## Springettsbury Township Turnkey Water Quality Improvements for its 2018-2023 NPDES MS4 Permit – West Tributary Grant Number C990002491 Springettsbury Township

## **Project Description**

Springettsbury Township, in York County, Pennsylvania implemented stream restoration to remove approximately 522,803 pounds of sediment per year, stabilized approximately 1.17 miles of actively eroding streambanks and restored approximately 0.58 miles of streams and 1.17 miles of permanent riparian buffer on an unnamed tributary to the Codorus Creek. The Township contracted with AKRF, Inc. to provide turnkey services (design, permitting, construction, and operations, maintenance, and monitoring) to implement this project through the Township's 2018-2023 NPEDES MS4 Permit cycle. The final pounds of sediment per year is currently under review by PA DEP and may increase from the number stated above.

<u>Project Goals</u> Remove sediment and stabilize streambanks along the Wastewater Treatment Plant's west tributary that flows into the Codorus Creek.

<u>Project Results</u> The project's key accomplishments for the stream restoration project were the removal of approximately 522,803 pounds of sediment per year. This was accomplished by bank stabilization using bank grading, vegetative bank stabilization and riparian planting. The project stabilized approximately 1.17 miles of actively eroding stream banks and created a permanent riparian buffer for the unnamed tributary to the Codorus Creek. The total restored stream length for the project totaled approximately 0.58 miles. The project also included the planting of approximately 1330 trees and 95 shrubs in the limits of the riparian buffer. This streambank restoration project provided a forested buffer area throughout the reach of the project where rising water has a place to "flood", therefore, reducing the velocity and consequently reducing erosion.

Before:



After:



Project Costs Total implementation cost: \$1,427,252.19

<u>Lessons Learned</u> Communication with the York County Conservation District was critical to a successful project. Coordinating with the Conservation District and having regular site visits assured us that the job would run smoothly and have no problems with the sediment and erosion control measures put into place for this project.

During construction, Meadville had proposed to keep their stockpile and construction entrance at one location. The outcome of this would ease the logistics of deliveries and have less confusion when drivers were coming to the site. This also saved time and material due to not moving the stockpile and construction entrance halfway through the project.

<u>Partners AKRF</u>, Inc. was the consultant and contractor for project work. Pennsylvania Department of Environmental Protection, National Fish and Wildlife Foundation, York County Planning Commission, York County Stormwater Consortium

**Contact Information** 

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