



CHESAPEAKE BANGE COUNTY CHESAPEAKE BANGE COUNTY CHESAPEAKE TRIBUTARY STRATEGY

A collaborative, County-based approach to minimize costs and promote environmental stewardship



Why did Lycoming County get involved in the Bay cleanup?

- Community/stakeholder demand for help
- Sewer infrastructure upgrades estimated at \$225 million in Lycoming County alone
- Unique ability to offer leadership and advocacy







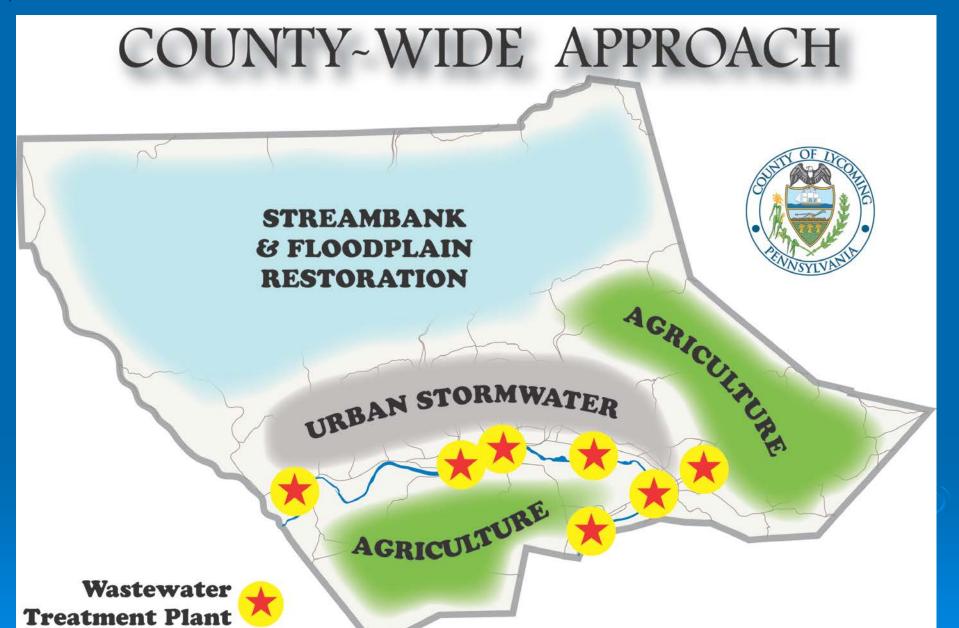
Goals and Objectives

- Quality of our <u>local</u> waterways
- Chesapeake Bay recovery
- Flexibility for WWTPs
- Preserve economic development opportunities
- Integrate all sources of pollution into the solution











50+ local entities
participate in Advisory
Committee, Point
Source Work Group,
and Non-Point Source
Work Group



Updated 6/1/2010



Accomplishments to Date

- Local stakeholder network with 5+ years experience
- A leading local government voice in Bay recovery
- Pioneers in nutrient credit market
 - Lycoming County provided more than ¼ of all credits sold at first two PENNVEST auctions







More Accomplishments



- BMP implementation and demonstration projects
- Water Quality Improvement Monitoring Project (Growing Greener grant)
- Public outreach and education efforts (100+ presentations, local to national levels)
- Ag outreach efforts



January 5, 2012 Recognition Event





State & Federal Participation

- Local Government Advisory Committee to the Chesapeake Executive Council (2010-present)
- DEP Nutrient Trading work group (2012-present)
- > PENNVEST auction stakeholder work group (2009-2010)
- > Hosted EPA's TMDL "Roadshow" (2010 and 2011)
- DEP WIP work groups (2011)
- Many briefings, tours, and meetings with EPA, DEP, PDA, legislators, agencies, and non-profits (2009- present)

Grant Funders



- > \$120,000 DEP grant in 2009
- \$ 32,277 Growing Greener grant in 2011
- \$92,400 Shared Municipal Services grant in 2009





\$600,000 NFWF Innovative Nutrient and Sediment Reduction grant in 2009

> \$15,000 grant in 2010



Chesapeake Bay Cleanup = Local Infrastructure Challenge













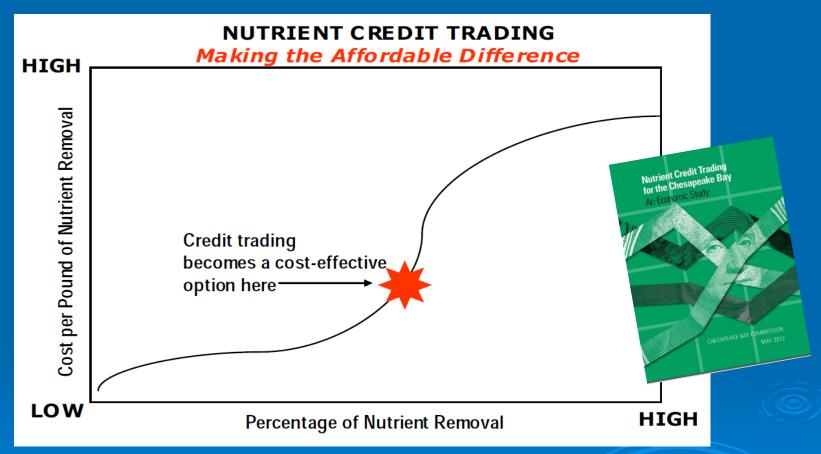
Trading = Flexibility & Savings

- Point Sources can purchase credits for short-, mid-, or long-term needs
 - "True-up" at end of year
 - Delay upgrades & buy time to:
 - Secure capital funding
 - Evaluate new technology
 - Evaluate growth & development needs
 - Avoid capital upgrades
 - Partially upgrade





Why Partially Upgrade?



"Knee of the Curve": Incremental reduction in nutrient removal becomes exponentially more expensive



Hughesville-Wolf Example

- Upgrade cost: \$1.45 million
- Est. credit cost: \$157,000
- \$1.29 million savings projected over 20 years (89% discount)
- "Quadruple-win" outcome:
 - Ratepayers save money
 - Farmers gain income
 - Local waterways are cleaner
 - Bay reductions are achieved







West Branch Regional Authority Example

- Muncy and Montgomery
- Outdated facilities
- Floodway/floodplain
- Credits made regionalization effort possible
- Approach decreased ratepayer costs, increased grant awards







Conservation District Role Is Essential

- Agricultural outreach
 - Baseline compliance
 - Amish outreach
- Credit certification and verification through DEP
- Executing grant-funded projects (NFWF, WQIMP)
- The "carrot" before the "stick"



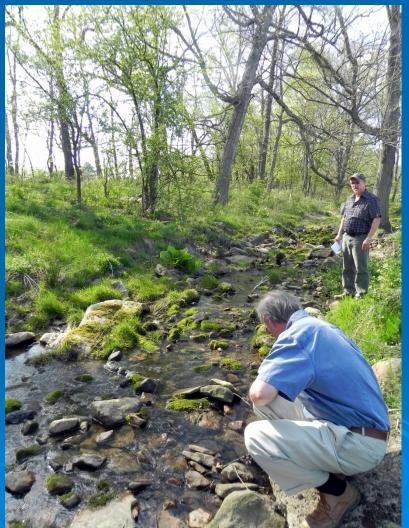




Ag BMPs at Work on a Lycoming County Farm









Financial Sustainability

- Four local trades to date
- Five more trades through PENNVEST auction and private sale since 2010
- Sales to date: \$201,255 to be shared by 20+ farmers and the County
 - County's 25% share held in reserve as insurance policy
- Local success story and credibility for statewide program : Priceless!

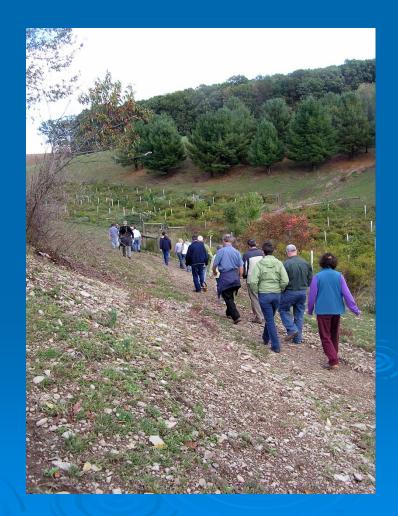






Next Steps

- State and federal actions continue to "roll downhill"
- Forging ahead with our innovative program
 - Facilitate more local trades
 - Expand into green infrastructure, stream BMPs
- Long-term goal: Achieve program <u>sustainability</u> through credit revenues

















Questions?

















Contact Information

Megan Lehman, AICP

Environmental Planner Lycoming County

Phone: (570) 320-2115

Email: <u>mlehman@lyco.org</u>

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Funding provided by:





