



down to earth

Environmental Restoration Quarterly • Fall 2022

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CEAM Engineer of the Year

By Kelly Martin, Watershed Grants Technician

In July, the Department of Land & Resource Management nominated Martin B. Covington, III, P.E. for the County Engineers Association of Maryland (CEAM), County Engineer of the Year Award. On September 29, in recognition of exemplary service to the citizens of Carroll County, the State of Maryland, and CEAM, Martin was awarded **County Engineer of the Year!**

Martin has been the Carroll County Stormwater Program Engineer for 26 years. During that time, he has been the guiding influence on stormwater management in the County and has provided technical assistance toward policy development with the Maryland Department of the Environment (MDE).

Martin manages the review of stormwater management plans and computations for proposed construction projects to protect the waters of the state from environmental degradation. His comprehensive reviews are in accordance with Federal, State, and local laws as well as best engineering practices. Martin is also responsible for the delegated review authority for structural integrity of small dams as authorized by MDE.

During his career, Martin has been instrumental in developing innovative practices to address stormwater requirements, including the design of surface sand filters. The result of his research work resulted in an award-winning design that provides water



quality, groundwater recharge, and extended detention in “dry” facilities. These facilities dramatically change the receiving stream hydrology allowing streambank regeneration to occur without human intervention, essentially providing natural stream restoration.

It is due to Martin’s dedication to engineering and his contributions to the field of stormwater management that he received this honor.



Education and Outreach - Fall 2022

By **Claire Hirt**, NPDES Compliance Specialist

Alongside the many technical responsibilities of the Carroll County Bureau of Resource Management, one of our most rewarding functions is engaging with the public at outreach events. Whether through our educational booth at a festival, a litter cleanup day at a stream, or a community tree planting effort, we genuinely enjoy helping people to develop a personal connection to their local watersheds.

We were invited to host our Water Resources Booth at a number of events around the County and within the municipalities this year, including the Carroll County Family Summer Bash, the Mount Airy Farmer's Market, and the Taneytown Harvest Festival. Many individuals and families stopped by to play stormwater games, see the watershed model in action, and collect some educational freebies to bring home. Through collaboration with the Recycling Office, we were even able to do a rain barrel giveaway!

The booth will make its next appearance at the Environmental Symposium on November 12th, so please come by to learn more about what we at the Bureau are doing to restore and protect our water resources, and what you can do individually as well. Follow us on Facebook to see other events and happenings in watersheds around Carroll County: <https://www.facebook.com/carrollenvironment>.



Martin Covington at the Carroll County Rec and Parks Family Summer Bash (July)



Janet O'Meara at the Taneytown Harvest Festival (September)

GRANT FUNDING UPDATE:

* The Bureau of Resource Management partnered with the Center for Watershed Protection in a grant application to further study the long-term effects of BMP implementation on stream channel stability in urban watersheds. The project was awarded \$170,155 from the Chesapeake Bay Trust Restoration Research Award Program and will be administered by CWP. This effort continues the Bureau's work begun in 2016 to examine the effectiveness of stormwater retrofits on the receiving stream channel and if self-recovery of channel stability can be achieved through the implementation of specific BMPs that reduce the overall magnitude, duration, and frequency of erosive storm flows.

* The Bureau of Resource Management was awarded \$31,000 from the Chesapeake and Atlantic Coastal Bays Trust Fund for a tree planting project on the site of the Willow Pond Retrofit and Stream Restoration project. Approximately 3.61 acres/720 trees will be planted in Fall 2022, providing for a reduction of pollutant loads, stabilization, and improved habitat in the Liberty Reservoir Watershed.

Resource Management Staff Partner with McDaniel to Engage Students

By Ed Singer, Watershed Management Coordinator

The Carroll County Bureau of Resource Management has been collaborating with McDaniel College's Environmental Studies Program to engage their students in the restoration work the County performs to maintain compliance with their NPDES Permit. Recently, staff invited Dr. Jason Scullion's Environment Management and Dr. Meg Christie's Wetland Ecology classes to visit a few completed and future sites of stream restoration and stormwater retrofit projects.

This collaboration is mutually beneficial as it provides Environmental Studies students a practical look at concepts that they are studying at McDaniel and gives the Bureau an opportunity to speak about the important work we do in protecting and improving Carroll County's natural resources. These retrofit and restoration projects are key to improving the downstream water quality in our watersheds. These McDaniel students could be our future innovators, designers, researchers, and monitors for activities related to watershed management. This interaction with students gave Bureau Staff the opportunity to talk about how we identify, design, construct, fund, and monitor the effectiveness of retrofit and restoration projects in Carroll County.

The Bureau hopes to continue and expand our relationship with McDaniel to connect students with work that is happening in our community that relates to their academic and future career interests. In October, the Bureau's staff attended the grand opening of McDaniel's Environmental Center. More information on the Center can be found at:

<https://www.mcdaniel.edu/academics/environmental-studies/mcdaniel-environmental-center>.



Project Updates

By Ed Singer, Watershed Management Coordinator

Construction is wrapping up on our two most recent stormwater retrofit projects. The Locust Wetland in Union Bridge and Stone Manor constructed wetland in Eldersburg are substantially complete and have been planted with wetland plants and trees. The Locust facility is designed to remain wet and will consist of submerged aquatic vegetation gradually transitioning to a forested buffer. The Stone Manor facility was seeded with a wetland mix and the roots of the plants will extend into a submerged gravel wetland. The water in the Stone Manor facility is designed to remain 6 inches below the finished grade with a 2-foot pool in the gravel below the plants.

The plants are a critical part of these facilities as they will help in removing nutrients and other pollutants before stormwater is discharged into our receiving streams.



Locust Wetland



Stone Manor

Upcoming Events...

October 29th -

9:00 AM—1:00 PM

2022 TREELAY—sponsored by the Alliance for the Chesapeake Bay—Volunteer Tree Planting in Westminster—sign up here: <https://htru.io/Swre>

November 5th -

9:00 AM—12:00 PM

Dickenson Run Stream Clean-up in New Windsor—sign up here: <https://www.chesapeakenetwork.org/cleanup/dickenson-run-stream-cleanup/>

Carroll County's 1st Annual Environmental Symposium

November 12th -

9:00 AM—12:00 PM

Carroll County Environmental Symposium & Recycled Art Contest—Carroll Community College, Room K-100, 1601 Washington Road, Westminster—Find more information here: www.carrollcountymd.gov/environmentalsymposium or Contact: Kelly Martin at krmartin@carrollcountymd.gov

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