

Phase 6 Partnership Review Comments: Recommended Responses

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Objectives

- Describe changes made based upon comments.
- Review draft planning target timeline.
- Ask for WQGIT approval of the revised Phase 6 Partnership Model to be used to establish draft planning targets.

Comment Process

- 115 Comments received
 - Lots of conversations!
- Comments were indicative of a thorough review and resulted in a better model
- CBPO staff, WQGIT Chair and Vice Chair, and Modeling Workgroup Co-Chairs provided initial responses in spreadsheet that was sent to the WQGIT in mid-August

Changes Made - General

- Improvements to model documentation
- Changes to E3 definitions
- Name change: MS4 Construction => Regulated Construction
- Shoreline length and loads will be attributed to all agencies, not just non-federal

Changes Made – Land Use

- Incorporated VA crop and pasture remote sensing data
- **Decision requested today:** Increased mixed open and decreased turf in rural areas
- No decreases in developed through time
- True-up between remote sensing and ag census reformulated to work at the land segment scale rather than the LRseg scale to have less impervious change at the LRseg scale

Changes Made - Inputs

- **Decision requested today:** Adjust uncertainty of soil P data
- Distribute animals within counties as provided by states
- Biosolids data corrected
- Point sources data corrected
- PA properly submitted DOD BMP progress data

Changes Made - Inputs

- Livestock stream/pasture/barnyard fractions revised
- Remove artificial cap in applications
- Correct C-factors used for mixed open
- Crop removal updated for all crops
- Set default credit for stream exclusion practices

Additional Changes for Milestones

- Inputs

- CBPO and Modeling Workgroup, working through the appropriate source sector workgroup, will make Partnership approved revisions to inputs each 2-year milestone period to incorporate the best data available without violating the calibration
 - Fully consistent with past Partnership decisions
- Examples of input data which can be revised: construction, harvested forest, MS4, fertilizer, manure nutrient concentrations, animal location, animal numbers, soil P concentrations, BMPs...

Changes – Calibration

-- If Recalibration Warranted*

- Surface versus groundwater nitrate in the coastal plain (no change in loads)
- Enhanced Vegetative Index will be evaluated for removal as a land-to-water factor
- Lower delivery at unmonitored small coastal plain streams

*Modeling Workgroup Co-Chairs and CBPO Modeling Team recommend model re-calibration to fully ensure all the Partnership approved proposed changes and updated inputs are factored into the resultant management scenarios.

Comment Process

- Comments, as well as revised and expanded responses, will be included in the final Phase 6 Chesapeake Bay Watershed Model and Chesapeake Bay Water Quality/Sediment Transport Model documentation as appendices
 - The Modeling Workgroup wants to ensure full transparency and a complete public record of the Partnership review process
- The Partnership will continue to track the responses to the comments not acted on in the current models. This list will be maintained to help guide future work by the Partnership and its scientific community partners.

Timeline - Expanded

- **August 28** – WQGIT approves Phase 6 suite of models for development of the draft Phase III WIP planning targets and notifies MB and PSC of decision
- **August 31** – All data inputs and revisions considered final
- **September 1-9** – CBPO teams work to make changes to watershed model and incorporate new/revised input data
- **September 1-9** – CBPO shares new/revised input data with respective jurisdictions
- **September 15** – CBPO teams start re-running key scenarios through updated watershed model in prep for September 25-26 WQGIT meeting
- **September 15** – In parallel, CBPO Modeling Team will move forward with re-calibration of the Phase 6 watershed model factoring all the agreed to changes and revised input data
- **September 25-26** – Key scenarios for planning targets presented to WQGIT in preparation of October PSC meeting
- **October 13** – Re-calibration of Phase 6 watershed model completed
- **October 16**: Results presented to Modeling Workgroup; re-running of key scenarios initiated
- **October 23** – WQGIT briefed on re-calibration results, re-run key scenarios, and implications for draft Phase III WIP planning targets to be presented to the MB/PSC
- **October 30-31** – PSC retreat to review and approve draft planning targets for Partnership review
- **November-February** – Review of draft planning targets and potential watershed/Bay WQ model recalibration
- **March 2018** – PSC approval of final planning targets

DECISION REQUESTED: Recognizing a commitment from the Modeling Workgroup and Water Quality GIT to both update inputs to the Phase 6 Chesapeake Bay Watershed Model during milestone periods and work to continually investigate improvements to model simulations for future models, the Water Quality GIT concurs with the Modeling Workgroup that:

- 1) all fatal flaw and data management issues raised by the Partnership have been adequately addressed through proposed revisions or responses, and
- 2) the resulting September 2017 version of the Partnership's Phase 6 Chesapeake Bay Watershed Model will be used to establish draft Phase III WIP planning targets.

DECISION REQUESTED (Con't): This concurrence recognizes both the need to conduct final calibrations of the Partnership's Phase 6 Chesapeake Bay Watershed Model and, as needed, the Chesapeake Bay Water Quality Sediment Transport Model in support of the jurisdictions' review of the draft Phase III WIP planning targets starting in November 2017 and the Partnership's decisions on the final Phase III WIP planning targets in March 2018. This concurrence also recognizes the agreement to document all concerns expressed by all partners, the Phase 6 resolutions, and the longer term resolutions, in the final model documentation.