

**Final Report
March 2015
Coldwater Heritage Partnership
Fry's Run Streambank Restoration & Riparian Buffer Project
Northampton County Conservation District**

Project Photos

Please see attached photos.

Project Summary

The project included the restoration of 140 linear feet of highly eroded streambanks using habitat improvement structures designed by the PA Fish & Boat Commission, and the purchase of 200 trees and shrubs to be planted as a riparian buffer along 480 linear feet of Fry's Run at Fry's Run County Park in Williams Township Northampton County. The total project cost, including local contributions, was \$18,736.16. Please see the Final Expense Record for an itemized budget breakdown.

In the end, the purchase and planting of 600 live stakes along Fry's Run was changed out for the purchase of 200 containerized trees and shrubs, which will better serve to help stabilize riparian soils, reduce polluted runoff, reduce floodwater velocities and improve thermal conditions along Fry's Run than would live stakes. The 200 containerized trees and shrubs were paid for in March 2015; however, due to seasonal timing, they won't be shipped to Fry's Run County Park for planting until April 17, 2015.

Project Monitoring & Maintenance Plans & Next Phase

Staff from the County Conservation District and County Parks Department and volunteers from the Fry's Run Watershed Association will be responsible for monitoring and maintaining the site. The responsibilities will include maintaining and repairing the surface of the habitat improvement structures as needed, and watering and weeding the 200 containerized trees and shrubs once they've been planted.

While the 600 live stakes that were originally planned as part of the project were changed out for the 200 containerized trees and shrubs, as mentioned under **Project Summary** above, live stakes will be purchased and planted along the immediate streambanks of Fry's Run to help stabilize those streambank soils immediately adjacent to the creek. This phase of the project will most likely occur in the spring of 2016, with funding provided by either the Conservation District or the Watershed Coalition of the Lehigh Valley.

Project Partners

- Northampton County Conservation District – served as project leader and was responsible for coordinating all aspects of the project, including ordering construction and planting materials, contracting with the excavator for project construction, developing the project Erosion & Sedimentation Control Plan, and coordinating and supervising project volunteers.
- Northampton County Parks Department – granted permission to implement the project on county-owned parkland and provided tools and labor for the project.
- Northampton County Prison Department – provided four work release inmates as volunteers who assisted with implementing the project.
- PA Fish & Boat Commission – designed the streambank stabilization structures for the project, coordinated and held the required General Permit issued by the PA Department of Environmental

Protection to build the structures and provided construction oversight for the streambank stabilization phase of the project.

- Fry's Run Watershed Association – provided volunteer labor to assist in the construction of the streambank stabilization devices and will provide the same for the riparian buffer planting in April 2015.
- Lehigh Valley Master Watershed Steward Program – provided volunteer labor to assist in the construction of the streambank stabilization devices and will provide the same for the riparian buffer planting in April 2015.
- Lehigh Gap Nature Center – granted \$3,000 to the Northampton County Conservation District to help with the purchase of 200 containerized trees and shrubs for the riparian buffer planting phase of the project.
- Watershed Coalition of the Lehigh Valley – granted \$1,272 to the Northampton County Conservation District to help with the purchase of 200 containerized trees and shrubs for the riparian buffer planting phase of the project.

Project Accomplishments

The project included the construction of seven PA Fish & Boat Commission designed fish habitat improvement structures: four single log vane deflectors, two modified mud sill cribs and one stone deflector. These streambank stabilization structures now help stabilize 140 linear feet of previously degraded streambanks at Fry's Run Park, deflect stream flow away from the banks to reduce streambank erosion, and provide critical habitat for macroinvertebrates, trout and other species of fish.

The project also included the purchase of 200 containerized trees and shrubs, which will be shipped to Fry's Run County Park for planting in April 2015. These riparian buffer plantings will help filter stormwater runoff, reduce streambank erosion, reduce water temperatures and enhance in-stream habitat for trout and other aquatic organisms in this High Quality-Cold Water Fishery.

Along with other recent accomplishments in implementing recommendations in the Fry's Run Coldwater Conservation Plan, this project accomplished yet another step toward improving the health of Fry's Run and its coldwater ecosystem.