

Modeling Workgroup Meeting

August 9, 2017

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

For Remote Access:

Adobe Connect: https://epawebconferencing.acms.com/modeling (enter as guest)

Conference Line: (866)-299-3188 Code: 267-985-6222

Event webpage:

http://www.chesapeakebay.net/what/event/august_2017_modeling_workgroup_quarterly_review

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

10:10 Progress in James River Chlorophyll Modeling – Jian Shen, VIMS

An update on the James River chlorophyll modeling work will be presented. The work uses a refined model of chlorophyll in the tidal James linked with the Phase 6 models of the airshed, watershed and Bay.

10:50 Interim calibration of the WQSTM - Carl Cerco, CoE-ERDC

The current state of the calibration of the WQSTM will be presented in detail comparing the previous 2010 and current 2017 calibrations. The presentation will compare the total loads of nitrogen and phosphorus for all nutrient species in detail for the 2010 and 2017 versions of the WQSTM for the Base Case and WIP scenarios. The changes of G1, G2, and G3 from the watershed and shoreline erosion loads between the 2010 and 2017 models will be examined with regards to how the total reactivity of nutrient loads may be changing between the P5.3.2 (2010) and P6 (2017) models. The final WQSTM calibration will be delivered to the CBPO early in August.

12:15 Estimated Changes in Gravitational Circulation and Chesapeake Hypoxia with Sea Level Rise – Lew Linker, EPA-CBPO; Richard Tian, VIMS; Ping Wang, VIMS Review of the sensitivity scenarios of estuarine circulation with estimated 2050 sea level rise (SLR). The sensitivity scenarios used the 1993-1995 WQSTM simulation period to compare scenarios of 1) Base Case w/ out SLR or boundary salinity increase, 2) SLR only w/out salinity boundary increase, and 3) SLR w/ salinity boundary increase.

12:30 LUNCH

1:30 Key Scenarios on Interim WQSTM Calibration – Lew Linker, EPA-CBPO, Ping Wang, VIMS and Richard Tian, UMCES

A series of key scenarios run on the July version of the WQSTM calibration will be presented.

2:00 Progress on Geo Scenarios – Richard Tian, UMCES and Ping Wang, VIMS

Progress on the preliminary, initial geo scenarios will be described including a description of what the proposed geo runs are, and how they will be run and produced on the cloud.

2:15 ADJOURN