

**SPRING CREEK IVEY LANE APARTMENT SITE (SCILAS)
STREAM STABILIZATION PROJECT**
PA DEP GROWING GREENER GRANT NO. C990003008
GRANTEE: CAPITAL AREA GREENBELT ASSOCIATION (CAGA)

PROJECT DESCRIPTION: The project constructed 500 linear feet of stream stabilization along an eroding and degrading segment of Spring Creek located in City of Harrisburg and Swatara Township, Dauphin County, south of Ivey Lane Apartment complex and approximately 260 feet west of 19th Street.

Stabilization included construction of 45 feet of boulder/log revetment, two boulder packing applications to protect mature trees (35 feet total), 60 feet of mud sill, 110 feet of boulder bank revetment, repair/extension of the exposed 12" HDPE pipe, and 265 feet of boulder toe with bank regrading. Native plantings consisting of more than 200 trees and shrubs, 33 live stakes, and 0.8 acre of seeding concluded construction activities to stabilize and renaturalize the project site.

PROJECT GOALS: The goals of this project were to:

- reduce sediment and attached phosphorus discharge, improve in-stream and riparian habitat, encourage infiltration and plant uptake of nutrients (e.g., nitrogen and phosphorus) along the stream perimeter, and promote flood flow attenuation;
- restore aquatic habitat and create shelter spaces (holding habitat) for fish and other aquatic organisms;
- initiate invasive vegetation management and vegetation restoration using native plant materials supporting a diverse and self-sustaining ecosystem; and
- prevent stormwater and trail infrastructure collapse and the accompanying pollution threat of sediment discharge into the stream

PROJECT RESULTS: Based on Model My Watershed, a web-based pollutant reduction application, reductions from the project are estimated to be 57,000 pounds per year, phosphorus by 87 pounds per year and nitrogen by 96 pound per year. The pollutant reductions support the PA DEP's goals of reducing stream impairments and supporting the Chesapeake Bay Phase 3 WIP.

The habitat is successfully supporting aquatic life and wildlife. The protected pockets along the banks are providing shelter and the vegetation is providing food and shelter conducive to aquatic and wildlife. Brown Trout, in the only Brown Trout designated stream in Harrisburg, have been routinely spotted, and ducks are raising young along the restored stream segment.

PICTURES



PROJECT COST: \$230,150 PADEP Growing Greener Grant; \$27,900 cash Match and \$39,600 In-kind Match

LESSONS LEARNED: The project spanned the COVID pandemic and a multiplicity of team changes at the DEP, and to contractor staffing. The contractor staffing changes resulted in the introduction of a qualified and trusted subcontractor to the team. The project team learned the importance of good communication to ensure construction accurately matching the design plans and accomplished the stated project goals is especially important when personnel changes.

PARTNERS: Capital Area Greenbelt Association; PA DEP; Consultants: Skelly and Loy, Inc.; and the landowner, the City of Harrisburg

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