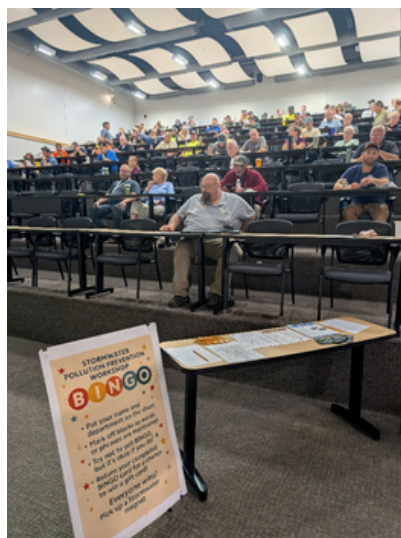
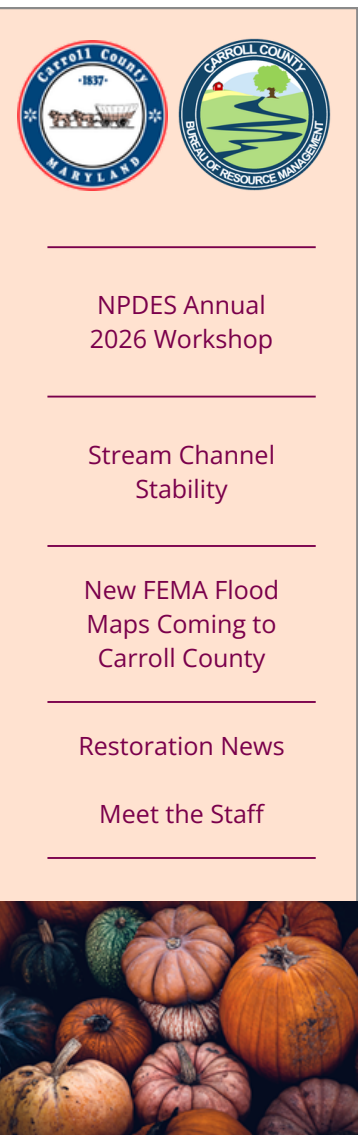




NPDES Annual 2026 Workshop

By: Timothy Matt, Environmental Coordinator NPDES

Carroll County Resource Management held their annual NPDES Training Workshop on September 16th. There were 82 attendees, which included county staff and our local municipalities. Jason Swope with the Chesapeake Conservation Landscaping Council (CCLC), gave a wonderful talk on Sustainable Landscape Management. He engaged with public works, facilities and our MS4 co-permittees to think about smarter, greener ways to maintain landscapes and reduce pesticides. Everyone who attended the workshop came away with a better understanding of our MS4 permit and the requirements of the permit to reduce and eliminate pollutants into our storm drain systems. We look forward to next year's NPDES Workshop!



Resource Management Division

225 N. Center St., Westminster, MD 21157 - 410-386-2712

<https://www.carrollcountymd.gov/government/directory/planning-land-management/resource-management/>
protecting and managing Carroll County's natural resources for the pleasure and enjoyment of its citizens

Stream channel stability, is self-recovery possible?

By: Byron Madigan, Water Resource Manager

Despite decades of stormwater best management practice (BMP) implementation, the continued degradation of urban streams remains a concern. Impervious cover within urban watersheds reduces groundwater infiltration vital for water supply, and causes accelerated runoff to our streams through increased volume and velocity to the receiving channel. This increase accelerates stream bank erosion, resulting in greater sediment and nutrient loads within the stream corridor.

There has been a significant amount of research on the effectiveness or pollutant removal efficiencies of various stormwater BMP designs, but not much on what physical changes occur within the receiving stream below the facility following implementation. Addressing urban runoff can be achieved through a variety of approaches, but do headwater stream channels have the ability to self-recover following the implementation of flow controlling BMPs?

After being awarded a research grant from the Chesapeake Bay Trust's (CBT) Restoration Research Grant Program In 2016, Carroll County partnered with the Center for Watershed Protection (CWP) to design a paired watershed study to evaluate the effectiveness of upland BMP implementation on stream channel stability. The original study ended in 2020 and showed that enhanced sand filter and wet pond retrofits performed as designed and reduced the magnitude, duration, and frequency of erosive flow rates, substantially reducing the measured runoff curve numbers and simulating a hydrologic



regime close to that of the "woods in good condition" performance standard from MDE. However, a major recommendation from this original study was to continue monitoring the sites over a longer period of time, which would allow additional time to observe the response of channel geomorphology to changes in the flow regime, which typically occurs over much longer periods than the duration of the original study. Therefore, the study was continued in the fall of 2022 through the spring of 2026 through an additional grant from CBT that was awarded to CWP.

In September 2026, Byron Madigan, Water Resources Manager for the County's Water Resource Office traveled to Nashville, Tennessee to co-share the results of this long-term study with Lisa from CWP at the National Stream Restoration Conference. Additionally, the results of the study aim to provide recommendations to credit flow controlling BMPs as a hydrogeomorphic stream stabilization technique for inclusion as part of the nutrient and sediment crediting protocols for the Chesapeake Bay Total Maximum Daily Load (TMDL).



Shannon Run XS1 - Spring 2020 (base flow)



Shannon Run XS1 - Spring 2025 (storm flow)

New FEMA flood maps coming to Carroll County: What you need to know

By: Patrick Varga, CFM, Environmental Review Manager

The Federal Emergency Management Agency (FEMA) develops Flood Insurance Rate Maps (FIRMs) to help communities understand and manage flood risk. These maps identify areas that are more likely to experience flooding and help guide development, building standards, flood insurance requirements, and floodplain management activities. FEMA periodically updates the maps as new information and improved studies become available. They are an important tool for helping property owners and communities understand flood risk before making decisions about purchasing property, developing land, or constructing buildings.

Carroll County's current FEMA flood maps became effective in 2015. FEMA has completed an update that will become effective on November 27, 2026. One of the most significant changes for Carroll County is the addition of designated floodways along the South Branch of the Patapsco River. A floodway identifies the portion of a floodplain that is particularly important for carrying floodwaters downstream. Because flooding in these areas can involve faster-moving water and greater hazards, development within floodways requires additional consideration and review.

To prepare for the updated FEMA maps, the County is proposing changes to Chapter 153, Floodplain Management, and Chapter 38, Floodplain Construction. The revisions update the County's regulations to reflect the new FEMA maps and

provide clearer guidance for development in areas identified as floodways. The updated regulations also strengthen the County's focus on avoiding and minimizing impacts to flood levels, floodwater movement, and floodplain storage.

The proposed changes clarify requirements for construction and other activities within the floodplain, including additions, filling, improvements to existing buildings, and floodproofing. Development within a designated floodway will receive additional review to ensure that it does not increase flood levels or interfere with the movement of floodwaters. The regulations continue the County's existing approach of limiting development where it could increase flood risk or create problems for neighboring properties.

Ultimately, the updated maps and regulations provide an opportunity to better communicate flood risk throughout Carroll County. The goal is not simply to establish additional requirements, but to help property owners, residents, and the development community understand why floodplain regulations are necessary. By identifying flood hazards earlier and considering them during the planning and development process, Carroll County can continue to reduce future flood damage, protect public safety, and build a more flood-resilient community.

Carroll County Department of Planning & Land Management

CARROLL ENVIROFEST

- Rain Barrel & Compost Bin Giveaway
- Recycled Art Contest
- Plant Swap
- Live Demonstrations
- Plant BINGO



Robert Moton Center

March 13, 2027
9 am - Noon



THIS EVENT IS FREE AND OPEN TO THE PUBLIC

Restoration News

By: Claire Hirt, Watershed Restoration Manager

The Hampstead Valley 4 Stormwater Restoration project is underway! Kinsley Construction has completed the lower-most portion of the project, extending and realigning the existing storm drain pipes and pouring a new endwall to support them. In order to excavate the new surface sand filter and construct the stabilized stream channel, grades need to be adjusted throughout most of the site. To this end, clearing of woody vegetation is in progress, and the dense strands of invasive bamboo will be removed within the next couple of weeks. Construction of the step pools will follow shortly thereafter. This project is funded in part by Maryland's Chesapeake & Atlantic Coastal Bays Trust Fund. For more information on this grant program, please visit <https://dnr.maryland.gov/ccs/pages/funding/trust-fund.aspx>.

The Melstone Valley Retrofit was recently completed, just in time for any fall storms that may roll through. Thank you to Magstone, White Pine, and Stambaugh, who all played a vital role in the construction process! Up next will be the Windemere and Meadow Ridge retrofits, both of which are in the final design stage and expected to begin construction early next year.



Meet the Staff

Shawn Favorite Environmental Inspector I



Shawn Favorite is excited to begin a new chapter as an Environmental Inspector with Carroll County Government. After calling Carroll County home for the past 20 years, Shawn is especially proud to have the opportunity to serve the community that he and his family have been part of for so long.

Before joining Carroll County Government, Shawn worked for a local environmental, construction, and excavating contractor, where he gained valuable hands-on experience in site development and environmental preservation. His work in the field gave him a strong understanding of the importance of protecting the environment while supporting responsible growth and development within the community. Shawn is excited to bring that experience into his new role and continue serving the county he has called home for two decades.

Outside of work, Shawn's life revolves around family, farming, and making memories. He and his wife are proud parents of two children, and much of their time is spent supporting their kids as they participate in 4-H and various sports. Whether it's sitting on the sidelines, cheering them on, or lending a hand with their 4-H projects, Shawn enjoys being there for all of the moments—big and small.

Shawn and his family live on their family farm, where they raise meat goats and market hogs. Farm life keeps him busy with plenty of early mornings, long days, and, of course, barn chores, but it's a lifestyle he truly enjoys. For Shawn, the farm is more than just a place to live—it's a place where family traditions are continued, hard work is valued, and important life lessons are learned.

When he's not doing barn chores or sitting on a sports sideline, you can usually find Shawn relaxing and watching college football. He is a proud Texas Longhorns fan and looks forward to spending his Saturdays cheering on his favorite team.

Shawn is grateful for the opportunity to join Carroll County Government and looks forward to getting to know his new coworkers, meeting members of the community, and putting his experience, knowledge, and dedication to work in a role that allows him to give back to the county and community he is proud to call home.