



# Stormwater Management

## PROGRAM DESCRIPTION AND OBJECTIVES

Uncontrolled stormwater runoff from developed areas leads stormwater pollution running into our streams, causing erosion of stream banks, siltation and widening of stream channels, and localized flooding.

In urban areas like many parts of Montgomery County, rain and snow melt run across streets, sidewalks, and rooftops, rather than soaking into the ground. This fast-moving, excess water carries pollution, harming our waterways, tearing away the sides of our streams, and causing erosion and sedimentation. Urban runoff also adds to downstream pollution in the Anacostia, Patuxent, and Potomac rivers and the Chesapeake Bay. Multi-state agreements as well as State legislation and programs emphasize the importance of watershed-based programs to protect aquatic habitats and reduce pollution in the Bay and its tributaries.

The objectives of the Stormwater Management program are: protecting natural waterway environments, addressing the impacts of stormwater runoff by enhancing existing best management practices (BMPs) such as ponds, restoring streams previously damaged by excessive erosion and sedimentation, and installing new BMPs to capture runoff and allow for treatment to prevent impaired water quality. The County's Stormwater Management program is watershed-based and focuses on mitigating problems caused by development that was constructed prior to the implementation of current stormwater management controls and on proactive planning in the developing portions of the County.

Residential and commercial property owners pay a Water Quality Protection Charge (WQPC) to fund the Stormwater Management program. The WQPC funds are used to install new treatment facilities and retrofit existing facilities, maintain treatment facilities, monitor the effects of the treatment, ensure an active public education and engagement program, and ensure compliance with the multiple requirements of the permit issued to the County under the Clean Water Act, and the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit. The WQPC, financing secured by the WQPC, as well as a State-facilitated long-term loan, are the main funding mechanisms for treatment facility projects.

The County's stormwater restoration requirements are established in the MS4 Permit, issued by the Maryland Department of the Environment (MDE). A fourth generation permit was issued for Montgomery County in November 2021.

The Stormwater Management capital program includes facility planning, watershed planning, MS4 compliance implementation, design and construction of stormwater retrofit projects (including low-impact development and green infrastructure), and stream restoration projects. These projects reduce pollution in streams and manage peak runoff flows to improve stream channel habitat and reduce sedimentation impacts from watershed development and urbanized areas.

The CE's recommended FY25-30 CIP includes new funding to address flooding throughout the County. Planning work is underway to identify projects to design and construct. Although funding is added to the Stormwater Management subcategory, many of these projects may ultimately reside elsewhere in the capital budget. In those cases, funds will be shifted from Stormwater Management to the subcategory that will design and construct the improvements.

Since FY04, the County has performed structural maintenance for qualified private stormwater management facilities such as ponds, sand filters, and underground facilities located on homeowner and condominium association and commercial properties. The WQPC funds the maintenance of these privately-owned structures as well as County-owned facilities. This program improves the long-term operational effectiveness of these facilities and increases their pollution removal efficiency.

The Stormwater Management program, which was developed by the Department of Environmental Protection (DEP) to comply with the NPDES MS4 permit, continues to act as a model for jurisdictions throughout Maryland who are required to develop and implement a Stormwater Management program.

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The CIP budget represents the resources necessary to complete the requirements of the MS4 permit and maintain improvements already completed. Additionally, DEP continues to identify program efficiencies to allow for better informed decision making and restoration outcomes at reduced costs. These include the pursuit of lower-cost funding through the Maryland Water Quality Revolving Loan Fund and the increased utilization of Public Private Contracts and Partnerships.

The FY25-30 CIP program for Stormwater Management continues the County's commitment to treat impervious surfaces within the County to the maximum extent practicable. The Department of Transportation (DOT) and the Maryland-National Park and Planning Commission also assist in achieving the County's stormwater management goals and hold regular meetings with DEP staff looking for additional areas of cooperation.

## HIGHLIGHTS

- Make significant investments to address flooding throughout the County.
- Create a new project that focuses on small scale repair and restoration work to prevent minor deficiencies from becoming larger, more costly projects in the future.
- Use Maryland Water Quality Revolving Loan funds to reduce program costs through lower interest financing.
- Use Water Quality Bonds for projects that are ineligible for low-interest loans.
- Install new stormwater management facilities and retrofit old stormwater controls to prevent property damage, improve water quality, and protect habitat.
- Repair major structures on public and private stormwater facilities accepted into the County's maintenance program.

## PROGRAM CONTACTS

Contact Vicky Wan of the Department of Environmental Protection at 240.777.7722 or Richard H. Harris of the Office of Management and Budget at 240.777.2795 for more information regarding this department's capital budget.

## CAPITAL PROGRAM REVIEW

A total of eight projects are recommended for FY25-30 and are described in detail in the Project Description Forms. The Recommended FY25-30 Stormwater Management Capital Program totals \$306.3 million, an increase of \$177.4 million or 137.6 percent from the amended FY23-28 program of \$128.9 million. This increase is primarily due to a new \$153.0 million project to address flooding throughout the County.

The Stormwater Management Capital Program will be funded primarily by long-term debt financing through the Maryland Water Quality Revolving Loan Fund, WQPC-backed bonds, and Current Revenue: WQPC. The Stormwater Management Program assumes multiple awards of Maryland Water Quality Revolving Loan Funds over the six-year period, which replace WQPC Bonds as the primary source of funding for new installations and water quality improvements. Maryland Water Quality Revolving Loan Funds are a low-interest form of borrowing that reduces the overall cost of the program. The loans and bonds will cover expenditures incurred for the design and construction of additional stormwater facilities needed to comply with the requirements of the County's MS4 permit. Cost containment efforts have been aggressively pursued to avoid large increases in the WQPC.

Also included in the funding of the stormwater management projects is an assumption of \$15.0 million in State Aid based on the State's interest in supporting stormwater management efforts throughout the state.



# Anacostia Streams Restoration

(P802502)

Category	Conservation of Natural Resources	Date Last Modified	01/09/24
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Kensington-Wheaton	Status	Preliminary Design Stage

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	452	-	-	452	404	24	24	-	-	-	-
Construction	13,530	-	-	13,530	380	350	10,800	2,000	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>13,982</b>	<b>-</b>	<b>-</b>	<b>13,982</b>	<b>784</b>	<b>374</b>	<b>10,824</b>	<b>2,000</b>	<b>-</b>	<b>-</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Federal Aid	8,680	-	-	8,680	380	-	8,300	-	-	-	-
Long-Term Financing	4,952	-	-	4,952	404	24	2,524	2,000	-	-	-
State Aid	350	-	-	350	-	350	-	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>13,982</b>	<b>-</b>	<b>-</b>	<b>13,982</b>	<b>784</b>	<b>374</b>	<b>10,824</b>	<b>2,000</b>	<b>-</b>	<b>-</b>	<b>-</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	832	Year First Appropriation	
Appropriation FY 26 Request	350	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

## PROJECT DESCRIPTION

This project provides for the design and construction of an Anacostia Streams Restoration Project which will provide restoration in Sligo Creek and Bel Pre Creek, under the County's Municipal Separate Storm Sewer System (MS4) Permit. The Anacostia Stream Restoration Project is a cost sharing project with the US Army Corps of Engineers under Section 206 authority, and will restore ecological function, structure, and stream improvements.

## ESTIMATED SCHEDULE

The Anacostia Stream Restoration Project is scheduled to conclude engineering and design at the end of 2026 for Bel Pre Creek and at the end of the third quarter of 2027 for Sligo Creek. Construction is scheduled to be complete by the end of the second quarter of 2028 for Bel Pre Creek and at the end of the first quarter of 2029 for Sligo Creek.

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## PROJECT JUSTIFICATION

This project is needed to comply with the County's MS4 permitting requirements and to implement the County's adopted water quality goals (COMCOR Chapter 19, Article IV) and to protect habitat conditions in local streams. In addition, the project supports the goals of the Anacostia Watershed Restoration Agreement.

## FISCAL NOTE

The Anacostia Stream Restoration project was previously under the Countywide Project. It is now in its own dedicated project number, though some initial design costs are still reflected in the Countywide project (\$24,000 in FY24). Cost sharing with the US Army Corps of Engineers is based on CAP Section 206 authority. The feasibility study is cost shared 50 percent federal, 50 percent County after the first \$100,000 in study costs. The first \$100,000 in study cost is federally funded. Design and construction costs are shared 65 percent federal and 35 percent County.

## DISCLOSURES

The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

## COORDINATION

United States Army Corps of Engineers, Maryland-National Capital Park and Planning Commission



# Comprehensive Flood Management Plan (P802202)

Category	Conservation of Natural Resources	Date Last Modified	01/07/24
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Planning Stage

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	4,874	-	2,141	2,733	2,733	-	-	-	-	-	-
Other	465	465	-	-	-	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>5,339</b>	<b>465</b>	<b>2,141</b>	<b>2,733</b>	<b>2,733</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Current Revenue: General	1,300	465	835	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	3,914	-	1,181	2,733	2,733	-	-	-	-	-	-
Intergovernmental	125	-	125	-	-	-	-	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>5,339</b>	<b>465</b>	<b>2,141</b>	<b>2,733</b>	<b>2,733</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	2,139	Year First Appropriation	FY22
Appropriation FY 26 Request	-	Last FY's Cost Estimate	4,100
Cumulative Appropriation	3,200		
Expenditure / Encumbrances	1,162		
Unencumbered Balance	2,038		

## PROJECT DESCRIPTION

This project supports the development of a Comprehensive Flood Management Plan (CFMP) for Montgomery County.

The CFPM will improve the County's ability to address flooding based on scientific and engineering data and use a comprehensive, coordinated approach to identify potentially affected residents and businesses, particularly underserved communities and businesses that are least prepared to respond to and recover from flooding events. The CFPM will, among other things:

- gather data on historic flooding in the County, including input from affected communities;
- examine the potential impacts of climate change and other significant factors that can cause flooding in the County, including the effect of updated rainfall predictions;
- provide recommendations for regulatory, policy, and organizational changes necessary for the County to comprehensively plan for, respond to, and recover from flooding events; and

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- include detailed hydrologic and hydraulic modeling, vulnerability assessments, and the development of adaptation/mitigation design plans.

Typical tasks in the development of specific watershed/sub-watershed assessments may include evaluations of current risk, future risk due to climate change, and assessment of risk due to aging assets. More specifically, the effort will include identifying areas at risk of flooding, quantifying that risk, developing mitigation alternatives, and conducting cost-benefit analyses, including evaluation of impacts to disadvantaged communities. Additional results will include development of prioritized CIP projects and implementation schedules. The level of detail and budget required to accomplish these tasks will vary by watershed. There are 8 major watersheds and almost 150 smaller watersheds in the County.

This study will complement the state's efforts under Stormwater Management Law, Environment Article 4-201.1, which requires the Maryland Department of the Environment (MDE) to report on the most recent precipitation data available, investigate flooding events since 2000, and update Maryland's stormwater quantity management standards for flood control.

## ESTIMATED SCHEDULE

Phase 1 will identify watersheds for detailed modeling in Phase 2 and provide an assessment of current County programs, policies, budgets, and other components of the County's flood management activities. Phase I will be completed in early FY24. Modeling of specific watersheds and continued analysis of the County's flood-related programs, policies, etc. began in FY24.

## COST CHANGE

Additional funding added in order to complete Phase 2 work.

## PROJECT JUSTIFICATION

Flooding incidents in Montgomery County have been increasing in frequency and severity for several years. The built environment also affects flooding. An April 2021 report from the Office of Legislative Oversight (OLO) identified an upward trend of urban flooding in the County, from two to four occurrences a year before 2010 to 11 to 39 occurrences per-year since 2010; and that the severity has increased in terms of property damage and loss of life. According to the U.S. Environmental Protection Agency, precipitation in Maryland has increased by about 5 percent in the last century but precipitation from extremely heavy storms has increased in the eastern United States by more than 25 percent since 1958.

To determine the best way to address flooding problems, the County needs a systematic watershed and subwatershed-based analysis of flooding, a better understanding of the impact the County will experience from increased rainfall linked to climate change, and other significant contributing factors.

## FISCAL NOTE

In addition to County support, the Department of Environmental Protection will pursue outside funding to fund these efforts. FY22 supplemental added Current Revenue: General for the amount of \$1,300,000. FY25 includes a funding switch to reduce Intergovernmental and increase Current Revenue: WQP, including \$75,000 from prior appropriation.

## COORDINATION

Department of Permitting Services, Office of Emergency Management and Homeland Security, Department of Transportation, Montgomery County Fire and Rescue Service, Maryland-National Capital Park and Planning Commission, Maryland Department of the Environment, United States Army Corps of Engineers



# Facility Planning: Stormwater Management (P809319)

Category	Conservation of Natural Resources	Date Last Modified	01/08/24
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	33,207	15,806	1,815	15,586	2,340	2,455	2,576	2,648	2,720	2,847	-
Construction	51	51	-	-	-	-	-	-	-	-	-
Other	448	448	-	-	-	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>33,706</b>	<b>16,305</b>	<b>1,815</b>	<b>15,586</b>	<b>2,340</b>	<b>2,455</b>	<b>2,576</b>	<b>2,648</b>	<b>2,720</b>	<b>2,847</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Contributions	4,260	-	-	4,260	505	600	700	750	800	905	-
Current Revenue: General	5,000	5,000	-	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	21,638	9,965	1,547	10,126	1,635	1,655	1,676	1,698	1,720	1,742	-
Intergovernmental	68	-	68	-	-	-	-	-	-	-	-
State Aid	140	140	-	-	-	-	-	-	-	-	-
Stormwater Management Waiver Fees	2,600	1,200	200	1,200	200	200	200	200	200	200	-
<b>TOTAL FUNDING SOURCES</b>	<b>33,706</b>	<b>16,305</b>	<b>1,815</b>	<b>15,586</b>	<b>2,340</b>	<b>2,455</b>	<b>2,576</b>	<b>2,648</b>	<b>2,720</b>	<b>2,847</b>	<b>-</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	1,713	Year First Appropriation	FY93
Appropriation FY 26 Request	2,455	Last FY's Cost Estimate	26,233
Cumulative Appropriation	18,769		
Expenditure / Encumbrances	16,710		
Unencumbered Balance	2,059		

## PROJECT DESCRIPTION

This project provides for facility planning, Municipal Separate Storm Sewer System (MS4) Permit program implementation and water quality monitoring, watershed assessments, and Total Maximum Daily Load (TMDL) Implementation Planning to evaluate watershed conditions, stream health, water quality, and pollution sources to assist with the planning and programming of restoration projects for stormwater management, stormwater retrofit, Environmental Site Design (ESD)/Low Impact Development (LID), stream restoration projects, tree planting and reforestation, and other alternative best management practices. This project supports the regulatory

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requirements in the MS4 permit for water quality improvements through management programs, stormwater restoration, TMDL implementation planning, and assessment of controls. Watershed assessment plans are developed to comprehensively understand the changes that have taken place in the County's watersheds, to evaluate the current understanding of watershed conditions, and are used to support the planning to identify potential restoration opportunities for in the County's current and future MS4 Permit. The project also provides for development of the annual Comprehensive TMDL Implementation Plan required by the MS4 permit. The plan lays out the County's progress toward reducing pollutants through past, current, and future planned restoration projects and is used to support the planning to identify potential pollutant reductions from potential restoration opportunities. Restoration projects are implemented in the Stormwater Management Retrofit Countywide project (No. 808726). Facility planning represents planning, monitoring, and programming to support concept and project opportunities in advance of full programming of a restoration project for stormwater management, stormwater retrofit, ESD/LID, stream restoration projects.

## COST CHANGE

Funds from a class action settlement with the Monsanto Corporation were added to the six-year period, and funding for FY29 and FY30 was added.

## PROJECT JUSTIFICATION

The facility planning products support the requirements outlined in the County's MS4 Permit. This project establishes the facilities planning data and opportunities and alternatives analysis needed to identify and set priorities for individual capital projects. Facility planning costs for projects which are ultimately included in stand-alone Project Description Forms (PDFs) are reflected here and not in the resulting individual project. Future individual CIP projects which result from facility planning will reflect reduced planning and design costs.

## FISCAL NOTE

In FY25, \$4.26 million in contributions from the Monsanto National Class Action settlement payment to Montgomery County was added to Facility Planning: Stormwater Management. Expenditures in the outyears include expected monitoring, assessment, and TMDL implementation planning to meet the requirements of the Polychlorinated biphenyls (PCB) TMDL and MS4 permit. In FY24, there was a shift of \$778,000 from the operating budget to Current Revenue: WQP in this PDF to consolidate stream monitoring and gauge costs in the capital budget while also relieving debt service coverage ratio pressure in the operating budget. In FY23, \$200,000 in Stormwater Management Waiver Fees was transferred to Stormwater Management: Countywide (P808726). In addition, there was a FY21 supplemental in Intergovernmental funding for the amount of \$67,509.

## DISCLOSURES

Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

## COORDINATION

Maryland-National Capital Park and Planning Commission, U. S. Army Corps of Engineers, WSSC Water, Department of Transportation, Montgomery County Public Schools, Stormwater Management Retrofit Countywide (No. 808726).





# General Repair of BMPs and Stream Assets (P802506)

Category	Conservation of Natural Resources	Date Last Modified	01/08/24
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	2,679	-	-	2,679	384	459	459	459	459	459	-
Construction	6,245	-	-	6,245	895	1,070	1,070	1,070	1,070	1,070	-
<b>TOTAL EXPENDITURES</b>	<b>8,924</b>	<b>-</b>	<b>-</b>	<b>8,924</b>	<b>1,279</b>	<b>1,529</b>	<b>1,529</b>	<b>1,529</b>	<b>1,529</b>	<b>1,529</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Current Revenue: Water Quality Protection	7,224	-	-	7,224	1,279	1,529	1,529	829	1,529	529	-
Water Quality Protection Bonds	1,700	-	-	1,700	-	-	-	700	-	1,000	-
<b>TOTAL FUNDING SOURCES</b>	<b>8,924</b>	<b>-</b>	<b>-</b>	<b>8,924</b>	<b>1,279</b>	<b>1,529</b>	<b>1,529</b>	<b>1,529</b>	<b>1,529</b>	<b>1,529</b>	<b>-</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	1,279	Year First Appropriation	
Appropriation FY 26 Request	1,529	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

## PROJECT DESCRIPTION

This project is intended to fund repair sub-projects for stormwater management (SWM) facilities and stream restoration assets that are beyond the scope of the routine maintenance funded by the operating budget programs but are not so large or extensive as to be prioritized under the Major Structural Repair project (P800700). These repairs generally require engineered design and sediment control plans and other permitting like Major Structural Repair sub-projects, but the scope of work is greatly reduced in scale.

The intent of this project is to protect and enhance the functioning of these assets to protect water quality, increase the asset's useful life, and avoid costly repairs in the future. Work on the SWM facilities includes small scale dredging projects that increase the useful life of the asset and ensure that it functions as designed. Work is identified through DEP's triennial inspection program which assures that all SWM facilities under County jurisdiction are inspected and maintained, as required by State law, County law, and the County's MS4 Permit. Stream restoration smaller scale repairs are also identified in inspections which rank severity and issues with erosion, installed structures, and riparian vegetation. Repairs may include removing debris blockages negatively impacting stream banks, or

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design, permitting, and construction management of small spot repairs to protect stream banks, infrastructure, and stream habitat. This work takes place in all areas of the County, assuring water resources protection for all Montgomery County citizens. This work will also provide some climate change resiliency by addressing the sediment erosion impacts of more severe storms.

## DISCLOSURES

Expenditures will continue indefinitely.

## COORDINATION

Department of Transportation, Maryland-National Capital Park and Planning Commission, Maryland Department of Natural Resources



# Implementation of the Comprehensive Flood Management Plan

(P802507)

Category	Conservation of Natural Resources	Date Last Modified	01/09/24
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Planning Stage

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	33,000	-	-	33,000	2,000	3,000	9,000	9,000	5,000	5,000	-
Construction	120,000	-	-	120,000	1,000	7,000	21,000	21,000	35,000	35,000	-
<b>TOTAL EXPENDITURES</b>	<b>153,000</b>	<b>-</b>	<b>-</b>	<b>153,000</b>	<b>3,000</b>	<b>10,000</b>	<b>30,000</b>	<b>30,000</b>	<b>40,000</b>	<b>40,000</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Current Revenue: Water Quality Protection	2,636	-	-	2,636	1,000	1,636	-	-	-	-	-
Water Quality Protection Bonds	150,364	-	-	150,364	2,000	8,364	30,000	30,000	40,000	40,000	-
<b>TOTAL FUNDING SOURCES</b>	<b>153,000</b>	<b>-</b>	<b>-</b>	<b>153,000</b>	<b>3,000</b>	<b>10,000</b>	<b>30,000</b>	<b>30,000</b>	<b>40,000</b>	<b>40,000</b>	<b>-</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	3,000	Year First Appropriation	
Appropriation FY 26 Request	10,000	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

## PROJECT DESCRIPTION

This project provides for implementation of Phase III of the County's Comprehensive Flood Management Plan, developed under the Comprehensive Flood Management Plan (P802202) project. Phase I and II studied watersheds throughout the County and identified areas most prone to flooding and areas that will become prone to flooding in the future. Phase III constructs improvements in areas with identified needs.

## PROJECT JUSTIFICATION

Flooding incidents in Montgomery County have been increasing in frequency and severity for several years. The built environment also affects flooding. An April 2021 report from the Office of Legislative Oversight (OLO) identified an upward trend of urban flooding in the County, from two to four occurrences a year before 2010 to 11 to 39 occurrences per year since 2010; and, the severity has

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increased in terms of property damage and loss of life. According to the U.S. Environmental Protection Agency, precipitation in Maryland has increased by about 5 percent in the last century but precipitation from extremely heavy storms has increased in the eastern United States by more than 25 percent since 1958.

## FISCAL NOTE

This PDF is intended as a central funding source. As individual projects are identified, funds will be transferred to the administering department, which could include the the Department of Transportation, Department of General Services, the Department of Environmental Protection, and the Maryland-National Capital Park and Planning Commission. The funding levels are starting points for Phase III work. The current budget figures are placeholders. Better cost estimates will be available as Phase III projects complete design.

In addition to County support, the Department of Environmental Protection will pursue outside funding to fund these efforts.

## DISCLOSURES

Expenditures will continue indefinitely.

## COORDINATION

Department of Permitting Services, Office of Emergency Management and Homeland Security, Department of Transportation, Montgomery County Fire and Rescue Service, Maryland-National Capital Park and Planning Commission, Maryland Department of the Environment, United States Army Corps of Engineers



# Stormwater Management Facility Major Structural Repair

(P800700)

Category	Conservation of Natural Resources	Date Last Modified	01/08/24
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	19,494	8,326	1,733	9,435	1,585	1,500	1,770	1,740	1,640	1,200	-
Construction	37,984	17,313	8,739	11,932	4,684	1,750	1,700	900	2,098	800	-
Other	691	691	-	-	-	-	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>58,169</b>	<b>26,330</b>	<b>10,472</b>	<b>21,367</b>	<b>6,269</b>	<b>3,250</b>	<b>3,470</b>	<b>2,640</b>	<b>3,738</b>	<b>2,000</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Contributions	600	-	-	600	-	-	-	-	600	-	-
Current Revenue: Water Quality Protection	15,997	11,328	1,700	2,969	2,969	-	-	-	-	-	-
Long-Term Financing	12,184	5,361	4,953	1,870	1,870	-	-	-	-	-	-
State Aid	1,959	399	130	1,430	1,430	-	-	-	-	-	-
Water Quality Protection Bonds	27,429	9,242	3,689	14,498	-	3,250	3,470	2,640	3,138	2,000	-
<b>TOTAL FUNDING SOURCES</b>	<b>58,169</b>	<b>26,330</b>	<b>10,472</b>	<b>21,367</b>	<b>6,269</b>	<b>3,250</b>	<b>3,470</b>	<b>2,640</b>	<b>3,738</b>	<b>2,000</b>	<b>-</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	2,327	Year First Appropriation	FY07
Appropriation FY 26 Request	1,550	Last FY's Cost Estimate	55,034
Cumulative Appropriation	43,044		
Expenditure / Encumbrances	35,120		
Unencumbered Balance	7,924		

## PROJECT DESCRIPTION

This project provides for the design and construction of major structural repairs to County maintained stormwater management facilities. The County is responsible for structural maintenance of over 6,800 stormwater management facilities. Major structural repairs can include dredging and removing sediment, removal and replacement or relining of failing pipes and principal spillways, replacing failing riser structures, and repairing failing dam embankments. The major work completed under this project is more significant than routine maintenance and requires engineering analysis and design and application for Federal, State, and/or local permitting. Some small scale dredging and maintenance work is also funded in this project as a preventative measure, to keep minor

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issues from becoming major structural repair work.

## COST CHANGE

Funding for the Turkey Branch Stream Repair project is shifted from the Countywide PDF (P808726), and funding for FY29 and FY30 has been added.

## PROJECT JUSTIFICATION

This project provides for major structural repairs in order to comply with the County's municipal separate storm sewer system (MS4) permit. It is limited to funding repairs at facilities that require extensive engineering design and permitting that cannot be accomplished within a single fiscal year due to the time required to obtain State and Federal permits.

Current projects include: Wheaton Branch Overtopping Protection, Railroad Branch Dam, Lake Hallowell Dredging Project, Lake Whetstone Toe Drain Repair, Clearspring Manor Road, Norbeck Manor Pond, Quail Valley Pond, Rossmoor Leisure World Pond, and Gunners Lake Erosion Repair.

## FISCAL NOTE

In FY25, Current Revenue: WQP partially replaces funds that had previously been programmed as Water Quality Protection Bonds in the six-year period. Funding sources updated in FY23 to include Water Quality Protection Fund bonds in FY23-FY28. FY21 supplemental in Contributions for the amount of \$600,000.

## DISCLOSURES

Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

## COORDINATION

Department of Transportation, Maryland-National Capital Park and Planning Commission, Department of Permitting Services, Homeowners Associations, Montgomery County Public Schools, Department of General Services, Maryland State Highway Administration, Stormwater Management Retrofit: Countywide (No. 808726), and Maryland Department of Natural Resources.



# Stormwater Management Retrofit: Countywide

(P808726)

Category	Conservation of Natural Resources	Date Last Modified	01/07/24
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	52,082	27,749	2,302	22,031	2,629	4,073	3,783	3,844	3,848	3,854	-
Land	3	3	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	10	10	-	-	-	-	-	-	-	-	-
Construction	101,708	29,358	7,801	64,549	10,585	64	35,750	6,050	6,050	6,050	-
Other	7,388	7,040	168	180	-	80	-	100	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>161,191</b>	<b>64,160</b>	<b>10,271</b>	<b>86,760</b>	<b>13,214</b>	<b>4,217</b>	<b>39,533</b>	<b>9,994</b>	<b>9,898</b>	<b>9,904</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Current Revenue: Water Quality Protection	26,897	15,323	1,616	9,958	1,476	1,653	1,633	1,794	1,698	1,704	-
Federal Aid	5	5	-	-	-	-	-	-	-	-	-
Intergovernmental	1,000	1,000	-	-	-	-	-	-	-	-	-
Long-Term Financing	82,269	13,802	5,975	62,492	8,778	14	35,700	6,000	6,000	6,000	-
State Aid	19,327	3,717	2,500	13,110	2,760	2,350	2,000	2,000	2,000	2,000	-
Stormwater Management Waiver Fees	1,380	-	180	1,200	200	200	200	200	200	200	-
Water Quality Protection Bonds	30,313	30,313	-	-	-	-	-	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>161,191</b>	<b>64,160</b>	<b>10,271</b>	<b>86,760</b>	<b>13,214</b>	<b>4,217</b>	<b>39,533</b>	<b>9,994</b>	<b>9,898</b>	<b>9,904</b>	<b>-</b>

## OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
Maintenance	1,890	90	180	270	360	450	540
<b>NET IMPACT</b>	<b>1,890</b>	<b>90</b>	<b>180</b>	<b>270</b>	<b>360</b>	<b>450</b>	<b>540</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	(1,012)	Year First Appropriation	FY87
Appropriation FY 26 Request	2,081	Last FY's Cost Estimate	147,131
Cumulative Appropriation	102,530		
Expenditure / Encumbrances	97,013		

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## APPROPRIATION AND EXPENDITURE DATA (\$000s)

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Unencumbered Balance

5,517

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### PROJECT DESCRIPTION

This project provides for the design and construction of new and upgraded stormwater management facilities throughout the County under the County's Municipal Separate Storm Sewer System (MS4) Permit. Facilities include but are not limited to new or upgraded stormwater management ponds, Environmental Site Design (ESD) / Low-Impact Development (LID) facilities, and stream restorations.

### COST CHANGE

Funds for the Turkey Branch Stream Repair project was shifted to Major Structure Repair and funds for Anacostia Streams Restoration was shifted to a new PDF, which were offset by funding added for FY29 and FY30.

### PROJECT JUSTIFICATION

This project is needed to comply with the County's MS4 permitting requirements and to implement the County's adopted water quality goals (COMCOR Chapter 19, Article IV) and protect habitat conditions in local streams. In addition, the project supports the goals of the Anacostia Watershed Restoration Agreement.

### OTHER

This project utilizes Maryland Water Quality Revolving Loan Funds (long-term financing). Expenditures in the out-years include expected costs to meet the requirements of the County's next MS4 permit. The scope of the next permit is subject to negotiation with the Maryland Department of Environment.

### FISCAL NOTE

Funding sources updated in FY23 to include Water Quality Protection Bonds. There was also a transfer of \$200,000 in Stormwater Management Waiver Fees in FY23 from Misc. Stream Valley Improvements (P809319). In FY21, a supplemental added \$93,773 in Intergovernmental and a fund switch removed \$200,748 in State Aid and added Federal Aid for the Chesapeake Bay Trust Green Streets, Green Jobs, Green Towns grant. This project utilizes Maryland Water Quality Revolving Loan Funds (long-term financing).

### DISCLOSURES

Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

### COORDINATION

Department of Transportation, Maryland National Capital Park and Planning Commission, Department of Permitting Services, Maryland Department of the Environment, Natural Resources Conservation Service, U.S. Army Corps of Engineers, Facility Planning: Stormwater Management (No. 809319), and Maryland Department of Natural Resources.





# Wheaton Regional Dam Flooding Mitigation (P801710)

Category	Conservation of Natural Resources	Date Last Modified	01/07/24
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Kensington-Wheaton	Status	Planning Stage

## EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Planning, Design and Supervision	1,509	762	89	658	614	44	-	-	-	-	-
Construction	3,267	-	-	3,267	875	2,392	-	-	-	-	-
<b>TOTAL EXPENDITURES</b>	<b>4,776</b>	<b>762</b>	<b>89</b>	<b>3,925</b>	<b>1,489</b>	<b>2,436</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY23	Est FY24	Total 6 Years	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	Beyond 6 Years
Current Revenue: Water Quality Protection	1,617	628	-	989	989	-	-	-	-	-	-
State Aid	96	-	-	96	-	96	-	-	-	-	-
Water Quality Protection Bonds	3,063	134	89	2,840	500	2,340	-	-	-	-	-
<b>TOTAL FUNDING SOURCES</b>	<b>4,776</b>	<b>762</b>	<b>89</b>	<b>3,925</b>	<b>1,489</b>	<b>2,436</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>

## APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 25 Request	-	Year First Appropriation	FY16
Appropriation FY 26 Request	-	Last FY's Cost Estimate	4,776
Cumulative Appropriation	4,776		
Expenditure / Encumbrances	922		
Unencumbered Balance	3,854		

## PROJECT DESCRIPTION

This flood mitigation project, located along Glenhaven Drive and Dennis Avenue in Wheaton, will excavate and expand the stream channel upstream of the Wheaton Regional Pond and modify the pond's riser structure. This project will be constructed in parallel with the Department of Transportation's (DOT) Dennis Avenue bridge replacement. The two projects will modify the current 100-year floodplain boundary just upstream of the pond. The post-project 100-year floodplain will not include the residential properties located in the current 100-year floodplain.

## ESTIMATED SCHEDULE

The riser modification and channel design began in FY18 with the riser repair construction expected to start in FY24 and conclude in FY25. The excavation of the channel will occur in coordination with DOT's culvert replacement in FY23 and FY24.

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## PROJECT JUSTIFICATION

An engineering analysis by the Department of Environmental Protection indicates that the effect of the riser structure associated with the Wheaton Regional Pond, the Dennis Avenue Culvert, and an undersized stream channel along Glenhaven Drive, cumulatively, will cause flooding of roads and private property upstream of the pond during a 100-year storm event. Flooding of adjacent roads and private property has already occurred in 2006 and 2010.

## FISCAL NOTE

In FY25, \$989,000 in Current Revenue: Water Quality Protection replaces that amount of Water Quality Bonds. In FY24, State Aid increased \$96,000 to reflect a State grant for tree planting, with an offsetting reduction in Water Quality Protection bonds. Funding sources updated in FY23 to include Water Quality Protection Fund bonds in FY23-FY28. The County intends for a portion of long term financing in FY22 to also be paid for with Water Quality Protection Fund bonds. This project will be done in conjunction with the DOT Dennis Avenue bridge replacement project (P501701).

## DISCLOSURES

The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

## COORDINATION

Department of Transportation, Federal Emergency Management Agency, Maryland Emergency Management Agency, and Dennis Ave Bridge M-0194 Replacement (No. 501701).