Modeling Quarterly Review Meeting

April 1, 2014

CBPO Conference Room - The Fishshack
410 Severn Avenue Annapolis, MD 21403

For Remote Access:

Adobe Connect: https://epa.connectsolutions.com/modeling/ (enter as guest)
Conference Bridge: (866)-299-3188 code 410-267-5731#
Event webpage: http://www.chesapeakebay.net/calendar/event/21418/

10:00 Announcements and Amendments to the Agenda – Montali-Currey

10:05 Oyster Restoration, Aquaculture, and Nitrogen Removal – Cornwell
Jeff Cornwell will describe studies examining the roles of on-bottom and float aquaculture as well as Harris Creek sanctuary restoration in nitrogen removal by oysters (*Crassostrea virginica*).

10:40 Review of Modeling Workgroup Priorities – Currey-Montali
A review of the Modeling Workgroup priorities with associated timelines and why the various elements are important to the Workgroup will be presented. In addition, a Virginia Tech proposal will be described that could provide a vehicle for modeling issues that the Modeling Workgroup needs to have addressed.

11:15 Watershed model schedule – Shenk
Gary will present an updated development schedule with key links to the Midpoint Assessment schedule.

11:30 Phase 6 Prototype – Bhatt-Shenk
Gary will present Gopal's work on a prototype of the Phase 6 Watershed Model based on the HSPF PQUAL simulation and with an updated precipitation input dataset, hydrology, and sediment simulations.

12:15 LUNCH

1:00 Phase 6 Calibration Decision Rules – Mandel
Ross will describe proposed refinements for the Phase 6 river calibration method and for PQUAL parameter selection.

1:30 Further Analysis of Phase 6 Nutrient Sensitivities – Yactayo
Guido will describe an analysis of SPARROW nutrient export sensitivities to input loads and provide an initial look at an equivalent SWAT analysis.

1:45 Relative Importance of Upland and In-Stream Sediment and Nutrient Sources – Fraley-McNeal, Christianson, and Law

Lisa Fraley-McNeal, Reid Christianson, and Neely Law will describe the results of an empirical analysis of in-stream sediment loadings from urban, headwater streams. The results suggest that urban streams are a potentially significant and variable source of total watershed sediment loads.

2:15 TMDL Models Representation of the Nutrient Loading Hypoxia Relationship – Brady and DiToro

Damian Brady will present an analysis directed at the question, "Can the trend in hypoxic volume be reproduced by the current TMDL models or are other, as yet unappreciated, factors at work?"

3:00 ADJOURN

Modeling Quarterly Review Meeting

April 2, 2014

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10:00 Announcements and Amendments to the Agenda – Montali-Currey

10:05 Implementation of Expert Panel Recommendations – Shenk
A suggested approach for implementation of Expert Panel recommendations for the simulation of management actions in the Phase 5.3.2 Models will be described.

10:30 Examination of Watershed Phosphorus Simulation Approaches – Kleinman
Peter Kleinman of USDA/ARS will present information on phosphorus simulation approaches that can be used to update the Phase 6 agriculture simulation.

11:00 WQSTM Oyster Simulation – Cerco
Initial work on model simulations to assess the influence of oyster filter feeders on water quality, with increased aquaculture and sanctuary development will be described.

11:25 WQSTM Shallow Water Simulation – Cerco
Carl will present preliminary work on a refined shallow water simulation using the Water Quality and Sediment Transport Model (WQSTM).

11:45 Multiple Model Assessment of Shallow Water Systems – Linker
The objective of the RFP is to improve the CBP assessment of the open-water DO and clarity/SAV water quality standards in shallow through the use of a multiple model assessment. The principal investigators for the work have been selected. The next steps will be completion of final work plans and the selection of field/simulation sites from among the entire mix of shallow water monitoring (SWM) sites including tidal fresh, mesohaline, and polyhaline monitoring sites.

12:15 LUNCH

1:00 Progress on Lower Susquehanna Dams – Linker
The progress made on the simulation of the Lower Susquehanna Reservoirs will be described.

1:30 Modeling Laboratory Action Team Update – Bennett
Mark will present the Modeling Laboratory Action Team Management Board presentation for comments and recommendation.

1:45 James Chlorophyll – Butt
The status of the James River chlorophyll analysis will be reviewed.

2:00 ADJOURN