STAC is working to finalize four reports from the following FY2016 workshops:

- 1) Quantifying Ecosystem Services and Co-Benefits of Nutrient and Sediment Reducing Best Management Practices (BMPs)
- 2) Legacy Sediment, Riparian Corridors, and Total Maximum Daily Loads
- 3) An Analytical Framework for Aligning Chesapeake Bay Program Monitoring Efforts to Support Climate Change
- 4) Understanding and Explaining 30+ Years of Water Clarity Trends in the Bay's Tidal Waters

STAC is also working to finalize three reports from the following FY2015 workshops:

- 1) Linking Wetland Workplan Goals to Enhance Capacity, Increase Implementation
- 2) Assessing Uncertainty in the CBP Modeling System
- 3) Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-making

Status and Trends (Previously Indicators) Workgroup:

Indicators being updated:

- Wetlands Restored on Agricultural Lands (October 2017)
- Water Quality Standards Attainment and Monitoring (tidal segments achieving water quality standards and USGS assessment of monitored nitrogen, phosphorus and sediment loads) (October 2017)
- Toxic Contaminants (October 2017)
- Student MWEE* (October 2017)
- Planting Forest Buffers (October 2017)
- Sustainable Schools (Fall 2017)
- Citizen Stewardship* (Fall 2017)
- Adult Striped Bass Abundance and Fishery Management (Fall 2017)

2017 Midpoint Assessment: Year of Decision WQGIT Recommendations to the PSC



WQGIT's September 25-26 F2F Meeting

- WQGIT discussed the following issues over their 2-day meeting:
 - Draft Phase 6 geographic isolation scenarios and changes to levels of effort from Phase II WIP planning targets.
 - How to address Conowingo infill and climate change, and impacts to Phase III WIP and Phase III WIP planning target development
 - How to account for growth in the Phase III WIPs.
- The WQGIT was not able to finalize recommendations for each issue, so a PSC decision point for today is whether to hold a one day or two day retreat in October (October 30-31, 2017).
- All remaining issues not addressed in October will come before the PSC for final decision on December 13, 2017.
 - Note: This will shift the overall Midpoint Assessment schedule by 6-weeks.

Recap of Policy Decisions

Who?







How?

Allocation equity rules used in the Bay TMDL

Most cost effective practices and locations

When?

By 2025

Beyond 2025

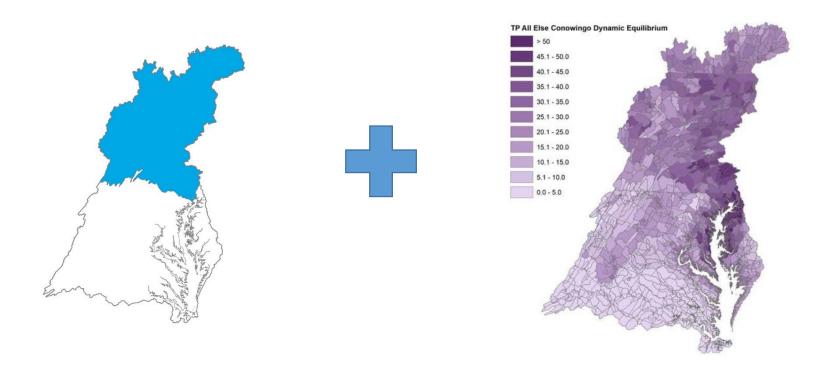
Post 2025

WQGIT Recommendations to the PSC

 There is a need to address Conowingo <u>now</u>, as we know it's already a changed condition and Partnership decisions should inform the Clean Water Act 401 certification discussions between Maryland and Exelon.

WQGIT Recommendations to the PSC

- Maintain the "Susquehanna basin only" option for PSC consideration.
- Present the "Susquehanna + most effective basins" option for PSC consideration.



WQGIT Recommendations to the PSC

- Assign the loads associated with Conowingo infill as local planning goals, separate from the jurisdictions' Phase III WIP planning targets.
- MD, PA, NY, and Exelon would need to determine how to account for reductions equivalent to the load associated with Conowingo infill, coming up with a multi-strategy approach.
 - Strategy can go beyond looking at just load reductions for example, N:P exchanges, dredging, USACE Comprehensive Plan, contribution(s) from Exelon.
 - Implementation beyond 2025 may be necessary given the impacts to levels of effort.
- Consider a letter from the PSC on expectations for addressing increased loads associated with Conowingo infill as part of the Clean Water Act 401 certification.

Climate Change Recap of Policy Decisions

The Partnership will decide how to address climate change considerations in the Phase III WIPs:

Quantitatively – accounting for additional loads due to climate change impacts projected through 2025 in the Phase III WIPs

AND/OR

Qualitatively – adaptively manage climate change considerations through the implementation of BMPs (with climate resilient characteristics) and other commitments through the Phase III WIPs and 2-year milestones



Climate Change

WQGIT Recommendations to the PSC

Decision Point #1: Approve policy approach to guide jurisdictions' development and implementation of their Phase III WIPs.

Decision Point #2: Establish "minimum" standard for implementation in jurisdictions' Phase III WIPs.

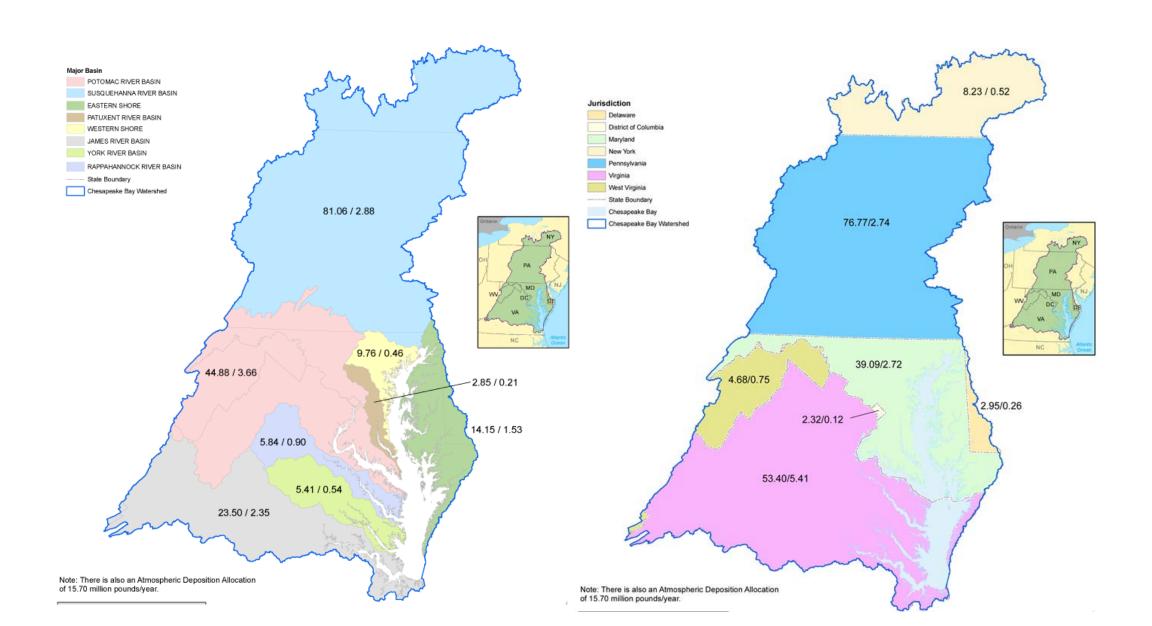
Decision Point #3: Establish the level of flexibility among jurisdictions for implementation of climate change policies that exceed minimum standards.

Climate Change

Upcoming Decisions & Presentations

- For the December 13, 2017 PSC Meeting:
 - Presentation of modeling results of climate change impacts (precipitation change, temperature increase, and sea level rise) using final calibrated Phase 6 modeling tools, with a comparison of scenario results to the draft Phase III WIP planning targets to show any changes to levels of effort.
 - **Decision Requested**: (1) how should climate change considerations and impacts be factored into the Phase III WIPs and (2) by when?

Planning Targets by Jurisdiction and Major River Basin



Partnership Decisions to Date on Planning Targets

- In December 2016, PSC approved the use of the same methodology to establish the Phase III WIP planning targets that was used to establish the 2010 Bay TMDL allocations.
- The WQGIT and Source Sector Workgroups developed new definitions of "No Action" and "E3", as part of the planning targets methodology.
- The WQGIT approved using the year 2010 as the baseline for establishing the Phase III WIP planning targets, which is consistent with the Bay TMDL.

Next Steps for Final Phase 6 Calibration and Partnership Decisions

Between Now and December 13, 2017...

- Complete final calibration of the Phase 6 Watershed Model and the Phase 6 Water Quality Sediment Transport Model to determine the new assimilative capacity of the Chesapeake Bay.
 - Need to see what changes there are to the assimilative capacity due to the (1) effects of Conowingo; (2) climate change; and (3) other refinements incorporated into the modeling tools.
- Once calibration is complete, develop the draft Phase III WIP planning targets
 - Based on new geographic isolation scenarios.
 - Understand how and why levels of effort would change for various decision options.

Proposed Revised Midpoint Assessment Schedule

First week of December 2017

• Modeling Workgroup and WQGIT recommendations on (1) how to address Conowingo; (2) climate change in the Phase III WIPs; (3) Phase 6 suite of modeling tools; and (4) draft Phase III WIP planning targets.

December 13, 2017

 PSC meeting to make final decisions on how to address Conowingo Dam and climate change in the Phase III WIPs; approval of the Phase 6 suite of modeling tools; and release of the draft Phase III WIP planning targets for 4-month Partnership review.

December 15, 2017 – April 15, 2018

Partnership review of the draft Phase III WIP planning targets.

• April 30, 2018

Release of the final Phase III WIP planning targets.

• January 31, 2019

 Draft Phase III WIPs posted on jurisdictions' websites for partner and public stakeholder review.

• May 31, 2019

• Final Phase III WIPs posted on jurisdictions' websites

Upcoming 2017 PSC Decisions

- Decisions and Presentations for December 13, 2017 PSC Meeting
 - **Decision Requested:** Approval of the final calibrated Phase 6 suite of modeling tools.
 - **Presentation** of modeling results of Conowingo scenario options using final calibrated Phase 6 modeling tools, with a comparison of scenario options to the jurisdictions' draft Phase III WIP planning targets.
 - **Decision Requested**: (1) Who should be responsible for addressing the additional load due to Conowingo; (2) how should it be allocated; and (3) by when should this additional load be addressed?
 - **Presentation** of modeling results of climate change impacts (precipitation change, temperature increase, and sea level rise) using final calibrated Phase 6 modeling tools, with a comparison of scenario results to the draft Phase III WIP planning targets to show any changes to levels of effort.
 - **Decision Requested**: (1) how should climate change considerations and impacts be factored into the Phase III WIPs and (2) by when?
 - **Decision Requested:** Approval and release of the draft Phase III WIP planning targets for Partnership review.