DENLINGER FARM AT BEILER RUN

Technical assistance helps farmers, streams and brook trout

PROJECT GOALS

Identify farmers willing to enroll in the Regional Conservation Partnership Proposal and install best management practices (BMPs) to not only bring them into compliance with Pennsylvania law, but to improve fish and wildlife habitat.

COMMUNITY AND ECONOMIC BENEFITS

- Project brought the farm into compliance with state law.
- Excluding livestock from the stream improves local water quality, enhancing public health.
- Raises awareness of neighboring farms to the benefits of the "whole-farm conservation effort."

ENVIRONMENTAL BENEFITS

- Planting forested buffers reduces stormwater runoff and erosion in the stream corridor.
- Adding trees increases air and water quality because they are natural filters for excess nutrients.
- Lower water temperatures provide food and habitat for a variety of wildlife.
- Installing fencing for livestock decreases nutrient pollution in the stream, ultimately reducing the pollutants entering the Bay.
- Planting trees increases soil stabilization, which decreases nutrient runoff locally and downstream.

CONSERVATION PROJECTS INSTALLED

- Forested buffers.
- Exclusion fencing.
- Manure storage.
- Alternative watering source.
- Roof runoff controls.



Denlinger Farm's stream one year after installing BMPs. (Photo: Stroud Water Research Center)



Denlinger Farm's stream before installing BMPs. (Photo: Stroud Water Research Center)

PROJECT SUMMARY

This project involves the 93-acre farm, Denlinger Farm, which abuts an unnamed tributary to Mill Creek along Lynwood Road in Ronks, Pennsylvania. Project partners have been working with the farming community along this stream to implement BMPs. Farmers have implemented BMPs, including installing livestock fencing, managing manure storage and planting trees to help determine the best way to improve and maintain the quality of their local ecosystem, as well as the Chesapeake Bay's.

The Stroud Center has been monitoring the stream for water chemistry, macroinvertebrates and stream temperature in hopes of documenting the benefits yielded by the BMPs. There has been a terrific response from the farming community along this stream. Over the past decade, five farms have enrolled in the Conservation Reserve Enhancement Program (CREP) to install forested buffers and agricultural BMPs. Partners continue to conduct more outreach to farms in the wider watershed. The owner of Denlinger Farm has planted a forested buffer and installed several other BMPs, including roof runoff controls, an alternative watering source, buffer fencing and manure storage. As a result of this project, and similar work within the same watershed, Beiler Run is now listed as one of Lancaster County's target waterways for their Rapid Delisting Strategy for stream restoration.

THINGS TO CONSIDERS

- The financial variability of a farm operation is an important by complicated consideration in conservation work.
- It is helpful to have grant proposals submitted with farms, locations, BMPs and costs known.
- Integrating soil health practices with BMP implementation is an emerging, but useful, approach.
- Cost-share support is highly effective for farmers adopting new behaviors, aligning well with existing funding for soil health outreach and technical assistance.

THE PARTNERS AND FUNDING SOURCES

- National Fish and Wildlife Foundation.
- Chesapeake Bay Foundation.
- Stroud Water Research Center.
- Red Barn Consulting.
- TeamAg Inc.
- Lancaster County Conservation District.

CONTACTS

- Lamonte Garber Stroud Water Research Center
- Igarber@stroudcenter.org