



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Clean Water Management

Improving Local Water Quality in Pennsylvania and Restoring the Chesapeake Bay

**Chesapeake Bay Program Conservation District
and PA Agency Staff Meeting**

March 15, 2016

▶ A Legal Obligation

- Federal Clean Water Act
 - Requires Pennsylvania to reduce loading of nitrogen, phosphorous and sediment to the Chesapeake Bay watershed and meet water quality standards by 2025.
 - NPDES CAFO Permits – Concentrated Animal Feeding Operations (CAFOs).
- Pennsylvania's Clean Streams Law
 - Chapter 102: Erosion & Sediment Control.
 - Chapter 91: Polluted Runoff (Manure).
 - Chapter 83: CAO – Concentrated Animal Operations.

▶ Since 1985

- Investment: More than \$4 billion in Pennsylvania through various loan and grant programs toward Chesapeake Bay restoration efforts.
- Results: Phosphorous down 25 percent, nitrogen down 6 percent, sediment reduced nearly 15 percent.
- Significantly reduced discharges of nutrients, *particularly from wastewater treatment plants.*

▶ 2010 Total Maximum Daily Load

- In 2010 EPA established a Total Maximum Daily Load (TMDL) for the Chesapeake Bay.
- Implementation of this TMDL requires Pennsylvania to develop plans to meet specific target reductions in nitrogen, phosphorus and sediment loads in phases.
- Pennsylvania will not meet reduction targets for nitrogen and sediment goals for **Agriculture** and **Urban Stormwater**.

Consequences of NOT Meeting Goals

- Federal Funds Can be Withheld
 - EPA held \$2.9 million of DEP Chesapeake Bay funds.
 - EPA has indicated future DEP funds may be withheld.
 - Other Federal funds may be withheld.
- Additional Regulatory Requirements
 - Wastewater Treatment Plant Effluent Limits.
 - More regulation on Agriculture.
 - Additional federal farm inspections.

Why PA is Falling Short

- Resources have been inadequate.
- Penn State estimated the resource needs:
 - \$3.6 billion in capital costs to fully implement all nonpoint source BMPs in the WIP;
 - \$378.3 million per year through 2025.
- In 2014, \$146.6 million was spent to address non-point source reductions in PA.
 - \$127.6 million was used for BMPs
 - \$250.7 million less than PSU estimated needs.

Why PA is Falling Short

- Data to measure current Chesapeake Bay pollution reduction efforts for agricultural and urban stormwater pollutant sources is inadequate.
 - Relies on installation of Best Management Practices (BMPs) that were cost-shared by federal or state government.
 - Non-cost shared BMPs have not been counted.

Why PA is Falling Short

- The Chesapeake Bay watershed in Pennsylvania is home to more than 33,600 farms.
 - EPA required DEP to inspect **10 percent of farms annually**.
 - In 2014, DEP conducted a total of 592 inspections, which equates to a **1.8 percent** inspection rate.

Why PA is Falling Short

- The Chesapeake Bay watershed in Pennsylvania has 261 communities with MS4 permits.
 - EPA requires that DEP inspect **20 percent of the MS4 systems annually**.
 - In 2014, DEP inspects each once every 5 years; achieving this 20% requirement.
 - Significant compliance with MS4 permitting requirements in the Bay watershed is uncertain until the 20% inspection rate is consistent.

▶ The “Reboot”

- Pennsylvania must change its approach for the Chesapeake Bay.
- DEP cannot work alone and be successful.
- Chesapeake Bay Restoration Plan is aimed at improving local water quality in Pennsylvania – and the Chesapeake Bay.

▶ “Reboot”: Six Elements

- 1) Address Pollutant Reduction
- 2) Quantify & Multiply BMPs
- 3) Improve Record-keeping
- 4) Identify Needed Changes
- 5) Establish a DEP Chesapeake Bay Office
- 6) Seek New Resources

▶ Value of This Approach

- Retarget existing resources.
- Address chronic data gaps to get municipalities and farmers credit they deserve.
- Improve DEP management focus on local water quality improvement and the Chesapeake Bay.
- Improve information technology.
- Create a “culture of compliance.”

Conclusion

- Local water quality in PA is a shared responsibility.
- Collaboration, partnerships, commitment and resources are key.
- Everyone must do their part.
- PA Constitution Article 1, Section 27 :

The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.



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DEP Chesapeake Bay Website:

<http://www.dep.pa.gov/Business/Water/Pages/Chesapeake-Bay-Office.aspx#.VrkUGvMo7ct>