

Gray ACAs Improvements Project  
Growing Greener Grant #C990000723  
Snyder County Conservation District (SCCD)

**PROJECT DESCRIPTION**

A roofed animal concentrated area (ACA, heavy use area protection, HUAP) was constructed for the farm's main beef grazing enterprise to facilitate feeding cattle and collecting manure up to three months when pasture conditions are not suitable for grazing (winter, too wet, drought). A nutrient management plan (NMP) was developed as well as barnyard exclusion fencing was installed for the operations' goat herd. Project timeframe: January 2019 to October 2022.

**PROJECT GOALS**

1. Develop a NMP for the beef, goat, pasture & crop operation. 2. Permanently keep goat herd from unimproved goat ACA at existing barn. 3. Construct an improved beef herd ACA with manure storage capability during timeframes when pasture grazing is unsuitable. End results: Reduce nitrogen (N) and phosphorus (P) loads entering Unnamed tributary (UNT) to Susquehanna River.

**PROJECT RESULTS**

In 2020, a NMP was approved for the operation covering crop years 2021-2023. After USDA-Natural Resources Conservation Service (NRCS) goat and beef ACA designs and estimates were deemed unsatisfactory in early 2021, the Operator & Owners chose to go through private engineering at his expense to design suitable beef ACA agreed to install fencing to exclude goats from existing barnyard. Work on beef ACA with supporting practices began in late-2021 and completed in summer 2022. FieldDoc's Adapted Chesapeake Nutrient & Sediment Load Reduction Models show an estimated load reduction of 188.86 and 4.18 lb./yr. of N and P respectfully.

**PICTURES**



Beef ACA constructed and being used while beef calves are being weaned from their mothers. Photos taken 9/30/2022.

**PROJECT COSTS**

Total Cost: \$325,097.49  
Growing Greener Grant Amount: \$209,633.00 (All towards NMP and ACA)  
Cash Match from Operator/Owners: \$107,964.49  
SCCD In-Kind Match: \$7,500.00  
Total Match: \$115,464.49

**LESSONS LEARNED**

Challenges were a.) shifting engineering and quality assurance from NRCS to private sector due to design flexibility and potential cultural resource issues, b.) securing contactors and materials and increased prices during a COVID-19 economy, c.) misunderstandings between municipal and operator/owners regarding building permits which led to a project timeline extension. Success: completion of the project to help operator manage beef & grazing operation while decreasing N and P runoff.

**PARTNERS**

Farm Operator Brian Gray, Farm Owners Annette & David Gray, and Snyder County Conservation District (Grantee)

**CONTACT INFORMATION**

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