



# Maryland

## Department of the Environment

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

Ben Grumbles, Secretary  
Horacio Tablada, Deputy Secretary

APR 10 2019

Mr. Rudolph S. Chow, P.E., Director  
Baltimore City  
Department of Public Works  
200 Holliday Street  
Baltimore, MD 21202

Dear Mr. Chow:

This letter acknowledges the Maryland Department of the Environment's (Department) receipt, on December 27, 2018, of Baltimore City'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 City, 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 City 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 City's National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Separate Storm Sewer System (MS4) permit.

After reviewing Baltimore City's 2018 FAP, the Department has determined that the City has demonstrated that it has sufficient funding in its FAP. The Department has provided more detailed comments in an attachment for the City's information and use. The City'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 Baltimore City 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  
Kimberly L. Grove, P.E., Chief, Office of Compliance and Laboratories

Attachment

**Maryland Department of the Environment’s (MDE) Review of  
Baltimore City’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 of the date of issuance of its permit. Baltimore City submitted the FAP to MDE on December 27, 2018.</li> <li>• A public hearing was held on November 29, 2018. The City approved the FAP on December 18, 2018; a copy of the approval was submitted with the FAP.</li> <li>• The City’s permit expired on December 26, 2018. The City’s FAP demonstrates sufficient funding to complete 100% of the projected ISRP costs associated with the current (i.e., expired) permit.</li> </ul>
<p>Actions to Meet Permit Requirements   (“All Actions” worksheet)</p>	<ul style="list-style-type: none"> <li>• The City reported completing 4,077.9 acres of restoration, and projected to complete a total of 4,314.8 acres of restoration by the end of the permit term (i.e., December 26, 2018). This is 23.8 acres more than the 4,291 acre Baseline Treatment Requirement approved by MDE in 2015.</li> <li>• As noted in the “All Actions” table, the City has completed 100.6% (4,314.8 acres) of the restoration requirement during the current permit term (12/27/2013 to 12/26/2018).</li> <li>• While not required, Baltimore City did provide projections for fiscal years (FY) 2020 to 2023. The City projects completing 4,865.2 acres of restoration from FY2019 to FY2020 and 5,188.2 by FY2023. These projections include both planned BMPs and BMPs under construction.</li> <li>• All best management practices (BMPs) listed are approved in MDE’s Guidance or by the Chesapeake Bay Program (CBP) and were realistic to perform in the time allotted.</li> <li>• Baltimore City has not proposed using nutrient trading to meet restoration goals.</li> <li>• Baltimore City reported the BMPs completed between FY2014 and FY2018 on both the “All Actions” and “Specific Actions” tables. However, there was no double counting as the formulae on the “All Actions” table only summed acreages and costs related to the completed BMPs. Within the table, all formulas and subtotals were used correctly and all required fields were populated. All BMP types were correctly entered, including annual operational BMPs.</li> <li>• The plan included an Executive Summary and all required information in the MDE suggested table format.</li> </ul>
<p>Annual and Projected Costs</p>	<ul style="list-style-type: none"> <li>• In the “All Actions” table, only redevelopment, which is developer-funded, had no associated costs.</li> <li>• The total cost per acre for completed restoration efforts over the permit term (FY2014-FY2019) was approximately \$10,664 (average cost/acre = \$56,827). Over the next two years (FY2019 to FY2020), the total cost per</li> </ul>

## MDE’s Review of Baltimore City’s 2018 FAP

Plan Condition	MDE Assessment and Recommendations
<p>Annual and Projected Costs (Cont.)</p> <p>(“All Actions” and “ISRP Cost” worksheet)</p>	<p>acre increases to approximately \$12,462 (average cost/acre = \$58,102). The total cost per acre increases to \$33,554 (average cost/acre = \$83,475) when restoration costs for FY2014 to FY2023 are considered.</p> <ul style="list-style-type: none"> <li>• The City initially addressed restoration requirements through street sweeping and storm drain vacuuming; estimating combined restoration credits to be 3,955 impervious acres per year for FY2019 to FY2023. However, the City projects future restoration efforts to increase from 4,314.8 acres at the end of the permit term to 5,188.2 acres by the end of FY2023. The difference in restoration achieved is attributed to a combination of structural practices, green infrastructure, and alternative BMPs (e.g., stream restoration). These practices are more expensive, hence the increases in total and average costs per acre.</li> <li>• In the “ISRP Cost” table, costs were reported for all required fiscal years and all formulas were used correctly.</li> </ul>
<p>Annual and Projected Revenues</p> <p>(“ISRP Revenue” worksheet)</p>	<ul style="list-style-type: none"> <li>• Revenues were reported for all required fiscal years and all formulas were used correctly.</li> <li>• Baltimore City’s current permit expired on December 26, 2018 (i.e., the middle of FY2019). Accordingly, half of FY2019 and all of FY2020 are projections beyond the permit term.</li> <li>• The City reported that revenue for FY2019 (\$47,885,242) is less than costs toward the ISRP (\$79,874,107). However, for FY 2020, the revenue (\$29,135,433) is marginally more than the annual costs (\$27,364,218). The combined revenues (\$77,020,675) is \$30,217,650 less than (or 71.8% of) the combined annual costs (\$107,238,325).</li> </ul>
<p>Funding Sources</p> <p>(“Fund Sources” worksheet)</p>	<ul style="list-style-type: none"> <li>• Funds were reported for all required fiscal years and all formulas were used correctly.</li> <li>• Sources of funds for the next two years include: <ul style="list-style-type: none"> <li>○ Stormwater Remediation Fee = \$40.3M</li> <li>○ State Revolving Loan Fund = \$30.6M</li> <li>○ Revenue Bonds = \$5.6M</li> <li>○ Water/Wastewater Utility Fund = \$4.0M</li> <li>○ Environmental Impact Bond = \$3.2M</li> <li>○ Miscellaneous Fees = \$0.2M</li> <li>○ Total Funding Sources = \$83.9M</li> </ul> </li> <li>• On average for the next two fiscal years, the City projected that the majority of the annual funds for meeting permit requirements would be from the stormwater remediation fees (48%) and from State Revolving Loans (36%). However, the State Revolving Loans are only being used in FY2019.</li> <li>• The City is reported using \$28,696,247 in bonds, grants, and/or loans through the end of FY2018 (i.e., the majority of the permit term). Additionally, the City projects using \$39,426,689 for FY2019. However, the City has reported no use of bonds, loans, or grants beyond FY2019.</li> </ul>

**MDE’s Review of Baltimore City’s 2018 FAP**

<b>Plan Condition</b>	<b>MDE Assessment and Recommendations</b>
Specific Actions and Expenditures from Previous Fiscal Years  (“Spec Actions” worksheet)	<ul style="list-style-type: none"><li>• The City has reported actions that reflect restoration efforts completed by the end of FY2018. The City has also reported actions for the first half of FY2019 that, when added to the completed restoration activities, show that the City will meet the permit’s restoration requirements.</li><li>• The County reported BMPs completed since the expiration of its previous permit term.</li><li>• Actions and expenditures were reported for all required fiscal years and all formulas were used correctly.</li></ul>