

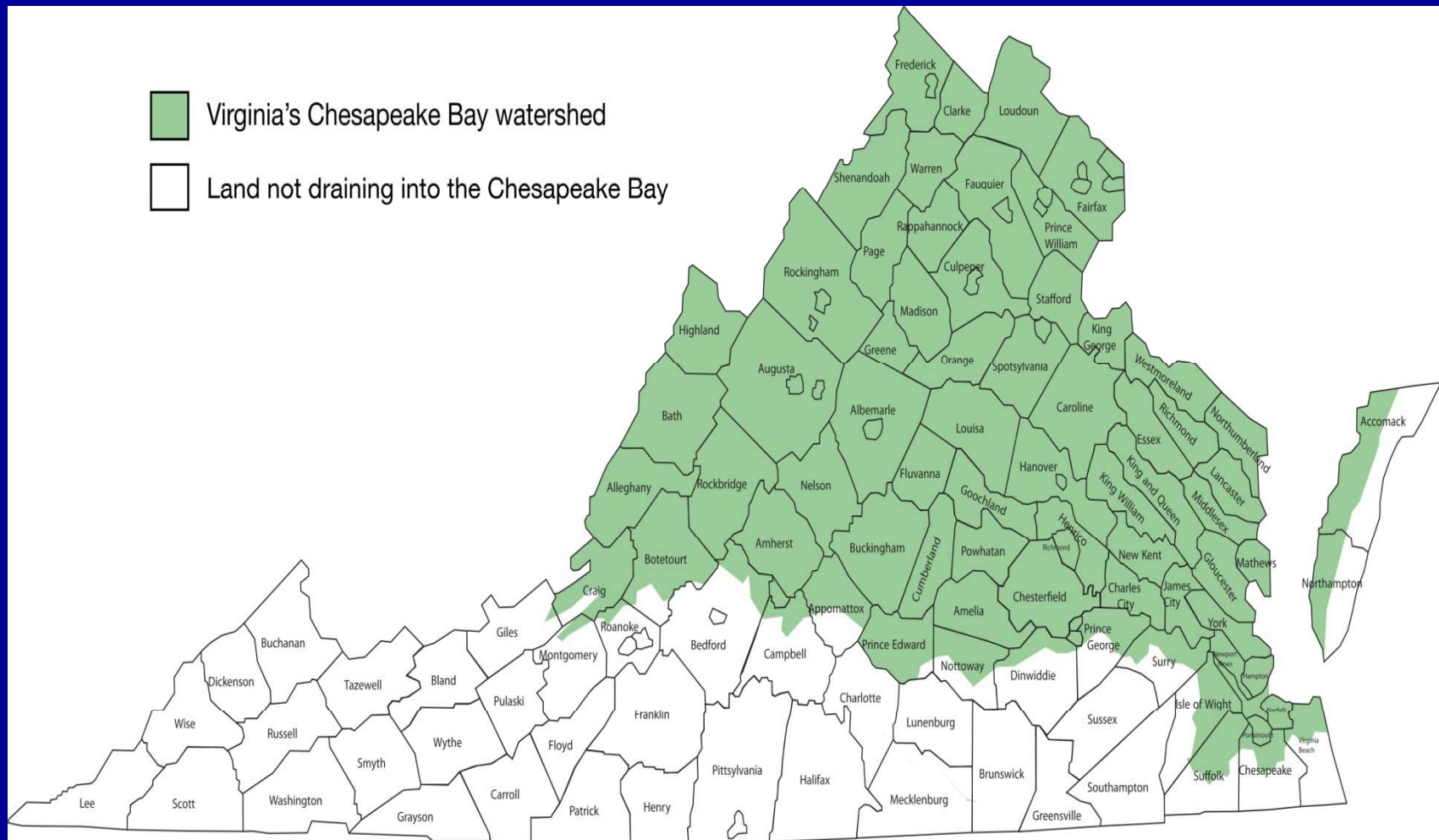


Virginia Chesapeake Bay TMDL Watershed Implementation Plans (WIP) – Phase II

Crater PDC
June 29, 2011

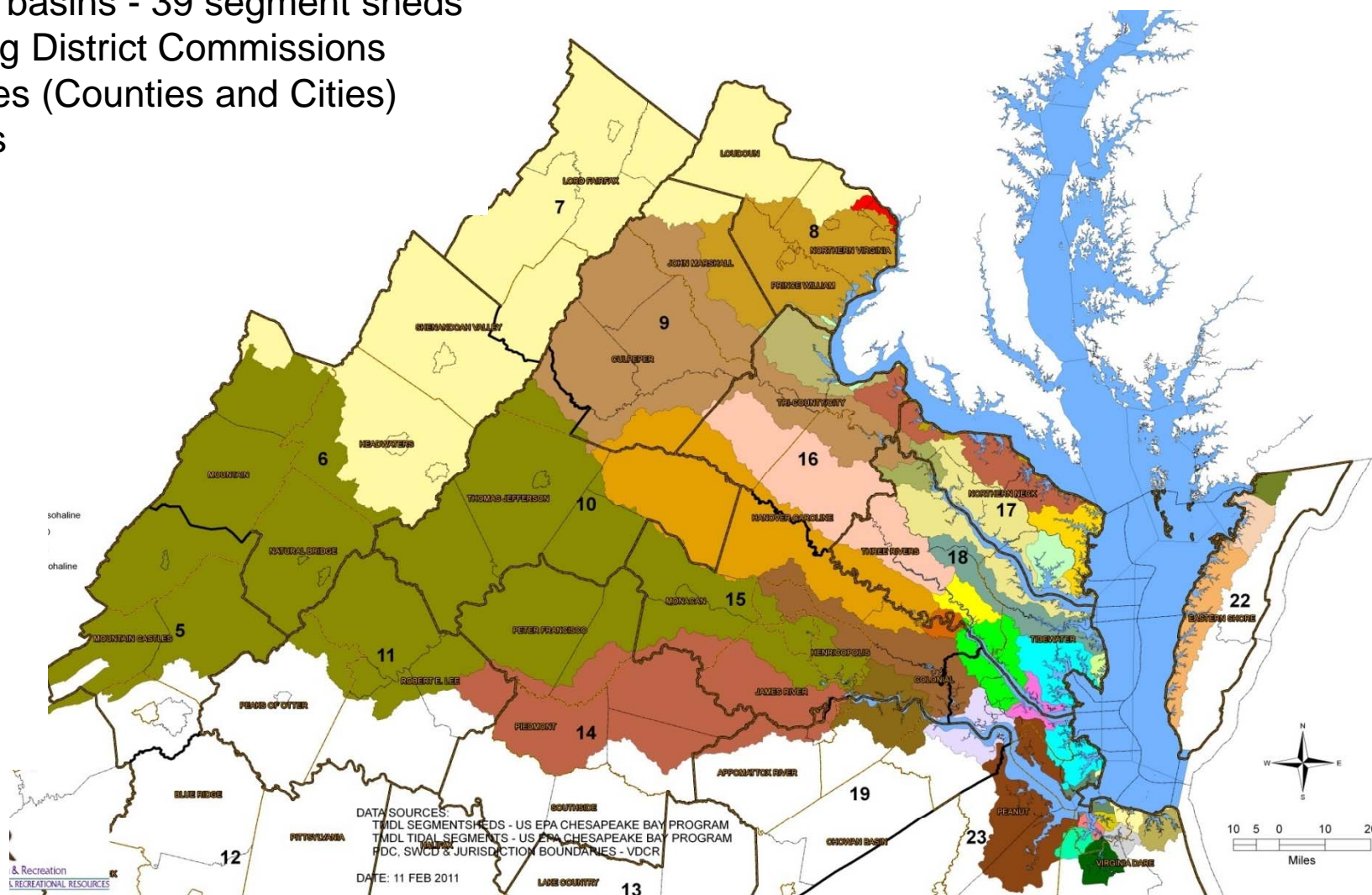
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TMDL Phase II Lead

Virginia's Chesapeake Bay Watershed



Scale of Implementation

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



Virginia Nitrogen Loads

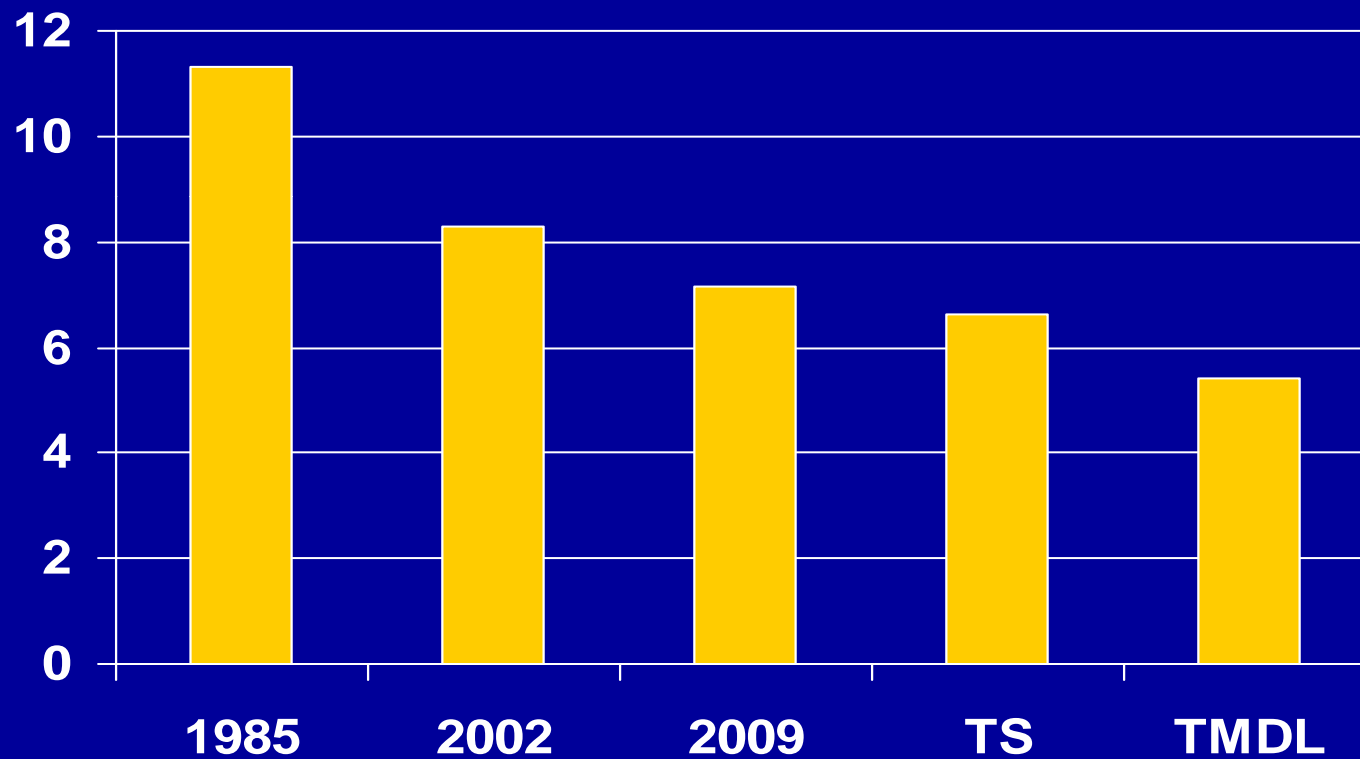
[million lbs/yr]



TS – VA Tributary Strategy issued in 2005

Virginia Phosphorus Loads

[million lbs/yr]



TS – VA Tributary Strategy issued in 2005

Phase I Review

Virginia's Watershed Implementation Plan: Overview

- Submitted 27 Nov 2010
- Accepted By EPA 29 Dec 2010
- Meets 2017 target loads for all basins through management actions, plus use of existing nutrient credits achieve those target loads.
- Proposes a broad expansion of the existing nutrient credit exchange.
- Includes plan for the James River for additional study of the current chlorophyll standard.
- Expected Revisions to the 2025 allocations in 2017.

Phase I Review

Expand Nutrient Credit Exchange

Legislative Findings and Purpose – [§62.1-44.19:12]

- Meeting cap allocations cost-effectively and as soon as possible
- Accommodating continued growth and economic development
- Providing foundation for establishing market-based incentives to help achieve non-point source reduction goals

Next Steps:

- Major programmatic undertaking for Commonwealth
- Will require General Assembly action
- Conduct legislature-sanctioned study during 2011
- Proposal for consideration during 2012 session of General Assembly

Phase I Review

James River Strategy

- Conduct scientific study to determine the most appropriate chlorophyll criteria for the tidal James River
- Concurrently, begin pollution reduction actions during Phase II of TMDL Implementation to achieve the 60% reduction target by 2017
- Initiate rulemaking under the Virginia Administrative Process Act to amend water quality standards, as needed
- Amend TMDL allocations for the James River Basin, as needed, in response to revised water quality standards
- Implements necessary management actions during Phase III to achieve TMDL allocations prior to 2025

Phase I Review

Virginia's Watershed Implementation Plan: Wastewater Proposals

- Will meet allocations through Watershed General Permit that establishes nutrient caps for all significant discharges and ability to trade
- Propose additional reductions of 2.6 million lbs of N and 200,000 lbs of P in the James basin and 42,500 lbs of P in the York
- Propose new facilities under 1000 gpd must offset entire nutrient load.
- Propose offsets for nutrient loads from small dischargers expanding to less than 40,000 gallons per day

Phase I Review

Virginia's Watershed Implementation Plan: Onsite/Septic Proposals

- New or replacement systems in the Chesapeake Bay watershed utilize nitrogen reducing technology and implementation of new regulations for alternative systems that are currently under development
- Establishing a tax credit or other financial incentive for the upgrade or replacement of existing conventional systems with systems that have nitrogen removal technologies
- The plan proposes requiring septic pumpouts in areas outside those governed by the Chesapeake Bay Preservation Act which currently requires pumpouts every 5 years

Phase I Review

Virginia's Watershed Implementation Plan: Agriculture/Forestry Proposals

- Extensive implementation of resource management plans on agricultural acres which could result in implementation of these practices:
 - nutrient management plans
 - livestock exclusion from streams
 - 35' stream buffers
 - soil conservation
 - other practices accepted by the Bay model
- Vastly improved accounting of voluntary practices
- Improved implementation of forestry water quality BMP requirements

Phase I Review

Virginia's Watershed Implementation Plan: Urban/Suburban Stormwater Proposals

- Urban nutrient management plans on golf courses, municipally owned lands.
- Restrictions on do-it-yourself non-agricultural lawn and turf fertilizers including “P ban”
- 20% phosphorus reduction standard for areas being redeveloped.
- Stormwater *retrofits* on existing developed lands to reduce nitrogen, phosphorus and sediment.
- For new development, post development loads cannot exceed allowed loads of previous land uses

Phase II Goals

- Further divide the 39 segment shed allocations (as identified in WIP I) to a more local scale
- Work with local elected officials, staff, soil & water conservation districts, stakeholder organizations and citizens to identify strategies to be implemented
- Provide additional detail on practices and strategies to be implemented by 2017
- Include updates resulting from revisions to the Bay Watershed Model
- Include specific programs and practices in the first 2-year milestone (2012-1213)

Phase II Project Elements

- Development of Local Reduction Goal for each of the 96 localities
- Local Engagement
- Local development of Community Conservation Information (CCI)
- Phase II WIP Development
- 2012/2013 Milestone Development

Virginia's Phase II Approach

Local Goal Load Development

- Utilize the Bay Model outputs to distribute the source-segment Bay TMDL allocations and WIP I BMPs to the local scale
 - Land Use / Land Cover
 - All source and segment loads aggregated to a single local goal for each pollutant
 - BMPs accounted for in the model
 - 2009 Progress BMPs
 - WIP I BMPs
 - BMPs scenario to meet Goal Load
- The local reduction goals and associated BMPs will be the starting point for localities to work from during the Phase II WIP development process
- Data will be revised upon EPA completion of the Phase 5.3.2 model (July/August)
- Absent any input from localities, these data will be used as the default values for the Phase II WIP

Local Engagement Process

- Secretary's Office presentations to 16 PDCs – 15 completed
- Follow-up discussions with PDCs to explore their interest in participating - initiated
- Meeting with PDC staff
 - More detail on Phase II process
 - Discuss of the Community Conservation Information
 - Discuss potential roles with PDCs
 - Technical
 - Facilitation
 - Neither/both
 - Ability/capacity/resources (available and needed)

Virginia's Phase II Approach

Local Engagement & Outreach Process (cont.)

- Meeting with PDCs, Localities, SWCDs and other stakeholders
 - Overview of Phase II process
 - Discussion of desired local deliverables
 - Current BMPs
 - Land Use / Land Cover
 - Strategies
 - Resource needs
 - Discussion of timeline
 - Provide local goals and model output data
 - Provide assessment tool for evaluation of scenarios
- Ongoing support and technical assistance

Virginia's Phase II Approach

Community Conservation Information

- **Baseline Data**
 - Goal loads and model outputs for localities
 - Locally available data (land use, BMPs on the ground, etc.)
- **Resource Assessment**
 - Local conditions
 - Incorporate local data into assessment tool
 - Source identification
- **Existing Program Evaluation**
- **Conservation Strategies**
 - 2017 Implementation goals
 - 2025 Strategies
- **Identify additional resources and programs required to achieve implementation goals**
 - Estimate costs of local implementation

Virginia's Phase II Approach

2012 – 2013 Milestone Development

- Evaluate Phase I WIP actions
- Evaluate 2011 milestone actions and contingencies
- Identify new State programs (Fertilizer control, Enhanced Nutrient Credit Exchange Program, etc.)
- Develop 2012-2013 Actions
- Identify additional resources required to achieve implementation goals
- Submit preliminary milestones to EPA (11/1/2011)
- Submit final milestones to EPA (1/03/2012)

Potential Role of PDC

- Technical
- Facilitation
- Neither/both
- Capacity/resources - available and needed

Project Schedule

- Draft Local Goals to Localities - 06/01/2011
- EPA Delivers Phase 5.3.2 Model – 07/1/2011
- Final Local Goals to Localities - 08/01/2011
- Local Conservation Strategies Finalized – 10/01/2011
- Preliminary 2012-2013 Milestones to EPA - 11/01/2011
- Draft Phase II WIP to EPA - 12/01/2011
- Final 2012-2013 Milestones to EPA - 01/03/2012
- Final Phase II WIP to EPA – 03/30/2012

How the PDC can help

- Assist local governments with collection of local land use and BMP data
- Evaluate model information related to loads, land uses, 2009 and 2025 BMP implementation level and compare to local data
- Work with localities identify additional BMPs and strategies to implement them

How the State can help

- Continued engagement and some technical assistance
- Provide “Assessment Tool”
- Pass through EPA contract assistance
- Possible grants

Questions?

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