Conservation of Natural Resources

Stormwater Management

Facility Planning: Stormwater Management
(P809319)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	19,729	13,259	960	5,510	710	920	940	960	980	1,000	-
Other	295	295	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	20,024	13,554	960	5,510	710	920	940	960	980	1,000	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Current Revenue: General	5,000	5,000	-	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	14,087	7,617	960	5,510	710	920	940	960	980	1,000	-
State Aid	140	140	-	-	-	-	-	-	-	-	-
Stormwater Management Waiver Fees	797	797	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	20,024	13,554	960	5,510	710	920	940	960	980	1,000	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	560	Year First Appropriation	FY93
Appropriation FY 22 Request	940	Last FY's Cost Estimate	17,441
Cumulative Appropriation	14,687		
Expenditure / Encumbrances	13,741		
Unencumbered Balance	946		

PROJECT DESCRIPTION

This project provides for facility planning and feasibility studies to evaluate watershed conservation needs and to identify remedial projects for stormwater management, stormwater retrofit, Environmental Site Design (ESD)/Low Impact Development (LID), and stream restoration projects. Projects in facility planning may include the preparation of watershed plans assessing stream restoration, stormwater management retrofit projects, and ESD/LID projects to help mitigate degraded stream conditions in rural and developed watersheds. Water quality monitoring and analysis is required to quantify impacts of watershed development and projects implemented in Stormwater Management Retrofit Countywide project (No. 808726). The projects generated in facility planning support the requirements in the County's Municipal Separate Storm Sewer System (MS4) Permit. Facility planning represents planning and preliminary design and develops a program of requirements in advance of full programming of a project. This project also

provides for operation of automated fixed monitoring stations as required by the MS4 Permit.

COST CHANGE

Project increase due to addition of FY25 and FY26 to this on-going level of effort project, and estimated costs for watershed updates beginning in FY22.

PROJECT JUSTIFICATION

The facility planning products support the requirements outlined in the County's MS4 Permit. This project establishes the facilities planning data 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

Expenditures in the outyears include expected costs to meet the requirements of the County's next MS4 permit. The scope of the next MS4 permit is subject to negotiation with the Maryland Department of Environment.

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, Washington Suburban Sanitary Commission, Department of Transportation, Montgomery County Public Schools, Stormwater Management Retrofit Government Facilities (No. 800900), Stormwater Management Retrofit Roads (No. 801300), Stormwater Management Retrofit Schools (No. 801301), Stormwater Management Retrofit Countywide (No. 808726), Misc. Stream Valley Improvements (No. 807359).

Misc Stream Valley Improvements
(P807359)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	6,118	4,838	1,090	190	130	60	-	-	-	-	-
Land	2	2	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	1	1	-	-	-	-	-	-	-	-	-
Construction	17,055	5,885	6,250	4,920	3,850	1,070	-	-	-	-	-
Other	2,335	2,335	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	25,511	13,061	7,340	5,110	3,980	1,130	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Current Revenue: Water Quality Protection	4,722	1,582	1,940	1,200	1,200	-	-	-	-	-	-
Long-Term Financing	9,175	65	5,200	3,910	2,780	1,130	-	-	-	-	-
State Aid	4,106	4,106	-	-	-	-	-	-	-	-	-
Stormwater Management Waiver Fees	1,490	1,290	200	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	6,018	6,018	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	25,511	13,061	7,340	5,110	3,980	1,130	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	-	Year First Appropriation	FY73
Appropriation FY 22 Request	(2,582)	Last FY's Cost Estimate	25,713
Cumulative Appropriation	28,093		
Expenditure / Encumbrances	18,831		
Unencumbered Balance	9,262		

PROJECT DESCRIPTION

This project provides for design and construction of habitat restoration or stabilization measures for stream reaches having significant channel erosion, sedimentation, and habitat degradation. Developed areas constructed without current stormwater controls contribute uncontrolled runoff which results in eroded streambanks, excessive sediment, tree loss, and degraded habitat for fish and aquatic life. Stormdrain outfalls damaged from severe erosion are identified and, where possible, the outfalls are repaired - funded from the Outfall

Repairs project (No. 509948).

COST CHANGE

Project decrease due to transfer of future stream restoration work to CIP Project #808726 - Stormwater Management Retrofit Countywide.

PROJECT JUSTIFICATION

The project supports the requirements of the County's MS4 permit and addresses the goals of the Chesapeake Bay Watershed Agreement, Anacostia Watershed Restoration Agreement, and the County's adopted water quality goals (Chapter 19, Article IV). The project will stabilize and improve local stream habitat conditions where streams have been damaged by inadequately controlled stormwater runoff.

OTHER

Projects planned for design and construction include Glenstone and Booze Creek Repairs. The CIP project includes funding for the stream restoration study of Anacostia Watershed by the Army Corps of Engineers.

The Montgomery Parks Department of the Maryland-National Capital Park and Planning Commission (M-NCPPC) and the Montgomery Department of Environmental Protection (DEP) have agreed that M-NCPPC will serve as the lead agency for implementing stream restoration projects including long-term monitoring and maintenance that are located wholly or mostly on parks property in support of the County's MS4 permit. Previously, DEP had begun design work on the following stream restoration projects which meet these criteria: Clearspring Manor, Glenallan, Stoneybrook (Beach Drive to Montrose Avenue), and Grosvenor (Beach Drive to Rockville Pike). DEP has provided all design work for these projects to M-NCPPC for design completion, permitting, and construction under M-MNCPPC's Stream Protection: SVP (P818571) project. M-NCPPC has agreed that all MS4 credits generated from these projects will be credited towards the County's future MS4 permit with delivery of the restored impervious acres no later than Dec. 31, 2023. M-NCPPC will provide appropriate updates at key project milestones to ensure that MS4 credits are achieved in the timeframe required, in addition to providing the long-term monitoring and maintenance required for the County to maintain the impervious acreage credit. These projects are currently estimated to have a combined cost of $2.4M and will provide approximately 44 acres of credit; funding was provided under M-MNCPPC's Stream Protection: SVP (P818571) project. Parks will provide updated schedule and cost information on all projects for construction allocation funding beginning in FY 20, based on MDE's Water Quality Revolving Loan Fund cycle timeframes. M-NCPPC and DEP developed a Memorandum of Understanding that details how projects completed by M-NCPPC, funded with WQPC dollars, with MS4 credits going to DEP, will be handled. M-NCPPC will document all MS4 credits created through these projects in accordance with MDE requirements to obtain State approval for the permit credits. M-NCPPC recognizes that stream restoration projects with relatively small segments located on Parks property may be selected by the County's DBM contractor. If selected by the County's contractor and approved by DEP with concurrence by M-NCPPC, the contractor will need to obtain a Park Permit and comply with all M-NCPPC requirements.

FISCAL NOTE

This project assumes the award of Maryland Water Quality Revolving Loan Funds (Long-Term Financing) over the six-year period, which would replace Water Quality Protection Bonds as the primary source of funding for the program.

This CIP Project will be closed after the completion of the Booze Creek Repair project, expected in FY22. Any future stream restoration work shall be performed under CIP Project # 808726 - Stormwater Management Retrofit: Countywide.

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, Maryland-National Capital Park and Planning Commission, Washington Suburban Sanitary Commission, Department of Permitting Services, Maryland Department of the Environment, and Maryland Department of Natural Resources.

Stormwater Management Design/Build /Maintain Contract

(P801901)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	335	335	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	335	335	-	-	-	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Current Revenue: Water Quality Protection	335	-	335	-	-	-	-	-	-	-	-
Long-Term Financing	-	335	(335)	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	335	335	-	-	-	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	-	Year First Appropriation	FY19
Appropriation FY 22 Request	-	Last FY's Cost Estimate	46,300
Cumulative Appropriation	20,000		
Expenditure / Encumbrances	335		
Unencumbered Balance	19,665		

PROJECT DESCRIPTION

This project provides for the use of a Design/Build/Maintain (DBM) contract for the design and construction of new and/or upgrades of existing under-performing stormwater management facilities or stream restorations throughout the County to meet the requirements of the County's Municipal Separate Storm Sewer System (MS4) Permit.

COST CHANGE

This CIP Project is being closed as of FY21. Any future stormwater restoration work done using a Design/Build/Maintain (DBM) Contract shall be performed under CIP Project # 808726 - Stormwater Management Retrofit: Countywide.

PROJECT JUSTIFICATION

This project is needed to comply with the County's MS4 permitting requirements in a cost-effective manner, to implement the County's adopted water quality goals (Chapter 19, Article IV), and to protect habitat conditions in local streams.

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.

Stormwater Management Facility Major Structural Repair
(P800700)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	13,125	5,205	1,430	6,490	1,290	990	1,050	1,050	1,060	1,050	-
Construction	30,273	12,063	2,740	15,470	3,570	3,700	2,100	2,100	2,000	2,000	-
Other	1	1	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	43,399	17,269	4,170	21,960	4,860	4,690	3,150	3,150	3,060	3,050	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Current Revenue: Water Quality Protection	15,805	9,485	810	5,510	1,630	1,290	650	630	660	650	-
Long-Term Financing	20,122	312	3,360	16,450	3,230	3,400	2,500	2,520	2,400	2,400	-
State Aid	399	399	-	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	7,073	7,073	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	43,399	17,269	4,170	21,960	4,860	4,690	3,150	3,150	3,060	3,050	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	6,530	Year First Appropriation	FY07
Appropriation FY 22 Request	2,820	Last FY's Cost Estimate	27,994
Cumulative Appropriation	22,931		
Expenditure / Encumbrances	18,820		
Unencumbered Balance	4,111		

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 repair work under this project is more significant than routine maintenance and requires engineering analysis and design and application for Federal, State, and/or local permitting.

COST CHANGE

The six-year cost increase is due to an increased number of major structural repair projects.

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, Persimmon Tree Ponds, Peachwood Pond, Briars Acres Pond, Railroad Branch Dam, Lake Hallowell dredging project, and Lake Whetstone Toe Drain repair.

FISCAL NOTE

This project assumes the award of Maryland Water Quality Revolving Loan Funds (long-term financing) over the six-year period, which would replace Water Quality Protection Bonds as the primary source of funding for the program. No State Aid is assumed for this project in FY21-26.

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 - Roads
(P801300)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	7,212	7,204	8	-	-	-	-	-	-	-	-
Construction	8,523	8,523	-	-	-	-	-	-	-	-	-
Other	23	23	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	15,758	15,750	8	-	-	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Current Revenue: Water Quality Protection	8	-	8	-	-	-	-	-	-	-	-
State Aid	9,312	9,312	-	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	6,438	6,438	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	15,758	15,750	8	-	-	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	(148)	Year First Appropriation	FY13
Appropriation FY 22 Request	-	Last FY's Cost Estimate	15,906
Cumulative Appropriation	15,906		
Expenditure / Encumbrances	15,756		
Unencumbered Balance	150		

PROJECT DESCRIPTION

This CIP Project is being closed as of FY21. Any future stormwater restoration work along County Roads shall be performed under CIP Project # 808726 - Stormwater Management Retrofit: Countywide.

This project provides for the design and construction of Environmental Site Design (ESD)/Low Impact Development (LID) stormwater management devices along County roads constructed prior to modern stormwater management controls.

PROJECT JUSTIFICATION

This project supports the requirements of the County's Municipal Separate Storm Sewer System (MS4) permit and addresses the

goals of the Chesapeake Bay Watershed Agreement and the County's adopted water quality goals (Chapter 19, Article IV).

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.

Stormwater Management Retrofit - Schools
(P801301)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	1,873	1,823	50	-	-	-	-	-	-	-	-
Construction	3,208	3,208	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	5,081	5,031	50	-	-	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Current Revenue: Water Quality Protection	50	-	50	-	-	-	-	-	-	-	-
State Aid	1,360	1,360	-	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	3,671	3,671	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	5,081	5,031	50	-	-	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	(301)	Year First Appropriation	FY13
Appropriation FY 22 Request	-	Last FY's Cost Estimate	5,382
Cumulative Appropriation	5,382		
Expenditure / Encumbrances	5,334		
Unencumbered Balance	48		

PROJECT DESCRIPTION

This CIP Project is being closed as of FY21. Any future stormwater restoration work at Mounty County Public Schools shall be performed under CIP Project # 808726 - Stormwater Management Retrofit: Countywide.

This project provides for the design and construction of Environmental Site Design (ESD)/Low Impact Development (LID) stormwater management devices at Montgomery County Public Schools (MCPS) such as buildings, parking lots, and other impervious surfaces constructed prior to modern stormwater management controls.

PROJECT JUSTIFICATION

This project supports the requirements of the County's Municipal Separate Storm Sewer System (MS4) permit and addresses the

goals of the Chesapeake Bay Watershed Agreement and the County's adopted water quality goals (Chapter 19, Article IV).

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.

Stormwater Management Retrofit: Countywide
(P808726)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	52,232	20,672	3,520	28,040	5,070	5,040	4,680	3,420	5,900	3,930	-
Land	3	3	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	10	10	-	-	-	-	-	-	-	-	-
Construction	77,628	25,438	5,480	46,710	6,330	10,990	7,130	8,060	6,190	8,010	-
Other	3,889	3,889	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	133,762	50,012	9,000	74,750	11,400	16,030	11,810	11,480	12,090	11,940	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Contributions	60	-	60	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	22,540	11,549	2,551	8,440	2,440	1,000	1,000	1,000	2,000	1,000	-
Intergovernmental	1,000	1,000	-	-	-	-	-	-	-	-	-
Long-Term Financing	60,383	3,679	5,744	50,960	7,100	11,850	8,450	7,620	7,850	8,090	-
State Aid	18,594	3,699	645	14,250	1,660	3,000	2,180	2,680	2,060	2,670	-
Stormwater Management Waiver Fees	1,100	-	-	1,100	200	180	180	180	180	180	-
Water Quality Protection Bonds	30,085	30,085	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	133,762	50,012	9,000	74,750	11,400	16,030	11,810	11,480	12,090	11,940	-

OPERATING BUDGET IMPACT ($000s)

Impact Type		Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26
Maintenance		600	-	-	150	150	150	150
NET IMPACT		600	-	-	150	150	150	150

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	27,640	Year First Appropriation	FY87
Appropriation FY 22 Request	2,700	Last FY's Cost Estimate	59,805
Cumulative Appropriation	68,900		
Expenditure / Encumbrances	60,170		

APPROPRIATION AND EXPENDITURE DATA ($000s)

Unencumbered Balance	8,730

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

The increase is due to the consolidation of the following Watershed Restoration CIP projects into this CIP project:

- Stormwater Management Design/Build/Maintain Contract (P801901),
- Stormwater Management Retrofit - Government Facilities (P800900),
- Stormwater Management Retrofit - Roads (P801300),
- Stormwater Management Retrofit - Schools (P801301),
- Watershed Restoration - Interagency (P809342), and
- Misc Stream Valley Improvements (P807359).

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 assumes the award of Maryland Water Quality Revolving Loan Funds (long-term financing) over the six-year period, which would replace Water Quality Protection Bonds as the primary source of funding for the program. 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

This project assumes the award of Maryland Water Quality Revolving Loan Funds (long-term financing) over the six-year period, which would replace Water Quality Protection Bonds as the primary source of funding for the program.

The Department of Environmental Protection will provide quarterly Program status updates to the Council. The work Program will be based on permits requirements, an assessment of priority needs and community input including feedback from stormwater partners.

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.

Watershed Restoration - Interagency
(P809342)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	2,898	2,898	-	-	-	-	-	-	-	-	-
Land	4	4	-	-	-	-	-	-	-	-	-
Construction	1,873	1,873	-	-	-	-	-	-	-	-	-
Other	2	2	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	4,777	4,777	-	-	-	-	-	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Current Revenue: Water Quality Protection	166	166	-	-	-	-	-	-	-	-	-
G.O. Bonds	527	527	-	-	-	-	-	-	-	-	-
State Aid	370	370	-	-	-	-	-	-	-	-	-
Stormwater Management Waiver Fees	3,226	3,226	-	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	488	488	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	4,777	4,777	-	-	-	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	-	Year First Appropriation	FY93
Appropriation FY 22 Request	-	Last FY's Cost Estimate	4,778
Cumulative Appropriation	4,778		
Expenditure / Encumbrances	4,778		
Unencumbered Balance	-		

PROJECT DESCRIPTION

This project provides for the design and construction of stormwater management retrofits and stream restoration projects which manage stormwater runoff, enhance aquatic habitat, and improve water quality in County streams. The projects are executed under interagency agreements with the U.S. Army Corps of Engineers (USACE).

This CIP Project is being closed as of FY21. Any future Interagency stormwater restoration work shall be performed under CIP Project # 808726 - Stormwater Management Retrofit: Countywide.

PROJECT JUSTIFICATION

This project will improve local stream water quality, protect stream conditions, and enhance wildlife and aquatic habitats in Sligo Creek, Northwest Branch, Paint Branch, and Little Paint Branch tributaries within the interjurisdictional Anacostia River Watershed.

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.

Wheaton Regional Dam Flooding Mitigation
(P801710)

Category	Conservation of Natural Resources	Date Last Modified	01/08/20
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Kensington-Wheaton	Status	Planning Stage

EXPENDITURE SCHEDULE ($000s)

Cost Elements	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Planning, Design and Supervision	1,030	187	443	400	170	160	70	-	-	-	-
Construction	4,500	-	-	4,500	-	3,600	900	-	-	-	-
TOTAL EXPENDITURES	5,530	187	443	4,900	170	3,760	970	-	-	-	-

FUNDING SCHEDULE ($000s)

Funding Source	Total	Thru FY19	Est FY20	Total 6 Years	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	Beyond 6 Years
Current Revenue: Water Quality Protection	2,530	187	443	1,900	170	1,090	640	-	-	-	-
Federal Aid	3,000	-	-	3,000	-	2,670	330	-	-	-	-
TOTAL FUNDING SOURCES	5,530	187	443	4,900	170	3,760	970	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA ($000s)

Appropriation FY 21 Request	-	Year First Appropriation	FY16
Appropriation FY 22 Request	2,580	Last FY's Cost Estimate	5,530
Cumulative Appropriation	2,950		
Expenditure / Encumbrances	622		
Unencumbered Balance	2,328		

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 FY22. The excavation of the channel will occur in coordination with DOT's culvert replacement in FY23 and FY24.

COST CHANGE

Faster than expected design resulted in acceleration of the design phase, though redesign in the Dennis Avenue Bridge Replacement project (P501701) will delay construction to FY22.

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 during a 100-year storm event. Flooding of adjacent roads and private property has already occurred in 2006 and 2010. The County is seeking a map revision to the Federal Emergency Management Agency (FEMA) panel for this area to have the 100-year floodplain updated to reflect existing conditions.

FISCAL NOTE

This project will be done in conjunction with the DOT Dennis Avenue bridge replacement project (P501701). The County will also partner with the Maryland Emergency Management Agency (MEMA) to seek FEMA Pre-Disaster Mitigation Grant Program funding for the channel modifications.

COORDINATION

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