



# Maryland

## Department of the Environment

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

Ben Grumbles, Secretary  
Horacio Tablada, Deputy Secretary

**JUN 25 2019**

Mr. Christopher J. Phipps, P.E., Director  
Anne Arundel County Department of Public Works  
2662 Riva Road  
Annapolis, MD 21401

Dear Mr. Phipps:

This letter acknowledges the Maryland Department of the Environment's (Department) receipt of Anne Arundel County's 2018 Financial Assurance Plan (FAP) on February 25, 2019 and the County's 2018 Watershed Protection and Restoration Program (WPRP) Annual Report, received on February 8, 2019, 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 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 Anne Arundel 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 Anne Arundel 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](mailto: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  
Erik Michelsen, Watershed Protection and Restoration Program

Attachment

**Maryland Department of the Environment’s (MDE) Review of  
Anne Arundel County’s 2018 Financial Assurance Plan (FAP)**

Plan Condition	MDE Assessment and Recommendations
<p>Demonstration of Sufficient Funding</p>	<ul style="list-style-type: none"> <li>• Annotated Code of Maryland ENV § 4-202.1(j) requires Phase I Municipal Separate Storm Sewer System (MS4) permitted jurisdictions to submit the Financial Assurance Plan (FAP) every 2 years on the anniversary date of MS4 permit issuance. Anne Arundel County submitted a draft FAP on February 8, 2019 and an approved FAP was submitted to MDE on February 25, 2019.</li> <li>• The County held a public hearing and approved the FAP on February 19, 2019; a copy of the County resolution was submitted with the FAP.</li> <li>• The County’s permit expired on February 11, 2019. The County’s FAP demonstrates sufficient funding to complete 100% of the projected two-year ISRP costs.</li> </ul>
<p>Actions to Meet Permit Requirements   (“All Actions” worksheet)</p>	<ul style="list-style-type: none"> <li>• The plan included an Executive Summary and all required information in the MDE suggested table format.</li> <li>• The County’s FAP reports that its impervious acre requirement, also known as the ISRP baseline, is 4,996 acres. However, in 2015 MDE approved a treatment requirement of 5,862 acres. For this review, the revised baseline requirement of 4,996 acres will be used.</li> <li>• The County reported completing 2,140 acres of restoration, and projected to complete a total of 2,681 acres of restoration by the end of the permit term (i.e., February 11, 2019). While this is only 54% of the revised baseline requirement, the FAP does not report completed nutrient trading for 2,607 acres (that brings the County’s total permit term restoration to 4,996 acres or 100% of the requirement).</li> <li>• The County projects completing 1,871 acres of restoration from fiscal year (FY) 2019 to FY2020 and 6,208 acres by FY2023. These projections include BMPs that are proposed, in planning, and under construction.</li> <li>• All BMP types were correctly entered, including annual operational BMPs. All listed best management practices (BMPs) are approved in MDE’s Guidance or by the Chesapeake Bay Program (CBP) and were realistic to perform in the allotted time.</li> <li>• The County reported BMPs completed between FY2012 and FY2018 on both the “All Actions” and Specific Actions worksheets. However, there was no double counting as the formulae on the “All Actions” worksheet only summed acreages and costs related to permit term BMPs once. Within the worksheet, all formulae and subtotals were used correctly and all required fields were populated.</li> </ul> <p>It should be noted that while a majority of the completed BMPs were reported in both worksheets without discrepancies, there were some BMPs from Specific Actions that were not reported in the “All Actions” worksheet. For example, FY2015 and FY2016 shoreline stabilization</p>

## MDE’s Review of Anne Arundel County’s 2018 FAP

Plan Condition	MDE Assessment and Recommendations
<p>Actions to Meet Permit Requirements (cont.)</p>	<p>reported in “All Actions” was approximately 78 acres and 66 acres, respectively. For the same years and BMP type in Specific Actions, the County reported credit for approximately 78 acres and 96 acres, respectively. For FY2014, the “All Actions” worksheet did not include shoreline stabilization while the Specific Actions worksheet included 70.4 acres.</p>
<p>Annual and Projected Costs (“All Actions” and “ISRP Cost” worksheet)</p>	<ul style="list-style-type: none"> <li>• The total cost per acre for completed restoration efforts over the permit term (i.e., FY2014 to FY2019) was approximately \$25,795. Over the next two years (i.e., FY2019 to FY2020), the total cost per acre increases to approximately \$33,879. The total cost per acre decreases to \$30,528 when restoration costs for FY2014 to FY2023 are considered.</li> <li>• In the “ISRP Cost” table, costs were reported for all required fiscal years and all formulae were used correctly.</li> <li>• For the next two fiscal years (i.e., FY2019 to FY2020), the total ISRP cost is \$110.2 million.</li> </ul>
<p>Annual and Projected Revenues (“ISRP Revenue” worksheet)</p>	<ul style="list-style-type: none"> <li>• Revenues were reported for all required fiscal years and all formulae were used correctly.</li> <li>• Anne Arundel County’s current permit expired on February 11, 2019 (i.e., the middle of FY2019). Accordingly, half of FY2019 and all of FY2020 are projections beyond the permit term.</li> <li>• The FAP demonstrates sufficient funding for 113% of the projected ISRP costs for FY2019 to FY2020 (revenues projected at \$124.7 million with a projected cost of \$110.2 million over the same period).</li> </ul>
<p>Funding Sources (“Fund Sources” worksheet)</p>	<ul style="list-style-type: none"> <li>• Funds were reported for all required fiscal years and all formulae were used correctly.</li> <li>• Sources of funds for the next two years include: <ul style="list-style-type: none"> <li>○ Revenue Bonds = \$70.0M</li> <li>○ Stormwater Remediation Fees = \$44.3M</li> <li>○ State Grants = \$4.3M</li> <li>○ General Fund = \$3.8M</li> <li>○ Capital Improvement Project Recoveries &amp; Other Revenue = \$1.5M</li> <li>○ Miscellaneous Fees = \$0.8M</li> <li>○ Total Funding Sources = \$124.7M</li> </ul> </li> <li>• On average for the next two fiscal years, the County projected that the majority of the annual funds for meeting permit requirements would be from revenue bonds (56%) and stormwater remediation fees (36%).</li> </ul>

**MDE’s Review of Anne Arundel County’s 2018 FAP**

Plan Condition	MDE Assessment and Recommendations
<p>Specific Actions and Expenditures from Previous Fiscal Years                       (“Spec Actions” worksheet)</p>	<ul style="list-style-type: none"> <li>• The County has reported actions that reflect restoration efforts completed from the expiration of its previous permit term up to the end of FY2018.</li> <li>• Actions and expenditures were reported for all required fiscal years and a majority of formulae were used correctly. The formula for total implementation cost of “Operational Programs” excluded costs for FY2014 and FY2015 street sweeping, and cost for FY2016 inlet cleaning. Including these missing costs increases the “Operational Programs” cost from \$2.2 million to \$2.9 million. This increases the total Specific Actions cost from \$41.5 million to \$42.2 million.</li> <li>• As reported by the County, the total cost per acre for Specific Actions completed up to FY2018 was approximately \$19,385 (average cost per acre = \$131,549, excluding \$0 BMPs).</li> </ul> <p>If adjusting for the missing implementation costs for street sweeping and inlet cleaning, the total cost per acre for Specific Actions up to FY2018 increases to \$19,705. The total cost per acre for the permit term (calculated in the “All Actions” worksheet) would increase from \$25,795 to \$26,050.</p> <ul style="list-style-type: none"> <li>• Some of the BMPs and associated acreage that the County implemented as of FY2018 include: 597 equivalent acres of shoreline stabilization; 247 equivalent acres of stream restoration; 222 equivalent acres of septic denitrification; 198 acres of wet ponds; 115 equivalent acres from step pool storm conveyances; and 9 acres of bio-swales.</li> </ul>