

T&E COMMITTEE #5
May 4, 2018

Worksession

MEMORANDUM

May 2, 2018

TO: Transportation, Infrastructure, Energy & Environment Committee

FROM: *KL* Keith Levchenko, Senior Legislative Analyst

SUBJECT: **Worksession: FY19-24 Capital Improvements Program (CIP) Conservation of Natural Resources: Stormwater Management and Water Quality Protection Charge (WQPC) Equivalent Residential Unit (ERU) Rate Resolution**

PURPOSE: To Review and Make Recommendations to the Council on the FY19-24 Stormwater Management Capital Improvements Program and WQPC ERU Rate

NOTE: The Stormwater Management CIP is funded entirely from Water Quality Protection Fund (WQPF) dollars and State Aid and other outside sources of funding. Therefore, changes in expenditures in this program **DOES NOT** affect overall CIP Spending Affordability limits.

Highlights

- March 15 CE Recommendation: \$102.5 million (decrease of \$243 million, -70.3%)
- Assumes a 5% MS4 permit impervious acreage retrofit requirement
- Assumes completion of work under the 2010-2015 MS4 permit Consent Decree by the end of 2018
- Assumes new Water Quality Revolving Loan funding (+\$55.1 million) and removal of most WQPF Bond funding (-\$289.9 million)
- Cancellation of 26 stormwater management (swm) projects
- Suspension of 44 swm projects (potentially to be picked up by new DBM contract)
- Continuation of 3 pay-for-performance contracts
- Creation of new Public/Private Partnership project (+\$48.3 million) to address 526 acres of impervious area
- Reductions in the SM Major Structural Repair project
- No increase recommended in the WQPC ERU Rate in FY19 or in FY20.

Council Staff Recommendations:

- Approve the FY19-24 Stormwater Management CIP with the following changes to the SM Public/Private Partnership project:
 - Change the name to SM Design/Build/Maintain Contract project
 - Reduce the FY19 appropriation (amount TBD) to reflect first-year workplan project costs
 - Add language to the PDF noting required project updates to be provided to the Council
 - Include preferences for swm projects with long-term environmental benefits
 - Reduce the project by a total of \$2.0 million (across FY20, 21, and 22) to offset the increased expenditures assumed in Parks' Stream Protection: SVP project
- Approve the WQPC ERU rate with no increase (\$104.25; as recommended by the County Executive).

The following officials and staff are planning to attend the Council worksession:

County Government

- Patty Bubar, Acting Director, Department of Environmental Protection (DEP)
- Frank Dawson, Chief, Division of Watershed Management Capital Projects (WMCP), DEP
- Jim Stiles, Chief, Construction Management Section, WMCP, DEP
- Vicki Wan, Manager, Water Quality Protection Charge and Technology Services, DEP
- Mary Beck, Office of Management and Budget
- Trevor Lobaugh, Office of Management and Budget

Montgomery Parks

- Mike Riley, Director, Montgomery Parks
- Andy Frank, Section Chief, Environmental Engineering

Attachments

- Memorandum of March 15 from County Executive Leggett to Council President Hans Riemer: Amendments to the Recommended FY19 Capital Budget and FY19-24 CIP (Excerpt) (©1-28)
- List of cancelled stormwater management projects (©29)
- List of suspended stormwater management projects (©30-31)
- List of ongoing stormwater management projects (©32-33)
- Parks Proposal: Stream Protection: SVP (©34-35)
- Water Quality Protection Fund Recommended Fiscal Plan (©36)
- FY19 Water Quality Protection Charge Equivalent Residential Unit Rate Resolution (©37-38)

NOTE: The T&E/PHED Joint Committee met on March 22 and April 17 to discuss the Executive's recommended changes to the County's Stormwater Management CIP, the status of the County's National Pollution Discharge Elimination System Municipal Separate Storm Sewer System Discharge (NPDES-MS4) Permit, and funding issues associated with the Maryland-National Capital Park and Planning Commission's (M-NCPPC) stormwater management and stream restoration activities.

FY19-24 STORMWATER MANAGEMENT CIP

Stormwater management is a shared responsibility among several County departments and agencies. DEP plans and implements the stormwater management CIP program. The Department of Permitting Services reviews, approves, inspects, and enforces requirements for construction of privately-owned stormwater management facilities. DEP works with the County's Department of Transportation (DOT) to address storm drain outfall repair issues, as well as with the Washington Suburban Sanitary Commission (WSSC) when WSSC infrastructure work is needed. DEP also inspects and provides structural maintenance for most Montgomery County Public Schools (MCPS) and the M-NCPPC land. M-NCPPC also performs stream restoration and stormwater management work on parkland and coordinates with DEP on shared projects.

**National Pollution Discharge Elimination System
Municipal Separate Storm Sewer System Discharge
(NPDES-MS4) Permit**

2010-2015 NPDES-MS4 Permit Status

DEP is the lead department coordinating a multi-department/agency effort to meet the requirements of the five-year MS4 permit¹ issued to the County by MDE on February 16, 2010. This permit expired in February 2015. However, expired permits are assumed to remain in effect pending issuance of a succeeding permit by MDE, which is expected in 2019.

The County's MS4 permit is the major driver of DEP's stormwater-related work and thus its WQPF expenditures.

DEP has not yet achieved the expired permit's stormwater management retrofit requirements (20 percent of the County's total impervious area not already managed to the maximum extent practicable (MEP)) from its 2010-2015 MS4 permit. The County's draft FY17 MS4 Annual Report² (recently submitted to MDE) calculates that the County achieved 2,927 acres of the 3,778-acre goal (or about three-fourths of the goal). DEP is in negotiations with MDE for the execution of a Consent Decree that will require completion of the remaining acreage by December 2020. This work would be in addition to any new requirements included in the next permit. **Based on DEP's latest calculations, the Consent Decree retrofit requirements are expected to be met by December 2018, which is earlier than previously expected and is part of the reason why costs are lower going forward in the Recommended CIP.**

2019-2024 NPDES-MS4 Permit

For the next permit, the Executive's Recommended CIP assumes DEP's next MS4 permit will include a retrofit goal of five percent of the County's impervious area not already managed to the MEP. This goal is estimated to require the treatment of another 945 acres. This level is much less than the 20 percent goal of the old permit and a major reason for the savings reflected in the March 15 amendments (compared to the January 15 recommendation, which assumed a 10 percent requirement), as noted below.

NOTE: In its response to Council Staff questions, DEP has indicated that the "additional requirement for stormwater will be at least 5 percent restoration." However, the Audubon Naturalist Society (in coordination with the Stormwater Partners and the Choose Clean Water Coalition) have noted in Council Public Hearing testimony that MDE "has never implied that they will expect counties to achieve less than 10% impervious surface restoration in the next permit term." Council Staff cautions that if the next permit includes a higher requirement, then the stormwater management CIP may require adjustment next year (as may the WQPC ERU rate).

¹ The County's MS4 permit is available on the DEP website at:
[https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/water-reports/npdes/MOCO MS4 Permit.pdf](https://www.montgomerycountymd.gov/DEP/Resources/Files/downloads/water-reports/npdes/MOCO%20MS4%20Permit.pdf).

² The County's FY17 MS4 Annual Report is available for download at: <https://www.montgomerycountymd.gov/water/stormwater/ms4.html>.

FY19-24 CIP Fiscal Summary

January 15, 2018 CIP Transmittal

In the FY17-22 Approved CIP a 10 percent impervious acreage restoration requirement for the upcoming 2019-24 MS4 permit was assumed. This assumption was carried forward into the January 15 FY19-24 CIP transmittal. It equates to 1,890 acres required.

The Executive's January 15 recommendation reflected a \$99.6 million reduction (-28.8 percent) in six-year expenditures from the Approved FY17-22 CIP (see Table 1 below). According to DEP, this reduction was primarily due to the use of a revised implementation rate. Historically, the Water Quality Protection Fund Fiscal Plan assumed aggressive assumptions about future regulatory requirements. However, the January 15 transmittal was based on "a more realistic level of activity based on historical performance" and assumed a 70 percent implementation rate.

In addition, the January 15, 2018 transmittal reflected a change in project delivery to a new comprehensive design/build/maintain contract approach.

March 15, 2018 CIP Transmittal

On March 15, the County Executive transmitted amendments to his Recommended FY19-24 Capital Improvements Program (CIP) (see ©1-28). These amendments included further expenditure changes to the Stormwater Management CIP (also shown in Tables 1 and Table 2 below), mainly related to the lower MS4 permit retrofit assumption (5 percent instead of 10 percent) and reduced requirements associated with meeting the 2010-15 permit (because of additional impervious area credits identified).

Table 1:
Stormwater Management CIP (in \$000s)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	345,508	54,537	55,588	65,054	66,972	54,305	49,052		
FY19-24 CE - 1/15/18	245,847			55,022	51,763	32,145	37,046	35,424	34,447
change from approved	(99,661)			(10,032)	(15,209)	(22,160)	(12,006)		
percent change from approved	-28.8%			-15.4%	-22.7%	-40.8%	-24.5%		
FY19-24 CE - 3/15/18	102,540			27,370	22,110	15,660	15,170	12,800	9,430
change from approved	(242,968)			(37,684)	(44,862)	(38,645)	(33,882)		
percent change from approved	-70.3%			-57.9%	-67.0%	-71.2%	-69.1%		

Table 2:
Stormwater Management Projects: Six-Year Spending Changes (in \$000s)

Project	Six-Year Costs		Change from App.	
	Approved	3/15/18	\$	%
Facility Planning: SM	6,671	4,580	(2,091)	-31.3%
Misc Stream Valley Improvements	61,273	14,990	(46,283)	-75.5%
SM Facility Major Structural Repair	21,710	9,110	(12,600)	-58.0%
SM Design/Build/Maintain Contract	-	48,300	48,300	n/a
SM Retrofit - Government Facilities	12,678	-	(12,678)	-100.0%
SM Retrofit - Roads	116,843	50	(116,793)	-100.0%
SM Retrofit - Schools	13,253	1,000	(12,253)	-92.5%
SM Retrofit - Countywide	97,780	18,980	(78,800)	-80.6%
Watershed Restoration - Interagency	11,950	-	(11,950)	-100.0%
Wheaton Regional Dam Flooding Mitigation	3,350	5,530	2,180	65.1%
Total Expenditure Changes	345,508	102,540	(242,968)	-70.3%
Change from Approved		\$ (242,968)		
		% -70.3%		

The March 15 CIP transmittal coincided with the Executive's FY19 Recommended Operating Budget for DEP (including the Water Quality Protection Fund and associated Fiscal Plan). The recommended fiscal plan assumes no increase in the ERU rate for the WQPC in FY19 or FY20.

Major Changes in Funding Assumptions from the Approved CIP

The sources of funds for the Approved FY17-22 CIP and the FY19-24 Recommended CIP (as transmitted on 3/15/2018) are shown in the following chart.

Table 3:
Stormwater Management CIP Funding (in \$000s)

	FY17-22	FY19-24	% of	Change from FY17-22	
	Total	Total	Total	\$	%
Six-Year Total	345,508	102,540		(242,968)	-70.3%
Long-Term Financing	-	55,148	22.4%		
State Aid	30,000	14,000	5.7%	(16,000)	-53.3%
Federal Aid	2,666	3,000	1.2%	334	n/a
SWM Waiver Fees	1,800	1,235	0.5%	(565)	n/a
Water Quality Protection Charge - Bonds	294,151	4,210	1.7%	(289,941)	-98.6%
Water Quality Protection Charge	16,891	24,947	10.1%	8,056	47.7%

State aid is down substantially, which is not unexpected given the overall reduction in CIP expenditures.

What is new in the FY19-24 CIP is the inclusion of "Long-Term Financing" and the corresponding reduction in WQPC – Bonds.

Six years ago, the Council approved the Executive's recommendation to use bonds paid for with WQPC revenue to cover the majority of spending in this program (about 85 percent of total Approved FY17-22 stormwater management program expenditures). These bonds are separate from the County's General Obligation Bond Spending Affordability limits. For FY19 and beyond, the Executive is recommending transitioning to long-term financing available through the State's Water Quality Revolving

Fund, which would provide financing at significantly lower interest rates and thus reduce debt service assumed in the Fund's Fiscal Plan.

Project Delivery Methods

DEP's current CIP program involves projects constructed under one of two methods:

- **"Design-Bid-Build" approach** (i.e., separate contracts for design and construction). This longstanding method includes about 1,255 acres of impervious area restoration across dozens of projects currently in design or under construction.
- **Pay for Performance Contracts:** Includes three projects (with a total of 132 acres of impervious area restoration to be completed in FY19 and 120 acres to be completed in FY20).³

The Executive's FY19-24 CIP recommendation makes substantial changes to the Design-Bid-Build set of projects, including:

- cancelling 26 projects (see ©29) with estimated costs of \$38 million (305.65 acres of credit).
- suspending 44 projects (see ©30-31) with estimated costs of \$58.6 million (624.8 acres of credit). *(NOTE: These projects will be made available to bidders under the new contracting approach described below.)*
- continuing 19 projects (see ©32-33) under the Design-Bid-Build approach (\$25.5 million), which will provide 324.1 acres of credit.

DEP is working to transition its future retrofit work to a design/build/maintain contracting model (to cover up to 530 impervious area credits) whereby the contractor would be responsible for identifying and achieving impervious acreage credits (subject to DEP review and approval). The Recommended CIP assumes savings in per-acre retrofit costs totaling about \$5 to \$6 million in the six-year period. However, actual savings will not be known until the new contract is awarded.

As a result of the changes described above (as well as changes in the FY19 Operating Budget), the Executive's Water Quality Protection Fund Fiscal Plan (see ©36) assumes no rate increase for FY19 and FY20.

The new contracting method is incorporated into a new project, SM Public/Private Partnership (see PDF on ©11-12). The chart below shows the assumed expenditure string.

SM Retrofit - Public/Private Partnerships								
	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23
FY17-22 Latest Approved	-							
FY19-24 CE Recommended	48,300			1,830	9,370	9,620	9,640	9,640
change from approved	48,300			1,830	9,370	9,620	9,640	
percent change from approved	n/a			n/a	n/a	n/a	n/a	

The project would be funded mostly with long-term financing (\$29.3 million) and State aid (\$11.5 million), with the balance from Water Quality Protection Fund current revenue.

³ DEP also has a Memorandum of Understanding with the Glenstone Foundation for stream restoration that is working in a similar manner to a pay for performance contract. DEP expects to receive credit for 75 acres in FY19 under this agreement.

The project also assumes that the Design-Build-Maintain contract would be fully appropriated in FY19 (see later discussion).

Concerns with the Design-Build-Maintain (DBM) Contract Approach

The PHED/T&E Joint Committee discussed the new contract approach with DEP on March 22 and followed up on April 17. The Council also heard concerns from environmental groups in public hearing testimony and written correspondence. The major issues are summarized below, along with follow-up information from Executive staff and Council Staff recommendations:

Cost Savings

As noted earlier, DEP is assuming cost savings from the new contracting model through contracting efficiencies (one contract instead of two), flexibility provided to the contractor to propose projects, and economies of scale with the contractor identifying projects that would provide up to 530 impervious area credits. However, ultimately, the exact cost savings from this process will not be known until DEP evaluates responses to the Request for Procurement (RFP) later this year. DEP has noted that the costs identified in the responses to the RFP will need to be considered in the context of its existing project delivery methods, and that if sufficient cost savings are not found, DEP would need to reconsider this comprehensive approach.

Environmental Priorities

The Joint Committee asked DEP how the new contracting model would address DEP's environmental priorities (beyond just meeting the minimum permit requirements). For instance, some projects that may be of high value to the County or that link to other important projects or County goals may be more complex and costly and thus not initially selected by a contractor, unless contract language provides an incentive for the contractor to do so. Along these lines, environmental groups have pressed DEP to commit to a 60 percent goal of utilizing green infrastructure (as compared to gray stormwater infrastructure⁴).

In discussions with the Joint Committee and Council Staff, DEP has noted that its RFP will include a number of required components, including:

- Projects must be in the MS4 area.
- Projects must be eligible for water quality credits (including both impervious area and nutrient and sediment impacts for Total Maximum Daily Load calculations).
- Projects must be eligible for Department of Natural Resources grants and Water Quality Revolving Loan funds.
- Projects must address existing infrastructure problems (e.g., pond retrofits must address existing repairs needed).
- Projects will not involve Parks property.

⁴ As noted in DEP's FY16 MS4 Annual Report, "gray stormwater infrastructure (is) conventional piped drainage and water treatment systems...designed to move urban stormwater away from the built environment." In contrast, green infrastructure "uses vegetation, soils, or other elements and practices to restore some of the natural processes required to manage water and create healthier urban environments. At the city or county scale, green infrastructure is a patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water. At the neighborhood or site scale, these stormwater management systems mimic nature, infiltrate, evapotranspire, and/or beneficially reuse water."

Also, after the contractor is selected and recommends projects, DEP will be able to approve or disapprove specific projects.

The evaluation criteria will also include preferences for bids that include DEP projects currently in design (i.e., the suspended projects noted earlier).

Council Staff recommends that DEP also ask the bidders to include, as part of their proposals, feedback to DEP regarding the suspended projects they choose NOT to include in their proposals. *This information will be useful going forward in determining whether some of these projects should be considered for future funding outside the DBM contract.*

DEP has also noted that the evaluation criteria will include preferences for projects which meet the definition of green infrastructure. *NOTE: While DEP expects most projects to meet the green infrastructure definition, DEP is not planning to include a specific green infrastructure goal in the RFP.*

Consistent with the green infrastructure definition, Council Staff recommends that preference be given to projects that provide long-term environmental benefits over projects that may have a more limited short-term benefit.

Community/Neighborhood Outreach

Another issue with the new comprehensive contract is addressing neighborhood concerns. Under the current Design-Bid-Build contracting model, DEP and its design engineer work closely with affected neighborhoods to respond to concerns about project scope and construction impacts. DEP has noted that under the new comprehensive contract, DEP will still be the lead on neighborhood outreach and coordination with the construction contractor required to provide support, as needed, to DEP.

Parks Projects

At the April 17 Joint Committee meeting, the Parks Department discussed its proposal to Council Staff that would have DEP turn over three partially designed stream restoration projects to the Parks Department. These projects include: Glenallan, Clearspring Manor, and Stoneybrook/Grosvenor. Parks would be responsible for completing the design, permitting, and construction. Parks estimates that these projects would cost a total of \$2.4 million and provide 44 impervious acreage credits that Parks would provide toward DEP's MS4 permit requirements. This equates to about \$55,000 per acre credit, which is a lower per acre credit cost than DEP's costs have been under its Design-Bid-Build contracting approach.

Parks agreed to complete the design and permitting of this work during FY19 with existing resources. OMB and Parks staff agreed to develop a Memorandum of Understanding (MOU) that would provide for a process by which Parks could use long-term financing paid for with WQPF dollars in exchange for stream restoration work that provides MS4 credits under DEP's permit.

Parks has drafted a revised Stream Protection: SVP PDF (see ©34-35) that assumes construction work for the above-noted restoration projects in FY20-22. \$400,000 in funding would be reallocated from expenditures previously-recommended by the Executive. An additional \$2.0 million would be added (with all funding in the project presumed to come from long-term financing paid for with WQPF current revenue). *NOTE: Council Staff will review the PDF language with Executive Staff prior to final approval.*

Council Staff is supportive of this revised project. Council Staff also recommends that offsetting reductions totaling \$2.0 million be taken out of DEP's SM Public/Private Partnership project in FY20-22.

Council Oversight

Given the large contract cost, its five-year duration, and the uncertainty of the cost savings and types of projects to be done, Council Staff has been working with Executive Staff to identify ways the Council can maintain an appropriate level of involvement in the project going forward. Council Staff recommends that language be added to the PDF requiring the Executive to provide regular project updates to the Council.

In addition, as currently structured, the Council is being asked for an FY19 appropriation for the total contract cost. While the Council can receive updates from Executive Staff as the project moves forward, the Council would not have any formal authority in the future to compel changes in the project or to require the Executive to consider other project delivery methods.

In response to these concerns, Council Staff suggests that the project's FY19 appropriation be reduced to cover contract start-up and the contractor's first workplan. This approach would provide the Council an opportunity to assess the project next year and consider additional appropriations when more information is known. Council Staff is supportive of this revised multiple appropriation approach. NOTE: Council Staff has asked OMB to identify the appropriation that would be needed in FY19. OMB staff will be available to speak to this issue at the Committee worksession.

Project Review

NOTE: Multiple project description forms include language under "Cost Change", which states: "Project decrease is due to updated progress towards meeting MS4 permit and a shift to a Public/Private Partnership." Council Staff recommends revising this language in each PDF to read, "Project decrease is due to updated progress towards meeting MS4 permit and a shift of future projects to the SM Design/Build/Maintain Contract (Project #601901)".

NOTE: Except for the Wheaton Regional Dam Flooding Mitigation project, the other PDFs are linked directly to the new contracting method recommended by the County Executive.

Wheaton Regional Dam Flooding Mitigation (PDF on ©23-24)

Wheaton Regional Dam Flooding Mitigation										
	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	B6Y
FY17-22 Latest Approved	3,350	-	159	50	50	275	2,816			7,000
FY19-24 CE Recommended	5,530			70	80	330	3,130	1,920	-	-
change from approved	2,180			20	30	55	314			(1,700)
percent change from approved	65.1%			40.0%	60.0%	20.0%	11.2%			n/a

This project was approved two years ago as part of the FY17-22 CIP to provide for the acquisition of properties located in Wheaton along Glenhaven Drive and Dennis Avenue, an area prone to severe flooding during a 100-year storm event because of the Wheaton Regional Dam downstream, the Dennis Avenue Culvert, and an undersized stream channel along Glenhaven Drive. The properties to be acquired were to be turned into non-structural recreational open space for the community.

Based on DEP being unsuccessful in getting property owners to sell their properties, DEP revised the project scope to include upgrading the dam, the culvert, and/or the stream channel (as well as replacing

the Dennis Avenue Bridge) to avoid future potential flooding. DEP intends to seek funding through the FEMA Pre-Disaster Mitigation Grant program for the channel modifications. The Council ultimately approved the amended project with a total project cost of \$5.05 million (with Federal Aid of \$3.0 million and WQPF current revenue of \$2.05 million) with \$1.7 million occurring beyond six-years.

For the FY19-24 CIP, the Executive is recommending an increase in the total project cost of \$480,000 (9.5%) to cover project management costs inadvertently not previously included in this project. According to DEP, project management costs for this project were incorrectly assumed to come from the SM Facility Major Structural Repair project. The six-year cost is up \$2.2 million; it includes \$1.7 million in costs previously beyond six years which are now included in FY23.

For the related Dennis Avenue Bridge M-0194 Replacement, the FY19-24 Recommended CIP assumes the same total project cost (\$5.6 million) and scope. However, the construction schedule for the bridge has been revised. The approved project assumed phased construction beginning in the Spring of 2022 with completion in the Summer of 2023 and Dennis Avenue remaining open during construction. The recommended project also assumes construction begins in Spring 2022, but with construction only taking four months (completion in the Summer of 2022) and with Dennis Avenue closed during construction.

Council Staff recommends approval of the Executive's Recommended FY19-24 CIP amendment for the Wheaton Regional Dam Flooding Mitigation project.

Facility Planning: SM (PDF on ©5-6)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	6,671	2,126	1,323	997	773	799	653		
FY19-24 CE Recommended	4,580			750	730	750	790	780	780
change from approved	(2,091)			(247)	(43)	(49)	137		
percent change from approved	-31.3%			-24.8%	-5.6%	-6.1%	21.0%		

The approved project funds evaluations of watershed needs and identifies alternatives to address these needs, including possible CIP projects. It provides approximately 30 percent design completion to projects generated from this program. The project is funded with Water Quality Protection Fund current revenue dollars.

For the FY19-24 CIP, the project has been adjusted downward (-\$2.1 million, -31.3 percent), consistent with the Executive's recommendation to utilize a Design/Build/Maintain project beginning in FY19 which assumes the contractor is responsible for identifying projects and designing them. DEP will approve projects, provide contract oversight, and also be the lead on community outreach. DEP staff will also be responsible for performing watershed assessments and other technical reviews. The expenditure schedule for the recommended project assumes annual DEP personnel costs plus \$100,000 for miscellaneous and limited consultant costs each year.

Misc. Stream Valley Improvements (PDF on ©7-8)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	61,273	8,880	10,952	12,571	13,716	8,548	6,606		
FY19-24 CE Recommended	14,990			5,160	7,660	1,630	180	180	180
change from approved	(46,283)			(7,411)	(6,056)	(6,918)	(6,426)		
percent change from approved	-75.5%			-59.0%	-44.2%	-80.9%	-97.3%		

This project funds the design and construction of restoration and corrective measures to stream reaches having severe channel erosion, sedimentation, habitat degradation, and flooding problems. Priorities are based on watershed studies done out of the Facility Planning: SM project.

During its stream evaluations, DEP also identifies storm drain outfall repair needs and coordinates with DOT's Outfall Repairs project. Sewer issues are also identified and forwarded to WSSC.

For the FY19-24 CIP, the project has been adjusted downward (-\$46.3 million, -75.5 percent), consistent with the Executive's recommendation to utilize a Design/Build/Maintain project for future retrofit work. The expenditures and funding reflected in the recommended project are for projects already underway, including: Fallsreach Stream and Flints Grove Stream in FY19, stream monitoring costs in FY19-24, expenses related to Lower Booze Creek repairs in FY19 through FY21, the payment for the Broad Run Stream pay for performance project in FY20, payment for the Glenstone Stream Phase 2 project in FY19, and DEP personnel costs in FY19 through FY21.

Long-term financing has been substituted in FY19 and FY20 where possible.

Stormwater Management Facility Major Structural Repair (PDF on ©9-10)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	21,710	4,629	3,404	2,169	3,585	4,852	3,071		
FY19-24 CE Recommended	9,110			1,480	2,320	3,330	1,430	280	270
change from approved	(12,600)			(689)	(1,265)	(1,522)	(1,641)		
percent change from approved	-58.0%			-31.8%	-35.3%	-31.4%	-53.4%		

This project provides for the design and construction of major structural repairs to County-maintained stormwater management facilities. Smaller, less complex projects are funded out of the Operating Budget.

For the FY19-24 CIP, the Executive is recommending a six-year total of about \$9.1 million (a decrease of \$12.6 million, -58 percent). Project costs have fluctuated substantially in recent years as large projects were addressed (such as the hydraulic dredging of two large lakes: Lake Whetstone in Montgomery Village and Gunners Lake in Germantown (each costing about \$3.0 million)). The PDF (see ©9-10) notes the immediate work assumed in this project. Other projects are recommended for deferral (with some projects to be included in the list of 44 projects that will be provided in the RFP for the DBM contract). DEP is continuing to evaluate the impacts of these deferrals and some may require future funding. Long-term financing is assumed for eligible work beginning in FY20.

NOTE: No construction dollars are recommended by the Executive for FY23 and FY24. It is likely that dollars will need to be added to these years after DEP completes its assessment and prioritization of work.

SM Retrofit: Government Facilities (PDF on ©13-14)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	12,678	3,452	2,314	2,239	1,718	1,524	1,431		
FY19-24 CE Recommended	-								
change from approved	(12,678)			(2,239)	(1,718)	(1,524)	(1,431)		
percent change from approved	-100.0%			-100.0%	-100.0%	-100.0%	-100.0%		

This project provides for the design and construction of ESD and LID stormwater management devices at County facilities.

For the FY19-24 CIP, the project has been zeroed out, consistent with the Executive's recommendation to utilize a Design/Build/Maintain project for future retrofit work. Current projects underway are expected to be completed by the end of FY18.

SM Retrofit: Roads (PDF on ©15-166-7)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	116,843	9,426	11,182	25,038	26,115	23,838	21,244		
FY19-24 CE Recommended	50			50					
change from approved	(116,793)			(24,988)	(26,115)	(23,838)	(21,244)		
percent change from approved	-100.0%			-99.8%	-100.0%	-100.0%	-100.0%		

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 controls.

For the FY19-24 CIP, the project has been zeroed out (except for \$50,000 in FY19 costs for closeout expenses related to engineering contracts), consistent with the Executive's recommendation to utilize a Design/Build/Maintain project for future retrofit work.

SM Retrofit: Schools (PDF on ©17-18)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	13,253	2,486	1,948	2,505	2,287	2,141	1,886		
FY19-24 CE Recommended	1,000			1,000					
change from approved	(12,253)			(1,505)	(2,287)	(2,141)	(1,886)		
percent change from approved	-92.5%			-60.1%	-100.0%	-100.0%	-100.0%		

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) facilities, parking lots, and other impervious areas.

For the FY19-24 CIP, the project has been adjusted downward (-\$12.3 million, -92.5 percent), consistent with the Executive's recommendation to utilize a Design/Build/Maintain project for future retrofit work. Current work out of this project includes low-income development (LID) projects at Olney ES and Sherwood ES, which are expected to be completed in FY19.

SM Retrofit: Countywide (PDF on ©19-20)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	97,780	21,939	19,225	19,425	18,000	9,654	9,537		
FY19-24 CE Recommended	18,980			17,030	1,950				
change from approved	(78,800)			(2,395)	(16,050)	(9,654)	(9,537)		
percent change from approved	-80.6%			-12.3%	-89.2%	-100.0%	-100.0%		

This project provides for the design and construction of stormwater management retrofit projects countywide.

For the FY19-24 CIP, the project has been adjusted downward (-\$78.8 million, -80.6 percent), consistent with the Executive's recommendation to utilize a Design/Build/Maintain project for future retrofit work. The expenditures and funding reflected in the recommended project are for projects already underway. Long-term financing has been substituted in FY19 where possible.

Watershed Restoration – Interagency (PDF on ©21-22)

	Six-Year	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24
FY17-22 Latest Approved	11,950	1,599	5,081	60	728	2,674	1,808		
FY19-24 CE Recommended	-								
change from approved	(11,950)			(60)	(728)	(2,674)	(1,808)		
percent change from approved	-100.0%			-100.0%	-100.0%	-100.0%	-100.0%		

This project is an ongoing series of subprojects that are being constructed in cooperation with the US Army Corps of Engineers. Expenditures by the Corps of Engineers do not show up in the PDF. The Corps pays 65 to 75 percent of the total costs.

For the FY19-24 CIP, the project has been zeroed out. DEP has noted that it is unlikely that future work will be done out of the new Design/Build/Maintain project. Therefore, if and when future projects to be done by the US Army Corps of Engineers are identified, this project will need to be updated.

Council Staff Recommendation

Council Staff recommends approval of the FY19-24 Stormwater Management CIP, with the following changes to the SM Public/Private Partnership project:

- Change the name to SM Design/Build Comprehensive Contract project.
- Reduce the FY19 appropriation (amount TBD) to reflect first-year workplan project costs.
- Add language to the PDF noting required project updates to be provided to the Council.
- Include preferences for swm projects with long-term environmental benefits
- Reduce the project's expenditures by a total of \$2.0 million (across FY20, 21, and 22) to offset the increased expenditures assumed in Parks' Stream Protection: SVP project.

Council Staff also recommends approval of the WQPC ERU rate with no increase in FY19, as recommended by the County Executive (see draft resolution on ©37-38).

Attachments

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OFFICE OF THE COUNTY EXECUTIVE
ROCKVILLE, MARYLAND 20850

Isiah Leggett
County Executive

MEMORANDUM

March 15, 2018

TO: Hans Riemer, Council President

FROM: Isiah Leggett, County Executive *Isiah Leggett*

SUBJECT: Amendments to the Recommended FY19 Capital Budget and
FY19-24 Capital Improvements Program (CIP)

In January 2017, I submitted my recommended FY19-FY24 Capital Improvements Program. Since that time, it has become clear that adjustments to the January recommendations are needed for affordability reasons.

Cost Sharing

While most of the attached amendments are needed to address fiscal capacity concerns, I have included \$2,155,000 in increased funding in my March CIP amendments for the following Cost Sharing project Community Grants: 7th Generation Foundation, Inc.: \$25,000; A Wider Circle, Inc.: \$100,000; Bender JCC of Greater Washington: \$20,000; CASA de Maryland, Inc.: \$100,000; Charles E. Smith Jewish Day School of Greater Washington, Inc.: \$20,000; Cornerstone Montgomery, Inc.: \$350,000; Easter Seals Serving DC|MD|VA: \$50,000; First Baptist Church of KenGar: \$10,000; Hebrew Home of Greater Washington, Inc.: \$40,000; Jewish Foundation for Group Homes: \$75,000; Melvin J. Berman Hebrew Academy: \$75,000; Olney Theatre Corporation: \$650,000; Potomac Community Resources, Inc.: \$30,000; Round House Theatre: \$250,000; Sunflower Bakery: \$100,000; The Ivymount School, Inc.: \$50,000; The Menare Foundation, Inc.: \$9,958; TLC - The Treatment Learning Centers, Inc.: \$25,000; Warrior Canine Connection: \$50,000; YMCA of Metropolitan Washington: \$125,000.

I am also recommending allocating \$891,762 in existing project funding for the following CIP Grants for Arts and Humanities organizations as recommended by the Arts and Humanities Council of Montgomery County: Glen Echo Park Partnership for Arts and Culture, Inc.: \$250,000; Round House Theatre, Inc.: \$250,000; The Olney Theatre Center for the Arts, Inc.: \$100,000; Montgomery Community Television, Inc.: \$98,237; and Metropolitan Ballet Theatre, Inc.: \$193,525.

Stormwater Management

I am pleased to report that the Department of Environmental Protection is on track to achieve an important programmatic milestone and is undertaking a number of initiatives to improve water quality in a cost-effective manner. First and foremost, pending MDE review and approval, the department has determined that they will be able to fulfill the requirements of the 2010 MS4 Permit by this winter. As a leader in the state and in the nation, since 2001, the County has already treated over 5,000 acres of uncontrolled impervious surface in its efforts to remediate stormwater runoff. Since FY10,

the County has invested approximately \$117 million towards this effort. In addition, the County continues to meet Permit activities by identifying pollutant sources, expanding its stormwater facility maintenance and inspection program, enhancing property management programs to reduce stormwater pollution, expanding stormwater pollution awareness outreach programs, and making progress on meeting the County wasteload allocations for approved Total Maximum Daily Load.

The Department of Environmental Protection has also applied for low-cost financing through the Maryland Water Quality Revolving Loan Fund, which will be secured by the Water Quality Protection Charge. Through this loan program, the County stands to save an estimated \$22 million in financing costs, over the life of the loans, as compared to traditional bond funding. The department also intends to pursue a public-private partnership contracting vehicle for the anticipated new Permit – a mechanism that has provided significant cost efficiencies in other jurisdictions such as Prince George's County.

As a result of DEP's work in streamlining the Stormwater Management program – both in the operating and capital budgets – the Water Quality Protection Charge rate in FY19 will remain the same as in FY18. This is an important accomplishment since the Charge has increased an average of 16 percent each year from FY09 to FY18.

Staff from the Department of Environmental Protection and Maryland National Capital Park and Planning Commission have also collaborated on stormwater management activities. The M-NCPPC has agreed that they will pursue low-cost funding from the same Maryland Water Quality Revolving Loan Fund to support the activities under its new permit. In the meantime, Water Quality Protection Charge funding will be allocated in FY19 to the M-NCPPC Stream Protection and Pollution Prevention CIP projects until they can secure state support. Increased operating support for M-NCPPC's stormwater management work has also been negotiated, and M-NCPPC and DEP have committed to sharing data and working collectively to maximize credit towards achieving their two permit requirements.

This budget submission for the MS4 program continues the tradition of strong environmental stewardship while ensuring the best use of taxpayer dollars for an economically vibrant future.

The Capital Budget's Role In Supporting the Operating Budget

As is often the case, reductions or other adjustments in the capital budget are often needed to address operating budget needs. For instance, in January, the Council approved \$9.309 million in FY18 Current Revenue reductions to partially offset an expected \$120 million shortfall in operating budget revenues. Now, in March, further adjustments are needed.

Fortunately, project savings in the Apparatus Replacement, Ride On Bus Fleet, Wheaton Redevelopment Program, Technology Modernization, and Public Arts Trust projects are expected to be manageable for departments. In addition, excess one-time FY18 bond premium proceeds have been allocated in a manner that will free up FY18 Current Revenue in the following projects without jeopardizing planned project activity: MCG Reconciliation PDF, MCPS Funding Reconciliation, Pedestrian Safety Program, Resurfacing: Residential/Rural Roads, Traffic Signal System Modernization, and Traffic Signals. A funding switch to replace Mass Transit Current Revenue with Short-Term

**FY19-24 RECOMMENDED CIP
MARCH BUDGET AMENDMENTS SUMMARY (\$000s)**

PROJECT #	PROJECT NAME	EXPLANATION OF ADJUSTMENT	FY19-24 CHANGE (\$000s)	FUNDING SOURCES
NEW PROJECTS				
P361901	Heavy Equipment Replacement	Added funding to finance heavy equipment replacement primarily for Highway Services operations	3,176	Long-term Financing
SCOPE CHANGES				
P720601	Cost Sharing: MCG	Added FY19 funding for Community Grants and specified FY19 Arts Facility Grants funding awards based on Arts and Humanities Commission recommendations.	2,155	Current Revenue: General
STORMWATER MANAGEMENT				
P809319	Facility Planning: SM	Changes to CIP scope based on updated progress towards meeting MS4 permit and shift to Public-Private Partnership contract.	(3,126)	Current Revenue: Water Quality Protection
P807359	Misc Stream Valley Improvements	Changes to CIP scope based on updated progress towards meeting MS4 permit and shift to Public-Private Partnership contract. Funding switch in FY18 to reflect award of State Aid.	(52,832)	SWM Waiver Fees, State Aid, Water Quality Protection Bonds, Current Revenue: Water Quality Protection, Long-term Financing
P800700	SM Facility Major Structural Repair	Changes to CIP scope based on updated progress towards meeting MS4 permit and shift to Public-Private Partnership contract.	(6,917)	Water Quality Protection Bonds, Current Revenue: Water Quality Protection, Long-term Financing
P801901	SM Public/Private Agreements	Changes to CIP scope based on updated progress towards meeting MS4 permit and shift to Public-Private Partnership contract. Funding switch to reflect State Aid assumptions.	(1,900)	State Aid, Current Revenue: Water Quality Protection, Long-term Financing
P800900	SM Retrofit - Government Facilities	Changes to CIP scope based on updated progress towards meeting MS4 permit and shift to Public-Private Partnership contract.	(6,560)	Water Quality Protection Bonds, Long-Term Financing
P801300	SM Retrofit - Roads	Changes to CIP scope based on updated progress towards meeting MS4 permit and shift to Public-Private Partnership contract.	(25,355)	State Aid, Water Quality Protection Bonds
P801301	SM Retrofit - Schools	Changes to CIP scope based on updated progress towards meeting MS4 permit and shift to Public-Private Partnership contract. Funding switch in FY18 to reflect award of State Aid.	(5,907)	State Aid, Long-Term Financing, Water Quality Protection Bonds
P808726	SM Retrofit: Countywide	Funding switch in FY18 to reflect award of State Aid - Capital Stormwater and Stream Restoration Trust Fund Grant Agreement #14-18-2341 TRF 15.	(39,054)	State Aid, Current Revenue: Water Quality Protection, Long-Term Financing, Water Quality Protection Bonds
P809342	Watershed Restoration - Interagency	Changes to CIP scope based on updated progress towards meeting MS4 permit and shift to Public-Private Partnership contract.	(2,295)	Long-Term Financing, Water Quality Protection Bonds

P801710	Wheaton Regional Dam Flooding Mitigation	Project increase is due to revised Planning Design & Supervision cost estimates. Funding switch reducing Long-Term Financing and increasing Current Revenue: Water Quality Protection.	639 Federal Aid, Current Revenue: Water Quality Protection, Long-Term Financing, Water Quality Protection Bonds
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MONTGOMERY COUNTY PUBLIC SCHOOLS

P846540	Relocatable Classrooms	Appropriate \$5 million in FY18 instead of FY19 to facilitate timely installation	- Current Revenue: General
P0765510	MCPS Funding Reconciliation	Substitute Current Revenue General for Recordation Tax in FY18-24. Replace \$17.8M in Recordation Tax with GO Bonds in FY18.	- Recordation Tax, G.O. Bonds, Current Revenue
P056516	MCPS Affordability Reconciliation	Reduction of \$1.469 in FY19 Current Revenue: General to help support operating budget funding above mandatory MDE. \$3 million reduction in FY18 GO bonds (or substitutes) based on expected project savings to address \$33 million shortfall in School Impact and Recordation tax receipts. Recognizes impact of approved savings plan. Maintains total MCPS funding at \$1.751 billion with additional GO bonds in FY23 and FY24.	2,153 Current Revenue: General, G.O. Bonds
P036510	Technology Modernization: MCPS	Reduce CR:General to previously approved levels; Reflects FY18 Savings Plan reduction (\$330K); FY18 funding Switch to substitute Recordation Tax for CR:General.	(2,153) Current Revenue: General, Recordation Tax

MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

P008720	Ballfield Initiatives	Added FY19 CUPF funding to renovate additional school fields.	250 Intergovernmental
P998773	Enterprise Facilities' Improvements	Funding switch from Current Revenue - Enterprise (M-NCPPC) to Revenue Bonds for the Ridge Road Ice Rink	- Current Revenue: Enterprise (M-NCPPC), Revenue Bonds
P078701	Pollution Prevention and Repairs to Ponds & Lakes	Replaced G.O. Bonds with Water Quality Current Revenue in FY19. Replaced G.O. Bonds in FY20 and beyond with Maryland Department of the Environment (MDE) Water Quality Revolving Loan Funds (Long Term Financing). FY19 and FY20 expenditures were reduced by M-NCPPC (\$575,000) to align project schedules with low-cost State loan schedules and to minimize WQP charge rate impacts. Reflects approved FY18 Savings Plan reduction (\$55,000) in Current Revenue.	(575) G.O. Bonds, Current Revenue: Water Quality Protection, Long-Term Financing
P818571	Stream Protection: SVP	Water Quality Current Revenue replaces G.O. Bonds as the funding source in FY19. Maryland Department of the Environment (MDE) Water Quality Revolving Loan Funds (Long Term Financing) replaces G.O. Bonds in FY20 and beyond.	- G.O. Bonds, Current Revenue: Water Quality Protection, Long-Term Financing
P871747	M-NCPPC Affordability Reconciliation	Reduce GO Bond reduction by \$575,000 to reflect savings due to MNCPPC revised water quality funding request. Reverts Current Revenue to prior approved funding due to fiscal constraints.	(1,537) Current Revenue: General, G.O. Bonds

PARKING LOT DISTRICTS

P501551	Parking Lot Districts Service Facility	Updated to reflect latest schedule and cost estimates.	896 Current Revenue: Parking - Silver Spring
P508256	Pkg Beth Fac Renovations	Add \$2.8 million over FY19-20 for the re-decking renovation project for Bethesda Garage 47 on Waverly St. Increase funding in FY23-24 for projected additional renovation work	2,930 Current Revenue: Parking - Bethesda



Facility Planning: SM (P809319)

Category	Conservation of Natural Resources	Date Last Modified	03/10/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	17,277	11,737	960	4,580	750	730	750	790	780	780	-
Other	164	164	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	17,441	11,901	960	4,580	750	730	750	790	780	780	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Current Revenue: General	5,000	5,000	-	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	11,504	5,964	960	4,580	750	730	750	790	780	780	-
State Aid	140	140	-	-	-	-	-	-	-	-	-
Stormwater Management Waiver Fees	797	797	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	17,441	11,901	960	4,580	750	730	750	790	780	780	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	(127)	Year First Appropriation	FY93
Appropriation FY 20 Request	346	Last FY's Cost Estimate	17,690
Cumulative Appropriation	14,468		
Expenditure / Encumbrances	12,851		
Unencumbered Balance	1,617		

PROJECT DESCRIPTION

This project provides for facility planning and feasibility studies to evaluate watershed conservation needs and to identify remedial project alternatives 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 LID and ESD 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 Retrofit SM Government Facilities (No. 800900), SM Retrofit Roads (No. 801300), SM Retrofit Schools (No. 801301), SM Retrofit Countywide (No. 808726), and Misc Stream Valley Improvements (No. 807359). 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 decrease is due to updated progress towards meeting MS4 permit and a shift to a Public/Private Partnership.

PROJECT JUSTIFICATION

The facility planning products support the requirements outlined in the County's MS4 Permit as detailed in the Montgomery County Coordinated Implementation Strategy (CCIS). 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.

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, SM Retrofit Government Facilities (No. 800900), SM Retrofit Roads (No. 801300), SM Retrofit Schools (No. 801301), SM Retrofit Countywide (No. 808726), Misc. Stream Valley Improvements (No. 807359).



Misc Stream Valley Improvements (P807359)

Category	Conservation of Natural Resources	Date Last Modified	03/10/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	6,687	3,457	680	2,550	700	840	470	180	180	180	-
Land	2	2	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	1	1	-	-	-	-	-	-	-	-	-
Construction	16,102	3,612	50	12,440	4,460	6,820	1,160	-	-	-	-
Other	582	582	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	23,374	7,654	730	14,990	5,160	7,660	1,630	180	180	180	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Current Revenue: Water Quality Protection	2,676	-	-	2,676	1,086	660	930	-	-	-	-
Long-Term Financing	9,579	-	-	9,579	3,279	6,300	-	-	-	-	-
State Aid	5,584	3,659	425	1,500	500	500	500	-	-	-	-
Stormwater Management Waiver Fees	2,039	499	305	1,235	295	200	200	180	180	180	-
Water Quality Protection Bonds	3,496	3,496	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	23,374	7,654	730	14,990	5,160	7,660	1,630	180	180	180	-

OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Maintenance	160	20	30	20	5	35	50
NET IMPACT	160	20	30	20	5	35	50

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	(13,168)	Year First Appropriation	FY73
Appropriation FY 20 Request	-	Last FY's Cost Estimate	70,259
Cumulative Appropriation	37,947		
Expenditure / Encumbrances	15,529		
Unencumbered Balance	22,418		

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 as part of stream restoration projects - funded from the Outfall Repairs project (No. 509948). Stream deterioration can also adversely affect sanitary sewer crossings by exposing sewer lines and manholes, which in turn can be fish barriers and leak raw sewage into streams or allow infiltration of stream baseflow into the sewer system, potentially causing substantial increases in wastewater treatment costs. Any future stream work will be accomplished under Project 801901- SM Public/Private Partnership.

COST CHANGE

Project decrease is due to updated progress towards meeting MS4 permit and a shift to a Public/Private Partnership.

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. Corrective measures constructed or coordinated under this project include stream bank stabilization, channel modifications, habitat restoration, storm drain outfall or sanitary sewer infrastructure repairs to improve fish and other biological resources, while reducing sediment and nutrient loadings caused by excessive streambank erosion. The Facility Planning: SM project (No. 809319) includes funds for watershed studies and identifies and prioritizes stream reaches in need of restoration and protection.

OTHER

The Department of Environmental Protection identifies damaged sewer lines as part of this project, and the Washington Suburban Sanitary Commission makes sewer repairs during project construction. Projects planned for design and construction include Fallsreach, Flints Grove Stream, and Booze Creek Repairs.

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. While the State of Maryland has indicated a desire to provide funding, all indicated State Aid is preliminary. 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. Costs in out years included cost of stream monitoring.

COORDINATION

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



SM Facility Major Structural Repair (P800700)

Category	Conservation of Natural Resources	Date Last Modified	03/10/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	7,582	3,842	790	2,950	1,130	570	420	280	280	270	-
Construction	17,751	10,791	800	6,160	350	1,750	2,910	1,150	-	-	-
Other	1	1	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	25,334	14,634	1,590	9,110	1,480	2,320	3,330	1,430	280	270	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Current Revenue: Water Quality Protection	12,044	8,104	1,590	2,350	-	600	600	600	280	270	-
Long-Term Financing	5,280	-	-	5,280	-	1,720	2,730	830	-	-	-
State Aid	399	399	-	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	7,611	6,131	-	1,480	1,480	-	-	-	-	-	-
TOTAL FUNDING SOURCES	25,334	14,634	1,590	9,110	1,480	2,320	3,330	1,430	280	270	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	(2,200)	Year First Appropriation	FY07
Appropriation FY 20 Request	-	Last FY's Cost Estimate	37,179
Cumulative Appropriation	25,131		
Expenditure / Encumbrances	16,780		
Unencumbered Balance	8,351		

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 5,786 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 local permitting.

COST CHANGE

Project decrease is due to updated progress towards meeting MS4 permit and a shift to a Public/Private Partnership.

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.

OTHER

Projects include: Wheaton Branch overtopping protection, Persimmon Tree, Peachwod Pond, Briars Acres pond, 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 FY19-24.

DISCLOSURES

Expenditures will continue indefinitely.

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, SM Retrofit: Countywide (No. 808726), Maryland Department of Natural Resources.



SM Public/Private Partnership (P801901)

Category	Conservation of Natural Resources	Date Last Modified	03/10/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	12,250	-	-	12,250	1,830	2,160	2,410	2,430	2,430	990	-
Construction	36,050	-	-	36,050	-	7,210	7,210	7,210	7,210	7,210	-
TOTAL EXPENDITURES	48,300	-	-	48,300	1,830	9,370	9,620	9,640	9,640	8,200	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Current Revenue: Water Quality Protection	7,535	-	-	7,535	-	-	1,140	1,780	2,190	2,425	-
Long-Term Financing	29,265	-	-	29,265	1,830	9,370	5,980	4,860	4,450	2,775	-
State Aid	11,500	-	-	11,500	-	-	2,500	3,000	3,000	3,000	-
TOTAL FUNDING SOURCES	48,300	-	-	48,300	1,830	9,370	9,620	9,640	9,640	8,200	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	43,235	Year First Appropriation	FY19
Appropriation FY 20 Request	1,105	Last FY's Cost Estimate	-
Cumulative Appropriation	-		
Expenditure / Encumbrances	-		
Unencumbered Balance	-		

PROJECT DESCRIPTION

This project provides for the use of a Public/Private Partnership (P3) 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. Compliance with the MS4 Permit requires the control of impervious surfaces not currently treated to the maximum extent practicable. Any stormwater management facility type(s) or stream restoration, deemed creditable per the Maryland Department of the Environment regulations, can be implemented per this project.

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.

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. 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, Department of Permitting Services, Maryland Department of the Environment



SM Retrofit - Government Facilities

(P800900)

Category	Conservation of Natural Resources	Date Last Modified	03/10/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	8,692	8,292	400	-	-	-	-	-	-	-	-
Site Improvements and Utilities	3	3	-	-	-	-	-	-	-	-	-
Construction	4,330	4,110	220	-	-	-	-	-	-	-	-
Other	19	19	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	13,044	12,424	620	-	-	-	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Current Revenue: Water Quality Protection	1,182	1,182	-	-	-	-	-	-	-	-	-
State Aid	1,358	1,358	-	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	10,504	9,884	620	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	13,044	12,424	620	-	-	-	-	-	-	-	-

OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Maintenance	56	56	-	-	-	-	-
NET IMPACT	56	56	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	(5,644)	Year First Appropriation	FY09
Appropriation FY 20 Request	(1,017)	Last FY's Cost Estimate	24,898
Cumulative Appropriation	19,705		
Expenditure / Encumbrances	13,610		
Unencumbered Balance	6,095		

PROJECT DESCRIPTION

This project provides for the design and construction of Environmental Site Design (ESD)/Low Impact Development (LID)

stormwater management devices at County facilities such as buildings, parking garages, and parking lots constructed prior to modern stormwater management controls. ESD/LID stormwater devices include: Green Roofs, bioretention areas, tree box inlets, porous concrete, and other types of devices that promote water filtering and groundwater recharge. Implementing new stormwater devices in developed areas built with inadequate or no stormwater control is required in the County's Municipal Separate Storm Sewer System (MS4) Permit as detailed in the Montgomery County Coordinated Implementation Strategy (CCIS). The Department of Environmental Protection (DEP) in coordination with the Department of General Services (DGS) has identified candidate CIP projects that will be implemented jointly. After FY18, future stormwater work related to Government Facilities will be accomplished under Project 801901- Public/Private Partnership.

COST CHANGE

Decrease is due to updated progress towards meeting MS4 permit and a shift to a Public/Private Partnership.

PROJECT JUSTIFICATION

This project supports the requirements of the County's current MS4 permit and addresses the goals of the Chesapeake Bay Watershed Agreement and the County's adopted water quality goals (Chapter 19, Article IV). The County's MS4 permit requires that the County provide stormwater controls for 20 percent of impervious surfaces not currently treated to the maximum extent practicable, with an emphasis, where possible, on the use of LID/ESD devices.

COORDINATION

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



SM Retrofit - Roads (P801300)

Category	Conservation of Natural Resources	Date Last Modified	03/10/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	7,376	6,356	970	50	50	-	-	-	-	-	-
Construction	8,523	8,518	5	-	-	-	-	-	-	-	-
Other	2	2	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	15,901	14,876	975	50	50	-	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
State Aid	9,508	9,308	200	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	6,393	5,568	775	50	50	-	-	-	-	-	-
TOTAL FUNDING SOURCES	15,901	14,876	975	50	50	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	(24,594)	Year First Appropriation	FY13
Appropriation FY 20 Request	(3,459)	Last FY's Cost Estimate	132,844
Cumulative Appropriation	43,954		
Expenditure / Encumbrances	18,975		
Unencumbered Balance	24,979		

PROJECT DESCRIPTION

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. ESD/LID stormwater devices include bioretention, curb extensions, porous concrete, tree box inlets, and other types of devices that promote water filtering and groundwater recharge. Any future Roads stormwater management work will be accomplished under Project 8019010- Public/Private Partnership.

COST CHANGE

Project decrease is due to updated progress towards meeting MS4 permit and a shift to a Public/Private Partnership.

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). The County's MS4 permit requires that the County provide stormwater controls for 20 percent of impervious surfaces not currently treated to the maximum extent practicable, with an emphasis, where possible, on the use of ESD/LID devices. This project will be responsible for controlling stormwater on County roads, largely through ESD/LID practices, as needed to satisfy the permit requirements.

OTHER

A portion of these potential ESD/LID stormwater retrofits on County roads were previously programmed under the SM Retrofit - Government Facilities project (No. 800900). This stand-alone project includes potential ESD/LID projects for County roads and allows for a more efficient implementation of projects of similar scope in partnership with the Department of Transportation (DOT).

COORDINATION

Department of General Services, Department of Transportation, Maryland-National Capital Park and Planning Commission, Department of Permitting Services, Maryland Department of the Environment, United States Army Corps of Engineers, Maryland Department of Natural Resources.



SM Retrofit - Schools **(P801301)**

Category	Conservation of Natural Resources	Date Last Modified	03/10/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	1,958	1,478	300	180	180	-	-	-	-	-	-
Construction	3,424	854	1,750	820	820	-	-	-	-	-	-
TOTAL EXPENDITURES	5,382	2,332	2,050	1,000	1,000	-	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
State Aid	1,878	528	1,350	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	3,504	1,804	700	1,000	1,000	-	-	-	-	-	-
TOTAL FUNDING SOURCES	5,382	2,332	2,050	1,000	1,000	-	-	-	-	-	-

OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Maintenance	1	1	-	-	-	-	-
NET IMPACT	1	1	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	(1,283)	Year First Appropriation	FY13
Appropriation FY 20 Request	(1,621)	Last FY's Cost Estimate	15,674
Cumulative Appropriation	8,286		
Expenditure / Encumbrances	5,823		
Unencumbered Balance	2,463		

PROJECT DESCRIPTION

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. LID/ESD stormwater devices that may be implemented under this project include: green roofs, bioretention areas, tree box inlets, porous concrete, and other types of devices that promote water filtering and groundwater recharge. Any future School stormwater management work will be accomplished under Project 801901-

Public/Private Partnership.

COST CHANGE

Decrease is due to updated progress towards meeting MS4 permit and a shift to a Public/Private Partnership.

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). The County's MS4 permit requires that the County provide stormwater controls for 20 percent of impervious surfaces not currently treated to the maximum extent practicable, with an emphasis, where possible, on the use of LID/ESD devices. This project will be responsible for controlling stormwater on Montgomery County Public School (MCPS) properties largely through the use of LID/ESD practices needed to satisfy the permit requirements.

OTHER

A portion of these potential LID/ESD stormwater retrofits located at County schools were previously programmed under the FY11-16 Approved SM Retrofit - Government Facilities project (No. 800900). This stand-alone project includes LID/ESD projects located on MCPS property and allows for a more efficient implementation of projects in partnership with MCPS.

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

Maryland-National Capital Park and Planning Commission, Montgomery County Public Schools, Department of Permitting Services, Maryland Department of the Environment.



SM Retrofit: Countywide

(P808726)

Category	Conservation of Natural Resources	Date Last Modified	03/12/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	22,029	14,369	5,390	2,270	1,910	360	-	-	-	-	-
Site Improvements and Utilities	4	4	-	-	-	-	-	-	-	-	-
Construction	37,404	9,094	11,600	16,710	15,120	1,590	-	-	-	-	-
Other	588	588	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	60,025	24,055	16,990	18,980	17,030	1,950	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Intergovernmental	1,000	-	1,000	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	13,247	4,586	3,385	5,276	3,826	1,450	-	-	-	-	-
Long-Term Financing	11,024	-	-	11,024	11,024	-	-	-	-	-	-
State Aid	5,210	-	4,210	1,000	500	500	-	-	-	-	-
Water Quality Protection Bonds	29,544	19,469	8,395	1,680	1,680	-	-	-	-	-	-
TOTAL FUNDING SOURCES	60,025	24,055	16,990	18,980	17,030	1,950	-	-	-	-	-

OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24
Maintenance	25	20	5	-	-	-	-
NET IMPACT	25	20	5	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	(22,746)	Year First Appropriation	FY87
Appropriation FY 20 Request	(8,587)	Last FY's Cost Estimate	126,578
Cumulative Appropriation	91,586		
Expenditure / Encumbrances	44,828		
Unencumbered Balance	46,758		

PROJECT DESCRIPTION

This project provides for the design and construction of new and/or upgrades of existing underperforming stormwater management facilities and devices under the County's Municipal Separate Storm Sewer System (MS4) Permit as detailed in the draft Montgomery County Coordinated Implementation Strategy (CCIS). Compliance with the MS4 permit requires controlling 20 percent of impervious surfaces, or approximately 3,778 impervious acres, not currently treated to the maximum extent practicable. Inventories of candidate projects have been conducted under the Facility Planning: SM project (PDF No. 809319) for the County's ten watersheds (Paint Branch, Rock Creek, Cabin John Creek, Hawlings River, Watts Branch, Great Seneca, Muddy Branch, Sligo Creek, Little Paint Branch, and Northwest Branch). Some of the most complex projects constructed under this project are assessed and the preliminary plans are completed in the Facility Planning: SM project (No. 809319). Where feasible, the projects integrate wetland and habitat features consistent with the goals of the Chesapeake Bay Agreement. In small drainage areas, retrofit projects may also include biofiltration, bioretention, or stormwater filtering devices. Any future work under this Project's area will be accomplished under Project 801901-Public/Private Partnership.

COST CHANGE

Project decrease is due to updated progress towards meeting MS4 permit requirements and a shift to a Public/Private Partnership.

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 (Chapter 19, Article IV) and protect habitat conditions in local streams. In addition, the project supports the goals of the Anacostia Watershed Restoration Agreement.

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. While the State of Maryland has indicated a desire to provide funding, all indicated State Aid is preliminary and not appropriated. In FY17 and FY18, funding from the Current Revenue: Water Quality Protection replaced some funding previously allocated to Water Quality Protection Bonds and State Aid. Expenditures in the outyears 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. WSSC and DEP have agreed to an MOU related to Stormwater Management Projects in FY18. WSSC will transfer \$1 million to the County to allow DEP to undertake SWM projects on WSSC's behalf.

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: SM (No. 809319), Maryland Department of Natural Resources.



Watershed Restoration - Interagency (P809342)

Category	Conservation of Natural Resources	Date Last Modified	03/10/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	2,898	2,898	-	-	-	-	-	-	-	-	-
Land	4	4	-	-	-	-	-	-	-	-	-
Construction	1,874	1,874	-	-	-	-	-	-	-	-	-
Other	2	2	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	4,778	4,778	-	-	-	-	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	527	527	-	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	166	166	-	-	-	-	-	-	-	-	-
State Aid	370	370	-	-	-	-	-	-	-	-	-
Stormwater Management Waiver Fees	3,226	3,226	-	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	489	489	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	4,778	4,778	-	-	-	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	(6,730)	Year First Appropriation	FY93
Appropriation FY 20 Request	-	Last FY's Cost Estimate	16,777
Cumulative Appropriation	11,508		
Expenditure / Encumbrances	4,778		
Unencumbered Balance	6,730		

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). The first two agreements, which were signed in 1992 and 1997, were limited to subwatersheds within the Anacostia Watershed. In FY04, the USACE expanded project eligibility to include all County subwatersheds within the Mid-Potomac watershed. The feasibility study and the design and construction of the projects

selected in Montgomery County are managed by the U.S. Army Corps of Engineers with assistance from the Maryland Department of Environment and Maryland-National Capital Park and Planning Commission.

COST CHANGE

Project decrease is due to updated progress towards meeting MS4 permit and a shift to a Public/Private Partnership.

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. The project supports the goals of the Chesapeake Bay initiatives, the Anacostia Watershed Restoration Agreement, and addresses the County's Municipal Separate Storm Sewer System (MS4) permit as detailed in the Montgomery County Coordinated Implementation Strategy (CCIS).

COORDINATION

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



Wheaton Regional Dam Flooding Mitigation (P801710)

Category	Conservation of Natural Resources	Date Last Modified	03/12/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Kensington-Wheaton	Status	Planning Stage

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	1,030	-	-	1,030	70	80	100	460	320	-	-
Construction	4,500	-	-	4,500	-	-	230	2,670	1,600	-	-
TOTAL EXPENDITURES	5,530	-	-	5,530	70	80	330	3,130	1,920	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Federal Aid	3,000	-	-	3,000	-	-	-	2,670	330	-	-
Current Revenue: Water Quality Protection	2,530	-	-	2,530	70	80	330	460	1,590	-	-
TOTAL FUNDING SOURCES	5,530	-	-	5,530	70	80	330	3,130	1,920	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	-	Year First Appropriation	FY16
Appropriation FY 20 Request	-	Last FY's Cost Estimate	5,050
Cumulative Appropriation	2,950		
Expenditure / Encumbrances	-		
Unencumbered Balance	2,950		

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 will begin in FY18 with the riser repair construction starting in FY21. The excavation of the channel will occur in coordination with DOT's culvert replacement in FY22 and FY23.

COST CHANGE

Project increase is due to revised Planning, Design, and Supervision cost estimates.

PROJECT JUSTIFICATION

An engineering analysis by the Department of Environmental Protection (DEP) 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 (LOMR) 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. The County will also partner with the Maryland Emergency Management Agency (MEMA) to seek FEMA Pre-Disaster Mitigation (PDM) Grant Program funding for the channel modifications.

COORDINATION

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



Pollution Prevention and Repairs to Ponds (P078701)

Category	M-NCPPC	Date Last Modified	03/12/18
SubCategory	Development	Administering Agency	M-NCPPC
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	2,184	265	487	1,432	208	208	231	231	277	277	-
Site Improvements and Utilities	8,455	1,506	2,756	4,193	317	492	769	769	923	923	-
TOTAL EXPENDITURES	10,639	1,771	3,243	5,625	525	700	1,000	1,000	1,200	1,200	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	1,255	752	503	-	-	-	-	-	-	-	-
Current Revenue: General	3,596	231	1,565	1,800	300	300	300	300	300	300	-
Current Revenue: Water Quality Protection	225	-	-	225	225	-	-	-	-	-	-
Long-Term Financing	3,600	-	-	3,600	-	400	700	700	900	900	-
State Aid	50	48	2	-	-	-	-	-	-	-	-
State ICC Funding (M-NCPPC Only)	1,913	740	1,173	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	10,639	1,771	3,243	5,625	525	700	1,000	1,000	1,200	1,200	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	470	Year First Appropriation	FY07
Appropriation FY 20 Request	700	Last FY's Cost Estimate	7,569
Cumulative Appropriation	5,069		
Expenditure / Encumbrances	3,187		
Unencumbered Balance	1,882		

PROJECT DESCRIPTION

This PDF funds continuing efforts to update and maintain our existing facilities to meet today's standards and enhance environmental conditions throughout the park system. M-NCPPC operates 12 maintenance yards (MY) throughout the County that are regulated as industrial sites under NPDES because bulk materials storage and equipment maintenance have the potential to pollute surface waters. Each MY is subject to NPDES regulations, and must have a Stormwater Pollution Prevention Plans (SWPPPs) in place. SWPPPs are generally a combination of operational efforts and capital projects, such as covered structures for bulk materials and equipment, vehicle wash areas, or stormwater management facilities. In addition, M-NCPPC has identified between 60 and 70 existing farm ponds, lakes,

constructed wetlands, irrigation ponds, recreational ponds, nature ponds, and historic dams on park property that do not qualify for funding through Montgomery County's Water Quality Protection program. Based on the results of field inspections, projects are prioritized for design, permitting, and construction.

COST CHANGE

Council approved a FY18 Special Appropriation of \$100,000 in Current Revenue. FY18 reduction of \$55,000 in Current Revenue reflects the FY18 Savings Plan. This project schedule has been adjusted in FY19 and FY20 to better align with low-cost State loan processes. Increases beginning in FY20 to address new MS4 permit requirements.

PROJECT JUSTIFICATION

The NPDES General Discharge Permit for Stormwater Associated with Industrial Facilities, Permit No. 02 SW issued by the Maryland Department of the Environment (MDE), requires implementation of Stormwater Pollution Prevention Plans (SWPPP) at each maintenance yard. The MDE Dam Safety Program requires regular aesthetic maintenance, tri-annual inspection, and periodic rehabilitation of all pond facilities to maintain their function and structural integrity. NPDES Municipal Separate Storm Sewer System (MS4) Permit.

FISCAL NOTE

Prior year partial capitalization of expenditures through FY16 totaled \$6,029,000. In FY16 received an additional \$600k from SHA for ICC Mitigation. State Bond Bill of \$50k received in 2015 for West Fairland Local Park. FY14 transferred in FY14, \$40k GO bonds from Ballfield Improvements, #008720. In FY13, transferred in \$200k GO Bonds from Lake Needwood Modifications #098708. In FY18, County Council approved a FY18 Special Appropriation totaling \$100,000 in Current Revenue. Water Quality Current Revenue replaces G.O. Bonds in FY19. Maryland Department of the Environment (MDE) Water Quality Revolving Loan Funds (Long Term Financing) replace G.O. Bonds in FY20 and beyond.

DISCLOSURES

Expenditures will continue indefinitely.

COORDINATION

Montgomery County Department of Permitting Services (MCDPS), Montgomery County Department of Environmental Protection (MCDEP), Maryland Department of the Environment, Washington Suburban Sanitary Commission (WSSC), Montgomery County Department of Transportation, State Highway Administration (SHA)



Stream Protection: SVP (P818571)

Category	M-NCPPC	Date Last Modified	03/07/18
SubCategory	Development	Administering Agency	M-NCPPC
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	1,597	192	235	1,170	172	172	195	195	218	218	-
Site Improvements and Utilities	5,552	681	941	3,930	578	578	655	655	732	732	-
TOTAL EXPENDITURES	7,149	873	1,176	5,100	750	750	850	850	950	950	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	2,049	873	1,176	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	750	-	-	750	750	-	-	-	-	-	-
Long-Term Financing	4,350	-	-	4,350	-	750	850	850	950	950	-
TOTAL FUNDING SOURCES	7,149	873	1,176	5,100	750	750	850	850	950	950	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	750	Year First Appropriation	FY81
Appropriation FY 20 Request	750	Last FY's Cost Estimate	4,449
Cumulative Appropriation	2,049		
Expenditure / Encumbrances	829		
Unencumbered Balance	1,220		

PROJECT DESCRIPTION

As a result of development in urban and suburban watersheds, stream channels are subject to increased storm water flows that result in severely eroded stream banks. This project makes corrective improvements to damaged stream channels, floodplains, and tributaries in stream valley parks and constructs new stormwater management (SWM) facilities and associated riparian enhancements to improve watershed conditions. Stream erosion problems include stream sedimentation, destruction of aquatic habitat, undercutting of stream banks, blockage of migration routes, loss of floodplain access, tree loss, and damage to infrastructure. Rock and wood revetments are used in association with reforestation, floodplain enhancements, outfall enhancements, and other stream protection techniques to prevent continued erosion and improve aquatic habitat. Stream protection projects must be examined from a watershed perspective to identify/control the source of problems. Wherever possible new SWM facilities will be built to control water flows prior to entering the stream channel to help the watershed return to a more stable equilibrium. Parks often implements these improvements with other stream valley improvements to improve cost effectiveness and ensure infrastructure protection. This project also includes reforestation

in stream valley parks.

COST CHANGE

Increases beginning in FY19 to address new permit requirements and the addition of FY23 and FY24 to this ongoing project.

PROJECT JUSTIFICATION

The project meets Montgomery County's water quality goals, Chapter 19, Article IV of the Montgomery County Code: to protect, maintain, and restore high quality chemical, physical, and biological conditions in the waters of the State in the County. This project is also supported by the Countywide Stream Protection Strategy, Comprehensive Watershed Inventories, and Parks' Phase II NPDES MS4 Permit commitments.

FISCAL NOTE

Prior year partial capitalization of expenditures through FY16 totaled \$12,854,000. FY13 transfer in of \$129K GO Bonds from Lake Needwood Modifications #098708. Water Quality Current Revenue replaces G.O. Bonds as the funding source in FY19. Maryland Department of the Environment (MDE) Water Quality Revolving Loan Funds (Long Term Financing) replaces G.O. Bonds in FY20 and beyond.

DISCLOSURES

Expenditures will continue indefinitely.

COORDINATION

Montgomery County Department of Environmental Protection, National Capital Planning Commission for Capper-Cramton Funded Parks, State and County Department of Transportation, State Dept. of Natural Resources, Montgomery County Department of Environmental Protection, PDF 733759 , Utility rights-of-way coordinated with WSSC and other utility companies where applicable., U.S. Army Corps of Engineers, Metropolitan Washington Council of Governments

Cancelled Projects

TABLE A

Project name	Type	IA Credit	Status Detail	26 Projects Total Earned Per Invoice
Longwood Community Center	LID	0.60	40-Design and Permits Complete	\$ 107,619
Dumont Oaks	Pond	11.86	34-In Permit Design	\$ 41,176
Fox Hills West	Pond	2.21	36-In Final Design	\$ 75,450
Greenhills II	Pond	3.66	34-In Permit Design	\$ 41,216
Hunting Hills Woods	Pond	5.18	34-In Permit Design	\$ 21,532
Potomac Community Center	LID	2.40	40-Design and Permits Complete	\$ 107,619
Seneca Whetstone (HOA) SWM Retrofit - 10886	Pond	1.90	36-In Final Design	\$ 64,337
Williamsburg Square - 11056	Pond	0.90	34-In Permit Design	\$ 43,195
Williamsburg Square - 11126	Pond	0.32	34-In Permit Design	\$ 43,195
Williamsburg Square - 11165	Pond	1.17	34-In Permit Design	\$ 43,195
Brooke Manor Estates HOA	Pond	8.22	32-In Concept Design	\$ 87,300
Dufief Mill Basin 1	Pond	5.53	32-In Concept Design	\$ 21,532
Dufief Mill Basin 2	Pond	10.90	32-In Concept Design	\$ 21,532
Fox Hills North CA	Pond	7.00	32-In Concept Design	\$ 61,148
Greenhills I	Pond	13.55	32-In Concept Design	\$ 41,216
Hunters Woods 2	Pond	13.18	32-In Concept Design	\$ 35,085
Potomac Crossing 1	Pond	3.15	32-In Concept Design	\$ 61,148
Potomac Crossing 2	Pond	4.01	32-In Concept Design	\$ 61,148
Shady Grove Apartments	Pond	32.77	32-In Concept Design	\$ 87,300
Stewarttown Homes	Pond	15.80	32-In Concept Design	\$ 60,746
Walnut Creek	Pond	3.65	34-In Permit Design	\$ 35,085
Watkins Mill HOA - 11150	Pond	4.86	32-In Concept Design	\$ 35,085
Kensington Estates Green Streets	LID	29.20	34-In Permit Design	\$ 269,082
Manor Woods Green Streets	LID	20.40	34-In Permit Design	\$ 618,109
Wheaton Woods LID	LID	18.17	36-In Final Design	\$ 866,670
Snowdens Mill Stream Restoration	Stream	85.06	34-In Permit Design	\$ 251,348
		305.65		\$ 3,202,067

Suspended Projects

TABLE B

Project name	Type	IA Credit	Status Detail	44 Projects Total Earned Per Invoice
Quail Valley 1 SWM Retrofit	Pond	3.15	36-In Final Design	\$129,887
Washington Science Center	Pond	12.79	36-In Final Design	\$117,760
BelPre Manor	Multiple	8.70	36-In Final Design	\$113,608
Derwood Station South	Pond	7.41	34-In Permit Design	\$87,300
Flower Valley	Pond	5.49	34-In Permit Design	\$87,300
Germantown MARC	LID	6.35	36-In Final Design	\$87,300
Germantown Park - 10917, 10985	Pond	5.21	36-In Final Design	\$55,655
Germantown Park - 10972	Pond	0.70	36-In Final Design	\$59,046
Germantown Park - 10981	Pond	1.92	36-In Final Design	\$59,046
Germantown Park - 11111	Pond	1.94	34-In Permit Design	\$59,046
Germantown Park - 11156	Pond	3.24	36-In Final Design	\$55,655
Germantown Park - 11178	Pond	4.11	36-In Final Design	\$59,046
Germantown Park - Stream	Stream	8.96	36-In Final Design	\$59,046
Goshen Estates	Pond	34.43	34-In Permit Design	\$60,746
Longmeade Crossing	Multiple	11.70	36-In Final Design	\$113,608
Old Farm Creek SR	Stream	18.18	36-In Final Design	\$178,955
Pine Knolls	Pond	16.01	34-In Permit Design	\$75,450
Plumgar II Regional SWM Retrofit	Pond	22.77	36-In Final Design	\$66,010
Quail Ridge	Pond	4.32	36-In Final Design	\$70,895
Seneca Park SWM Retrofit				
Wheatfield Dr	Pond	6.53	36-In Final Design	\$66,010
Seneca Park Whetstone SWM Retrofit - 10826	Pond	3.37	36-In Final Design	\$66,010
Stedwick Pepco SWM Retrofit	Pond	11.05	36-In Final Design	\$66,010
Strawberry Knoll Bay Filter	Pond	6.72	36-In Final Design	\$129,887
Thomas Choice	Pond	13.54	36-In Final Design	\$104,613
Townes of Gloucester	Pond	8.01	34-In Permit Design	\$73,415
Williamsburg Square - 11099	Pond	4.98	34-In Permit Design	\$43,195
Williamsburg Village Regional	Pond	15.75	34-In Permit Design	\$87,300
Clearspring Manor	Pond	15.52	34-In Permit Design	\$105,557
Clearspring Manor Stream Restoration	Stream	8.02	34-In Permit Design	\$105,557
Germantown View	Pond	7.74	36-In Final Design	\$72,897
Glenallan Tributary	Stream	17.25	34-In Permit Design	\$173,490

Greencastle Woods 2	Pond	14.12	34-In Permit Design	\$73,415
Grosvenor Tributary Stream Restoration	Stream	80.00	34-In Permit Design	\$383,330
Gunners Branch Stream Restoration	Stream	52.28	34-In Permit Design	\$292,875
Judson Henderson Valleywood LID	LID	16.79	36-In Final Design	\$555,842
Manors of Paint Branch	Pond	6.99	34-In Permit Design	\$73,415
Plum Gar Stream Restoration	Stream	10.50	34-In Permit Design	\$116,209
Sligo Estates - Ballantrae - McDonald Knolls	LID	7.82	34-In Permit Design	\$289,821
Stoneybrook Stream Restoration	Stream	47.50	36-In Final Design	\$290,546
Willow Ridge	Pond	9.68	34-In Permit Design	\$70,895
Woodrock	Pond	33.21	34-In Permit Design	\$75,450
Bel Pre Stream Restoration	Stream	27.00	34-In Permit Design	\$164,555
Cannon Road Green Streets	LID	5.90	34-In Permit Design	\$256,057
Springbrook-Homestead Estates Green Streets	LID	17.10	34-In Permit Design	\$364,432
		624.75		\$5,696,140

Ongoing Projects

- 4) Please list all of the current projects DEP plans to complete under its current standard design contract, construction contract approach. Please note estimated costs for each project and the impervious acreage credits assumed for each project. Please note which projects are needed for the Consent Decree work and which are expected to be used for credits under the new permit.

See following Table D for requested information on current CIP MS4 Permit projects.

TABLE D

Remaining Project	Status	Estimated Construction Cost	IA Credit	For current MS4 Permit	For next MS4 Permit
Potomac Ridge SWM Pond A	In Construction	\$900,000	10.60	X	
Potomac Ridge SWM Pond B	In Construction	\$630,000	2.51	X	
Northlake Apartments SWM Pond	In Construction	\$1,100,000	5.97	X	
University Towers LID	In Construction	\$1,670,000	4.20	X	
Northwood Church LID	In Construction	\$100,000	0.50	X	
Pueblo Road SWM Pond	In Construction	\$2,600,000	42.84	X	
Mills Farm SWM Pond	In Construction	\$700,000	11.66	X	
Potomac Chase SWM Pond	In Construction	\$1,120,000	29.64	X	
Hunters Woods III SWM Pond	In Construction	\$1,260,000	6.90	X	

Quail Valley 2 SWM Pond	In Construction	\$1,250,000	14.42	X	
Greencastle Lakes SWM Pond	In Construction	\$1,300,000	27.79		X
Olney Elementary School LID	In Bidding	\$580,000	2.75	X	
Sherwood Elementary School LID	In Bidding	\$230,000	0.31	X	
Falls Reach SWM Pond and Stream	In Bidding	\$2,340,00	39.30		X
Flints Grove SWM Pond and Stream	In Bidding	\$2,420,000	41.84		X
Kemp Mill SWM Pond	In Design	\$660,000	7.96		X
Montgomery County Airpark SWM Pond	In Design	\$2,310,000	60.72		X
Watkins Meadow SWM Pond	In Design	\$1,300,000	14.19		X
Lower Booze Creek Stream Repair	In Design	\$3,000,000	0(*)	(*)	

(*) DEP has taken IA credit in FY14 for stream restoration work at Lower Booze Creek. The County has to perform repairs to maintain this IA credit.

Parks Proposal



Stream Protection: SVP (P818571)

Category	M-NCPPC	Date Last Modified	5-1-2018 03/07/18
SubCategory	Development	Administering Agency	M-NCPPC
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	2055 1,597	192	235 ¹⁶²⁹	1,170	172	321 ¹⁷²	390 ¹⁹⁵	310 ¹⁹⁵	218	218	-
Site Improvements and Utilities	7094 5,552	681	941 ⁵⁴⁷¹	3,030	578	1079 ⁵⁷⁸	1310 ⁸⁸⁵	1040 ⁸⁸⁵	732	732	-
TOTAL EXPENDITURES	7,149	873	1,176	5,100	750	750	850	850	950	950	-
	9149			7100		1400	1700	1350			

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY17	Est FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
G.O. Bonds	2,049	873	1,176	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	750	-	-	750	750	-	-	-	-	-	-
Long-Term Financing	6350 4,350	-	-	6350 ^{4,350}	-	1400 ⁷⁵⁰	1700 ⁸⁵⁰	1350 ⁸⁵⁰	950	950	-
TOTAL FUNDING SOURCES	7,149	873	1,176	5,100	750	750	850	850	950	950	-
	9149			7100		1400	1700	1350			

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 19 Request	750	Year First Appropriation	FY81
Appropriation FY 20 Request	750	Last FY's Cost Estimate	4,449
Cumulative Appropriation	2,049		
Expenditure / Encumbrances	829		
Unencumbered Balance	1,220		

PROJECT DESCRIPTION

As a result of development in urban and suburban watersheds, stream channels are subject to increased storm water flows that result in severely eroded stream banks. This project makes corrective improvements to damaged stream channels, floodplains, and tributaries in stream valley parks and constructs new stormwater management (SWM) facilities and associated riparian enhancements to improve watershed conditions. Stream erosion problems include stream sedimentation, destruction of aquatic habitat, undercutting of stream banks, blockage of migration routes, loss of floodplain access, tree loss, and damage to infrastructure. Rock and wood revetments are used in association with reforestation, floodplain enhancements, outfall enhancements, and other stream protection techniques to prevent continued erosion and improve aquatic habitat. Stream protection projects must be examined from a watershed perspective to identify/control the source of problems. Wherever possible new SWM facilities will be built to control water flows prior to entering the stream channel to help the watershed return to a more stable equilibrium. Parks often implements these improvements with other stream valley improvements to improve cost effectiveness and ensure infrastructure protection. This project also includes reforestation

in stream valley parks. (Project Description continued below)

COST CHANGE

Increases beginning in FY19 to address new permit requirements and the addition of FY23 and FY24 to this ongoing project.

PROJECT JUSTIFICATION

The project meets Montgomery County's water quality goals, Chapter 19, Article IV of the Montgomery County Code: to protect, maintain, and restore high quality chemical, physical, and biological conditions in the waters of the State in the County. This project is also supported by the Countywide Stream Protection Strategy, Comprehensive Watershed Inventories, and Parks' Phase II NPDES MS4 Permit commitments.

FISCAL NOTE

Prior year partial capitalization of expenditures through FY16 totaled \$12,854,000. FY13 transfer in of \$129K GO Bonds from Lake Needwood Modifications #098708. Water Quality Current Revenue replaces G.O. Bonds as the funding source in FY19. Maryland Department of the Environment (MDE) Water Quality Revolving Loan Funds (Long Term Financing) replaces G.O. Bonds in FY20 and beyond, which will be repaid through the Water Quality Protection Fund.

DISCLOSURES

Expenditures will continue indefinitely.

COORDINATION

Montgomery County Department of Environmental Protection, National Capital Planning Commission for Capper-Cramton Funded Parks, State and County Department of Transportation, State Dept. of Natural Resources, Montgomery County Department of Environmental Protection, PDF 733759, Utility rights-of-way coordinated with WSSC and other utility companies where applicable., U.S. Army Corps of Engineers, Metropolitan Washington Council of Governments

PROJECT DESCRIPTION (Continued)

The M-NCPPC Department of Park (Parks) and Montgomery County Department of Environmental Protection (DEP) have agreed that Parks will serve as the lead agency for implementing stream restoration projects on parkland, and will implement the following additional stream restoration projects in the FY 19-24 CIP through this project; Clearspring Manor, Glenallan, Stoneybrook (Beach Drive to Montrose Avenue), and Grosvenor (Beach Drive to Rockville Pike). Prior to moving to a design-build-maintain (DBM) procurement model, the DEP had begun design work on these streams segments which are located predominantly on parkland. Parks and DEP recognize that these projects have been previously vetted, resources have been expended for planning and design, and these projects will provide both ecological benefits and MS4 credits. In FY 18, DEP will transfer all design work for these projects to Parks for design completion, permitting, and construction. Parks has agreed that all MS4 credits generated from these projects will be credited to the County's permit. These projects are currently estimated to have a combined cost of \$2.4M, providing approximately 44 acres of credit. Parks will utilize its resources for completing design/permitting. Parks will provide updated schedule and cost information on all projects within FY19 for construction funding allocation from this project beginning in FY 20, based on MDE's WQRLF cycle timeframes. Parks and DEP will immediately begin working on an MOU detailing how projects completed by Parks, funded with WQPF dollars, with MS4 credits going to the DEP will be handled. Parks will document all MS4 credits created through these projects in accordance with MDE requirements to obtain State approval for the Permit credits.

Parks will continue to identify future stream restoration projects throughout the Stream Valley Park system through inter-agency collaboration that provide ecological benefit, infrastructure protection, MS4 credits, and other watershed benefits for future implementation. Parks recognizes that stream restoration projects with relatively small segments on Park property may be selected by the County's DBM contractor. If selected by the DBM contractor and approved by DEP with concurrence from Parks, the DBM contractor will need to obtain a Park Permit and comply with all M-NCPPC requirements.

FY19-24 PUBLIC SERVICES PROGRAM: FISCAL PLAN				Water Quality Protection Fund			
FISCAL PROJECTIONS	FY19: Estimate	FY19 CE Rec	FY20 PROJECTION	FY21 PROJECTION	FY22 PROJECTION	FY23 PROJECTION	FY24 PROJECTION
ASSUMPTIONS							
Indirect Cost Rate	17.39%	18.23%	18.23%	18.23%	18.23%	18.23%	18.23%
CPI (Fiscal Year)	2.30%	2.0%	2.1%	2.2%	2.3%	2.4%	2.4%
Investment Income Yield	1.20%	1.70%	2.20%	2.70%	3.20%	3.20%	3.20%
Number of Equivalent Residential Units (ERUs) Sited	365,000	365,000	365,000	365,000	365,000	365,000	365,000
Water Quality Protection Charge (\$/ERU)	\$104.25	\$104.25	\$104.25	\$109.50	\$115.00	\$121.75	\$121.75
Collection Factor for Charge	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%	99.5%
BEGINNING FUND BALANCE	19,430,002	5,028,814	4,364,220	3,999,894	3,205,648	2,579,521	2,106,497
REVENUES							
Charges For Services	37,501,848	37,415,935	37,378,059	39,245,666	41,222,786	43,640,160	43,849,160
Bag Tax Receipts	2,471,921	2,471,821	2,471,921	2,471,921	2,471,921	2,471,921	2,471,921
Miscellaneous	600,750	383,968	482,210	580,448	639,380	639,380	639,380
Subtotal Revenues	40,574,517	40,271,636	40,332,189	42,298,029	44,334,097	46,951,461	46,951,461
INTERFUND TRANSFERS (Net Non-CIP)							
Transfers To General Fund	(7,757,261)	(7,900,961)	(8,138,610)	(9,339,268)	(10,216,310)	(10,956,110)	(11,680,960)
Indirect Costs	(1,598,110)	(1,739,210)	(1,739,210)	(1,739,210)	(1,739,210)	(1,739,210)	(1,739,210)
Telecommunications Charge	(13,151)	(13,151)	0	0	0	0	0
Transfers to Debt Service Fund (Non-Tax)	(6,148,000)	(6,148,600)	(6,399,400)	(7,600,350)	(9,477,100)	(9,216,900)	(9,921,750)
TOTAL RESOURCES	52,447,258	37,399,685	36,557,999	38,958,565	37,323,435	36,574,872	37,396,998
CIP CURRENT REVENUE APPROPRIATION							
PSP OPER. BUDGET APPROP. EXP'S	(5,413,000)	(5,099,000)	(3,810,000)	(4,040,000)	(3,920,000)	(5,130,000)	(3,765,000)
Operating Budget	(26,849,984)	(27,945,464)	(28,112,833)	(27,842,813)	(28,286,873)	(28,759,503)	(29,258,463)
Labor Contracts	0	0	(75,744)	(75,744)	(75,774)	(75,774)	(75,774)
Maintenance of New and Newly Transferred Facilities	0	0	(81,034)	(113,360)	(780,127)	(821,095)	(695,882)
Operating Impacts of CIP Projects	0	0	(465,800)	(415,600)	(415,600)	(415,600)	(415,800)
Building Rent Escalation	0	0	(12,494)	0	0	0	0
Wheaton Redevelopment Project Operating Budget Impacts	0	0	0	(1,265,540)	(1,265,540)	(1,266,903)	(1,265,972)
Subtotal PSP Oper. Budget Approp./Exp's	(26,849,984)	(27,945,464)	(28,747,995)	(29,713,015)	(30,823,914)	(31,338,375)	(31,711,701)
OTHER CLAIMS ON FUND BALANCE	(15,155,460)	0	0	0	0	0	0
TOTAL USE OF RESOURCES	(47,418,444)	(33,635,464)	(32,557,905)	(33,753,815)	(34,743,914)	(36,468,375)	(35,476,701)
YEAR END FUND BALANCE	5,028,814	4,364,220	3,999,894	3,205,648	2,579,521	2,106,497	1,920,297
END-OF-YEAR RESERVES AS A:							
PERCENT OF RESOURCES	9.6%	11.7%	10.9%	8.7%	6.9%	5.5%	5.1%
NET REVENUE	12,313,272	10,574,011	9,845,074	10,845,804	11,770,873	13,873,876	13,590,558
DEBT SERVICE COVERAGE RATIO	2.00	1.72	1.54	1.43	1.38	1.51	1.36

Assumptions:

- These projections are based on the County Executive's Recommended budget and include the revenue and resource assumptions of that budget. The projected future expenditures, revenues, and fund balances may vary based on changes to fee or tax rates, usage, inflation, future labor agreements, and other factors not assumed here.
- Stormwater facilities transferred into the maintenance program will be maintained to permit standards as they are phased into the program.
- Operating costs for new facilities to be completed or transferred and Operating Budget Impacts of Stormwater CIP projects between FY20 and FY24 have been incorporated in the future fiscal impact (FFI) rows.
- The operating budget includes planning and implementation costs for compliance with the Municipal Separate Storm Sewer System (MS4) permit issued by the Maryland Department of the Environment in February 2010. Debt service on bonds that will be used to finance the CIP project costs of MS4 compliance has been shown as a transfer to the Debt Service Fund. The Department of Finance issued \$37.8 million in Water Quality Protection Charge Revenue Bonds dated July 18, 2012 (Series 2012A) and \$46.5 million dated April 5, 2016 (Series 2016A). The actual debt service costs for the Series 2012A and 2016A bond issuances and projected debt service for anticipated MDE Water Quality Revolving Loan awards in years FY20-24 are included in the fiscal plan. Actual debt service costs may vary depending on the size and timing of future loan and bond issuances. Current revenue may be used to offset future borrowing requirements. Future WQPC rates are subject to change based on the timing and size of future debt issuance, State Aid, and legislation.
- Charges are adjusted to fund the planned service program and maintain net revenues sufficient to cover 1.25 times debt service costs.

Resolution No.: _____
Introduced: _____
Adopted: _____

**COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND**

By: Council President at the Request of the County Executive

SUBJECT: Water Quality Protection Charge for FY19

Background

1. Under County Code Section 19-35(c), each fiscal year the County Council must, by resolution, set the rate for the Water Quality Protection Charge.
2. Under County Code Section 19-35(d), the County Council may set a different rate for each type of property identified by regulation. If different rates are set, the rates must generally reflect the relative amount of impervious surface on each type of property.
3. Under Section 19.35.01.02 of the Code of Montgomery County Regulations (COMCOR), the Base Rate is the annually designated dollar amount set by the County Council to be assessed for each Equivalent Residential Unit (ERU) of property that is subject to the Water Quality Protection Charge (the "Charge"). The ERU is defined in COMCOR Section 19.35.01.02 as the statistical median of the total horizontal impervious area of developed single family detached residences in the County. The designated ERU for Montgomery County equals 2,406 square feet of impervious surface.
4. Under COMCOR Section 19.35.01.04, properties subject to the Charge are assigned to one of the following classifications for purposes of determining the appropriate assessment rate:
 - a. For Single Family Residential Properties, which include townhouses and duplexes, the Charge is assessed as a percentage of one ERU based on the total impervious area for each property. Properties in this classification are assigned to one of seven (7) tiers to determine the appropriate assessment rate, ranging from 33 percent of the Base Rate for an ERU up to 300 percent of the Base Rate.
 - b. For Multifamily Residential Properties, the Charge is assessed based on the number of ERUs assigned to the property. The total impervious area for the property is divided by the ERU; the result is then multiplied by the Base Rate to determine the Charge. If the property is a condominium development, the Charge is assessed in

equal shares to the owners of the development by dividing the total ERUs calculated for the property by the number of individual condominium units, and then multiplying this number by the Base Rate to determine the amount billable to each unit owner.

- c. For Nonresidential Properties, the Charge is assessed based on the number of ERUs assigned to the property. The total impervious area for the property is divided by the ERU; the result is then multiplied by the Base Rate to determine the Charge. If the nonresidential property is a condominium development, the Charge is billed in equal shares to the owners of the development by dividing the total ERUs calculated for the property by the number of individual condominium units, and then multiplying this number by the Base Rate to determine the amount billable to each unit owner.
 - d. If a property is owned by a Non-Profit organization (501(c)(3) organization), the property is assigned to one of three (3) tiers to determine the appropriate assessment rate, and the Charge must not exceed the percent of the Base Rate for one ERU in the respective Tier classification.
 - e. For Agricultural Properties, the Charge is assessed based on the percentage of one ERU of the Base Rate for the applicable Single Family Residential Tier for the impervious area of the houses on these properties.
5. Under County Code Section 19-35(g), the Charge does not apply to any property located in a municipality that notifies the County it has imposed or intends to impose a similar charge to fund its stormwater management program in that municipality.

Action

The County Council for Montgomery County, Maryland approves the following resolution:

The Base Rate for the Water Quality Protection Charge for Fiscal Year 2019 is \$104.25 per Equivalent Residential Unit (ERU). This resolution takes effect on July 1, 2018.

This is a correct copy of Council action.

Megan Davey Limarzi, Esq.
Clerk of the Council