Griffith Farm Tour- 9/18/24

In attendance- Northcentral Stream Restoration Partnership:
Savannah Rhoads- Watershed and Program Specialist with UCCD
Reneé Carey- Executive Director of Northcentral PA Conservancy (NPC)
Jason Fellon- DEP NCRO Watershed Coordinator
Cameron Englehart- PA Fish & Boat Commission Habitat Manager

Major Takeaway: The partnership often works with partnering agencies like NRCS or applies for additional grant funding (National Fish & Wildlife Foundation Small Watershed Grants) to address barnyard issues on Agricultural properties to eliminate all resource concerns (Full-barnyard restoration approach); Part of the stream work often includes streambank exclusion fencing

- Ave cost was $22.73 per linear foot to do streambank stabilization work in 2022; full barnyard restoration usually costs over $100,000- Heavy use areas, manure stacking structure, etc.

Technical Assistance/Design for Stream Work: All performed by PFBC once an interested landowner is secured by Conservation District; Barnyard BMPs are typically NRCS or a private engineering firm
Funding Sources: DEP (Growing Greener Grants), PFBC (In-kind funding from Chesapeake Bay Unit), PennDOT-Central Susquehanna Valley Thruway project, Norfolk-Southern railway, etc.; From 2007-2022 there has been $4,294,669 funding spent between in-kind and grant funds throughout PA on stream restoration through NPC
Timeline/Progress in Watershed: Projects on Turtle Creek- start within headwater section as much as possible; You find a willing landowner that then shares their experience with their neighboring properties and do some outreach to gain momentum.
Turtle Creek specifics: Projects began in 2013, farmers then saw the benefits of protecting and stabilizing their banks to improve livestock and crop health, increased water quality, and no longer losing more land from erosion

- We have now reached a total of 23 projects, over 20,000 linear feet, and have planted 28 riparian buffers within Union County; More landowners are lined up as proposed restoration sites within Turtle Creek and beyond
- We have mainly worked with one specific excavator for stream stabilization- great relationship, he's experienced, less of a safety concern for stream team, has the proper equipment, and always willing to work long hours to get the job done
- Continuous monitoring has been done by SU and BU for 10+ years and is still occurring today; DEP also has their own Biologists that monitor progress over time
- We have hit a majority of the agricultural sections and now have moved into the more urban stretches further down in the watershed closer to the Susquehanna River
- DEP's 2024 Integrated Water Quality report revealed 2.2 miles of Turtle Creek are no longer impaired where there have been projects implemented

Additional Links:

PA DEP Story Map Coverage:

https://padep-1.maps.arcgis.com/apps/Cascade/index.html?appid=e99f1e95560f4ffebcb52905bc1be1e7

PFBC Stream Habitat Management/Structure Work:

https://www.fishandboat.com/Conservation/Habitat/Pages/Stream-Habitat.aspx

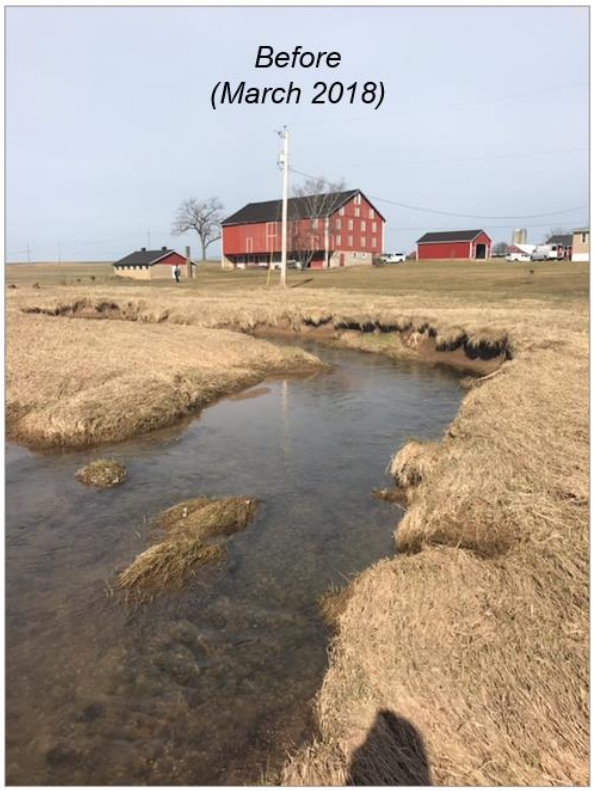
[Photos to view before the tour:]

Mary Beth Griffith's

Before (March 2018)

August 2018

March 2023



What the Problem Looks Like:

- Poor bank vegetation
- Little to no riffle habitat
- Embedded Substrate
- Animals with full access to stream

Beginning Steps

- Either contact a landowner where resource concerns are noticed or receive a call from a concerned resident
  - Chapter 105 complaints, Chesapeake Bay Inspections, GP applications, word of mouth from neighbor
- Schedule Initial site visit
  - Discuss funding opportunities, options to get work completed (complete I&E), Contact related agencies (NRCS, DEP, NPC, etc), determine program that makes the most sense (ACAP/EQIP/Growing Greener/NFWF)
- Correspond with other agencies
  - Barnyard issues- NRCS Civil Engineer Tech, Stream project- PFBC, TU or USFWS plus exclusion fencing and buffer planting, DGLVR problem- Civil engineer from Penn State

Northcentral Stream Partnership overview

Who?

Northcentral Pennsylvania Conservancy

PA Dept. of Environmental Protection NCRO Watershed Manager

PA Fish and Boat Commission Habitat Management Division

County Conservation Districts

What?

303d Listed Streams

Agricultural Sedimentation/Siltation

Aquatic Life use

Why?

Shared Project Goals:

- Decrease erosion
- Stabilize stream banks
- Stabilize the riparian buffer
- Increase filtration of run-off
- Support fish and aquatic life
- Improve/create aquatic habitats

How?

Low Tech BMPs including:

- In-stream habitat structures
- Stream bank fencing
- Ag Crossings
- Riparian buffer plantings

Results

Stabilized streambanks

Improved in-stream habitat for aquatic life

Greening of the stream corridor

Improved wildlife habitat

Reconnection to the floodplain

Improving water quality

Typical Design/Overview at Griffith Farm: