

First Presbyterian Church of Murrysville Stormwater Retrofit Phase 2

Design Features: Rock lined channel installation and 80 foot pipe replacement

Date of Installation: 2021

Location: First Presbyterian Church of Murrysville
3202 N. Hills Road, Murrysville, PA 15668

Client: First Presbyterian Church of Murrysville

Cost: \$29,820.00 Growing Greener, \$14,390 partner's match.

Project Partners: Westmoreland Conservation District, First Presbyterian Church of Murrysville, Eveready Contracting

Project Contact: Hank Bradish, hank@wcdpa.com



Final rock lined channel

Project Specifications

The project was designed by the Westmoreland Conservation District (WCD) in 2020-2021 in conjunction with the First Presbyterian Church of Murrysville. Funding permitted the replacement of 80 feet of 15" CMP pipe with 18" HDPE pipe extending from an existing manhole over the hillside. Fifty feet of the existing channel was widened and a completely new rock lined channel was installed over the hillside for more flow capacity and safer conveyance of stormwater.

Benefits/Performance Measures

The project reduced erosion and sedimentation and provided support to the MS4 community of the Municipality of Murrysville through the implementation of green infrastructure projects by stabilizing an eroded site, reducing runoff volume, and improving water quality to the tributaries of the Turtle Creek Watershed.

Pollutant Load Reductions

BMP	Location	Acreage managed	TSS/yr	TP/yr	NO3/yr
Existing detention Basin and fore bay	Murrysville, Medic One, Murrysville PA	~5 acres	1470 lbs	2.2 lbs	1.2 lbs

TSS-total suspended solids TP-total phosphorus NO3-nitrate

First Presbyterian Church of Murrysville Stormwater Retrofit Phase 2



(Before) Hillside where proposed channel was planned to be installed and existing channel widened



(After) Hillside when channel was under construction and existing channel widened



Final channel after stabilization



New outlet of pipe and beginning of channel