

Climate Model Narrative Request

4/19/21
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Outline

- Climate change and regulations
 - Climate change in models
- Climate Modeling Narrative
 - Intended focus

Climate Change and regulation

- 2010 Total Maximum Daily Load was created.
- Watershed Implementation Plans - Phase 3 (WIP3):
 - Specific steps to achieve pollution reductions
 - Reevaluated every two years with WIP Milestones (next in 2022-2023)
- Climate change affects TMDL water quality standard attainment and therefore, WIP3 Targets.
- 2014 Chesapeake Bay Program Watershed Agreement adopted.
- But how do we know what we are striving to attain?

Climate change and models

- Modeling helps us set TMDL Targets and WIP3s!
- Numerical simulations:
 - Airshed
 - Watershed
 - Estuary
- Decisions on climate change WIP3 Targets for 2025 made by PSC in December 2020.
 - The CBPO Modeling Team will assess CBP's 2035 climate change risk between now and 2025.
- Technical aspects of CBP climate change findings are complex
- Seeking to include CBP climate change findings and knowledge to jurisdiction specific WIPs

Climate Modeling Narrative Request

- 2014 Watershed Agreement to restore the Bay and its watershed
 - 10 goals and 31 outcomes:

Have the Climate Resiliency WG work with the Modeling WG to draft language which aids state jurisdictions in defining their progress towards meeting phase 3 WIP milestones.

What is the existing climate narrative?

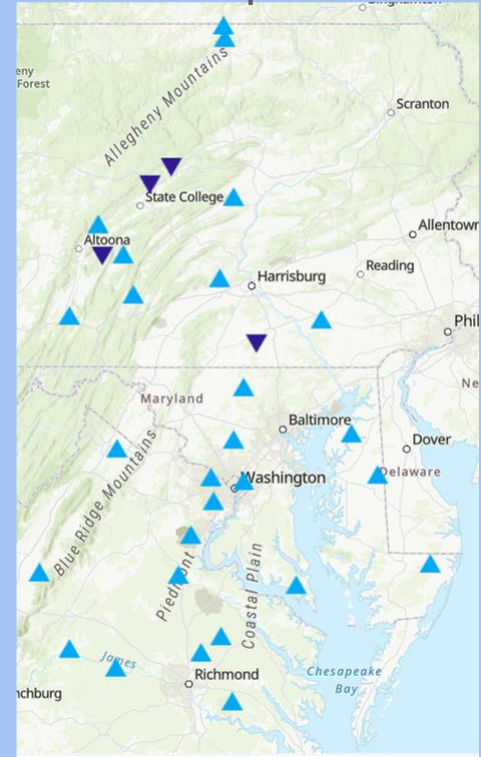
- Preliminary estimates for assessing the impacts of climate change through 2025 indicate that nutrient loads could potentially double for 2035.
- The WQGIT decided that the current 2025 estimates should be documented and quantified at the watershed-scale in each jurisdiction's 2022-23 milestones.
- **The partnership will continue to refine its climate modeling and assessment framework via the Modeling Workgroup in order to assess CBP's 2035 climate change risk in 2025.**
- The results will be presented to the WQGIT in 2025.

Where is the Modeling Workgroup focus?

- Revisions to the Watershed Model



- 2025 climate impact assessment



Who is the intended audience of this narrative?

- State agencies and their local stakeholders (e.g., municipalities, conservation districts, local governments, etc).

Summary

1. Federal and State requirements to control pollution (TMDLs)
2. Specific Watershed Implementation Plans to meet required reductions
3. CBP modeling helps set the requirements used in these WIPS
4. Dissemination of technical modeling information to state and local jurisdictions is necessary
5. Climate Narrative incorporating modeling efforts underway

Questions?