West Virginia Conservation Agency's Partnership with WVDEP to Delist Impaired Waterways

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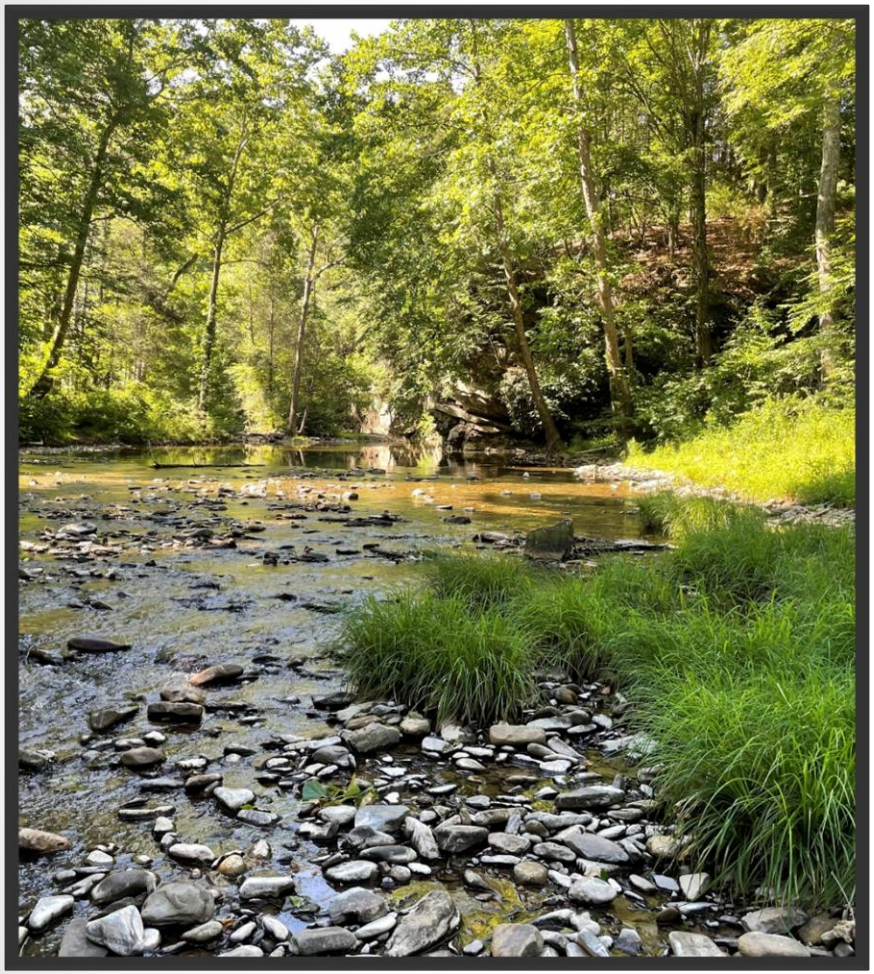
Impaired Waters and Department of Environmental Protection (DEP)

- 303(d) list of impaired and threatened waters
  - State submits list to Environmental Protection Agency (EPA) every 2 years
  - State identifies pollutant
- Total Maximum Daily Loads (TMDL)
  - Data and model driven
  - Developed by DEP and approved by EPA
  - Pollution source identification and plan of action
  - Waterways tracked until fully restored
- Common impairments in WV
  - Fecal coliform
  - Iron, aluminum, selenium
  - pH

Clean Water Act §319 Nonpoint Source (NPS) Pollution Program

- WVDEP's NPS Program administers §319 grants
  - Awarded by the USEPA Region III
  - Projects that reduce NPS pollution
  - Max grant reimbursement is 60% of the total project cost
  - 40% non-federal match requirement for each grant
- Watershed Based Plan (WBP)
  - Plan of action for a specific impaired waterway with an approved TMDL
  - Outlines pathway to meeting water quality standards
  - Required to receive §319 grants
- WVCA §319 projects include:
  - Conservation planning
  - Agricultural BMP implementation
  - Septic system rehabilitation and pumping
  - Stream restoration

Delisting a Stream



Second Creek, Monroe County, West Virginia.
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- WBP of action complete
- Monitoring plan must be approved by WVDEP
  - Quality data
  - Correct sample locations
- One year monitoring plan
  - Minimum sample set = 20
  - 90% of samples must meet WQ standards to delist
- Concentration based
  - Delisting decisions are concentration based despite TMDL's being load based

Combining the §319 Program and Water Quality Monitoring to Delist Streams

- Working on a watershed basis
  - HUC 10 and 12 levels
  - Projects in one watershed may continue over several grants
  - Load reductions modeled
- Monitoring
  - Triggered when load reduction modeling nearly meets WBP goal
    - 50-75%
  - Determine original sample locations
    - Pre-TMDL monitoring
    - Assessment units
  - Pre-TMDL data = pre-project data
  - Staff gauge



Staff gauge, Second Creek.
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Outcomes

- Data provides:
  - WVDEP delisting decision
  - WBP revision if not delisted
  - Instantaneous loading data to compare with modeled TMDL
- Funding delineation
  - Agency §319 administrative grant covers intense watershed studies
  - Watershed based §319 grants cover practice implementation and load reduction modeling



Woodland phlox, Monroe County, West Virginia.
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Questions?



Carpenter Creek, Monroe County, West Virginia. Kara Grosso