<u>Project Description</u> - This project was designed to address resource concerns associated with the Freeman livestock operation. The farm is a mixed livestock operation with cow/calf pairs, finishing beef, meat goats, finishing swine, broilers, and layers. The farmstead has several resource concerns, primarily a large earthen ACA (animal concentration area) and lack of a manure storage, with stockpiled manure exposed to uncontrolled surface runoff. During the winter, manure is either stockpiled in the open and exposed to surface runoff or land applied to nearby fields, posing a greater environmental risk during winter months. Since existing pasture areas are inadequate for the number of cattle that currently graze the pasture, the finishing beef will be confined to a heavy use area.

Project Timeframe - December 07, 2017 through December 31, 2021

<u>Project Goals</u> - The resource concerns were addressed by implementing several BMPs. The heavy use area was addressed with the construction of a roofed concrete barnyard (PA-561) roofed concrete stacking pad (PA-313) for the manure. The manure stacking pad will accommodate 6 months of manure to allow for timely application. The structure includes gutters and downspouts (PA-558) and underground outlets (PA-620) for the safe collection of roof water. The project involved installation of a stormwater diversion (PA-362) with an erosion control blanket immediately upslope from the proposed roofed/paved heavy use area and stacking pad for directing upslope surface runoff away from the new structure.

Pictures -





<u>Project Results</u> -The project will prevent excess nutrients and sediments from entering the waterways and ultimately the Chesapeake Bay. The project area drains directly to Leonards Creek, a high quality (HQ) designated stream. The project will allow the manure to be safely stored until it can be safely land applied. There will be approximately 500 tons of manure stored annually. This will prevent 11,246 lbs. of nitrogen, 6,532 lbs. phosphorus, and 10,901 lbs. potassium from entering the watershed.

Project Costs - \$134,650 Growing Greener plus an additional \$22,775 in match funds.

