



# down to earth

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## Maryland's Phase III Watershed Implementation Plan to be Finalized

By: Brenda Dinne, Special Projects Coordinator

Maryland Department of the Environment (MDE) concluded the public comment period for Maryland's draft Phase III Watershed Implementation Plan (WIP) on June 7. The final WIP will be submitted to the U.S. Environmental Protection Agency (EPA) on August 9, 2019. The plan is intended to lay out the actions, policies, and regulatory measures that Maryland will take to achieve the Chesapeake Bay pollution limits by 2025.

In 2010, the EPA set a numeric limit, called a total maximum daily load, for the amount of nitrogen, phosphorus, and sediment that the Chesapeake Bay could assimilate and still meet water quality standards. Washington, DC and the six states that drain to the Bay are responsible for the measures necessary to meet these standards. Each developed a series of plans, called WIPs, to demonstrate how each intended to reduce those pollutants to acceptable levels by 2025.

Based on a midpoint (2017) assessment of progress toward the pollution reduction targets resulting from implementation of the Phase I and II WIPs, Maryland's Phase III WIP anticipates progress based on the State's expected actions and continuation of local efforts. Continued local implementation and investment, along with state-level pollution reduction strategies, are projected to achieve Maryland's 2025 Chesapeake Bay restoration targets. Maryland's 2025 pollution reduction targets for bay restoration are 45.8 million pounds total nitrogen and 3.68 million pounds of total phosphorus. These 2025 nitrogen and phosphorus targets were calculated to include increased pollution impacts expected from growth in human and livestock populations through 2025. Pollution reduction efforts will be expected to continue beyond 2025 to address climate change, additional growth, pollutants behind the Conowingo Dam on the Susquehanna River, and maintenance of reduced pollution levels.

Implementation is divided into five sectors – agriculture, urban/stormwater, septic, wastewater, and natural, impacting all areas of Carroll County in one way or another. In Carroll, the Soil Conservation District is responsible for helping farmers to implement agricultural best practices. The Carroll County Health Department implements septic regulations and administers funds for septic upgrades from the Bay Restoration Fund. The County and municipalities are responsible for stormwater that drains to their storm sewer systems.

Since 2010, Carroll's wastewater treatment plants (WWTP) with over 500,000 gallons per day treatment capacity have been or are in the process of upgrading treatment levels to enhanced nutrient removal, significantly reducing nutrients discharged to local streams. Across Maryland, WWTPs represent a significant contribution to nutrient reduction progress. Best management practices implemented on farms in Carroll County have contributed to significant nutrient reductions from the agricultural sector as well.

The primary regulatory tool used by the State to reduce nutrient pollution resulting from stormwater runoff is the federal stormwater permit, called a National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit. The Phase II WIP required the ten largest counties plus Baltimore City to treat stormwater from 20 percent of the impervious surfaces in their urbanized areas during the current five-year permit term. Carroll County and its municipalities anticipate having all the facilities and practices in place to meet that requirement by the end of the permit term in December 2019.

To learn more about Maryland's Phase III WIP, please visit MDE's website at <https://mde.maryland.gov/programs/Water/TMDL/TMDLImplementation/Pages/Phase3WIP.aspx>.



# Bureau of Resource Management Outreach

By Kelly Martin, Watershed Grants Technician

Bureau of Resource Management (BRM) staff were busy this spring at the Carroll County Farm Museum teaching students about the importance of caring for the environment.

On April 23, BRM staff were part of a team of instructors that worked with 400 students from

the Gerstell Academy. Students were divided into 20 groups, and each group participated in five different activities that taught them about history, community, and different aspects of the environment. BRM instruction focused on: teaching the students about stormwater best management practices; a walking tour of

the Farm Museum grounds to view the bio-retention facility, landscape infiltration facility, rain garden, rain barrel, and drywell; providing landscape maintenance to a bio-retention facility; and learning about using macroinvertebrate identification and chemical sampling to monitor stream health.



On May 1, BRM staff returned to the Farm Museum to host a belated Earth Day Celebration with Outdoor School students from Mount Airy Middle. These 65 sixth-grade students rotated through four stations learning about forest conservation and the benefits of planting trees, how to

use macroinvertebrates to determine stream health, examples of stormwater best management practices, and how stormwater management ponds address run-off from the surrounding area.

At the end of the day, each group was provided a map depicting the area surrounding the Farm Museum, and students discussed where additional stormwater best management practices might be constructed to provide additional benefits to the watershed.



## Stormwater Update

By: Janet O'Meara, Watershed Management Coordinator

**Elderwood**—Construction continues in Eldersburg on the Elderwood SWM Basin #2/ Oklahoma Phase IV Stormwater Management Facility. Clearing continues on the remainder of the Elderwood facility. The contractor encountered rock which required blasting on the Oklahoma facility. Blasting was completed in mid-June, and rock removal from the site continues. Staff attended the Oklahoma Homeowners Association meeting at the Eldersburg Library on Monday, June 10 to answer questions citizens had related to the project. This project received partial grant funding from the Maryland State Highway Administration Transportation Alternatives Program.

**Merridale**—Construction wrapped up in June on the Merridale Gardens stormwater management facility. A final walkthrough will be completed with the Town of Mount Airy to establish any minor items that may need to be addressed. The County will be holding a meeting with residents in the coming weeks to go over the proposed landscaping plan. This project received partial grant funding through the Department of Natural Resources Chesapeake and Atlantic Coastal Bays Trust Fund.

**Roberts Mill**—Construction of the Roberts Mill stormwater management (SWM) facility located off O'Brien Avenue in Taneytown is anticipated to begin in August. Bids were received on May 31 with the low bid of \$2,691,434 submitted by W.F. Delauter & Son, Inc. for the stormwater management facility retrofit work. The County has received \$1,000,000 in grant funding from the Maryland Department of Natural Resources which will cover a portion of the construction.



*Elderwood*

Partial grant funding provided by:



*Merridale*

Partial grant funding for Roberts Mill and Merridale provided by:

