

Appendix B – Legal Authority

MARYLAND DEPARTMENT OF THE ENVIRONMENT
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
MUNICIPAL SEPARATE STORM SEWER SYSTEM DISCHARGE PERMIT

PART I. IDENTIFICATION

A. Permit Number: 11-DP-3310 MD0068268

B. Permit Area

This permit covers all stormwater discharges from the municipal separate storm sewer system (MS4) owned or operated by Harford County, Maryland.

C. Effective Date: December 30, 2014

D. Modified Date: November 8, 2019

E. Expiration Date: December 29, 2019

PART II. DEFINITIONS

Terms used in this permit are defined in relevant chapters of Title 40 of the Code of Federal Regulations (CFR) Parts 122-124 or the Code of Maryland Regulations (COMAR) 26.08.01, 26.17.01, and 26.17.02. Terms not defined in CFR or COMAR shall have the meanings attributed by common use.

PART III. WATER QUALITY

The permittee must manage, implement, and enforce a stormwater management program (SWMP) in accordance with the Clean Water Act (CWA) and corresponding stormwater National Pollutant Discharge Elimination System (NPDES) regulations, 40 CFR Part 122, to meet the following requirements:

1. Effectively prohibit pollutants in stormwater discharges or other unauthorized discharges into the MS4 as necessary to comply with Maryland's receiving water quality standards;
2. Attain applicable wasteload allocations (WLAs) for each established or approved Total Maximum Daily Load (TMDL) for each receiving water body, consistent with Title 33 of the U.S. Code (USC) §1342(p)(3)(B)(iii); 40 CFR §122.44(k)(2) and (3); and
3. Comply with all other provisions and requirements contained in this permit, and in plans and schedules developed in fulfillment of this permit.

Compliance with all the conditions contained in PARTs IV through VII of this permit shall constitute compliance with §402(p)(3)(B)(iii) of the CWA and adequate progress toward compliance with Maryland's receiving water quality standards and any EPA approved stormwater WLAs for this permit term.

PART IV. STANDARD PERMIT CONDITIONS

A. Permit Administration

Harford County shall designate an individual to act as a liaison with the Maryland Department of the Environment (MDE) for the implementation of this permit. The County shall provide the coordinator's name, title, address, phone number, and email address. Additionally, the County shall, in its annual reports, submit to MDE an organizational chart detailing personnel and groups responsible for major NPDES program tasks in this permit. MDE shall be notified of any changes in personnel or organization relative to NPDES program tasks.

B. Legal Authority

Harford County shall maintain adequate legal authority in accordance with NPDES regulations 40 CFR Part 122.26 throughout the term of this permit. In the event that any provision of its legal authority is found to be invalid, the County shall notify MDE within 30 days and make the necessary changes to maintain adequate legal authority. All changes shall be included in the County's annual report.

C. Source Identification

Sources of pollutants in stormwater runoff countywide shall be identified and linked to specific water quality impacts on a watershed basis. The source identification process shall be used to develop watershed restoration plans. The following information shall be submitted annually for all County watersheds within the permit area in geographic information system (GIS) format with associated tables as required in PART V of this permit:

1. Storm drain system: all infrastructure, major outfalls, inlets, and associated drainage areas delineated;
2. Industrial and commercial sources: industrial and commercial land uses and sites that the County has determined have the potential to contribute significant pollutants;
3. Urban best management practices (BMPs): stormwater management facility data including outfall locations and delineated drainage areas;
4. Impervious surfaces: public and private land use delineated, controlled and uncontrolled impervious areas based on, at a minimum, Maryland's hierarchical eight-digit sub-basins;
5. Monitoring locations: locations established for chemical, biological, and physical monitoring of watershed restoration efforts and the *2000 Maryland Stormwater Design Manual*; and
6. Water quality improvement projects: projects proposed, under construction, and completed with associated drainage areas delineated.

D. Management Programs

The following management programs shall be implemented in areas served by Harford County's MS4. These management programs are designed to control stormwater discharges to the maximum extent practicable (MEP) and shall be maintained for the term of this permit. Additionally, these programs shall be integrated with other permit requirements to promote a comprehensive adaptive approach toward solving water quality problems. The County shall modify these programs according to needed program improvements identified as a result of periodic evaluations by MDE.

1. Stormwater Management

An acceptable stormwater management program shall continue to be maintained in accordance with the Environment Article, Title 4, Subtitle 2, Annotated Code of Maryland. Activities to be undertaken by the County shall include, but not be limited to:

- a. Implementing the stormwater management design policies, principles, methods, and practices found in the latest version of the *2000 Maryland Stormwater Design Manual*. This includes:
 - i. Complying with the Stormwater Management Act of 2007 (Act) by implementing environmental site design (ESD) to the MEP for new and redevelopment projects;
 - ii. Tracking the progress toward satisfying the requirements of the Act and identifying and reporting annually the problems and modifications necessary to implement ESD to the MEP; and
 - iii. Reporting annually the modifications that have been made or need to be made to all ordinances, regulations, and new development plan review and approval processes to comply with the requirements of the Act.

- b. Maintaining programmatic and implementation information including, but not limited to:
 - i. Number of Concept, Site Development, and Final plans received. Plans that are re-submitted as a result of a revision or in response to comments should not be considered as a separate project;
 - ii. Number of redevelopment projects received;
 - iii. Number of stormwater exemptions issued; and
 - iv. Number and type of waivers received and issued, including those for quantity control, quality control, or both. Multiple requests for waivers may be received for a single project and each should be counted separately, whether part of the same project or plan. The total number of waivers requested and granted for qualitative and quantitative control shall be documented.

Stormwater program data shall be recorded on MDE's annual report database and submitted as required in PART V of this permit.

- c. Maintaining construction inspection information according to COMAR 26.17.02 for all ESD treatment practices and structural stormwater management facilities including the number of inspections conducted and violation notices issued by Harford County.
- d. Conducting preventative maintenance inspections, according to COMAR 26.17.02, of all ESD treatment systems and structural stormwater management facilities at least on a triennial basis. Documentation identifying the ESD systems and structural stormwater management facilities inspected, the number of maintenance inspections, follow-up inspections, the enforcement actions used to ensure compliance, the maintenance inspection schedules, and any other relevant information shall be submitted in the County's annual reports.

2. Erosion and Sediment Control

An acceptable erosion and sediment control program shall continue to be maintained and implemented in accordance with the Environment Article, Title 4, Subtitle 1, Annotated Code of Maryland. Activities to be undertaken by the County shall include, but not be limited to:

- a. Implementing program improvements identified in any MDE evaluation of the County's erosion and sediment control enforcement authority;
- b. Ensure that construction site operators have received training regarding erosion and sediment control compliance and hold a valid Responsible Personnel Certification as required by MDE;
- c. Program activity shall be recorded on MDE's annual report database and submitted as required in PART V of this permit; and
- d. Reporting quarterly, information regarding earth disturbances exceeding one acre or more. Quarters shall be based on calendar year and submittals shall be made within 30 days following each quarter. The information submitted shall cover permitting activity for the preceding three months.

3. Illicit Discharge Detection and Elimination

Harford County shall continue to implement an inspection and enforcement program to ensure that all discharges to and from the MS4 that are not composed entirely of stormwater are either permitted by MDE or eliminated. Activities shall include, but not be limited to:

- a. Field screening at least 100 outfalls annually. Each outfall having a discharge shall be sampled using a chemical test kit. Within one year of permit issuance, an alternative program may be submitted for MDE approval that methodically identifies, investigates, and eliminates illegal connections to the County's storm drain system;

- b. Conducting annual visual surveys of commercial and industrial areas as identified in PART IV.C.2 above for discovering, documenting, and eliminating pollutant sources. Areas surveyed shall be reported annually;
- c. Maintaining a program to address and, if necessary, respond to illegal discharges, dumping, and spills;
- d. Using appropriate enforcement procedures for investigating and eliminating illicit discharges, illegal dumping, and spills. Significant discharges shall be reported to MDE for enforcement and/or permitting; and
- e. Reporting illicit discharge detection and elimination activities as specified in PART V of this permit.

4. Litter and Floatables

This section of the permit requires Harford County to address problems associated with litter and floatables in waterways that adversely affect water quality. Increases in litter discharges to receiving waters have become a growing concern both nationally and within Maryland and cannot be ignored. Harford County needs to evaluate current litter control problems associated with discharges from its storm drain system and develop and implement a public outreach and education program as needed on a watershed by watershed basis.

- a. As part of Harford County's watershed assessments under PART IV.E.1 of this permit, Harford County shall document all litter control programs and identify potential sources, ways of elimination, and opportunities for overall improvement.
- b. Within one year of permit issuance, as part of the public education program described in PART IV.D.6., Harford County shall develop and implement a public education and outreach program to reduce littering and increase recycling. This shall include:
 - i. Educating the public on the importance of reducing, reusing, and recycling;
 - ii. Disseminating information by using signs, articles, and other media outlets; and
 - iii. Promoting educational programs in schools, businesses, community associations, etc.
- c. Evaluating annually the effectiveness of the education program.
- d. Submit annually, a report which details progress toward implementing the public education and outreach program. The report shall describe the status of public outreach efforts including resources (e.g., personnel and financial) expended and the effectiveness of all program components.

5. Property Management and Maintenance

- a. Harford County shall ensure that a Notice of Intent (NOI) has been submitted to MDE and a pollution prevention plan developed for each County-owned municipal facility requiring NPDES stormwater general permit coverage. The status of pollution prevention plan development and implementation for each County-owned municipal facility shall be reviewed, documented, and submitted to MDE annually.
- b. The County shall continue to implement a program to reduce pollutants associated with maintenance activities at County-owned facilities including parks, roadways, and parking lots. The maintenance program shall include these or MDE approved alternative activities:
 - i. Street sweeping;
 - ii. Inlet inspection and cleaning;
 - iii. Reducing the use of pesticides, herbicides, fertilizers, and other pollutants associated with vegetation management through increased use of integrated pest management;
 - iv. Reducing the use of winter weather deicing materials through research, continual testing and improvement of materials, equipment calibration, employee training, and effective decision-making; and
 - v. Ensuring that all County staff receives adequate training in pollution prevention and good housekeeping practices.

The County shall report annually on the changes in any maintenance practices and the overall pollutant reductions resulting from the maintenance program. Within one year of permit issuance, an alternative maintenance program may be submitted for MDE approval indicating the activities to be undertaken and associated pollutant reductions.

6. Public Education

Harford County shall continue to implement a public education and outreach program to reduce stormwater pollutants. Outreach efforts may be integrated with other aspects of the County's activities. These efforts are to be documented and summarized in each annual report. The County shall continue to implement a public outreach and education campaign with specific performance goals and deadlines to:

- a. Maintain a compliance hotline or similar mechanism for public reporting of water quality complaints, including suspected illicit discharges, illegal dumping, and spills.
- b. Provide information to inform the general public about the benefits of:
 - i. Increasing water conservation;
 - ii. Residential and community stormwater management implementation and facility maintenance;
 - iii. Proper erosion and sediment control practices;
 - iv. Increasing proper disposal of household hazardous waste;

- v. Improving lawn care and landscape management (e.g., the proper use of herbicides, pesticides, and fertilizers, ice control and snow removal, cash for clippers, etc.);
 - vi. Residential car care and washing; and
 - vii. Proper pet waste management.
- c. Provide information regarding the following water quality issues to the regulated community when requested:
- i. NPDES permitting requirements;
 - ii. Pollution prevention plan development;
 - iii. Proper housekeeping; and
 - iv. Spill prevention and response.

E. Restoration Plans and Total Maximum Daily Loads

In compliance with §402(p)(3)(B)(iii) of the CWA, MS4 permits must require stormwater controls to reduce the discharge of pollutants to the MEP. By regulation at 40 CFR §122.44, BMPs and programs implemented pursuant to this permit must be consistent with applicable WLAs developed under EPA approved TMDLs (see list of EPA approved TMDLs attached and incorporated as Attachment B).

Harford County shall annually provide watershed assessments, restoration plans, opportunities for public participation, and TMDL compliance status to MDE. A systematic assessment shall be conducted and a detailed restoration plan developed for all watersheds within Harford County. As required below, watershed assessments and restoration plans shall include a thorough water quality analysis, identification of water quality improvement opportunities, and a schedule for BMP and programmatic implementation to meet stormwater WLAs included in EPA approved TMDLs.

1. Watershed Assessments

- a. By the end of the permit term, Harford County shall complete detailed watershed assessments for the entire County. Watershed assessments conducted during previous permit cycles may be used to comply with this requirement, provided the assessments include all of the items listed in PART IV.E.1.b. below. Assessments shall be performed at an appropriate watershed scale (e.g., Maryland's hierarchical eight or twelve-digit sub-basins) and be based on MDE's TMDL analysis or an equivalent and comparable County water quality analysis.
- b. Watershed assessments by the County shall:
 - i. Determine current water quality conditions;
 - ii. Include the results of a visual watershed inspection;
 - iii. Identify and rank water quality problems;
 - iv. Prioritize all structural and nonstructural water quality improvement projects; and
 - v. Specify pollutant load reduction benchmarks and deadlines that demonstrate progress toward meeting all applicable stormwater WLAs.

2. Restoration Plans

- a. Within one year of permit issuance, Harford County shall submit an impervious surface area assessment consistent with the methods described in the MDE document “Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits” (MDE, June 2011 or subsequent versions). Upon approval by MDE, this impervious surface area assessment shall serve as the baseline for the restoration efforts required in this permit.

By the end of this permit term, Harford County shall commence and complete the implementation of restoration efforts for twenty percent of the County’s impervious surface area consistent with the methodology described in the MDE document cited in PART IV.E.2.a. that has not already been restored to the MEP. Equivalent acres restored of impervious surfaces, through new retrofits or the retrofit of pre-2002 structural BMPs, shall be based upon the treatment of the WQ_v criteria and associated list of practices defined in the *2000 Maryland Stormwater Design Manual*. For alternate BMPs, the basis for calculation of equivalent impervious acres restored is based upon the pollutant loads from forested cover.

- b. Within one year of permit issuance, Harford County shall submit to MDE for approval a restoration plan for each stormwater WLA approved by EPA prior to the effective date of the permit. The County shall submit restoration plans for subsequent TMDL WLAs within one year of EPA approval. Upon approval by MDE, these restoration plans will be enforceable under this permit. As part of the restoration plans, Harford County shall:
 - i. Include the final date for meeting applicable WLAs and a detailed schedule for implementing all structural and nonstructural water quality improvement projects, enhanced stormwater management programs, and alternative stormwater control initiatives necessary for meeting applicable WLAs;
 - ii. Provide detailed cost estimates for individual projects, programs, controls, and plan implementation;
 - iii. Evaluate and track the implementation of restoration plans through monitoring or modeling to document the progress toward meeting established benchmarks, deadlines, and stormwater WLAs; and
 - iv. Develop an ongoing, iterative process that continuously implements structural and nonstructural restoration projects, program enhancements, new and additional programs, and alternative BMPs where EPA approved TMDL stormwater WLAs are not being met according to the benchmarks and deadlines established as part of the County’s watershed assessments.

3. Nutrient Trading

Harford County may acquire total nitrogen (TN), total phosphorus (TP), and total suspended sediments (TSS) credits, in accordance with the requirements of the Maryland

Water Quality Trading and Offset Program, COMAR, 26.08.11, to meet its 20 percent impervious surface area restoration requirement in this permit. The basis for an equivalent impervious acre restored through trading is the difference in pollutant loads between urban and forest stormwater runoff according to MDE's "Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, Guidance for National Pollutant Discharge Elimination System Stormwater Permits" (MDE, 2014, or the most recent version). On an annual basis, until reissuance of this permit, the permittee shall report to MDE:

- a. The cumulative impervious acres restored achieved through the installation of BMPs during the permit compliance period;
- b. The equivalent impervious acres restored achieved through credit acquisition during the permit compliance period; and
- c. Documentation required to verify credits acquired and to be used for impervious surface restoration during the permit compliance period.

4. Public Participation

Harford County shall provide continual outreach to the public regarding the development of its watershed assessments and restoration plans. Additionally, the County shall allow for public participation in the TMDL process, solicit input, and incorporate any relevant ideas and program improvements that can aid in achieving TMDLs and water quality standards. Harford County shall provide:

- a. Notice in a local newspaper and the County's website outlining how the public may obtain information on the development of watershed assessments and stormwater watershed restoration plans and opportunities for comment;
- b. Procedures for providing copies of watershed assessments and stormwater watershed restoration plans to interested parties upon request;
- c. A minimum 30 day comment period before finalizing watershed assessments and stormwater watershed restoration plans; and
- d. A summary in each annual report of how the County addressed or will address any material comment received from the public.

5. TMDL Compliance

Harford County shall evaluate and document its progress toward meeting all applicable stormwater WLAs included in EPA approved TMDLs. An annual TMDL assessment report with tables shall be submitted to MDE. This assessment shall include complete descriptions of the analytical methodology used to evaluate the effectiveness of the County's restoration plans and how these plans are working toward achieving compliance with EPA approved TMDLs. Harford County shall further provide:

- a. Estimated net change in pollutant load reductions from all completed structural and nonstructural water quality improvement projects, enhanced stormwater management programs, and alternative stormwater control initiatives;
- b. A comparison of the net change in pollutant load reductions detailed above with the established benchmarks, deadlines, and applicable stormwater WLAs;
- c. Itemized costs for completed projects, programs, and initiatives to meet established pollutant reduction benchmarks and deadlines;
- d. Cost estimates for completing all projects, programs, and alternatives necessary for meeting applicable stormwater WLAs; and
- e. A description of a plan for implementing additional watershed restoration actions that can be enforced when benchmarks, deadlines, and applicable stormwater WLAs are not being met or when projected funding is inadequate.

F. Assessment of Controls

Harford County and ten other municipalities in Maryland have been conducting discharge characterization monitoring since the early 1990s. From this expansive monitoring, a statewide database has been developed that includes hundreds of storms across numerous land uses. Analyses of this dataset and other research performed nationally effectively characterize stormwater runoff in Maryland for NPDES municipal stormwater purposes. To build on the existing information and to better track progress toward meeting TMDLs, better data are needed on ESD performance and BMP efficiencies and effectiveness.

Assessment of controls is critical for determining the effectiveness of the NPDES stormwater management program and progress toward improving water quality. The County shall use chemical, biological, and physical monitoring to assess watershed restoration efforts, document BMP effectiveness, or calibrate water quality models for showing progress toward meeting any applicable WLAs developed under EPA approved TMDLs identified above. Additionally, the County shall conduct physical stream monitoring to assess the implementation of the latest version of the *2000 Maryland Stormwater Design Manual*. Specific monitoring requirements are described below.

1. Watershed Restoration Assessment

The County shall continue monitoring in the Wheel Creek watershed, or select and submit for MDE’s approval a new watershed restoration project for monitoring. Monitoring activities shall occur where the cumulative effects of watershed restoration activities can be assessed. One outfall and an associated in-stream station, or other locations based on a study design approved by MDE, shall be monitored. The minimum criteria for chemical, biological, and physical monitoring are as follows:

- a. Chemical Monitoring:
 - i. Eight (8) storm events shall be monitored per year at each monitoring location with at least two occurring per quarter. Quarters shall be based

on the calendar year. If extended dry weather periods occur, baseflow samples shall be taken at least once per month at the monitoring stations if flow is observed;

- ii. Discrete samples of stormwater flow shall be collected at the monitoring stations using automated or manual sampling methods. Measurements of pH and water temperature shall be taken;
- iii. At least three (3) samples determined to be representative of each storm event shall be submitted to a laboratory for analysis according to methods listed under 40 CFR Part 136 and event mean concentrations (EMC) shall be calculated for:

Biochemical Oxygen Demand (BOD ₅)	Total Lead
Total Kjeldahl Nitrogen (TKN)	Total Copper
Nitrate plus Nitrite	Total Zinc
Total Suspended Solids	Total Phosphorus
Total Petroleum Hydrocarbons (TPH)	Hardness
E. coli or enterococcus	

- iv. Continuous flow measurements shall be recorded at the in-stream monitoring station or other practical locations based on the approved study design. Data collected shall be used to estimate annual and seasonal pollutant loads and reductions, and for the calibration of watershed assessment models. Pollutant load estimates shall be reported according to any EPA approved TMDLs with a stormwater WLA.

b. Biological Monitoring:

- i. Benthic macroinvertebrate samples shall be gathered each Spring between the outfall and in-stream monitoring locations or other practical locations based on an approved study design; and
- ii. The County shall use the EPA Rapid Bioassessment Protocols (RBP), Maryland Biological Stream Survey (MBSS), or other similar method approved by MDE.

c. Physical Monitoring:

- i. A geomorphologic stream assessment shall be conducted between the outfall and in-stream monitoring locations or in a reasonable area based on the approved study design. This assessment shall include an annual comparison of permanently monumented stream channel cross-sections and the stream profile;
- ii. A stream habitat assessment shall be conducted using techniques defined by the EPA's RBP, MBSS, or other similar method approved by MDE; and
- iii. A hydrologic and/or hydraulic model shall be used (e.g., TR-20, HEC-2, HEC-RAS, HSPF, SWMM, etc.) in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.

- d. Annual Data Submittal: The County shall describe in detail its monitoring activities for the previous year and include the following:
 - i. EMCs submitted on MDE's long-term monitoring database as specified in PART V below;
 - ii. Chemical, biological, and physical monitoring results and a combined analysis for the approved monitoring locations; and
 - iii. Any requests and accompanying justifications for proposed modifications to the monitoring program.

2. Stormwater Management Assessment

The County shall continue monitoring the Church Creek watershed, or select and submit for MDE's approval a new watershed restoration project for determining the effectiveness of stormwater management practices for stream channel protection. Physical stream monitoring protocols shall include:

- a. An annual stream profile and survey of permanently monumented cross-sections in Church Creek to evaluate channel stability;
- b. A comparison of the annual stream profile and survey of the permanently monumented cross-sections with baseline conditions for assessing areas of aggradation and degradation; and
- c. A hydrologic and/or hydraulic model shall be used (e.g., TR-20, HEC-2, HEC-RAS, HSPF, SWMM, etc.) in the fourth year of the permit to analyze the effects of rainfall; discharge rates; stage; and, if necessary, continuous flow on channel geometry.

G. Program Funding

1. Annually, a fiscal analysis of the capital, operation, and maintenance expenditures necessary to comply with all conditions of this permit shall be submitted as required in PART V below.
2. Adequate program funding to comply with all conditions of this permit shall be maintained. Lack of funding does not constitute a justification for noncompliance with the terms of this permit.

PART V. PROGRAM REVIEW AND ANNUAL PROGRESS REPORTING

A. Annual Reporting

1. Annual progress reports, required under 40 CFR 122.42(c), will facilitate the long-term assessment of Harford County's NPDES stormwater program. The County shall submit annual reports on or before the anniversary date of this permit and post these reports on the County's website. All information, data, and analyses shall be based on the fiscal year and include:

- a. The status of implementing the components of the stormwater management program that are established as permit conditions including:
 - i. Source Identification;
 - ii. Stormwater Management;
 - iii. Erosion and Sediment Control;
 - iv. Illicit Discharge Detection and Elimination;
 - v. Litter and Floatables;
 - vi. Property Management and Maintenance;
 - vii. Public Education;
 - viii. Watershed Assessment;
 - ix. Restoration Plans;
 - x. TMDL Compliance;
 - xi. Assessment of Controls; and
 - xii. Program Funding.

- b. A narrative summary describing the results and analyses of data, including monitoring data that is accumulated throughout the reporting year;

- c. Expenditures for the reporting period and the proposed budget for the upcoming year;

- d. A summary describing the number and nature of enforcement actions, inspections, and public education programs;

- e. The identification of water quality improvements and documentation of attainment and/or progress toward attainment of benchmarks and applicable WLAs developed under EPA approved TMDLs; and

- f. The identification of any proposed changes to the County's program when WLAs are not being met.

2. To enable MDE to evaluate the effectiveness of permit requirements, the following information shall be submitted in a format consistent with Attachment A:
 - a. Storm drain system mapping (PART IV.C.1);
 - b. Urban BMP locations (PART IV.C.3);
 - c. Impervious surfaces (PART IV.C.4);
 - d. Water quality improvement project locations (PART IV.C.6);
 - e. Monitoring site locations (PART IV.C.5);
 - f. Chemical monitoring results (PART IV.F.1);
 - g. Pollutant load reductions (PART IV.E.4 and IV.F.1);

- h. Biological and habitat monitoring (PART IV. F.1);
 - i. Illicit discharge detection and elimination activities (PART IV.D.3);
 - j. Erosion and sediment control and stormwater program information (PART IV.D.1 and IV.D.2);
 - k. Grading permit information - quarterly (PART IV. D.2); and
 - l. Fiscal analyses - cost for NPDES related implementation (PART IV. G).
3. Because this permit uses an iterative approach to implementation, the County must evaluate the effectiveness of its programs in each annual report. BMP and program modifications shall be made within 12 months if the County's annual report does not demonstrate compliance with this permit and show progress toward meeting WLAs developed under EPA approved TMDLs.

B. Program Review

In order to assess the effectiveness of the County's NPDES program for eliminating non-stormwater discharges through the illicit connection program and reducing the discharge of pollutants to protect water quality, MDE will review program implementation, annual reports, and periodic data submittal. Procedures for the review of local erosion and sediment control and stormwater management programs exist in Maryland's sediment control and stormwater management laws. Additional evaluations may be conducted at MDE's discretion to determine compliance with permit conditions.

C. Reapplication for NPDES Stormwater Discharge Permit

This permit is effective for no more than five years, unless administratively continued by MDE. Continuation or reissuance of this permit beyond this permit term will require the County to reapply for NPDES stormwater discharge permit coverage in its fourth year annual report. Failure to reapply for coverage constitutes a violation of this permit.

As part of this application process, Harford County shall submit to MDE an executive summary of its NPDES stormwater management program that specifically describes how the County is meeting the overall goal to ensure that each County watershed has been thoroughly evaluated and its progress in implementing water quality improvements. This application shall be used to gauge the effectiveness of the County's NPDES stormwater program and will provide guidance for developing future permit conditions. At a minimum, the application summary shall include:

- 1. Harford County's NPDES stormwater program goals;
- 2. Program summaries for the permit term regarding:
 - a. Illicit discharge detection and elimination results;
 - b. Restoration plan status including County totals for impervious acres, impervious

acres controlled by stormwater management, the current status of water quality improvement projects and acres managed, and documentation of progress toward meeting stormwater WLAs developed under EPA approved TMDLs;

- c. Pollutant load reductions as a result of this permit and an evaluation of whether TMDLs are being achieved;
 - d. Impervious acres compared to the baseline and twenty percent restoration requirement in PART IV.E.2.a.; and
 - e. Other relevant data and information for describing County programs;
3. Program operation and capital improvement costs for the permit term; and
 4. Descriptions of any proposed permit condition changes based on analyses of the successes and failures of the County's efforts to comply with the conditions of this permit.

PART VI. SPECIAL PROGRAMMATIC CONDITIONS

A. Chesapeake Bay Restoration by 2025

A Chesapeake Bay TMDL has been developed by the EPA for the six Bay States (Delaware, Maryland, New York, Pennsylvania, Virginia, and West Virginia) and the District of Columbia. The TMDL describes the level of effort that will be necessary for meeting water quality criteria and restoring Chesapeake Bay. This permit is requiring compliance with the Chesapeake Bay TMDL through the use of a strategy that calls for the restoration of twenty percent of previously developed impervious land with little or no controls within this five year permit term as described in Maryland's Watershed Implementation Plan. The TMDL is an aggregate of nonpoint sources or the load allocation (LA), and point sources or WLA, and a margin of safety. The State is required to issue NPDES permits to point source discharges that are consistent with the assumptions of any applicable TMDL, including those approved subsequent to permit issuance.

Urban stormwater is defined in the CWA as a point source discharge and will subsequently be a part of Maryland's WLA. The NPDES stormwater permits can play a significant role in regulating pollutants from Maryland's urban sector and in the development of Chesapeake Bay Watershed Implementation Plans. Therefore, Maryland's NPDES stormwater permits issued to Harford County and other municipalities will require coordination with MDE's Watershed Implementation Plan and be used as the regulatory backbone for controlling urban pollutants toward meeting the Chesapeake Bay TMDL by 2025.

B. Comprehensive Planning

Harford County shall cooperate with other agencies during the completion of the Water Resources Element (WRE) as required by the Maryland Economic Growth, Resource Protection and Planning Act of 1992 (Article 66B, Annotated Code of Maryland). Such cooperation shall entail all reasonable actions authorized by law and shall not be restricted by the responsibilities

attributed to other entities by separate State statute, including but not limited to reviewing and approving plans and appropriating funds.

PART VII. ENFORCEMENT AND PENALTIES

A. Discharge Prohibitions and Receiving Water Limitations

Harford County shall prohibit non-stormwater discharges through its MS4. NPDES permitted non-stormwater discharges are exempt from this prohibition. Discharges from the following will not be considered a source of pollutants when properly managed: water line flushing; landscape irrigation; diverted stream flows; rising ground waters; uncontaminated ground water infiltration to separate storm sewers; uncontaminated pumped ground water; discharges from potable water sources; foundation drains; air conditioning condensation; irrigation waters; springs; footing drains; lawn watering; individual residential car washing; flows from riparian habitats and wetlands; de-chlorinated swimming pool discharges (not including filter backwash); street wash water; and fire fighting activities.

Consistent with §402(p)(3)(B)(iii) of the CWA, the County shall take all reasonable steps to minimize or prevent the contamination or other alteration of the physical, chemical, or biological properties of any waters of the State, including a change in temperature, taste, color, turbidity, or odor of the waters or the discharge or deposit of any organic matter, harmful organism, or liquid, gaseous, solid, radioactive, or other substance into any waters of the State, that will render the waters harmful to:

1. Public health, safety, or welfare;
2. Domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial use;
3. Livestock, wild animals, or birds; and
4. Fish or other aquatic life.

B. Duty to Mitigate

Harford County shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

C. Duty to Comply

Harford County shall be responsible for complying with all conditions of this permit. Other entities may be used to meet various permit obligations provided that both the County and the other entity agree contractually. Regardless of any arrangement entered into however, the County remains responsible for permit compliance. In no case may this responsibility or permit compliance liability be transferred to another entity.

Failure to comply with a permit provision constitutes a violation of the CWA and is grounds for enforcement action; permit termination, revocation, or modification; or denial of a permit

renewal application. The County shall comply at all times with the provisions of the Environment Article, Title 4, Subtitles 1, 2, and 4; Title 7, Subtitle 2; and Title 9, Subtitle 3 of the Annotated Code of Maryland.

The County shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the County to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the County only when the operation is necessary to achieve compliance with the conditions of the permit.

D. Sanctions

1. Penalties Under the CWA - Civil and Criminal

Section 309(d) of the CWA, 33 USC §1319(d) provides that any person who violates any permit condition is subject to a civil penalty not to exceed \$25,000 per day for each violation. Pursuant to the Civil Monetary Penalty Inflation Adjustment Rule, 40 CFR Part 19, any person who violates any NPDES permit condition or limitation after December 6, 2013, is liable for an administrative penalty not to exceed \$37,500 per day for each such violation. Section 309(g)(2) of the CWA, 33 USC §1319(g)(2) provides that any person who violates any permit condition is subject to an administrative penalty not to exceed \$10,000 per day for each violation, not to exceed \$125,000. Pursuant to the Civil Monetary Penalty Inflation Adjustment Rule, 40 CFR Part 19, any person who violates any NPDES permit condition or limitation after December 6, 2013, is liable for an administrative penalty not to exceed \$16,000 per day for each such violation, up to a total penalty of \$187,500. Pursuant to Section 309(c) of the CWA, 33 USC §1319(c), any person who negligently violates any permit condition is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than one year, or both. If a person has been convicted of negligent violations of the CWA previously, the criminal penalties may be increased to \$50,000 per day of violation, or imprisonment of not more than two years, or both. Any person who knowingly violates any permit condition is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than three years, or both. If a person has been convicted of knowing violations of the CWA previously, the criminal penalties may be increased to \$100,000 per day of violation, or imprisonment of not more than six years, or both.

2. Penalties Under the State's Environment Article - Civil and Criminal

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the County from civil or criminal responsibilities and/or penalties for a violation of Title 4, Title 7, and Title 9 of the Environment Article, Annotated Code of Maryland, or any federal, local, or other State law or regulation. Section 9-342 of the Environment Article provides that a person who violates any condition of this permit is liable to a civil penalty of up to \$10,000 per violation, to be collected in a civil action brought by MDE, and with each day a violation continues being a separate violation. Section 9-342 further authorizes the MDE to impose upon any person who violates a permit condition, administrative civil penalties of up to \$10,000 per violation, up to

\$100,000.

Section 9-343 of the Environment Article provides that any person who violates a permit condition is subject to a criminal penalty not exceeding \$25,000 or imprisonment not exceeding one year, or both for a first offense. For a second offense, Section 9-343 provides for a fine not exceeding \$50,000 and up to two years imprisonment.

The Environment Article, §9-343, Annotated Code of Maryland, provides that any person who tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$50,000 per violation, or by imprisonment for not more than two years per violation, or both.

The Environment Article, §9-343, Annotated Code of Maryland, provides that any person who knowingly makes any false statement, representation, or certification in any records or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$50,000 per violation, or by imprisonment for not more than two years per violation, or both.

E. Permit Revocation and Modification

1. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the County for a permit modification or a notification of planned changes or anticipated noncompliance does not stay any permit condition. A permit may be modified by MDE upon written request by the County and after notice and opportunity for a public hearing in accordance with and for the reasons set forth in COMAR 26.08.04.10.

After notice and opportunity for a hearing and in accordance with COMAR 26.08.04.10, MDE may modify, suspend, or revoke and reissue this permit in whole or in part during its term for causes including, but not limited to the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary reduction or elimination of the authorized discharge;
- d. A determination that the permitted discharge poses a threat to human health or welfare or to the environment and can only be regulated to acceptable levels by permit modification or termination;

- e. To incorporate additional controls that are necessary to ensure that the permit effluent limit requirements are consistent with any applicable TMDL WLA allocated to the discharge of pollutants from the MS4; or
- f. As specified in 40 CFR §§122.62, 122.63, 122.64, and 124.5.

2. **Duty to Provide Information**

The County shall furnish to MDE, within a reasonable time, any information that MDE may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit; or to determine compliance with this permit. The County shall also furnish to MDE, upon request, copies of records required to be kept by this permit.

F. Inspection and Entry

Harford County shall allow an authorized representative of the State or EPA, upon the presentation of credentials and other documents as may be required by law, to:

- 1. Enter the permittee's premises where a regulatory activity is located or conducted or where records must be kept under the conditions of this permit;
- 2. Have access to and obtain copies at reasonable times of any records that must be kept under the conditions of this permit;
- 3. Inspect at reasonable times, without prior notice, any construction site, facility, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- 4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location.

G. Monitoring and Recordkeeping

Unless otherwise specified by this permit, all monitoring and records of monitoring shall be in accordance with 40 CFR Part 122.41(j).

H. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State, or local law or regulations.

I. Severability

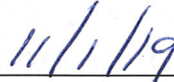
The provisions of this permit are severable. If any provision of this permit shall be held invalid for any reason, the remaining provisions shall remain in full force and effect. If the application of any provision of this permit to any circumstance is held invalid, its application to other circumstances shall not be affected.

J. Signature of Authorized Administrator and Jurisdiction

Each application, report, or other information required under this permit to be submitted to MDE shall be signed as required by COMAR 26.08.04.01-1. Signatories shall be a principal executive officer, ranking elected official, or other duly authorized employee.



D. Lee Currey, Director
Water and Science Administration



Date

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COUNTY COUNCIL
OF
HARFORD COUNTY, MARYLAND

Resolution No. 027-20

Legislative Session Day 20-29

November 10, 2020

Introduced by Council President Vincenti at
the request of the County Executive

A RESOLUTION providing for the approval of the Financial Assurance Plan, a copy of which is attached hereto, for the Harford County national pollutant discharge elimination system Phase I municipal separate storm sewer system permit and for submission of the Plan to the Maryland Department of the Environment for its review.

RESOLUTION NO. 027-20

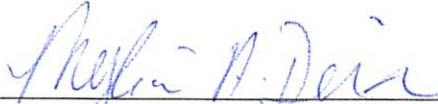
1 WHEREAS, Harford County has been issued a national pollutant discharge elimination
2 system Phase I municipal separate storm sewer system permit (“Permit”) for discharges from its
3 storm drain outfalls; and

4 WHEREAS, the Annotated Code of Maryland, Environment Article, §4-202.1(j)(1)
5 requires that on or before July 1, 2016, and every 2 years thereafter on the anniversary of the date
6 of issuance of its Permit, a county must file a Financial Assurance Plan describing its projected
7 program for meeting permit requirements, including sources of revenue for the program; and

8 WHEREAS, the Annotated Code of Maryland, Environment Article, §4-202.1(j)(3)
9 provides that the Financial Assurance Plan may not be filed until the local governing body of the
10 county has held a public hearing and approved the Financial Assurance Plan.

11 NOW, THEREFORE, BE IT RESOLVED by the County Council of Harford County,
12 Maryland, that the Financial Assurance Plan is hereby approved and shall be submitted to the
13 Maryland Department of the Environment for its review.

ATTEST:



Mylia Dixon
Council Administrator



Patrick S. Vincenti
President of the Council

ADOPTED: December 15, 2020

Harford County Financial Assurance Plan (November 2020)

MS4 Information	
Jurisdiction	Harford County
Contact Name	Christine Buckley
Phone	(410) 638-3217 extension 1176
Address	212 S. Bond Street
City	Bel Air
State	MD
Zip	21014
Email	cmbuckley@harfordcountymd.gov
Baseline Impervious Surface Untreated (Acres)	10,928
Permit Number	11-DP-3310
Reporting Year	FY2020

Harford County Financial Assurance Plan (November 2020)

Article 4-202.1(j)(1)(i)1: Actions that will be required of the county or municipality to meet the requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

Untreated impervious surface (acres) or
baseline: 10,928

RESTORATION TYPE	CLASS	IMPERVIOUS ACRES	COST ^{1,2}	% ISRP COMPLETE	STATUS	PROJECTED YEAR ³
Operational Programs						
(SEPP) Septic Pumping	A	150	\$0	1.4%	Planning	FY20
(SEPP) Septic Pumping	A	150	\$0	1.4%	Planning	FY21
(SEPP) Septic Pumping	A	150	\$0	1.4%	Planning	FY22
(SEPP) Septic Pumping	A	150	\$0	1.4%	Planning	FY23
(SEPP) Septic Pumping	A	150	\$0	1.4%	Planning	FY24
(SEPP) Septic Pumping	A	150	\$0	1.4%	Planning	FY25
Average Operations Next Two Years (FY2021-FY2022) ⁵		150	\$0	1.4%		
Average Operations Next Five Years (FY2021-FY2025) ⁵		150	\$0	1.4%		
Average Operations All Years ⁵		154	\$0	1.4%		
Capital Projects						
(SEPC) Septic Connections to WWTP	A	1.6	\$18,000	0.0%	Complete ⁴	FY20
(SEPC) Septic Connections to WWTP	A	6.2	\$72,000	0.1%	Planning	FY21
(SEPC) Septic Connections to WWTP	A	30.8	\$360,000	0.3%	Planning	FY22
(SEPC) Septic Connections to WWTP	A	4	\$45,000	0.0%	Planning	FY23

(SEPC) Septic Connections to WWTP	A	4	\$45,000	0.0%	Planning	FY24
(SEPC) Septic Connections to WWTP	A	4	\$45,000	0.0%	Planning	FY25
(SEPD) Installation of new BAT on existing septic Denitrification	A	5	N/A	0.0%	Complete ⁴	FY20
(SEPD) Installation of new BAT on existing septic Denitrification	A	5	N/A	0.0%	Planning	FY21
(SEPD) Installation of new BAT on existing septic Denitrification	A	5	N/A	0.0%	Planning	FY22
(SEPD) Installation of new BAT on existing septic Denitrification	A	5	N/A	0.0%	Planning	FY23
(SEPD) Installation of new BAT on existing septic Denitrification	A	5	N/A	0.0%	Planning	FY24
(SEPD) Installation of new BAT on existing septic Denitrification	A	5	N/A	0.0%	Planning	FY25
(FPU) Tree Plantings	A	1.5	\$45,000	0.0%	Planning	FY21
(FPU) Tree Plantings	A	1.5	\$45,000	0.0%	Planning	FY22
(FPU) Tree Plantings	A	1.5	\$45,000	0.0%	Planning	FY23
(FPU) Tree Plantings	A	1.5	\$45,000	0.0%	Planning	FY24
(FPU) Tree Plantings	A	1.5	\$45,000	0.0%	Planning	FY25
(STRE) Stream Restoration	A	36	\$1,100,000	0.3%	Complete ⁴	FY20
(PMED / PWED / WEDW / WSHW) Stormwater Retrofit	S	17.5	\$300,000	0.2%	Complete ⁴	FY20
(STRE) Stream Restoration	A	62.2	\$2,800,000	0.6%	Complete ⁴	FY20

(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	12.1	\$700,000	0.1%	Complete ⁴	FY20
(STRE) Stream Restoration	A	19.5	\$790,000	0.2%	Complete ⁴	FY21
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	2	\$320,000	0.0%	Design Complete	FY21
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	3	\$225,000	0.0%	Planning	FY22
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	3	\$225,000	0.0%	Planning	FY22
(STRE) Stream Restoration	A	43	\$1,600,000	0.4%	Under Design	FY22
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	3	\$300,000	0.0%	Under Design	FY22
(STRE) Stream Restoration	A	25	\$930,000	0.2%	Design Complete	FY22
(STRE) Stream Restoration	A	24	\$1,600,000	0.2%	Design Complete	FY22
(STRE) Stream Restoration	A	90	\$2,400,000	0.8%	Under Design	FY22
(STRE) Stream Restoration	A	50	\$2,700,000	0.5%	Under Design	FY22
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	1	\$320,000	0.0%	Under Design	FY22
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	1	\$320,000	0.0%	Under Design	FY22
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	3	\$460,000	0.0%	Under Design	FY22
(STRE) Stream Restoration	A	90	\$900,000	0.8%	Under Design	FY23
(STRE) Stream Restoration	A	54	\$1,200,000	0.5%	Under Design	FY23
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	5	\$400,000	0.0%	Under Design	FY23

(STRE) Stream Restoration	A	40	\$800,000	0.4%	Under Design	FY23
(STRE) Stream Restoration	A	45	\$930,000	0.4%	Under Design	FY23
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	125	\$6,300,000	1.1%	Planning	FY24
(STRE) Stream Restoration	A	80	\$6,000,000	0.7%	Planning	FY24
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	10	\$800,000	0.1%	Planning	FY24
(STRE) Stream Restoration	A	80	\$6,000,000	0.7%	Planning	FY25
(PMED / PWED /WEDW / WSHW) Stormwater Retrofit	S	10	\$800,000	0.1%	Planning	FY25
Subtotal Capital Next Two Years (FY2021-FY2022)		318	\$12,712,000	3%		
Subtotal Capital Next Five Years (FY2021-FY2025)		888	\$37,112,000	8%		
Subtotal Capital All Years		1,853	\$56,653,000	17%		
Other						
Nutrient Trading with WWTP		185	\$0	1.7%		
Subtotal Other Next Two Years (FY2021-FY2022)		0	\$0	0.0%		
Subtotal Other Next Five Years (FY2021-FY2025)		0	\$0	0.0%		
Subtotal Other All Years		185	\$0	1.7%		
Total Next Two Years (FY2021-FY2022)		468	\$12,712,000	4.3%		
Total Next Five Years (FY2021-FY2025)		1,038	\$37,112,000	9.5%		
Total All Years		2,192	\$56,653,000	20.0%		

¹ Cost is the total cost for the project including planning, design, and construction.

² Cost is not related to annual fiscal costs. Planning, design, and construction typically do not occur within a single fiscal year.

³ Projected year is the year the project is constructed.

⁴ Costs and impervious acres treated are preliminary.

Harford County Financial Assurance Plan (November 2020)

Article 4-202.1(j)(1)(i)2: Projected annual and 5-year costs for the county or municipality to meet the impervious surface restoration plan requirements of its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

DESCRIPTION	THRU FY 2019 ¹	CURRENT YEAR FY 2020	PROJECTED YEAR 1 FY 2021	PROJECTED YEAR 2 FY 2022	PROJECTED YEAR 3 FY 2023	PROJECTED YEAR 4 FY 2024	PROJECTED YEAR 5 FY 2025	TOTAL COSTS
Operating Expenditures								
Street Sweeping Program								\$0
Inlet Cleaning								\$0
Support of Capital Projects		\$235,000	\$250,000	\$280,000	\$310,000	\$340,000	\$370,000	\$1,785,000
Debt Service Payment		\$758,000	\$1,022,063	\$1,200,000	\$1,400,000	\$1,600,000	\$1,800,000	\$7,780,063
Other								\$0
Capital Expenditures								
General Fund (Paygo)								\$0
WPR Fund (Paygo)		\$6,300,000	\$9,500,000	\$7,000,000	\$7,500,000	\$8,000,000	\$8,500,000	\$46,800,000
Debt Service								\$0
Grants & Partnerships		\$1,100,000	\$980,000	\$880,000	\$1,500,000	\$1,500,000	\$1,500,000	\$7,460,000
Other (support of capital projects)		\$125,000	\$250,000	\$300,000	\$350,000	\$400,000	\$450,000	\$1,875,000
Subtotal Operation and Paygo:		\$7,418,000	\$11,022,063	\$8,780,000	\$9,560,000	\$10,340,000	\$11,120,000	\$58,240,063
Total Expenditures:		\$8,518,000	\$12,002,063	\$9,660,000	\$11,060,000	\$11,840,000	\$12,620,000	\$65,700,063

Total ISRP² costs except debt service: \$57,920,000

Compare ISRP² costs (except debt service) / total ISRP² proposed actions: 102%

¹ Harford County has not provided this information because it is beyond the requirements of the statute.

² Impervious Surface Restoration

Harford County Financial Assurance Plan (November 2020)

Article 4-202.1(j)(1)(i)3: Projected annual and 5-year revenues or other funds that will be used to meet the cost for the county or municipality to meet the impervious surface restoration plan requirements under the National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

DESCRIPTION	PAST UP THRU FY 2019 ¹	CURRENT YEAR FY 2020	PROJECTED YEAR 1 FY 2021	PROJECTED YEAR 2 FY 2022	PROJECTED YEAR 3 FY 2023	PROJECTED YEAR 4 FY 2024	PROJECTED YEAR 5 FY 2025	TOTAL NEXT 2-YEARS FY 21-22	TOTAL
Annual Revenue Appropriated for ISRP ²		\$11,495,000	\$12,783,200	\$12,739,738	\$12,939,724	\$13,144,961	\$13,355,709	\$25,522,938	\$76,458,331
Annual Costs towards ISRP ²		\$8,518,000	\$12,002,063	\$9,660,000	\$11,060,000	\$11,840,000	\$12,620,000	\$21,662,063	\$65,700,063

Compare revenue appropriated / annual costs: 118%

WPRP 2020 Reporting Criteria: 100%

¹ Harford County has not provided this information because it is beyond the requirements of the statute.

² Impervious Surface Restoration

Subtotal Grants and Partnerships		\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$ 4,000,000	\$20,000,000
Total Annual Sources of Funds		\$12,100,000	\$13,456,000	\$13,410,250	\$13,620,763	\$13,836,801	\$14,058,641	\$68,382,454
Percent of Funds Directed Toward ISRP²		95.0%	95.0%	95.0%	95.0%	95.0%	95.0%	

Compare total permit term paygo ISRP² costs / subtotal permit term paygo sources: 360%

Compare total permit term ISRP² costs / total permit term annual sources of funds: 84%

¹ Harford County has not provided this information because it is beyond the requirements of the statute.

² Impervious Surface Restoration

³ Grants anticipated

³ Funding includes programs or portions of programs required by the MS4 in addition to ISR such as illicit discharge.

Harford County Financial Assurance Plan (November 2020)

Article 4-202.1(j)(1)(i)5: Specific actions and expenditures that the county or municipality implemented in the previous fiscal years to meet its impervious surface restoration plan requirements under its National Pollutant Discharge Elimination System Phase I Municipal Separate Storm Sewer System Permit.

Baseline Acres: 10,928

Requirement: 20%

RESTORATION ID	TYPE	CLASS	NUMBER	IMP ¹ ACRES	BUILT DATE	COST	% ISRP ² Complete	STATUS ²	COMMENTS
Operational Programs									
Septic Pumping	SEPP	A	4,972	149.2	FY19	\$0	1.4%	Complete	
Septic Pumping	SEPP	A	5,031	150.9	FY18	\$0	1.4%	Complete	
Septic Pumping	SEPP	A	4,970	149.1	FY17	\$0	1.4%	Complete	
Septic Pumping	SEPP	A	5,176	155.3	FY16	\$0	1.4%	Complete	
Septic Pumping	SEPP	A	4,718	141.5	FY15	\$0	1.3%	Complete	
Septic Pumping	SEPP	A	5,053	151.6	FY14	\$0	1.4%	Complete	
Septic Pumping	SEPP	A	4,767	143.0	FY13	\$0	1.3%	Complete	
Septic Pumping	SEPP	A	5,252	157.5	FY12	\$0	1.4%	Complete	
Septic Pumping	SEPP	A	6,425	192.8	FY11	\$0	1.8%	Complete	
Septic Pumping	SEPP	A	6,300	189.0	FY10	\$0	1.7%	Complete	
Septic Pumping	SEPP	A	4,220	126.6	FY09	\$0	1.2%	Complete	

Average Operations Complete To Date ⁴			5,171	155.1		\$0	1.4%		
Capital Projects									
Stream restoration	STRE	A	1	96.9	FY20	\$650,000	0.9%	Complete	
Tree planting	FPU	A	1	1.3	FY20	\$9,000	0.0%	Complete	
Stream restoration	STRE	A	1	8.9	FY20	\$97,000	0.1%	Complete	
New bioretention facility	FBIO	S	1	1.6	FY19	\$131,000	0.0%	Complete	
Stream restoration	STRE	A	1	92.5	FY19	\$2,100,000	0.8%	Complete	
Stream restoration	STRE	A	2	131.1	FY18	\$2,000,000	1.2%	Complete	
Retrofit of existing stormwater pond	WPWS	S	4	8.42	FY18	\$130,000	0.1%	Complete	
New bioretention facility	FBIO	S	1	0.1	FY18	\$96,000	0.0%	Complete	
Permeable Pavers	APRP	A	1	0.1	FY18	\$68,000	0.0%	Complete	
New bioretention facility	FBIO	S	1	0.2	FY18	\$120,000	0.0%	Complete	
Retrofit of existing stormwater pond	IBAS	S	1	3.0	FY18	\$178,000	0.0%	Complete	
Tree planting	FPU	A	1	0.5	FY18	\$32,000	0.0%	Complete	
New mirccobioretention	MMBR	S	1	0.2	FY18	\$11,000	0.0%	Complete	
Stream restoration	STRE	A	1	110.3	FY18	\$1,090,000	1.0%	Complete	

Retrofit existing stormwater pond	WPWS	S	2	8.8	FY18	\$320,000	0.1%	Complete	
Stream restoration	STRE	A	1	31.7	FY18	\$1,140,000	0.3%	Complete	
Outfall Stabilization	OUT	A	1	0.8	FY18	\$30,000	0.0%	Complete	
Retrofit of existing stormwater pond	WPWS	S	1	3.7	FY17	\$530,000	0.0%	Complete	
Stream restoration	STRE	A	1	41.8	FY17	\$900,000	0.4%	Complete	
New pocket wetland	WPWS	S	1	0.3	FY17	\$13,000	0.0%	Complete	
Retrofit of existing stormwater pond	WPWS	S	1	8.7	FY16	\$580,000	0.1%	Complete	
Retrofit of existing stormwater pond	PMED	S	1	12.0	FY16	\$390,000	0.1%	Complete	
Retrofit of existing stormwater pond	MSGW	S	1	0.8	FY16	\$82,000	0.0%	Complete	
New bioretention facility	FBIO	S	1	0.6	FY15	\$100,000	0.0%	Complete	
Stream restoration	STRE	A	1	24.6	FY15	\$550,000	0.2%	Complete	
Stream restoration	STRE	A	1	24.3	FY14	\$570,000	0.2%	Complete	
Retrofit of existing stormwater pond	WEDW	S	1	3.8	FY14	\$240,000	0.0%	Complete	
Retrofit of existing stormwater pond	WEDW	S	1	4.8	FY14	\$320,000	0.0%	Complete	
Stream restoration	STRE	A	1	21.8	FY13	\$320,000	0.2%	Complete	
Retrofit of existing stormwater pond	WPWS	S	1	11.7	FY12	\$520,000	0.1%	Complete	
Stream restoration	STRE	A	1	14.0	FY12	\$220,000	0.1%	Complete	

New bioretention facility	FBIO	S	1	0.9	FY11	\$160,000	0.0%	Complete	
New bioretention facility	STRE	A	1	0.6	FY11	\$180,000	0.0%	Complete	
Stream restoration	STRE	A	1	50.4	FY11	\$380,000	0.5%	Complete	
New bioretention facility	FBIO	S	1	0.6	FY11	\$110,000	0.0%	Complete	
Demolition of townhouse community	IMPP	A	1	2.1	FY11	N/A	0.0%	Complete	Costs not available
Tree planting	FPU	A	2	0.8	FY16	\$19,000	0.0%	Complete	
Tree planting	FPU	A	2	1.2	FY15	\$26,000	0.0%	Complete	
Tree planting	FPU	A	3	1.8	FY15	\$50,000	0.0%	Complete	
Tree planting	FPU	A	4	3.2	FY14	\$81,000	0.0%	Complete	
Tree planting	FPU	A	4	1.8	FY14	\$56,000	0.0%	Complete	
Tree planting	FPU	A	1	0.8	FY13	\$24,000	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	11	4.3	FY20	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	6	2.3	FY19	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	9	3.5	FY18	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	8	3.1	FY17	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	9	3.5	FY16	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	3	1.2	FY15	N/A	0.0%	Complete	

Septic Connection to WWTP	SEPC	A	2	0.8	FY14	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	1	0.4	FY13	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	10	3.9	FY12	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	9	3.5	FY11	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	9	3.5	FY10	N/A	0.0%	Complete	
Septic Connection to WWTP	SEPC	A	11	4.3	FY09	N/A	0.0%	Complete	
Installation of new BAT on existing septic Denitrification	SEPD	A	18	4.7	FY19	N/A	0.0%	Complete	
Installation of new BAT on existing septic Denitrification	SEPD	A	18	4.7	FY18	N/A	0.0%	Complete	
Installation of new BAT on existing septic Denitrification	SEPD	A	41	10.7	FY17	N/A	0.1%	Complete	
Installation of new BAT on existing septic Denitrification	SEPD	A	69	17.9	FY16	N/A	0.2%	Complete	
Installation of new BAT on existing septic Denitrification	SEPD	A	56	14.6	FY15	N/A	0.1%	Complete	
Installation of new BAT on existing septic Denitrification	SEPD	A	41	10.7	FY14	N/A	0.1%	Complete	
Subtotal Capital Complete To Date			388	831		\$14,623,000	7.51%		
Other									
Nutrient Trading with WWTP			1	1,215		\$0	11.1%	Complete	

Subtotal Other Complete To Date			1	1,215		\$0	11.1%		
Total Complete to Date			5,560	2,201		\$14,623,000	20.0%		

¹Impervious

²Impervious Surface Restoration