

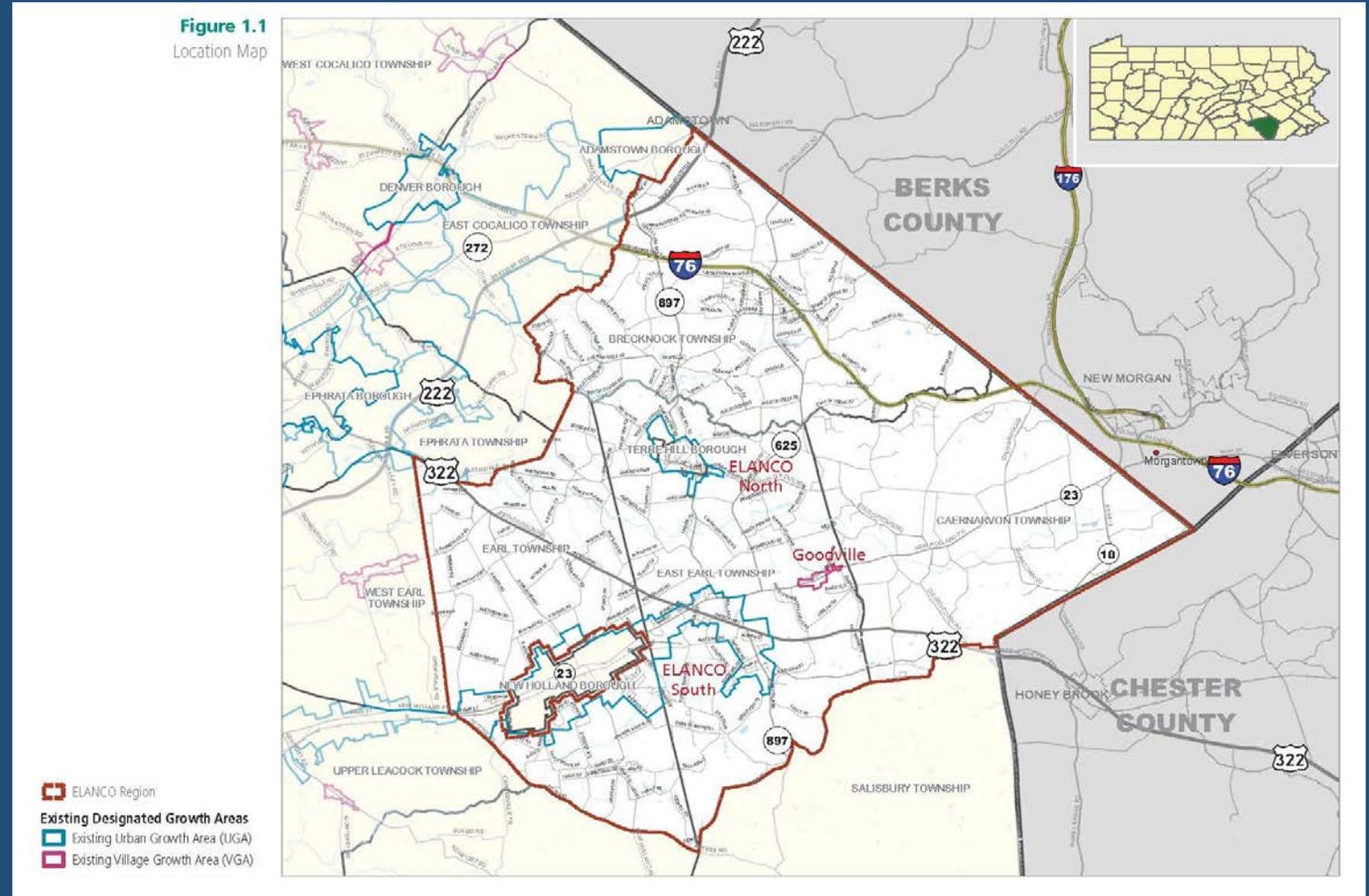
# Improving Surface and Ground Water Quality: The ELANCO (Eastern Lancaster County) Source Water Protection Initiative

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PA DEP Ag Workgroup Meeting  
Southcentral Regional Office  
August 5, 2015

# ELANCO Region

- This part of Lancaster County historically has high nitrate levels (averaging around 8 mg/L). Treatment levels for public water suppliers start at 10 mg/L (maximum contaminant level - MCL).
- Majority land use is agricultural
- Large conservative Mennonite community that is very closed off to outside organizations and agencies.



# National Source Water Collaborative Pilot Project

Lancaster County chosen as one of three national pilot projects

- Lancaster County, Pennsylvania
- Sheridan, Wyoming
- State of Wisconsin

## Objective

- To implement “Blueprints” – county water resources element to comp plan
- To conduct outreach to farmers to promote conservation practices that reduce nitrate levels in the region

The screenshot shows the homepage of the SourceWater Collaborative website. At the top, there is a navigation menu with links for Home, SWP Events, Get Help, Collaboration, Allies, and About Us. The main header features the SourceWater Collaborative logo and a large image of water being poured from a glass, with the text "WHERE SAFE WATER BEGINS". Below this, a welcome message states: "Welcome to SourceWaterCollaborative.org, a web forum about where America's safe drinking water begins – the lakes, streams, rivers and aquifers we tap for public water systems. We are a web portal of the Source Water Collaborative, 25 national organizations united to protect America's sources of drinking water." A "View All Highlights" button is located to the right of this text. Below the welcome message, there is a section titled "SOURCE WATER HIGHLIGHTS" featuring a notice from the U.S. Environmental Protection Agency (EPA) regarding a request for nominations for the National Drinking Water Advisory Council (NDWAC). The notice is dated October 6th and posted on August 21, 2014. It invites nominations of qualified candidates for a three-year appointment to the NDWAC. The notice also mentions that the 15-member Council was established by the Safe Drinking Water Act (SDWA) to provide practical and independent advice, consultation and recommendations to the EPA Administrator on the activities, functions, policies and regulations required by the SDWA. This Federal Register notice solicits nominations to fill six new vacancies from December 2014 through December 2017. Please review the [Federal Register notice](#) for details on submissions. To the right of the main content, there are several sidebars. The top sidebar is titled "UPCOMING EVENTS" and includes a "SIGN UP FOR EMAIL ALERTS" form with an input field for "Email Address" and a "SEND" button. Below this is a section titled "CREATE YOUR OWN GUIDE ONLINE TOOL" with a "CLICK TO GET STARTED" button. The bottom sidebar is titled "GET CONNECTED FIND ALLIES IN SOURCE WATER PROTECTION" and includes a "Your Guide." logo.

# ELANCO Source Water Protection – a True Collaborative

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Initially headed by ELANCO municipalities and the Lancaster County Planning Commission, partners included:

- EPA Headquarters (Washington, DC) and Region 3 (Philadelphia)
- USDA/NRCS
- Lancaster County Conservation District
- ELANCO municipalities (East Earl Township, Terre Hill Borough, Caernarvon Township, New Holland Borough, Brecknock Township, and Earl Township)
- PA Department of Environmental Protection (Office of Drinking Water)
- Pennsylvania Rural Water Association
- WREN
- Western Heights Water Authority
- Lancaster Farmland Trust
- Lancaster County Conservancy
- Susquehanna River Basin Commission
- Private consulting firms: Team Ag, SSM Group (did ELANCO Source Water Protection Plan), LandStudies, Becker Engineering
- Most importantly, representatives from the Mennonite Community
  - Amos Zimmerman (farmer)
  - Aaron Hurst (small business owner)

# Phase I: Education and Outreach to Farmers

## Goal

To conduct outreach to farmers to promote conservation practices that reduce nitrate levels in the region

## Education and Outreach

Organized workshop at Shady Maple with Ray Archuleta, noted NRCS soil health expert.

## Local connections key!

Used Mennonite hotline to get the word out about the event.

## Protecting Your Water Begins with Your Land

*A one day workshop on the key farming practices that can best protect the drinking water sources you depend on for the health of your family, livestock, and community.*



Cover Crops



No-Till Farming



Stream Buffers

### LEARN

About the connection between drinking water and the health of your soil, herd, and family

### CONNECT

With local groups that offer land and water management resources

### LISTEN

To testimonials from Lancaster farmers who have taken simple steps to protect their land and water

### ACT

Ask questions of local experts to help you start protecting your resources today

**Monday, December 9, 2013**

**8:30 AM – 3:00 PM**

**Shady Maple Banquets & Conference Center**

**129 Toddy Drive, East Earl, PA 17519**

*(Coffee/Donuts and Lunch will be provided)*

Please call (717) 842-4195 to register for this important Educational Workshop.  
Thank you and we look forward and welcome your attendance.

**ELANCO REGION SOURCE WATER COLLABORATIVE**

RSVP by December 2, 2013

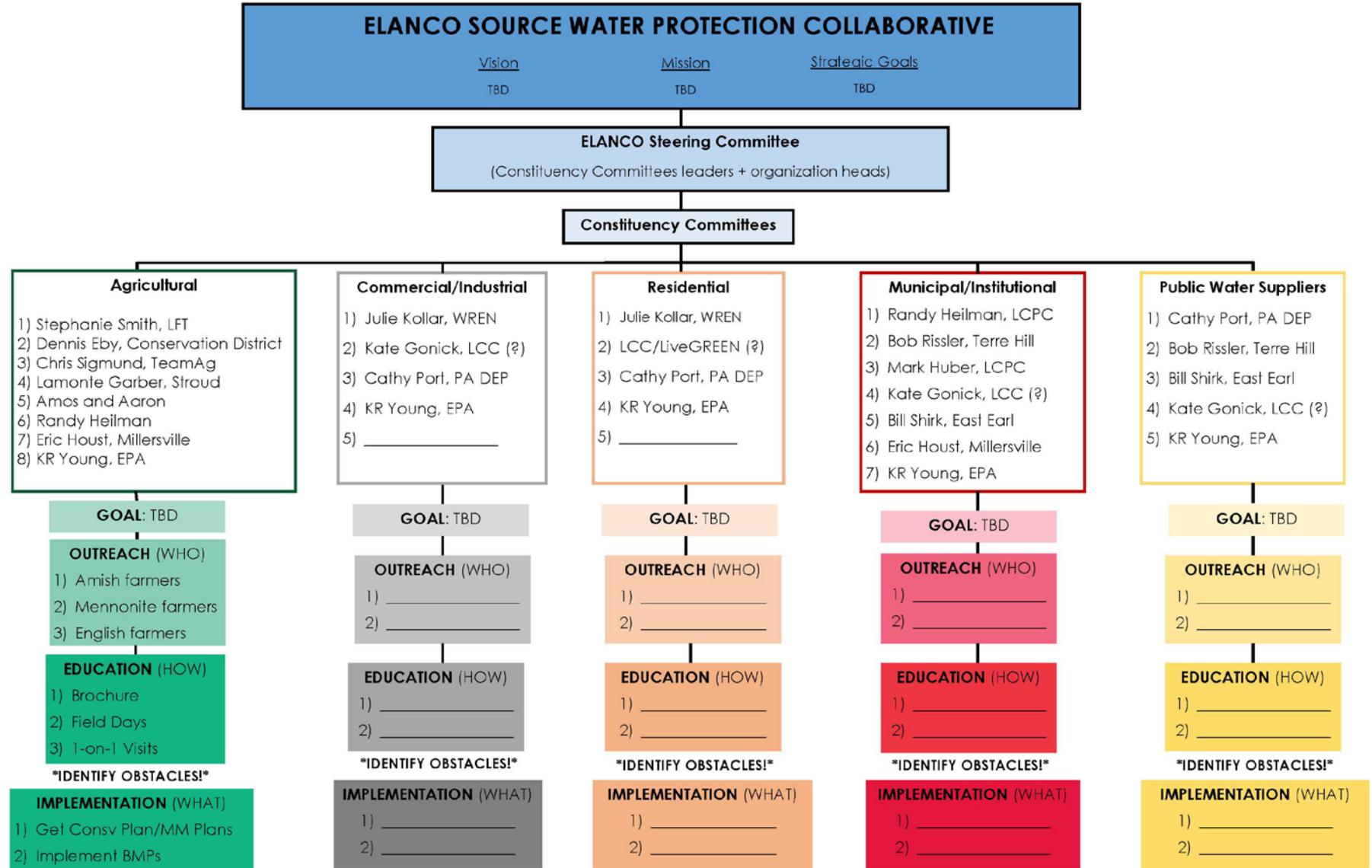
**400 FARMERS ATTENDED!**



THE WORD IS OUT.

NEXT STEP?

FORMALIZE THE COLLABORATIVE



# MISSION

The ELANCO Source Water Collaborative is committed to protecting and improving water quality for current and future generations through a cooperative, proactive approach. Using the shared interests of public water suppliers, citizens, businesses, private, non-profit, and governmental partners, the Collaborative promotes education and use of best management practices that will preserve and support Eastern Lancaster County's unique culture and strong economy.



# Phase II: Building the Relationship

*Intensive Group Meetings, Plan Development, & BMP Implementation*

## Ag Committee

Lead by Lancaster Farmland Trust

- Lancaster Farmland Trust
- Lancaster County Conservation District
- Stroud Water Research Center
- Team Ag Consulting
- Jeff Stoltzfus, Adult Educator
- DEP Office of Drinking Water
- EPA Region 3
- Lancaster County Planning Commission
- Amos and Aaron, Mennonite Representatives



# Lancaster Farmland Trust: Preserving and Stewarding Lancaster County's Farmland



Easement Acquisition  
(Preserve)

Stewardship/  
Smart Farms  
(Conserve)

Municipal Outreach  
(Protect)

Specialize in:

- Building relationships, primarily with plain-sect Amish and Mennonite (75% of our constituency)
- Trained in boots-on-the-ground work
- A resource, not a regulator
- Connecting farmers with municipalities (conduit for outreach)
- A leader in ag water quality work, including BMP Assessments for MS4 reporting

# Phase II: Building the Relationship

*Intensive Group Meetings, Plan Development, & BMP Implementation*

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Two pronged approach:

- 1-on-1 visits in Earl and East Earl Townships (Conservation District's friendly compliance reminders)
- Small focus groups (Lancaster Farmland Trust grant – 10 free plans)

## **RATIONALE:**

Conservation District applied regulatory pressure to get plans in place (provided the impetus for action). Held small group meetings in “safe space” (basement of Aaron's store) to provide technical assistance in developing plans and implementing BMPs. From the macro (400 farmer workshop) to the micro (working one-on-one with landowners), we have seen positive change in the ELANCO region.

Building personal, trustworthy relationships are **CRUCIAL** for success!

# Small Farmer Focus Groups

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Aaron's Store, AAA Supply, Terre Hill, PA



Aimed for 10 focus groups (still in progress), up to 15 farmers in each session

# Small Farmer Focus Groups – No-Till

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Farmer to Farmer: Experienced and Beginners. A place for discussion..

# Small Farmer Focus Groups – Manure Management

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Speakers: Dennis Eby, Lancaster County Conservation District & Chris Sigmund, Team Ag

# Small Farmer Focus Groups – Pesticides & Groundwater



Speakers: Diane Oleson, Penn State Extension & Dennis Eby, Lancaster County Conservation District. Pesticide Credits offered.

# Small Farmer Focus Groups – No-Till II



State of the Art Custom No-Till Planter tutorial. Jeff Graybill, Penn State Extension, also spoke to the group.

# Small Farmer Focus Groups – Manure Management Workshop



# Small Farmer Focus Groups – Our Successes

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## Quantitative Successes (the numbers):

- Over 100 site visits by the Conservation District
- 7 focus groups completed, engaging over 90 farmers
- 15 conservation or manure management plans written by Team Ag (via Lancaster Farmland Trust grant)
- 35 manure management plans written during one focus group
- Over 60 farmers on waiting list to get plans written by Conservation District
  - Such an overwhelming response, Conservation District is not taking on any more plans at the moment to get through ELANCO backlog

# Small Farmer Focus Groups – Our Successes

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## Qualitative successes:

- Built trust within the Mennonite farming community through Aaron and Amos. Engagement with community at an all-time high
- Dialogue is now freely passed through constituencies. Opportunity to discuss challenges (on both ends) to meet water quality regulations
- Partnerships secured between farmers and ELANCO Ag Committee partner organizations
- Stage is now set for further BMP implementation

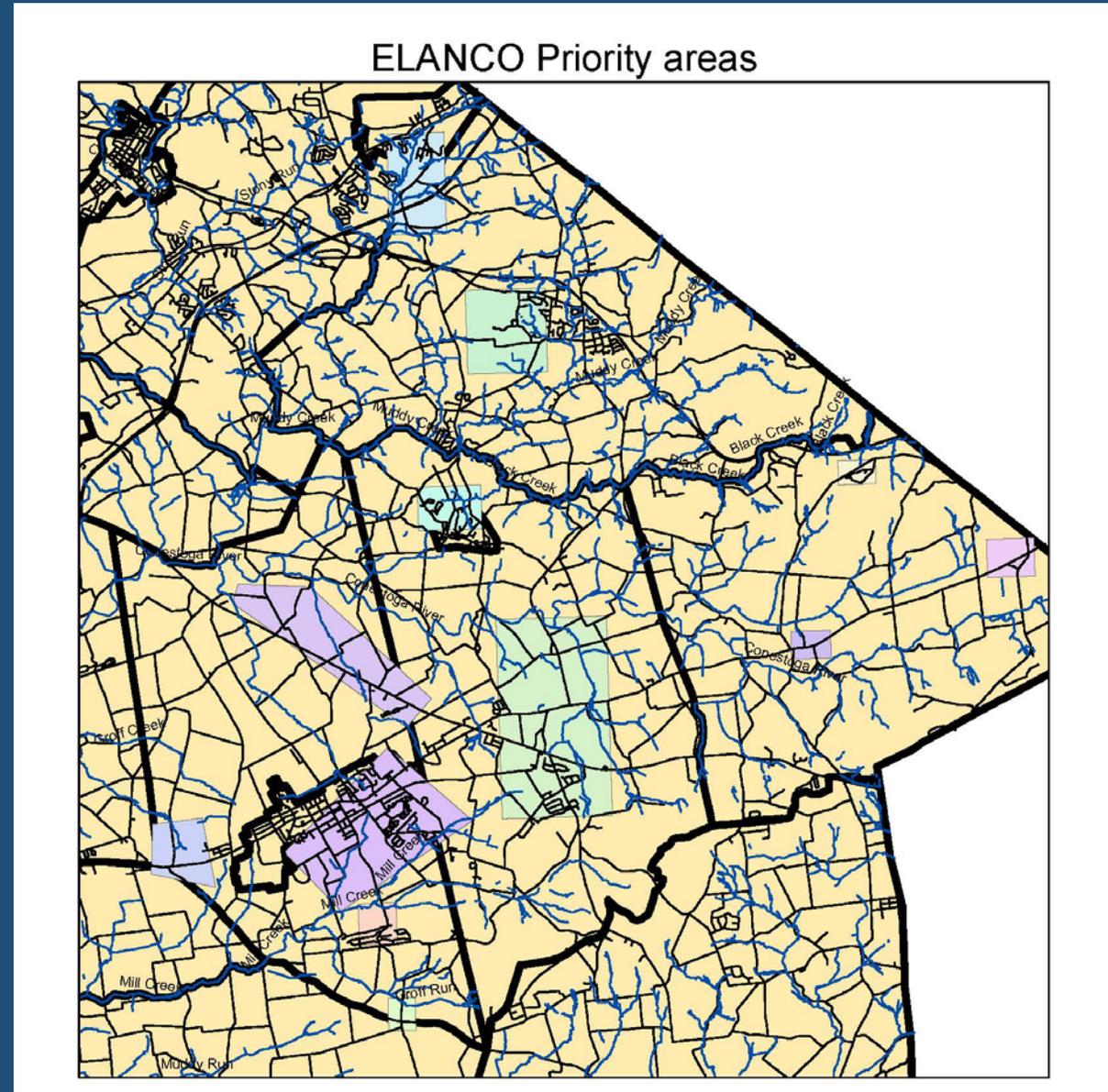
# Small Farmer Focus Groups – Our Challenges

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- How to keep farmers engaged, interested, and committed to further BMP implementation
- Scarcity of private funding for BMP implementation (best funding for this community)
- Engagement of other constituencies – farmers feel singled out
- Potential farmer “burn out”
- Determining further measurements of success

# Next Steps – Pinpointing High Nitrate Areas

- Goal to engage other land uses in late 2015 and 2016
- Planned workshop this winter to target all land uses within high nitrate areas in ELANCO
- Wish list: 2 other committees active (Residential? Commercial?) this fall leading into the workshop
- Success occurs when partners are working in step across the board
- Challenges in time commitment



# QUESTIONS?

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