

# 2019 Action Strategy for the Reservoir Watersheds

## Baltimore Reservoir Watershed Management Program September 2019

The following text provides a list of actions that the members of the Baltimore Reservoir Watershed Protection Committee have agreed to carry out, in the shared goal of protecting the water quality of the region's reservoirs and their tributaries. These reservoirs include the Loch Raven, Liberty, and Prettyboy Reservoirs. This document serves as an update to the *2005 Action Strategy for the Reservoir Watersheds*. The *2005 Action Strategy* was agreed to as part of the 2005 reaffirmation of the 1984 and the 1979 *Reservoir Watershed Management Agreement*. Actions listed in each category under "Initiate" will generally be new measures, while actions under "Continue" will be the continuation of existing measures.

### Reservoir and Watershed Assessment

#### Monitoring

##### **Initiate:**

1. The RTG will work to implement the enhanced monitoring plan recommended in the June 2016 report to the Baltimore Metropolitan Council by the Center for Watershed Protection and EA Engineering, Science and Technology. The fundamental goal of the Reservoir Watershed Management Program is to ensure that the three reservoirs (Loch Raven, Liberty and Prettyboy) and their respective watersheds continue to serve as sources of high-quality raw water for the Baltimore Metropolitan water-supply system. Continued monitoring of the reservoirs and their tributaries helps to ensure the quality of the water. The enhanced monitoring plan is a result of the recommendations adopted by the RTG based on an evaluation of the historical monitoring program completed by the U.S. Geological Survey. The data collected and analyzed as a result of this updated

monitoring plan will result in the overall improvement of the watershed monitoring and management system of the Baltimore Metropolitan Water Supply System and as such, improved and maintained source water quality. It will also enable the City and its RWMA partners to improve watershed planning and management based on more reliable and comparable data that will in turn facilitate the development of improved prediction of trends and the ability to further facilitate compliance with water quality standards and TMDL-based Watershed Implementation Plan requirements.

See the sidebar on the following page for examples of how the data could be used by member reservoir watershed jurisdictions and state agencies.

##### **Continue:**

2. Baltimore City will continue to conduct fixed-interval monitoring of tributaries to the three reservoirs. The City will also continue to conduct monitoring at in-lake stations. Concentrations of key pollutants of concern are measured, and estimated annual loadings of sediment and total phosphorus are calculated.
3. Baltimore County will continue to conduct fixed-interval monitoring of tributaries in its portions of the three reservoir watersheds. The County will also continue to conduct biological sampling in the tributaries in its portions of the three reservoir watersheds, including its Randomized Biological Monitoring Program to assess general water quality in the three watersheds. Results are reported annually in Baltimore County's NPDES/MS4 report, submitted to MDE.

## Examples of How the Enhanced Monitoring Data Could be used

The Maryland Department of Environment (MDE) will use the data in collaboration with jurisdictions in the reservoir watersheds that have Stormwater Wasteload Allocations (SW-WLA) for total phosphorus and sediments. Municipal Separate Storm Sewer (MS4) permits, and their associated Best Management Practice (BMPs) requirements, constitute an important tool for meeting the WLAs. The more reliable and comparable data from the enhanced monitoring can facilitate engineering and, as necessary, allow for BMP adjustments and refinements. This could result in the implementation of BMPs to the specifications needed to meet load reductions required for the reservoir watersheds, ensuring greater effectiveness and return-on-investment by all of MDE's water programs.

MDE will also use the data in the ongoing process of revising, maintaining and updating its guidance manuals for SW-WLA implementation for MS4 Phase I jurisdictions. The data will be helpful to MDE as they work to develop a methodology and guidance to assist Maryland Counties with prioritizing source water (i.e., 'Use -P' designated) watersheds within the Counties' MS4 permit SW-WLA implementation plans. Prioritizing source water protection areas within MS4 SW-WLA plans may assist local jurisdictions in securing grant funding for restoration projects, thus protecting and enhancing the resource.

MDE will use the enhanced monitoring data to assess changes in loads and concentrations over time. These assessments may be done using statistical modeling methods such as multiple regression analyses and Generalized Additive Model (GAM) analyses in an effort to identify changes that may be attributed to restoration efforts in sub-watersheds within reservoir drainages. Restoration practices for which this type of modeling could be used include:

- Urban stormwater retrofits
- Stream restoration
- Agricultural practices
- Improved deicing material application technologies and practices
- Identification of areas for which alternative/improved deicing practices will be most effective and necessary
- Septic upgrades, sanitary sewer connections and sewer repairs

These data will give a clearer picture of the overall health of specific reservoir tributaries and sub-watersheds rather than only considering restoration efforts in the context of individual, segmented political entities. This will ensure that implementation takes place in a coordinated, cost-effective manner, increasing the scope and pace of water quality improvements. MDE could also use the data for control site monitoring, if no restoration is planned in some sub-watersheds.

The 2018 Farm Bill contains provisions for States to identify local priority areas for drinking water protection, and to dedicate at least 10% of total funds available for conservation programs (with the exception of CRP), each year from FY 2019 through FY 2023, for use for source water protection. The data generated by the enhanced monitoring effort will help jurisdictions target the proper areas for these efforts, optimizing the value of the Farm Bill funding.

Additional, longer-term applications for the enhanced monitoring data could include the following:

- Assessing potential impacts of climate change on pollutant loads to the reservoirs.
- Enhancement/refinement/upgrades to existing TMDL watershed and water quality models.
- Statistical or deterministic modeling to associate pollution events with changes to water treatment approaches and costs.
- Modeling to assist in the assignment of attribution of loads to contributing jurisdictions in the context of MS4 permitting and SW-WLA implementation and progress tracking.
- Identification and tracking of potential contaminants of emerging concern.

4. Baltimore County will continue to conduct bacteria monitoring on an as-needed basis, based upon TMDL requirements.
5. The signatories will continue to work collaboratively to generate data of sufficient quality and quantity to:
  - Characterize the state, changes, and trends in water quality in the reservoirs and their tributaries through a regular sampling, analysis, and reporting monitoring program to ensure maintenance of high quality raw drinking water supply;
  - Characterize the state, changes, and trends in water quality in the reservoirs and their tributaries through a regular sampling, analysis and reporting monitoring program to support management activities to track progress and compliance towards TMDLs;
  - Identify emerging water quality issues affecting the quality of the raw or finished water supply;
  - Improve the application and development of models simulating water quality response in the reservoirs, effectiveness of management practices (e.g. BMPs), or other scenarios as defined by the RTG; and,
  - Create readily available data sets, or future data, needed for special studies, on an as needed basis.
2. Baltimore and Carroll Counties and Baltimore City will update the water availability analysis in Water Resource Elements (WREs) as needed. State law requires that a WRE be developed and adopted by counties and municipalities as a component of the local Comprehensive Plan. The WREs include a “water supply availability analysis” that compares current and future demands for public water in each area with the known and planned sources of water (wells, stream withdrawals, reservoirs, etc.). All counties have developed their WREs.
3. The Maryland Department of the Environment (MDE) will continue to implement Total Maximum Daily Load (TMDL’s) addressing pollutants in the region’s reservoirs through the Municipal Separate Storm Sewer System (MS4) permitting process and NPDES permits for wastewater treatment plants. Nutrient load reductions are calculated in the applicable county(s) MS4 report.

## Reservoir Modeling and Predictive Analysis

### *Continue:*

1. Baltimore City, in cooperation with other Reservoir Program signatories, will investigate the principal sources of the “precursors” (organic substances present in the raw water) of the disinfection byproducts (DBPs) which have been detected at various points in the metropolitan water system. The research would include a study of the relationship between sub-watershed land cover, total organic carbon/dissolved carbon in the tributaries and the reservoirs, and DBP precursors in the raw water.
2. Policy for **new** municipal discharges in the watersheds: MDE, through its NPDES permit program, continues to discourage new discharges exceeding 1,000 gpd, except as needed to correct failing septic systems. In those cases, MDE will encourage land treatment of the plant effluent.
3. MDE, through its NPDES permit program, continues to discourage discharges from

## Point Source Management

### *Continue:*

1. The upgrade of the Hampstead Wastewater Treatment Plant (WWTP) to an enhanced nutrient removal (ENR) process will be completed. Effective October 2017, Carroll County was issued dual (split) discharge permits: one to Piney Run and the other to Deep Run watersheds, with a total permitted discharge of 1.15 MGD. The Piney Run discharge permit (State #16DP0594, NPDES #MD0022446) includes an alternate effluent limit (AEL). This permit can be viewed on MDE’s website at <http://mes-mde.mde.state.md.us/>
2. Policy for **new** municipal discharges in the watersheds: MDE, through its NPDES permit program, continues to discourage new discharges exceeding 1,000 gpd, except as needed to correct failing septic systems. In those cases, MDE will encourage land treatment of the plant effluent.
3. MDE, through its NPDES permit program, continues to discourage discharges from

package sewage treatment plants intended to serve new residential communities and proposed to discharge in the reservoir watersheds.

4. MDE, through its NPDES permit program, continues to institute a phosphorus limit of 0.3 mg/l effluent concentration from **existing** industrial sources when each permit comes up for renewal.
5. Policy for **new** industrial discharges: MDE, through its NPDES permit program, discourages significant phosphorus discharges to the reservoir watersheds.
6. Since phosphorus is the primary nutrient of concern for the reservoirs, Baltimore and Carroll Counties continue to strive to reach phosphorus load goals for the reservoir TMDLs.

## Nonpoint Source Management, Land Use and Natural Resource Protection

### Agricultural Practices

#### *Continue:*

1. The Baltimore County Soil Conservation District (SCD) and the Carroll SCD (also referred to as the “two SCDs”) will continue to encourage farm owners/operators in the three reservoir watersheds to utilize their various technical and financial assistance programs for soil conservation practices and other measures to protect local water quality. This includes both the federal programs (from Natural Resources Conservation Service and Farm Service Agency) and the state assistance programs which are delivered in cooperation with the two SCDs (see items below).
2. The two SCDs will continue to give targeted attention to farms operated in the reservoir watersheds, and will adopt the long-term goal of preparing a “soil conservation and water quality plan” (SCWQ plan) for every farm in the reservoir watersheds.
3. The two SCDs will continue to follow up on the implementation by farmers in the watersheds of their existing SCWQ plans

(i.e., plan maintenance) and to update all SCWQ plans that are 10 or more years old.

4. The two SCDs will continue to assist farmers in meeting the requirements of federal (USDA) laws and regulations, which require up-to-date SCWQ plans for all farms that apply for benefits under a variety of federal USDA programs.
5. The two SCDs will continue to assist farmers in meeting the requirements of Maryland laws and regulations, including:
  - a) Maryland Agricultural Land Preservation Program requirements that participants develop and implement a SCWQ plan. The same plan requirements apply for the local land preservation programs and for Rural Legacy designation;
  - b) Maryland water-quality and sediment-control requirements, which utilize SCWQ plans to address pollution concerns;
  - c) Maryland state discharge permits for confined animal feeding operations, which require SCWQ plan components as part of a Comprehensive Nutrient Management Plan for such operations; and
  - d) The Maryland Water Quality Improvement Act, which requires farmers to implement animal waste management measures as part of a complete nutrient management plan.
6. The two SCDs will continue to encourage farm owners and operators in the reservoir watersheds to use the Maryland Agricultural Cost-Share program (MACS) to help offset the costs of best management practice (BMP) implementation.
7. The two SCDs will continue to provide information and assistance to farm owners and operators in the watersheds to help them utilize the Low-Interest Loan Agricultural Conservation Program to cover the cost of implementing conservation measures.
8. The two SCDs will continue to promote and support farmer participation in USDA financial assistance programs that provide funding or other incentives for the application of eligible BMPs on farms or for

the removal of highly erodible areas from crop production.

9. The two SCDs will continue to encourage and assist agricultural producers to comply with the requirements of their "nutrient management plans", including the implementation of those soil-conservation, water-quality, and animal-waste-management BMPs which support the appropriate management of nutrient inputs to croplands.
10. In support of the Maryland Water Quality Improvement Act of 1998, as well as the Reservoir Watershed Management Program, the Maryland Department of Agriculture (MDA) will continue to:
  - a) Provide comprehensive educational programs developed for nutrient consultants, as well as operation-specific training and certification for farmers, nutrient applicators, and fertilizer users in urban/suburban areas;
  - b) Offer related assistance to farmers through the MACS cost-share program;
  - c) Support technical assistance provided through the SCDs and county Extension offices;
  - d) Enforce the Act and its regulations, including taking action against noncompliant farms;
  - e) Compile information and generate reports at the county and state levels on operator/farmer compliance with nutrient management plan requirements; and
  - f) With the development of an advanced database system, may generate nutrient plan implementation reports at both the county and watershed levels.
11. The signatories will work together to evaluate the pollution potential from horse operations located in the reservoir watersheds. The two SCDs will expand outreach and assistance to those operations.
12. MDA and the two SCDs will continue to - target assistance to farmers with on-site problems having the potential to cause

water pollution. Where polluting conditions are suspected to exist on a farm, the particular SCD will work with MDA and with MDE to follow the enforcement protocol developed pursuant to a Memorandum of Understanding among MDA, MDE, and the State Soil Conservation Committee.

13. MDE will continue to inspect each site (often a farm) proposed for sewage biosolids application, and may issue a permit which specifies the allowed application rate, taking the sludge nutrient content into consideration. An MDE inspector also visits the site/farm at the time the biosolids are being applied, to verify that permit conditions are being met.
14. The Carroll SCD and the Baltimore County SCD will continue to report their agricultural pollution reduction programs to MDA through a central reporting system.

## Sediment Control and Stormwater Infrastructure

### *Continue:*

1. Baltimore and Carroll Counties will continue to implement state-mandated stormwater management regulations for all new development (including residential, commercial and institutional.) The current county regulations, amended to adhere to MDE's year 2000 regulations and supporting Design Manual, provide for enhanced water quality protection and onsite groundwater recharge, as compared to the older local regulations. (The counties and the State Highway Administration are also subject to the state law, in connection with all new or reconstructed road projects.)
2. Baltimore County and Carroll County will strive to reach sediment goals for the reservoir TMDLs.
3. Baltimore and Carroll Counties will continue to operate their respective programs for the periodic inspection of all existing stormwater management facilities in their jurisdictions. The two counties' programs meet state/federal requirements for stormwater facility approval, inspection and enforcement, as set forth in their

federal/state NPDES/MS4 (municipal stormwater) permits, which are issued in Maryland by MDE.

4. Baltimore and Carroll Counties will continue their respective maintenance programs for all publicly-owned stormwater management facilities.
5. Baltimore and Carroll Counties, working in cooperation with their respective SCDs, will continue to operate sediment and erosion control programs county-wide, in order to limit sediment runoff from all new private construction and redevelopment sites. (The SCDs and the county agencies cooperate on sediment-control plan review and approval, while the county agencies do the inspection and enforcement.) Carroll County also enforces the sediment and erosion control regulations in the towns of Hampstead, Manchester and Westminster.
6. MDE will continue to enforce sediment and erosion control on state agency construction projects. The Maryland State Highway Administration (SHA) provides sediment control inspection on its own construction projects.
7. MDE will continue to carry out periodic reviews of the respective local sediment/erosion control programs and stormwater management programs.

## Sewerage System Infrastructure

### *Continue:*

1. Baltimore and Carroll Counties will continue to operate sewage pumping stations located in the Liberty and Loch Raven watersheds in compliance with current state standards for backup systems, including secondary power sources and/or reserve storage capacity, in addition to backup pumps. This greatly reduces the chances of sewage overflows from the public collection systems which are adjacent to the two reservoirs.
2. Baltimore and Carroll Counties will continue to reinforce the reservoir protection goals and policies which are contained in their master land-use plans.

## Septic Systems

### *Continue:*

1. Baltimore County will continue to administer the Bay Restoration Fund (BRF) Grant Program which provides financial assistance for income-eligible residents for septic system upgrades, repairs and public sewer connections.
2. Baltimore and Carroll Counties will continue to promote the proper operation and maintenance of septic systems by homeowners.

## Urban Nutrient Management

### *Continue:*

1. MDA will continue to operate a statewide training and certification program for commercial lawn care companies, which results in reduced nutrient application through the proper use of lawn fertilizers and pesticides.
2. Baltimore County will continue to conduct programs involving street-sweeping, stormdrain-inlet cleaning, and storm pipe cleaning in its urbanized areas, in support of source control objectives by reducing pollutant inputs.
3. Carroll County will continue to regularly inspect inlets and storm sewers in commercial and industrial areas.
4. The two counties and Baltimore City will continue to evaluate a variety of urban best management practices under the technical work required by their NPDES/MS4 (municipal stormwater) permits, which are issued by MDE.

## Land-Use Planning and Zoning

### *Continue:*

1. Baltimore County will continue to apply Resource Conservation (RC) zoning in the reservoir watersheds, with allowed

residential densities and performance standards that are protective of water quality.

2. Baltimore County will maintain insofar as possible the current limits of extension of the Urban-Rural Demarcation Line (URDL) in the Loch Raven and Liberty watersheds. (The Prettyboy watershed lies well outside of the URDL line.) The URDL essentially represents Baltimore County's urban growth boundary.
3. Baltimore and Carroll Counties will maintain the current extent of conservation and agricultural zoning in the reservoir watersheds, insofar as possible.
4. Baltimore and Carroll Counties will protect the reservoir watersheds by limiting insofar as possible additional urban development zoning within the reservoir watersheds.
5. The Baltimore County and Carroll County master land-use plans will continue to support the goals of the Reservoir Watershed Management Agreement and the commitments made in this Action Strategy.

### Resource Protection and Restoration; Development Guidelines

#### *Continue:*

1. Baltimore and Carroll Counties will continue to implement the sensitive-area protection provisions of their development regulations for non-tidal wetlands, steep slopes, floodplains and water courses, forests, water bodies, and natural land areas. These regulations are intended to protect important ecosystem functions and tributary stream quality.
2. Baltimore County will continue to implement a comprehensive forest resource management program in the watersheds, with the goal of ensuring the ecological and economic sustainability of forest resources as a means to help stabilize watershed hydrology and to help protect water quality.
3. The signatories will continue to encourage the Department of Natural Resources to

manage its land holdings in the reservoir watersheds so as to benefit reservoir protection.

4. Baltimore County will continue to implement its deer management program in which deer surveys and harvest operations are conducted at Oregon Ridge and Cromwell Valley Parks. The goal of the program is to bring the number of deer at the parks to a sustainable population.
5. Baltimore County will continue to implement its capital improvement program for stream restoration and for upgrading of existing stormwater best management practices to stabilize selected stream channels and to improve water quality in the reservoir watersheds.
6. Baltimore and Carroll Counties will continue to apply their regulations for the design, construction and operation of golf courses. These guidelines address water quality and habitat-protection issues, including appropriate nutrient application and pesticide management, as well as the preferred designs for wetlands crossings and guidance on the removal of vegetation.

### Management of Municipal Watershed Property

#### *Continue:*

1. Baltimore City will continue its efforts to maintain diverse and vigorously-growing forest communities on the City-owned watershed properties surrounding the three reservoirs.
2. When and where appropriate, Baltimore City will continue to implement the recommendations of the Comprehensive Forest Conservation Plan for Long-term Watershed Protection on the City of Baltimore's Reservoirs, which was prepared by the state DNR Forest Service in 2003. These recommendations are aimed at improving the health, diversity and sustainability of the forests surrounding the lakes.

3. New or expanded recreational or commercial facilities should not be constructed in the City-owned watersheds. Existing facilities should be managed so as to not represent a significant threat to the health of the City-owned forests, nor to the water quality of the reservoirs.
4. Baltimore City will continue to take action to discourage or prevent unauthorized recreational uses of the City-owned watersheds which present a significant threat to public safety, forest health, and/or reservoir water quality.

In order for MDE to provide notice to community water systems that could be affected, the facilities are required to immediately report any release of Extremely Hazardous Substance and Hazardous Substances listed under CERCLA to the State Emergency Response Commission.

5. As required by law, signatories with water systems serving populations more than 3,300 will update risk assessments and emergency response plans associated with hazardous substances and spills.

### Toxics, Pathogens, Potential Spills, Road Deicing, and Disinfectant Byproduct Precursors

***Initiate:***

1. The Reservoir Technical Group will promote measures to reduce road salt runoff in the reservoir watersheds in support of the requirements within the NPDES MS4 permits. The RTG will support the Counties' development of their Salt Management Plans (SMPs), with a goal of reversing the trend of higher concentrations of sodium chloride in the waters feeding the reservoirs.
2. Reservoir Program signatories will review and comment on the existing arrangements and established procedures for notification of all appropriate agencies in the event of a significant spill or discharge of a hazardous substance in any of the reservoir watersheds.
3. Signatories will review information that is available on prevention of leaks or spills of hazardous materials directly into the reservoir as well.
4. As required under the America's Water Infrastructure Act, Section 2018 MDE will notify community water suppliers, such as the City of Baltimore, of releases of hazardous substances that may potentially affect their source water. It also requires MDE to provide the City of Baltimore with access to hazardous chemical inventory data for facilities in their source water areas, if requested.

***Continue:***

6. MDE, working in cooperation with the Hazardous Waste Facility Siting Board, will enforce the provision in State law which prohibits the siting of any hazardous waste facility that would "adversely affect" a public water supply, such as the reservoirs.
7. Program participants will continue to stay abreast of new developments and new issues relating to potential toxics problems in the reservoirs.
8. MDE will continue to support fish-consumption "advisories" for fish taken from the three reservoirs, based on the potential for bioaccumulation of mercury present in the water column. Much of the source of the mercury is atmospheric deposition, generally from out-of-state.
9. Baltimore City will continue to analyze the raw (untreated) reservoir water for certain pathogens, in compliance with federal EPA requirements (the Long-Term Enhanced Surface Water Treatment Rule.)
10. Baltimore City will continue to track sodium and chloride levels in both the raw water and the finished water. This will enable the Reservoir Program participants, working through the RTG, to establish a goal for sodium concentration in the lakes, should they choose to do so.

## Coordination and Administration of Reservoir Watershed Protection Program

### ***Continue:***

1. The six major jurisdictions in the Baltimore region will continue to fund the operation and coordination of the Reservoir Watershed Protection (Management) Program by making annual payments to the Baltimore Metropolitan Council, with each jurisdiction's contribution based in part on the volume of Baltimore City or (raw) reservoir water consumed by that jurisdiction in the previous fiscal year.
2. Program participants, working through the Reservoir Technical Group, will prepare a report on progress made in implementing the Action Strategy for the Reservoir Watersheds, at a minimum once every four years.
3. Signatories will send representatives to meetings that will participate in the activities of the program to an extent that is appropriate to the program goals.

## Public Awareness

### ***Continue:***

1. Reservoir Program participants will continue to identify and pursue opportunities for public education programs relating to reservoir protection.
2. Reservoir Program participants will continue to use the Baltimore Metropolitan Council website to disseminate progress reports, technical reports, current information and to promote public awareness about the Reservoir Program and its activities and accomplishments.
3. Reservoir Program signatories will continue to assist and encourage the efforts of local citizens' organizations which are concerned about watershed management issues and reservoir protection.

## Funding Opportunities

### ***Initiate:***

1. The RTG will work to both understand the reasons for limitations on grant funding opportunities for best management practices within reservoir watersheds, and to then communicate the need for funding.
2. The RTG will review and pursue opportunities under the 2018 Farm Bill that contains provisions for States to identify local priority areas for drinking water protection and improving water quality.
3. The RTG will work with MDE to expand eligibility within existing grants and loans programs to include the reservoir areas as priorities.

The following Watershed Protection Committee members have approved the 2019 Action Plan for the Reservoir Watershed.

**Baltimore City, Maryland**

By:   
Matthew Garbark,  
Acting Director, Dept. of Public Works

Date: 11/23/2020

**Baltimore County, Maryland**

By:   
Regina A. Esslinger,  
Manager, Environmental Impact Review,  
Dept. of Environmental Protection and Sustainability

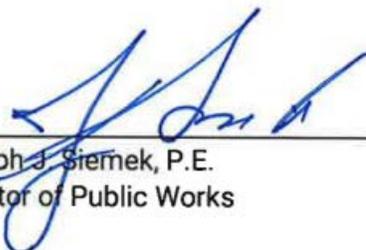
Date: 11/18/2020

**Carroll County, Maryland**

  
By: \_\_\_\_\_  
Roberta Windham, Esq.  
County Administrator

Date: November 10, 2020

**Harford County, Maryland**

By:   
Joseph J. Siemek, P.E.  
Director of Public Works

Date: 12-18-2020

**Howard County, Maryland**

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Chief, Resource Conservation Division  
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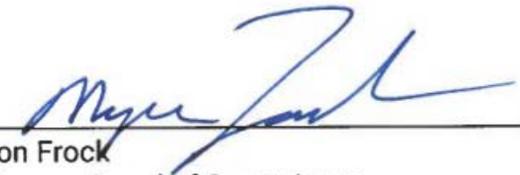
Date: 1/5/2021

**Baltimore County Soil Conservation District**

By:  \_\_\_\_\_  
Mike McGinnis  
Chairman, Board of Supervisors

Date: 10-15-20

**Carroll Soil Conservation District**

By:  \_\_\_\_\_  
Myron Frock  
Chairman, Board of Supervisors

Date: 11.23.2020

**Maryland Department of Agriculture**

By:  \_\_\_\_\_  
Hans Schmidt  
Assistant Secretary, Office of Resource Conservation

Date: 12/2/2020

**Maryland Department of the Environment**

By:   
Saeid Kasrei  
Administrator, Water Supply Program

Date: Dec 21/2020

**Baltimore Metropolitan Council**

By:   
Michael B. Kelly  
Executive Director

Date: December 17, 2020