

2017 Midpoint Assessment: Year of Decision

October 3, 2017 Principals' Staff Committee Meeting

WQGIT Recommendations to the PSC



Today's Objectives

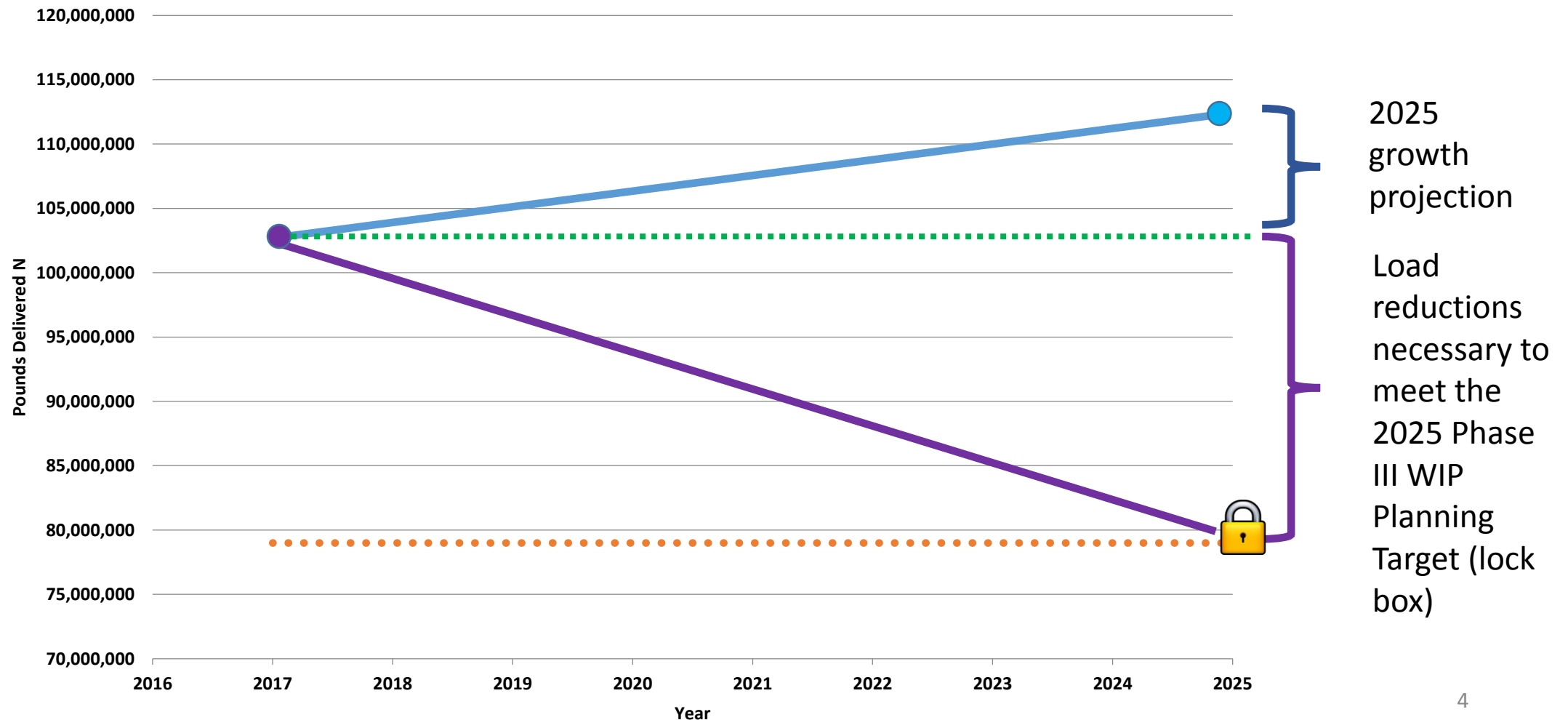
- Update on WQGIT Discussions and Recommendations to the PSC on Key Midpoint Assessment Policy Issues from their September 25-26 Face-to-Face Meeting
- PSC Decisions for Today's Meeting
- Overview of (1) Upcoming PSC Meetings; (2) Schedule of PSC Decisions; and (3) Next Steps for Finalizing Phase 6 Models and Draft Planning Targets

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.

Accounting for Growth

Recap of Policy Decision: Should 2025 Future Projections be Used to Account for Growth in the Phase III WIPs?



Accounting for Growth

WQGIT Recommendations to the PSC

- Use 2025 growth projections as base conditions for the Phase III WIPs.
 - This approach explicitly accounts for growth in the Phase III WIPs.
- Update the growth projections every 2 years with the best available data to inform the development of the two-year milestones.
 - Allows for adaptive management to changing growth patterns and trends as we approach 2025.

Accounting for Growth

Upcoming Decisions

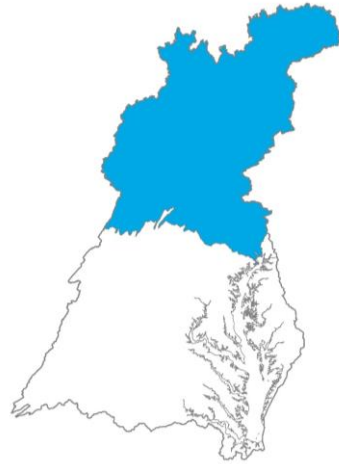
- **For the October 30-31, 2017 PSC Meeting:**
 - A **presentation** of each jurisdiction's preliminary 2025 growth projection will be provided.
 - **Decision Requested:** Does the PSC concur with the WQGIT recommendations to (1) use 2025 growth projections as base conditions for the Phase III WIPs and (2) update these projections every two years?
 - Note that the Current Zoning scenario results will not be final until November 15. Therefore, **does the PSC wish to defer this decision until the December 13 meeting?**

What specific information, type of analyses, and/or pro's and con's would PSC members like to see in advance of and during the October 30-31, 2017 PSC meeting?

Conowingo Dam Infill

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

Conowingo Dam Infill

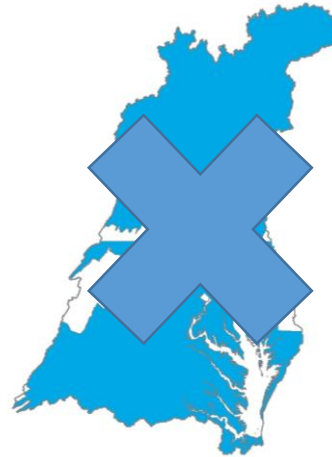
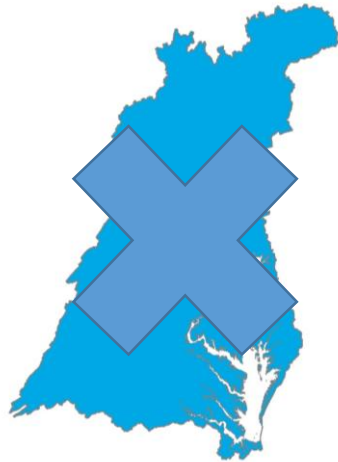
WQGIT Recommendations to the PSC

- There is a need to address Conowingo now, 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.

Conowingo Dam Infill

WQGIT Recommendations to the PSC

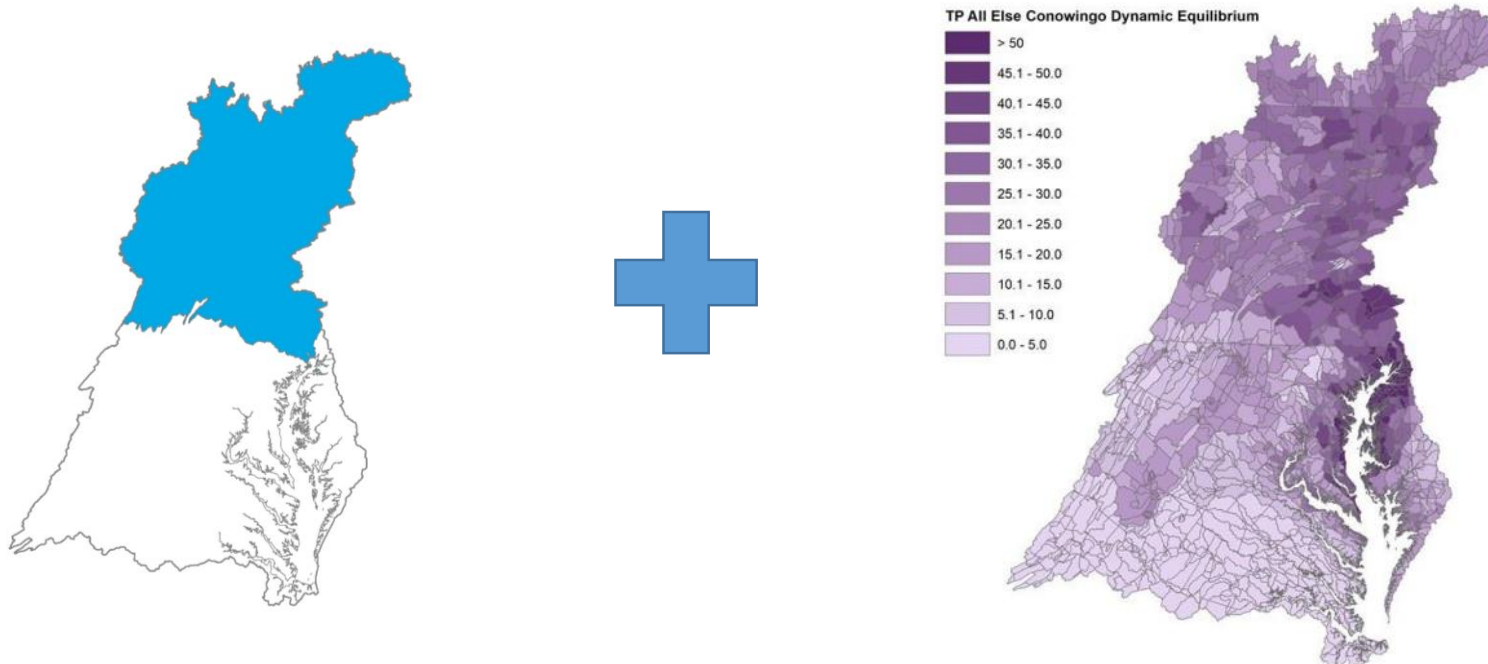
- Remove the options of “All Basins” and “Susquehanna + MD + VA” assuming responsibility for addressing Conowingo Dam.
 - Not cost-effective and negatively impacts WV, DE, and DC.



Conowingo Dam Infill

WQGIT Recommendations to the PSC

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



Conowingo Dam Infill

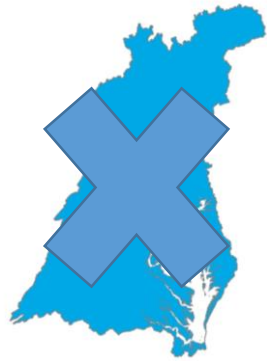
WQGIT Recommendations to the PSC

- 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.

Conowingo Dam Infill

Requested Decisions Today

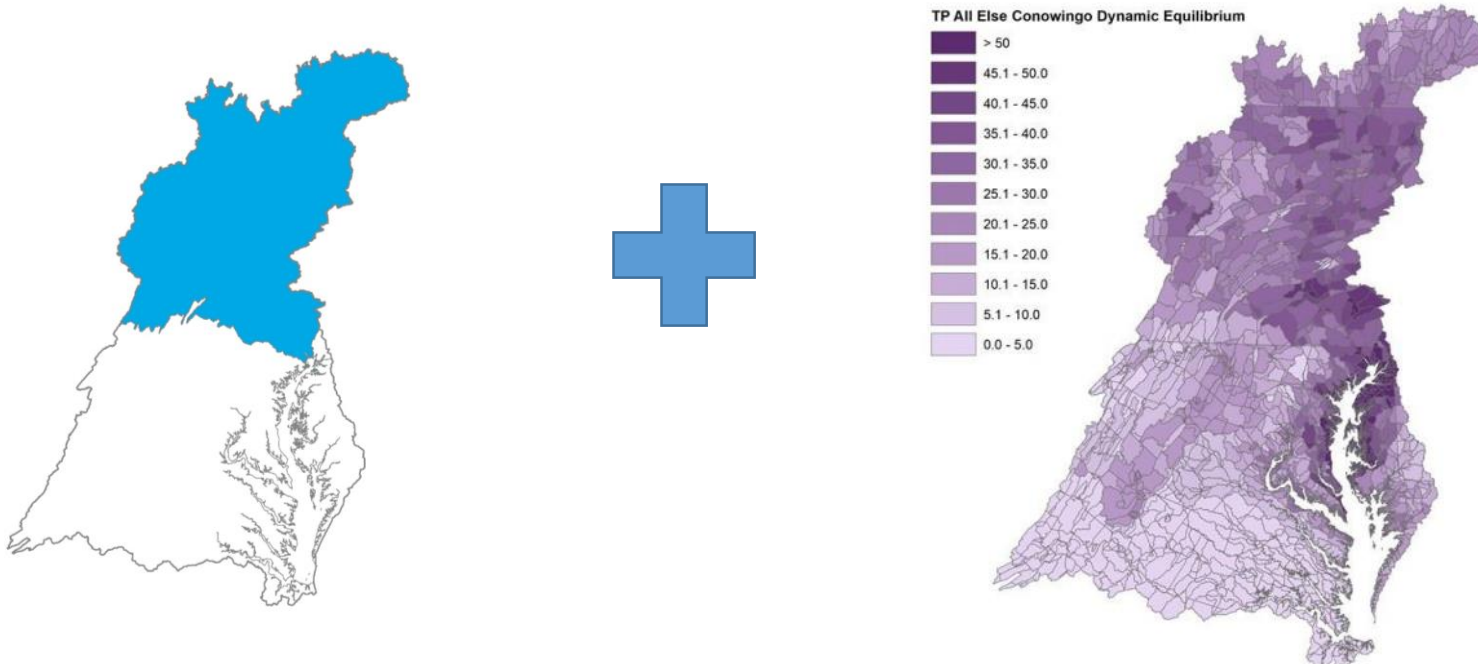
- Does the PSC agree with the WQGIT recommendation to remove the “All Basins” and “Susquehanna + MD + VA” options for assuming responsibility to address Conowingo infill?
 - Not cost-effective and negatively impacts WV, DE, and DC.



Conowingo Dam Infill

Requested Decisions Today

- Maintain the “Susquehanna basin only” option for PSC consideration.
- Does the PSC agree to add the “Susquehanna + most effective basins” option for final PSC decision on December 13, 2017?



Conowingo Dam Infill

Requested Decisions Today

- Does the PSC agree to send a letter on expectations for addressing increased loads associated with Conowingo infill as part of the Clean Water Act 401 certification?

Conowingo Dam Infill

Upcoming Decisions & Presentations

- **For the December 13, 2017 PSC Meeting:**
 - **Presentation** of modeling results of 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?

What specific information, type of analyses, and/or pro's and con's would PSC members like to see in advance of and during the December 13, 2017 PSC meeting?

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

Quantitative Policy Options

- *Factor Climate Change into Phase III WIP Base Conditions:*
 - Use the 2025 climate projection scenarios as base conditions (informed by CBWM climate modeling results) in the establishment of the jurisdictions' Phase III WIPs.
 - The climate change projection would be an added load that the jurisdictions would need to address in addition to their Phase III WIP planning targets, thereby increasing the level of effort.

Climate Change

Qualitative Policy Options

- *Optimize Phase III WIP Development and Adaptively Manage BMP Implementation:*
 - *Element A:* During the development of Phase III WIPs, jurisdictions will consider and prioritize BMPs that are more resilient to future climate impacts over the intended design life of the proposed practices.
 - *Element B:* Within a practical time-period applicable to an individual source sector, initiative or action, the Partnership will consider new information on the performance of BMPs, including the contribution of seasonal, inter-annual climate variability, and weather extremes. Jurisdictions will assess this information and their support programs and adjust plans through the two-year milestone process to implement their Phase III WIPs to better mitigate anticipated increases in nitrogen, phosphorus, or sediment due to climate change.
 - *Element C:* Jurisdictions will provide a narrative consistent with the Guiding Principles that describes their programmatic commitments to address climate change in their Phase III WIPs.

Climate Change

WQGIT Recommendations to the PSC

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

WQGIT Recommendation to PSC:

- Language changes on the policy options have been requested, including the removal of qualitative policy option Element A related to Phase III WIP development. The Climate Resiliency Workgroup will revise the language prior to the October 30-31, 2017 PSC meeting.

Climate Change

WQGIT Recommendations to the PSC

Decision Point #2: Establish “minimum” standard for implementation in jurisdictions’ Phase III WIPs.

WQGIT Recommendation to the PSC:

- Did not reach consensus on adopting the quantitative policy component - Use the 2025 climate projection scenarios as base conditions (informed by CBWM climate modeling results) in the establishment of the jurisdictions’ Phase III WIPs.
- The CBPO Modeling Team will provide 2025 climate change projections to give each jurisdiction an understanding of how their level of effort may change.
 - This information will be available by the time of the December 13, 2017 PSC meeting.

Climate Change

WQGIT Recommendations to the PSC

Decision Point #2: Establish “minimum” standard for implementation in jurisdictions’ Phase III WIPs.

WQGIT Recommendation to the PSC:

- Did not reach consensus on adopting qualitative policy component Element B and Element C, as further discussions are needed.
 - Pros and cons of each quantitative and qualitative policy component will be developed and presented to the PSC at their October 30-31 meeting.
- If the level of effort to achieve the quantitative reductions are relatively low, consider adopting the quantitative approach in addition to any qualitative component.
 - Should the quantitative component be adopted, consider the possibility of post-2025 implementation to address any changes in levels of effort.

Climate Change

WQGIT Recommendations to the PSC

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

WQGIT Recommendation to the PSC:

- Provide the jurisdictions with the flexibility to also address climate change quantitatively in the Phase III WIPs and 2-year milestones, if the Partnership adopts only the qualitative policy component.

Climate Change

Upcoming Decisions & Presentations

- **For the October 30-31, 2017 PSC Meeting:**
 - **Presentation** of the language changes to the policy components, as requested by the WQGIT.
 - **Presentation** of the pros and cons of adopting the quantitative and qualitative climate change policy components.
 - **Decision requested:** Removal of qualitative policy component Element A related to Phase III WIP development.

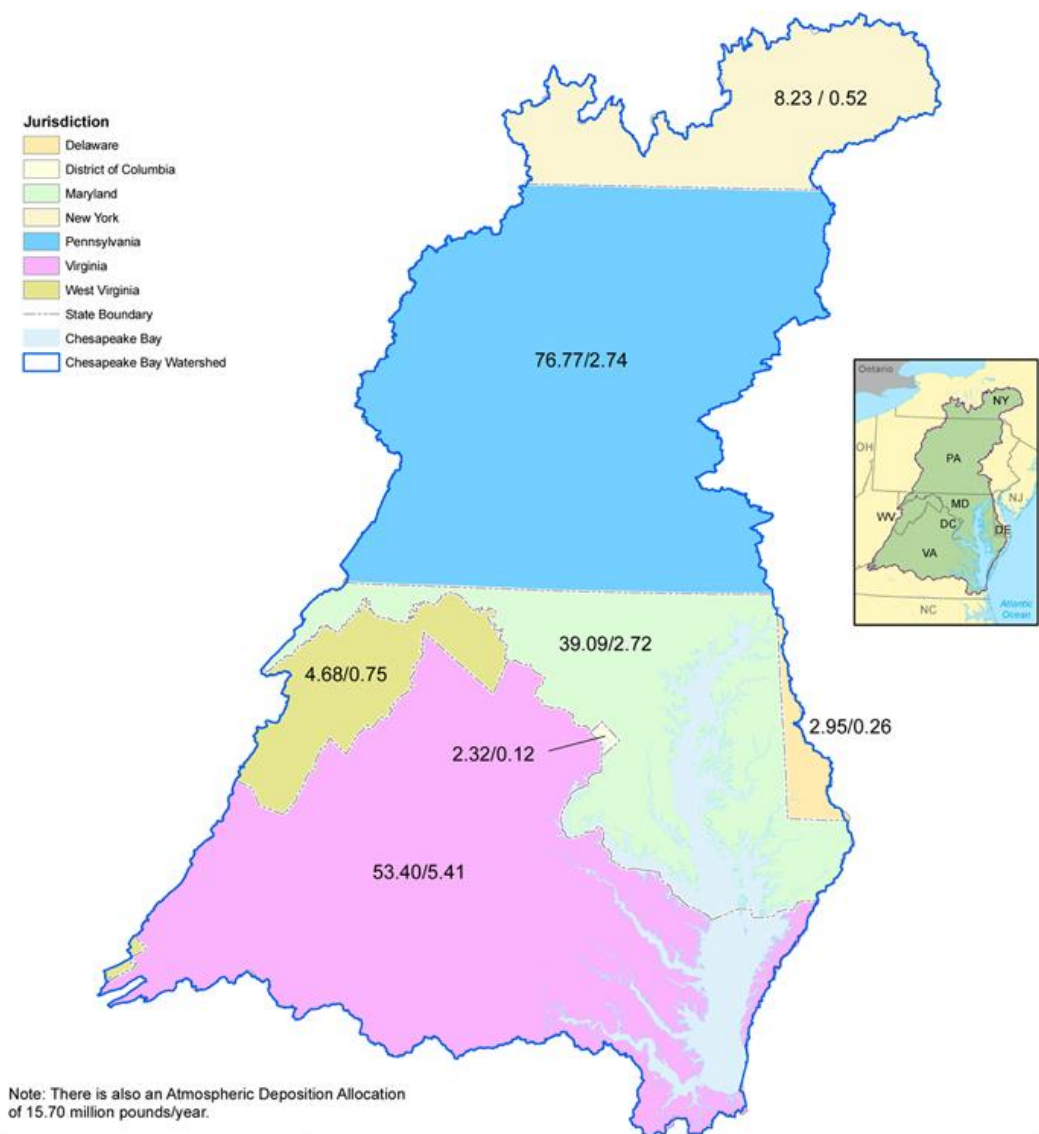
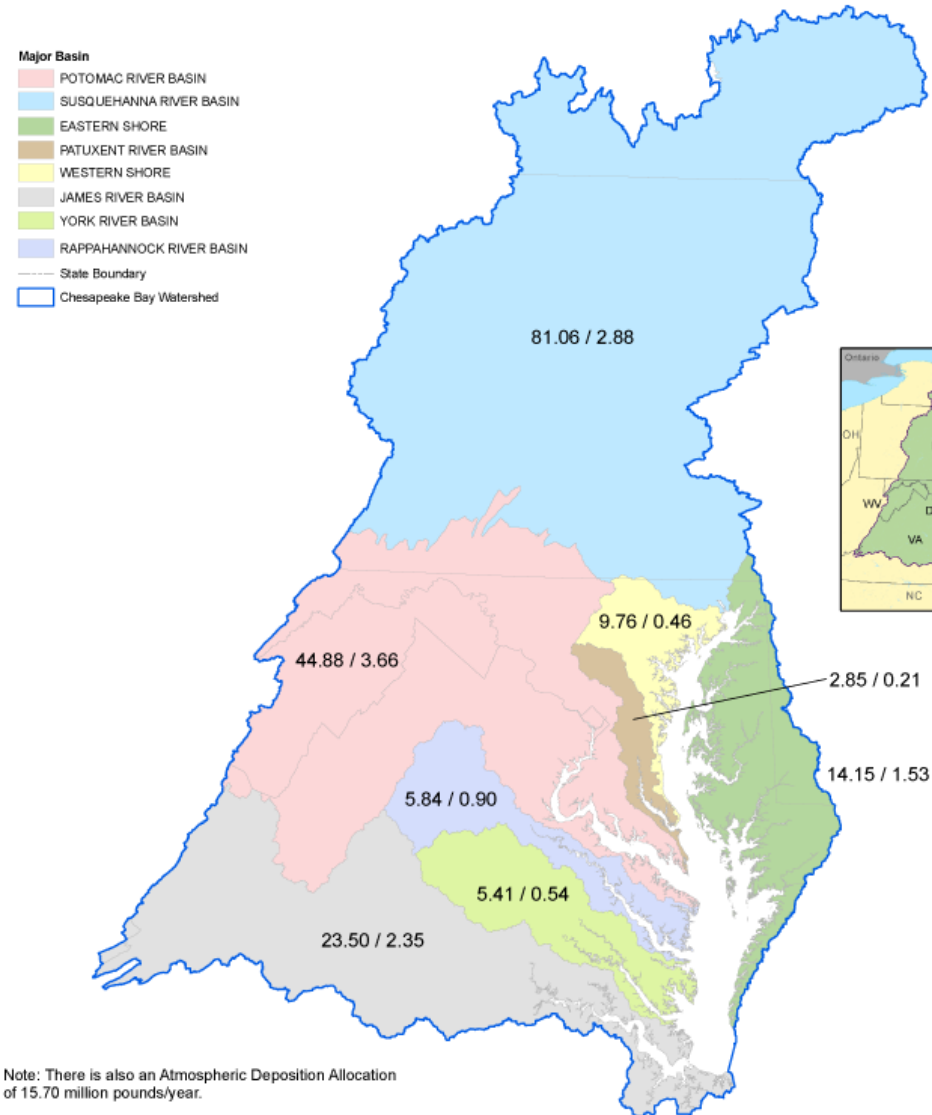
Climate Change

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?

What specific information, type of analyses, and/or pro's and con's would PSC members like to see in advance of and during the October and December PSC meetings?

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.

**Draft Phase III WIP Planning Targets Will Not
Be Ready for Review Until December 2017**

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

PSC Decisions Requested Today

- Approval of revised Midpoint Assessment schedule, including revised dates for:
 - Finalizing the Phase 6 modeling tools
 - Releasing the draft Phase III WIP planning targets
 - Developing the Phase III WIPs

Upcoming 2017 PSC Decisions

- **Decisions and Presentations for October 30-31, 2017 PSC Meeting**
 - A **presentation** of each jurisdiction's 2025 growth projection will be provided.
 - **Decision Requested:** Does the PSC concur with the WQGIT recommendations to (1) use 2025 growth projections as base conditions for the Phase III WIPs and (2) update these projections every two years?
 - **Presentation** of the language changes to the climate change policy components, as requested by the WQGIT.
 - **Presentation** of the pros and cons of adopting the quantitative and qualitative climate change policy components.
 - **Decision requested:** Removal of the climate change qualitative policy option Element A related to Phase III WIP development.
 - **Presentation** of any requested analyses on Conowingo and Climate Change.

PSC Decisions Requested Today

- Agreement on whether to have a one day PSC meeting on either October 30 or 31, as opposed to a two-day retreat.

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.

What specific information, type of analyses, and/or pro's and con's would PSC members like to see in advance of and during the October and December PSC meetings?