

Conewago Creek Bioswales  
C990000729  
Londonderry Township, Dauphin County, PA

---

#### PROJECT DESCRIPTION

This grant funded the engineering and construction of two bioswales for the Conewago Creek Floodplain Restoration Project.

#### PROJECT GOALS

The goal of the project was to target a very eroded portion of the Conewago Creek for full floodplain restoration, stream restoration, wetland restoration, and legacy sediment removal. The goal was to construct two bioswales that would address sediment and nutrient reduction needs as part of the the larger Conewago Creek Restoration Project for the Municipal Separate Storm Sewer System (MS4) permit and the Chesapeake Bay Pollutant Reduction Plan. This goal was accomplished.

#### PROJECT RESULTS

The stream restoration is projected to achieve 1,503,411 lbs/yr of sediment load reduction, 3,489 lbs/yr of phosphorus load reduction, and 13,517 lbs/yr of nitrogen load reduction. There are three phases of construction for the full permitted project currently, which are now complete. Load reduction calculations for the Conewago Creek Floodplain Restoration project were developed using the procedures established in A Unified Guide for Crediting Stream and Floodplain Restoration Projects in the Chesapeake Bay Watershed (Wood, Schueler and Stack, 2021). This restoration activity is anticipated to have a significant improvement to habitat for wildlife along the stream corridor throughout the project footprint.

#### PICTURES

Pre-Construction



Post-Construction



#### PROJECT COSTS

Our spending came in well below the budget request. The total amount disbursed was \$18,564.33, which was well under the established budget of the grant of \$332,885.00.

#### LESSONS LEARNED

This project was a good lesson in collaboration with neighboring property owners to understand how land development plans that may affect a project. After the grant was issued, the neighboring property came in with a land development plan to develop the existing farm property into a warehouse. This led to substantial reductions in storm sewer upgrades along Hoffer Road. Being able to pivot and connect infrastructure upgrades from the land development to the grant funded project help us adapt to this changed circumstance.

#### PARTNERS

Herbert, Rowland & Grubic, Inc. – Construction administration, grant administration, and engineering support  
Landstudies, Inc. – Construction observation and engineering support

#### CONTACT INFORMATION

Monique Dykman - [mdykman@londonderrypa.org](mailto:mdykman@londonderrypa.org)  
MS4 Environmental Specialist

Londonderry Township  
783 S. Geyers Church Road  
Middletown, PA 17057  
(717) 944-1803