Phase 6.0 Review Update

Agriculture Workgroup

October 19, 2017

Management Board
September 21

Use and Simulation of Soil Phosphorus Data in the Phase 6 Model

- **Action:** DE stood aside with respect to their fatal flaw comments on this issue.

- **Decision:** Agreed to the near-term recommendations
  - Approved 7 itemized actions and agreed to provide this document to the WQGIT
    - *Incorporating Soil Phosphorus in the Phase 6 Model: Recommended Path Forward* (with editorial revisions).
    - *The WQGIT will inform the MB, if there are any significant changes to these actions.*

INCORPORATING SOIL PHOSPHORUS IN THE PHASE 6 MODEL

Recommended Path Forward (Abbreviated)

1. Comprehensive statistical analysis of all the states' existing soil P data
2. Regional standards for comparable & consistent suite of soil P sample collection methods, sample data recording, and laboratory analysis methods
3. Ensure the collection of more representative soil P data
4. Quality assurance system for soil P data comparability within & across jurisdictions
5. Develop a verified reference soil P sub-dataset for each state
6. STAC workshop to investigate the impact of & appropriate model representation of soil P levels of urban and other non-ag land uses for future use by the Partnership.
7. With support of AgWG, STAC, universities & private laboratories, develop & implement a regional structure & process for the biennial collection, synthesis, and reporting of soil P analysis data by land use at an aggregated county-scale for inclusion in the Phase 6 Chesapeake Bay Watershed Modeling tools during future two-year milestone periods

Water Quality GIT
September 25-26

- Scenario Year for Establishing Phase III WIPs: 2010

- Conowingo Dam:
  - Recommend “Susquehanna + most effective basins” option for PSC consideration regarding basins to assume responsibility for dam impacts on water quality.
  - Assign loads as local planning goals, separate from jurisditions’ 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.

Water Quality GIT
September 25-26

https://media1.giphy.com/media/3o6Ei2yv8fqpR3nJG8/200_s.gif

Next Steps for Final Phase 6 Calibration and Partnership Decisions

October and November…

- Complete final calibration of the Phase 6 Water Quality Sediment Transport Model and the Phase 6 Watershed Model to determine the new assimilative capacity of the Chesapeake Bay.
- Re-run Phase 6 geographic isolation scenarios.
- Need to see what changes there are to the assimilative capacity due to the (1) effects of (a) Conowingo, (b) climate change, and (c) both; (2) run 0.17 M SLR through final Phase 6 models and (3) other refinements incorporated into the modeling tools.
- Finalize current zoning + animal numbers and crop mix scenario for 2025.
- Re-run necessary scenarios on final calibrated Phase 6 models.
- Build understanding of the calibrated Phase 6 model scenario results, re-evaluating the scenarios used for key decisions/recommendations at the WQGIT F2F meeting.
- Conduct sensitivity scenarios for tidal wetland loss.