



Glady Run Stream Restoration and Preservation Project



Coldwater assisted Greene County Parks & Trails (GCP&T) in the successful preparation of a grant application and implementation of a project to restore and protect approximately 3,500 linear feet of the Glady Run stream. This stream had been historically channelized and re-located along a historical railroad. Prior to construction of the project, the stream was suffering from severely eroding stream banks that were contributing substantial sediment and nutrient loads. The erosion was also threatening the adjacent Little Miami Scenic Trail / Ohio to Erie Trail that is heavily used for cycling and walking as well as a City of Xenia water main.



Pre-construction photo of eroding streambank at Glady Run, immediately adjacent to the Little Miami Scenic Trail bike path.

The overall project budget was based on a \$226,962 grant from the Ohio EPA's Section 319(h) Non-Point Source Program along with a \$64,338 local match. Coldwater helped GCP&T to develop a solution to meeting the 25% local match through the use of donated conservation easements and in-kind labor of GCP&T staff. Following the grant award, Coldwater provided assistance with grant administration, project design, permitting, construction oversight, invasive species removal, and public outreach. Coldwater designed informative signage that will be placed near Glady Run along the bike path to educate the public about the project.

The final design involved the construction of a stabilized bank slope featuring toe rock protection and native seeding/ plantings. The project was designed to restore and stabilize eroding bank sections while maintaining the conveyance capacity of the channel. Permits obtained by Coldwater for the project included a U.S. Army Corps of Engineers Nationwide Permit 27, a local floodplain development permit, and an Ohio EPA construction NPDES permit.



Post-construction view

Glady Run Stream Restoration Project

The Glady Run Stream Restoration Project received a 50% match grant from the state and provided the funding and expertise needed to restore the stream. The section of Glady Run features rapidly eroding riparian along the Little Miami Scenic Trail. In addition to threatening the stability of the trail, this section regularly impacts water quality because it acts as a significant source of sediment and nutrient pollution. The first step in this project was to install a natural stream bank that can hold erosion, allow the stream to recover from future erosion, improve water quality through reduction in sediment and nutrient pollution, and improve stream and riparian habitat. These techniques include the construction of a rock toe structure, installation of toe rock, and planting of native trees and shrubs. A natural bank of vegetation allows for the use of the stream bank that provides habitat for wildlife while also stabilizing the stream bank. Certain stream species can be grown from various of toe banks. These toe banks are made throughout the project and consist of native riparian and wetland species.

Native Plantings - What to look for

- American Bluestem (Spartina americana)
- Blueberry (Vaccinium sp.)
- Blue Shrub (Lonicera caerulea)

Partners: GREENE COUNTY PARKS & TRAILS, XENIA OHIO ENVIRONMENTAL PROTECTION AGENCY, COLDWATER CONSULTING, LLC, Wasi

Map: Shows restoration areas, Glady Run, Little Miami Scenic Trail / Ohio to Erie Trail

