



Commonwealth of Virginia Draft Chesapeake Bay TMDL Watershed Implementation Plan

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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 2000
 - Bay meet water quality standards
- 2005 New Tributary strategies were released
- 2010 TMDL <<<<<<< WIP



Virginia's Priorities

- Allow flexibility in implementation to ensure cost-effective practices are given priority.
- Recognize current economic conditions, the economic impacts of the TMDL and the need for federal support.
- Reserve the right to modify the plan and adapt as necessary.

Water Quality Improvements

- Ensure the plan works in the real world, not just in the “model world”.
- “The TMDL is developed using the Chesapeake Bay model which allows for evaluation of implemented and proposed actions. While meeting the requirements of the model are important in order to meet the technical elements of the TMDL, our focus is on implementing practices and programs that result in real environmental improvement. We will use the model as a management tool, but we will tailor our actions within real scientific, economic, social and political frameworks.”
- Known deficiencies in the model
- Working with EPA on Input deck

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- “This strategy has been constructed within the parameters set by the Chesapeake Bay Program model, and over the preceding months considerable time has been spent “crunching the numbers” so that our plans could be evaluated by the model. While these arithmetic calculations are important to define the suite of management actions we must take in the future, they are only a first step in the implementation process. The model is a tool to assist us in directing our actions. The implementation of our strategies will take place on the ground as we work treatment plant by treatment plant, farm by farm, parking lot by parking lot, and locality by locality. These strategies must have the flexibility to address real world issues, not just the issues raised by the Chesapeake Bay Program model.”

Development of the Plan

- 2009: Agency review of programs
- 2009 – 2010: Convened Stakeholder Advisory Group (SAG): 40 members from all affected interests.
- 2010: Convened “Expert Panels” to advise staff on feasible levels of treatment.
- 2010: July: Sector Workgroups – SAG members with additional participants
 - Received allocations for P/N on 1 July
- 2010: August: SAG Steering Committee – Representatives from each sector workgroup and several at-large members.
 - Received sediment allocations on 13 August
- 2010: September: Reviewed by Governor and sent to EPA



Virginia's Watershed Implementation Plan: Overview

- 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.



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
- Pursuing legislature-sanctioned study during 2011
- Proposal for consideration during 2012 session of General Assembly



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

Wastewater Proposals

- Using the current nutrient allocations for significant wastewater facilities under the State Water Control Board issued Watershed General Permit that establishes nutrient caps for all significant discharges and ability to trade
- 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

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.



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
- Vastly improved accounting of voluntary practices.
- Improved implementation of forestry water quality BMP requirements.



Urban/Suburban Stormwater Proposals

- The plan proposes urban nutrient management plans on golf courses, municipally owned lands.
- The plan proposes restrictions on do-it-yourself non-agricultural lawn and turf fertilizers including “P ban”
- The plan proposes a 20% phosphorus reduction standard for areas being redeveloped.
- The plan proposes 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



Future Dates and Expected Actions

- Comment Period ended 8 Nov
- Review and Modify WIP/TMDL
- Submit Revised WIP to EPA 29 Nov
- EPA submits final TMDL 31 Dec



Future Dates and Expected Actions

Expected in 2011:

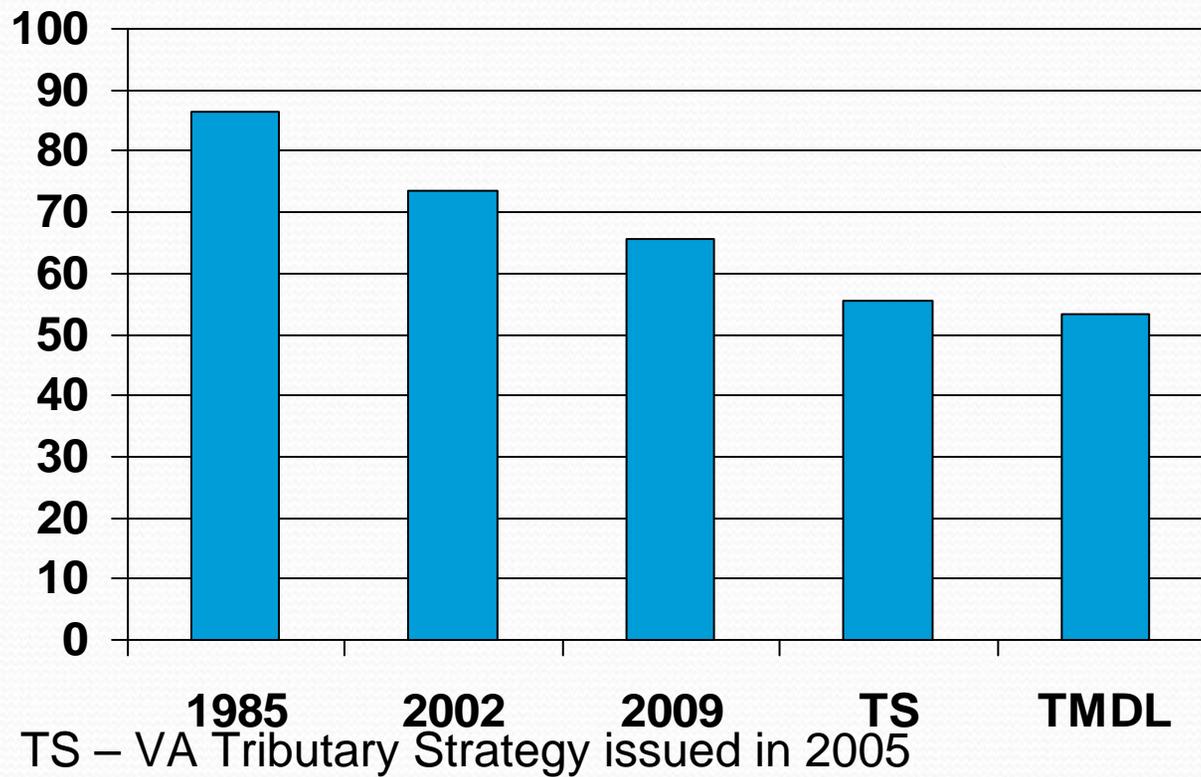
- Revisions to the Chesapeake Bay Model to correct currently known deficiencies.
- States develop Phase II WIPS. Phase II plans are expected to be developed with actions proposed at a smaller, local scale. Submit draft summer 2011.
- Modifications of TMDL allocations by EPA by 15 Dec 2011

Expected in 2017:

- States develop and submit Phase III WIPS
- Adjust allocations according to progress on state plans
- Modifications of the TMDL allocations by Dec 2017

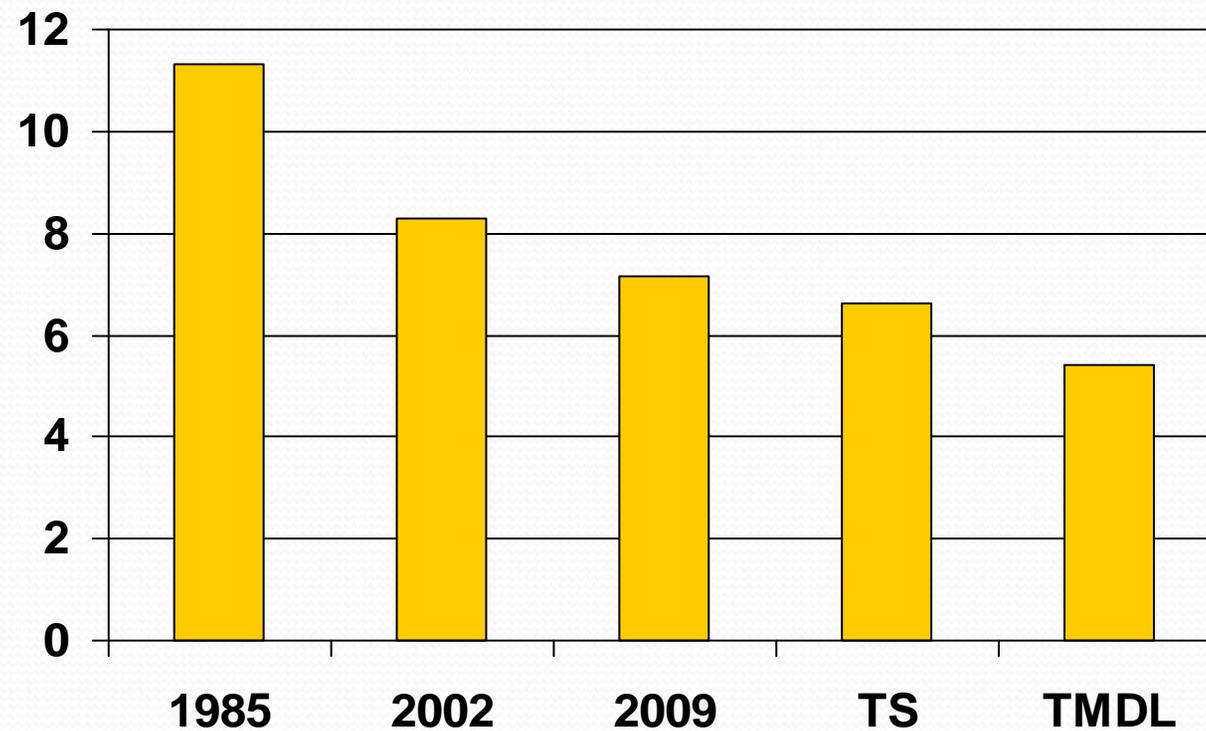
Virginia Nitrogen Loads

[million lbs/yr]



Virginia Phosphorus Loads

[million lbs/yr]



TS – VA Tributary Strategy issued in 2005