Pennsylvania Agriculture

- 34,000 farms in Chesapeake Bay watershed.
- Economics:
  - #1 in U.S. Mushroom Production
  - # 4 in U.S. Egg Production
  - #5 in U.S. Milk Production
  - #13 in U.S. Pork Production
    - $331.5 m in sales, 8000 PA jobs
- Tourism
- Clean Local Waters
  - Clean local waters
  - Safe drinking water for families and animals
  - Recreational fishing
EPA Animal Agriculture Program Assessments

- VA, PA, and NY assessments published March 2015.
- WV, MD, and DE assessments to be published in August 2015.

Link:
http://www.epa.gov/reg3wapd/tmdl/ChesapeakeBay/EnsuringResults.html
Click Agriculture Tab
Acknowledgments

- EPA Region III CAFO Team:
  - David McGuigan
  - Mark Zolandz
  - Kyle Zieba
Authority

- EPA conducts periodic reviews of state programs as part of its oversight responsibilities under the Clean Water Act.
- Satisfies EPA commitment made in the “CBF Settlement Agreement”
Agriculture is a Big Part of the Bay Solution

For the Chesapeake Bay TMDL, states are looking to agriculture to achieve roughly 2/3 of the necessary nutrient reductions.

Why? Big land use, “cost-effective”
Relative N Reductions for TMDL Pennsylvania

Agriculture: 71%
Urban: 19%
Wastewater: 8%
Septic: 2%

Strong State Programs are Critical
What we Evaluated

- Regulatory and voluntary animal agriculture programs
- Universe of operations covered
- Staffing and funding
- Data management
- Agency communication
- On-the-ground implementation
- Alignment with TMDL WIP practices
Who we Talked To

- PADEP North and South-Central Regional Offices
- PA Department of Agriculture
- PA State Conservation Commission
- Conservation Districts in Lancaster, Lebanon, Snyder, Union counties
What Programs did We Look At?

- CAFO NPDES Program
- Nutrient Management Program – CAO
- Ag Erosion & Sediment Control Program
- Manure Management Program
- Commercial Manure Hauler and Broker Certification Program

Data:
- Questionnaire and interviews
- 57 NPDES CAFO files, 86 files from Conserv. Districts
Top-Line Findings
Pennsylvania - Top Line Findings

1. CAFO & CAO Programs are robust and well-implemented.
   - Cover greater universe than federal rule.
   - Most operations are in 3rd permit cycle.
   - Operations inspected regularly.
   - Compliance issues addressed.
   - Covers 10-20% of PA operations in Bay watershed.
Pennsylvania - Top Line Findings

2. Compliance challenges with state regulations covering the remaining 80-90% of operations (MMP, Ag E&S):

- Compliance with state regulations is the backbone of the Watershed Implementation Plan.
- Applies to the majority of operations, but compliance is low.
- Regional Ag WS Assessments – excellent, but overall compliance inspection coverage is insufficient.
- Operations typically not inspected unless a complaint is filed or they are in one of the Regional Ag Watershed Assessment watersheds.
Successful/Promising Compliance Approaches - Bay State Examples

- Field presence through regular random inspections
- Thorough inspections
- Credible threat of enforcement for noncompliance
- Escalating enforcement response
- Annual farmer reporting
- Annual compliance reports
Pennsylvania - Top Line Findings

3. Compliance with state regulations likely won’t be enough to meet PA agricultural TMDL WIP goals.

- Need additional policies and programs to provide further incentive to farmers to implement priority conservation practices.
  - Nutrient management plans, conservation plans, animal waste storage systems, livestock exclusion.
Successful/Promising Approaches
Examples from Bay States

- Incentivize Voluntary Efforts
  - Ag Certainty Programs
  - Voluntary NMP Programs for Small Dairies

- Quantify Funding Needs/Develop Source
  - Ag Funding Needs Assessments
  - State Ag Cost Share Programs

- Target/Leverage Funding
  - Target regions based on CEAP, target sectors, practices.
  - RCPP – target sectors, regions, practices, more TA
  - Performance-Based Funding

- Flexible Cost Share Programs
  - PA Fence ‘Em Out!
Next Steps

- Publish Program Assessments for WV, MD, and DE August 2015.

- AFO Sub-Watershed Assessments:
  - Conduct one a year from 2013 – 2016.
  - Evaluate how effective state programs are in protecting local waterways from nitrogen, phosphorus, and sediment runoff.
  - 2013: Little Antietam Creek, Maryland.
  - 2014: Cooks Creek, Virginia.
Utility of Ag Assessments

- EPA will use the assessments along with its ongoing CB TMDL evaluations to ensure states have the programs, policies, and resources necessary to succeed.
  - What’s working well and why?
  - What is not working well and why?
  - How can state programs be strengthened?
- Strong state agricultural programs are essential for the Bay restoration. We are all in this together.
Relative N Reductions for TMDL

Pennsylvania

Who has a role to play?

Strong state programs are essential.

- Agriculture: 71%
- Urban: 19%
- Wastewater: 8%
- Septic: 2%

Who has a role to play?