

Halfmoon Creek and the Rapid Stream Delisting Strategy



Logan Stenger, Chesapeake Conservancy

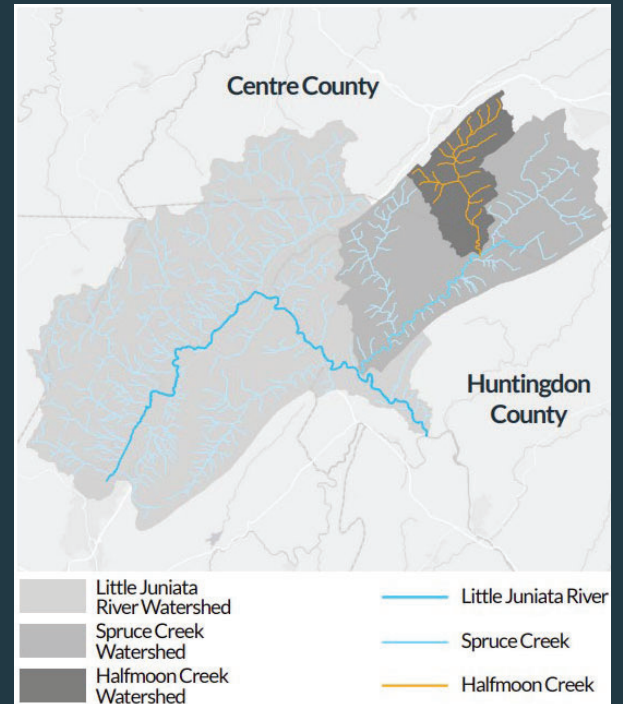


Agenda

- Halfmoon Creek Overview
- Development of WIP
- Rapid Stream Delisting
- Progress to date/Advancing restoration

Halfmoon Creek Watershed

- Located in Centre/Huntingdon counties
- Part of Juniata River watershed



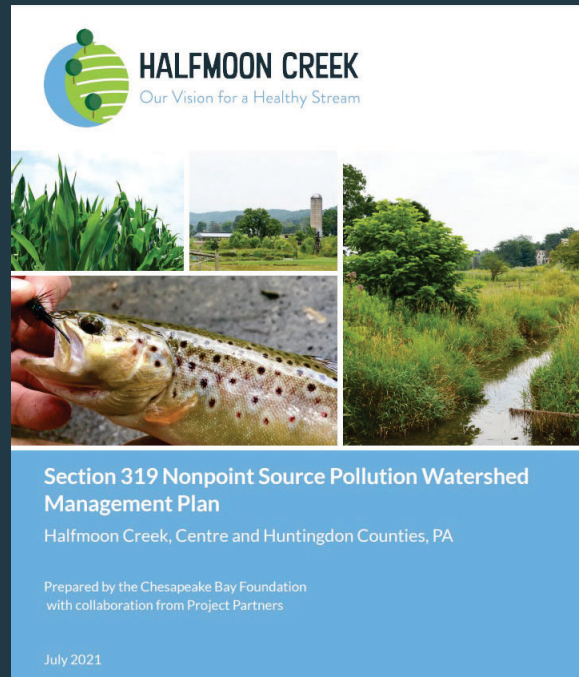
Halfmoon Creek Watershed

- Located in Centre/Huntingdon counties
- Part of Juniata River watershed
- Chapter 93 High-Quality, Coldwater
- Natural reproduction “wild” trout stream
- Impaired for sediment
 - Cropland/pasture runoff
 - Grazing in riparian areas
 - Development



Development of Watershed Implementation Plan (WIP)

- WIP development led by Chesapeake Bay Foundation
 - In response to the TMDL
 - Opens door for more funding to implement restoration work!
- Completed in July 2021
- Key takeaways:



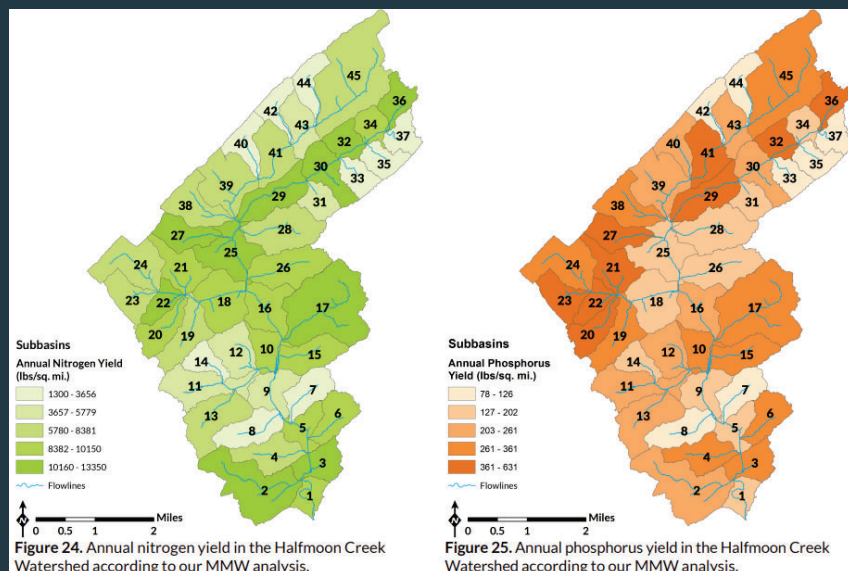
Key Takeaway #1 – Existing progress

- Project/Practice Implementation
 - Barnyard BMPs (Heavy Use Areas, Manure Stacking) - >97,000 sq ft
 - Riparian Buffers - >60 acres
 - Stream Restoration - >19,000 ft
 - No-till – 335 acres
 - Cover Crops - >450 acres
- Water Quality Monitoring
 - 2019 assessment – 8 sites total
 - One site in headwaters improved significantly since 2007, but still below impairment threshold
 - Remaining sites remained low with only slight changes since 2007



Key Takeaway #2 – Moving forward...

- Modeling nutrient and sediment yields and BMP opportunities
- Restoration Area Prioritization → Rapid Stream Delisting!



What is Rapid Stream Delisting?

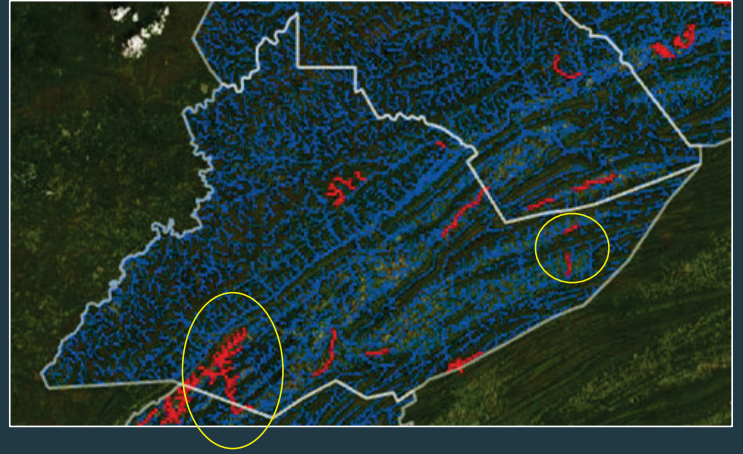
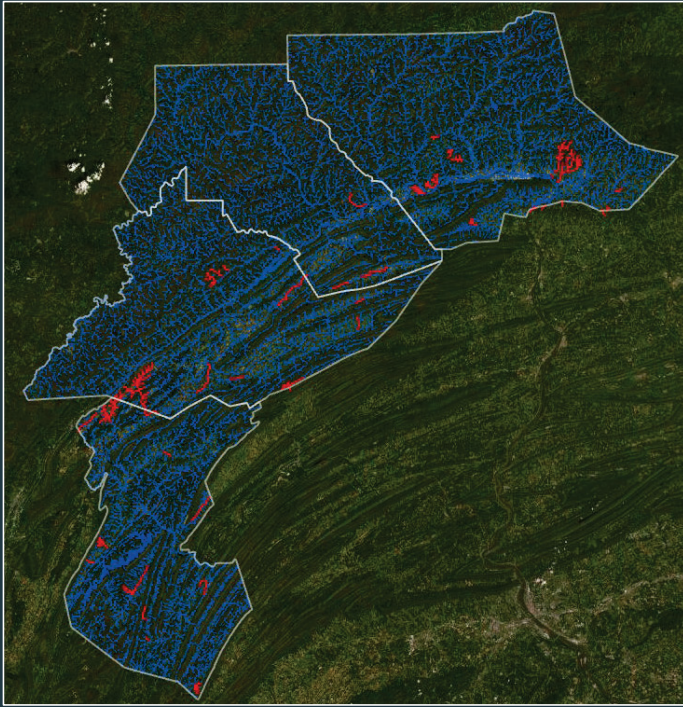
- 40+ organizations participating since 2016.
- Common agenda: “Focusing water quality improvement projects where they can yield the biggest bang for the buck,” driven by GIS-based prioritization of local priorities.
- Evolution of partnership around water quality outcomes.
- In 2020--set goal of working together to de-list agriculturally impaired streams over next 10-12 years.

*Rapid means 102 years

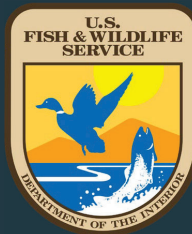


Source of Impairment: Agriculture

Causes of impairment: Sediment and nutrients



Halfmoon Creek Partners



Funding Sources/Partners



- State

- DEP Growing Greener
- DEP Section 319
- DCNR Buffer grants

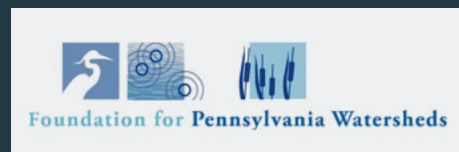
- Federal

- NRCS programs (EQIP, RCPP, CREP)
- NFWF (INSR, SWG)
- Federal Earmark



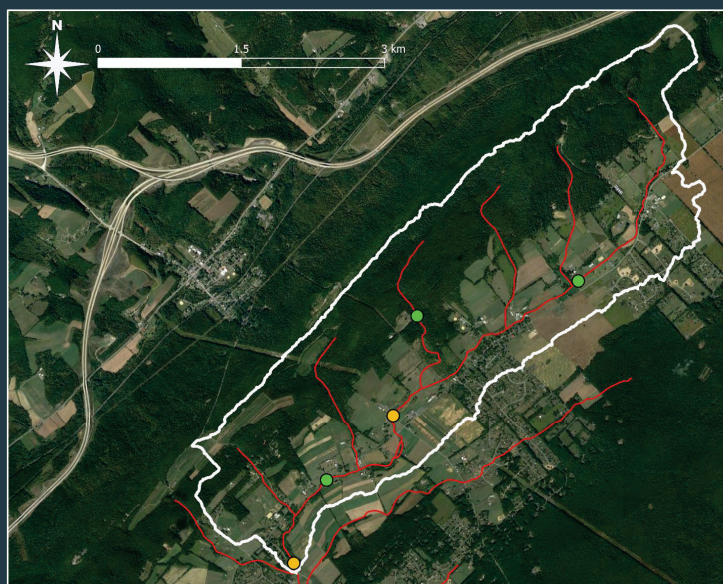
- Private Foundations

- Hamer
- Degenstein
- RK Mellon
- Foundation PA Watersheds



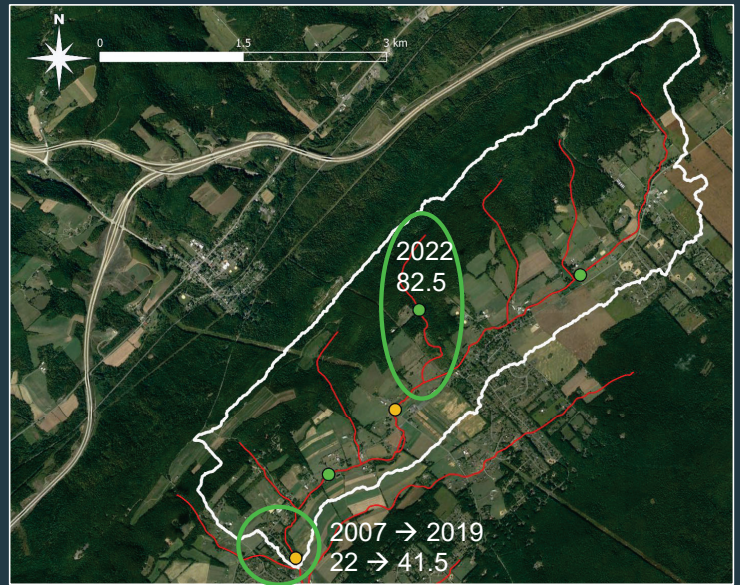
Progress: Halfmoon Creek – Bald Eagle

- 9.6 miles of impaired stream
- 9 landowners have completed projects
 - Agricultural BMPs
 - Stream restoration
 - Riparian buffers
- No projects scheduled at the moment, emphasis on outreach to new landowners.



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- Monitoring and Delisting!



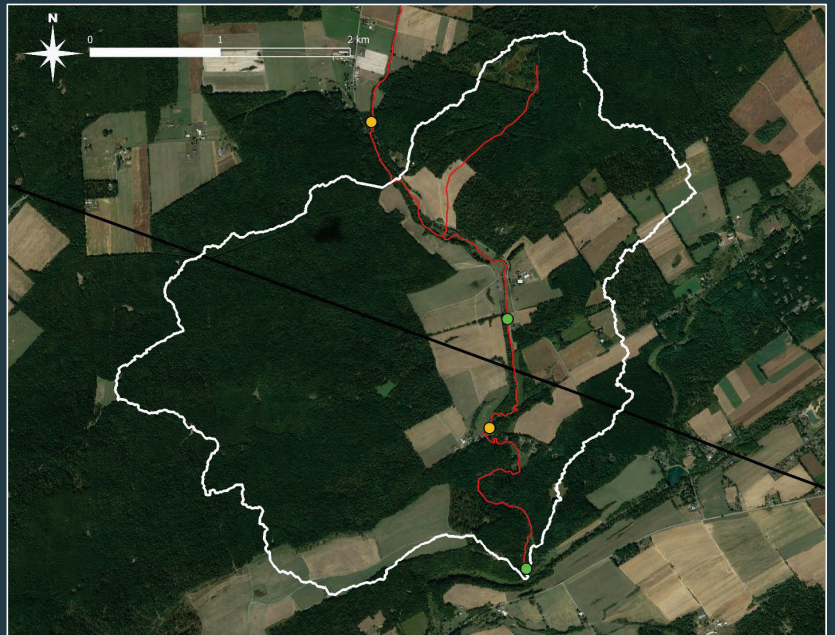
Progress: Halfmoon Creek – Loveville Catchment

- 5.9 miles of impaired stream
- 7 landowners have completed projects
 - Agricultural BMPs
 - Stream restoration
 - Riparian buffers (+5 acres this spring)
- 1 project slated for 2025 construction, outreach to another for CNMP development.



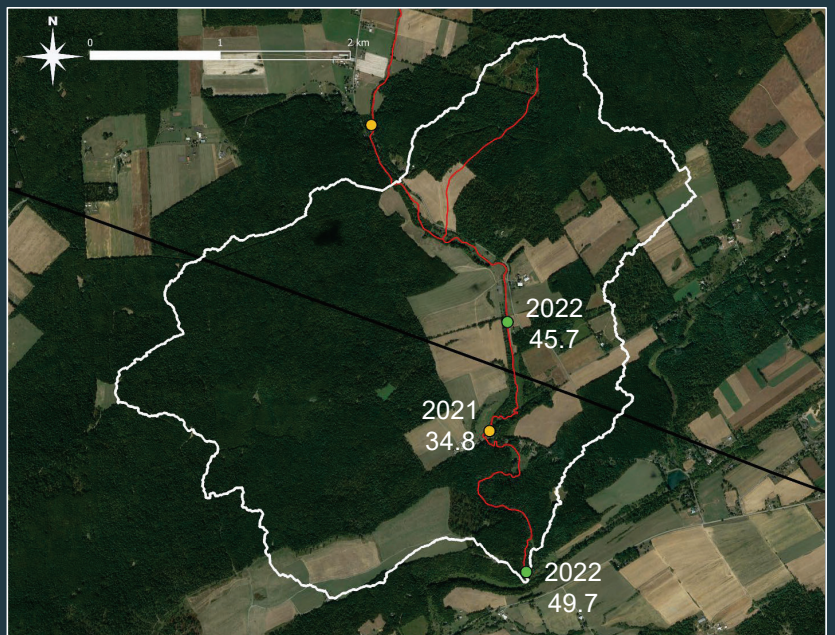
Progress: Halfmoon Creek – Confluence Catchment

- 4 miles of impaired stream
- 3 landowners have completed projects
 - Stream restoration
 - Riparian buffer
 - Livestock fencing and crossings
- Another 3 landowners slated for 2025 project implementation!
 - This will complete all opportunity parcels!



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Moving Forward

- WIP remains a model for conservation direction in the watershed.
- Continuing to advance projects
 - Implementation
 - Outreach
- Monitoring
- Rapid Stream Delisting expansion!
 - Maryland and Virginia



Questions?

Contact Info

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