Weaver Run Restoration Growing Greener Grant 2009 Awarded to Paint Creek Regional Watershed Association

Final Report

TECHNICAL REPORT

Narrative

A. What was the project supposed to accomplish?

This project's purposes were to treat several Abandoned Mine Discharges impacting Weaver Run, a headwater stream in the Paint Creek Watershed in Somerset County, and improve the water quality of Weaver Run and its receiving streams. This project furthered restoration work throughout the Stonycreek River Watershed, a DEP Qualified Hydrologic Unit.

B. What you actually did and how it differs from your plan?

We proposed treating the following discharges: D06, D07, D08, D10, and D11. D06 flowed into a pond and D07 was the pond's effluent. Upon closer inspection of this site, our engineer concluded that there was not enough room to build a treatment system for these discharges, so we focused our attention on the lower portion of Weaver Run. Initially, we proposed treating D10 and D11 together at one location, but because of the way the lower site (D11) flooded during a wet spring, we decided that would not be the ideal location for a treatment system. Pumping D11 up to D10 would not have been economical, so we built a system for D10 and theorized that its effluent would buffer the impacts of D11, which sometimes only had flow of 5 gallons per minute in the late summer and fall. Through monitoring, we discovered D8 actually split into two discharges, so instead of treating this one discharge, we treated each (8A and 8B) individually. In the end, we constructed open limestone beds for D10, D8A, and D8B.

C. What were your successes and reason for your success?

We were fortunate to have an established partnership with the Pennsylvania Association of Conservation Districts (PACD) and their Technical Service division in Somerset and the Conemaugh Valley Conservancy's Kiski-Conemaugh Stream Team. Eric Robertson and Phil Gardner of PACD designed these systems and helped with their implementation. EarthShapers, LLC's bid came in under the engineer's estimate, which was a cost savings. The Stream Team continued its monitoring and technical support throughout the project. Community support also helped highlight this project. Once water quality was such that aquatic life could live in Weaver Run, the Windber Sportsmen's Club stocked brook trout in the stream for the first time in over 80 years. All summer, adults and children were seen fishing in Weaver Run and its receiving stream, Seese Run.

D. What problems were encountered and how you dealt with them?

Our most significant problem was that the land on which treatment systems 8A and 8B were to be built was actively being sold when we finished our first system and was ready to begin them. The original landowner, Phil Petrunak, had signed a landowner agreement and was willing to donate a portion of his land so that we could construct these two systems, but we waited to meet with the new landowners, Jim and Cheryl Stinebeck. So the sale of this property delayed our project and forced us to request extensions. Fortunately, the Stinebecks were supportive of our efforts and they signed a landowner agreement so these systems could be built.

E. How your work contributed to solution of original problems?

The *Paint Creek Restoration Plan* recommended treatment of several discharges along Weaver Run, a stream with a pH too low for aquatic life and laden with metals. Construction of the first and largest treatment system, D10, markedly improved the water quality of Weaver Run downstream. While construction of D8A and D8B treatment systems just finished in October, we anticipate them "sweetening" the water even more and extending the stream section with improved water quality.

F. What else needs to be done?

On behalf of the Paint Creek Regional Watershed Association, the Conemaugh Valley Conservancy's Kiski-Conemaugh Stream Team will collect water samples from the Weaver Run treatment systems monthly for a year and then quarterly to monitor their effectiveness.

Water samples from the "Twins" were collected on October 30, 2014 and sent to the DEP's lab, but the results have not been received yet.

G. What are your plans for disseminating results of your work?

The media did cover the results of the first treatment system, D10. A press release will be issued for the completion of the project and, possibly in the spring, we'll have a dedication.

H. How well did your spending align with your budget request?

We spent less on project management than anticipated, largely due to the generosity of our board and partners who collaborated with us. Additionally, our engineer said we did not need any permits so we saved considerable contractual dollars. These savings were put into treatment system construction, so we did go over our proposed construction budget by about \$14,000.

Summary

The Paint Creek Regional Watershed Association constructed three open limestone beds to directly treat three Abandoned Mine Discharges and buffer a couple others that were inhibiting life in Weaver Run. These systems improved water quality to the point that, in 2014, the local sportsmen's club stocked brook trout in Weaver Run for the first time in over 80 years.

Goals and Accomplishments Worksheets

Attached.

Photographs

The following digital photos were submitted to Malcolm Crittenden, our DEP project advisor, on 11/20/14.



Left, Weaver Run Discharge D10. Right, D10 Treatment System.



Left, D8B (Lower) Treatment System. Right, D8A (Upper) Treatment System.

Technical Reports

- Water quality data
- Project Design

Attached.

Operation, Maintenance and Replacement Plan

Attached.

<u>Other</u>

Local Media

- Bal, Kecia. "Trout Time: Wintry weather may require more hardy anglers." *Our Town.* [Johnstown, PA] 2 April 2014. Print.
- Griffith, Randy. "Stream set for stocking after decades of pollution." *Tribune-Democrat*. [Johnstown, PA] 2 April 2014. Print.