Building the Capacity for Success in the Phase III WIPs

Lucinda Power

Acting Associate Director, EPA Chesapeake Bay Program
Secretary of Natural Resources' Chesapeake Bay Stakeholders Advisory Group
August 22, 2018





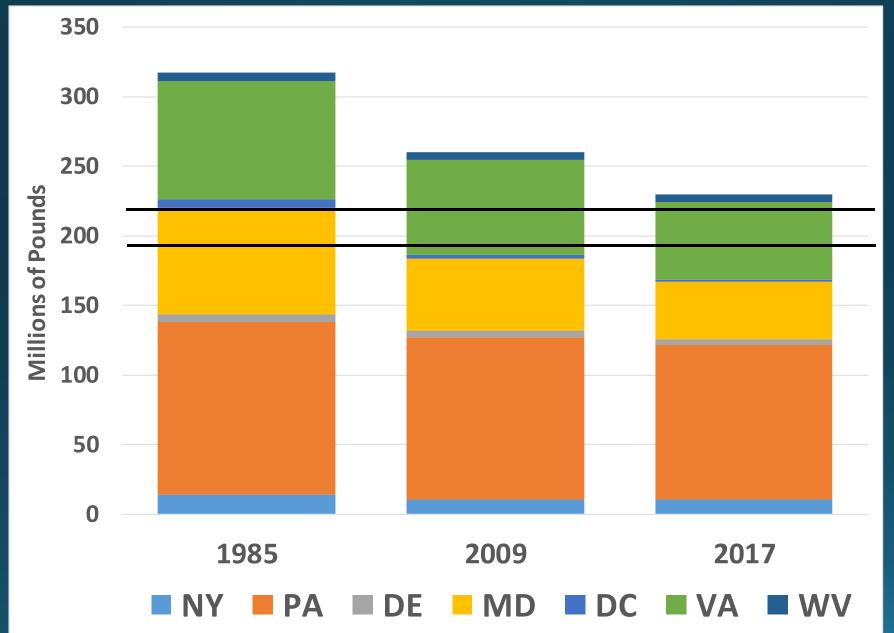
WE ARE SEEING REAL BAY AND WATERSHED RESPONSES

EPA's 2017 Midpoint Assessment of Progress

Percent of Goal Achieved by Jurisdiction & Watershed-wide

		Nitrogen	
	Reduction Achieved	Reduction Required	Percent Progress
	2009-2017	by Bay TMDL	Towards 2025 Target
Jurisdiction	(M lbs/year)	(M lbs/year)	(%)
PA	5.62	37.64	15%
MD	5.05	10.78	47%
VA	12.22	15.54	79%
wv	0.37	0.44	84%
DE	0.34	1.08	32%
DC	1.30	0.50	100%
NY	-0.17	1.87	0%
AllJurisdictions	24.73	67.86	36%
	Phosphorus		
	Reduction Achieved	Reduction Required	Percent Progress
	2009-2017	by Bay TMDL	Towards 2025 Target
Jurisdiction	(M lbs/year)	(M lbs/year)	(%)
PA	0.784	1.413	55%
MD	0.583	0.491	100%
VA	2.239	2.270	99%
wv	0.247	0.265	93%
DE	0.074	0.068	100%
DC	-0.002	-0.049	100%
NY	0.208	0.313	66%
AllJurisdictions	4.131	4.772	87%
	Sediment		
	Reduction Achieved	Reduction Required	Percent Progress
	2009-2017	by Bay TMDL	Towards 2025 Target
Jurisdiction	(M lbs/year)	(M lbs/year)	(%)
PA	267	699	38%
MD	210	45	100%
VA	268	492	54%
wv	115	73	100%
DE	18	-1	100%
DC	1	0	100%
NY	10	27	36%
AllJurisdictions	888	1,335	67%

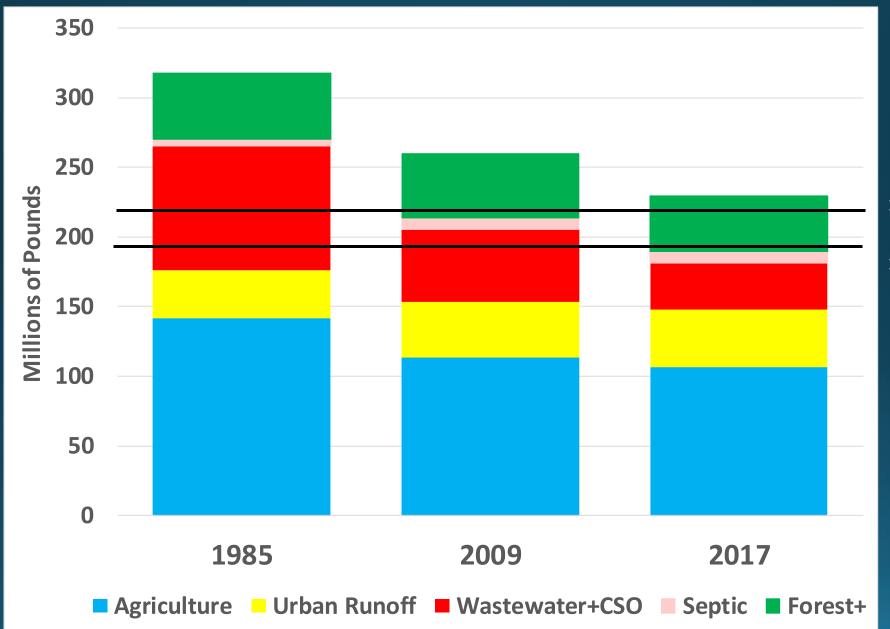
CB Watershed Nitrogen Loads-Goals by Jurisdiction



2017 Interim Target

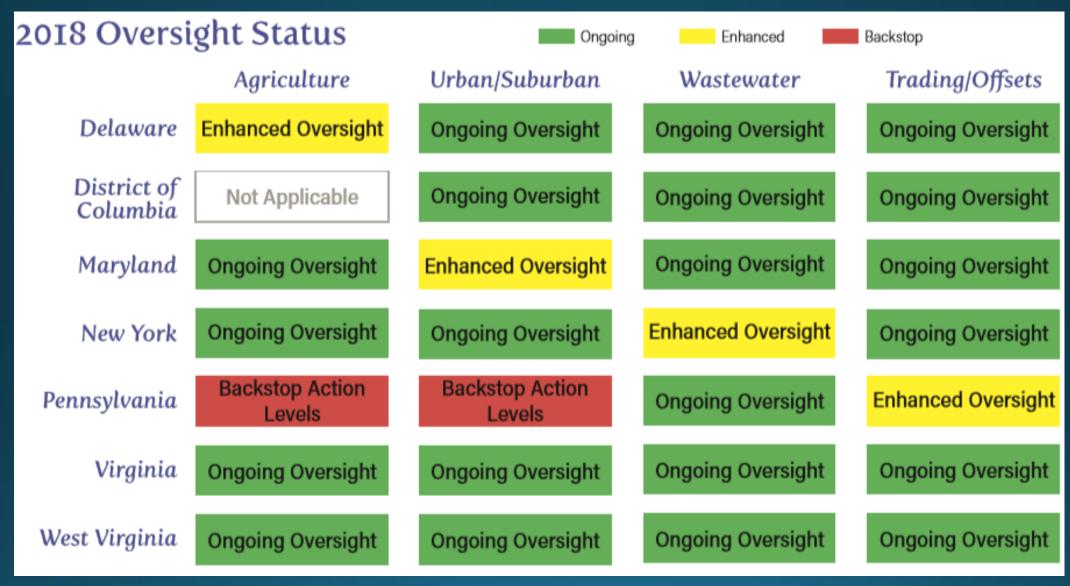
2025 Planning Target

CB Watershed Nitrogen Loads-Goals by Source



2017 Interim Target

2025 Planning Target



Definitions Ongoing Oversight: EPA will continue to monitor progress.

Enhanced Oversight: Having identified specific concerns with a jurisdiction's implementation of strategies to meet TMDL goals, EPA may take additional federal actions to ensure that jurisdiction stays on-track.

Backstop Actions Level: Having identified substantial concerns with a jurisdiction's actions to meet the TMDL goals, EPA has taken federal actions to help the jurisdiction get back on-track.

Phase III WIP Expectations for the Bay Watershed Jurisdictions

Overview

➤ EPA released its final expectations for the Phase III WIPs on June 20, 2018 to account for the next seven years of implementation of the 2010 Bay TMDL, as well as to factor in new science and information resulting from the Bay TMDL's midpoint assessment.

CBP Partnership Role

- These Phase III WIP expectations went through thorough Partnership review prior to its interim release in January 2017 and final release in June 2018.
- Although this document is being released by EPA, many of these expectations are Partnership driven and reflect Partnership priorities and PSC decisions.
- Through these expectations, the Partnership reaffirmed its commitment to have practices and controls in place by 2025 to meet applicable water quality standards in the Chesapeake Bay.

Phase III WIP Expectations – Top 4

- Programmatic and numeric implementation commitments for 2018-2025
- Strategies for engagement of local, regional and federal partners in implementation
- Account for changed conditions: climate change and growth
- Develop, implement local planning goals below the state-major basin scales
- Consideration of co-benefits

Programmatic & Numeric Expectations

- Build and/or increase the financial capacity, technical assistance, regulatory oversight, financial cost-share, and other incentives to implement agricultural and stormwater programs and practices to achieve Phase III planning targets
- Identify specific funding, financing, cost-share, technical assistance, legislative, regulatory and other actions needed to address gaps in programmatic capacity
- Greater targeting of more effective BMPs in higher loading watersheds based on modeled and monitoring data

Programmatic & Numeric Expectations

- Building and implementing programmatic infrastructure, BMP verification programs, policies, legislation, and regulations to fully account for and offset growth through 2025
- Full listing of all NPDES permits
- Submission of a BMP input deck to include the level and location of BMPs needed to meet the Phase III planning targets by 2025
- EPA expects more detailed documentation of planned changes to existing programmatic capacity or development of new programmatic capacity for those source sectors under enhanced or backstop levels of oversight.

What's New for Phase III?

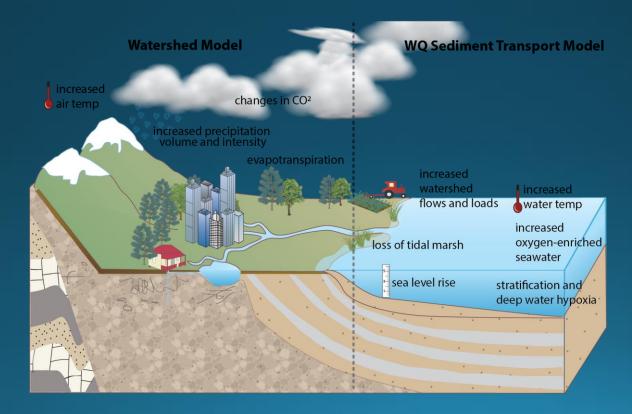
Final Phase III Planning Targets

	Planning Target (millions of pounds per year)	
Jurisdiction	Nitrogen	Phosphorus
District of Columbia	2.42	0.130
Delaware	4.55	0.108
Maryland	45.78	3.680
New York	11.53	0.587
Pennsylvania	73.18	3.044
Virginia	55.73	6.192
West Virginia	8.22	0.432

1 6

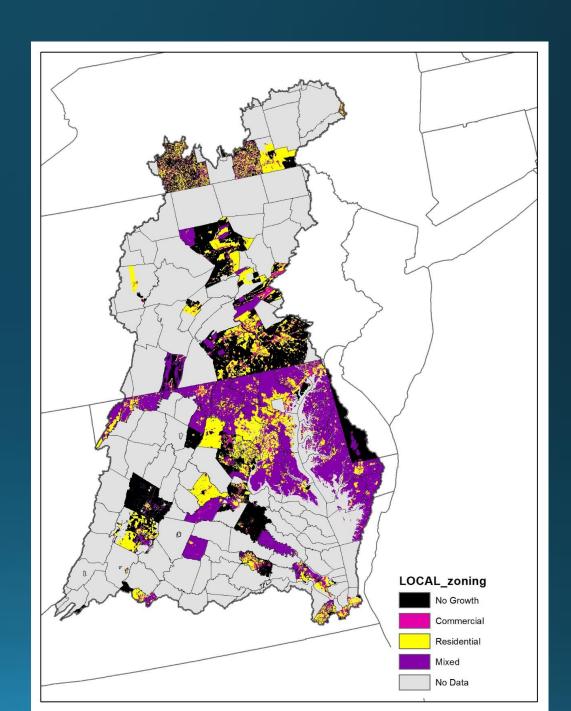
Addressing Climate Change

Include a narrative strategy in the Phase III WIPs that describes the jurisdictions current action plans and strategies to address climate change, as well as the jurisdiction-specific nutrient and sediment pollution loadings due to 2025 climate change conditions, while incorporating local priorities and actions to address climate change impacts.



Accounting for Growth

Use 2025 growth projections to account for growth in the Phase III WIPs and two-year milestones. Updates to projections will occur every two years



Partnership Approved Local Planning Goal Recommendations

WQGIT Approved - December 19, 2016

Final Recommendations of the Local Planning Goals Task Force

Introduction:

This document serves as a framework of the key questions and options that the Local Planning Goals Task Force (Task Force) recommends¹ that jurisdictions consider when developing their Phase III Watershed Implementation Plans (WIPs). The charge given to the Task Force by the Water Quality Goal Implementation Team (WQGIT) poses three primary questions: 1) should the Phase III WIPs include local planning goals; and 2) if there are local planning goals, what are the options for the scale of the goals; and 3) how these goals could be expressed in different jurisdictions. In order to provide jurisdictions with the flexibility to develop plans that fit their needs, this paper presents options for how a jurisdiction could define "local", and what is meant by a goal. Below is the full charge to the Task Force as well as the Task Force's recommendations.

Task Force Charge² - as Assigned by the WQGIT

"To make recommendations to the Water Quality Goal Implementation Team (WQGIT) regarding whether the Phase III WIPs should include local area planning targets³ (LAPTs) and, if so, options for how these targets could be expressed in different jurisdictions. The Local Area Planning Targets Task Force (Task Force) will address findings from the Chesapeake Bay Total Maximum Daily Load (Bay TMDL) Stakeholder Assessment, including the goal of raising awareness of local partners' contribution toward achieving the Bay TMDL; the technical capacity of the Chesapeake Bay Program's Phase 6 modeling suite; how local implementation addresses local conditions, needs and opportunities, such as local water quality; and the availability of tools to assist in the development and optimization of local implementation strategies. The Task Force will review the efforts of some jurisdictions to develop LAPTs as part of the Phase II WIPs and recent work to establish federal facility targets. Task Force recommendations will be presented as part of the development of the Phase III WIP expectations by EPA."



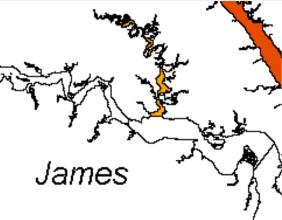
Suggested Questions to Consider

- How can local planning goals best reflect local priorities and needs?
 - E.g., Infrastructure maintenance and financing; public health; and economic development
- How can local planning goals advance implementation goals?
 - E.g., Emphasis on targeting BMPs in "priority" watersheds ("priority" can be based on funding, most effective at reducing loads, or higher loading areas)
- How can local planning goals capture co-benefits beyond just water quality improvements?
 - E.g., riparian forest buffers, stream/pasture fencing, wetland creation or enhancements

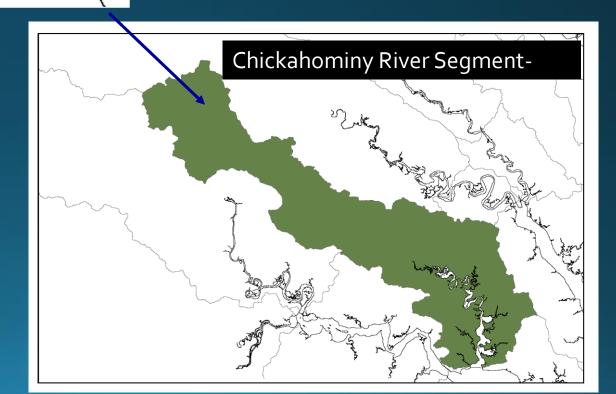
Segment-Shed Goals for Tidal Jurisdictions

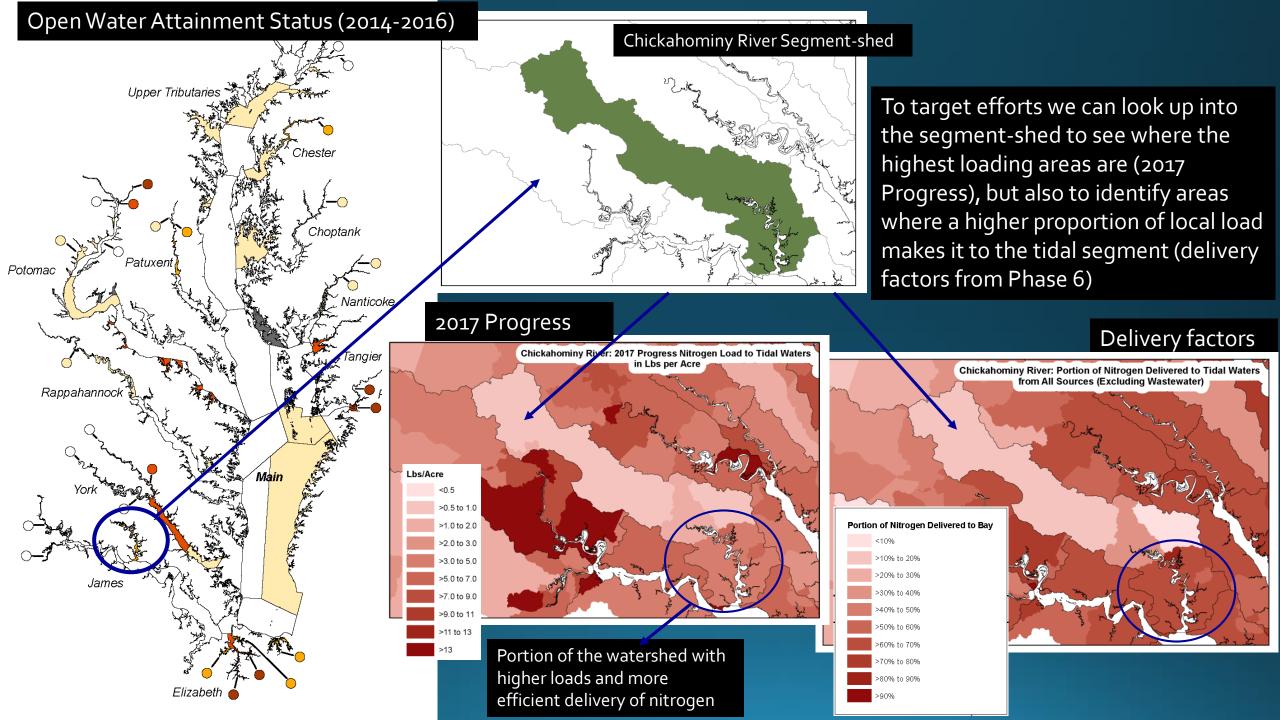
Open Water Attainment Status (2014-2016) Upper Tributaries Potomac Attainment Deficit (2014-2016) No data Attaining (no deficit) -0.1 to -5% -5.1% to -15% -15.1% to -25% -25.1% to -85% Designated use N/A

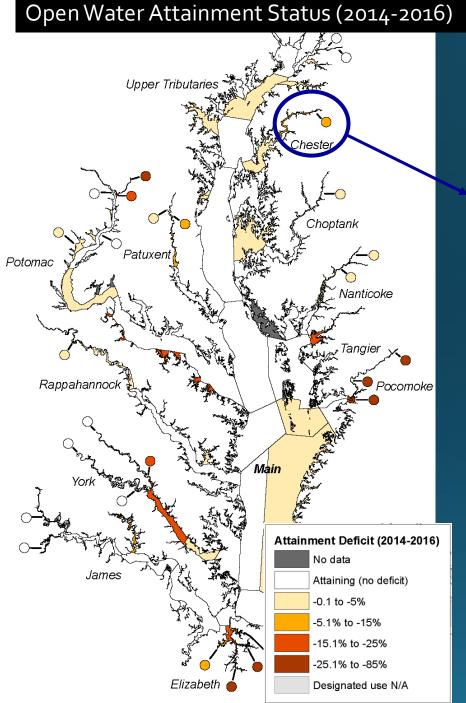
Chickahominy River



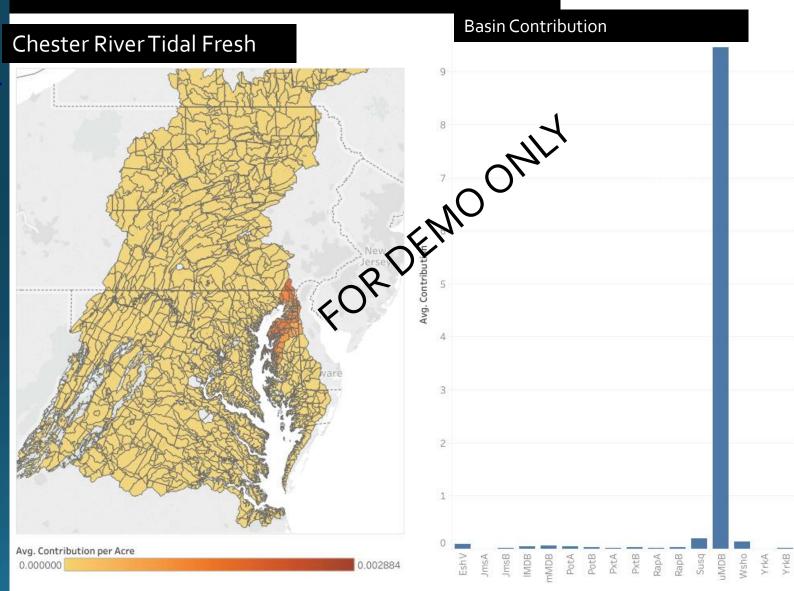
To prioritize segments we can identify tidal segments currently out of attainment, quantify how far away they are from attainment, and determine if they are getting better or worse over time

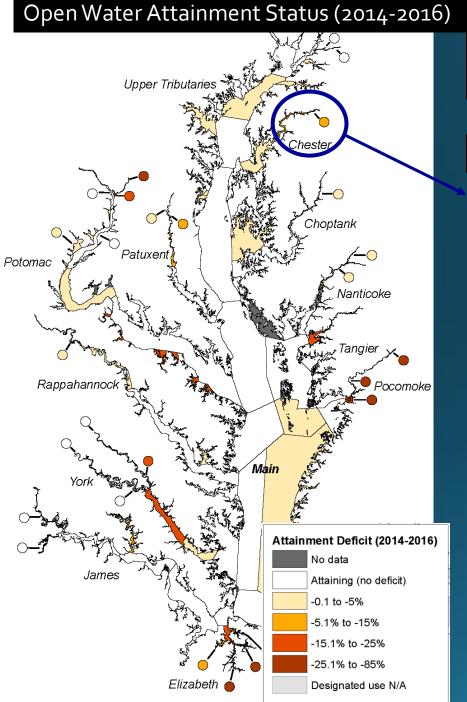




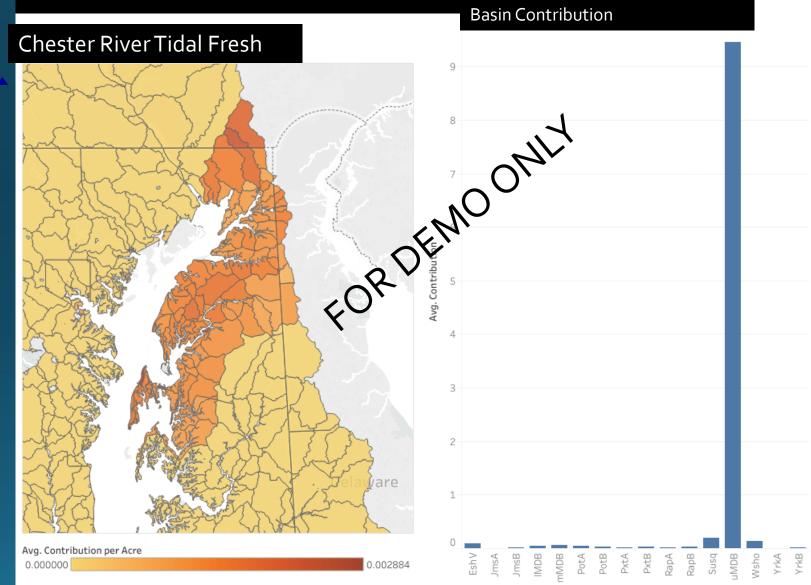


In a few months, we will be able to generate maps showing the most influential areas of the watershed for any segment and know the relative infulence of different basins on water quality in the segment





In a few months, we will be able to generate maps showing the most influential areas of the watershed for any segment and know the relative infulence of different basins on water quality in the segment



PA-specific Expectations

- Given the impact of PA on the Bay and the additional reductions needed by 2025 (35M lbs of nitrogen), EPA released PA-specific Phase III WIP expectations.
- PA's Phase III WIP should demonstrate:
 - Commitment to programmatic, policy, legislative, and regulatory changes
 - Commitment to the necessary level of staff, partnerships, and financial resources
 - Modification of current expected reductions for the urban sector
 - Demonstrated collaboration with local partners and other key stakeholders

Addressing Conowingo Dam Infill

- Agreed to a separate Conowingo target, with a separate WIP
- Agreed to the concept of pooling resources applied by a third party (with Partnership oversight) in areas determined to have most impact on the Bay as part of the WIP

February 16 DRAFT

FOR DISCUSSION PURPOSES, SUBJECT TO MODIFICATION

Framework for the Conowingo Watershed Implementation Plan

Objective: To obtain final PSC approval on this draft Framework for developing the Conowingo Watershed Implementation Plan.

Background: When the TMDL was established in 2010, it was estimated that Conowingo Dam would be trapping sediment and associated nutrients through 2025. New research has determined this is not the case, and that the reservoir behind Conowingo Dam has now reached dynamic equilibrium. As a result, more sediment, nitrogen, and phosphorus are now entering the Chesapeake Bay than were estimated when the TMDL was established. Even with full implementation of the seven Bay jurisdictions' WIPs, this additional pollutant loading from Conowingo reservoir reaching dynamic equilibrium will cause or contribute to water quality standards exceedances in the upper Bay. This additional pollutant load must be addressed if the Bay's water quality standards, as they are currently written and implemented, are to be met. The Chesapeake Bay Program (CBP) partnership estimates that, after fully implementing the Bay TMDL and Phase I/II WIPs, an additional reduction of 6 million pounds of nitrogen and 0.26 million pounds of phosphorus is needed in order to mitigate the water quality impacts of Conowingo Reservoir infill. Although further analysis may alter the total nitrogen and phosphorus loads needing to be reduced, these current estimates are also based on reductions occurring in the most effective subbasins of the watershed - that is, the geographic areas with the greatest influence on Chesapeake Bay water quality. If implementation were directed watershed-wide, including less effective areas, the total pollution reduction needed would increase.

Phase III WIP Expectations for Federal Lands and Federal Facilities

Phase IIII WIP Expectations for Federal Lands & Facilities

 EPA provided expectations regarding federal agency participation in the Phase III WIPs that will be developed by the Bay jurisdictions.

 Provides additional detail on expectations to ensure that the Bay jurisdictions have the information needed from federal agencies to prepare their WIPs and to demonstrate that needed pollutant reductions will occur.

Phase IIII WIP Expectations for Federal Lands & Facilities

- Achieve federal facility targets established in 2015, or however modified to align with Phase III WIP local area planning goals, by 2025.
- Establish new targets for new or upgraded facilities as part of the jurisdictions' local planning goals development.
- Report annual BMP progress to the jurisdictions and EPA using tools provided by the jurisdictions that are compatible with requirements for NEIEN.
- Develop two-year programmatic and two-year BMP implementation milestones.

Phase IIII WIP Expectations for Federal Lands & Facilities

- Provide to the jurisdictions:
 - Location and description of the federal land or facility;
 - Description and estimation of current releases of nitrogen, phosphorus, and sediment from those federal lands or facilities and an estimate of anticipated growth through 2025;
 - Planned pollutant reductions from point and nonpoint sources associated with federal lands and facilities to meet the their share of a local area planning goal;
 - Planned actions, programs, policies, and resources necessary through 2025 to reduce pollutant loads associated with federal lands and facilities with specific target dates; and
 - Procedure for tracking, verifying and annually reporting BMPs to jurisdictions and EPA.

EPA's Role & Support to Federal Agencies

- Help coordinate with federal agencies to provide input to the jurisdictions' Phase III WIPs.
- Continue to coordinate the effort for developing federal water quality milestones.
- Assist with the resolution of any disagreement between a federal agency and jurisdiction at the request of the jurisdiction or the federal agency as required by EO 12088.
- Provide technical advice and assistance to federal agencies.

Phase III WIP Schedule

- June 20, 2018: EPA finalized and released Phase III WIP expectations
- July 9, 2018: PSC approves the final Phase III planning targets
- Fall 2018: Jurisdictions present their approaches for developing local planning goals to the PSC
- April 12, 2018: Draft Phase III WIPs posted on jurisdictions' websites for partner and public stakeholder review
- June 7, 2019: Partners and public stakeholders' feedback on draft Phase III WIPs due to jurisdictions
- August 9, 2019: Final Phase III WIPs posted on jurisdictions' websites

Closing

- As a partnership, we need to recognize the good work and progress we've made in meeting our water quality commitments, while knowing that additional effort is needed to get us to the 2025 goals.
- ➤ We have a shared understanding of how much farther we need to go, what's needed both through regulatory and voluntary means to get us there, and what resources are key to making a demonstrable difference at the state and local levels.
- ➤ EPA looks forward to our continued collaboration with each of the seven Bay watershed jurisdictions as they develop and implement their Phase III WIPs, and
- > EPA will continue to support these efforts through technical assistance, funding, facilitation services, and other resources.

Links to Additional Resources

- WQGIT web page: http://www.chesapeakebay.net/groups/group/water_quality_goal_implementation_team
- Chesapeake Assessment Scenario Tool: http://cast.chesapeakebay.net/
- Chesapeake Progress / Water Quality: <u>http://www.chesapeakeprogress.com/clean-water#water-quality</u>

Lucinda Power Acting Associate Director U.S. EPA Chesapeake Bay Program Office 410-267-5722 power.lucinda@epa.gov

www.chesapeakebay.net

www.epa.gov/chesapeakebaytmdl

