

Chesapeake Bay Agricultural Waste Storage Project Growing Greener Project #: C990002449 Grantee: Chester County Conservation District (CCCD) Project completed December 2022

<u>PROJECT DESCRIPTION</u> Implementation of a 90' diameter by 12' depth concrete dairy waste storage facility and associated best management practices (BMPs) on a barnyard adjacent to headwaters of the Chesapeake Bay.

PROJECT GOALS Objectives for this project were to:

- Construct a new waste storage facility to NRCS standards that would increase the volume of manure and dairy operation byproducts (e.g., bedding, wastewater) that could be stored.
- Reduce non-point source pollutants by reducing the frequency and quantity of waste spread on cropfields (due to increased storage volume).
- Increase human and animal safety by installing a proper emptying system with a gated push-off, access lane, and safety fencing.

<u>PROJECT RESULTS</u> The installed 90' x 12' structure now provides the dairy operation with six months of storage and the following water quality benefits:

- Reduced nutrient loading to the stream from upland areas due to less frequent manure spreading
 on crop fields, and decreased nutrient and pathogen concentrations resulting from bedding
 previously stacked in barnyard areas adjacent to the stream.
- Chesapeake Assessment Scenario Tool (CAST) model Local Edge of Stream load reductions of 4,870 pounds per year of nitrogen and 280 pounds per year of phosphorus.

PICTURES



Concrete waste storage facility with safety fencing, gates, manure push-off, and access road to pump-out.

PROJECT COSTS \$2,200 for administrative costs and \$35,281.59 for construction.

<u>LESSONS LEARNED</u> Partnering Growing Greener funding with NRCS programs brings down the total project cost for the landowner. In this case, the landowner was incentivized to continue BMP implementation and is now using CAP funds to install a stream crossing.

<u>PARTNERS</u> NRCS assisted with the financial and technical assistance (engineering/design) for this project.

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