



## **Modeling Quarterly Review Meeting** **Watershed Modeling**

November 3, 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/calendar/event/22984/>

- 10:00 Announcements and Amendments to the Agenda – Dave Montali, WVDEP-  
Lee Currey, MDE**
- 10:05 Review of Modeling Workgroup Membership – Dave Montali, WVDEP - Lee  
Currey, MDE**  
Guidance for updating the Modeling Workgroup membership will be discussed.
- 10:15 Phase 6 Watershed Model Schedule Update – Gary Shenk, EPA-CBP**  
Gary will present further updates of the development schedule with key links to the 2017 Midpoint Assessment schedule.
- 10:25 Phase 6 Reservoir Simulation Progress – Gary Shenk, USGS and Ross  
Mandel, ICPRB**  
Progress in development of the Phase 6 prototype model will be described with emphasis on the wide range of reservoir refinements underway including those brought through estimated SPARROW impoundment effects, new P6 refined reservoirs, and planned refinements of the Conowingo and Lower Susquehanna reservoirs.
- 11:00 Developing Information for Phase 6 Conowingo Calibration – Bruce  
Michael, MDDNR**  
Bruce will review the information and data being developed through the Exelon supported research and monitoring program. The data available by the close of December for application in WSM and WQSTM application will be described
- 11:25 A Multiple Model Approach to Conowingo Simulation – Jim Fitzpatrick,  
HDR HydroQual**  
The development of a separate model of the Conowingo pool that could be swapped for the HSPF simulation will be proposed. Either the direct integration approach, or an approach to develop multiple lines of evidence from a stand-alone model that would be reflective of the other documented lines of evidence of scour

and deposition in the Conowingo are decisions that would need to put before the partnership.

**12:00 LUNCH**

**1:00 Phase 6 Lag Time Simulation Progress – Gopal Bhatt, PSU and Gary Shenk, USGS**

Progress in development lag times for nutrient species other than groundwater nitrate will be described.

**1:30 Update on Phase 6 Inputs - Matt Johnson, U. Maryland**

Matt will report on the tsunami of 30 years of Phase 6 input data and the Phase 6 input loads relative to the Phase 5 input loads will be presented.

**1:45 Estimating Edge-of-Field Erosion from Cropland and Pasture using RUSLE2 – Peter Claggett, USGS**

Peter will describe an approach to estimate Phase 6 land use erosion rates based on RUSLE 2.

**2:15 ADJOURN**



## **Modeling Quarterly Review Meeting** **Estuarine/Ecosystem Modeling**

November 4, 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 410-267-5731#

**Event webpage:** <http://www.chesapeakebay.net/calendar/event/22984/>

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

**10:05 WQSTM Calibration Status – Carl Cerco, U.S. CoE ERDC**

The Water Quality and Sediment Transport Model (WQSTM) calibration to the August 2015 Phase 6 Model loads will be examined. Initial estimates of tidal marsh attenuation of nitrogen, phosphorus and sediment will be discussed as well as the initial estimated loss of attenuation through tidal wetland loss through sea level rise. Progress in developing an improved representation of shallow water in the Water Quality and Sediment Transport Model (WQSTM) will also be presented.

**11:35 Conowingo Infill Studies – Jeff Cornwell, Jeremy Testa, and Larry Sanford – UMCES**

An update on the two-year research and monitoring program will be provided and a description of how the information provided by this research and monitoring program could be simulated by the WQSTM will be provided by the PIs and Carl Cerco.

**12:30 LUNCH**

**1:15 Chester River Shallow Water Multiple Models – Richard Tian, UMCES**

Richard will describe the application of FVCOM, an unstructured grid model, in the Chester River shallow water work and provide an initial look at the water quality calibration.

**1:45 Phase 6 Septic System Loads – Vic D’Amato, Tetra Tech**

A refinement of estimated septic system nutrient loads that reach low order Chesapeake watershed streams will be described.

**2:00 Progress in Simulating Lag Times with rSAS – Ciaran Harman, JHU**

The application of rSAS to simulate groundwater nitrate lag times will be presented.

**2:30 Analysis of Lag Times in the Potomac Watershed – Ward Sanford, USGS**  
Progress in development of the Phase 6 prototype model will be described with emphasis on reservoir refinements underway.

**3:00 Assessment of Bank and Flood Plain Nutrient and Sediment Loads – Greg Noe and Peter Claggett, USGS**  
Progress in the assessment of bank and flood plain nutrient and sediment loads will be described with an eye toward application in the Phase 6.

**3:30 Restoring the Chesapeake Bay: A Legislator's Perspective – Scott Lingamfelter, Virginia House of Delegates and Chair of the Chesapeake Bay Commission**  
The Honorable L. Scott Lingamfelter, chair of the CBC, will address the Modeling Workgroup.

**3:50 ADJOURN**