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
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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
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.
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)

- 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

Stewardship/Smart Farms (Conserve)

Municipal Outreach (Protect)
Phase II: Building the Relationship

Intensive Group Meetings, Plan Development, & BMP Implementation

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

Aimed for 10 focus groups (still in progress), up to 15 farmers in each session
Small Farmer Focus Groups – No-Till

Farmer to Farmer: Experienced and Beginners. A place for discussion.
Small Farmer Focus Groups – Manure Management

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 – Our Successes

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
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

- 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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