Westmoreland Conservation District

Watershed Restoration

Municipality of Murrysville Streambank Stabilization Project

Design Features: Streambank stabilization using rip-rap, bank grading, single log vane deflectors, and native riparian buffer planting

Date of Installation: Summer 2024

Location: Duff Park (4500 School Rd S, Murrysville, PA 15668); Bear Hollow Park (4100 Bear Hollow Park Court, Murrysville, PA 15668)

Client: Municipality of Murrysville

Cost: $163,185 of Department of Environmental Protection Growing Greener grant funds with $33,797.70 of match contributions from WCD and the Municipality of Murrysville for a total project cost of $196,982.70.

Project Partners: Municipality of Murrysville, G Salandro Excavating, and Westmoreland Conservation District

Banks along UNT to Haymaker Run stabilized with rip-rap and bank grading at Bear Hollow Park

Project Contact: Kylie Schultz, kylie@wcdpa.com

Project Specifications

This project successfully stabilized and reduced accelerated erosion along the banks of Turtle Creek and an Unnamed Tributary (UNT) of Haymaker Run in the Municipality of Murrysville, Westmoreland County. Approximately 325 feet of streambank were stabilized at Bear Hollow Park, and approximately 400 feet of streambank were stabilized at Duff Park. The Duff Park site included the stabilization along the Duff Park trail on one side of Turtle Creek and stabilization along the Westmoreland Heritage Trail on the other side of Turtle Creek. The banks were stabilized by grading back steep banks as much as possible and placing large rip-rap, as well as installing six total single log vane deflectors. Two deflectors were placed at Bear Hollow Park, and four were installed at Duff Park. Native trees were also planted along the streambanks to improve the riparian buffer at each site as much as possible.

The Westmoreland Conservation District partnered with the Municipality of Murrysville and G Salandro Excavating to install best management practices in order to stabilize these areas of concern at all three sites. The total project cost was $196,982.70, with $163,185 from a Department of Environmental Protection Growing Greener Grant and $33,797.70 in cash match and in-kind contributions from the Municipality of Murrysville and the Westmoreland Conservation District.

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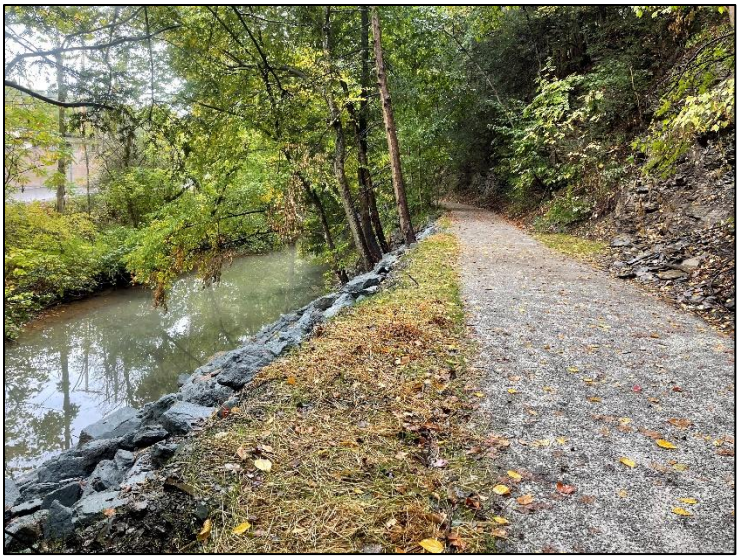
Benefits

Approximately 325 feet of streambank were stabilized at Bear Hollow Park, and approximately 400 feet of streambank were stabilized at Duff Park. This will reduce an estimated 22,440 lbs. of sediment pollution annually. The eroding banks at each site were also beginning to threaten existing recreational assets, such as walking trails and baseball fields. An existing sanitary sewer line also runs parallel to the streambank of the UNT to Haymaker Run at Bear Hollow Park. This was also protected through the use of bank stabilizing best management practices. This issue was addressed by stabilizing the actively eroding sections of the stream banks adjacent to the Westmoreland Heritage Trail (WHT), Duff Park and Bear Hollow Park.

Bear Hollow Park BEFORE: UNT to Haymaker Run

Bear Hollow Park AFTER: rip-rap and bank grading

Duff Park BEFORE: Turtle Creek



Duff Park AFTER: rip-rap, bank grading, trail resurfacing

Duff Park BEFORE: lack of riparian buffer

Duff Park AFTER: riparian buffer planting

Duff Park AFTER: installation of 4 single log vane deflectors. Note the leaves and current at the end of the log structure, showing that stream flows are being directed into the middle of the channel and away from the banks.