



down to earth

Environmental Restoration Quarterly • Spring 2022

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Project Spotlight: Bear Branch Stream Restoration

By: Elizabeth Spencer, Watershed Restoration Engineer

Over the winter, one of the Bureau of Resource Management’s stream restoration projects began wrapping up. This project is located on Bear Branch, within the Mayberry Game Protective Association property east of Mayberry Road.

The watershed to this point on Bear Branch is approximately 11.6 square miles. These waters eventually make their way to Double Pipe Creek.

As a part of our Watershed Restoration Program, approximately 6,768 linear feet of stream were restored through this site. This restoration will count towards the County’s goals and requirements to improve the quality of Carroll County waters.

Before restoration, the banks of this cold-water stream were eroding, causing instability of the channel bed and banks, hydraulic disconnection of the floodplain from its stream, and habitat degradation. As the bed and banks continued to erode, larger storm events became confined within the channel. These larger confined flows led to higher flooding velocities and stresses downstream.

Ecotone, Inc. was contracted to design a restoration plan to restore this reach of Bear Branch. The goals of this project were to increase floodplain connectivity during high flow events, lower stream bank heights relative to the floodplain to reestablish more frequent floodplain interaction, and reduce stress and velocity

(continued on Page 2)



Project Spotlight: Bear Branch Stream Restoration Continued



Before



During Construction

impacts on the stream bed and banks. In turn, this would create an ecologically diverse and functional stream restoration corridor with long-term benefits of sustainability, improved water quality, and providing diverse habitat opportunities for key species.

Wood material salvaged from on-site was utilized for bioengineering structures such as toe-wood, floodplain habitat, grade control structures, and log cross vanes. Trees, shrubs, and live stakes were planted along the stream and on the banks to provide habitat, stabilize the banks, and slow the velocities of storm flows.

The County received \$1,500,000 from the Maryland Department of Natural Resources Chesapeake and Coastal Service towards construction of the stream restoration project.

Magstone, LLC from Union Bridge began construction in January 2021. Being a cold-water trout stream, construction operations had to close down from March through May to allow for spawning, but construction picked back up after the stream closure period. In-stream work was completed by the end of the year, and the site was replanted in early 2022. Vegetative establishment is a very important factor in establishing and maintaining a stable ecosystem. This project will be monitored for bank scour, structure stability, and vegetative establishment for a five-year period to ensure lasting success.

Grant funding provided by:



Spring Word Scramble

hussinne
gsirpn
wroelfs
tupssor
uynnb
denarg
ludkncqi
wrsseoh



Word List

Bunny
Duckling
Flowers
Garden
Showers
Spring
Sprouts
Sunshine

Stormwater Update

By: Ed Singer, Watershed Management Coordinator

Trevanion Terrace

Grant funding



Maryland
Department of
the Environment

Trevanion Terrace Stormwater Management Facility – Construction of Trevanion Terrace is nearing completion. The pond will reduce pollution runoff from rain events and is designed to be a wet facility that will generally maintain approximately a 10-foot depth in the deepest part. This pond features an underdrain which draws cooler water from the bottom of the pond and better supports cold-water sensitive aquatic life in the receiving stream. This project was completed in cooperation with the City of Taneytown and a portion of the construction costs for this project are being paid for by MDE Maryland Water Quality Financing Administration through the Bay Restoration Fund.



Stone Manor Stormwater Management Facility – In April construction of a project to retrofit the Stone Manor Facility kicked off. This project was awarded to Hamilton Site Construction, Inc. from Mount Airy. This project will create a submerged gravel wetland which receives stormwater from a 21.85 acre drainage area and will provide water quality treatment to 5.63 acres of impervious surfaces.



Stone Manor



Carroll Environment on Facebook! By: Patrick Varga, CFM, Content Coordinator

Like, Follow, and Share Carroll Environment on Facebook!

The Carroll County Department of Land and Resource Management is now on Facebook at [Carroll Environment!](#) Residents interested in the environment, and specifically the Carroll County environment, are encouraged to learn and engage through the new social media page.

The new page will promote opportunities for Carroll County's residents to learn about and engage in information, projects, and activities that promote environmental stewardship and understanding in Carroll County. Posts will highlight ongoing and completed projects, solicit interest in volunteer opportunities, and promote environmental initiatives within the department and beyond. Watch for updates to find out about stream cleanups, tree plantings, and invasive species removal events hosted by the department. We're excited for you to join us!

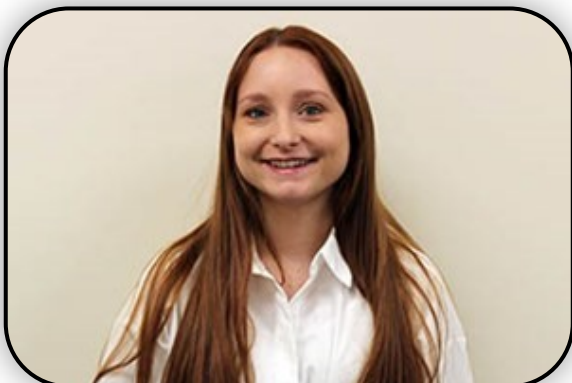
For more information, please contact Patrick Varga, CFM, Content Coordinator, at 410-386-2844 or pvarga@carrollcountymd.gov. For more information about the Department of Land and Resource Management, visit the [county's website](#).



Meet the Staff

Corian White Office Associate

Corian graduated with a bachelor's degree in criminology and criminal justice from UMD, College Park in 2020 and is currently in a Forensic Science-Cyber Investigation master's program at the University of Baltimore. She's worked in customer service focused jobs for 7 years including at Piney Run Park. In her spare time she enjoys reading, spending time with friends and family, and traveling.



Marci Boerner Office Technician

Marci is a lifelong resident of Carroll County and a graduate of North Carroll High School. Prior to being employed with the Carroll County Government, she spent 25 years working in the banking industry. Marci lives in Manchester on their family farm with her husband Joey and her twin sons Grant & Garrett. Marci and her family are active in the community involved in 4-H and organizing local fundraisers.

