



Maryland

Department of
the Environment

Larry Hogan
Governor

Boyd Rutherford
Lieutenant Governor

Ben Grumbles
Secretary

OCT 17 2016

Mr. Jeff Stratmeyer
Acting Director of Public Works
Harford County
212 South Bond Street, 1st floor
Bel Air, MD 21014

Dear Mr. Stratmeyer:

This letter acknowledges the Maryland Department of the Environment's (MDE) receipt of Harford County's 2016 Financial Assurance Plan (FAP) and 2016 Watershed Protection and Restoration Program (WPRP) Annual Report as required by the Annotated Code of Maryland. MDE received an e-mail from the County that included both reports as well as additional information on June 29, 2016.

Chapter 124 of the Acts of the General Assembly of 2015 requires MDE to make a determination regarding the sufficiency of funding in each FAP filed with the Department. For any FAP filed on or before July 1, 2016, funding in the FAP is sufficient if the FAP demonstrates that the County or municipality has dedicated revenues, funds, or sources of funds to meet, for the 2-year period immediately following the filing date of the FAP, 75% of the projected costs of compliance with the impervious surface restoration plan (ISRP) requirements of the County or municipality under its National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Separate Storm Sewer System (MS4) permit over that 2-year period. After reviewing Harford County's 2016 FAP MDE has determined that the County has demonstrated that it has sufficient funding in its FAP.

Below are more details regarding MDE's findings:

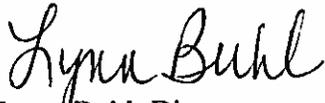
- The County indicated that 66% of its ISRP revenue for the next two years comes from its local budget and bonds, while 34% comes from external grant sources. The County will need to be prepared to increase its local budget and bonds should external grant sources decrease in future years.
- The County proposed 940 acres of treatment, or 41% of the total impervious acres restored, by improving the performance of its publicly owned treatment works (POTWs) in an amount equivalent to the impervious area pollutant reductions. As a matter of policy, MDE supports this option as a cost-effective means for achieving pollutant reductions and is committed to addressing how regulatory process requirements, including permit language and public participation, can be satisfied under this scenario. Until formal processes are in place, the County should continue to explore all currently approved best management practices (BMPs) for meeting the ISRP requirements.

- The County proposed numerous restoration options that incur little or no additional cost to its budget, including septic pumping, septic upgrades, and septic connections to POTWs. The County should also encourage more low-cost homeowner BMPs including rain barrels, rain gardens, and tree planting. These affordable BMP options provide great opportunities for citizen outreach and ISRP implementation.

MDE has provided additional review comments in an attachment for the County's information and use. Please provide a response to MDE's comments in subsequent FAPs and WPRP Annual Reports. MDE requests that WPRP Annual Reports be submitted in coordination with the NPDES MS4 Annual Reports, beginning on December 30, 2017. The County's next FAP will be due in coordination with its December 30, 2018 Annual Report.

MDE recognizes the substantial effort required to create the FAP and WPRP Annual Report. Harford County is commended for its effort in developing and implementing this very important environmental program for improving local water resources and restoring the Chesapeake Bay. If you have any questions regarding this review, please contact me at 410-537-3543 or Brian Clevenger at 410-537-3554, or brian.clevenger@maryland.gov.

Sincerely,



Lynn Buhl, Director
Water Management Administration

cc: Brian Clevenger, Program Manager, Sediment, Stormwater, and Dam Safety Program

Attachment

**Maryland Department of the Environment
Harford County's 2016 Financial Assurance Plan
September 2016**

FAP Condition	MDE Assessment and Recommendations
<p>Demonstration of Public Participation and Sufficient Funding</p>	<ul style="list-style-type: none"> • Harford County held the required Financial Assurance Plan (FAP) public hearing on June 14, 2016 and submitted "Proceedings of Public Hearing" to the Maryland Department of the Environment (MDE). • The County submitted its FAP to MDE on June 29, 2016 satisfying State reporting requirements. • The County also submitted to MDE County Council Resolution NO. 014-16, providing approval of the County's FAP. • The County's FAP demonstrates sufficient funding for the projected Impervious Surface Restoration Plan (ISRP) costs for the next two-year period. The County's revenue represents 113% of the costs (i.e., \$22.9 million in revenue versus \$20.3 million in cost).
<p>ISRP Baseline</p>	<ul style="list-style-type: none"> • Harford County's impervious area analysis indicated that there are 9,413 impervious acres in the County with little or no stormwater management. The County's current permit requires that 20% of that area, or 1,883 impervious acres, be restored during the course of its permit term (i.e., 9,413 untreated acres * 20% treatment requirement = 1,883 acres). The 1,883 impervious acre requirement is also known as the ISRP baseline. MDE's review of the County's impervious area analysis is pending at this time.
<p>Actions to Meet Permit Requirements ("All Actions" worksheet)</p>	<ul style="list-style-type: none"> • Harford County provided a narrative that included capital budget projections for implementing the Municipal Separate Storm Sewer System (MS4) permit, impervious area information, and staff costs. • The County provided specific types of best management practices (BMPs) in the "All Actions" worksheet. Some BMPs were already assigned capital improvement project (CIP) numbers and were under design or construction. • The County proposed that it will reach 120% of its ISRP, assuming that 940 acres of treatment, or 41% of the total impervious acres restored is achieved by improving the performance of publicly owned treatment works (POTWs) in an amount equivalent to the impervious area pollutant reductions. Because the County projected restoration activities that would exceed the ISRP requirement by the end of its permit term, the full use of POTW credits may not need to be relied upon as significantly. • The County stated that the re-allocation of pollutant loads would be a temporary measure to allow the County to continue to build program capacity and complete projects within more "realistic timeframes". • MDE is considering how the overachievement in nutrient reduction in the wastewater sector can be utilized by MS4 permittees in characterizing progress toward meeting total maximum daily load (TMDL) goals. As a matter of policy, MDE supports this option as a cost-effective means for achieving pollutant reductions and is committed to addressing how regulatory process requirements, including permit language and public participation, can be satisfied under this scenario. • Until formal processes are in place, MS4s should explore all currently approved BMP options for meeting the ISRP requirements.

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<p>Actions to Meet Permit Requirements</p> <p>("All Actions" worksheet)</p>	<ul style="list-style-type: none"> • The County's discussion of its restoration activities included inconsistent impervious acres analysis in several areas that need clarification, including: <ul style="list-style-type: none"> ○ According to the table on page 5 of the Executive Summary, the County completed 73 acres of restoration from Fiscal Year (FY)2009 to FY2015 and 59 acres from January 1, 2016 through the end of FY2016, totaling 132 acres of completed restoration. ○ The last paragraph on page 5 states that the County completed 182 acres of restoration and used that to determine that it has a balance of 759 acres; correcting the completed acres to 132, the balance becomes 809 acres. ○ In the first table on page 6, the County stated that 175 acres have been restored from FY2009-FY2016. Correcting this number to 132 would leave the plan short of the 941 acres the County proposes to restore with capital projects. ○ The completed CIP table provided in the supplemental materials total 136 acres of restoration. • The County included an average credit of 300 impervious acres per year for septic pumping, or 16% of its ISRP requirement. The County calculated acres based on the average annual volume of 10 million gallons delivered to the POTW per year by septic haulers (the County assumed that 1,000 gallons are removed from each septic system). Based on MDE's MS4 guidance, 300 acres represents 10,000 individual septic systems pumped every year. • The County shall provide specific locations of the systems pumped according to MDE's MS4 geodatabase as validation of these credits. Also, the County should be prepared to provide additional BMPs should the level of septic pump-out implementation fail to meet annual projections. • CIP0027 was itemized in both the "All Actions" and "Spec Actions" worksheets, which may indicate double counting of the BMP; more clarification is needed by the County regarding this BMP. • The County applied restoration implemented beginning in FY2009, the year the previous permit expired, to the 20% requirement. Accordingly, the County revised its worksheet to include two-year totals (FY2017-FY2018) and all years (FY2009-FY2020). This change is acceptable. • MDE requests that the County review the data discrepancies described above and provide clarifications in its next FAP submittal.
<p>Annual and Projected Costs</p>	<ul style="list-style-type: none"> • In the FAP narrative, Harford County estimated a restoration cost of \$55,000 per acre, and stated the remaining required restoration will cost \$96,000,000 over the next four years.
<p>Annual and Projected Costs</p>	<ul style="list-style-type: none"> • The County indicated that it will utilize opportunities to restore acres at no cost to the County, including septic pumping, septic upgrades, septic connections to waste water treatment plants and the re-allocation of loads.

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<p>“All Actions” and “ISRP Costs” worksheet)</p>	<ul style="list-style-type: none"> • Taking these cost saving options into account, the restoration cost per acre for completed projects is \$11,887. Restoration cost per acre for the next two years (i.e., FY2017-FY2018) is \$11,375 per acre. The cost for restoration for the entire term (i.e., FY2009-FY2020) is \$20,354 per acre. • As reported in the “All Actions” worksheet, the total cost of restoration over the entire term (FY2009-FY2020) is \$46,388,000. The total ISRP Cost (minus debt service) is \$48,449,000. While the total restoration cost from the “All Actions” worksheet should equal the ISRP Cost, the County is showing a difference of \$2,061,000. • Based on past progress, the County will need to increase the pace of implementation to fulfill the ISRP requirement. <ul style="list-style-type: none"> ○ The County plans to implement stream restoration for 525 acres of credit over the next 5 years. From FY2011-FY2016, the County completed 73 acres of stream restoration. Of the projected 525 acres, 340 acres are projects that have CIP numbers and an additional 185 acres of stream restorations are scheduled for completion during FY2019-FY2020 with no details provided yet. ○ The County should consider the practicality of relying heavily on stream restoration within a short time period. All stream restoration projects require pre-restoration monitoring for proper design. In addition, monitoring is required to estimate an erosion rate to calculate nutrient and sediment removal credits in accordance with the stream restoration expert panel protocols. Additional factors that may impact the construction process include weather and mandatory stream closure periods for fish spawning and migration. These variables indicate that any project with an anticipated credit for FY2017 should already be in the construction phase. ○ From FY2011-FY2016, stormwater facility retrofits were completed for 51 acres of restoration. The County plans to restore an additional 219 acres over the permit term. Thirty-six acres will be restored through stormwater facility retrofits that already have CIP numbers, expected to be completed between FY2017-FY2018. The County plans an additional 183 acres from FY2018-FY2020, but has not yet provided details. ○ The County plans to claim 15 acres per year (FY2017-FY2020) for tree plantings (1,500 trees per year). The County has taken credit for 7.6 acres through tree plantings over a two-year span (FY2013-FY2014) and did not implement tree planting projects in FY2015 nor FY2016. • The County will need to provide additional information in its next FAP submittal on the scheduling of these projects and specifically how they will be completed before the end of its permit term. Additionally, all discrepancies noted above shall be more fully explained or corrected.

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	<ul style="list-style-type: none"> • The County should encourage more low-cost homeowner BMPs including rain barrels, rain gardens, and tree planting. These affordable BMP options provide great opportunities for citizen outreach and ISRP implementation.
<p>Annual and Projected Revenues</p> <p>("ISRP Revenue" worksheet)</p> <p>Annual and Projected Revenues</p>	<ul style="list-style-type: none"> • Harford County did not report revenue, or sources of funds, under "Past up thru FY2015", stating that this information is beyond the requirement of the statute. • The County deducted the recordation tax revenue from the "Annual Revenue Appropriated for ISRP". The County stated in the narrative that most of the redirected recordation funds will be used to pay debt services for future bonds. The recordation tax is included in the paygo category of the "Fund Sources" worksheet, indicating that this source does not change the total budget. However, the County is increasing its restoration budget with this funding source. This discrepancy will need to be resolved in the County's next FAP submittal, specifically, more clarification is needed regarding the County's decision to remove the recordation tax from the ISRP annual revenue. • The County is appropriating 99% of its fund sources toward the ISRP revenue. The percent of funds directed toward the ISRP would be 100% if the County had not deducted the recordation tax from the "ISRP Revenue" worksheet.
<p>Funding Sources</p> <p>("Fund Sources" worksheet)</p>	<ul style="list-style-type: none"> • Harford County's sources of funds for the next two years include: <ul style="list-style-type: none"> ○ General Obligation Bonds = \$11.8M ○ External Grants = \$8M ○ General Fund = \$3.4M ○ Total Funding Sources = \$23.2M • Because 66% of its ISRP revenue for the next two years comes from its local budget and bonds, while 34% comes from external grant sources, the County will need to be prepared to increase its local budget and bonds should external grant sources decrease in future years. • The County changed the numerator of the "Compare total permit term ISRP costs / total permit term annual sources of funds" percentage to include FY2020, but the denominator of the formula refers to a cell that does not include FY2020 in the sum. • The County's funding sources exceed the projected revenues by \$590,000. For FY2016-FY2019, the projected revenue is \$44,450,000 and the funding source is \$45,040,000. • All of the above noted discrepancies need to be clarified in future FAP submittals.
<p>Specific Actions and Expenditures from Previous Fiscal Years</p>	<ul style="list-style-type: none"> • The "Spec Actions" worksheet correctly reflects completed restoration activities. The reported BMPs are site specific as required and the formulas in this worksheet are correct.

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FAP Condition	MDE Assessment and Recommendations
("Spec Actions" worksheet)	<ul style="list-style-type: none"> • All fields have been populated in the "All Actions" worksheet, except for the cost of a demolition of a townhome community (impervious to pervious land conversion). The County stated that this cost was unavailable. • The County shall provide the cost of all projects in future FAP submittals or a valid justification for omitting this information.
Future WPRP and FAP Reporting	<ul style="list-style-type: none"> • Harford County's next Watershed Protection and Restoration Program (WPRP) Annual Report will be due in coordination with the County's December 30, 2017 MS4 Annual Report. • The County's next FAP will be due in coordination with its December 30, 2018 Annual Report.

