



## **Follow-up to the STAC Independent Peer Review Panel of the 2017 Water Quality and Sediment Transport Model (WQSTM) Model Review**

July 7, 2017

CBPO Fish Shack/Conference Call  
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: 410-267-5731**

- 2:00 Welcome, Announcements, and Amendments to the Agenda – WQSTM Peer Review Co-Chairs**
- 2:10 Follow-up Actions Taken for the Water Quality Sediment Transport Model (WQSTM) Peer Review Panel – *Lew Linker, EPA-CBPO***  
The agreed to follow-up activities in June, in the next quarter, and in the longer term will be reviewed.
- 2:20 Overview of the key scenarios of 1985 Progress, 2009 Progress, WIP2 Level of Effort, E3, and No Action, and Others – *Lew Linker, EPA-CBPO***  
An overall review of the Phase 6 Watershed Model (WSM) scenarios will be presented. (The task covers Phase 6 WSM scenarios only, not the WQSTM, because the WQSTM interim calibration to the June 1 WSM loads will not be completed until early July and the final WQSTM calibration will be completed until the close of July.)
- 2:40 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. In the case of both (2) and (3) there is an expectation from theory of an increase in gravitational circulation.
- 3:00 Q&A with Panel**

**3:10 Representation of G1, G2, and G3 Particulate Organics in the 2010 and 2017 WQSTMs – Carl Cerco, COE-ERDC ret.**

The presentation compares 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.

**3:30 Examination of 2010 and 2017 WQSTM Response to the Same Base Case and WIP Loadings – Carl Cerco, COE-ERDC ret**

An examination of the current (2017) WQSTM to see if large differences are found from results of the 2010 model will be reviewed. The analysis will use Phase 5.3.2 loadings for both the Base Case and the Watershed Implementation Plan (WIP) scenarios. The approach will examine if there are large changes seen between results of the 2010 WQSTM (with labile and refractory particulate organic matter) and the current WQSTM (with G1, G2, G3 particulate organic matter) run under the same Phase 5.3.2 load conditions.

**4:15 Open Comments, Questions, and Discussion from the Review Panel**

**4:30 ADJOURN**