

Conserving Natural Resources for Our Future

Dennis Bross Farm BMP Implementation GROWING GREENER PROJECT #SC160157

Agricultural Best Management Practices (BMP's) were implemented on a dairy operation on Meck, Crosskill, and Little Swatara Creeks, Berks County, Pennsylvania. The Agricultural BMPs reduced sediment and nutrient pollution to surface waters within the Chesapeake Bay Watershed.

Project Results:

- Construction of a 148' x 12' x 8' rectangular under barn manure storage and 12' x 82' circular concrete storage.
- Installation of 2,500' of streambank fencing and 1 agricultural stream crossing, protecting 0.5 acres of existing forest riparian buffer and creating 0.5 acres of herbaceous riparian area.
- Over 5000 sq. ft. of heavy use area protection with roofs and cover, curbs, or 4' walls.
- · Implementation of 3,525 sq. ft. of Animal Walkways and Trails with livestock exclusion fencing.
- Installation of 200 ft. of barnyard gutter, downspout, and 250 ft. of underground outlet to keep clean water clean.
- Development of an NRCS 590 Comprehensive Nutrient Management Plan on 142 acres.
- Conservation Plans and implementation on 117.7 acres of cropland, and 16.7 acres of pasture land.

Project Pollutant Load Reductions

Nitrogen (N) lbs./yr.

Phosphorus (P) lbs./yr.

Sediment (S) T/yr.

10,494.0

1,926.0

628.0



BEFORE: Severe stream degradation from unrestricted livestock access



AFTER: Livestock exclusion fencing with a riparian buffer protects streambanks and filters pollutants.

Project Partners:

Berks County Conservation District (BCCD), USDA Natural Resource Conservation Service (NRCS), Chesapeake Bay Special Projects Program, Dennis Bross Farm.

Project Cost:

A total of \$115,225.00 was allocated by the Growing Greener Grant program, with a \$220,308.00 cash match contributed by USDA-NRCS, and additional \$117,106.81 of non-cash match from Chesapeake Bay Special Project Program. The total project cost was \$452,639.81.

Lesson Learned:

Inter-agency and cooperative partnerships are critical to allocate and leverage funds to implement BMPs in agricultural priority areas. Collaborative efforts expand public funding and ultimately reduce sediment and nutrient pollution to headwater tributaries within the Chesapeake Bay watershed.