

DELAWARE COUNTY

Est. 1946

Soil & Water Conservation District

as Members of the Upper Susquehanna Coalition







Presented by the Delaware County Soil and Water Conservation District

# Part of Something Big

- Renowned and respected organization
- A sense of community
  - Monthly meetings
  - Collaborate and share ideas with other districts and agencies
  - Support system
- Financial Assistance
  - Variety of programs assist with project implementation costs
  - Matching funds for federal and state grants
  - Lower landowner cost share
  - Chesapeake Bay Incentive Payment (CBIP)
- Technical Assistance
  - Wetlands
  - Streambank stabilization
  - Riparian buffer establishment and maintenance



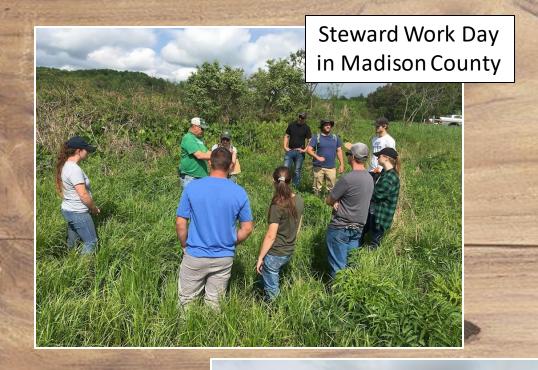


## **Buffer Programs**

- USC Riparian Buffer Establishment Assistance
  - Replanting native trees and shrubs
  - Tree tube maintenance and removal
  - Invasive species management
  - Herbicide applications
  - Evaluation for survivability
  - Data collection and field reports
- Our Buffer Steward program began in 2018
  - We evaluate and maintain an average of 300 acres each year
  - Steward group work days
- 2020 Herbicide Pilot Program
  - Funding to hire licensed herbicide applicator to perform work
  - Stewards assist in collecting data and making observations









Herbicide Application



Replanting to increase survivability



### **Trees for Tributaries**

- Offered twice annually in Spring and Fall
- USC provides free plants and materials to plant streamside buffers in Susquehanna Watershed
- Volunteer events
  - School groups
  - Local organizations
  - Private landowners
- Education and Outreach
- USC Riparian Restoration
  - Funding for project planning
  - Non-CREP buffers















### **Cover Crops**

- Funding for continued and <u>new</u> acres of cover crops each fall
  - Greater incentive for new acres
  - Encourages districts to form relationships with new participants
  - Use this funding to reimburse farmers for their costs
    - 2022 State rate was \$70/acre
- 2019 Pilot Program aerial seeding by helicopter
  - 300 acres on three Susquehanna Watershed farms in Delaware County
  - Research and data collection
- Delaware County implements an average of:
  - 1220 continued acres and 30 new acres each year with at least 16 Susquehanna farms
  - Utilize USC funding in combination with state funding





# Agricultural BMPs

- USC Programs provide additional funding to implement agricultural BMPs
- Matching funds for state and federal programs
- RCPP funds were used to match our Round 23
   Ag Non-Point Source grant to complete this waste storage facility









## **Changing Plans**

- Kortright Creek isolated cloud burst released five inches of rain in less than an hour
  - Loss of pasture land
  - Road and stream crossing washouts
  - Stream bank failure and erosion
  - 6 ft Head cut
- Extensive damage made this area ineligible for CREP as originally planned
- Worked with USC and NRCS partners to obtain funding and repair this area
  - 763 LF of rock rip-rap
  - 4000 LF of livestock exclusion fence
  - 4 watering facilities
  - 2 Stream crossings
  - 5.46 acre tree planting

Featured in our DCSWCD
Annual
Newsletter















#### **Streambank Stabilization**

- Significant erosion along Ouleout Creek was causing loss of valuable pasture and crop land
- Obtained USC and EQIP funding to install:
  - 350 LF Berm removal
  - 865 LF of rock rip-rap
  - 3 Rock deflectors
  - 3 Grade control structures
- Project to be completed this spring
  - 1 acre tree planting
    - Large plant stock 6-8ft tall trees
  - 600 LF of livestock exclusion fence











### Special Program: Ouleout Creek Assessment

- The Ouleout is a 109 mi<sup>2</sup> watershed located in Delaware County
  - contains a substantial amount of agriculture including dairy and crop production
- Assessment funded by USC
  - Funding for additional staff to complete assessment
  - Modeled after research conducted along the West Branch Delaware River
  - Identify and prioritize water quality issues along the Ouleout Creek
  - Estimate amount of nutrients entering the stream through erosion





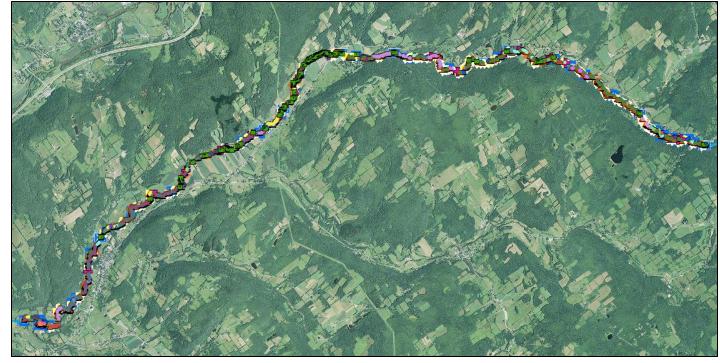
Featured on the USC Watershed Wednesday's series!



### **Assessment Steps**

- Data collection relies on <u>Stream Feature Inventory</u> methods
- Evaluate eroding streambanks using the Bank Assessment for Non-point source Consequences of Sediment model
- Sample representative streambank soils for total phosphorus and total nitrogen content.
- Calculate annual nutrient loading rates for segments of streambank erosion.





#### Assessment cont.

- Rank stream reaches by annual nutrient loading rates.
- Create reach specific action plans as part of an overall <u>Ouleout</u> <u>Watershed Action Plan</u>



- Utilize Action Plan to prioritize and implement necessary projects
- Remediate streambank erosion
- Prevent nutrients from reaching Chesapeake Bay





# **Getting Involved**

- Reach out and communicate your needs
  - USC can provide funding and assistance through a variety of sources
  - Funding for independent projects or matching funds for other grants
- Don't forget about other Soil and Water Districts!
  - Collaborate, ask questions, and share information
- Be comfortable with trying new things
  - Building a new program or enhancing an existing program in your county
- Continue to be active in your community and form relationships with potential participants
  - Outreach and education

