Draft CHESAPEAKE BAY TMDL

Restoring West Virginia's waterways and Chesapeake Bay

Public Meeting
Romney, West Virginia
November 4, 2010

www.epa.gov/chesapeakebaytmdl

Today's Agenda

- **EPA presents draft TMDL**
  - Rich Batiuk, Chesapeake Bay Program Associate Director for Science
  - Bob Koroncai, Chesapeake Bay TMDL Manager
- **West Virginia presents WIP**
  - Alana Hartman, Potomac Basin Coordinator, WVDEP
- **Question & Answer**
- **More information**
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First…The Bottom Line

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Lack of progress triggered TMDL

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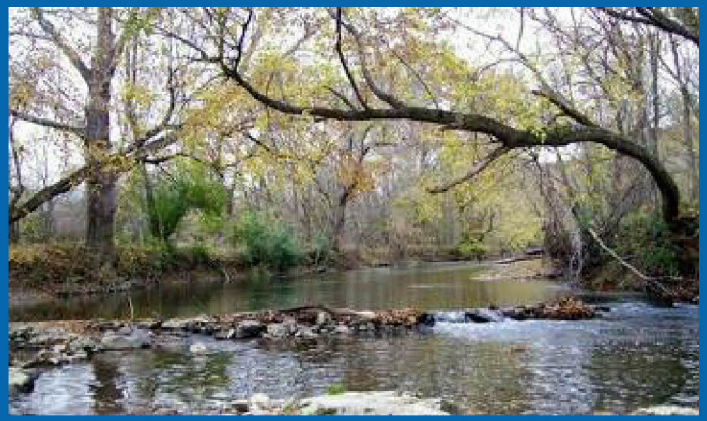
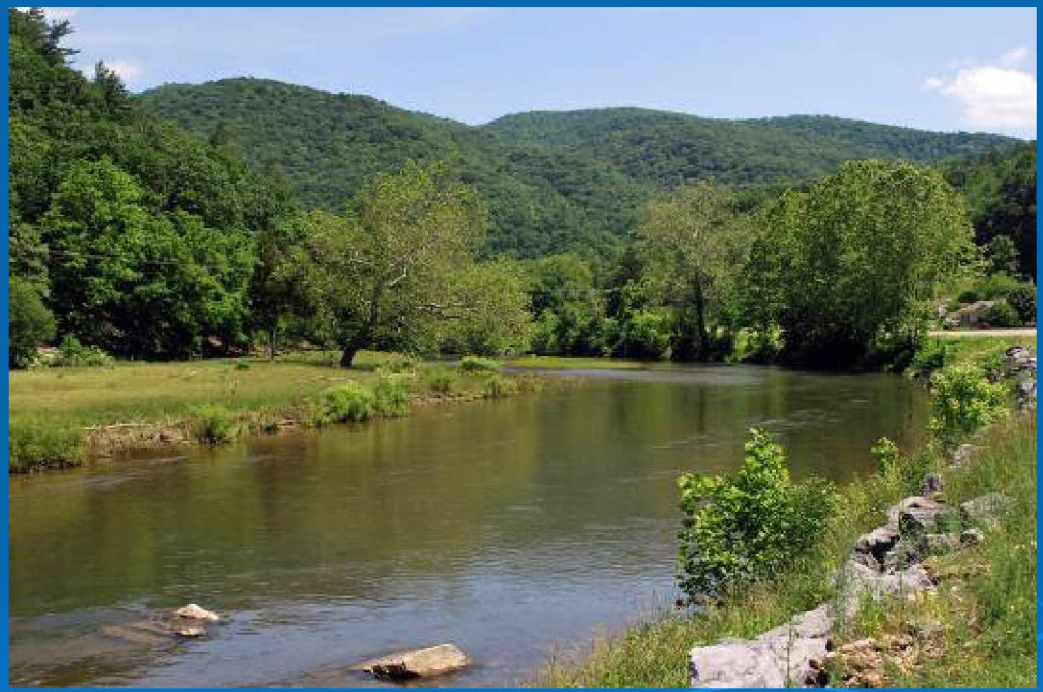
TMDL is a "pollution diet"

For your streams, creeks and rivers





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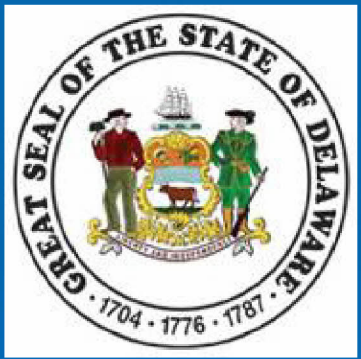
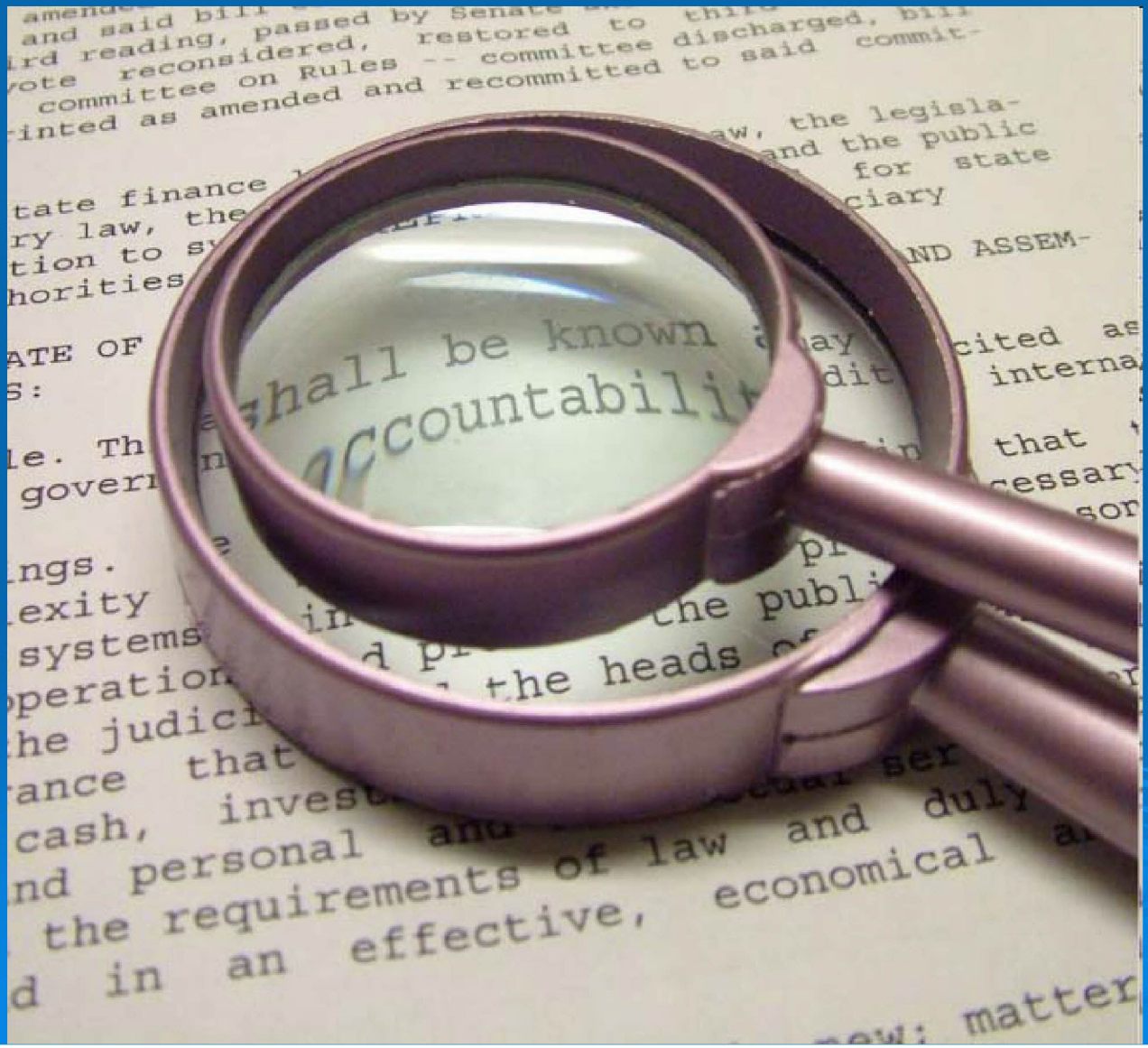
Blend of state actions and federal measures



Accountability for results



Task not easy but essential

What is a TMDL?

And Why Does it Matter?

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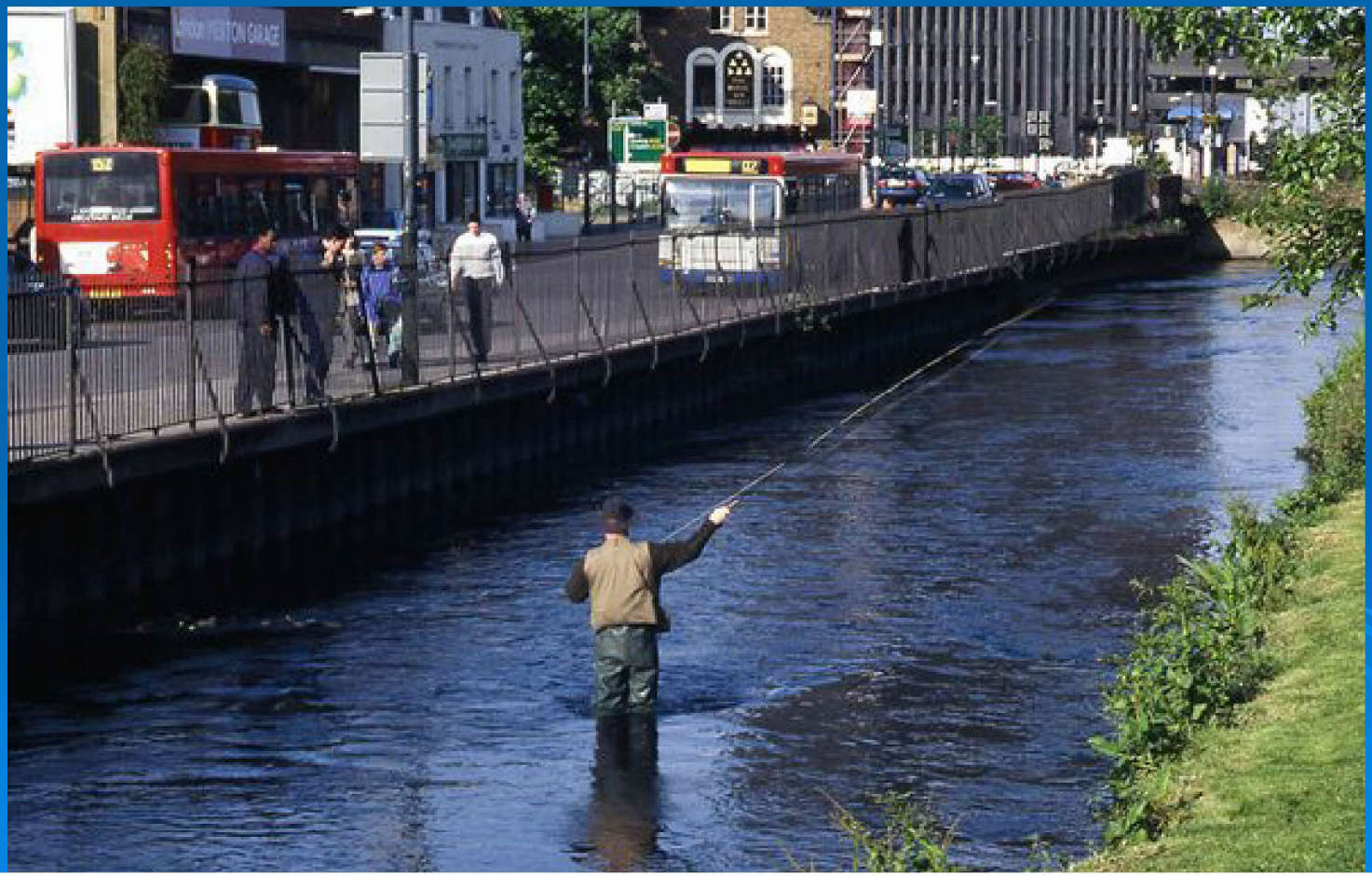
Clean Water Act requires TMDL for waters that don't meet state standards

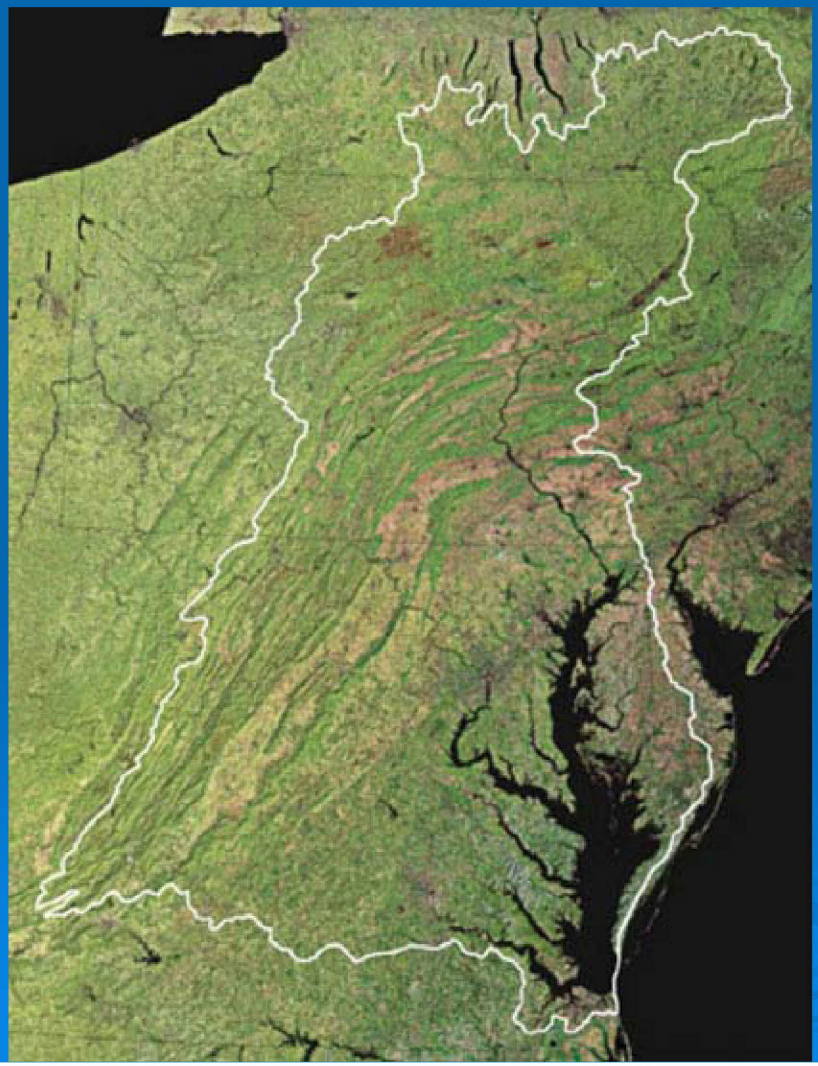
TMDL = Total Maximum Daily Load

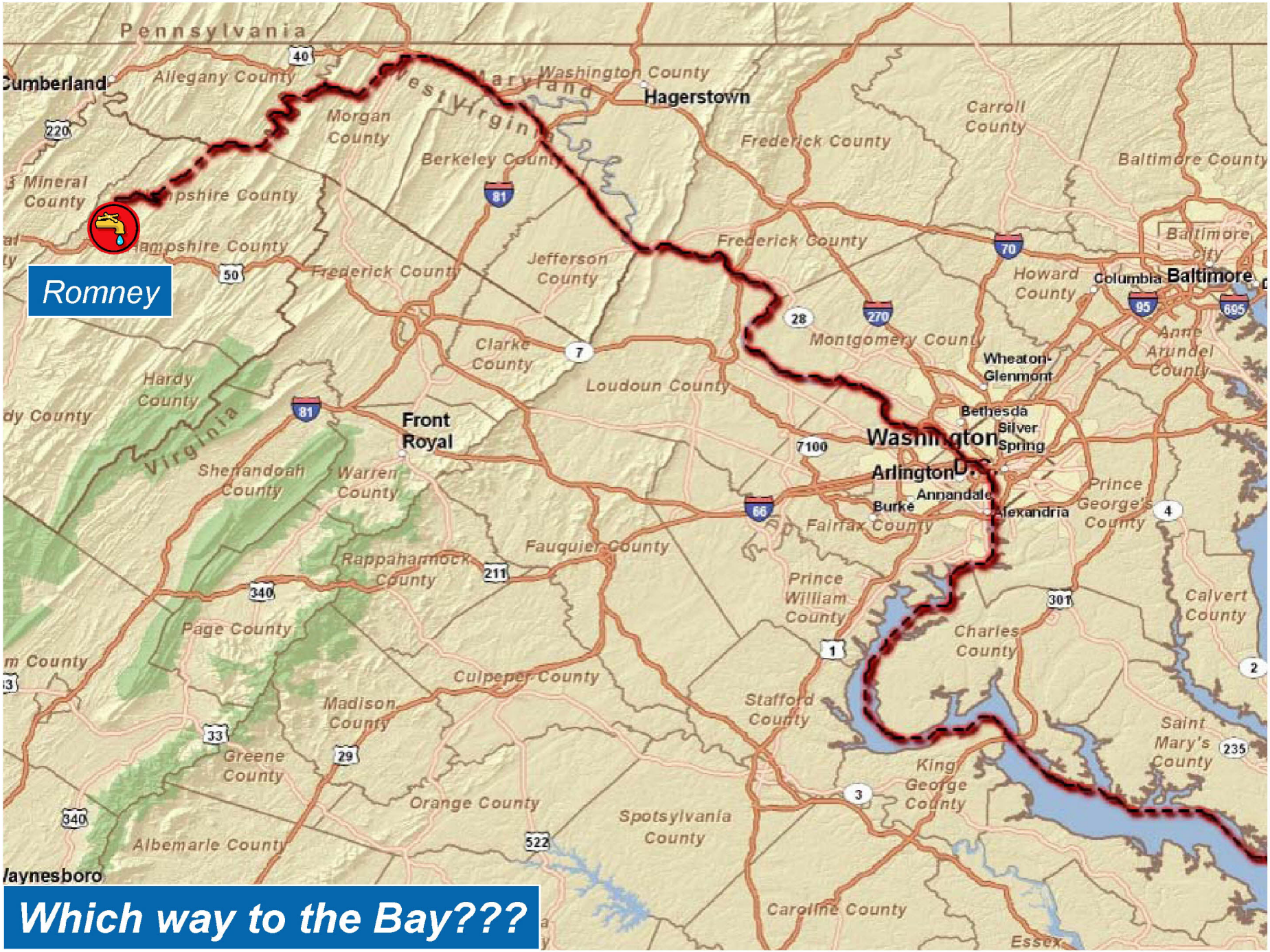
Defines amount of pollution a water body can handle and be healthy



Bay and tributaries are polluted by nitrogen, phosphorus, sediment

Rivers, streams, & creeks contribute to Bay, so included in TMDL

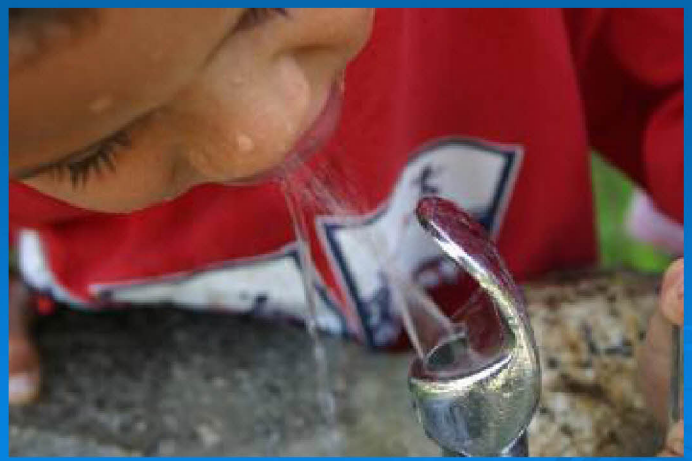



Romney
Which way to the Bay???
Pennsylvania
Cumberland
Allegany County
Maryland
Washington County
Hagerstown
Morgan County
Berkeley County
Frederick County
Carroll County
Baltimore County
Mineral County
Hampshire County
Jefferson County
Howard County
Columbia
Baltimore
Baltimore City
Montgomery County
Anne Arundel County
Wheaton-Glenmont
Clarke County
Loudoun County
Hardy County
Virginia
Front Royal
Bethesda
Silver Spring
Washington
Arlington
Annandale
Burke
Alexandria
Fairfax County
Prince George's County
Shenandoah County
Warren County
Fauquier County
Rappahannock County
Prince William County
Calvert County
Charles County
Page County
Culpeper County
Madison County
Stafford County
Greene County
Saint Mary's County
King George County
Orange County
Spotsylvania County
Albemarle County
Caroline County
Essex
Waynesboro

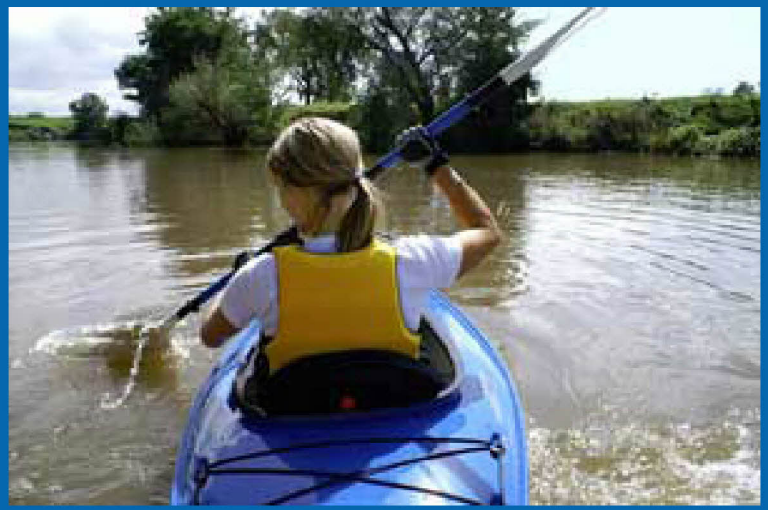
Legal obligation to get it done

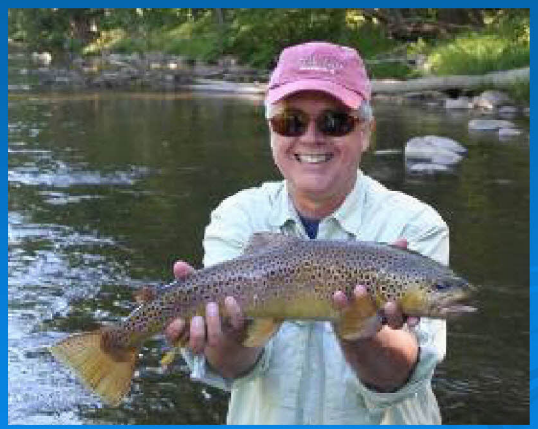
Part of strategy to meet a Presidential Executive Order

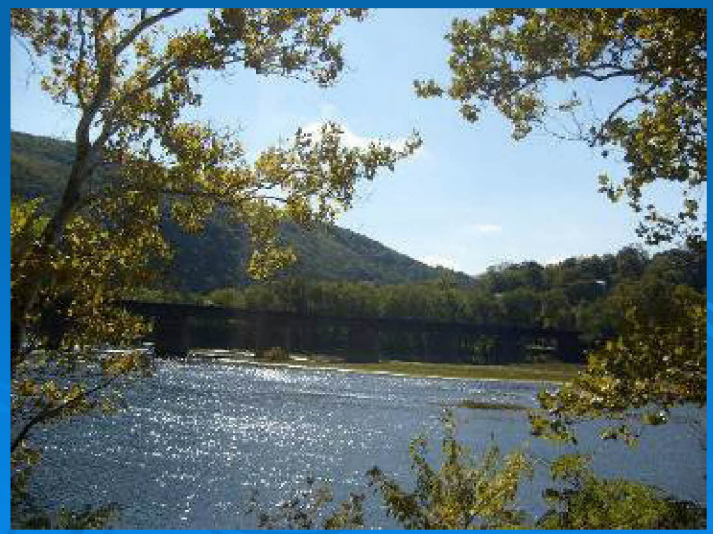
Clean water matters to your community



Clean water matters to your community







Clean water matters to your community

The Economic Impact

- Clean water can increase the value of single-family homes up to 4,000 feet from the water's edge by up to 25 percent.
- Philadelphia estimates that installation of green stormwater infrastructure will raise property values 2 to 5 percent, generating $390 million over the next 40 years.
- For every $1 spent on drinking water protection, an average of $27 is saved in water treatment costs.

Setting the Pollution Diet

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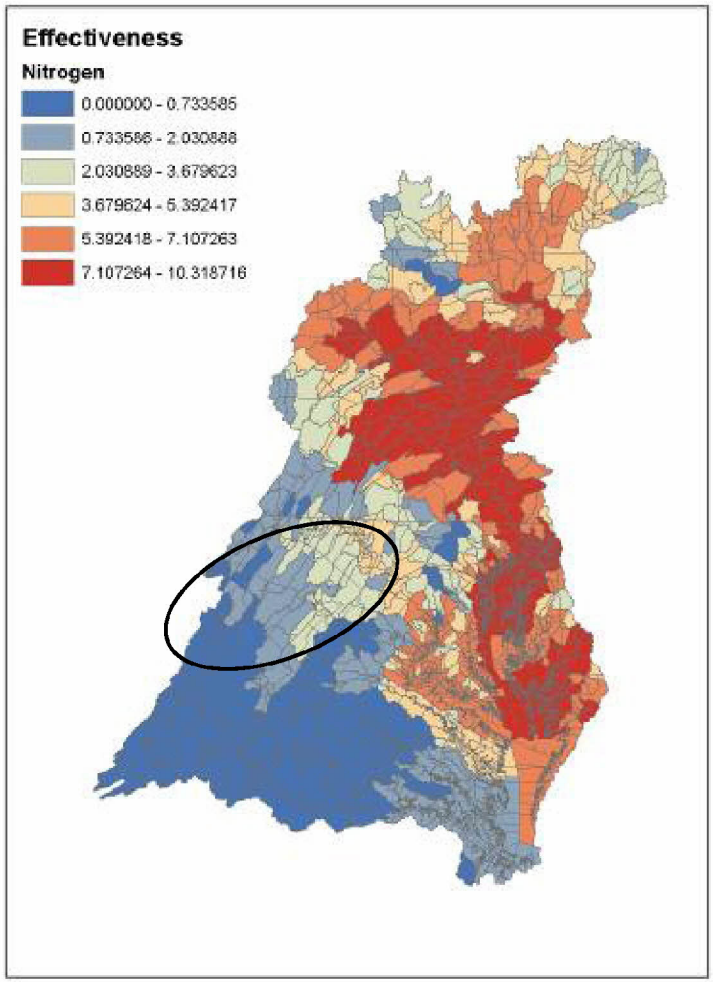
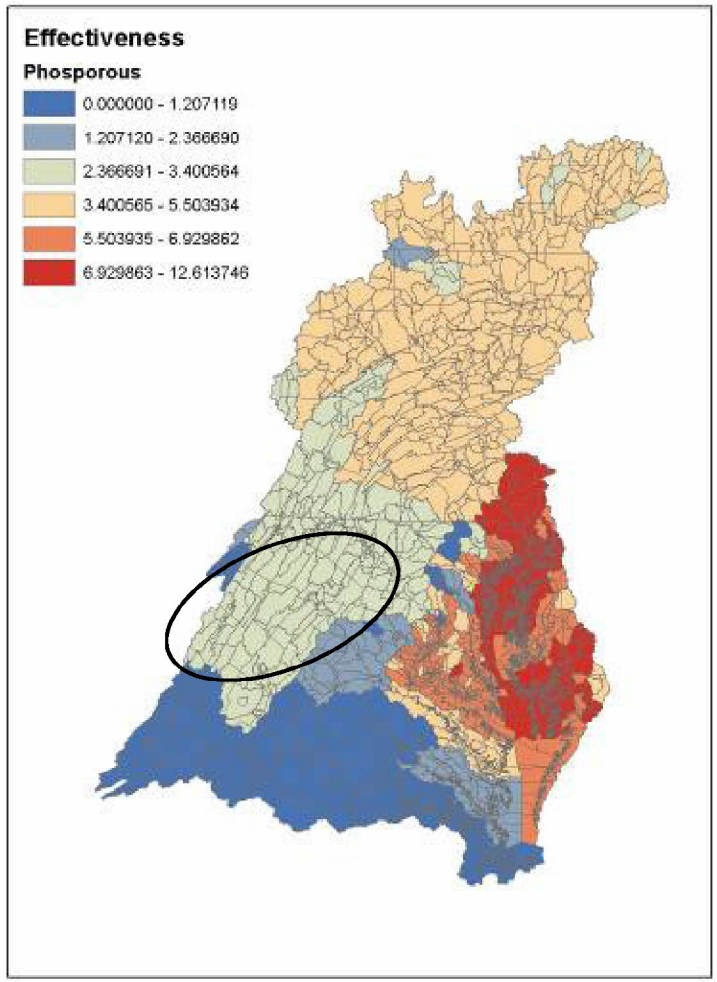
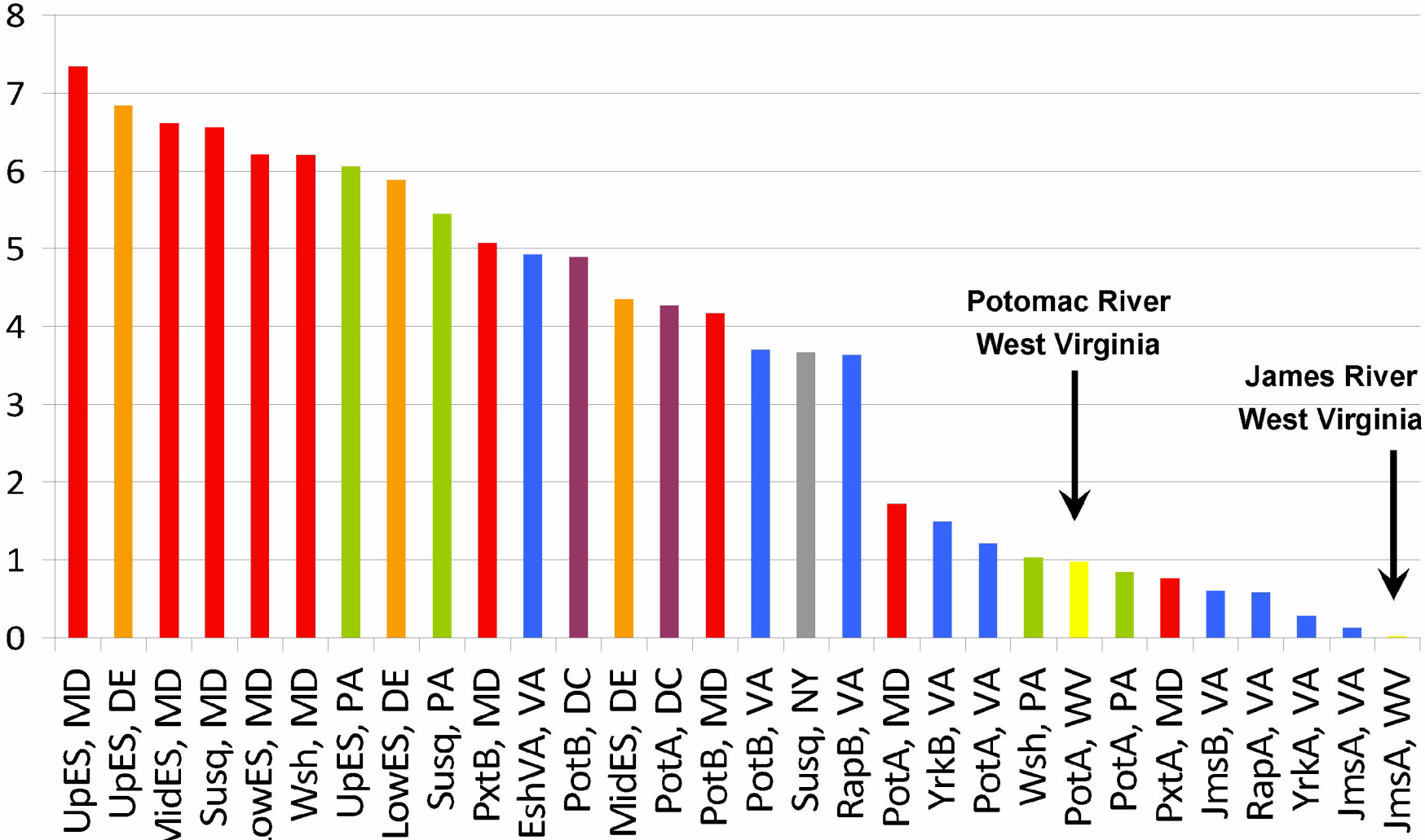
Impact of Pollution

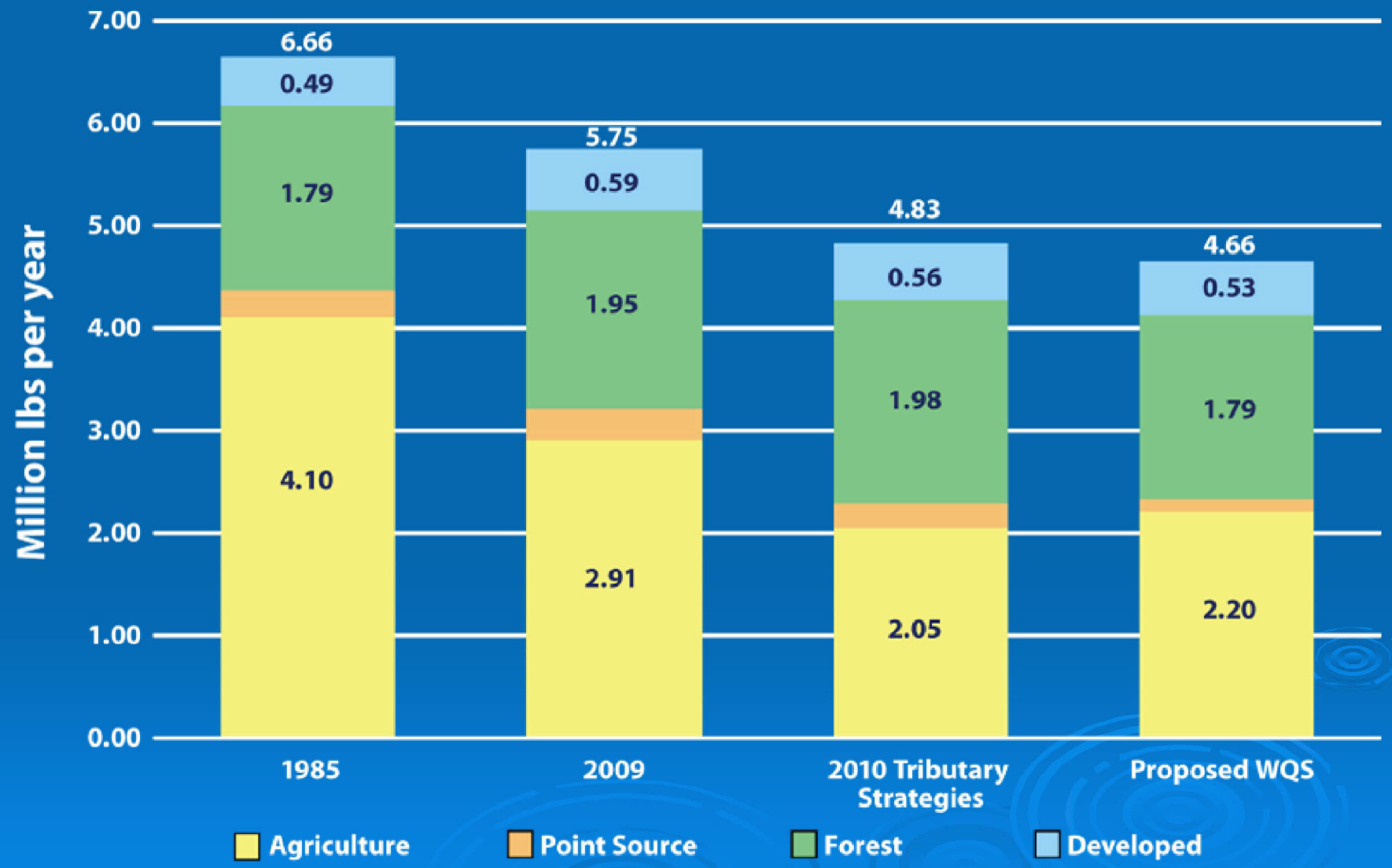




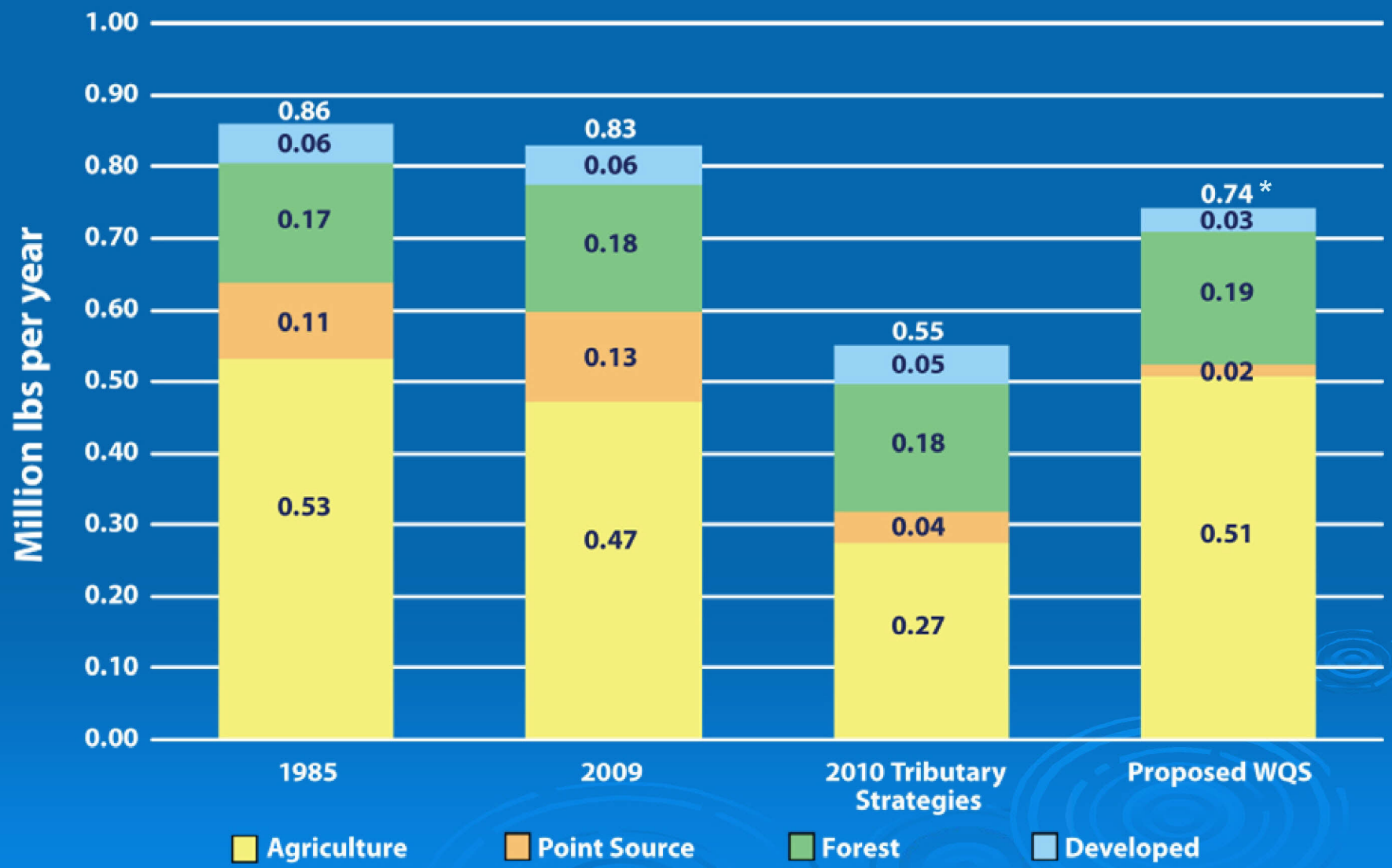
Major River Basin by Jurisdiction Relative Impact on Bay Water Quality



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



WV Phosphorus Loads by Sector and Scenario—CBP Watershed Model P5.3



* Includes an additional 200,000 pounds phosphorus allocation

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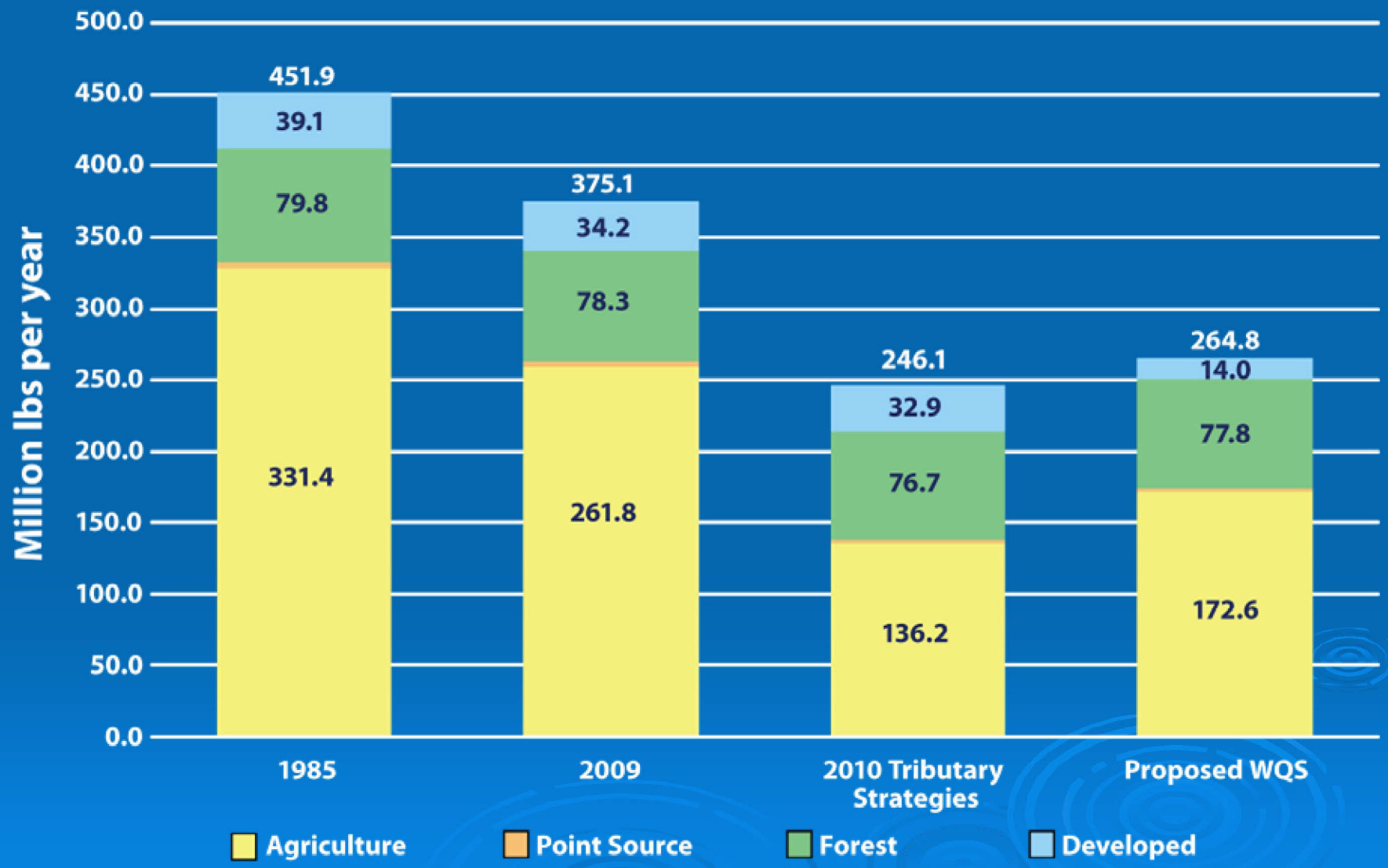
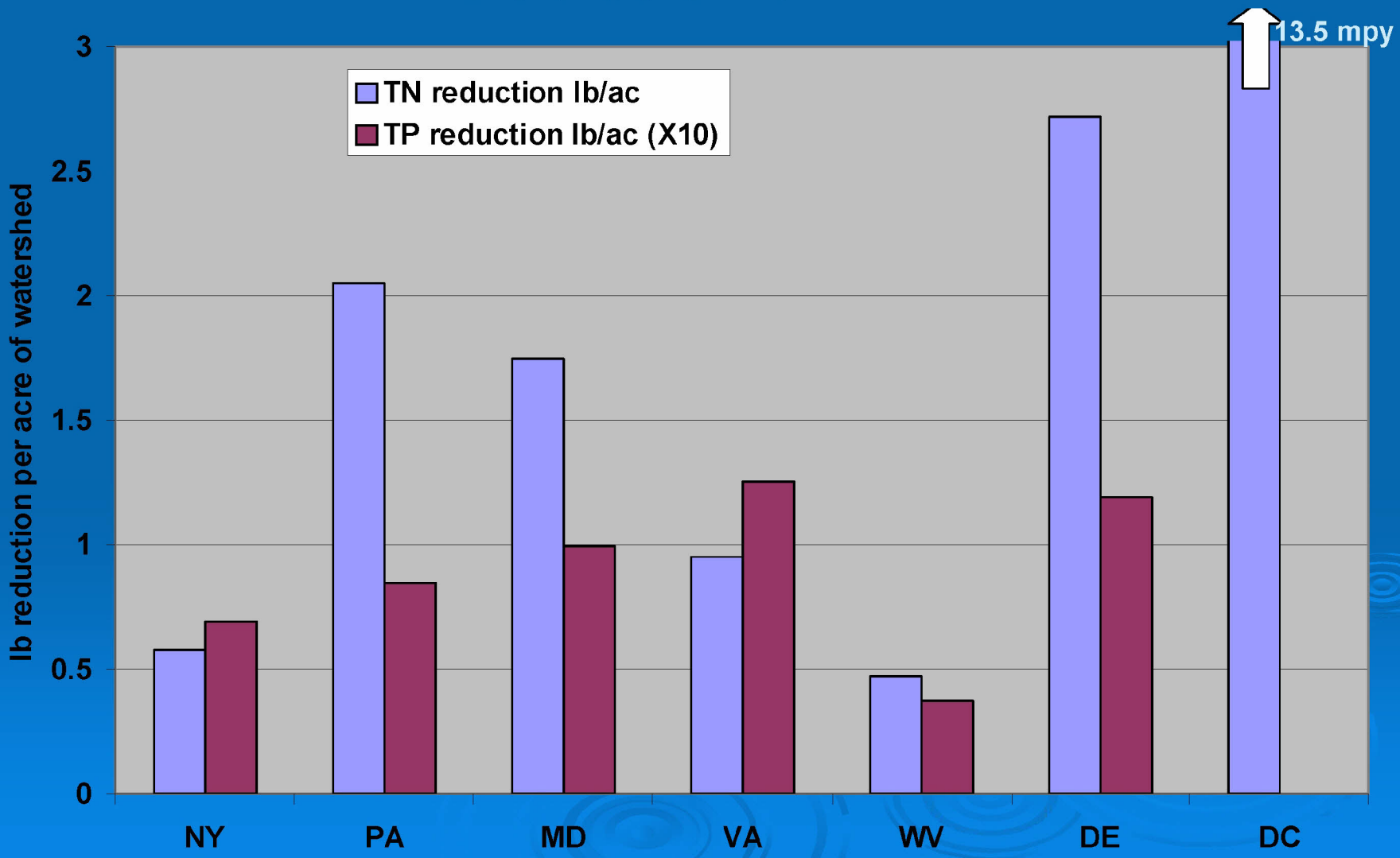
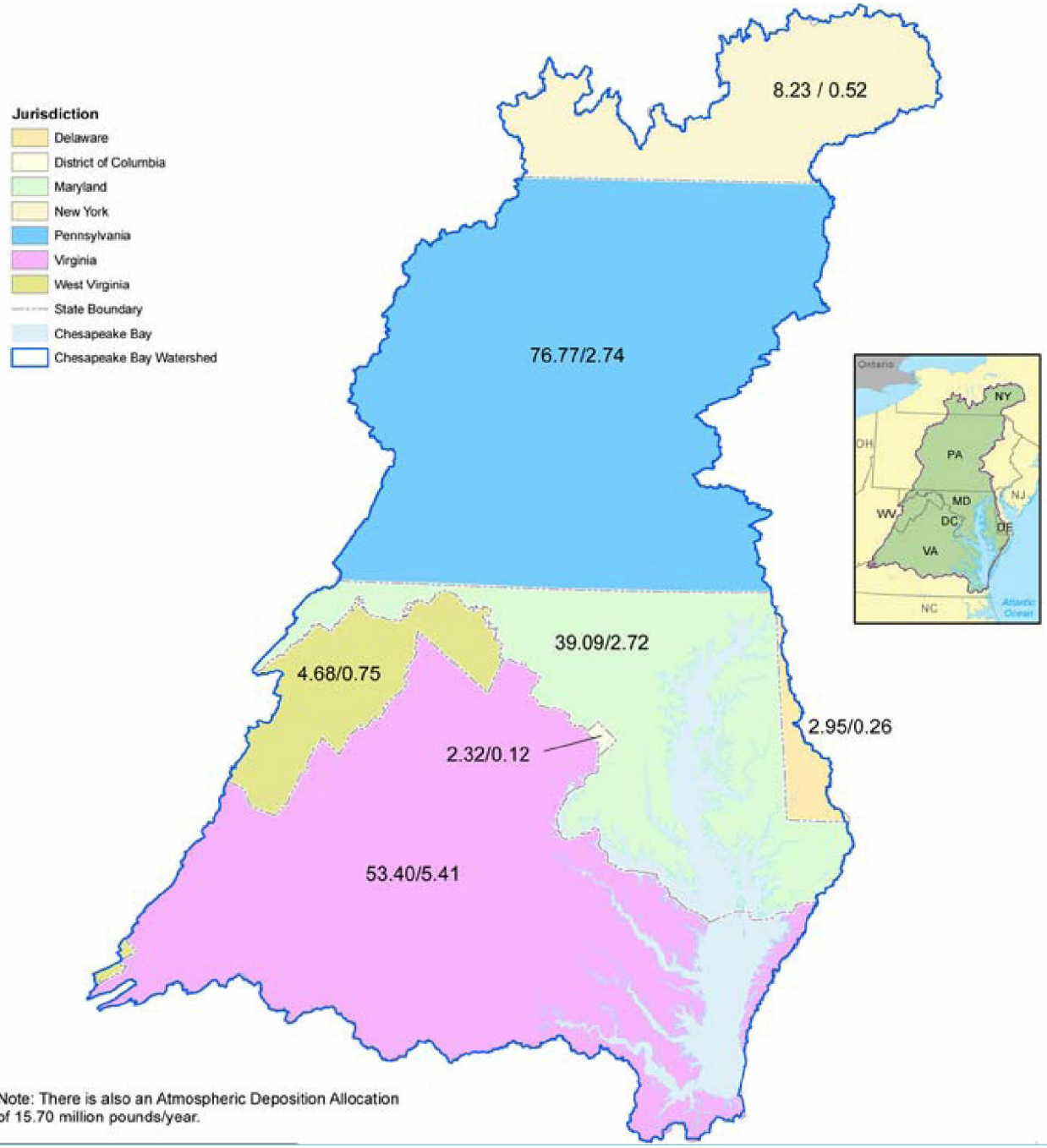
WV Sediment Loads by Sector and Scenario—CBP Watershed Model P5.3



The TMDL Requires Low Load Reductions in WV

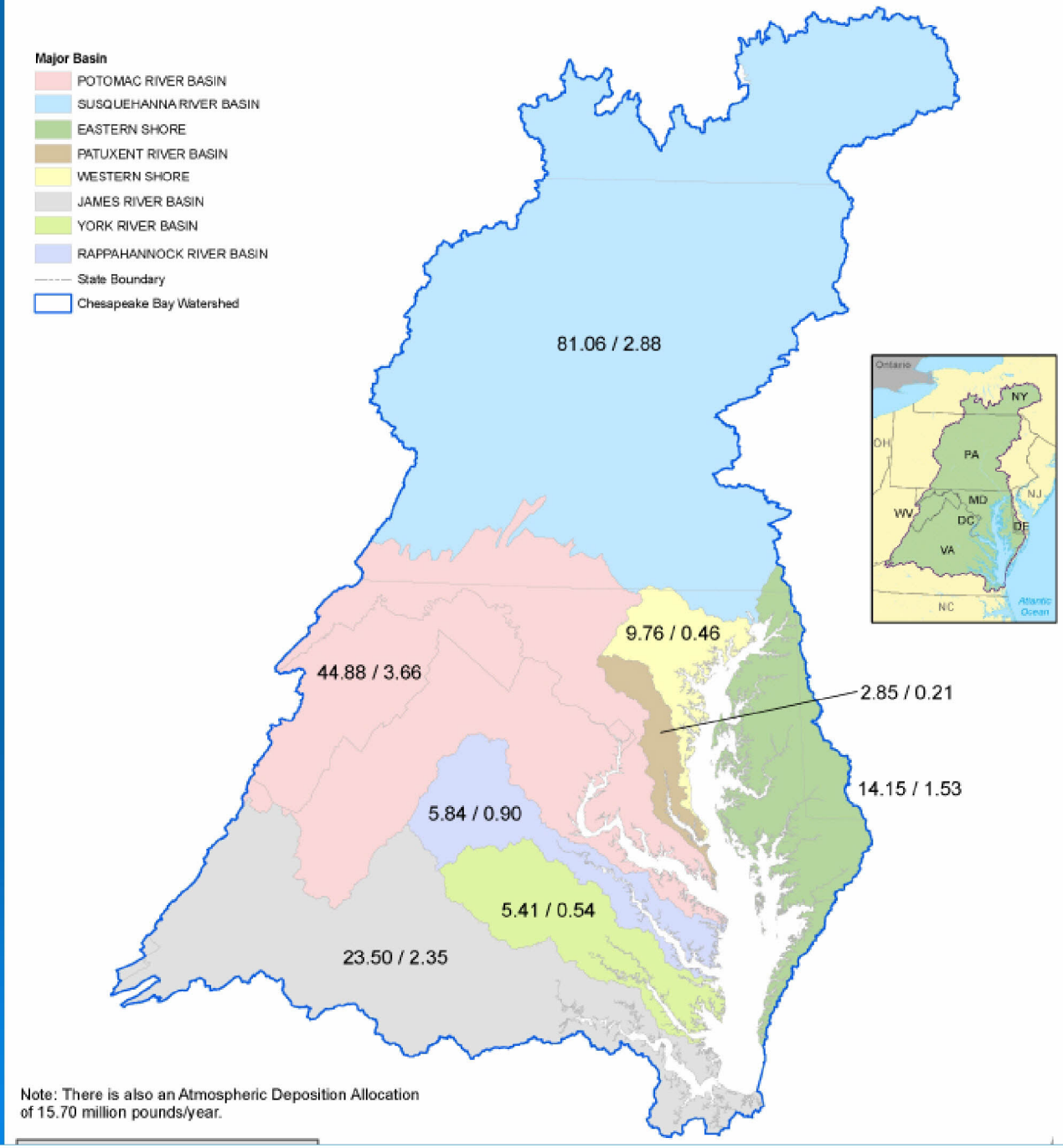


Pollution Diet by State



Note: There is also an Atmospheric Deposition Allocation of 15.70 million pounds/year.

Pollution Diet by River



Note: There is also an Atmospheric Deposition Allocation of 15.70 million pounds/year.

TMDL Goals

2 year milestones

60 percent by 2017

100 percent by 2025

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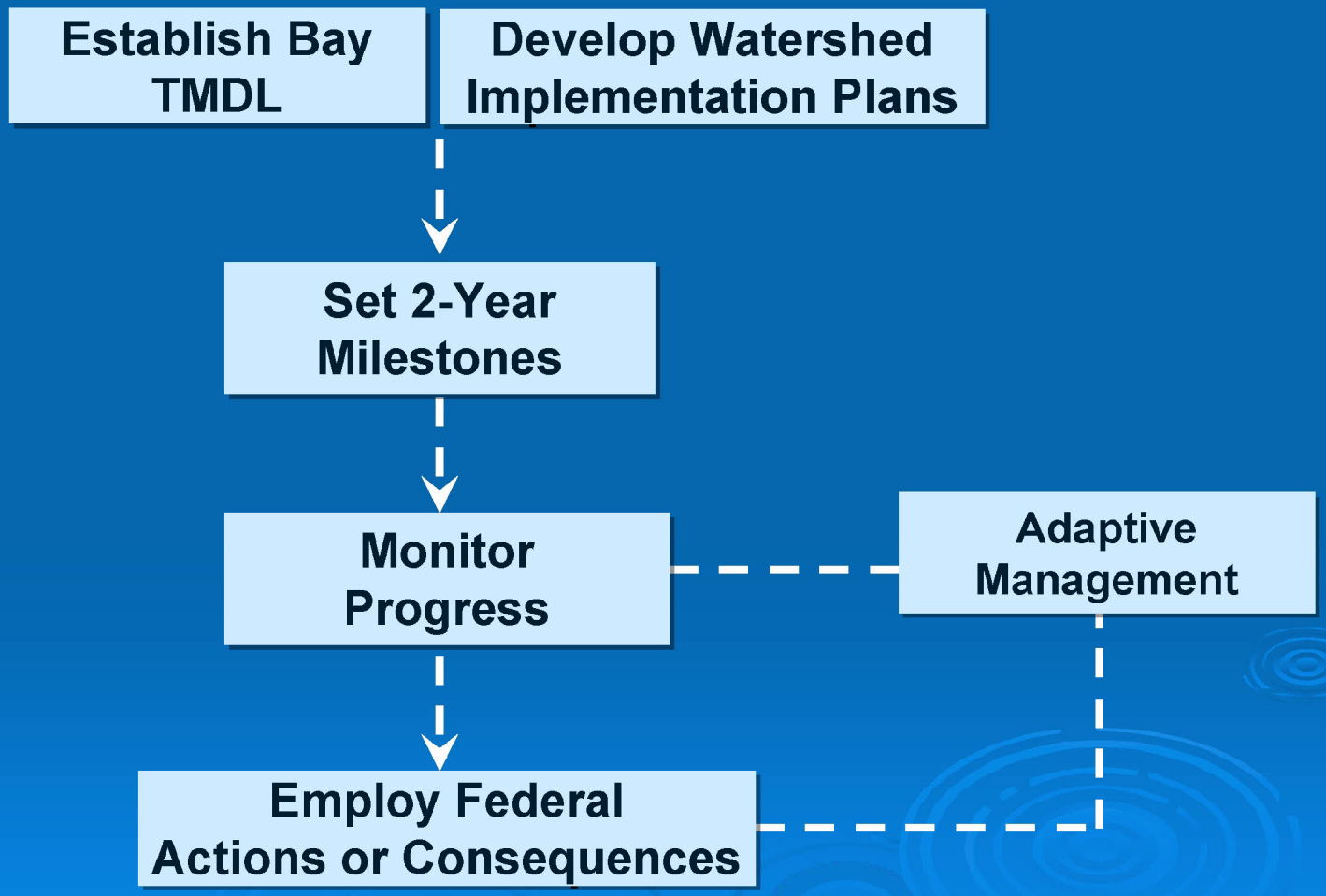
Local in 2011

Accountability for Results



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Meeting the Pollution Diet

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Watershed Implementation Plan

The how, when and where of attaining the TMDL diet

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Overall Draft WIP Evaluation

- 7 jurisdictions provided Draft WIPs in early September
- WIPs must:
  - achieve pollution targets
  - provide reasonable assurance

Do WIPs meet the allocations?

Jurisdiction	Nitrogen	Phosphorus	Sediment
DC	✓	✓	
DE			✓
MD	✓	✓	✓
NY			✓
PA	✓		
VA			✓
WV		✓	

Draft West Virginia WIP Evaluation

- Met phosphorus allocation
- Did not meet nitrogen (18 percent over)
- Did not meet sediment (38 percent over)

Overall Draft WIP Evaluation

None of the WIPs provided adequate assurance

- Inadequate strategy for filling program gaps
- Limited enforceability/accountability
- Few dates for key actions

Federal Backstops

- All jurisdictions require some level of backstop to:
  - Meet the pollution allocations
  - Provide a high level of assurance
- Backstop allocations focus on federal authority
  - Additional reductions from regulated point sources (wastewater treatment plants, CAFO, MS4s)
  - Finer scale allocations for headwater states

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Federal Backstops

- **Backstop allocation adjustments**
  - Minor - adjust load allocations to equal targets
  - Moderate -
    - Stronger CAFO/MS4 requirements
    - Significant WWTPs: N @ 4 mg/l, P @ 0.3 mg/l
  - High Backstop –
    - Stronger CAFO/MS4 requirements
    - Significant WWTPs: N @ 3 mg/l, P @ 0.1 mg/l

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Backstops by Jurisdiction

- Maryland, DC – Minor Backstop
- Virginia – Moderate Backstop
- Delaware, Pennsylvania, New York and West Virginia – High Backstop
- Headwater States (PA, NY, WV)
  - EPA assigning finer scale wasteload and load allocations

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Draft West Virginia WIP Evaluation

For West Virginia: high backstop

- Insufficient detail to assure that the necessary reductions would be achieved by 2017 and 2025 :
  - Proposed gap-filling strategies
  - Associated actions
  - Timeframes
- Need to strengthen accountability through compliance

Draft West Virginia WIP Evaluation

For West Virginia: high backstop

- Wastewater facilities: limit of technology (3 mg/L TN and .1 mg/L TP) at design flow
- MS4s:
  - 50% of MS4 lands meet aggressive controls
  - 25% of unregulated land meet aggressive controls
- CAFO production areas:
  - Waste management, barnyard runoff control, mortality composting. Precision feed management for all animals.
  - AFOs treated same as CAFOs EXCEPT no feed management on dairies; designation as necessary

In Summary

- Hybrid TMDL is blend of jurisdiction WIPs and EPA backstop allocations
- Final WIPs need to address deficiencies
- EPA prefers to use jurisdiction WIPs and not backstop in final TMDL

Opportunities for Improvement

- Jurisdictions can enhance their WIP submissions by the November 29 deadline
  - EPA will engage jurisdictions in discussions
  - EPA will evaluate the final WIPs
  - Final TMDL will be informed by final WIPs

Next Steps

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Next Steps

- Hold 18 public meetings in six states, D.C.
- Public comment period until November 8
- States, D.C. submit final WIPs on November 29
- TMDL will be established by December 31

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Submit Your Comments

- Public comment period until November 8
  - Electronically, visit:
    www.regulations.gov
    Docket ID No. EPA-R03-OW-2010-0736
  - In writing, mail to:
    Water Docket, EPA, Mailcode: 2822T
    1200 Pennsylvania Ave., NW.,
    Washington, D.C., 20460.
  - By hand, drop off from 8:30 a.m. - 4:30 p.m.:
    EPA Docket Center Public Reading Room,
    EPA Headquarters West, Room 3340,
    1301 Constitution Ave., NW, Washington, D.C.

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What's New ... EPA Issues Draft Chesapeake Bay TMDL

View Press Release, Executive Summary EXIT Disclaimer, EPA Evaluation of Draft Watershed Implementation Plans (PDF) and the Federal Register Notice. EXIT Disclaimer

Review and Comment on the Draft TMDL

The PDF links on this page can be viewed with the Adobe PDF reader. About PDF

EPA will establish and oversee achievement of a strict "pollution diet" known as a Total Maximum Daily Load, or TMDL, that will drive actions to clean local waters and the Chesapeake Bay. Read more...

National Information

- Executive Order Website
- Federal Register Notice

What's Happening

The six watershed states and the District of Columbia have submitted draft Phase 1 Watershed Implementation Plans (WIPs).

View Delaware, District of Columbia, Maryland, New York, Pennsylvania, Virginia and West Virginia EXIT Disclaimer