Maryland
Department of
the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

APR 10 2019

Mr. Joseph J. Siemek, P.E.
Director of Public Works
Harford County
212 South Bond Street, 3rd Floor
Bel Air, MD 21014

Dear Mr. Siemek:

This letter acknowledges the Maryland Department of the Environment's (Department) receipt, on December 20, 2018, of Harford County's 2018 Financial Assurance Plan (FAP) and 2018 Watershed Protection and Restoration Program (WPRP) Annual Report as required by the Annotated Code of Maryland.

Chapter 124 of the Acts of the General Assembly of 2015 requires the Department to make a determination regarding the sufficiency of funding in each FAP filed with the Department. The first FAP, filed in 2016 by the County, was found to demonstrate sufficient funding for the 2-year period immediately following the filing date of the FAP. The second and subsequent FAP, is sufficient if it demonstrates that the County has the dedicated revenues, funds, or sources of funds to meet, for the 2-year period immediately following the filing date of the FAP, 100% of the projected costs of compliance with the impervious surface restoration plan (ISRP) requirements of the County's National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Separate Storm Sewer System (MS4) permit.

After reviewing Harford County's 2018 FAP, the Department has determined that the County has demonstrated that it has sufficient funding in its FAP. The Department has provided more detailed comments in an attachment for the County's information and use. The County's next WPRP Annual Report will be due in coordination with its next MS4 Annual Report, and its FAP will be due in coordination with the 2020 MS4 Annual Report.

The Department recognizes the substantial effort required in developing these FAPs and WPRP Annual Reports, and looks forward to working with Harford County on this very important environmental program for improving local water resources and Chesapeake Bay. If you have any questions regarding this review, please contact me at 410-537-3567 or Jennifer M. Smith at 410-537-3561, or jenniferm.smith@maryland.gov.

Sincerely,

D. Lee Currey
Director, Water and Science Administration

cc: Jennifer M. Smith, P.E., Program Manager, Sediment, Stormwater, and Dam Safety Program
Christine Buckley, Harford County Department of Public Works

Attachment

Maryland Department of the Environment's (MDE) Review of Harford County's 2018 Financial Assurance Plan (FAP)

Plan Condition	MDE Assessment and Recommendations
Demonstration of Sufficient Funding	• The County submitted its FAP to MDE on December 20, 2018 satisfying State reporting requirements. • Harford County held the required public hearing on October 9, 2018. • The County also submitted to MDE County Council Resolution NO. 013-18, providing approval of the County's FAP. • The County's FAP demonstrates sufficient funding for the projected ISRP costs for the next two-year period. The County's revenue represents 102% of the costs (i.e., $23.18M in revenue versus $22.75M in cost).
Actions to Meet Permit Requirements ("All Actions" worksheet)	• Harford County provided a narrative that included capital budget projections for implementing the Municipal Separate Storm Sewer System (MS4) permit, impervious surface information, and staff costs. • The County's impervious surface baseline is 11,094 impervious acres with little or no water quality treatment. The County's current permit requires that 20% of that area, or 2,218 impervious acres, be restored during the course of its permit term. The 2,218 impervious acre requirement is also known as the Impervious Surface Restoration Plan (ISRP) requirement. • The County provided specific types of best management practices (BMPs) in the "All Actions" worksheet. The worksheet includes projects completed in Fiscal Year (FY) 2018 and those that are expected to be completed between FY2019 and FY2023. All BMPs chosen by the County are approved in MDE's Accounting Guidance. • The County applied restoration implemented beginning in FY2009, the year the previous permit expired, to the ISRP requirement. Accordingly, the County revised its worksheet to designate FY2010–FY2020 as the permit term. This change is acceptable. • The County proposed that it will meet its ISRP requirement, assuming that 1,331 acres of treatment (i.e., 60% of the restoration requirement) is achieved by trading with its wastewater treatment plants (WWTPs) in an amount equivalent to the impervious surface pollutant reductions. The County stated that trading will be temporary while the County continues to complete restoration projects. • Water Quality Trading Program regulations, Code of Maryland Regulations (COMAR) 26.08.11, became effective on July 16, 2018. The Department supports nutrient trading with the wastewater sector to achieve restoration goals; however, the current permit must be modified accordingly. The permit modification process will require time and effort; the Department recommends that the County initiate this process as soon as possible so that the trading option may be added to the County's MS4 permit before the end of the term in December 2019. • The County expects to have completed stream restorations for 441 acres of impervious surface restoration by the end of the current permit term. From FY2010–FY2017, the County completed seven stream restoration projects to

Plan Condition	MDE Assessment and Recommendations
Actions to Meet Permit Requirements (Cont.)	restore 94 acres of impervious surface, and three stream restorations for 86 acres in FY2018. The County expects to complete 12 stream restorations within the next two years to restore an additional 262 acres. One project is currently under construction, designs are complete for four, and seven projects are currently under design. • MDE again suggests that the County consider the practicality of relying heavily on stream restoration within a short time period. Numerous factors (e.g., monitoring requirements, weather, stream closures) may impact the construction process. • From FY2010 to FY2017, the County completed 11 retrofits of stormwater facilities for 54 acres of impervious surface restoration. In FY2018, the County completed three projects to restore six acres and in FY2019–FY2020, the County plans to complete seven additional projects to restore 29 acres. Past implementation demonstrates that the County expects to complete restoration projects at an accelerated rate in FY2019/FY2020. • Retrofit projects scheduled for completion from FY2019 onward are noted as a general stormwater retrofit category. The County should provide a specific BMP type when this information is available. • Annual BMPs are properly accounted for under Operational Programs. The County included an average permit term credit of 308 impervious acres per year for septic pumping, or 14% of its ISRP requirement. The County calculated acres based on the average annual volume of 10 million gallons delivered to the WWTP per year by septic haulers. Based on MDE's MS4 Accounting Guidance, 308 acres represents 10,266 individual septic systems pumped every year. • As stated in the 2016 FAP review, the County must provide specific locations of the systems pumped according to MDE's MS4 geodatabase as verification of these credits. The estimated loads transferred by septic haulers will not be sufficient to receive credit. The County should be prepared to provide additional BMPs should the level of septic pump-out implementation fall short of annual projections. • In the "All Actions" worksheet, $0 cost was reported for septic pumping. If a project has no reported cost, the County needs to include the reason (e.g., property owner expense, grant funded). • All required fields have been populated. The County added additional "Status" categories (i.e., Under Design, Design Complete). • Formulas for two-year, five-year (or permit term), and all-year sum totals are correct. • The five-year (or permit term) and all-year subtotals in the "All Actions" worksheet include the correct subtotals for impervious acres restored from the Specific Actions ("Spec Actions") worksheet.

MDE's Review of Harford County's 2018 FAP

Plan Condition	MDE Assessment and Recommendations
Annual and Projected Costs ("All Actions" and "ISRP Cost" worksheet)	• The data are complete for annual and projected costs for FY2018 through FY2023. All cost formulas for two-year, five-year (or permit term), and all-year sum totals are correct. • The restoration cost per acre for completed operational and capital projects (FY2010–FY2017) is $14,389. The County's cost of projected capital and operational projects in FY2019 and FY2020 is $30,510 per acre (i.e., a 112% increase over FY2010–FY2017 costs) and for FY2010 through FY2020 is $33,045 per acre. Taking the cost saving option of nutrient trading into account, restoration cost per acre for the permit term (i.e., FY2010–FY2020) is $13,434 per acre. • The five-year (or permit term) and all-year subtotals in the "All Actions" worksheet include the correct subtotals for costs from the Specific Actions worksheet. • The "All Actions" cost for FY2019–2020 is $18,608,000 while the reported ISRP Cost for the same period is $22,750,000.
Annual and Projected Revenues ("ISRP Revenue" worksheet)	• The data are complete for annual and projected revenues for FY2018 through FY2023 and the worksheet formulas are correct. • The reported ISRP revenue equals the percent of funds directed toward the ISRP. • The reported revenue for the next two fiscal years exceeds the reported cost for the next two fiscal years (i.e., 102% of the cost).

Funding Sources	• The data are complete for applicable sources of funds for FY2018–FY2023 and the worksheet formulas are correct.
	• Sources of funds for the next two years include:
	  o General Obligation Bonds = $12.2M
	  o State Grants = $7.7M
	  o General Funds = $2.8M
	  o Federal Grants = $0.9M
	  o Recordation Tax = $0.8M
	  o Total Funding Sources = $24.4M
	• The largest sources of funds are general obligation bonds and state funded grants. For FY2018–FY2020, $18M and $12.8M were reported for bonds and State and federal grants, respectively. For FY2021–FY2023, $19.05M and $12M were reported for bonds and grants, respectively. No loans were reported.
	• The total funds for each fiscal year exceed the annual revenue appropriated for ISRP (i.e., appropriated annual ISRP revenue is 95% of the funding source or $23,180,000).

Plan Condition	MDE Assessment and Recommendations
Specific Actions and Expenditures from Previous Fiscal Years ("Spec Actions" worksheet)	• The reported actions reflect completed restoration projects and the BMP codes represent MDE approved BMPs. • The reported BMPs are site specific as required and the formulas in this worksheet are correct. BMPs are not duplicated in the "All Actions" worksheet. • In the Specific Actions worksheet, $0 cost was reported for septic pumping. If a project has no cost, the County needs to include the reason (e.g., property owner expense, grant funded). The County provided this information for septic system upgrades.