

Haymaker Run Stream Habitat Improvement Project

Design Features: Log framed cross vane, modified mudsill, log framed stone deflector, single log vane deflector, graded stream banks, armor toe of slope with rip-rap

Date of Installation: Summer 2023

Location: Sardis Road, Murrysville, PA 15668

Client: Franklin Regional School District (landowner), Sportsmen & Landowner Alliance of Murrysville, Municipality of Murrysville

Cost: \$30,115 of WPCAMR Quick Response Emergency Repair Grant funds with \$13,000 match contributions; for a total project cost of \$43,115.

Project Partners: Pennsylvania Fish and Boat Commission, Franklin Regional School District, Murrysville Area Watershed Association, Sportsmen & Landowners Alliance of Murrysville, Rotary Club of Murrysville, Western Pennsylvania Conservancy and Westmoreland Conservation District

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In-stream jack dam structure was retrofitted to meet current PFBC design standards to create better fish habitat and more stable streambanks.

Project Specifications

The Sportsmen & Landowner Alliance of Murrysville (S.L.A.M.) had constructed four in-stream water jack-dam structures for fish habitat along Haymaker Run in Murrysville and utilized the site for youth fishing. The structures were constructed a number of years ago, and the increased severity of flooding events had since damaged the structures. A bridge collapse that occurred on top of one structure was the main area of concern as it was causing rapid erosion where flows were being blocked. An initial site visit was conducted by Westmoreland Conservation District along with members of S.L.A.M. and the Pennsylvania Fish and Boat Commission (PFBC). A conceptual plan was designed by the PFBC after seeing what areas of the stream were in need of improvements. This plan included updating the four existing structures with the approved PFBC design for a log framed cross vane, as well as other in-stream habitat structures. Construction began on August 28, 2023 by Earth Shapers LLC with construction oversight by the Westmoreland Conservation District. PFBC was on-site for all in-stream habitat structure installations. All four water jack-dam structures were retrofitted to meet current PFBC design standards. Also, 13 single log vane deflectors, 3 modified mudsills, 1 stone deflector, and 2 additional log framed cross vanes were installed.

Benefits

The stabilization of approximately 1,700 feet of the streambank and the retrofit of existing structures was imperative to reduce the accelerated erosion occurring at this site. Haymaker Run is classified as a High Quality Cold Water Fishery by the Department of Environmental Protection, so improvements to the stream were important for maintaining this status. In addition to reducing sedimentation, this project also restored fish habitat. This site is now more suitable for fishing and environmental education.



Site of collapsed bridge on top of in-stream structure. Debris is blocking stream flow and creating severe erosion along streambanks.



Site after debris was removed and structure was repaired and retrofitted. Banks were also graded and stabilized.