

Environmental issues facing Virginia dairymen

VSFA &
Nutrition Cow College
John Welsh, Agent – Rockingham County

What is a TMDL?

- A TMDL is the calculation of the maximum amount of pollution a body of water can receive and still meet state water quality standards designed to ensure waterways meet a national primary goal of being swimmable and fishable.

Agriculture in the spotlight



- “The Bay and its rivers are overweight with nitrogen, phosphorus and sediment from **agricultural operations**, urban and suburban runoff, wastewater, airborne contaminants and other sources.”
- Source
 - US EPA Chesapeake Bay TMDL Fact Sheet

Chesapeake Bay Program History

- 1980 Chesapeake Bay Commission
- 1983 Chesapeake Bay Agreement
- 1987 Chesapeake Bay Agreement
40% nutrient reduction
- 1992 Amended to develop Tributary strategies
- 2000 Chesapeake Bay 2000
meet water quality standards
- 2005 New Tributary strategies were released
- 2010 Chesapeake Bay TMDL and Virginia's Phase I WIP

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Chesapeake Bay TMDL

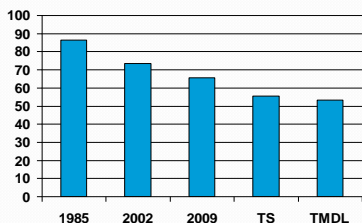
TMDL Timeline

- May 19, 2009 – President Barack Obama issues Chesapeake Bay Protection and Restoration Executive Order.
- September 1, 2010 – Draft Phase I WIPs due to EPA
- November 29, 2010 – Final Phase I WIPs due to EPA
- December 29, 2010 – EPA establishes the largest TMDL ever.
- December 15, 2011 – Phase II WIPs due to EPA.
- March 30, 2012 – Final Phase II WIPs due to EPA.



Virginia Nitrogen Loads

[million lbs/yr]

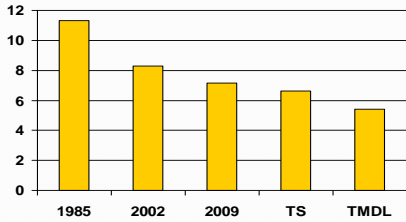


TS – VA Tributary Strategy issued in 2005
 Source : Chesapeake Bay TMDL Watershed Implementation Plan – Phase II James Davis-Martin, DCR

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Virginia Phosphorus Loads

[million lbs/yr]

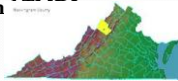


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 -Phase II James Davis Martin, DCR

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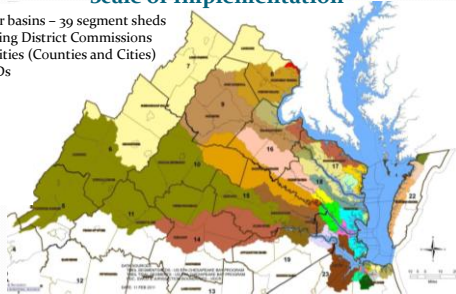
Purpose of Chesapeake Bay TMDL Phase II WIP

- Facilitate implementation first by dividing the Bay TMDL allocations into **local area targets** as appropriate. Second, EPA expects the Phase II WIPs to describe how partners are going to **reduce loads delivered to the Bay**. Third, the Phase II WIPs provide an opportunity for partners to **identify what resources, authorities and assistance** they need to implement actions that achieve their respective share of the Bay jurisdictions' WIP strategies an allocations;



Scale of Implementation

Five Major basins - 39 segment sheds
 16 Planning District Commissions
 96 Localities (Counties and Cities)
 32 SWCDs



Source: Chesapeake Bay TMDL Watershed Implementation Plan
 -Phase II James Davis Martin, DCR

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Rockingham County Response

“Rockingham is submitting a draft list of strategies and resource needs; however, the Board of Supervisors contends that ***the State is the primary responsible party*** to meeting the goals established to meet Chesapeake Bay standards.”

Purpose of Chesapeake Bay TMDL Phase II WIP

- Propose refinements as necessary to the Bay TMDL allocations, including refinements resulting from the agreed-upon land use and nutrient management updates to Scenario Builder and the Chesapeake Bay Program Watershed Model; and



Rockingham County Response

- “The County has not altered the data provided since there is insufficient and inaccurate base data from which to determine an accurate forecast of the reduction capability, and more importantly the impact that such reductions will have on the water quality in the state waters located in Rockingham County, and between Rockingham and the Chesapeake Bay.”

Commonwealth of Virginia 2013 Milestone goals– general ag

- Establish 2 ASA Coordinators
- Encourage precision ag apps – 12,500ac/yr
- Increase NMP to 70%
- Renew enhanced funding for livestock exclusion.
- Report voluntary BMPs for pilot SWCDs
- Implement voluntary BMP assessment statewide
- Initiate RMP framework



Commonwealth of Virginia 2013 Milestone goals – AFO

- Convert CAFO permits to VPDES permits
- Complete small AFO strategy MOU with VDACS
- Complete evaluations of 35% of small AFOs
- Achieve 75% NMP for unpermitted dairies
- Develop educational programs for unpermitted dairies.



Voluntary BMP Data Collection Pilot Project

Shenandoah Valley Soil & Water Conservation
District



Project Summary

- **Goal** : Document BMPs voluntarily installed by farmers in the SVSWCD service area (Rockingham and Page Counties)
- Voluntary BMP data will be entered into the existing state tracking system for potential use in the Bay model
 - BMPs Meeting Current Specifications:
 - will receive full reduction credit in the Bay model
 - may be checked in the future to determine if BMP is still in place
 - BMPs Not Meeting Specifications:
 - will be recorded and reduction credit ("Functional Equivalent") will be determined by EPA over the next two years
 - will not be verified with future visits until credit is received

Project Details

- Detailed BMP information is collected during an on-farm assessment conducted by technical staff
 - Assessments will be conducted with landowner permission. Landowners must sign an Assessment Authorization form for their information to be recorded.
- Information collected includes: landowner name and address, BMP location, installation date, BMP details (linear feet of stream excluded, type of fence, size of litter shed, etc.)
- Information collected is NOT subject to FOIA requests
- Reporting a voluntary BMP does not obligate the landowner to maintain the practice, and does not grant any agency authority over the practice

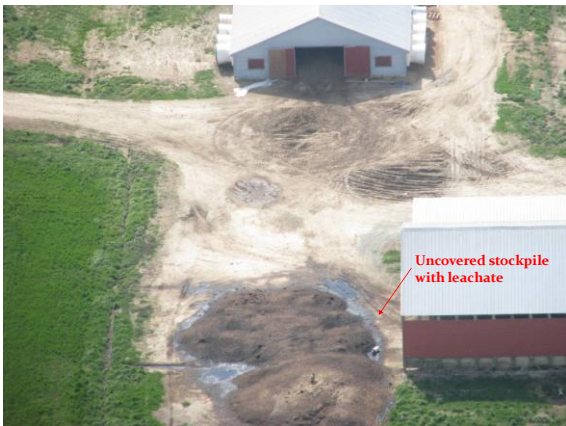
2012 Update on Agriculture and the Environment: Small AFO Assessment Program



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- Voluntary plan memorialized with a DEQ Letter
- Work with VDACS through the Ag Stewardship Program
- General VPA permit with DEQ
- Designation as a small CAFO and issuance of a VPDES (federal) permit







Resource Management Plans

- Va Legislature approved RMP “code” in April 2011
- “Producers ... in accordance with the plan will be deemed in full compliance...”
- Protection from what?
 - Future TMDL regulations.
 - What constitutes future state vs TMDL regs?
- For how long?
 - 9 years
- What is required?

Crystal Ball?

- 2025 = success???
- Will we have resolved nutrient imbalances?
- Where does the feed industry stand?
