

# Federal Role in the Chesapeake Bay Restoration Effort

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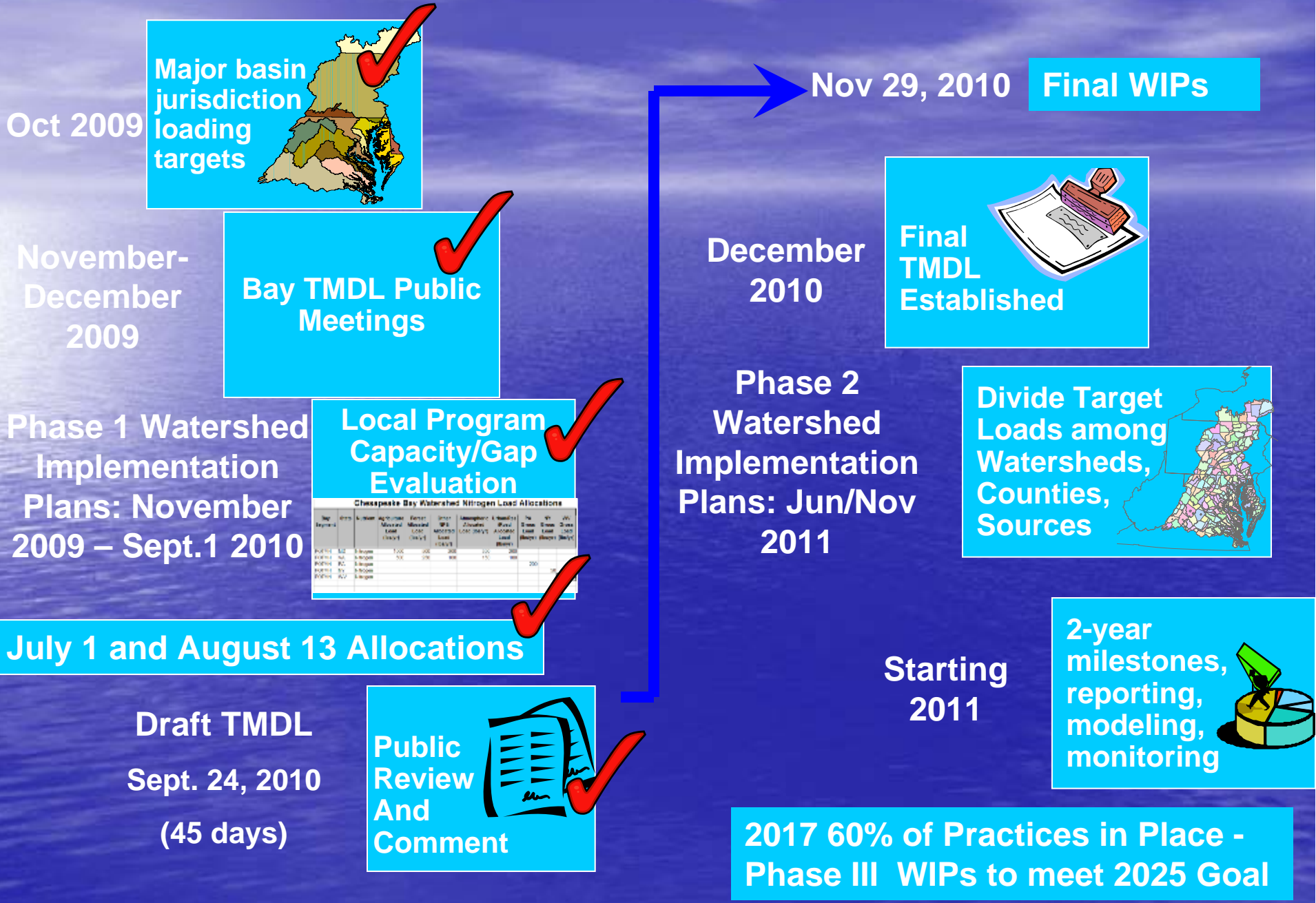
# Today's Points

- Schedule – Past and Future
- EPA's Response to Virginia's Watershed Implementation Plan (WIP)
- EPA-VA Interaction
- Remaining Major Issues

# Series of Bay Agreements

- 1983 (1 page)
  - There's a Problem – Work Together
- 1987 (7 pages)
  - 40% Reduction in Nutrients
- 1992 (back to 3 pages)
  - Work Upstream
  - Develop Tributary Strategies
- 1999 Consent Decree – TMDLs
- 2000 (up to 13 pages & 100+ commitments)
  - Beyond 40% - Delist the Bay and Rivers
- 2005 Tributary Strategies
- And Now – **Bay TMDL**

# Bay TMDL and WIP Schedule: 2009-2017



# TMDL/WIP Outreach

- Draft TMDL Issued on Sept 24: 45 Day public comment period until November 8<sup>th</sup>
- Four Public Meetings in Virginia: October 4 – 7, 2010
  - EPA and VA Participation
  - Webinar
- Stakeholder Outreach: Environmental Organizations, State Legislators, Local Governments, Agricultural Community, Homebuilders/Developers, and Wastewater Associations

## CHAPTER 519

*An Act to amend the Code of Virginia by adding in Chapter 3.1 of Title 62.1 an article numbered 4.1, consisting of sections numbered 62.1-44.19:4 through 62.1-44.19:8, relating to the **Water Quality Monitoring, Information and Restoration Act**. [S 1122]*

Approved March 18, 1997

*§ 62.1-44.19:7. Plans to address impaired waters.*

- A. The Board shall develop and **implement** a plan to achieve fully supporting status for impaired waters, except when the impairment is established as naturally occurring. The plan shall include the date of **expected achievement of water quality objectives, measurable goals, the corrective actions necessary, and the associated costs, benefits, and environmental impact of addressing impairment and the expeditious development and implementation of total maximum daily loads** when appropriate and as required pursuant to subsection C.*
- C. ...The Board shall develop and **implement** pursuant to a schedule total maximum daily loads of pollutants that may enter the water for each impaired water body as required by the Clean Water Act.*

*CHAPTER 3.7.*

*CHESAPEAKE BAY AND VIRGINIA WATERS CLEAN-UP AND OVERSIGHT ACT*

*§ 62.1-44.117. Development of an impaired waters clean-up plan; strategies; objectives.*

*A. The Secretary of Natural Resources shall **develop a plan** for the cleanup of the Chesapeake Bay and Virginia's **waters designated as impaired by the U.S. Environmental Protection Agency**. The plan shall be revised and amended as needed to reflect changes in **strategies, timetables, and milestones**.*

# CHESAPEAKE BAY AND VIRGINIA WATERS CLEAN-UP AND OVERSIGHT ACT

Continued...

*B. The plan shall address both point and nonpoint sources of pollution and shall include, but not be limited to the following:*

- 1. Measurable and **attainable objectives**;*
- 2. A description of the **strategies to be implemented**;*
- 3. **Time frames** or phasing to **accomplish plan objectives** and the expected dates of completion;*
- 4. A **clearly defined, prioritized, and sufficiently funded program** of work within the plan both for point and nonpoint source clean-up projects;*
- 5. A **disbursement** projection plan;*
- 6. **Potential problem areas** where delays in the implementation of the plan may occur;*
- 7. A **risk mitigation strategy**;*
- 8. A description of the extent of coordination between state and local governments;*
- 9. Assessments of alternative funding mechanisms*



# Watershed Implementation Plans

~Expectations~

## Similar to Existing Statutory Requirements

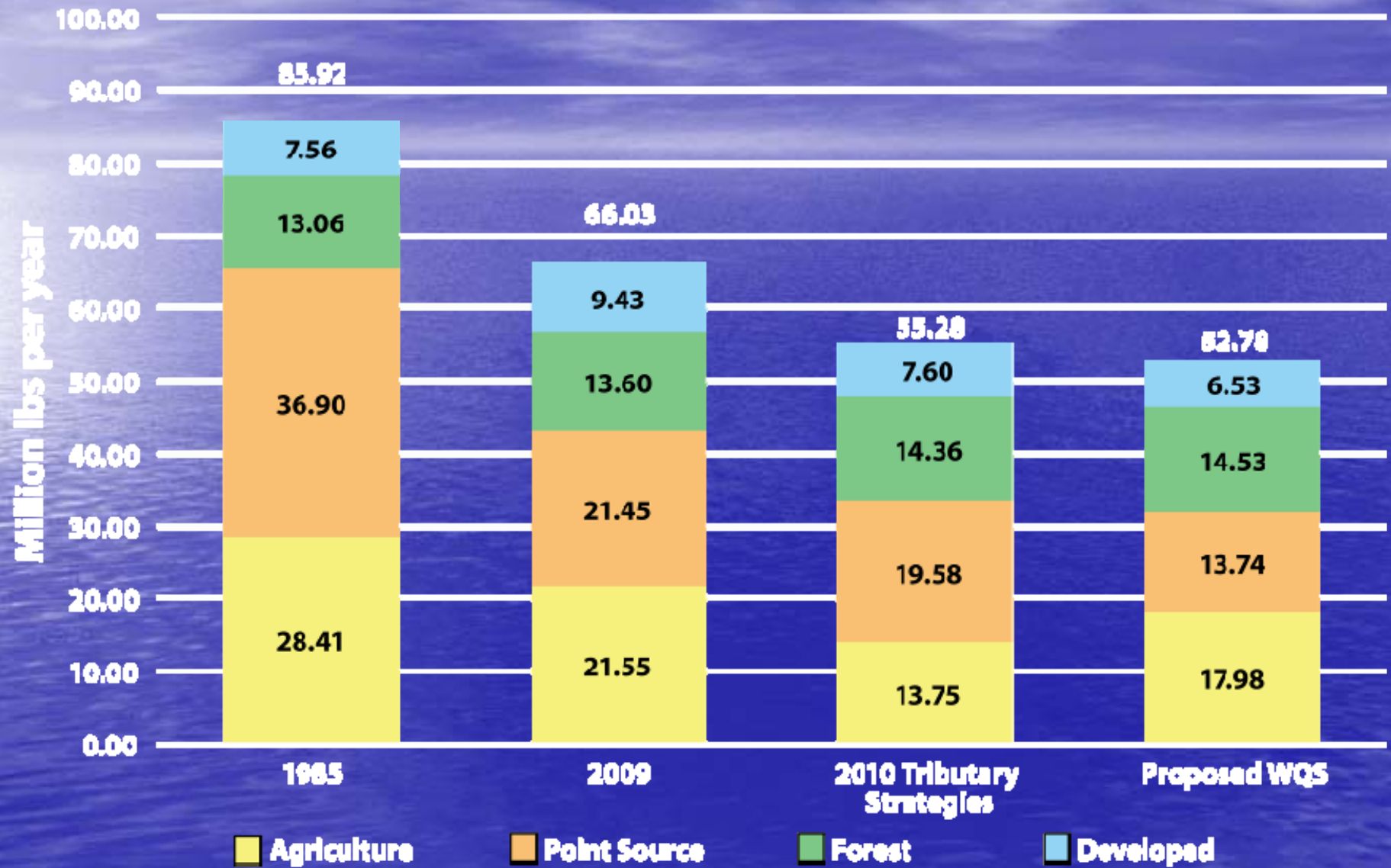
1. Interim and Final Nutrient and Sediment Target Loads
2. Current Loading Baseline and Program Capacity
3. Gap Analysis
4. Commitment and Strategy to Fill Gaps
5. Account for growth
6. Tracking and Reporting Protocols
7. Contingencies for Slow/Incomplete Implementation
8. Appendix with Detailed Targets and Schedule

**60% by 2017!!**

# None of This is All That New

- We've been at this a while
- We've had a pretty good idea of what needs to be done – "Trib Strat Effort"
- We've developed clean-up plans before
- We've developed many TMDLs
- Many of the partners have been at the table for quite some time

## VA Nitrogen Loads by Sector and Scenario—CBP Watershed Model P5.3



# **EPA Review of Virginia's Implementation Plan**

# EPA WIP Review Process

- A Team of EPA experts conducted a 3-day rigorous evaluation process
  - Common review criteria
  - Tiered the State submissions in 4 categories of quality and Reasonable Assurance
- Three goals were paramount:
  - Achieving the load caps in all basins and impaired segments
  - Providing a high level of reasonable assurance that nonpoint source controls will be achieved
  - Sufficient detail for permit writers

# EPA-VA Communication

- Aug. 24 – VA Summary of Proposed WIP Elements (SAG)
- Sept. 3 – Draft WIP submitted
- Sept. 23 – EPA Conference call with VA Senior Management - summary of EPA WIP review
- Sept. 24 – Letter from R3 Administrator explaining review process and brief summary of EPA WIP review findings
- Oct. 4 – Detailed WIP evaluation letter sent to VA

# Initial VA Findings: Stormwater

- Stormwater Reg Revisions - Contingency actions lacking in the event that Virginia's new regulations are not promulgated on schedule
- Redevelopment/New Development - Lacked strong performance standards
- Retrofits for Existing Development - Lacked strong detailed retrofit program with aggressive performance standards; reductions from existing stormwater loads not possible without retrofits
- Expansion of Nutrient Credit Exchange Program – General concerns – too vague
- Discrepancies - WIP strategies and input deck #s did not mesh (E3 issue)

# Initial VA Findings: Wastewater

- James River - Lacked commitment to retrofit and optimize WWTPs
- Non-Significant WWTPs - Lacked detail regarding permitting approach
- Tracking/Verification/Reporting - Additional clarity needed regarding nutrient loads and upgrade/compliance schedules
- On-Site Treatment Systems - Insufficient detail for strategies to achieve nitrogen reductions



# Initial VA Findings: Agriculture

- Implementation of "Priority Practices" - Lacked assurance for increased implementation
  - Drivers (e.g. regulatory and legislative initiatives)
  - Detailed strategy outlining timing and process for large increases in implementation rates
  - Sources of funding
- Compliance with Existing Regulatory Programs - Insufficient detail ensuring compliance
  - Compliance/Enforcement procedures
  - Needed staffing levels
  - Frequency of inspections/verification
- Smaller Animal Operations (AFOs) - Additional need to address impacts on water quality
- Phosphorus Management - Limited commitment to to address high P in soils and related excess manure

# (Proposed) Federal Backstop Allocations

(modify state WIP allocations)

- All jurisdictions require some level of Backstop allocation or adjustment because:
  - Didn't achieve basin-jurisdiction allocations (N, P, Sediment)
  - Didn't provide a high level of assurance that proposed strategies could be implemented (particular emphasis on 60% by 2017)

# Federal Backstop Actions Could Include...

- **Establish additional reductions from regulated point sources (e.g., wastewater treatment plants, CAFO, MS4s)**
- **Establish finer scale allocations for headwater states (TMDL)**
- **Expand NPDES permit coverage to unregulated sources**
- **Increase permit oversight/object to permits**
- **Require net improvement offsets**
- **Increased federal enforcement**
- **Condition or redirect federal grants**
- **Promulgation of local nutrient standards**

# For Virginia: **moderate backstop**

- Wastewater facilities: 4 mg/L TN and .3 mg/L TP and design flow
- MS4s: 50% of urban MS4 lands meet aggressive performance standard through retrofit/redevelopment; 50% of unregulated land treated as regulated
- Construction: Erosion and sediment control on all lands subject to Construction General Permit
- CAFO Production Areas: Waste management, barnyard runoff control, mortality composting, precision feed management for all animals. Same standards apply to AFOs not subject to CAFO permits EXCEPT no feed management on dairies

# Opportunities for Improvement

- EPA's Ultimate Goal is to Relax/Remove Backstops
  - Will We Get There?
- EPA is providing the States with opportunities to **enhance** their WIPs by November 29
- EPA is extensively engaging the jurisdictions to share information, guidance, examples from other states, etc.
- Other Opportunities for Improvement/Refinement
  - 2011 Phase II WIPs
  - Two-Year Milestones
  - 2017 Phase III

# EPA-VA Interaction

- Weekly Conference Calls since Oct. 15
  - Senior Management Involved
- Available Technical Experts
- Sit-Down Meeting – Oct. 29 & Nov. 19
- Shared Revised Data
- Shared Revised Strategies
- Final Summary/Status Letter Coming Today

# Remaining Issues

- Agriculture
  - Further Discussions this week
- James River Staged Implementation
  - Finalizing workable solution
- Stormwater
  - Additional detail needed
  - Permitting Issues
- Nutrient Credit Exchange Program – Expansion
  - Detail is improving...revisions continue
- James River Sediment Allocation
  - EPA decision pending (difference of opinion exists)



Image courtesy Guy Stephens