



down to earth

Environmental Restoration Quarterly • Fall 2024

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Winter School By: Chad Wasileski, PE, CFM, SWM Program Engineer

University of Palermo, Sicily (UNIPA) (Universita degli Studi di Palermo) and The University of Baltimore, have collaborated to create a fall program called The Winter School. This program was created to provide graduate students with an in-depth understanding of Sustainable Development Goals (SDGs). The program aims to equip students with the knowledge and skills necessary for fostering long-term sustainability and resilience through socio-economic, cultural, and ecological transitions. The students will learn to compare and analyze urban contexts like Palermo and Baltimore, each with its own unique socio-economic, cultural, and ecological profiles.

The program's seven graduate students and associated faculty came to Carroll County on October 10th to visit and learn about our wastewater treatment, stormwater management, water quality monitoring, and agricultural preservation programs. Carroll County specifically provides the perspective of rural ideology and the needs of a smaller community and their culture when compared to larger urban settings. The sustainable practices emphasized by the Bureau of Resource Management and the Bureau of Utilities show how these practices contribute to the health of the local watershed and ultimately the Chesapeake Bay. Additionally, the Agricultural Preservation Program provides a sustainable food source for the residents of Carroll County.



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<https://www.carrollcountymd.gov/government/directory/land-resource-management/resource-management/>

Protecting and managing Carroll County's natural resources for the pleasure and enjoyment of its Citizens

McDaniel Wetlands Ecology Class

By: Claire Hirt, Watershed Management Coordinator

On September 9th, BRM staff hosted a field learning opportunity for students from McDaniel's Wetlands Ecology class. Dr. Meg Christie and her class joined us at the Willow Pond Restoration Project, located on Sunshine Way in Westminster. This project, which was completed several years ago and is now well established, provides an interesting mix of features that are illustrative of what goes into ecological restoration efforts. The project involved the retrofit of an existing wet pond to improve water quality, the restoration of the adjacent stream channel for stabilization and floodplain connectivity, and the incorporation of innovative practices to improve temperature management.

The class rotated through four stations to learn about project design and construction, the ongoing monitoring program, wetland plants and soils, and the Clean Water Act regulations guiding restoration efforts. Students examined soil samples to identify indicators of wetland conditions, learned to identify some water-loving plants, and looked through preserved samples of stream insects used to assess stream health. We also highlighted career opportunities within the stormwater and restoration fields and discussed many great questions throughout the afternoon.



Jonathan Bowman, Forest Conservation Specialist, talks with students from McDaniel College Wetlands Ecology class about wetland soils.

Grant Funding Update

The Bureau of Resource Management was awarded \$1,000,000 from the Maryland Department of Natural Resources Chesapeake & Atlantic Coastal Bays Trust Fund for construction of the Roberts Field Restoration project. This project converts the existing wet pond into an innovative wet pond/submerged gravel wetland facility and creates 877 linear feet of stream channel.



The Bureau was also awarded \$100,545 from the National Fish and Wildlife Foundation Small Watershed Planning & Technical Assistance Grant to fund development of a comprehensive watershed assessment that evaluates green stormwater infrastructure projects to improve water quality in the Georges Murphy Run sub watershed of the Prettyboy Reservoir Watershed. Staff will work with the Center for Watershed Protection to complete this assessment.



Winter School visits the Hampstead Wastewater Treatment Plant

Carroll County Department of
Planning & Land Management

3RD ANNUAL ENVIRONMENTAL SYMPOSIUM

- Rain Barrel & Compost Bin Giveaway
- Recycled Art Contest
- UMD Insect Zoo
- Library Storytime Express
- Piney Run Critter Time



Carroll County Ag Center
October 26, 2024
9 am - Noon



THIS EVENT IS FREE AND OPEN TO THE PUBLIC

Other Outreach Activities

By: Claire Hirt, Watershed Management Coordinator

The Resource Management outreach team has stayed active throughout the summer and into fall engaging with the public at outreach events throughout the County.

On July 30th, we hosted a booth for Children’s Day at the Carroll County 4H Fair. Hundreds of kids and their families came through the arena. Under the blue canopy, they were able to make a stormwater-themed craft, look at stream bugs, and learn about healthy watersheds.

On August 27th, we spent the morning with Celebree School of Westminster, where we led a hands-on stream exploration activity with the preschool classrooms. Curious minds and hands searched through samples from a local stream to see what critters they could find. We talked about the importance of clean water to both our own bodies and to the animals that live in our waterways. It was great seeing everyone’s excitement for nature!

On September 28th, the Water Resources Booth was hosted by our staff at the Taneytown Harvest Festival. A cool misty morning turned into a warm, sunny afternoon, and we had the opportunity to talk about stormwater, run the watershed model, and connect folks with their watersheds.

Thanks to all who have stopped by to talk with us at our events! Our next booth appearance will be at the Carroll County Environmental Symposium on Saturday, October 26th. We hope to see you there!



The County’s two NPDES Compliance Specialists, Mitch Masser & Glenn Edwards, at the 4H Children’s Day outreach booth.



Gianni Assi, Watershed Restoration Engineer, providing guidance for the stormwater craft during Children’s Day at the Carroll County 4H Fair.



Claire Hirt, Watershed Management Coordinator, teaches Pre-K students at Celebree School of Westminster about stream ecology.



Stormwater Construction Updates

By: Claire Hirt, Watershed Management Coordinator

As fall begins, we are in the midst of two stormwater restoration projects: the Saint George's Gate Retrofit and the Oklahoma Outfall Stabilization Project.

Saint George's Gate continues progressing through the process of upgrading the existing dry stormwater facility to a surface sand filter. The first part of the project has involved installing a new outfall, constructing a new weir wall, and improving the stability of the inflow points with new manholes, pipes, and endwalls. The second part involves the installation of underdrains, filter media, and permanent stabilization.

Our contractor, Magstone, has been doing a great job of keeping the project moving forward, even with some rainy days and muddy soils! We anticipate construction to wrap up by late fall.

The Oklahoma Outfall Stabilization Project has just begun, located upstream of the Oklahoma stormwater retrofit in Eldersburg. We are installing storm drain to provide stable stormwater conveyance from an upland outfall down to the existing retrofit. C.J. Miller is constructing this project, and we expect work to wrap up around the start of the new year.



Construction is underway at the Saint George's Gate retrofit project.



Unmanaged stormwater within this outfall channel has caused major erosion upstream of the Oklahoma restoration project.

Meet the Staff

Ashley Caine
Office Associate



Ashley grew up in Hampstead and is currently living back at home after graduating from University of North Carolina Wilmington with a B.S. in Environmental Science and minors in Sustainability and Nonprofit Management. Ashley interned with the Bureau of Resource Management for two summers during her college career, and she is excited to return as Office Associate. Outside of work, Ashley enjoys traveling to new places, getting outside, reading, and going on walks.