Modeling Quarterly Review Meeting
WQSTM and CMAQ Modeling

January 14, 2015
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 267-985-6222#
Event webpage: http://www.chesapeakebay.net/S=0/calendar/event/22302/

10:00 Announcements and Amendments to the Agenda – Dave Montali, WVDEP - Lee Currey, MDE

10:05 Review of Modeling Workgroup Priorities – Lee Currey, MDE - Dave Montali, WVDEP
The quarterly review of the Modeling Workgroup priorities with associated timelines will be discussed.

10:20 Chester shallow water work – Richard Zimmerman, ODU
Dick will review plans for the shallow water bio-optical modeling work in the Chester River will be presented. The ODU Modeling Team is one of the four shallow water modeling teams working in the Chester.

11:00 Chester shallow water work – Richard Tian, UMCES
Richard will describe advances in the simulation of shallow water monitoring sites in the Chester River with the perspective for how to improve the clarity and DO water quality standards in shallow water regions.

11:30 WQSTM Shallow Water Simulation – Carl Cerco, U.S. CoE ERDC
Plans for refining the representation of shallow water in the WQSTM will be discussed.

12:00 LUNCH

1:00 WQSTM WQM progress – Carl Cerco, U.S. CoE ERDC
Development of new refractory species of phosphorus will be reviewed. The new refractory phosphorus species will be particularly needed in upcoming studies of Conowingo infill, shore erosion from sea level rise, and the phosphorus associated with shoreline erosion in general.

2:00 Ongoing Conowingo Studies – Bruce Michael, MDDNR
The Conowingo Analysis, Research, and Monitoring schedule will be reviewed and plans for how this 2-year plan ending in 2016 will fit into the simulations needed for the 2017 Midpoint Assessment Conowingo decisions will be discussed.

2:15 Conowingo Infill Studies – Jeff Cornwell and Jeremy Testa, UMCES
The two-year investigation of Conowingo infill particularly on the bioavailability of the organic and particular nutrients associated with the Conowingo sediments subject to scour will be discussed. The studies, conducted by UMCES, USGS, and others directly support the 2017 Midpoint Assessment decisions on the Conowingo and focus on the particulate nutrients mobilized in the Conowingo Reservoir and transported to tidal waters. The Modeling Workgroup will be responsible for follow-up of the research and field work with CBP model assessments to improve estimates of needed Conowingo infill nutrient offsets and the timing of the study's completion and the 2017 modeling deadlines will be challenging.

2:45 ADJOURN

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January 15, 2015
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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/S=0/calendar/event/22302/

10:00 Announcements and Amendments to the Agenda – Dave Montali, WVDEP - Lee Currey, MDE

10:05 CMAQ Air Scenarios – Jesse Bash and Robin Dennis – EPA-ORD, National Exposure Research Laboratory, Atmospheric Modeling and Analysis Division
A full review of CMAQ scenarios that use the bidirectional NH_4 simulation will be presented. The new scenarios will be of **2011** (which includes the 2010 CAIR implementation) **2017** (which includes implementation of the Tier 3 Fuel Rule) and **2025**, the year when all CBP implementation action for the TMDL are to be completed.

11:00 Impact of Warming and Sea Level Rise on Chesapeake Water Quality - Ping Wang, VIMS – Lew Linker, EPA-CBPO
An initial estimate of increased 2050 temperature of tidal water and of sea level rise will be examined both separately and together with respect to their influence on Chesapeake water quality and the Chesapeake water quality standards.

12:00 LUNCH

1:00 Representation of Climate Change in the Chesapeake Watershed – Gopal Bhatt, Penn State
An HSPF version of Phase 6 that will have full AGCHEM simulation for the representation of climate change in the Chesapeake watershed will be presented

1:20 Representing Estimated Increased Storm Intensity in the 2050 Climate Change Simulation – Guido Yactayo, UMCES (35)
Using the record of more than a quarter century of simulated rainfall in the Chesapeake, an increase in precipitation intensity has been quantified. Using this and other sources, an estimate of the increased precipitation intensity in a 2050 representation of the Chesapeake watershed will be developed.

1:40 Latest IPCC Downscaled Climate Change Scenarios –Venkataramana Sridhar and Choung Hyun Seong, Virginia Tech
Choung and Sri will review work on the latest IPCC scenarios downscaled to the Chesapeake watershed.

2:10 James Chlorophyll – John Kennedy, VADEQ
An update on the status of the James River chlorophyll analysis will be provided.

2:25 STAC Workshops for 2015 – Lew Linker, EPA-CBPO
STAC is now accepting proposals for responsive workshops for the fiscal year 2015 budget cycle (beginning on June 1, 2015 and concluding on May 31, 2016). Modeling Workgroup proposals for STAC workshops will be discussed.

2:45 ADJOURN