

Covered Bridge Meadow Agricultural BMPs - Grant #SW160095
Washington County Conservation District

PROJECT DESCRIPTION: The Best Management Practices (BMPs) installed during this project were streambank fencing, animal crossings, animal trail, and barn drains. The project was completed between 2016 and 2021 during multiple phases. This project is part of a larger push by WCCD to install agricultural BMPs in the Raccoon Creek Watershed.

PROJECT GOALS: Purpose of this project was to install agricultural BMPs on a farm in Washington County to improve the quality of the unnamed headwater tributary to Raccoon Creek. Water quality would be improved by excluding or limiting animal access to the stream through stream bank fencing and animal crossing installation. The BMPs would allow a vegetative area to be established that would allow the absorption of nutrients and reduce the quantity of sediment reaching the stream.

PROJECT RESULTS: The Best Management Practices (BMPs) installed for this project included 3,228 ft of streambank fencing, 2 animal crossings, 4,125 ft² of stabilized animal trail, roof gutters, dripline drain, and 2 spring development with 4 watering troughs. These BMPs resulted in a reduction in sediment, nitrogen, and phosphorus in the headwater stream.

<u>Parameter</u>	<u>Before</u>	<u>After</u>	<u>Load Reduction</u>
Nitrate	0.76 mg/L	0.44 mg/L	57.8%
Sediment	182,823 lbs/year	154,883 lbs/year	15.3%
Total Nitrogen	863 lbs/year	778 lbs/year	9.8%
Total Phosphorus	384 lbs/year	350 lbs/year	8.7%

PICTURES

Before Project



After Project



PROJECT COSTS: Total Project Cost \$63,714.00 of which \$46,697.00 was from Growing Greener Grant program and \$17,017.00 was provided as match.

LESSONS LEARNED: We learned two lessons from this project. The first lesson we learned was to include additional fence for any changes in layout of the fencing along the stream during construction. Due to the timeframe from grant submission to approval, the operation decided to separate some of the animals and the original layout of the fence did not include allowing access to the barn for some of the animals. During the preconstruction meeting with worked with the landowner to develop a solution that work for all parties involved. The second lesson we learned was to evaluate the capacity of the fence charger. The landowner did not have enough voltage or charge in the streambank fence to keep the bull out of the buffer. We worked with the landowner to understand proper charger installation and with the repairs that the landowner conducted prevents the animals from entering the buffer.

PARTNERS: Partners for Fish & Wildlife (California University of Pennsylvania)

CONTACT INFORMATION

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