Plum Run Stream Restoration Phase 3 at Strode's Mill

Growing Greener Project # 202001034833

Grantee: Brandywine Red Clay Alliance (BRC)



PROJECT DESCRIPTION: This project completed 905 linear feet of stream restoration on Plum Run, an impaired tributary of Brandywine Creek in East Bradford Township, Chester County. The stream restoration addressed steeply eroding stream banks and removal of legacy sediment left behind by an old mill dam that is no longer present; the work included stream bank grading, in-stream structures, erosion and sediment controls and enhancing the riparian buffer. The project was completed in May 2022 and is the final phase of a comprehensive stream restoration on a total of 4,470 linear feet of Plum Run. Phases 1 and 2 of the project were completed in 2020 and 2021. Most of the restored stream is located in preserved open space owned by East Bradford Township and will include walking trails and interpretive educational signs. Since 2010, BRC has completed eight projects on 1.8 miles of stream restoration in the Plum Run Watershed.

PROJECT GOALS: The goals of the project were to reduce stream bank erosion, sediment, nitrogen and phosphorous pollutants, improve fish and aquatic habitat and enhance the riparian buffer.

PROJECT RESULTS:

Pollution Reduction		In-stream Structures		Riparian Buffer	
Length of stream	905 In. ft.	root wads	15	Live Stakes	600
Nitrogen	67.9 lbs/yr.	straight vanes	4	Trees	425
Phosphorous	61.5 lbs/yr.	j-hooks	4	Volunteer hrs.	93
Sediment	20.31 tons/yr.	log vanes	2		



Stream channel BEFORE restoration



Stream channel AFTER restoration

PROJECT COSTS: Total implementation cost \$265,590- Growing Greener Grant (\$194,689), Chester County Preservation Program (\$65,901), East Bradford Twp. (\$5,000). Design for all three phases, William Penn Foundation- (\$100,000)

LESSONS LEARNED: Breaking a large project into multiple phases allows for greater diversity of funding sources and staging a project through multiple complex landowner relationships.

PARTNERS: East Bradford Township, Chester County Planning Department, Penn State Master Watershed Stewards

CONTACT INFORMATION: Brian Winslow, Watershed Conservation Director, bwinslow@brandywineredclay.org