

# **EPA ANIMAL AGRICULTURE PROGRAM ASSESSMENTS**

A photograph of a farm scene. In the foreground, there is a chain-link fence. Behind the fence is a large, grey metal barn with a brown roof. To the right of the barn is a tall, cylindrical metal silo with a rounded top. The sky is blue with scattered white clouds. The text is overlaid on the top and bottom of the image.

**PADEP Agricultural Advisory Board  
June 18, 2015**

**Kelly Shenk, Agricultural Advisor  
U.S. EPA Region III**

# Region 3 Agriculture Roundtables



# 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

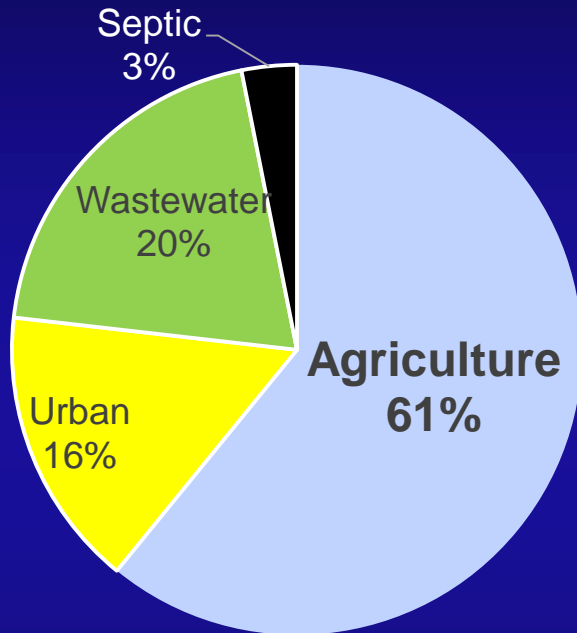
- EPA Region III CAFO Team:
  - David McGuigan
  - Mark Zolandz
  - Kyle Zieba

# Authority

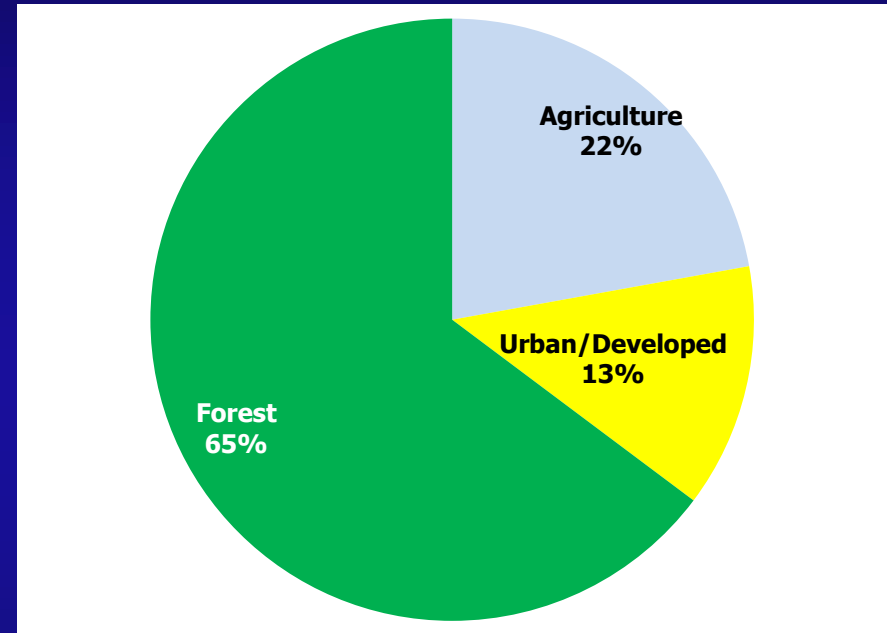
- EPA conducts periodic reviews of state programs as part of its oversight responsibilities under the Clean Water Act.
- Satisfies EPA commitment made in the “CBF Settlement Agreement”

# Agriculture is a Big Part of the Bay Solution

Relative N Reductions for TMDL



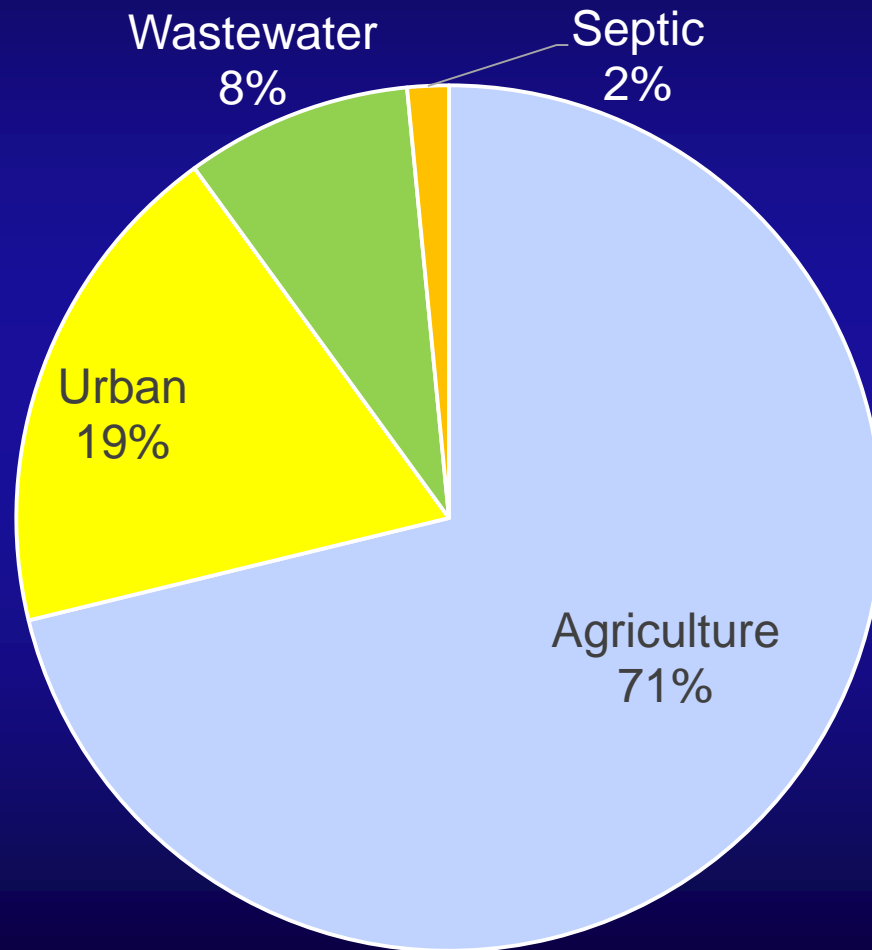
Chesapeake Watershed Land Use



*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*



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 3<sup>rd</sup> 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

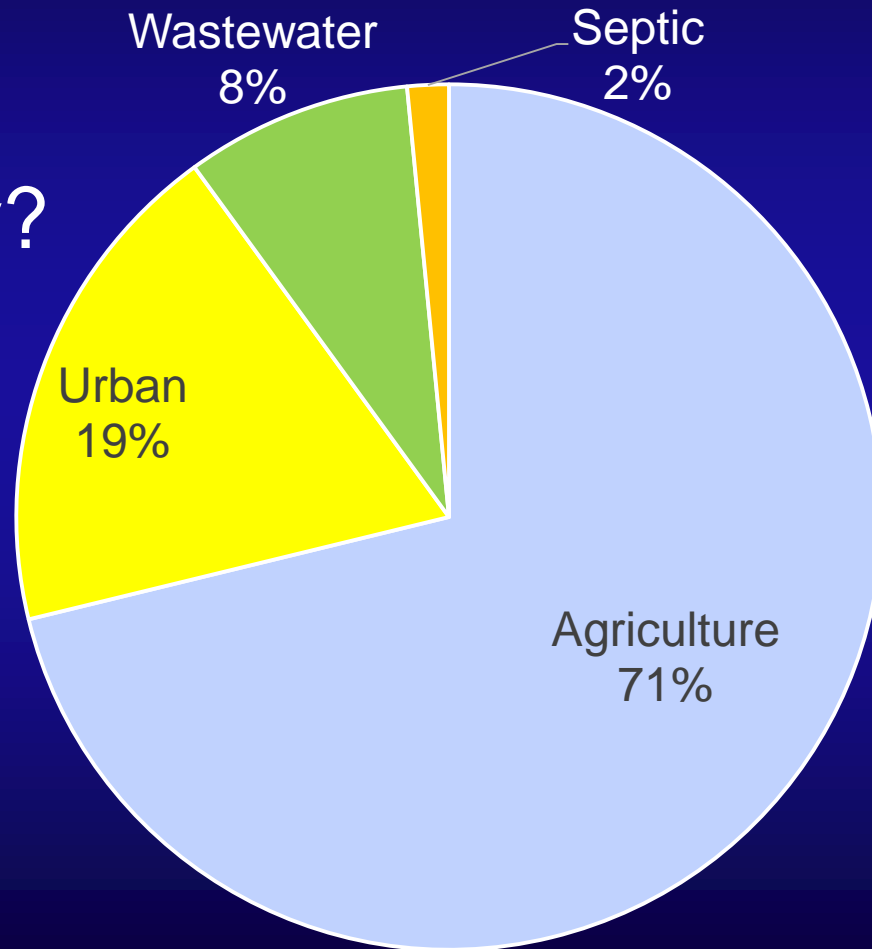
- **Publish Program Assessments for WV, MD, and DE August 2015.**
- **AFO Sub-Watershed Assessments:**
  - **Conduct one a year from 2013 – 2016.**
  - **Evaluate how effective state programs are in protecting local waterways from nitrogen, phosphorus, and sediment runoff.**
  - **2013: Little Antietam Creek, Maryland.**
  - **2014: Cooks Creek, Virginia.**
  - **2015: TBD, Pennsylvania.**

# 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

For more information



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