



# Maryland

Department of  
the Environment

Larry Hogan  
Governor

Boyd Rutherford  
Lieutenant Governor

Ben Grumbles  
Secretary

OCT 17 2016

Mr. Vincent J. Gardina, Director  
Baltimore County Government  
Department of Environmental Protection and Sustainability  
111 West Chesapeake Avenue, Room 400  
Towson, MD 21204

Dear Mr. Gardina:

This letter acknowledges the Maryland Department of the Environment's (MDE) receipt of Baltimore 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 July 13, 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 Baltimore 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:

- A public hearing was held on September 13, 2016 and County Council approval was received on September 19, 2016.
- The County proposed 1,000 acres of treatment, or 17% of its ISRP requirement, 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 indicated that a number of practices will be implemented by volunteers (e.g., rain barrels, tree planting, and septic pumping). These affordable BMP options provide great opportunities for citizen outreach and ISRP implementation, and should be maximized.

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 23, 2017. The County's next FAP will be due in coordination with its December 23, 2018 Annual Report.

MDE recognizes the substantial effort required to create the FAP and WPRP Annual Report. Baltimore 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](mailto: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  
Baltimore 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"> <li>• The Maryland Department of the Environment (MDE) received the County's Financial Assurance Plan (FAP) on July 13, 2016, past the due date of July 1, 2016. The submission was certified (signed) by the Administrative Officer, Fred Homan, on July 12, 2016.</li> <li>• The County held a public hearing on September 13, 2016 and approval by the County Council is scheduled for September 19, 2016.</li> <li>• In the future, the County will need to complete the public hearing and approval process by the submission deadline.</li> <li>• The FAP demonstrates sufficient funding (\$89,511,327) for 97% of the projected Impervious Surface Restoration Plan (ISRP) costs for the FY2017-FY2018 period (\$92,370,484), exceeding the requirement for funding of 75% of the ISRP. The County's next FAP submittal must show 100% funding of the ISRP permit requirement.</li> </ul>
<p>ISRP Baseline</p>	<ul style="list-style-type: none"> <li>• Baltimore County's impervious area analysis indicated that there are 30,180 impervious acres in the County with little or no stormwater runoff treatment. The County's current permit requires that 20% of that area, or 6,036 impervious acres, be restored during the course of its permit term (i.e., 30,180 untreated acres * 20% treatment requirement = 6,036 acres). The 6,036 impervious acre requirement is also known as the ISRP baseline. MDE approved the County's impervious area analysis in July, 2015.</li> </ul>
<p>Actions to Meet Permit Requirements  ("All Actions" worksheet)</p>	<ul style="list-style-type: none"> <li>• Baltimore County included an executive summary that indicated the actions required to meet its Municipal Separate Storm Sewer System (MS4) permit.</li> <li>• The County has documented specific or general categories of best management practices (BMPs) for meeting the ISRP baseline.</li> <li>• The two-year and five-year sum totals have been correctly calculated.</li> <li>• The County proposed 1,000 acres of treatment, or 17% of its ISRP requirement, by improving the performance of publicly owned treatment works (POTWs) in an amount equivalent to the impervious area pollutant reductions. In order to make a determination on the acceptability of this strategy, the County should provide more detailed information, including the name(s) of the involved POTW(s) and a calculation of the pollutant load available for re-allocation.</li> <li>• 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.</li> </ul>

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

FAP Condition	MDE Assessment and Recommendations
<p>Annual and Projected Costs</p> <p>("All Actions" and "ISRP Costs" worksheet)</p>	<ul style="list-style-type: none"> <li>• The County reported capital and operating costs for the current and projected fiscal years as required.</li> <li>• The cell formulas appear to be correct.</li> <li>• Completed and projected BMPs have been reported in the appropriate worksheets.</li> <li>• The County has completed 1,203 acres of restoration at a cost of \$9,467 per acre.</li> <li>• The County projected approximately 5,128 acres of restoration over the next two years at a projected cost of \$21,686 per acre. Overall, this results in a net increase of \$12,219 per acre.</li> <li>• Moving forward, the County should only use BMP codes listed in MDE's MS4 geodatabase. For example, under Capital Projects, the County reported sand filters as "SF" instead of the approved code, "FSND".</li> <li>• The County has listed "SWM Conversions/Retrofits" as a proposed capital project in FY2018 totaling 1,200 acres at a cost of \$17,238,000. While exact BMP details are not necessary, the County will need to provide additional specificity as to which categories of BMPs the County is planning to retrofit since the proposed restoration makes up a significant portion of the County's ISRP requirement.</li> <li>• The County indicated that a number of practices will be implemented by volunteers (e.g., septic pumping, tree and rain barrel sales or redevelopment). The County should continue to provide outreach and promote these volunteer efforts and BMPs for additional restoration credit and cost savings.</li> <li>• In future FAP submittals, the County should provide a reason (e.g., volunteer, partnership project) if a listed project has no cost to the County.</li> <li>• The reported total two and five-year costs in the "ISRP Cost" worksheet and the reported two and five year costs under the "All Actions" worksheet are off by approximately \$19 million. The County should provide clarification as to why these numbers do not match.</li> <li>• Annual BMPs (i.e., mechanical street sweeping and regenerative/vacuum street sweeping) are properly accounted for under "Operational Programs". However, septic pumping, which is also an annual BMP, was reported in the "Other" section. Moving forward, please report all annual BMPs under "Operational Programs" so that they may receive the correct amount of restoration credit. Additionally, as verification of these credits, the County shall provide specific information on each septic system that is pumped according to MDE's MS4 geodatabase.</li> <li>• The amount of credit that the County is projecting for stream restoration over the next several years appears to be optimistic when considering the many factors involved with bringing a project from initial concept to final completion. The County should consider the extensive timeline involved in implementing stream restoration projects; for instance, all stream restoration</li> </ul>

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

EAP Condition	MDE Assessment and Recommendations
<p>Annual and Projected Costs</p> <p>("All Actions" and "ISRP Costs" worksheet)</p>	<p>projects require pre-restoration monitoring for proper design. In addition, monitoring is required to estimate an erosion rate for calculating nutrient and sediment removal credits according to the stream restoration expert panel protocols. Additional factors may impact the construction process such as 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.</p> <ul style="list-style-type: none"> <li>• 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.</li> </ul>
<p>Annual and Projected Revenues</p> <p>("ISRP Revenue" worksheet)</p>	<ul style="list-style-type: none"> <li>• Revenues for the ISRP have been reported for FY2015-FY2020 as required by Annotated Code of Maryland, Environment Article § 4-202.1(j)(1)(i)3.</li> <li>• Entries and formulas have been entered correctly.</li> <li>• The County's reported annual sources of funds equals the percentage of funds directed toward the ISRP, demonstrating that the County has sufficient funding to meet its impervious surface restoration ISRP requirement.</li> </ul>
<p>Funding Sources</p> <p>("Fund Sources" worksheet)</p>	<ul style="list-style-type: none"> <li>• The required fields in the sources of funds worksheet are complete. In the future, the County must also indicate the percentage of funds directed towards the ISRP.</li> <li>• Cell formulas have been entered and calculated correctly.</li> <li>• The sum of the County's funding sources for the current fiscal year and the projected years exceed the County's costs, demonstrating sufficient funding for the permit term.</li> <li>• Sources of funds for the next two years include: <ul style="list-style-type: none"> <li>○ Stormwater Remediation Fees = \$55M</li> <li>○ Bonds = \$28M</li> <li>○ General Fund and Bay Restoration Fund = \$5M</li> <li>○ State Funded Grants = \$2M</li> <li>○ Total Funding Sources = \$90M</li> </ul> </li> </ul>
<p>Specific Actions and Expenditures from Previous Fiscal Years</p> <p>("Spec Actions" worksheet)</p>	<ul style="list-style-type: none"> <li>• There is a category of BMP listed that is not included in MDE's MS4 geodatabase. Described as "Rain Barrel Sale" ("RTD"), MDE's corresponding code is "MRWH" (rainwater harvesting). In the future, the County should remain consistent with the MDE's approved BMP codes.</li> <li>• The formulas for calculating the total costs have been entered correctly.</li> <li>• The County reported all costs of completed BMP projects in sufficient detail.</li> </ul>

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

<b>FAP Condition</b>	<b>MDE Assessment and Recommendations</b>
Demonstration of Sufficient Funding	<ul style="list-style-type: none"><li>• Baltimore County's next Watershed Protection and Restoration Program (WPRP) Annual Report will be due in coordination with the County's December 23, 2017 MS4 Annual Report.</li><li>• The County's next FAP will be due in coordination with its December 23, 2018 Annual Report.</li></ul>