

Maximum Extent Practicable (MEP) Report for Montgomery County's Municipal Separate Storm Sewer System (MS4) Program

May 30, 2019

Introduction

This report summarizes the information for Montgomery County requested by the Maryland Department of the Environment (MDE) to support their determination of the maximum extent practicable (MEP) for each Maryland jurisdiction holding a Large Phase I Municipal Separate Storm Sewer System (MS4) permit. The MEP process developed by MDE is based on three fundamental components: Restoration Project Portfolio, Physical Capacity, and Financial Capacity. Each of these components is summarized below and included as an appendix to this report (see Appendices A through C).

Montgomery County supports MDE's decision to broaden the MS4 restoration targets to include pollutants in addition to impervious area, and to allow consideration of local issues and priorities in establishing those targets. The County believes that this, combined with a more realistic pace of implementation, will help shift Maryland MS4s' restoration efforts from chasing impervious acres to a more holistic, and ultimately more effective, approach that addresses both Bay and local water quality goals.

The County does, however, have concerns about the time MDE is allowing for the Large Phase I MS4s to develop their MEP submittals, and the lack of sufficient and/or timely guidance to support that development. MDE first presented the new impervious acres (IA) treated/delivered total nitrogen (TN)/local Total Suspended Solids (TSS) approach, including the restoration project portfolio and physical and financial capacity questionnaires, to the Large Phase I MS4s on April 3, 2019. Preliminary guidance for the restoration project portfolio and physical capacity components of the submittal was provided on April 12, 2019, with clarification of that guidance provided as late as May 24, 2019. The specifics of the financial capacity component were first introduced on May 1, 2019, with guidance and an updated template provided on May 17, 2019. The County has made every effort to be responsive to MDE's request and to assemble a robust MEP package for submittal on May 30, 2019, but the extremely short turnaround and continually changing guidance have been extremely challenging. Therefore, the County reserves the right to continue to evaluate the information provided on May 30, 2019 and revise the information as needed prior to the next permit going to tentative determination on June 30, 2019. The County supports MDE's efforts to lay the foundation for the next permit based on this robust analytical approach. However, the County's program planning and contracting efforts are in a holding pattern, pending further clarity on the requirements in the new permit.

Montgomery County submitted a preliminary MEP analysis to MDE on July 18, 2018 showing that the County has reached MEP for three important aspects of the MS4 program: implementation schedules, current ability to finance the program, and capacity to perform operation and maintenance (see Appendix D). These are three of the factors identified by the U.S. Environmental Protection Agency (EPA) in the 1999 preamble to the Phase II MS4 rule for consideration in determining MEP:

"EPA has intentionally not provided a precise definition of MEP to allow maximum flexibility in MS4 permitting. MS4s need the flexibility to optimize reductions in storm water pollutants on a location-by-location basis. EPA envisions that this evaluative process will consider such factors as conditions of receiving waters, specific local concerns, and other aspects included in a comprehensive watershed plan. Other factors may include MS4 size, climate, implementation schedules, current ability to finance the program, beneficial uses of receiving water, hydrology, geology, and capacity to perform operation and maintenance." (National Pollutant Discharge Elimination System—Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges, Federal Register 64:235 (December 8, 1999) p. 68754)

The physical capacity information requested by MDE should help set more realistic and achievable implementation schedules, something to which Montgomery County is particularly sensitive given the April 2018 Consent Decree entered into by the County and MDE for failure to restore 20 percent of the County's impervious surface area that is not restored to the maximum extent practicable by February 15, 2015.

It is less clear how the financial capacity information requested will be used in making an MEP determination as it does not capture all of the factors relevant to the County's ability to finance its MS4 program. The information included in the County's July 18, 2018 letter better characterizes the County's financial capacity by looking not only at the current stormwater fee, but also at how the fee has increased significantly over time, and its impacts not only on individual households, but on Homeowner's Associations (HOAs) and commercial rate payers as well.

MDE's MEP approach is largely focused on the implementation of new stormwater practices, thereby minimizing the increasing cost of inspecting and maintaining existing infrastructure, as well as the cost of broader MS4 program implementation, including illicit discharge detection and elimination, litter control, property management, road maintenance, public outreach and monitoring. It is not clear how MDE can make a meaningful assessment of MEP without looking at the MS4 program in its entirety.

Restoration Project Portfolio

The restoration project portfolio is included as Appendix A to this report and identifies work that must be continued to maintain credit for annual practices implemented under the 2010 permit, as well as work to be planned, designed and/or constructed from FY 2019 through FY 2025. The County recognizes that MDE's request was for calendar year 2020 through 2027, however this timeframe was impractical for the following reasons:

- The County has continued to implement restoration projects since its completion of the 2010 permit's impervious surface restoration plan (ISRP) in December 2018 (mid-way through FY 2019), and work completed during this period (in the second half of FY 2019 and the first half of FY 2020) must be credited towards the next MS4 permit.
- The County operates on a fiscal year basis, making calendar year planning and reporting very challenging.

- The County's current six-year Capital Improvements Program (CIP) budget for Stormwater Management runs from FY 2019 through FY 2024.
- Appropriations have only been made for the first two years of the six-year CIP. As a result, capital project implementation beyond ongoing projects is limited to the current CIP budget appropriation.
- The current approved capital budget was assumed to fund the next permit beginning in FY 2019.
- It would not be appropriate to determine the MEP for a five-year permit term based on eight years' worth of restoration projects, thereby including projects implemented beyond the permit term. Jennifer Smith indicated in an email sent on April 11, 2019, that the restoration project portfolio "includes 7 years (CY2020-2027) so that [MS4s] can show that there will be projects that [they] are paying for during the permit term that will not be completed during the permit term." The reality is that all of the County's capital projects are funded by bonds and/or loans, which is reflected in our annual debt service.

In addition to maintaining annual street sweeping, catch basin cleaning and septic system pumping programs from the 2010 permit, the County is proposing to expand its street sweeping program and to continue its tree planting programs. According to the Stormwater Restoration Accounting Principles provided by MDE on April 12, 2019, alternative BMPs such as these operational programs and stream restoration will no longer be eligible for IA credit in the new Permit. The portfolio includes continuation of the RainScapes program, implementation of 57 CIP projects in planning, design or construction between FY 2019 and FY 2025, as well as planning and design of projects for future future permit terms. The portfolio also estimates that BMPs installed as part of redevelopment will continue to provide water quality benefits. All together, the project portfolio is estimated to treat approximately 585 previously un- or under-treated impervious acres and to reduce TN delivered to the Bay by 5,542 lbs/yr and TSS delivered to local streams by 3,445,461 lbs/yr.

On September 17, 2018, the County received conditional approval of its local TMDL implementation plans, which were submitted to MDE between 2011 and 2014. The conditional approval requires the County to revise its implementation plans, an effort that has begun but is still in the early stages. The County has made every effort to develop a meaningful restoration project portfolio within the timeframe allowed by MDE. However, it is important to note that projects identified in the portfolio may need to be replaced with projects found to be more effective in meeting local TMDL goals.

Impervious acres treated and pollutant reductions were estimated using MDE's 2014 Accounting Guidance, 2019 Accounting Principles, and nutrient credit calculator tool, the Phase 6 land use loading rates for developed land (urban impervious and turf), and the Phase 6 BMP efficiencies (including the stormwater treatment and runoff reduction curves). It is our understanding that MDE plans to release an updated Accounting Guidance document on June 30, 2019. Also, MDE indicated in a May 24, 2019 email that a new version of the nutrient credit calculator tool will be released in summer 2019 and will be based on the Phase 6 model (the current version is based on the Phase 5 model). The County will review and revise the restoration project portfolio when MDE releases the new credit calculator tool and the 2019 Accounting Guidance. The County will assess the impact of any future accounting changes and adjust its restoration targets accordingly.

Physical Capacity

The physical capacity questionnaire and associated Gantt charts are included in Appendix B to this report and reflect restoration performance during the County's 2010 MS4 permit term. Based on past performance, it will be difficult to begin and complete projects in a five-year permit time frame. This is in part why the County has continued to implement restoration projects following completion of the 2010 permit's ISRP requirement, and why it is critical that those projects be credited towards the next permit. On average, it has taken the County 67 months (5.6 years) to design and construct a stormwater pond retrofit, 51 months (4.3 years) to design and construct an ESD/LID project, and 86 months (7.2 years) to design and construct a stream restoration project. Given the length of time needed to implement CIP projects, it is critical that sufficient time is allowed for planning and project selection. Failure to do so can result in restoration dollars being wasted on projects that have not been sufficiently vetted at the planning stage and that ultimately cannot be implemented.

The County relies on contractor support for planning, project design and construction. On average, the procurement of design and construction services has taken between 10 and 13 months, with 7 to 9 months for the RFP process and 3 to 4 months to bid each individual design or construction task order. The County is exploring alternative contract mechanisms and will be implementing a new contracting approach in order to reduce these time frames.

In addition to state and federal permits, there are three local permitting agencies in the County: the Montgomery County Department of Permitting Services (DPS), the Maryland-National Capital Park and Planning Commission (MNCPPC), and the Washington Suburban Sanitary Commission (WSSC). Permitting typically runs parallel with the design process and can also be a limiting factor for implementation. The permitting process typically takes 38 months (3.2 years) for a stormwater pond retrofit, 28 months (2.3 years) for an ESD/LID project, and 47 months (3.9 years) for a stream restoration project. Easement acquisition, which can often be a permitting requirement, can take significant time, especially when working with multiple property owners. Easements are critical to ensure long term access for inspection and/or maintenance of stormwater management facilities. Once built, new facilities must be inspected and maintained in order to ensure that they continue to operate as designed and provide environmental benefit.

Operation and Maintenance (O&M) is a permanent requirement and therefore must have the necessary resources in place to continue work annually. O&M continues to grow as new practices are implemented. As O&M costs increase, our capacity to perform restoration work decreases unless there is an increase in revenues. The cost for maintenance work is also funded using capital funds for larger maintenance/repair projects such as dredging and repair of aging infrastructure. Although major structural repair work is funded by the County's Capital budget, it often does not provide restoration credit. The County is proposing to increase funding for major structural repairs in future budgets; this may result in a corresponding reduction in funding for restoration projects. Restoration projects associated with major structural repairs are included in the project portfolio as one of the County priorities/co-benefits.

Financial Capacity

The preliminary financial questionnaire provided in Appendix C indicates that stormwater services impose a relatively small financial burden on households in the County (0.11% of median household income as shown in row 2g in the financial capacity spreadsheet). However, the analysis does not accurately represent Montgomery County's financing mechanisms. Many of the County's water quality and MS4 programs are funded entirely by the Water Quality Protection Charge (WQPC), which is an excise tax levied on residential and non-residential property. Other departments that oversee permitting or solid waste have direct funding mechanisms as well to support their programming. The complexities of the budgets and expenditures cannot be captured in the financial analysis as currently presented. Furthermore, capital projects are financed, and the actual cost of the project does not include the additional costs for interest paid on the borrowed funding.

The WQPC is not paid by all of the households in the County. Of the 369,242 households (based on 2017 ACS), only 265,885 are residential WQPC rate payers. In addition, there are more than 12,000 non-residential rate payers, which generate approximately 35% of the total WQPC revenue but are not included in the analysis. The County believes a better analysis of the cost of the water quality programming would be limited to the WQPC rate payers and would include both residential and non-residential rate payers.

The financial questions as provided do not fully capture the future MS4 burden on the County. The analysis is only considering restoration work for the future permit based on the estimated project portfolio, which is a financed program. The projected annual cost for the restoration portfolio (as shown in row 3g in the financial capacity spreadsheet) is \$13 million. The operating budget (which is funded by revenue generated by the WQPC) covers the costs for the programs and requirements in the MS4 permit that are not captured in the restoration project portfolio, as well as the debt service associated with the financed capital program, which is paid over 20 years. Montgomery County's Department of Environmental Protection (DEP) has an estimated annual operating budget of approximately \$35 million. This budget includes all of DEP's water quality programs, including BMP O&M, outreach and education, illicit discharge detection and elimination, RainScapes and stream monitoring. It also supports our personnel and administrative expenditures, storm drain maintenance, CIP restoration and major structural repair debt services, and programs implemented by other departments and agencies.

Political capacity must also be considered. The WQPC rate payers generate the revenue for the water quality and MS4 programs for Montgomery County. The County leadership and voters have indicated that they are interested in limiting or removing the growth of the Equivalent Residential Unit (ERU) or WQPC Charge, approved by County Council each year, which in FY 2018, FY 2019 and FY 2020 is \$104.25. The County's MS4 and Water quality programs, including borrowing capacity, is limited to revenue generated by what the residents are willing to pay.

Due to the limited timeframe provided to respond, DEP has not had an opportunity to discuss the Financial Capacity analysis with our Department of Finance and Office of Management and Budget. The information that is provided is in draft form and is subject to change pending their review. We anticipate meeting with the departments in early June.

Appendix A. Restoration Project Portfolio

Restoration Projects To Be Planned, Designed, and/or Constructed from CY 2020 Through CY 2027
Montgomery County

Remaining Unmet Restoration Obligation from
Previous Permit (Impervious Acres):

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMP ACRES	TSS REDUCTION (lbs/year)	TN ² REDUCTION (lbs/year)	IMPLEMENTATION COST	IMPLEMENTATION STATUS ²	PROJECTED IMPLEMENTATION YEAR	TMDL PARAMETER OR WQ OBJECTIVE ADDRESSED	GENERAL COMMENTS ²
Remaining Unmet Restoration Obligations from Previous Permit											
Annual Operational Programs (Unmet Obligations from Previous Permit)^{3,4}											
Street Sweeping		A									
		A									
		A									
		A									
		A									
		A									
Catch Basin Cleaning		A									
		A									
		A									
		A									
		A									
Septic Sytem Pumping		A									
		A									
		A									
		A									
		A									
		A									
Subtotal Operations ⁵			-	-			\$ -				
Capital Projects (Unmet Obligations from Previous Permit Term)											
Subtotal Capital			-	-			\$ -				
Other (Unmet Obligations from Previous Permit Term)											
Subtotal Other			-	-			\$ -				
Total of Remaining Obligations from The Previous Permit											
			-	-			\$ -				
Obligations from Previous Permit That Must Be Continued											
Annual Operational Programs Required to be Maintained from Previous Permit^{3,4}											
Street Sweeping	VSS	A	1		192,360	587	\$ 175,000	Under Construction	FY 2019		
Street Sweeping	VSS	A	1		192,360	587	\$ 175,000	Planning	FY 2020		
Street Sweeping	VSS	A	1		192,360	587	\$ 175,000	Planning	FY 2021		
Street Sweeping	VSS	A	1		192,360	587	\$ 175,000	Planning	FY 2022		
Street Sweeping	VSS	A	1		192,360	587	\$ 175,000	Planning	FY 2023		
Street Sweeping	VSS	A	1		192,360	587	\$ 175,000	Planning	FY 2024		
Street Sweeping	VSS	A	1		192,360	587	\$ 175,000	Planning	FY 2025		
Catch Basin Cleaning	CBC	A	1		60,900	186	\$ 466,000	Under Construction	FY 2019		
Catch Basin Cleaning	CBC	A	1		60,900	186	\$ 466,000	Planning	FY 2020		
Catch Basin Cleaning	CBC	A	1		60,900	186	\$ 466,000	Planning	FY 2021		
Catch Basin Cleaning	CBC	A	1		60,900	186	\$ 466,000	Planning	FY 2022		
Catch Basin Cleaning	CBC	A	1		60,900	186	\$ 466,000	Planning	FY 2023		
Catch Basin Cleaning	CBC	A	1		60,900	186	\$ 466,000	Planning	FY 2024		
Catch Basin Cleaning	CBC	A	1		60,900	186	\$ 466,000	Planning	FY 2025		
Septic Sytem Pumping	SEPP	A	2,000		N/A	N/A	\$ -	Under Construction	FY 2019		
Septic Sytem Pumping	SEPP	A	2,000		N/A	N/A	\$ -	Planning	FY 2020		
Septic Sytem Pumping	SEPP	A	2,000		N/A	N/A	\$ -	Planning	FY 2021		
Septic Sytem Pumping	SEPP	A	2,000		N/A	N/A	\$ -	Planning	FY 2022		
Septic Sytem Pumping	SEPP	A	2,000		N/A	N/A	\$ -	Planning	FY 2023		
Septic Sytem Pumping	SEPP	A	2,000		N/A	N/A	\$ -	Planning	FY 2024		
Septic Sytem Pumping	SEPP	A	2,000		N/A	N/A	\$ -	Planning	FY 2025		
Subtotal Operations ⁵			2,002		253,260	773	\$ 4,487,000				
Capital Projects (Proposed to Replace Annual Obligations)											
Subtotal Capital			-	-			\$ -				
Other (Proposed to Replace Annual Obligations)											
Subtotal Other			-	-			\$ -				
Total of Obligations from Previous Permit That Must Be Continued											
			2,002	-	253,260	773	\$ 4,487,000				

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMP ACRES	TSS REDUCTION (lbs/year)	TN ¹ REDUCTION (lbs/year)	IMPLEMENTATION COST	IMPLEMENTATION STATUS ²	PROJECTED IMPLEMENTATION YEAR	TMDL PARAMETER OR WQ OBJECTIVE ADDRESSED	GENERAL COMMENTS ²
Proposed Restoration for the Next Permit											
Operational Programs⁴											
Street Sweeping	VSS	A	1		29,172	19	\$ 132,000	Under Construction	FY 2019	Local TSS TMDL	
Street Sweeping	VSS	A	1		29,172	19	\$ 132,000	Planning	FY 2020	Local TSS TMDL	
Street Sweeping	VSS	A	1		29,172	19	\$ 132,000	Planning	FY 2021	Local TSS TMDL	
Street Sweeping	VSS	A	1		29,172	19	\$ 132,000	Planning	FY 2022	Local TSS TMDL	
Street Sweeping	VSS	A	1		29,172	19	\$ 132,000	Planning	FY 2023	Local TSS TMDL	
Street Sweeping	VSS	A	1		29,172	19	\$ 132,000	Planning	FY 2024	Local TSS TMDL	
Street Sweeping	VSS	A	1		29,172	19	\$ 132,000	Planning	FY 2025	Local TSS TMDL	
Tree Montgomery	FPU	A	500		60	1	\$ 500,000	Under Construction	FY 2019	Local TSS TMDL	
Tree Montgomery	FPU	A	500		60	1	\$ 500,000	Planning	FY 2020	Local TSS TMDL	
Tree Montgomery	FPU	A	500		60	1	\$ 500,000	Planning	FY 2021	Local TSS TMDL	
Tree Montgomery	FPU	A	500		60	1	\$ 500,000	Planning	FY 2022	Local TSS TMDL	
Tree Montgomery	FPU	A	500		60	1	\$ 500,000	Planning	FY 2023	Local TSS TMDL	
Tree Montgomery	FPU	A	500		60	1	\$ 500,000	Planning	FY 2024	Local TSS TMDL	
Tree Montgomery	FPU	A	500		60	1	\$ 500,000	Planning	FY 2025	Local TSS TMDL	
Street Trees	FPU	A	1,500		619	3	\$ 550,000	Under Construction	FY 2019	Local TSS TMDL	
Street Trees	FPU	A	1,500		619	3	\$ 550,000	Planning	FY 2020	Local TSS TMDL	
Street Trees	FPU	A	1,500		619	3	\$ 550,000	Planning	FY 2021	Local TSS TMDL	
Street Trees	FPU	A	1,500		619	3	\$ 550,000	Planning	FY 2022	Local TSS TMDL	
Street Trees	FPU	A	1,500		619	3	\$ 550,000	Planning	FY 2023	Local TSS TMDL	
Street Trees	FPU	A	1,500		619	3	\$ 550,000	Planning	FY 2024	Local TSS TMDL	
Street Trees	FPU	A	1,500		619	3	\$ 550,000	Planning	FY 2025	Local TSS TMDL	
Subtotal Operations ⁵			14,001		33,922	48	\$ 8,274,000				
Capital Projects											
RainScapes	MRWH/NSCA/AGRE/APRP/MRNG	E	TBD	2	3,007	18	\$ 180,000	Under Construction	FY 2019	Local TSS TMDL	NOTE: This is an operating expense that does not fit under the operating section of the spreadsheet. REST BMP TYPE is representative ESD type for load reduction estimate only.
RainScapes	MRWH/NSCA/AGRE/APRP/MRNG	E	TBD	2	3,007	18	\$ 180,000	Planning	FY 2020	Local TSS TMDL	NOTE: This is an operating expense that does not fit under the operating section of the spreadsheet. REST BMP TYPE is representative ESD type for load reduction estimate only.
RainScapes	MRWH/NSCA/AGRE/APRP/MRNG	E	TBD	2	3,007	18	\$ 180,000	Planning	FY 2021	Local TSS TMDL	NOTE: This is an operating expense that does not fit under the operating section of the spreadsheet. REST BMP TYPE is representative ESD type for load reduction estimate only.
RainScapes	MRWH/NSCA/AGRE/APRP/MRNG	E	TBD	2	3,007	18	\$ 180,000	Planning	FY 2022	Local TSS TMDL	NOTE: This is an operating expense that does not fit under the operating section of the spreadsheet. REST BMP TYPE is representative ESD type for load reduction estimate only.
RainScapes	MRWH/NSCA/AGRE/APRP/MRNG	E	TBD	2	3,007	18	\$ 180,000	Planning	FY 2023	Local TSS TMDL	NOTE: This is an operating expense that does not fit under the operating section of the spreadsheet. REST BMP TYPE is representative ESD type for load reduction estimate only.
RainScapes	MRWH/NSCA/AGRE/APRP/MRNG	E	TBD	2	3,007	18	\$ 180,000	Planning	FY 2024	Local TSS TMDL	NOTE: This is an operating expense that does not fit under the operating section of the spreadsheet. REST BMP TYPE is representative ESD type for load reduction estimate only.
RainScapes	MRWH/NSCA/AGRE/APRP/MRNG	E	TBD	2	3,007	18	\$ 180,000	Planning	FY 2025	Local TSS TMDL	NOTE: This is an operating expense that does not fit under the operating section of the spreadsheet. REST BMP TYPE is representative ESD type for load reduction estimate only.
Fallsreach Stream	STRE	A	1	N/A	40,500	25	\$ 1,185,000	Complete	FY 2019	Local TSS TMDL	
Flints Grove Stream	STRE	A	1	N/A	48,600	30	\$ 1,385,000	Complete	FY 2019	Local TSS TMDL	
Glenstone Stream II	STRE	A	1	N/A	295,650	180	\$ 1,825,000	Complete	FY 2019	Local TSS TMDL	
Greencastle Lakes	PWET	S	1	24	45,488	98	\$ 1,320,000	Complete	FY 2019	Local TN, TP and TSS TMDLs	
Hunters Woods III	PWET	S	1	6	11,818	25	\$ 1,275,000	Complete	FY 2019	Local TSS TMDL	
Outfall Repair - 9100 Charred Oak Drive (Site 2)	OUTS	A	1	N/A	4,050	2	\$ 170,983	Complete	FY 2019	Local TSS TMDL	
Outfall Repair - 9124 Charred Oak Drive (Site 1)	OUTS	A	1	N/A	12,150	7	\$ 135,200	Complete	FY 2019	Local TSS TMDL	
Outfall Repair - Kemp Mill Road	OUTS	A	1	N/A	4,050	2	\$ 60,000	Complete	FY 2019	Local TN, TP and TSS TMDLs	
Outfall Repair - Lockridge Drive	OUTS	A	1	N/A	5,427	3	\$ 108,417	Complete	FY 2019	Local TN, TP and TSS TMDLs	
Quail Valley II	FNSD + STRE	S	1	6	24,342	43	\$ 1,265,000	Complete	FY 2019	Local TSS TMDL	
Outfall Repair - Woodbine Drive at Beach Drive	OUTS	A	1	N/A	7,290	4	\$ 140,000	Under Construction	FY 2019	Local TP and TSS TMDLs	
B'Nai Israel	PWET	S	1	71	143,544	26	\$ 2,748,328	Design	FY 2020	Local TSS TMDL	
Outfall Repair - Daniel Road	OUTS	A	1	N/A	7,695	5	\$ 75,000	Design	FY 2020	Local TP and TSS TMDLs	
Outfall Repair - Glen Road	OUTS	A	1	N/A	6,075	4	\$ 135,000	Design	FY 2020	Local TSS TMDL	
Outfall Repair - Hampden Street	OUTS	A	1	N/A	10,328	6	\$ 189,000	Design	FY 2020	Local TP and TSS TMDLs	
Outfall Repair - Kentsdale Drive	OUTS	A	1	N/A	5,751	4	\$ 75,000	Design	FY 2020	Local TSS TMDL	
Outfall Repair - Margate Road	OUTS	A	1	N/A	6,075	4	\$ 140,000	Design	FY 2020	Local TN, TP and TSS TMDLs	
Outfall Repair - Pebble Beach Drive	OUTS	A	1	N/A	6,075	4	\$ 65,000	Design	FY 2020	Local TN, TP and TSS TMDLs	
Outfall Repair - Stable Lane	OUTS	A	1	N/A	4,050	2	\$ 80,000	Design	FY 2020	Local TSS TMDL	
Outfall Repair - Wisperwood Lane	OUTS	A	1	N/A	5,751	4	\$ 140,000	Design	FY 2020	Local TSS TMDL	
Fallsreach pond	PWET	S	1	19	49,835	117	\$ 1,195,000	Under Construction	FY 2020	Local TSS TMDL	
Flints Grove pond	PWET	S	1	19	40,425	90	\$ 1,305,000	Under Construction	FY 2020	Local TSS TMDL	
Kemp Mill	PWPS	S	1	7	14,103	33	\$ 830,000	Under Construction	FY 2020	Local TN, TP and TSS TMDLs	
Watkins Meadow	PWET	S	1	13	25,677	56	\$ 1,062,000	Under Construction	FY 2020	Local TSS TMDL	
Broad Run Stream	STRE	A	1	N/A	425,250	260	\$ 4,493,328	Design	FY 2021	Local TSS TMDL	
Glenstone Stream III	STRE	A	1	N/A	230,850	141	\$ 1,425,000	Design	FY 2021	Local TSS TMDL	
Grosvenor Stream - PARKS	STRE	A	1	N/A	22,275	14	\$ 320,000	Design	FY 2021	Local TP and TSS TMDLs	
Stoneybrook Stream - PARKS	STRE	A	1	N/A	42,525	26	\$ 610,000	Design	FY 2021	Local TP and TSS TMDLs	
Airpark	PWET	S	1	50	3,065	6	\$ 2,410,000	Design	FY 2022	Local TSS TMDL	
Clearspring Manor Stream - PARKS	STRE	A	1	N/A	32,400	20	\$ 465,000	Design	FY 2022	Local TSS TMDL	
Glenallan Stream - PARKS	STRE	A	1	N/A	70,065	43	\$ 1,005,000	Design	FY 2022	Local TN, TP and TSS TMDLs	
Watkins Mill	PWET	S	1	5	11,438	26	\$ 610,000	Design	FY 2022	Local TSS TMDL and Major Structural Repair	
Clearspring Manor Pond	PWET	S	1	12	27,638	61	\$ 1,609,000	Design - Suspended	FY 2022	Local TSS TMDL and Major Structural Repair	
Germantown Park Asset 11178	PWET	S	1	3	7,031	15	\$ 620,000	Design - Suspended	FY 2022	Local TSS TMDL and Major Structural Repair	
Germantown Park Stream	STRE	A	1	N/A	36,288	22	\$ 1,126,000	Design - Suspended	FY 2022	Local TSS TMDL	
Glenmont Forest	MMBR/MRNG	E	76	11	22,848	74	\$ 2,291,000	Design - Suspended	FY 2022	Local TP and TSS TMDLs	
Goshen Estates	PWET	S	1	11	34,791	85	\$ 1,600,000	Design - Suspended	FY 2022	Local TSS TMDL and Major Structural Repair	
Washington Science Center	PWET	S	1	7	11,264	22	\$ 990,000	Design - Suspended	FY 2022	Local TSS TMDL	
Quail Valley I	PWET	S	1	3	5,009	10	\$ 700,000	Design	FY 2023	Local TSS TMDL and Major Structural Repair	
Bel Pre Manor Pond & Stream	PWET + STRE	S/A	1	0	13,445	9	\$ 1,047,000	Design - Suspended	FY 2023	Local TN, TP and TSS TMDLs	
Grosvenor Stream	STRE	A	1	N/A	262,805	160	\$ 5,116,000	Design - Suspended	FY 2023	Local TP and TSS TMDLs	
Longmead Crossing Pond & Outfall	PWET + STRE	S/A	1	5	16,537	24	\$ 1,265,000	Design - Suspended	FY 2023	Local TN, TP and TSS TMDLs	
Old Farm Creek	STRE	A	1	N/A	73,629	45	\$ 1,847,000	Design - Suspended	FY 2023	Local TSS TMDL	

REST BMP ID	REST BMP TYPE ¹	BMP CLASS ¹	NUM BMP	IMP ACRES	TSS REDUCTION (lbs/year)	TN ¹ REDUCTION (lbs/year)	IMPLEMENTATION COST	IMPLEMENTATION STATUS ²	PROJECTED IMPLEMENTATION YEAR	TMDL PARAMETER OR WQ OBJECTIVE ADDRESSED	GENERAL COMMENTS ²
Future Planning and Design	TBD		TBD	TBD	TBD	TBD	\$ 2,000,000	Planning	FY 2023	Local TMDLs and Major Structural Repair	Planning and design of projects for future permit term(s) (beyond 2025)
Bel Pre Creek	STRE	A	1	N/A	68,081	42	\$ 1,770,000	Design - Suspended	FY 2024	Local TN, TP and TSS TMDLs	
Cannon Road	MMBR/MRNG	E	TBD	14	31,158	98	\$ 2,495,000	Design - Suspended	FY 2024	Local TN, TP and TSS TMDLs	
Derwood Station South	PWET	S	1	7	12,809	28	\$ 635,000	Design - Suspended	FY 2024	Local TP and TSS TMDLs and Major Structural Repair	
Germantown Park	MMBR	E	1	1	900	3	\$ 410,000	Design - Suspended	FY 2024	Local TSS TMDL and Major Structural Repair	
Pine Knolls	PWED	S	1	14	32,892	75	\$ 1,017,000	Design - Suspended	FY 2024	Local TSS TMDL and Major Structural Repair	
Seneca Whetstone	PWET	S	1	1	12,060	5	\$ 590,000	Design - Suspended	FY 2024	Local TSS TMDL and Major Structural Repair	
Stoneybrook Stream	STRE	A	1	N/A	102,263	62	\$ 1,950,000	Design - Suspended	FY 2024	Local TP and TSS TMDLs	
Townes of Gloucester	PWET	S	1	4	11,456	25	\$ 902,000	Design - Suspended	FY 2024	Local TN, TP and TSS TMDLs and Major Structural Repair	
Williamsburg Village Regional	PWET	S	1	14	21,298	41	\$ 925,000	Design - Suspended	FY 2024	Local TP and TSS TMDLs and Major Structural Repair	
Future Planning and Design	TBD		TBD	TBD	TBD	TBD	\$ 1,500,000	Planning	FY 2024	Local TMDLs and Major Structural Repair	Planning and design of projects for future permit term(s) (beyond 2025)
Germantown Park	MMBR/MSWB	E	2	1	2,423	8	\$ 495,000	Design - Suspended	FY 2025	Local TSS TMDL and Major Structural Repair	
Germantown View	PWET	S	1	6	12,121	26	\$ 920,000	Design - Suspended	FY 2025	Local TSS TMDL and Major Structural Repair	
Quail Ridge	XDED/FSND	S	1	4	7,330	16	\$ 695,000	Design - Suspended	FY 2025	Local TSS TMDL and Major Structural Repair	
Tributary Catchment - BMPs	RR	E	TBD	7	27,639	108	\$ 2,500,000	Planning	FY 2025	Local TSS TMDL	
Tributary Catchment - Green Street	RR	E	TBD	4	11,844	46	\$ 2,500,000	Planning	FY 2025	Local TSS TMDL	
Future Planning and Design	TBD		TBD	TBD	TBD	TBD	\$ 1,300,000	Planning	FY 2025	Local TMDLs and Major Structural Repair	Planning and design of projects for future permit term(s) (beyond 2025)
Subtotal Capital			130	360	2,549,821	2,550	\$ 70,422,256				
Other											
New BMPs treating existing Impervious Area	REDE	E	TBD	45	121,692	434	\$ -	Planning	FY 2020	Local TSS TMDL	Redevelopment not implemented by the County, only included five year permit term (FY 2020-FY 2024)
New BMPs treating existing Impervious Area	REDE	E	TBD	45	121,692	434	\$ -	Planning	FY 2021	Local TSS TMDL	Redevelopment not implemented by the County, only included five year permit term (FY 2020-FY 2024)
New BMPs treating existing Impervious Area	REDE	E	TBD	45	121,692	434	\$ -	Planning	FY 2022	Local TSS TMDL	Redevelopment not implemented by the County, only included five year permit term (FY 2020-FY 2024)
New BMPs treating existing Impervious Area	REDE	E	TBD	45	121,692	434	\$ -	Planning	FY 2023	Local TSS TMDL	Redevelopment not implemented by the County, only included five year permit term (FY 2020-FY 2024)
New BMPs treating existing Impervious Area	REDE	E	TBD	45	121,692	434	\$ -	Planning	FY 2024	Local TSS TMDL	Redevelopment not implemented by the County, only included five year permit term (FY 2020-FY 2024)
Subtotal Other			-	225	608,459	2,171	\$ -				
Total for Next Permit			14,131	585	3,192,201	4,769	\$ 78,696,256				
Total for Remaining Obligations from The Previous Permit and Prosed Activities for the Next Permit			16,133	585	3,445,461	5,542	\$ 83,183,256				

Check with MDE Geodatabase:

Rest BMP ID, type, class, number of BMPs, impervious acres, built date, implementation cost should match the various geodatabase tables for BMPs (AltBMPLine, AltBMPPoint, AltBMPPoly, and RestBMP)-- aggregated by type and status.

Notes:

1 Use BMP types and classes from the MDE Geodatabase.

BMP Class	
Code	Code Description
A	Alternative BMP
E	ESD
S	Structural BMP

BMP Classification	BMP Type Code
Alternative Surfaces (A)	
E	AGRE
E	AGRI
E	APRP
E	ARTF
Nonstructural Techniques (N)	
E	NDRR
E	NDNR
E	NSCA
Micro-Scale Practices (M)	
E	MRWH
E	MSGW
E	MILS
E	MIBR
E	MIDW
E	MMBR
E	MRNG
E	MSWG
E	MSWW
E	MSWB
E	MENF
Ponds (P)	
S	PWED
S	PWET
S	PMPS
S	PPKT
S	PMED
Wetlands (W)	
S	WSHW
S	WEDW
S	WPWS
S	WPKT
Infiltration (I)	
S	IBAS
S	ITRN
Filtering Systems (F)	
S	FBIO

S	FSND
S	FUND
S	FPER
S	FORG
S	FBIO
Open Channels (O)	
S	ODSW
S	OWSW
Other Practices (X)	
S	XDPD
S	XDED
S	XFLD
S	XOGS
S	XOTH
Alternative BMPs	
A	MSS
A	VSS
A	IMPP
A	IMPF
A	FPU
A	CBC
A	SDV
A	STRE
A	OUT
A	SPSC
A	SHST
A	SEPP
A	SEPD
A	SEPC

BMP Type
Green Roof – Extensive
Green Roof – Intensive
Permeable Pavements
Reinforced Turf
Disconnection of Rooftop Runoff
Disconnection of Non-Rooftop Runoff
Sheetflow to Conservation Areas
Rainwater Harvesting
Submerged Gravel Wetlands
Landscape Infiltration
Infiltration Berms
Dry Wells
Micro-Bioretenion
Rain Gardens
Grass Swale
Wet Swale
Bio-Swale
Enhanced Filters
Extended Detention Structure, Wet
Retention Pond (Wet Pond)
Multiple Pond System
Pocket Pond
Micropool Extended Detention Pond
Shallow Marsh
ED – Wetland
Wet Pond – Wetland
Pocket Wetland
Infiltration Basin
Infiltration Trench
Bioretention

Sand Filter
Underground Filter
Perimeter (Sand) Filter
Organic Filter (Peat Filter)
Bioretention
Dry Swale
Wet Swale
Detention Structure (Dry Pond)
Extended Detention Structure, Dry
Flood Management Area
Oil Grit Separator
Other
Mechanical Street Sweeping
Regenerative/Vacuum Street Sweeping
Impervious Surface Elimination (to pervious)
Impervious Surface Elimination (to forest)
Planting Trees or Forestation on Pervious Urban
Catch Basin Cleaning
Storm Drain Vacuuming
Stream Restoration
Outfall Stabilization
Regenerative Step Pool Storm Conveyance
Shoreline Management
Septic Pumping
Septic Denitrification
Septic Connections to WWTP

Appendix B. Physical Capacity

Maryland Department of the Environment

Physical Capacity Questionnaire for Municipal Separate Storm Sewer System (MS4) Permittees as Part of a Maximum Extent Practicable (MEP) Analysis April 12, 2019

Montgomery County's Response

Submitted May 30, 2019

- 1. What is the typical implementation time frame (from planning through construction) for a restoration project? Provide a typical Gantt chart for the following three main classes of BMPs and break down into planning, design, and construction phases: 1. Large upland stormwater projects (e.g., new and retrofits for ponds, bioretention, infiltration basins, etc.); 2. Instream restoration projects; and, 3. Alternative projects (not annual) (e.g., tree planting). Provide a written justification to explain the time frames for each BMP class and phase.**

- 1.1. Large upland stormwater projects (e.g., new and retrofits for ponds, bioretention, infiltration basins, etc.);

SWM Pond Retrofits:

- Planning: Watershed assessments are updated every 10 years and updates take approximately 2 years to complete per watershed. The Watershed assessments provide information on potential project locations within a catchment. The watershed assessment, along with other planning tools, are used to identify projects that, once appropriated, could be moved into design phase.
- Design Phase: For the 2010 permit, the median period for permitting and design was 57 months (includes time for construction procurement). Contributing factors included permitting requirements, engineering consultant capacity, coordination with private property owners, and inclusion of dam safety upgrades in the scope of work.
- Construction Phase: For the 2010 permit, the median construction period was 10 months.
- The attached Gantt chart shows a typical schedule for SWM pond retrofits. Contingency durations have been added to reflect the median duration for permitting and design.

ESD/LID projects:

ESD/LID projects are primarily located on County-owned land or public-school property, many of these projects tend to be smaller in scale (and IA credit),

resulting in comparatively shorter times for design and construction. However, the use of public rights-of-way for a green street project still requires significant and sustained public engagement, through public meetings, which can increase the design period.

- Planning: Watershed assessments are updated every 10 years and updates take approximately 2 years to complete per watershed. The Watershed assessments provide information on potential project locations within a catchment. The watershed assessment, along with other planning tools, are used to identify projects that, once appropriated, could be moved into design phase.
- Design Phase: For the 2010 permit, the median period for permitting and design was 45 months (includes time for construction procurement).
- Construction Phase: For the 2010 permit, the median construction period was 6 months. The attached Gantt chart shows a typical schedule for ESD/LID retrofits. Contingency durations have been added to reflect the median duration for permitting and design.

1.2. Instream restoration projects:

- Planning: Watershed assessments are updated every 10 years and updates take approximately 2 years to complete per watershed. The Watershed assessments provide information on potential project locations within a catchment. The watershed assessment, along with other planning tools, are used to identify projects that, once appropriated, could be moved into design phase.
- Design Phase: For the 2010 permit, the median period for permitting and design was 71 months (includes time for construction procurement). Contributing factors included permitting requirements (including floodplain permitting), engineering consultant capacity, and coordination with private property owners.
- Construction Phase: For the 2010 permit, the median construction period was 15 months. Depending on the length of the project and/or the construction start date, stream closure periods will lengthen construction schedules.
- The attached Gantt chart shows a typical schedule for stream restoration projects. Contingency durations have been added to reflect the median duration for permitting and design.

1.3. Alternative projects (not annual) (e.g., tree planting): Many of the urban trees planted in the County are coordinated through the Tree Montgomery and Street

Tree programs. However, all trees planted on an individual basis, as opposed to reforestation, follow similar implementation time frames.

- Tree Montgomery is implemented by DEP by planting and establishing large shade trees on private property throughout the County. The process begins when a landowner applies to receive trees. Applications are reviewed, and some are prioritized based on requirements of the Tree Canopy Law. Once an application is approved, the process from site visit to installation generally takes between 4 and 6 months. This includes assisting applicants with choosing planting locations and species, as well as coordinating with the County's contractor to purchase and install the trees. Trees can be installed relatively quickly, with 20 to 30 trees planted per day during the planting season, which generally runs from October 15 through April 30.
- The Street Tree program is implemented by DOT and plants trees in the rights-of-way maintained by Montgomery County. The process from site visit to installation is similar in length to the Tree Montgomery process and takes from 4 to 6 months. Once planting locations are identified, street trees are installed relatively quickly, although DOT typically plants trees in the spring and fall, not during the winter.

2. Provide the average time to authorize capital improvement project (CIP) budgets for the initial project planning phase and for the design phase of a typical restoration project (assumes CIP approval for each phase is required). Do you have the ability to combine these two phases or do you have to get CIP approval for each phase consecutively?

Montgomery County utilizes a 6-year CIP budget which is updated and approved every two years. In general, a project enters the CIP budget as a planning project and then is approved as a design project in the next cycle; however, the County has the flexibility to add projects directly into design. When a project leaves planning, the design and construction costs are generally shown in the CIP budget, although only the design money is appropriated in some instances. The funding for both phases can be appropriated in the same budget although, based on the design phase durations, (see responses to question 1 above) construction funding is usually appropriated later (based on more accurate cost estimates).

The ambitious restoration target in the 2010 permit created the need to start many design projects concurrently, curtailing the planning phase. It is important to note that combining the planning and design phases tends to rush the planning effort and can result in sub-optimal project selection; for instance, projects that lack broad-

based community support. It is important to allow adequate time for planning to ensure that restoration efforts focus on the most effective projects (see Figure 1).

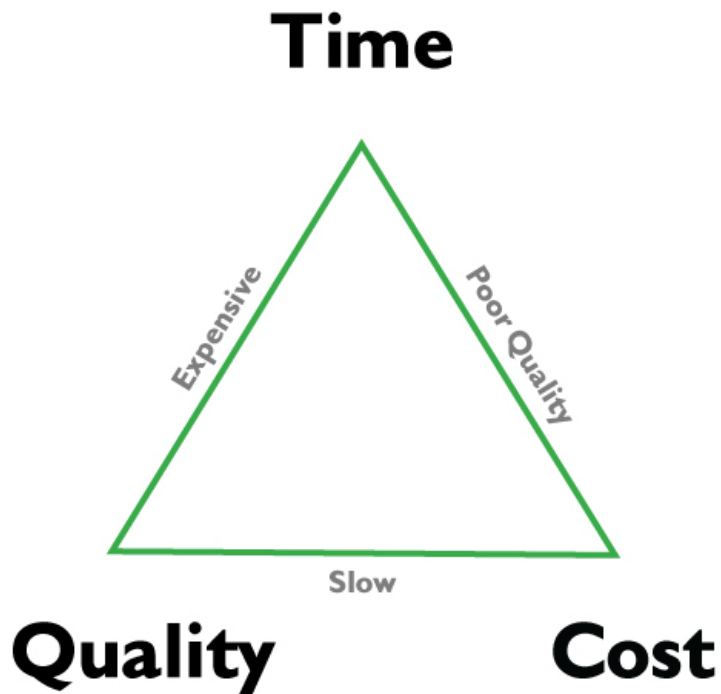


Figure 1. Triple constraint of time, cost and quality must be managed in project delivery. Limited time for delivery will result in higher project costs, lower quality projects, or both.

- 3. Provide the average time to procure professional planning, design, and construction services. Is procurement done in phases (e.g., procurement for planning, then procurement for design, and then procurement for construction)? How would a pay for performance type of contract or a design-build-operation-maintenance contract affect these time frames? Please provide information on any innovative contracting mechanism you use to reduce procurement timeframes and what those reduced time frames are.**

Planning has been done in-house and by contractors. Contractors are selected using a standard request for proposal (RFP) process which can take up to one year.

For design, bid, build contracting, the procurement of design and construction services each follow the same two-step process: first a list of pre-qualified vendors (engineers or construction contractors) is obtained via an RFP, and then each project

is bid as a task order among the pre-qualified vendors. On average, the RFP process takes 7 to 9 months. The bidding of each individual design or construction task order takes 3 to 4 months. Historically, the majority of the County's projects went through separate design and construction task order bidding. Planning is also separate task order as it is done at the watershed scale; however, it can use the same pre-qualified vendor.

Any response regarding the effect of a pay for performance (PFP) or a design-build-operation-maintenance (DBM) contract would be conditioned on the scope and complexity of the project and contract type. In general, the initial procurement stage, including negotiations, of a PFP or DBM contract could be significantly longer than for the issuance of a task order for an individual project – although on the same order of magnitude as an original RFP. There would be time savings in eliminating/reducing the time period for construction contractor procurement. Time frames should be shorter overall for these alternative contracting approaches if they include performance goals within prescribed time frames.

In October 2016, the County issued a PFP RFP which resulted in two PFP contracts for three projects. The procurement process took 7-1/2 months with contracts issued in June 2017. One SWM pond retrofit project (which was already in design when it was offered to the County) was completed in November 2018. Another SWM pond retrofit project is in design (permitting) and is expected to be completed in October 2019. The third project, a stream restoration, has just begun construction and is expected to be completed in June 2020.

In October 2018, the County issued a DBM RFP and proposals have been received. However, the new County Executive has asked our new Director, Adam Ortiz, to reevaluate the proposed DBM contracting approach and that reevaluation is still on going.

- 4. Provide the number of requests for proposals (RFPs) for BMP construction and for BMP design advertised during the past 5 year permit term. Of these, how many bids were submitted for each RFP and how many required re-advertising? Was there a trend over the permit term in the number of bid submittals received? How many unique companies provided bids for all RFPs?**

Design Services:

The County issued two RFP solicitations for BMP and stream engineering design services over the past 10 years.

The first solicitation resulted in four design contracts executed in May 2008. The

projects were issued and bid as 23 individual task orders under the 2008 contracts (2008 through 2012 until project completion). The 2008 engineering design solicitation received seven proposals that resulted in four pre-qualified contractors.

The second solicitation resulted in eight design contracts executed in October 2012. The projects were issued and bid as 46 individual task orders issued under the 2012 contract (2013 through 2018 until project completion or termination). This contract was used for more than restoration work; 42 task orders were issued for restoration and 4 task orders were issued for non-restoration engineering services. The 2012 solicitation received 17 proposals that resulted in eight pre-qualified contractors.

All four pre-qualified contractors for the 2008 design contracts were required to bid on each task order issued. For the 2012 design contracts, there was a rotational order of four firms per Invitation for Task Order Proposals who would be required to offer a bid.

Over the two design RFPs (2008 and 2012), 17 unique design companies submitted bids.

Construction Services

The County issued two RFPs for BMP and stream construction services during the term of the current MS4 permit (with projects being issued and bid as separate task orders); the first was executed in March 2013, and the second was executed in October 2017. The March 2013 Construction RFP specified the pre-qualification of up to five construction contractors. Nine proposals were received, and five firms were issued contracts as pre-qualified construction contractors. This solicitation resulted in 30 task orders being issued, with 28 task orders being awarded. The October 2017 Construction RFP specified the pre-qualification of up to eight construction contractors; 12 proposals were received, and eight firms were issued contracts as pre-qualified construction contractors. This solicitation has resulted in seven task orders being issued to date, with five task orders awarded.

Over the term of the 2013 construction contract, the number of active bidders (from the five pre-qualified firms) reduced from an average of five bidders at the beginning to two or three bidders at the end. This was one of the reasons that the number of pre-qualified bidders was increased to eight in the second solicitation. The 2017 contract has averaged five or six bidders per task order request for bids.

Over the two construction RFPs, 16 unique construction companies submitted bids.

The County also issued an invitation for bid (IFB) for LID construction services,

resulting in one contract in June 2014. Fourteen task orders have been issued under the LID construction contract.

None of the RFP solicitations for the pre-qualified contractors had to be re-advertised.

Pay for Performance: In October 2016, the County issued a PFP RFP which resulted in two PFP contracts for three projects.

- 5. Provide information on contracting limitations that result in longer project implementation times. Examples: Limited qualified construction contractors; Woman owned business enterprise (WBE) or minority owned business enterprise (MBE) requirements limit available qualified construction contractors and/or engineering contractors. Describe the issue and provide the time extension that results due to the issue.**

Socio-economic requirements, such as minority hiring requirements, would generally affect cost more than schedule.

Limited resources of the County's pre-qualified design firms had a detrimental effect on project schedules as the winning bidders often did not have the personnel capacity to perform all of the design work which the County generated under the current permit.

Limited construction services availability did not have a significant detrimental effect on project completion.

- 6. Provide a typical time frame required to obtain permits from local, state, and federal agencies for the three main BMP project classes (i.e., upland stormwater ponds, instream restoration, and alternative projects) prior to construction. Describe how these time frames affect the overall project implementation time frames described in Question #1. How can these time frames be reduced to help get these projects out the door faster?**

Locally, Montgomery County has three primary permitting agencies, including the Montgomery County Department of Permitting Services (DPS), the Maryland-National Capital Park and Planning Commission (MNCPPC), and the Washington Suburban Sanitary Commission (WSSC), that may grant permits/approvals for restoration work. At the state and federal level, permits and authorizations are provided by the Maryland Department of the Environment (MDE) and the U.S. Army Corps of Engineers (USACE), among others.

DPS issues erosion and sediment control permits, stormwater concept, floodplain, and Right-of-Way permits. M-NCPPC is responsible for reviewing compliance with Forest Conservation Law (forest conservation plans and Natural Resource Inventory). Any DEP restoration project that is performed on M-NCPPC (Montgomery Parks) property is subject to detailed review by M-NCPPC, including potential scope changes in response to M-NCPPC requests. M-NCPPC ultimately issues a construction permit for restoration work done on park land. WSSC may issue a permit for work around their infrastructure, within their easement, or when their infrastructure must be moved.

It is not possible to get an accurate breakdown of the time frame for individual permits (local, state, federal) because the County's project schedule tracking system was set up to track the overall permitting process. Typical/conservative time frames for common permits are shown in the Gantt charts provided in response to Question 1.

In Montgomery County, the permitting process typically begins with the Stormwater Concept submittal to the DPS and concludes with issuance of a Sediment Control Permit. Stormwater Concept approval is required for streams as well as BMPs. The Gantt charts provided in response to Question 1 show the following time frames from initial Stormwater Concept submittal to DPS, to Sediment Control Permit issuance. Typical/conservative time frames for other local, state, and federal permits, which run parallel with the design process, are shown in the Gantt charts.

- SWM Pond Retrofits: 38 months
- ESD/LID: 28 months
- Stream Restoration: 47 months

There have been instances where the permitting process did delay project implementation, for reasons including

- Permitting agencies enacting new requirements
- Stricter implementation of existing requirements
- Cascading effects of delays; one permit/approval holding up another
- Unresponsive reviewers
- "Scope creep" in reviews, such as requiring design changes that are not explicitly related to the restoration objectives

Unresponsive reviewers and scope creep were significant challenges for implementation in the early years of the 2010 permit, but these issues have largely

been resolved through improved coordination and communication.

To illustrate a new permitting requirement, in 2016 WSSC determined that new clearance requirements between LID/ESD projects and water lines were needed. This resulted in a delay waiting for WSSC to decide how much clearance would be required. Once a decision was made, the designs had to be changed to account for the new clearance requirements, which caused further delay.

Certain delays involving permits may be fundamentally linked to the design process. For instance, if the Limits of Disturbance (LOD) or wetland/waterway impacts change for unavoidable reasons late in the design process, certain permits may need to be revised. Engineering consultant capacity also affects the time frame for obtaining permits.

Proactive communication and check-ins with MDE, USACE, DPS, WSSC, and M-NCPPC throughout the process is critical to minimizing delay. This includes holding pre-application meetings with MDE and USACE. Permitting agency staff should be prepared to address questions and comments in a timely manner and discourage multiple reviews of the same project.

MDE/USACE-401/404 permits require obtaining signed floodplain encroachment waivers from all landowners affected when proposed hydraulic modeling indicates a 0.01' increase or greater above the existing 100-year floodplain elevation. The timeframe for obtaining these waivers is difficult to anticipate.

Easement acquisition, which often can be a permitting requirement, can take significant time, especially when working with multiple property owners.

For easements as well as permission for floodplain increases, a single landowner can cause delay if the item is on the critical path. This highlights the importance of early outreach and coordination with all landowners.

The permitting process for stormwater pond retrofits involves dam safety requirements, which are enforced at both the County and State level. Bringing a 30- or 40-year old pond up to current codes and standards, including but not limited to Maryland Pond Code 378, is generally part of DEP's pond retrofit process. While this provides County residents with modern stormwater management infrastructure, it also typically lengthens the permitting and design timeframe.

One bright spot for streamlined permitting in recent years is the Chesapeake Bay TMDL Regional General Permit (Bay TMDL RGP) issued by the U.S. Army Corps of Engineers, Baltimore Office. This allows certain restoration projects that are

implemented for MS4 purposes, including many pond retrofits, to be “self-verified” by the applicant.

Collaboration and cooperation at a high level between DEP and regulatory agencies would be helpful in moving MS4-related projects through the permitting process more efficiently and avoiding otherwise unforeseen obstacles. Also, having dedicated reviewers for MS4 projects would provide consistency and familiarity between designers and review agencies. Finally, additional streamlined permit mechanisms, such as the Bay TMDL RGP, would dramatically reduce the time frames for certain permits.

7. What type of a project do you consider as “low-hanging fruit”? What is your remaining capacity of available “low-hanging fruit” projects (estimate the number and impervious acre treatment total)?

The term is very subjective, but it generally applies to a project that obtains a large amount of IA credit for limited cost but often without maximizing environmental gain, or projects that are quick to implement.

The County does not have a list of “low hanging fruit” projects. The projects that were the easiest to complete, at the lowest cost, with the largest IA credit were implemented for the current (2010) permit.

8. Complete the spreadsheet provided for restoration projects to be planned, designed, and/or constructed from 2020 through 2027. Include for each restoration project the estimated impervious acres treated, estimated total nitrogen (TN) reduction, and estimated total suspended sediments (TSS) reduction; any local total maximum daily load (TMDL) parameter (or other water quality objective) addressed; estimated cost; implementation status; and projected completion year. Include projects that will be in the planning or design phase but will not be completed until after 2025. This information should be more specific for the first reporting year but may be more generalized for the remaining reporting years.

The County’s Project Portfolio is included with the MEP submittal provided to MDE on 5/30/2019.

9. Provide a copy of your 5 year CIP for restoration projects (2020-2027).

Attached are copies of the County’s approved Budget Sheets for current Restoration project categories for FY19 through FY24. Following is a summary of the County’s current approved 6-year CIP budget for restoration projects from those sheets:

FISCAL YEAR	FUNDING AMOUNT FOR RESTORATION PROJECTS
FY19 (current year)	\$25,880,000
FY20	\$19,060,000
FY21	\$11,150,000
FY22	\$10,110,000
FY23	\$10,600,000
FY24	\$9,160,000

Note that the above amounts provide funding for planning, design and construction of County restoration projects including all contracts, personnel, permitting and other related costs to implement the projects. Thus, the above budget amounts will not agree with the design and construction costs in the County’s Project Portfolio.

The above amounts do not include CIP funding for required major structural repairs of existing stormwater facilities. Although this type of work is Capital funded by the County, it is not shown above as it does not provide restoration credit. Note, as indicated in the County’s Project Portfolio submittal, the County is proposing to increase funding for major structural repairs in future budgets; this may result in a corresponding reduction in funding for restoration projects.

FY19, FY20 and FY21 include approximately \$3,719,000 in funding for the Lower Booze Creek Repair project. While it is a restoration project in the sense that it repairs a damaged stream, it is not eligible for restoration credit (and is not shown in the County’s Project Portfolio) because it is a repair of a previously restored stream section.

10. Provide a copy of your operating budget for annual restoration projects (FY2019).

BMP Class	Annual Operating Budget
Catch Basin and Storm Drain Cleaning	\$466,000
Street Sweeping	\$306,507
Septic Pump-out	\$0

The cost for our annual practices is not easily identified in our overall approved operating budget. The table above provides the annual cost for the work as provided in the FY18 FAP for Montgomery County. Street Sweeping is funded and managed by the DEP but contracted through the DOT. Catch Basin cleaning and storm drain cleaning are managed by the DOT but funded by the Water Quality Protection Charge. Septic pumping is a burden of the property owner. The cost for management of the septage is burden of WSSC and the costs are not transferred to the County. These annual practices will continue in the next permit cycle as described in the County’s Project Portfolio.

11. Provide a copy of your operating and maintenance budget for all BMPs implemented under the MS4 permit? (FY2019)

O&M is a permanent requirement and therefore must have the necessary resources in place to continue work annual. O&M continues to grow as new practices are implemented. As O&M costs increase, our capacity to perform restoration work decreases without an increase in revenues.

Estimated BMP Inspection and Maintenance Operating Budget (FY2019)		
	Costs	Notes:
Inspection and Maintenance Personnel	\$2,020,000	Approximate
Inspection	\$2,341,422	Yearly cost for implementation of the County's SWM BMP triennial inspection (preventative maintenance) program to comply with State and Local law and the County's MS4 permit.
Above Ground Maintenance	\$2,793,557	Yearly program cost for maintenance of above ground stormwater management facilities including structural facilities (ponds, sand filters, bioretention) and ESD facilities.
Below Ground Maintenance	\$3,156,300	Yearly program cost for maintenance of underground stormwater management facilities (oil/grit separators, underground detention, proprietary filtering systems, etc.).
Total O&M for Inspection and Maintenance	\$10,311,279	



SM Retrofit - Roads

(P801300)

Category	Conservation of Natural Resources	Date Last Modified	01/07/19
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	7,360	7,192	118	50	50	-	-	-	-	-	-
Construction	8,523	8,523	-	-	-	-	-	-	-	-	-
Other	23	23	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	15,906	15,738	118	50	50	-	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
State Aid	9,431	9,313	118	-	-	-	-	-	-	-	-
Water Quality Protection Bonds	6,475	6,425	-	50	50	-	-	-	-	-	-
TOTAL FUNDING SOURCES	15,906	15,738	118	50	50	-	-	-	-	-	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 20 Approp. Request	-	Year First Appropriation	FY13
Cumulative Appropriation	19,360	Last FY's Cost Estimate	19,256
Expenditure / Encumbrances	18,771		
Unencumbered Balance	589		

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.

COST CHANGE

Project decrease in FY20 is due to updated progress towards meeting MS4 permit and a FY19 transfer of \$49,000 in Long-Term Financing to the SM Design/Build/Maintain Contract project (No. 801901, Resolution 18-1185).

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).

FISCAL NOTE

Project decrease in FY20 is due to updated progress towards meeting MS4 permit and a FY19 transfer of \$49,000 in Long-Term Financing to the SM Design/Build/Maintain Contract project (No. 801901, Resolution 18-1185).

DISCLOSURES

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

COORDINATION

Department of 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	01/08/19
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY18	Rem 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	1,710	68	180	180	-	-	-	-	-	-
Construction	3,424	2,522	82	820	820	-	-	-	-	-	-
TOTAL EXPENDITURES	5,382	4,232	150	1,000	1,000	-	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Water Quality Protection Bonds	3,504	2,872	-	632	632	-	-	-	-	-	-
State Aid	1,878	1,360	150	368	368	-	-	-	-	-	-
TOTAL FUNDING SOURCES	5,382	4,232	150	1,000	1,000	-	-	-	-	-	-

OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total	Thru FY18	App FY18	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 20 Approp. Request	(1,621)	Year First Appropriation	FY13
Cumulative Appropriation	7,003	Last FY's Cost Estimate	5,382
Expenditure / Encumbrances	6,794		
Unencumbered Balance	209		

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.

COST CHANGE

Decrease is due to updated progress towards meeting MS4 permit.

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.

FISCAL NOTE

Acceleration of \$368,000 in Water Quality Protection Bonds from FY19 into FY18 and a funding schedule switch with State Aid to fill the gap.

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, Montgomery County Public Schools, Department of Permitting Services, Maryland Department of the Environment.



SM Design/Build/Maintain Contract (P801901)

Category	Conservation of Natural Resources	Date Last Modified	01/09/19
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY18	Rem 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	34,050	-	-	34,050	-	6,560	6,360	6,710	7,210	7,210	-
TOTAL EXPENDITURES	46,300	-	-	46,300	1,830	8,720	8,770	9,140	9,640	8,200	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Long-Term Financing	27,265	-	-	27,265	1,830	8,720	5,130	4,360	4,450	2,775	-
State Aid	11,500	-	-	11,500	-	-	2,500	3,000	3,000	3,000	-
Current Revenue: Water Quality Protection	7,535	-	-	7,535	-	-	1,140	1,780	2,190	2,425	-
TOTAL FUNDING SOURCES	46,300	-	-	46,300	1,830	8,720	8,770	9,140	9,640	8,200	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 20 Approp. Request	-	Year First Appropriation	FY19
Cumulative Appropriation	20,000	Last FY's Cost Estimate	-
Expenditure / Encumbrances	-		
Unencumbered Balance	20,000		

PROJECT DESCRIPTION

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

OTHER

The Montgomery Parks Department of the Maryland-National Capital Park and Planning Commission (M-NCPPC) and the Montgomery Department of Environmental Protection (DEP) have agreed that M-NCPPC will serve as the lead agency for implementing stream restoration projects including long term monitoring and maintenance, that are located wholly or mostly on parks property in support of the County's MS4 permit. Previously, DEP had begun design work on the following stream restoration projects which meet these criteria: Clearspring Manor, Glenallan, Stoneybrook (Beach Drive to Montrose Avenue), and Grosvenor (Beach Drive to Rockville Pike). In FY18, DEP will provide all design work for these projects to M-NCPPC for design completion, permitting, and construction under M-NCPPC's Stream Protection: SVP (P818571) project. M-NCPPC has agreed that all MS4 credits generated from these projects will be credited towards the County's future MS4 permit with delivery of the restored impervious acres no later than Dec. 31, 2023. M-NCPPC will provide appropriate updates at key project milestones to ensure that impervious acreage credits are achieved in the timeframe required, in addition to providing the long-term monitoring and maintenance required for the County to maintain the impervious acreage credit. These projects are currently estimated to have a combined cost of \$2.4M and will provide approximately 44 acres of credit. Parks will provide updated schedule and cost information on all projects in FY 19 for construction allocation funding beginning in FY 20, based on MDE's Water Quality Revolving Loan Fund cycle timeframes. M-NCPPC and DEP will immediately begin developing a Memorandum of Understanding that details how projects completed by M-NCPPC, funded with WQPF dollars, with MS4 credits going to DEP will be handled. M-NCPPC will document all MS4 credits created through these projects in accordance with MDE requirements to obtain State approval for the permit credits. M-NCPPC recognizes that stream restoration projects with relatively small segments located on parks property may be selected by the County's DBM contractor. If selected by the County's contractor and approved by DEP with concurrence by M-NCPPC, the contractor will need to obtain a Park Permit and comply with all M-NCPPC requirements

DEP will provide quarterly program status updates to the Council under this contract. The annual work program will be based on permit requirements, an assessment of priority needs, community input including feedback from a stormwater program advisory group, and partnership agreements.

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. The FY20 appropriation will be determined as part of the FY20 Capital Budget Process. FY19 transfer of \$49,000 in Long-Term Financing from SM Retrofit- Roads (No. 801300), \$7,387,000 in Long-Term Financing from SM Retrofit: Countywide (No. 808726), and \$3,121,000 in Long-Term Financing from Misc Stream Valley Improvements (No. 807359).

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



Misc Stream Valley Improvements (P807359)

Category	Conservation of Natural Resources	Date Last Modified	01/11/19
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	6,981	4,431	-	2,550	700	840	470	180	180	180	-
Land	2	2	-	-	-	-	-	-	-	-	-
Site Improvements and Utilities	1	1	-	-	-	-	-	-	-	-	-
Construction	16,303	3,863	-	12,440	4,460	6,820	1,160	-	-	-	-
Other	646	646	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	23,933	8,943	-	14,990	5,160	7,660	1,630	180	180	180	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Long-Term Financing	9,579	-	-	9,579	3,279	6,300	-	-	-	-	-
State Aid	5,181	3,681	-	1,500	500	500	500	-	-	-	-
Water Quality Protection Bonds	4,172	4,172	-	-	-	-	-	-	-	-	-
Current Revenue: Water Quality Protection	2,676	-	-	2,676	1,086	660	930	-	-	-	-
Stormwater Management Waiver Fees	2,325	1,090	-	1,235	295	200	200	180	180	180	-
TOTAL FUNDING SOURCES	23,933	8,943	-	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 20 Approp. Request	-	Year First Appropriation	FY73
Cumulative Appropriation	28,093	Last FY's Cost Estimate	45,264
Expenditure / Encumbrances	16,773		
Unencumbered Balance	11,320		

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.

COST CHANGE

Project decrease in FY20 is due to updated progress towards meeting MS4 permit and a FY19 transfer of \$3,121,000 in Long-Term Financing to the SM Design/Build/Maintain Contract project (No. 801901, Resolution 18-1185). FY18 cost increase of \$189,000 due to construction bids coming in higher than budgeted.

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 Glenstone, Fallsreach, Flints Grove Stream, and Booze Creek Repairs. CIP project includes funding for stream restoration study of Anacostia Watershed by the Army Corps of Engineers.

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. Project decrease in FY20 is due to updated progress towards meeting MS4 permit and a FY19 transfer of \$3,121,000 in Long-Term Financing to the SM Design/Build /Maintain Contract project (No. 801901, Resolution 18-1185). FY18 cost increase of \$189,000 due to construction bids coming in higher than budgeted.

DISCLOSURES

Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local

plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

COORDINATION

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



SM Retrofit: Countywide

(P808726)

Category	Conservation of Natural Resources	Date Last Modified	01/09/19
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	21,749	18,627	852	2,270	1,910	360	-	-	-	-	-
Site Improvements and Utilities	4	4	-	-	-	-	-	-	-	-	-
Construction	36,730	17,767	2,193	16,770	15,180	1,590	-	-	-	-	-
Other	1,322	1,322	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	59,805	37,720	3,045	19,040	17,090	1,950	-	-	-	-	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Water Quality Protection Bonds	29,264	27,182	362	1,720	1,680	40	-	-	-	-	-
Current Revenue: Water Quality Protection	13,247	8,011	-	5,236	3,826	1,410	-	-	-	-	-
Long-Term Financing	11,024	-	-	11,024	11,024	-	-	-	-	-	-
State Aid	5,210	1,683	2,527	1,000	500	500	-	-	-	-	-
Intergovernmental	1,000	844	156	-	-	-	-	-	-	-	-
Contributions	60	-	-	60	60	-	-	-	-	-	-
TOTAL FUNDING SOURCES	59,805	37,720	3,045	19,040	17,090	1,950	-	-	-	-	-

OPERATING BUDGET IMPACT (\$000s)

Impact Type	Total	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 20 Approp. Request	-	Year First Appropriation	FY87
Cumulative Appropriation	68,900	Last FY's Cost Estimate	78,795
Expenditure / Encumbrances	61,345		
Unencumbered Balance	7,555		

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.

COST CHANGE

Project decrease in FY20 is due to updated progress towards meeting MS4 permit requirements, a FY19 transfer of \$7,387,000 in Long-Term Financing to the SM Design/Build/Maintain Contract project (No. 801901, Resolution 18-1185), and a FY19 supplemental for \$60,000 in Contributions.

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. FY19 supplemental for \$60,000 in Contributions. Project decrease in FY20 is due to updated progress towards meeting MS4 permit requirements and a FY19 transfer of \$7,387,000 in Long-Term Financing to the SM Design/Build /Maintain Contract project (No. 801901, Resolution 18-1185). Acceleration of \$40,000 in Current Revenue: Water Quality Protection from FY20 into FY18 and a funding schedule switch with Water Quality Protection Bonds to fill the gap.

DISCLOSURES

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

COORDINATION

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



Facility Planning: SM

(P809319)

Category	Conservation of Natural Resources	Date Last Modified	11/08/18
SubCategory	Stormwater Management	Administering Agency	Environmental Protection
Planning Area	Countywide	Status	Ongoing

EXPENDITURE SCHEDULE (\$000s)

Cost Elements	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Planning, Design and Supervision	17,211	12,467	164	4,580	750	730	750	790	780	780	-
Other	230	230	-	-	-	-	-	-	-	-	-
TOTAL EXPENDITURES	17,441	12,697	164	4,580	750	730	750	790	780	780	-

FUNDING SCHEDULE (\$000s)

Funding Source	Total	Thru FY18	Rem FY18	Total 6 Years	FY 19	FY 20	FY 21	FY 22	FY 23	FY 24	Beyond 6 Years
Current Revenue: Water Quality Protection	11,504	6,760	164	4,580	750	730	750	790	780	780	-
Current Revenue: General	5,000	5,000	-	-	-	-	-	-	-	-	-
Stormwater Management Waiver Fees	797	797	-	-	-	-	-	-	-	-	-
State Aid	140	140	-	-	-	-	-	-	-	-	-
TOTAL FUNDING SOURCES	17,441	12,697	164	4,580	750	730	750	790	780	780	-

APPROPRIATION AND EXPENDITURE DATA (\$000s)

Appropriation FY 20 Approp. Request	346	Year First Appropriation	FY93
Cumulative Appropriation	14,341	Last FY's Cost Estimate	17,441
Expenditure / Encumbrances	13,111		
Unencumbered Balance	1,230		

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.

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

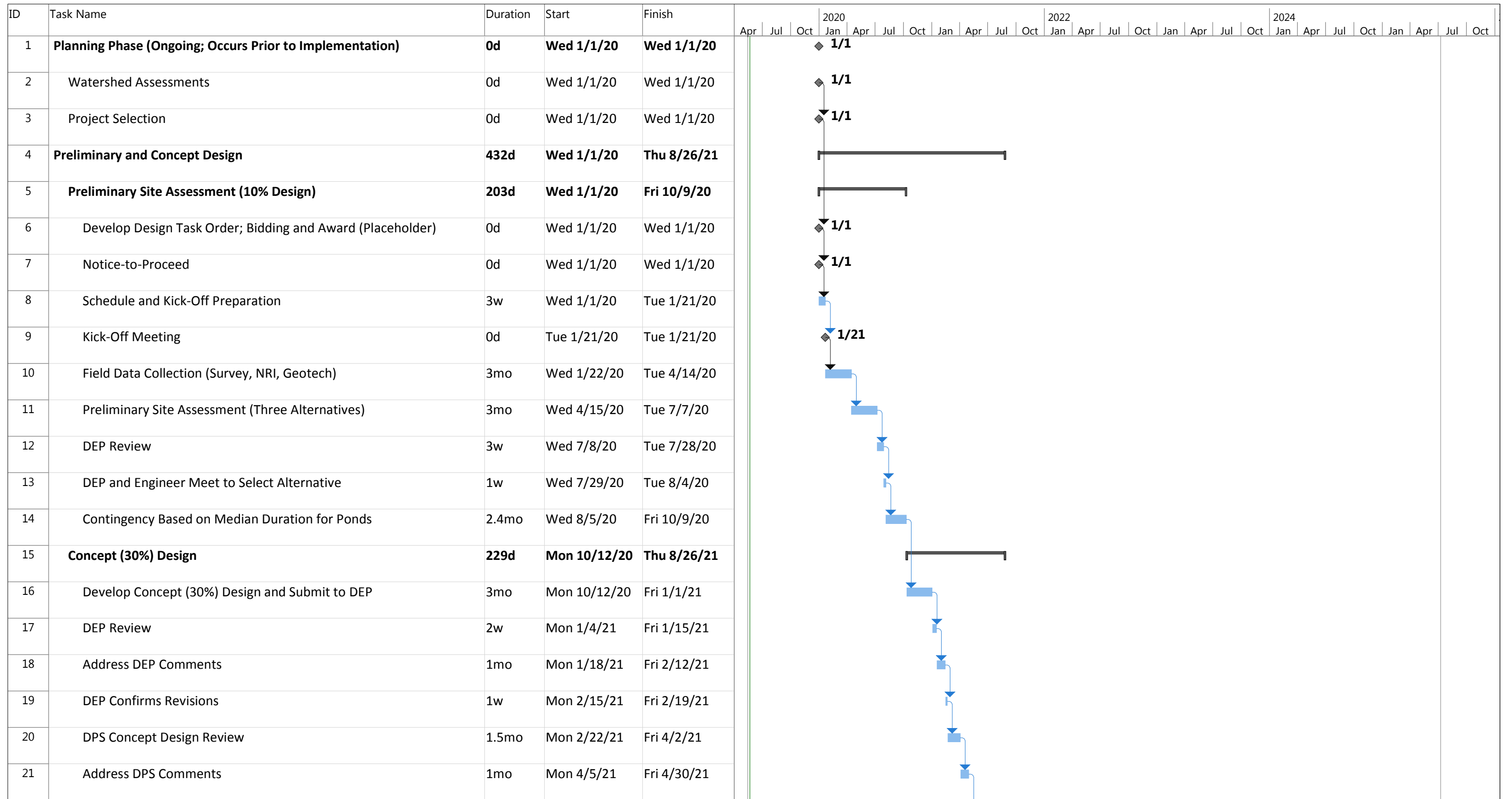
Expenditures in the outyears include expected costs to meet the requirements of the County's next MS4 permit. The scope of the next MS4 permit is subject to negotiation with the Maryland Department of Environment.

DISCLOSURES

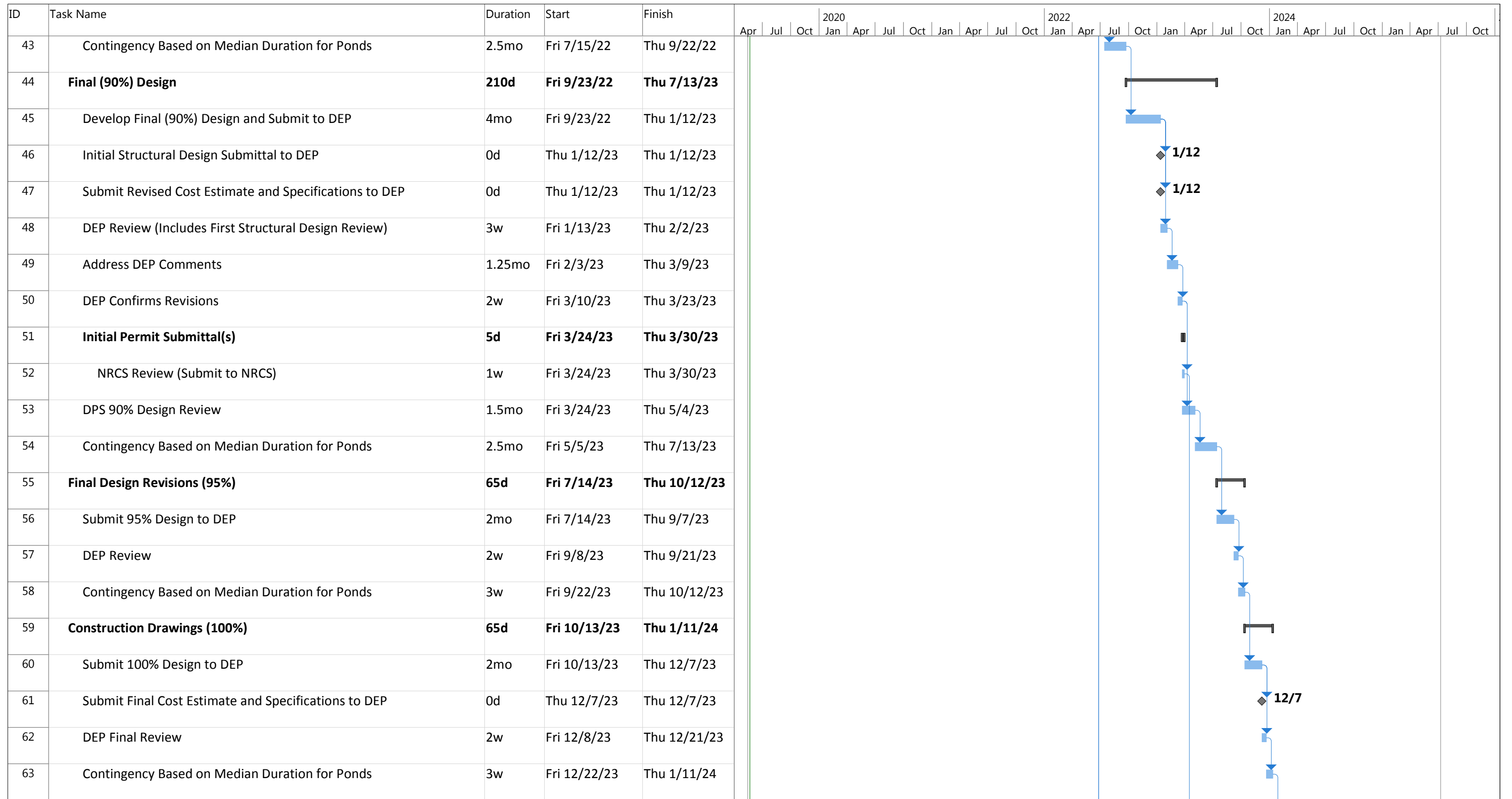
Expenditures will continue indefinitely. The County Executive asserts that this project conforms to the requirement of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

COORDINATION

Maryland-National Capital Park and Planning Commission, U. S. Army Corps of Engineers, Washington Suburban Sanitary Commission, Department of Transportation, Montgomery County Public Schools, 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).



Example Schedule for SWM Pond Retrofits With Contingency Durations	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			



Example Schedule for SWM Pond Retrofits With Contingency Durations	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			



Example Schedule for Stream Restoration With Contingency Durations	Task		Project Summary		Manual Task		Start-only		Deadline	
	Split		Inactive Task		Duration-only		Finish-only		Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
	Summary		Inactive Summary		Manual Summary		External Milestone			

Appendix C. Financial Capacity

MONTGOMERY COUNTY DRAFT SUBMITTAL 5-30-2019			
Financial Capacity Spreadsheet			
1	County/City Name	Montgomery County, MD	
2	Cost As A Percent Of Household Income		
2a	Median Household Income (MHI)	\$	103,178
2b	Total Number Of Households In Jurisdiction (H_{total})		369,242
2c	Average Annual Cost For Public Stormwater Related Management Programs (TAC_{storm})	\$	37,966,966.00
2d	Annual Cost For Public Stormwater Related Management Programs Per Household (HC_{storm})	\$	102.82
2e	% Of MHI Spent On Public Stormwater Related Management Programs ($\%MHI_{storm}$)		0.10%
2f	Total Annual Stormwater Remediation Fee Per Household	\$	112.90
2g	% Of MHI Spent Annually On Stormwater Remediation Fee ($\%MHI_{fee}$)		0.11%
3	Cost Of Impervious Surface Restoration As A Percent Of Household Income		
3a	Total In Previous Permit Term Spent On The Impervious Surface Restoration Plan (ISRP)	\$	147,160,086.00
3b	Average Annual Cost Of The ISRP During The Previous Permit Term (TAC_{ISRP})	\$	18,395,010.75
3c	Annual Cost Of The ISRP Per Household During The Previous Permit Term (HC_{ISRP})	\$	49.82
3d	% Of MHI Spent On The ISRP During The Previous Permit Term ($\%MHI_{ISRP}$)		0.05%
3e	Total Projected Cost For Restoration Portfolio	\$	77,979,678.00
3f	Projected Annual Cost For Restoration Portfolio (TAC_{Rest})	\$	12,996,613.00
3g	Projected Annual Cost For Restoration Portfolio Per Household (HC_{Rest})	\$	35.20
3h	% Of MHI Spent On Projected Cost Of Restoration Portfolio ($\%MHI_{Rest}$)		0.03%
4	Cost For Low-Income Residential Customers As A Percent Of Household Income		
4a	Percentage Of Households With Annual Income <\$25,000		9.40%
4b	% Of Income For Low Income Households Spent On Public Stormwater Related Management Programs ($\%LHI_{storm}$)		0.41%
4c	% Of Income For Low Income Households Spent On Stormwater Remediation Fees ($\%LHI_{fee}$)		0.45%
4d	% Of Income For Low Income Household Spent On The ISRP ($\%LHI_{ISRP}$)		0.20%
4e	% Of MHI For Low Income House Spent On Projected Cost Of Restoration Portfolio ($\%LHI_{Rest}$)		0.14%
5	Key Socioeconomic Indicators		
5a	Percentage Unemployed		5.40%
5b	Median Household Income	\$	103,178
5c	Percent Of Individuals (All People) Below Poverty Level		4.80%
6	Financial Capacity Indicators		
6a	Debt Indicators	Bond Rating – GO ¹ Bonds	AAA
6b		Bond Rating – Revenue Bonds	Aaa
6c		Net Debt As A % Of FMPV ²	2.33%
6d	Financial Management Indicators	Property Tax Revenues As % Of FMPV	0.70%
6e		Property Tax Revenue Collection Rate	1.03%

Notes:

1. GO = General Obligation
2. FMPV = Full Market Property Value

Moody's	Aaa
	Aa
	A
	Baa
	Ba
	B
	Caa
	Ca
	C
S&P	AAA
	AA
	A
	BBB
	BB
	B
	CCC
	CC
	R
	SD
	D

Parameter from 2017 ACS	2017 Value
National Average MHI	\$ 57,652.00
National Percent Unemployed	4.1%
National Percent of Individuals Below Poverty Level	14.6%

Appendix D. July 18, 2018 Letter from Patty Bubar to Lee Currey



DEPARTMENT OF ENVIRONMENTAL PROTECTION

Isiah Leggett
County Executive

Patty Bubar
Acting Director

July 18, 2018

Mr. Lee Currey, Director
Water and Science Administration
Maryland Department of the Environment
1800 Washington Boulevard
Baltimore, Maryland 21230

Dear Mr. Currey:

The purpose of this letter is to provide an update on Montgomery County's current fiscal status and the implications for the Municipal Separate Storm Sewer System (MS4) permit standard of Maximum Extent Practicable (MEP). As discussed at our meeting on March 22, our County Executive has determined he would not recommend an increase to the Water Quality Protection Charge (WQPC) in FY19 for the first time since 2005, and the county has reached its maximum capacity to issue bonds to pay for stormwater restoration work without increasing the WQPC. The County is also pursuing a new contract mechanism with the goal of providing significant cost efficiencies in the delivery of stormwater capital projects.

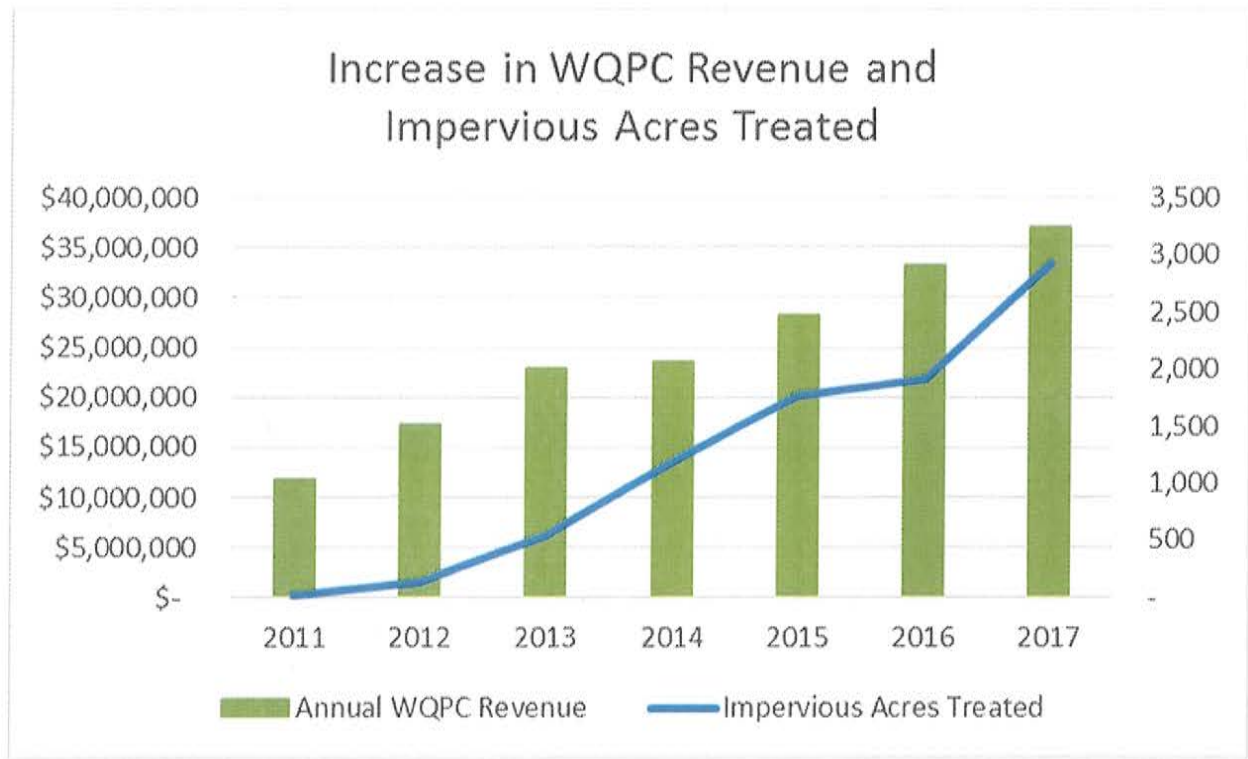
When the permit was issued in 2010, it was the first of its kind and included an aggressive requirement to restore twenty percent of the county's uncontrolled impervious surface. The county immediately got to work on achieving this challenging goal, despite protracted litigation initiated by third parties that remanded the permit to the Maryland Department of the Environment (MDE) before it was ultimately found to be valid in March 2016. The county has continued to work toward the restoration goal even after the permit expired February 2015, and in April 2018, the county signed a consent decree with MDE committing to fulfill the restoration requirement by December 2020.

While the county remains committed to preventing stormwater pollution and continuing our mutual efforts through the framework provided by the consent decree, the need for a consent decree highlights the challenges associated with this important work. The impacts to the environment from urban stormwater runoff are the result of decades of development and its resulting commercial, industrial and residential activities. These impacts simply cannot be reversed in a single permit term. While Montgomery County stands ready to achieve the restoration goal in the timeframe prescribed by the consent decree, it is becoming clear that county leadership has significant concerns about the continually rising costs of stormwater management and that the county may have reached MEP for the stormwater program.

Mr. Lee Currey
July 18, 2018
Page 2

The U.S. Environmental Protection Agency (EPA) has intentionally not provided a precise definition of MEP, however a number of factors for consideration in determining MEP are laid out in the 1999 preamble to the Phase II MS4 rule. A preliminary evaluation of those factors has identified three that are significant indicators that Montgomery County has reached its maximum program capacity: implementation schedules, current ability to finance the program, and capacity to perform operation and maintenance.

Implementation Schedules: Several challenges were not well understood when the County began work on the ambitious impervious surface restoration (ISR) goal set in the 2010 permit, and these challenges delayed implementation schedules and contributed to the County's inability to meet the 2015 deadline. The ISR goal set in the 2010 permit was a significant increase over past permits, and the first two years of the permit cycle were spent developing a comprehensive implementation plan, securing funding, hiring new staff and increasing contracting capacity. The County is continuously exploring new contracting approaches to improve future program performance, however the sheer scope of restoration work being required in the Chesapeake Bay Watershed has increased project costs as MS4 jurisdictions compete for qualified contract support. Permitting requirements at the federal, state and local levels delayed project schedules by failing to recognize the fundamental difference between land development projects, which must be closely regulated to avoid environmental impacts, and restoration work, which results in a net improvement to the environment. Older stormwater management facilities present opportunities for retrofits, but the areas downstream of these facilities have since been developed and retrofitting them would often result in their reclassification as high hazard dams, triggering an additional regulatory framework. The County's rate of progress toward achieving the restoration goal has shown that approximately 10 percent ISR can be completed in 5 years. Thus, the rate of progress envisioned when the permits were first issued was at least twice as high as what we have found to be maximally practicable.

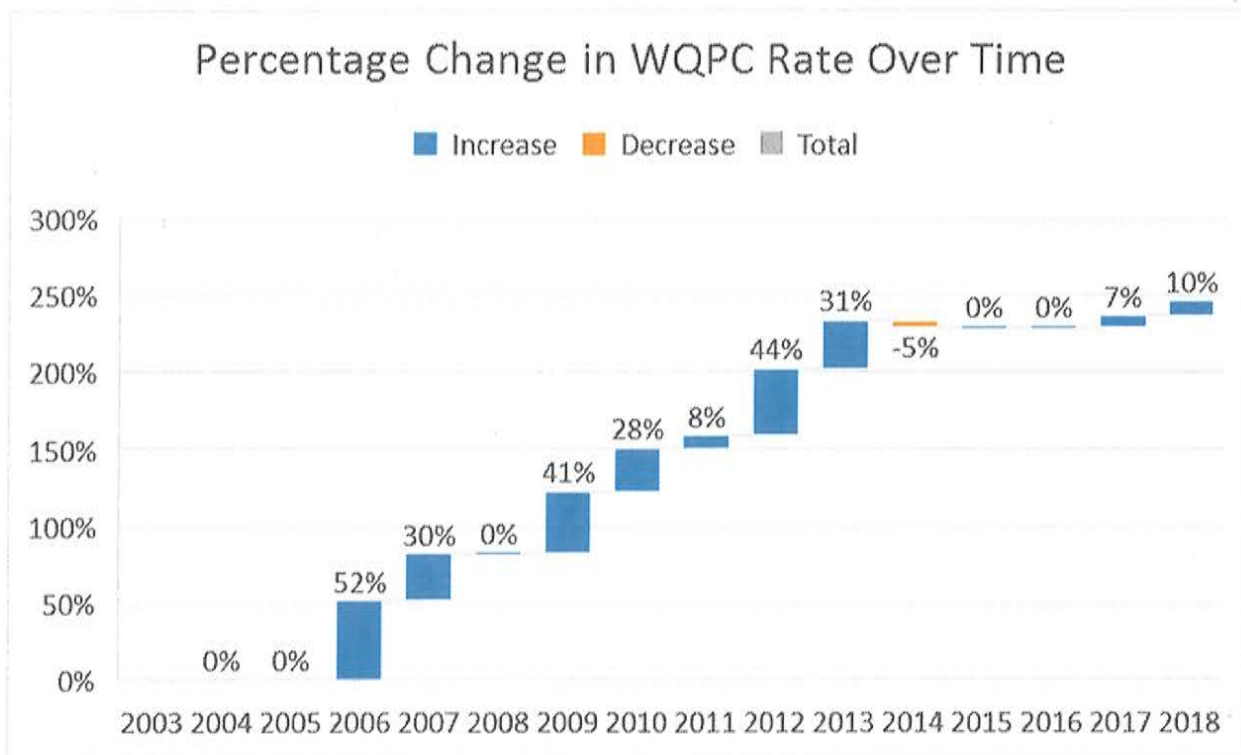


Current Ability to Finance the Program: The WQPC, which is an excise tax in Montgomery County dedicated to funding the water quality protection measures needed to ameliorate the environmental impact of stormwater runoff, was established in 2003 and has increased an average of 16% per year for the past 15 years or a total of 247% over the lifetime of the WQPC. In 2003, the typical homeowner paid \$12.75 while a nonresidential property paid about \$231 per impervious acre per year. Today, the typical homeowner pays about \$104 and a nonresidential/commercial property pays almost \$1,900 per impervious acre per year. The amount of collections has had to increase by an average of \$2.46M per year to fund the activities required under the MS4 permit.

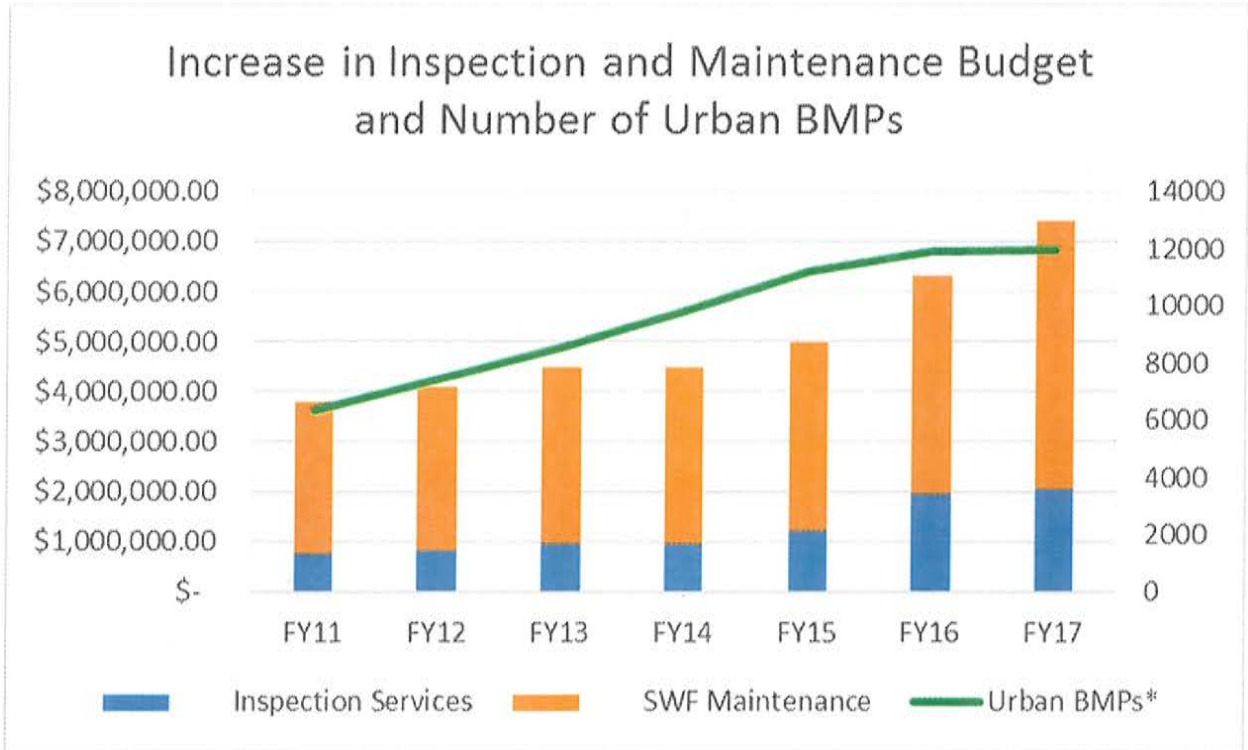
While the annual burden on homeowners is still manageable for most, and our program has financial hardship exemptions in place, there are residents who do not qualify for the exemptions and for whom increases in the annual charge are a burden to afford. Many HOAs have complained that the annual increases in the WQPC surpass the percent of increase in HOA dues allowed under their bylaws, which makes the continually increasing charges unaffordable for these communities. Many commercial properties have protested the WQPC as well. In 2015, the County lost a lawsuit brought on by a business owner that challenged the validity of the Charge as a fee as determined by the State. In order to continue the WQPC, the County had to enact emergency legislation to modify the WQPC law to make the WQPC an excise tax. There

are two current and pending lawsuits against the County's WQPC. One is awaiting action by the Maryland Special Court of Appeals and the other was recently dismissed by the Montgomery County Circuit Court. These lawsuits are being brought by property owners who have taken issue with the amount of WQPC they are charged and are challenging State law and sediment and stormwater permit requirements to which they are already subject in an attempt to invalidate the WQPC.

Since 2010, the County has expended more than \$200 million to build and maintain a program to meet the additional 20% ISR goal. Since 2010, even at large rates of increase, the WQPC has collected about \$185 million, which was not enough to fund all of the program's expenses. In addition to increasing the WQPC dramatically, the County has also issued two stormwater municipal bonds in the amount of \$84 million. The WQPC revenue funds personnel, operating and overhead costs, debt service, and meet the County's fund balance policies. The County will be repaying the stormwater bonds for the next 18 years (the last bond was issued in 2016) and will soon incur additional debt if it receives anticipated loans from the Maryland Water Quality Financing Administration. The county has done all it can to meet the fiscal demands of the MS4 permit. Both the County Executive and County Council have stated that continued increases to the WQPC will erode community support for the stormwater program, regardless of the associated water quality and environmental improvements.



Capacity to Perform Operation and Maintenance: The County's inspection and maintenance program has almost doubled in size, growing from more than 6,000 in FY11 to almost 12,000 facilities in FY17. Maryland's 2007 Stormwater Management Act and its ESD to the MEP standard has resulted in an explosion of ESD facilities being installed. The majority of development in Montgomery County is infill development, so most of these new ESD facilities have been installed on single family residential (SFR) lots. The County began obtaining easements that allow access to inspect new facilities in 2017, but it remains a challenge to access, inspect and require maintenance of ESD facilities that were installed on SFR lots between 2007 and 2017. The nature of the inspection program has also had to evolve to include educating individual home owners on their responsibilities, something that requires outreach and education along with inspection. Furthermore, the maintenance of vegetated ESD practices is significantly more expensive than maintenance of structural facilities, averaging \$1,800/yr for ESD and \$600/yr for structural. Combined with the exponential increase in ESD practices and increased maintenance costs for aging infrastructure, the proportion of the DEP budget that must go to inspections and maintenance increases each year. The inspection program is continually having to adapt to include new and alternative practices such as stream restoration and tree planting, and it takes time to understand how to inspect and maintain these new practices, as well as have the right staff and contracts implemented. In addition, many of the approved practices from the 1986-2000 eras, are reaching the end of their life span and requiring replacement of infrastructure (risers, principle spill way pipes) and dredging of accumulated material. While the County has worked to ensure that major repairs are also addressed during restoration projects, it is not always practicable. Jurisdictions must ensure there are sufficient resources for both restoration and major repairs. The County's WQPC revenue, bonds, and loans are used to finance the activities for restoration, inspection, maintenance, and major structural (infrastructure) repair and dredging.



*Note: The number of Urban BMPs reported in FY17 is artificially low because there is a lag between the handoff of the new BMPs from DPS to DEP during which drainage areas are delineated and impervious acres treated are calculated. BMPs are not reported for MS4 credit until these calculations are done.

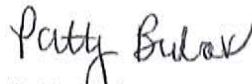
In addition to the factors described above, MDE’s approach to MS4 permitting and compliance has also impacted the scope of MEP by setting up competing priorities for compliance. By choosing to make ISR the primary standard by which MS4 performance is measured, MDE has prevented MS4s from focusing entirely on water quality improvements and implementing practices that address pollutants directly. MDE has chosen to be more stringent than other states in the Chesapeake Bay Watershed by not allowing Maryland MS4s access to the same water quality credits that are approved by EPA and available to MS4s in other states. These include the stream restoration protocols, nitrogen reductions for connecting septic systems to sanitary sewer, and retrofits of older stormwater management facilities to provide channel protection volume. This arbitrary exclusion of credit may have contributed to Maryland falling behind other states in making progress towards Bay restoration goals.

Montgomery County has made great strides in building a robust stormwater program, restoring over 5,000 impervious acres since the issuance of our second-generation permit in 2001, having a dedicated funding source in place since 2003, and having a comprehensive inspection and maintenance program. We stand ready to achieve the third-generation restoration goal in the timeframe prescribed by the consent decree and to meet the SEP requirement. We

Mr. Lee Currey
July 18, 2018
Page 7

have also budgeted to continue our ISR work at the rate of 5 percent (approximately 1,000 additional acres) over the next permit cycle. However, even with the leadership and commitment of elected officials, the imposition of significant additional requirements will jeopardize the entire program by continuing to increase compliance costs and undermining the support we have worked so hard to gain from our residents and elected officials. We believe we have shown that Montgomery County has reached its maximum program capacity as EPA defined in 1999. We welcome the opportunity to discuss this MEP assessment further with you and your staff.

Sincerely,



Patty Bulbar
Acting Director

PB:kb