Pennsylvania Farm Conservation Practice Inventory

Chesapeake Bay Ag Workgroup

July 14, 2016

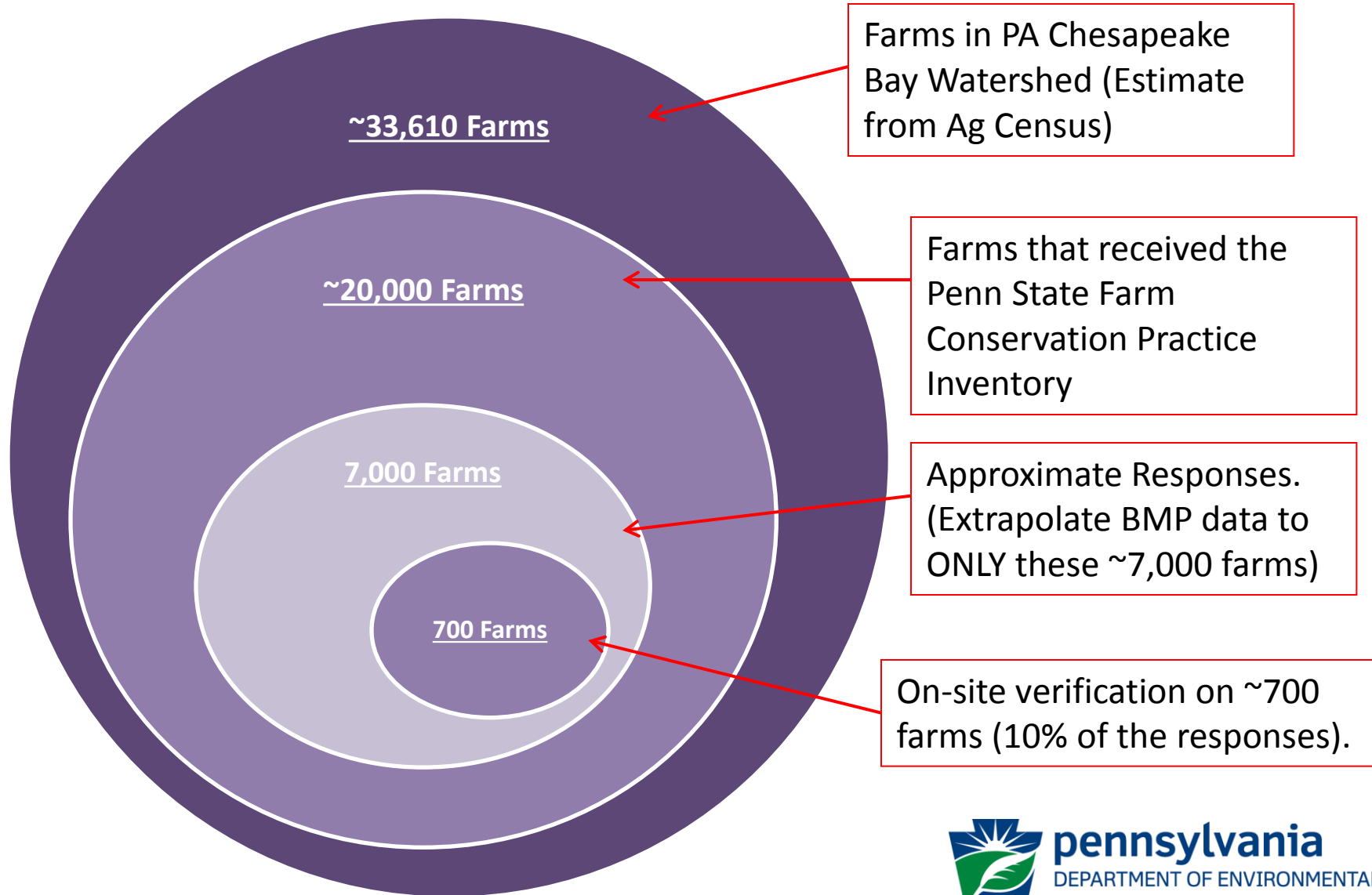Tom Wolf, Governor   Patrick McDonnell, Acting Secretary

Conservation Practice Inventory

- Introduction and Action Requested

- Penn State Methodology

- Preliminary Data

- Verification Methodology

- Data Submissions to NEIEN

- Action Requested

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Conservation Practice Inventory

- Introduction and Action Requested
  - How did we get here?

  - Pennsylvania Request(s) of Ag Workgroup
    - Accept 10% initial verification of all potentially eligible visual and non-visual non-cost share BMPs from self-certified assessment forms
    - Accept extrapolation to the total amount of responses (~7,000 farms)

Conservation Practice Inventory

~33,610 Farms

~20,000 Farms

7,000 Farms

700 Farms

Farms in PA Chesapeake Bay Watershed (Estimate from Ag Census)

Farms that received the Penn State Farm Conservation Practice Inventory

Approximate Responses. (Extrapolate BMP data to ONLY these ~7,000 farms)

On-site verification on ~700 farms (10% of the responses).

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Conservation Practice Inventory

Pennsylvania's Approved Verification Program

- Verification Program Core Elements
  - Statistical Approach for On-Site Verification
  - Self Evaluations
    - Self-Reporting (pp 14 & 121-122)
  - Protocols
    - on-site BMP verification checklists

Conservation Practice Inventory

Pennsylvania's Approved Verification Program

- Verification Program Core Elements
  - Statistical Approach for On-Site Verification

Due to the potentially large number of BMPs that may need to be verified, Pennsylvania will use statistical approaches as one important element of the overall BMP verification program. For example, Pennsylvania estimates that there are approximately 33,600 farming operations in the Commonwealth's Chesapeake Bay drainage area, with an undetermined number of BMPs installed. To determine the status of BMP implementation for this sector by visiting every facility would exceed available resources, and doesn't include BMPs from other sectors.

Page 121 (highlights added.)

Conservation Practice Inventory

Pennsylvania's Approved Verification Program

- Verification Program Core Elements
  - Self Evaluations

    ==Self-reporting of BMPs provides an opportunity to verify BMPs at significantly reduced costs, when compared to conducting visits to 100 % of facilities for any sector.== For example, DEP is working to build a partnership with external entities that would allow for self-reporting of Manure Management Plans (MMPs) at http://pacd.org/education/chesapeake-bay-educationoffice/

    manure-management-self-reporting/. This is being conducted in a manner that would support the important concepts of 1619 confidentiality contained in national law, but still allowing the reporting of this important practice to the Watershed Model at an aggregated level that doesn't contain individual producer information. Data would be collected with a short survey asking for the following types of information: Number of acres under a Manure Management Plan; Manure Type; and date plan was implemented. DEP is working with PACD to add additional BMPs for reporting.

    ==The MMPs reported through self-reporting would have a programmatic element allowing for onsite==
    ==verification of a percentage of the BMPs reported.== Conservation District staff will provide the on-site verification.

Page 121 (highlights added.)

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Pennsylvania's Approved Verification Program

- Verification Program Core Elements
  - Protocols

For on-site BMP verification, checklists will be developed to guide individuals verifying the existence of BMPs. An example of a form currently used by DEP employees is mentioned in the section of this document that addresses buffers. The Department has a goal of developing procedures for verifying these practices by July, 2017 and fully implementing those procedures by January, 2018.

Verification will not be an engineering inspection that confirms practice specifications. Rather, it will be a short visual review to confirm that the BMP is in place and appears to be functional, as best can be determined by the verifier. Two sources of information will be used to guide protocol development:

• NRCS National Conservation Practice Standards (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/references/?cid=nrcs dev11_001020);
• Resource Improvement Practice checklists contained in Appendix H of the CBP's Basinwide Framework document.

Page 122 (highlights added.)

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Conservation Practice Inventory

- Penn State Methodology

Conservation Practice Inventory

- Preliminary Data
  - Responses
  - Data for Bay Model
    - e.g. Manure Management Plans
  - Data for Other Purposes
    - e.g. Tillage / Cover Crops

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Conservation Practice Inventory

- Verification Methodology
  - Who: Penn State Extension Staff
  - How: Data Verification Form & Training

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Conservation Practice Inventory

- Verification Methodology
  - Statistical Application

Conservation Practice Inventory

- Data Submissions to NEIEN
  - Data for Bay Model
    - Manure Management Plans
    - Resource Improvement (RI) Practices

Conservation Practice Inventory

- ## Next Steps / Actions
  - Request for approval by Ag Workgroup
    - Accept 10% initial verification of all potentially eligible visual and non-visual non-cost share BMPs from self-certified assessment forms
    - Accept extrapolation to the total amount of responses (~7,000 farms)
  - Collect and input data by September 2016

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- Request for Approval by Ag Workgroup
  - Accept 10% initial verification (700 farms) of all potentially eligible visual and non-visual non-cost share BMPs from self-certified assessment forms.

In order to satisfy the expectation for verification of non-cost shared BMPs, it is recommended that a jurisdiction verify 100% of the initial identification of annual or multi-year structural BMPs and plan implementation by trained and certified technical field staff or engineers with supporting documentation that it meets the governmental and/or CBP practice standards.

Agriculture BMP Verification Guidance, **Page 5**

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- ## Request for Approval by Ag Workgroup
  - ### Accept extrapolation to the total amount of responses (~7,000 farms)

Proposed language to be added to the ***Agriculture BMP Verification Guidance, Page 5:***

However, a jurisdiction may choose to utilize a self-certified assessment inventory for initial verification of non-cost shared annual and/or multi-year structural BMPs and plan implementation, with an on-site follow-up of 10% (or other valid statistical sample size, as appropriate) of the assessment respondents. Jurisdictions may report the extrapolated data to the total number of inventory responses.

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Conservation Practice Inventory

- Next Steps / Actions
  - Collect and input data by September 2016

Contact Information: