Partnership Review of Phase 6 Model

Mark Dubin, UMD

Agriculture Workgroup

April 20, 2017

Phase 6 Fatal Flaw Review Timeline

Adapted from 'Proposed Schedule Adjustments to the Midpoint Assessment Timeline' Version 4/11/17

Line	Midpoint Assessment Deliverable	Original Schedule	Revised Schedule	Notes
4	Beta 6 Watershed Model Calibration	February 1 – March 30, 2017	April 1 – May 30, 2017	2-month shift in schedule
7	Beta 6 Scenario Builder Outputs Review • Base Conditions (Land use, Animals, Septic Systems) • Nutrient spread resulting from Phase 6 land uses • BMP application to Phase 6 land uses	N/A	April 1 – July 31, 2017	
11	Beta 6 Water Quality Sediment Transport Model Calibration	April 1 – April 30, 2017	June 1 – June 30, 2017	
13	Partnership's Fatal Flaw Review of the Beta 6 Modeling Tools • Ph6 model documentation available • All Forest, E3 scenarios • 2016 progress run (prior years?) • Other scenarios requested by the partners	April 1, 2017 – May 31, 2017	June 1, 2017 – July 31, 2017	The WQGIT will be briefed periodically on any Scenario Builder outputs or fatal flaw issues identified during the April – July review period
14	Resolution of Fatal Flaws Identified Through Partnership Review and Final Calibration (if necessary)	N/A	August 1 – August 30, 2017	WQGIT expressed concerns about resolving identified fatal flaws in a one-month period
16	Partnership Approval of Phase 6 Modeling Tools	N/A	September 2017	Modeling Workgroup and WQGIT sign off on Phase 6 suite of modeling tools; notify Management Board and PSC of decision

The full Midpoint Assessment Timeline is available online: http://www.chesapeakebay.net/calendar/event/24788/

Agriculture Workgroup/Agricultural Modeling Subcommittee*

- Review watershed model documentation chapters 3 and 6
- Compare the Scenario Builder (SB) edge of small stream (EOSS) simulated loads versus downstream delivered load calibration results for agriculture dominated watersheds
- Review the interconnecting steps (without BMPs) in the simulation of transport of nitrogen (then uniquely phosphorous, and then sediment)— from SB crop inputs, SB logic, load targets, atmospheric N, soil P—to EOSS calibration
- Review EOSS simulated impacts and calibration sensitivity analyses based on running model responses to individual agricultural BMPs and multiple stacked BMPs on the initial sensitivity analyses conducted by the Modeling Workgroup
- Brief the Agriculture Workgroup on findings from all the above analyses and evaluation as well as the ranging scenarios (e.g., All Forest, 1985, Phase II WIPs, E3, others) run through the calibrated Phase 6 models

**Information adapted from 'Partnership and Jurisdictional Review of the Suite of Chesapeake Bay Program Partnership Models: A Proposal' Version 2/27/17*