Moving Toward the April 2017 Rollout of the CBP Models

Modeling Workgroup Quarterly Review December 14, 2016

Lew Linker and the Modeling Management Team



Chesapeake Bay Program
Science, Restoration, Partnership



Closing Out the 2016 Year

The second secon	Dec 13-14, 2016	Phase 6 Beta 4 Version released.
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December 16, 2016 Sendoff Phase 6 Beta 4 Version for WQSTM calibration.

Dec 2016 Examine different approaches for geographic efficiency scenarios. Also, begin to examine equivalency of Phase 6 Beta 3 Version based geographic efficiency scenarios (used for WIP targets) with the Phase 5.3.2 version.

December 16, 2016 Complete WIP2 Level of Effort (LoE) Scenario on Phase 6 Beta 4.

December 31, 2016 Complete E3 Scenario inputs on Beta 4
Scenario Builder.



An Initial Look at Draft Phase 3 WIP Targets

Jan 16 – Feb 17, 2017 - Expanding on the December 13-14 work on geographic efficiency scenarios, ensure Phase 5.3.2 geographic efficiency scenarios are roughly equivalent to Phase 6 Beta 4. Confirm loads needed to achieve water quality standards based on proportional adjustment of Phase 6 Beta 4 WIP2 LoE Scenario. Examine potential changes in variances with Beta 4 E3 Scenario.

Jan 16 – Feb 17, 2017 - Run No Action, WIP2, and E3 scenarios on Phase 6 Beta 4

February 24, 2017 - Initial, preliminary, first cut, draft at WIP3 Targets.



"Now this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning." - Winston Churchill

- January 2017 Key final Phase 6 inputs from the partnership due on 12/31.

 From this the nutrient inputs needed for Phase 6 land uses will be completed by 1/31
- Jan 31, 2017 All nutrient inputs from Scenario Builder needed for Phase 6 land uses complete.
- Jan 15, 2017 WQSTM calibration to Phase 6 *Beta* 4 Version complete.

 Test degree of water quality achievement on WQSTM calibrated to Beta 4 with WIP2 LoE Scenario.
- Feb 1, 2017 Work begins on fine-scale land use final version of Phase 6.



Phase 6 Model Development Fini

Late Feb 2017 Modeling Quarterly Meeting

April 1, 2017 Phase 6 fatal review version of Watershed Model

for fatal flaw review by Chesapeake partnership.

April 1, 2017 Sendoff final Phase 6 Version for WQSTM

calibration.

Early Apr 2017 Modeling Quarterly Meeting

Apr 30, 2017 WQSTM calibration to final Phase 6 Version

complete.

May 2017 Complete with CoE ERDC and EPA supercomputer

centers the final Phase 6 geographic efficiency

scenarios.



Phase 6 Model Application

May PSC Meeting

June 2017 Draft WIP3 targets developed.

All of 2017 Ongoing support of CBP partners Phase 3 WIP

development.

July 2017 Modeling Quarterly Meeting

October 2017 Modeling Quarterly Meeting

Dec 2017 Final PSC decision on Phase III WIP planning

targets.



Phase 6 Model Application

Late May 2017 Principals' Staff Committee Retreat
Based on recommendations from the WQGIT and the
Management Board at their March and April 2017 meetings,
DECISIONS from the PSC members on:

1) Management Board's proposed draft Phase III WIP planning targets; 2) Approval of the Phase 6 suite of Partnership models and other decision support tools for management application by the Partnership; 3) How to fully offset the additional nutrient and sediment loads coming over Conowingo Dam due to the Conowingo Reservoir reaching its capacity to trap nutrients and sediments; and 4) When and how to incorporate climate change considerations into the Phase III WIPs.



Phase 6 Model Application

December 2017 Principals' Staff Committee Meeting:

The Partnership will have six months to review the draft Phase III WIP planning targets between when they are released in June 2017 and when they are finalized in December 2017. During this 6-month period, the Partnership will have an ongoing opportunity to request and see the results of model scenarios and programmatic analyses that will inform the development of the final planning targets.



The View From Management Committees

Version - September 26, 2016

VEBINAR by the Modeling Workgroup on the Partnership's full suite of Phase 6 models	All Partnership Groups	January TBD 2017
nd other supporting decision support tools.		
VEBINAR by the Modeling Workgroup on how the Partnership is simulating and assessing ag times related to nitrogen in groundwater and phosphorus storage in soils.	All Partnership Groups	February TBD 2017
RIEFING: Modeling Workgroup Co-Chairs present initial findings from the calibration of nal draft Phase 6 Chesapeake Bay Watershed Model.	WQGIT	March 27, 2017
VEBINAR by the Modeling Workgroup Co-Chairs on the fatal flaw review period of the hase 6 suite of Partnership modeling tools.	All Partnership Groups	March TBD 2017
ISCUSSION of any identified fatal flaws in the Phase 6 suite of modeling tools and ossible resolutions of the identified flaws.	WQGIT	April 10, 2017
RIEFING: STAR Modeling Workgroup Co-Chairs presentation of any identified fatal flaws in the Phase 6 suite of modeling tools and recommended resolutions of the identified aws.	Management Board	April 13, 2017
ECISIONS on the recommended resolution of any identified fatal flaws in the Phase 6 uite of modeling tools.	WQGIT	May 8, 2017
ECISIONS on the WQGIT's recommended resolution of any identified fatal flaws in the hase 6 suite of modeling tools.	Management Board	May 11, 2017
ECISION on approval of the Phase 6 suites of Partnership models and other decision apport tools for management application by the Partnership and the individual partners ased on resolution any identified fatal flaws in the Phase 6 suite of modeling tools.	Principals' Staff Committee	May TBD 2017 Retrea