivered under the City's Flood Action Alexandria initiative. The project is primarily within the right-of-way in the 10-block of Mt Vernon Ave, east of Commonwealth Ave. The project will consist of the construction of new inlets, a storm sewer extension up a portion of Mt Vernon Ave with new inlets at the curbs. Another storm sewer extension will be constructed in the alley to reduce nuisance flooding from alley runoff. Check valves will be installed at the connection to the Hooffs Run Culvert to prevent backflow into My Vernon Ave.

The neighborhood in this area was part of the Alexandria Flood Action neighborhood outreach program and staff continues to engage with the neighborhood. Updates are provided through the city Flood Action website, the Stormwater Utility and Flood Mitigation Advisory Group, and with direct outreach to the affected properties.

Severe urban flash flooding occurs in this area. The existing storm sewer in Mt Vernon Ave is inadequate to pass the local drainage from the city standard 10-year design storm and causes nuisance flooding and compounds severe flooding when the Hooffs Run Culvert is surcharged. This project will improve the local stormwater runoff management and increase the efficiency of moving stormwater through the storm sewers, reducing the frequency of nuisance flooding, and reduce the surcharge flooding from Hooffs Run Culvert during extreme flash flood events.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Strategic Plan; MS4 General Permit; Environmental Action Plan (EAP) 2040; City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Flood Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

STORM SEWER CAPACITY PROJECTS PROGRAM

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 11 - 15 Years

Storm Sewer Capacity Projects

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**130,341,908**	**11,415,908**	**18,029,000**	**15,325,000**	**9,109,000**	**8,778,000**	**16,939,000**	**15,485,000**	**12,803,000**	**14,518,000**	**7,450,000**	**490,000**	**118,926,000**
Financing Plan													
Cash Capital	949,492	949,492	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	50,214,800	1,514,800	2,829,000	1,623,000	2,429,000	806,000	11,267,000	8,485,000	7,803,000	10,518,000	2,450,000	490,000	48,700,000
Private Capital Contributions	-	-	-	-	-	-	-	-	-	-	-	-	-
State/Federal Grants	516,500	516,500	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	11,736,117	8,435,117	-	-	-	1,629,000	1,672,000	-	-	-	-	-	3,301,000
Financing Plan Total	**63,416,908**	**11,415,908**	**2,829,000**	**1,623,000**	**2,429,000**	**2,435,000**	**12,939,000**	**8,485,000**	**7,803,000**	**10,518,000**	**2,450,000**	**490,000**	**52,001,000**

CHANGES FROM PRIOR YEAR CIP

Project funding decreased, over the 10-year plan, by $15.4 million. This decrease is largely driven by a transfer to the Large Capacity – Commonwealth Ave., E. Glebe Rd., & Ashby St. project and to Storm Sewer Spot Improvements. Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project includes the design and implementation of large-scale capital projects to address stormwater capacity and flooding issues. The City has experienced repeated and increasingly frequent flooding from storm events which led to development of the *City of Alexandria Storm Sewer Capacity Analysis* (CASSCA, 2016), a multi-year citywide storm sewer analysis and planning-level exercise to identify potential capacity issues and develop prioritized recommendations for improvements to the storm sewer system.

Additionally, the City experienced four flash flooding events (July 8, 2019; July 23, 2020; September 10, 2020; and August 15, 2021) primarily as a result of severe rain events from changing weather patterns. Indications are that the City will continue to experience these severe rainfall events more frequently and that these large capital projects can provide a mix of conveyance and storage options to achieve long-term mitigation of flooding issues.

The top projects were prioritized based on planning-level cost-benefit analyses. These projects will mitigate flooding for the greatest number of residents, direct investment to areas where the most significant property damage is occurring and provide the greatest overall system benefit.

The prioritization sequence incorporates multiple data points such as the previous storm sewer and capacity analysis (CASSCA, 2016), property impacts documented through Alex311 service requests, refinement of those priorities through recent and ongoing neighborhood engagement meetings, and infrastructure connectivity from a systems perspective. These inputs were used to further prioritize capacity issues compared against reported issues and feedback from neighborhood groups. This prioritization includes a systematic (holistic, watershed) perspective to provide the capacity needed (conveyance and storage as practicable), with first ensuring downstream capacity is adequate before upstream issues can be addressed.

(Continued on next page)

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter; Strategic Plan; Water Quality Management Supplement to the City's Master Plan; MS4 General Permit; Environmental Action Plan (EAP) 2040; City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Flood Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

Storm Sewer Capacity Projects (continued)

For these large capacity capital projects that are costly, multi-year projects at the multi-block level, there is a greater level of certainty of project sequencing for the first three to four years. The top two prioritized large capacity projects were combined given the proximity of the project areas into the "Large Capacity – Commonwealth Ave, E. Glebe Rd., and Ashby Street" in a dedicated, discrete project in the CIP budget book, which is scheduled to begin construction early 2027 following utility relocations. The third prioritized project is the "Large Capacity – Hooffs Run Culvert Bypass" project is also a dedicated, discrete project in the CIP budget book, and is currently in planning/design.

All planning and modeling to date is based on conceptual cost estimates and preliminary assessments, so there is considerable risk that costs could be higher than anticipated. During the feasibility and design of the first three projects, staff conducted further cost-benefit analysis to include additional resiliency by using future storm forecasts in the design. It should be noted that even if the City designs capacity projects for larger, more intense storm events, there is always the risk that an even more significant rain event will occur. In those situations, greater capacity will help, but it cannot eliminate the risk of flooding entirely. If a higher design standard than the 10-year storm is used, individual projects will likely cost far more than projected and afforded in this model, and fewer projects will be delivered overall unless additional funding can be provided.

FY 2027 to FY 2036 Projects

Project sequencing initiating from FY 2027 to FY 2036 is based on the same considerations as the earlier projects; however, potential reprioritization may occur as further cost-benefit analysis, feasibility, and other design considerations become more available. These projects also include funding for potential property acquisition and/or public-private partnerships.

The City received an initial Virginia Community Flood Preparedness Fund (CFPF) 50% matching grant of $516,000 in March 2022 to accelerate portions of identified issues for the Edison Street and Dale Street area to deliver portions of the Edison and Dale Streets Large Capacity project ahead of the funding schedule of FY 2026 for that project. Staff were able to accelerate this project due to the grant funding, with design for this project nearing completion. The Notabene Drive and Old Dominion Boulevard project received a $750,000 Federal Community Project Funding grant administered by the Department of Housing and Urban Development (HUD) to accelerate portions of the project ahead of the design funding being available in FY 2027 as previously proposed.

The large capacity projects for the FY 2027 – FY 2036 CIP removes the two previously discussed projects and adds two additional projects – Braddock and West Flood Mitigation Project and Commonwealth and Ashby North Culvert Extension. Note that the past funding schedule approach which sought to fund large capacity projects as soon as feasible within the 10 years used in previous CIPs has been replaced with a "delivery schedule" that includes funding for design and construction based on previous cost estimates that include escalation adjustments based on year scheduled. The following large capacity projects are included in the overall 10-Year CIP Storm Sewer Capacity Program:

1. Dewitt Avenue
2. East Mason Avenue
3. Mt. Vernon Avenue, East Glendale Avenue, East Luray Avenue, and East Alexandria Avenue
4. East Monroe Avenue and Wayne Street
5. Russell Rd & W. Rosemont Ave
6. Braddock and West Flood Mitigation
7. Commonwealth and Ashby North Culvert Extension

As mentioned above, the schedule has been amended from a financial planning and budgetary funding schedule to a delivery schedule. However, until substantial feasibility and design work is completed for each specific project, the schedule and budget will only be estimates that will include significant contingencies. As additional information is collected and the design of each project is further defined, more precise construction schedules and cost estimates can be developed.

STORM SEWER SYSTEM SPOT IMPROVEMENTS

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 1
ESTIMATE USEFUL LIFE: Varies

Storm Sewer System Spot Improvements

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**109,865,839**	**21,930,439**	**6,446,000**	**6,852,000**	**9,212,000**	**9,376,000**	**9,624,000**	**9,874,000**	**10,120,400**	**10,374,000**	**10,634,000**	**5,423,000**	**87,935,400**
Financing Plan													
Cash Capital	3,111,492	3,111,492	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	55,996,145	10,346,145	1,194,000	4,426,000	4,606,000	4,688,000	4,812,000	4,937,000	5,060,000	5,187,000	5,317,000	5,423,000	45,650,000
Prior Capital Funding	-	-	-	-	-	-	-	-	-	-	-	-	-
Private Capital Contributions	9,927	9,927	-	-	-	-	-	-	-	-	-	-	-
State/Federal Grants	420,000	420,000	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	11,071,875	8,042,875	3,029,000	-	-	-	-	-	-	-	-	-	3,029,000
Financing Plan Total	**70,609,439**	**21,930,439**	**4,223,000**	**4,426,000**	**4,606,000**	**4,688,000**	**4,812,000**	**4,937,000**	**5,060,000**	**5,187,000**	**5,317,000**	**5,423,000**	**48,679,000**

CHANGES FROM PRIOR YEAR CIP

Funding for FY 2027 and FY 2028 increased by a total of $4.0 million. Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This project provides funding for essential capital infrastructure under the Flood Action Alexandria program that provides localized flood mitigation to specific neighborhoods on the lot and block level. These “Spot Improvements” of the City’s storm sewer system are typically small to mid-sized capital projects that alleviate localized drainage and flooding concerns and can be implemented in about 8 to 20 months from the beginning of design to final construction. These projects are typically identified through Alex311 inquiries, field observations, neighborhood engagement meetings, and onsite investigations.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter; Strategic Plan; Water Quality Management Supplement to the City’s Master Plan; MS4 General Permit; Environmental Action Plan (EAP) 2040; City of Alexandria Storm Sewer Capacity Analysis (CASSCA); Flood Action Alexandria; Northern Virginia Hazard Mitigation Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

STORMWATER BMP MAINTENANCE CFMP

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 1
ESTIMATE USEFUL LIFE: 30+ Years

Stormwater BMP Maintenance CFMP

	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**13,322,300**	**2,684,800**	**1,671,100**	**653,600**	**672,400**	**693,500**	**713,900**	**3,584,200**	**731,800**	**750,000**	**770,000**	**397,000**	**10,637,500**
Financing Plan													
GO Bonds (Stormwater)	1,425,000	-	-	-	-	-	-	1,425,000	-	-	-	-	1,425,000
Stormwater Utility Fund	7,295,800	2,684,800	1,354,000	327,000	336,000	347,000	357,000	367,000	366,000	375,000	385,000	397,000	4,611,000
Financing Plan Total	**8,720,800**	**2,684,800**	**1,354,000**	**327,000**	**336,000**	**347,000**	**357,000**	**1,792,000**	**366,000**	**375,000**	**385,000**	**397,000**	**6,036,000**

CHANGES FROM PRIOR YEAR CIP

Project funding increased by $1.0 million in FY 2027. This increase is to provide funding for stormwater-related improvements that will occur as part of the City Hall, Market Square, and Parking Garage renovation project.

PROJECT DESCRIPTION & JUSTIFICATION

The City is required to inspect and maintain stormwater facility best management practices (BMPs) installed to meet the City's Chesapeake Bay cleanup mandates. The Virginia Department of Environmental Quality (DEQ) issued the City's current Municipal Separate Storm Sewer System (MS4) Permit on November 1, 2023, that continues to mandate City-specific stormwater nutrient (nitrogen and phosphorus) reduction targets for the Chesapeake Bay Total Maximum Daily Load (TMDL). The current 2023 - 2028 MS4 permit requires that 100% reductions are achieved by June 30, 2028. Upcoming planning and analysis efforts that look at new modeling data and water quality monitoring are likely to revise the nutrient mandates with goals beyond the 2028 MS4 permit.

In October 2022, the Chesapeake Bay Executive Council has charged the Principal Staff Committee with recommending a critical path forward to meeting the Bay TMDL. The report, "The Executive Council Charge to the Principals' Staff Committee: Charting a Course to 2025 and Beyond" was published on January 17, 2024. Additionally, planned Bay modeling updates must include Climate Change predictions and other new data. Early estimates show that the current mandates will be increased and therefore are likely required beyond the 2028 date in subsequent permits.

Identification of strategies to meet these reductions, which includes the retrofit of large regional ponds, urban stream restoration, and installation of green infrastructure, are included in the City's Chesapeake Bay TMDL Action Plan.

Long-term maintenance of this new infrastructure must be performed to ensure proper functioning and reduce pollution in stormwater runoff to meet the state and federal mandates. This project funds maintenance of Stormwater Best Management Practices (BMPs) implemented throughout the City, with a focus on the maintenance of larger stormwater management capital projects implemented under the Bay TMDL Action Plan:

- Cameron Station Pond Retrofit
- City Facilities Stormwater BMPs
- Green Infrastructure
- Lake Cook Stormwater Management
- Lucky Run Stream Restoration
- MS4-TMDL Water Quality Compliance projects

This funding is also used to supplement operating funding to inspect and maintain the full public inventory of BMPs that are the responsibility of the City to ensure proper functioning.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Bay TMDL Action Plan, MS4 General Permit, Strategic Plan, Environmental Action Plan, Water Quality Management Supplement

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

STORMWATER UTILITY IMPLEMENTATION

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 1
ESTIMATE USEFUL LIFE: N/A

Stormwater Utility Implementation													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**1,673,200**	**1,673,200**	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Cash Capital	1,518,200	1,518,200	-	-	-	-	-	-	-	-	-	-	-
Prior Capital Funding	-	-	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	155,000	155,000	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**1,673,200**	**1,673,200**	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The City Council directed staff in February 2016 to develop the framework of a Stormwater Utility (SWU) to provide a dedicated funding source to more equitably distribute the increasing costs of recent state and federal Chesapeake Bay water pollution reduction mandates that require the implementation of costly infrastructure associated with stormwater management, as enforced through the City's Municipal Separate Storm Sewer System (MS4) general permit. More recently, funding has been shifted and increased to fund flooding mitigation capital projects and programmatic operations and maintenance under Flood Action Alexandria. Increasing operating and capital costs associated with the mandates exceeded the ½ cent dedication, demanding increasing contributions from the General Fund. Creation of the SWU more equitably apportions the cost obligation and provides a dedicated funding source for the City's Stormwater Management Program by shifting the burden to those properties that contribute more to stormwater runoff, thus alleviating pressure on the General Fund to support these funding responsibilities.

Following extensive public outreach, the City Council adopted the Stormwater Utility framework at its May 4, 2017, special meeting as part of the FY 2018 Budget. The City began implementing the Stormwater Utility Fee, effective January 1, 2018. First billing was sent May 2018 and second billing in October 2018, with the Real Estate bill. Every May and October thereafter, the Stormwater Utility bill was sent with each Real Estate bill, to fund these mandated stormwater improvements and the stormwater management program in an adequate, sustainable and equitable manner.

Database management, additional systems development (database modeling, integration and user interfaces), ongoing GIS data management, and other identified needs will continue, to successfully implement the utility. Extensive and ongoing robust public engagement is also key to implementation of the utility. Finally, an update to the Credit Program that expands the program to include flood mitigation practices, increased the menu of eligible options, made the application process easier, and allows for credits to be good for two years as opposed to annual was done the past year. Staff continues to administer the program and make changes based on a continuous improvement approach.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

City of Alexandria Municipal Separate Storm Sewer System (MS4) Permit; MS4 Program Plan; MS4 Year 5 Annual Report; City's Chesapeake Bay TMDL Action Plan; T&ES Strategic Plan; Eco-City Charter; Eco-City Action Plan 2040; Flood Action Alexandria

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

STREAM & CHANNEL MAINTENANCE

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation and Environmental Services
PROJECT LOCATION: Citywide
REPORTING AREA: Citywide
PROJECT CATEGORY: 1
ESTIMATE USEFUL LIFE: Varies

Stream & Channel Maintenance													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**30,271,208**	**10,870,508**	**1,020,250**	**1,080,050**	**2,104,000**	**2,169,600**	**2,232,100**	**2,299,600**	**2,356,400**	**2,409,800**	**2,469,900**	**1,259,000**	**19,400,700**
Financing Plan													
Cash Capital	3,962,205	3,962,205	-	-	-	-	-	-	-	-	-	-	-
GO Bonds	2,017,602	2,017,602	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	9,281,000	-	-	-	1,052,000	1,086,000	1,116,000	1,150,000	1,178,000	1,205,000	1,235,000	1,259,000	9,281,000
Private Capital Contributions	230,000	230,000	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	5,710,701	4,660,701	510,000	540,000	-	-	-	-	-	-	-	-	1,050,000
Financing Plan Total	**21,201,508**	**10,870,508**	**510,000**	**540,000**	**1,052,000**	**1,086,000**	**1,116,000**	**1,150,000**	**1,178,000**	**1,205,000**	**1,235,000**	**1,259,000**	**10,331,000**

CHANGES FROM PRIOR YEAR CIP

Funding added for FY 2036.

PROJECT DESCRIPTION & JUSTIFICATION

This capital maintenance project preserves the capacity for City streams and channels to carry a 100-year floodwater, performs repairs to erosion damage, stream corridor degradation, grade control structures, storm sewer discharge points, and provides for stream stabilization/restoration. Projects may minimize blockages at bridges by removing and thinning excess vegetation and restoring conveyance capacity by removing sediment that accumulates more quickly due to more frequent, intense storm events. Efforts typically include sediment removal, vegetation maintenance, and in Holmes Run and Cameron Run watersheds, often include efforts in smaller tributaries to these streams.

The increasing frequency of climate-change induced intense storm events is requiring increased funding to ensure the conveyance capacity of these waterways as climate resiliency and adaption measures consistent with the City's Climate Emergency Declaration. In response to recommendations through the Flood Action Alexandria initiative, this project includes funding totaling $10.0M over the 10-year period to perform inspection and maintenance of the City's larger flood channels due to the impact from more frequent, intense storm events.

Sediment removal and vegetation maintenance was conducted on Cameron Run in FY 2018 and the planning phase for sediment removal was initiated in FY 2024. Vegetation maintenance for Holmes Run occurred in FY 2023. Staff also prioritizes projects on our smaller streams, including Hooffs Run, Taylor Run, Timber Branch, Backlick, and tributaries to larger streams to ensure there are no blockages at road and railroad crossings and that conveyance capacity is maintained. A condition inspection of the Lake Cook Eisenhower Culverts – the discharge culverts from Lake Cook under Eisenhower Avenue to Cameron Run – occurred in FY 2025, and a project to make improvements to the culverts is currently in the design phase.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

Eco-City Charter; Water Quality Management Supplement to City Master Plan; MS4 General Permit and Program Plan; Chesapeake Bay TMDL Action Plan; Strategic Plan; Flood Action Alexandria

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.

TAYLOR RUN STREAM RESTORATION

DOCUMENT SUBSECTION: Stormwater Management
MANAGING DEPARTMENT: Department of Transportation & Environmental Services
PROJECT LOCATION: Chinquapin and Forest Parks
REPORTING AREA: Taylor Run/Duke Street
PROJECT CATEGORY: 3
ESTIMATE USEFUL LIFE: 21-25 Years

Taylor Run Stream Restoration													
	A (B + M)	B	C	D	E	F	G	H	I	J	K	L	M (C:L)
	Total Budget & Financing	Prior Appropriations	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036	Total FY 2027 - FY 2036
Expenditure Budget	**2,508,363**	**2,508,363**	-	-	-	-	-	-	-	-	-	-	-
Financing Plan													
Cash Capital	100,000	100,000	-	-	-	-	-	-	-	-	-	-	-
GO Bonds (Stormwater)	1,867,850	1,867,850	-	-	-	-	-	-	-	-	-	-	-
Stormwater Utility Fund	540,513	540,513	-	-	-	-	-	-	-	-	-	-	-
Financing Plan Total	**2,508,363**	**2,508,363**	-	-	-	-	-	-	-	-	-	-	-

CHANGES FROM PRIOR YEAR CIP

No changes from prior CIP.

PROJECT DESCRIPTION & JUSTIFICATION

The project will stabilize the at-risk sanitary sewer infrastructure using a minimal disturbance approach for the sewer crossings, manholes, and associated at risk infrastructure.

Staff will work with the broader community during the design process. The current project budget remaining is about $1.5 million with a rough order of magnitude cost estimate of $2 million developed during discussions with the public. Given the focus of the work in on stabilizing the at-risk sanitary sewer infrastructure, the project costs may be supplemented with Sanitary Sewer funds. While this funding should be sufficient, depending upon the extent of the work, staff may need to make a request for additional funding in the FY 2027 CIP budget to complete the work. Cost estimates and work extent will be refined during the design process.

A design contractor is on board and design has commenced using a minimal disturbance approach to stabilize the infrastructure.

EXTERNAL OR INTERNAL ADOPTED PLAN OR RECOMMENDATION

MS4 General Permit and Program Plan, Chesapeake Bay TMDL Action Plan, Strategic Plan, Environmental Action Plan 2040, Open Space Plan

ADDITIONAL OPERATING IMPACTS

No additional operating impacts identified at this time.