Chesapeake Bay Program
Science. Restoration. Partnership.

2017 & 2025 WIP Outcomes

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Through the Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to…*

Goal: Water Quality

2017 WIP Outcome

By 2017, have practices and controls in place that are expected to achieve 60 percent of the nutrient and sediment pollution load reductions necessary to achieve applicable water quality standards compared to 2009 levels

Through the Chesapeake Bay Watershed Agreement*, the Chesapeake Bay Program has committed to…*

Goal: Water Quality

2025 WIP Outcome

By 2025, have all practices and controls installed to achieve the Bay's dissolved oxygen, water clarity/submerged aquatic vegetation and chlorophyll-a standards as articulated in the Bay TMDL document

What We Want

To have Management Board support on:

1. Retiring the 2017 WIP outcome and focus of our efforts on 2025
2. Seeking additional financial resources for implementation from each jurisdiction, every federal partner and innovative sources
3. Focusing next two year workplan on Phase III WIP development and Partnership-driven commitments stemming from the mid-point assessment

1

Setting the Stage:

What are our assumptions?

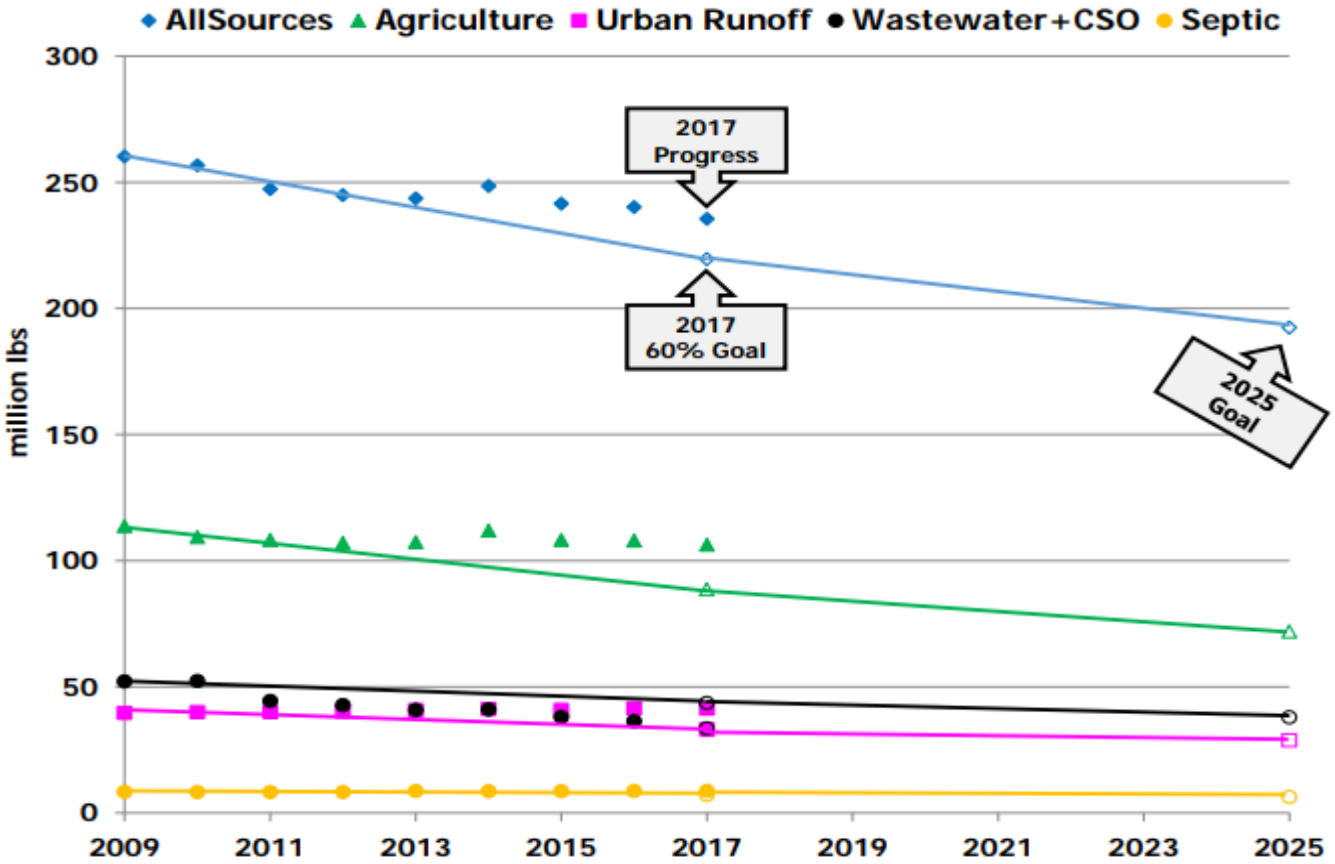
2010 Chesapeake Bay TMDL Based on the & Bay Jurisdictions' Watershed Implementation Plans

Elements of a WIP:
A Roadmap to Achieve Water Quality Standards

Phase I WIP and Phase II WIPs were developed and submitted to EPA in 2010 and 2012, respectively. Phase III WIPs will be developed and submitted by 2019. These documents focus on the following elements:

- Interim and final N, P, and SED Target Loads
- Current Loading Baseline and Program Capacity
- Local and Federal Engagement
- Account for Growth and Other Changed Conditions
- Gap Analysis
- Tracking and Reporting Protocols
- Contingencies

Achieving Shared Water Quality Goals (Placeholder)



Logic Behind Our Outcome

Following the Decision Framework:

Factors Influencing 2017 & 2025 WIP Outcomes

Implementation of Practices

- Continuing to sustain the capacity of governments and the private sector to implement practices
- Delivering the necessary financial capacity to implement practices and programs

Factors Influencing 2017 & 2025 WIP Outcomes

Improved Technical Information

- Improving the identification of sources and their contributions to nitrogen, phosphorus and sediment pollutant loads
- Quantifying the reductions from pollution control practices and verifying their continued performance
- Enhancing the next generation of decision support tools (Phase 6)
- Revisiting watershed model calibration methods with the goal of improving local watershed results
- Reviewing and updating historical implementation data that has been submitted by the jurisdictions to the CBP partnership, confirming that BMPs are still in place and ensuring that accurate information is included in the modeling tools

Factors Influencing 2017 & 2025 WIP Outcomes

Response of Water Quality Conditions to Management Practices

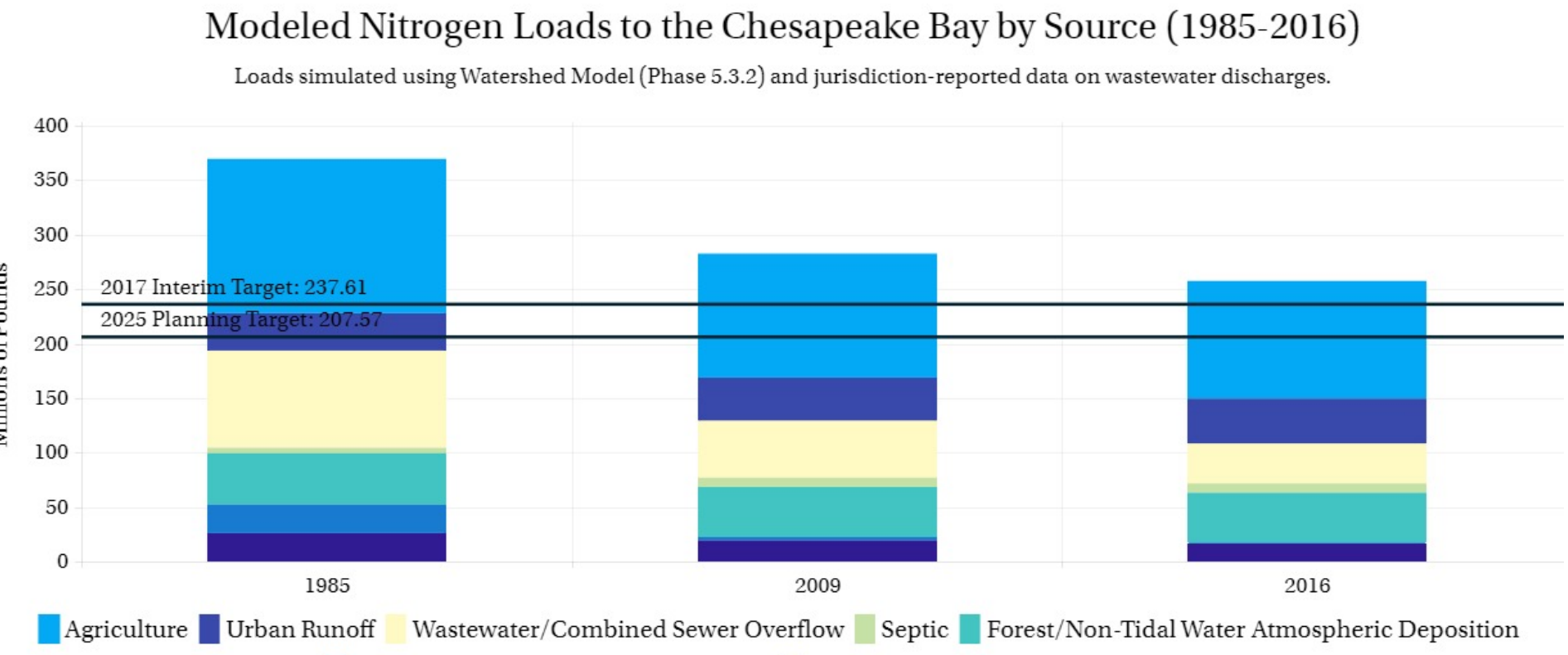
- Understanding the factors affecting the ecosystem response to pollutant load reductions to focus management efforts and strategies
- Factoring in effects from continued climate change
- Assessing the implementation potential of filter feeders for nutrient and sediment reductions
- Examining the impact the lower Susquehanna dams have on the pollutant loads to the Bay, including changes over time
- Conducting a detailed multi-year assessment of chlorophyll in the tidal James River using augmented monitoring and modeling approaches

2

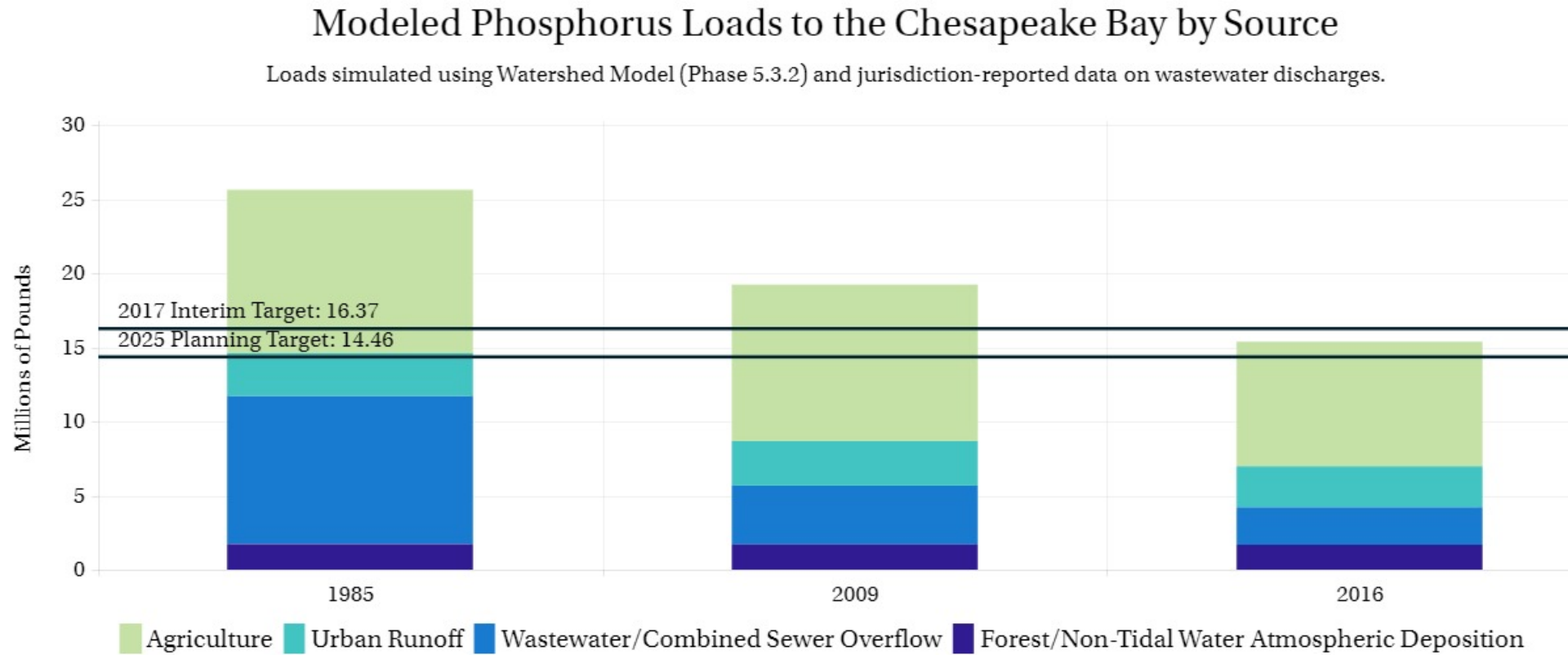
Progress:

Are we doing what we said we would do?

What is our progress?
(Placeholder – Need 2017 data)



What is our progress?
Placeholder – Need 2017 data



Analysis

Which actions were most critical in progress thus far? Why?

- Partnership establishing TMDL allocations and WIP implementation elements
- Funding capacity to implement programs and practices
- Strengthening programmatic, technical, policy, and regulatory infrastructures
- Engaging local partners in WIP planning and implementation
- Building new science and information into Partnership's decision support tools

Analysis

Which management actions will be the most critical to your progress in the future? Why?

- Continued (and increased) funding and resource support
- Continued partnership support to accelerate implementation
- Phase III WIP and two-year milestone development and implementation
- Continued crediting of innovative practices and technologies
- BMP verification program implementation
- Understanding how changing conditions will affect progress
- Explaining water quality monitoring trends and factors affecting trends

Analysis

What gaps have been filled, and how will we build on this in the future? Jurisdictions continue to address the following gaps:

- Financial, technical and regulatory capacity to deliver priority conservation practices (e.g., riparian forest buffers) to priority watersheds
- BMP tracking, verification and reporting programs

Additional incentives, new or enhanced state or local regulatory programs, market-based tools, technical or financial assistance, expanding state and local capacity, and new legislative authorities may be necessary

Analysis

What new management approaches are necessary?

- Conowingo WIP development and implementation
- Local planning goal development and implementation
- Aligning Bay grant funding with new understandings of science and modeling tools
- BMP co-benefits beyond just water quality improvements (e.g., riparian forest buffers)
- Completion of an optimization system
- Addressing climate change impacts (resilient BMPs and additional pollutant loads)

3

Challenges:

Are our actions having the expected effect?

Challenges

Did any factor, gap, or management approach present a challenge?

- Developing an approach to account for changed conditions due to climate change and Conowingo Dam infill
- Identifying sufficient funding mechanisms to support implementation efforts
- BMP verification program development and documentation of progress

Did an unforeseen factor influence your ability to move forward with an approach?

- Refinements to the Phase 6 suite of modeling tools and subsequent Phase III WIP planning targets impact on levels of implementation efforts needed moving forward

4

Adaptations:

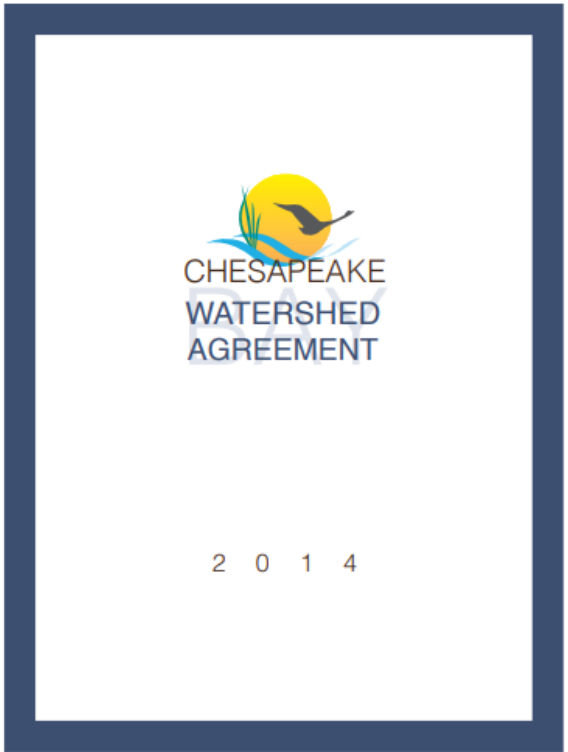
How should we adapt?

Based on what we've learned, we plan to…

What (if anything) would you recommend changing about your management approach at this time?

- Keep the focus on Phase III WIP development, two year milestones, and BMP verification while also emphasizing Partnership-driven priorities from the midpoint assessment, such as the Conowingo WIP, climate resilient BMPs, monitoring trend explanations, and optimization system
- Expanding partnership collaboration
- Sharing successful approaches among partners

Cross-Outcome Considerations



- Continue focus on the co-benefits of water quality BMPs with other outcomes
  - Forest Buffer
  - Healthy Watersheds
  - Stream Health
  - Toxic Contaminants
  - Climate Resiliency
  - Protected Lands
  - Brook Trout
  - Public Access
  - Wetlands
  - Tree Canopy
  - Fish Habitat
  - SAV
- Better understanding of climate resilient BMPs

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Discussion