

Streambank Restoration at Waynesboro Church

By Justin Atkins

Streambank erosion is currently one of the most common problems affecting streams in Pennsylvania. When a stream is eroded, sediment contaminates the water; sediment is currently one of the largest contributors to pollution in the Chesapeake Bay. When a streambank that ran along the property of Great Commission Deliverance Ministries Church in Waynesboro, Pennsylvania began to erode, Jana Mellott connected with Tammy Piper, Watershed Specialist for the Franklin County Conservation District, in May of 2014 to see what could be done to improve the stream.

Over the next six years, the Conservation District, in

partnership with USDA's Natural Resources Conservation Service (NRCS), implemented conservation practices to improve 2,200 feet of the West Branch Antietam Creek, a tributary of the Potomac River. A stream crossing, joint planting, live stakes, log vein with root wad, individual boulders, rock tow protection, and rock barbs were installed to slow down erosion and improve stream health. After the stream work was finished in August of 2018, riparian forest buffer was planted in September of 2019.

Rebecca Wertime, an advocate for stream health and buffers, joined the team to work on the development of the buffer. Wertime wrote the planting plan, selected different species, coordinated

the location of each planting, and helped with the installation.

Riparian forest buffers play a key role in improving the water quality of streams and lakes by protecting the water from the impact of adjacent land uses. They also replenish groundwater, protect associated wetlands, stabilize streambanks, minimize erosion, and prevent sedimentation of waterways. The roots of riparian buffers slow the flow of surface water and form a physical barrier, which causes sediment to settle out and be trapped.

NRCS assisted Piper and Wertime during the project to oversee construction and help with the riparian buffer planting in September. Troy Alleman, Franklin County's Earth Team volunteer, also helped to organize all the volunteers that came out to the stream to assist with the planting.

A streambank stabilization project is a very extensive project. With the help of NRCS and many volunteers from the community, the implementation of a riparian forest buffer reduced streambank erosion and improved water quality within the stream.



Troy Alleman (NRCS Intern) and church volunteers help with planting trees and shrubs along the streambank.

