

Shupe Run Streambank Stabilization

Design Features: Single log vane deflectors, rock saw-tooth deflectors, armor toe with rip-rap, graded stream banks

Date of Installation: 2022

Location: Shupe Run, Mount Pleasant Township

Client: Coal and Coke Trail

Cost: \$111,455.74

Project Partners: Richard King Mellon Foundation, Coal and Coke Trail, Regional Trail Corporation (RTC), Mount Pleasant Township, and the Westmoreland Conservation District

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Single log vane deflectors being installed to help direct stream current away from stream banks

Project Specifications

The Westmoreland Conservation District partnered with the Regional Trail Corporation, Mount Pleasant Township, and the Coal and Coe Trail to improve nearly one mile of the coal and Coke Trail along Shupe Run in Mount Pleasant Township, Westmoreland County. This project stabilized approximately 1600 feet of eroding streambank along Shupe Run with 32 single log vane deflectors, 25 rock saw-tooth deflectors, and rip-rap at the toe of graded streambanks. Additionally, about one mile of trail was resurfaced and fish habitats were enhanced.

Benefits/Performance Measures

Overall, this project stabilized around 1600 feet of streambank and resurfaced over a mile of the Coke and Coal trail. The single log vane deflectors (32), rock saw-tooth deflectors (25), and rip-rap stabilization ultimately prevents additional sedimentation to the stream and encroachment to the adjacent rail-trail. Thirty native trees were transplanted along the streambank to restore a native riparian buffer and to hold the soil in place at the top of the streambank.

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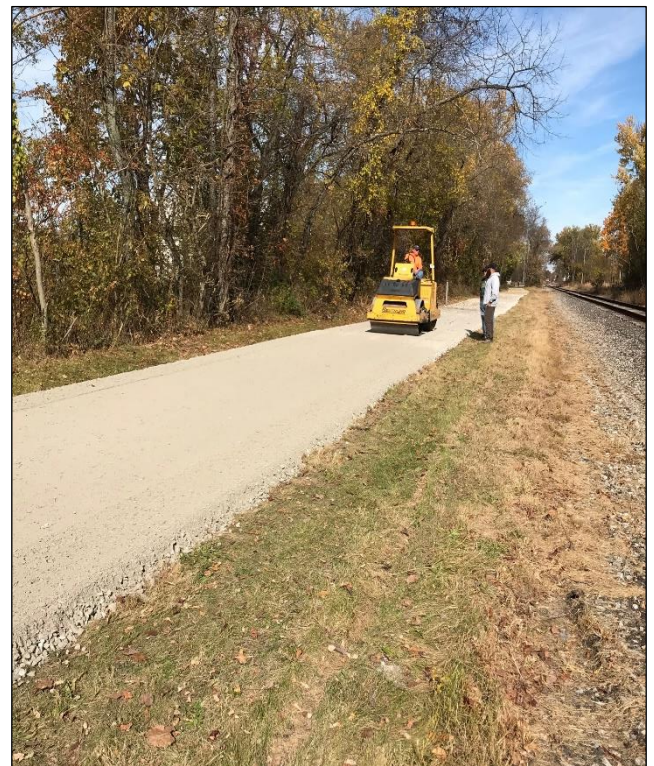
Before: Eroding and vertical banks causing sediment to enter the stream



After: Banks graded back to a stable slope and rock saw-tooth deflectors installed along the toe of the slope



Limestone aggregate paving for trail resurfacing



Limestone aggregate being compacted to create smooth, even trail surface