# Modeling Quarterly Review Meeting

April 16, 2012

CBPO Conference Room – The Fishshack 410 Severn Avenue Annapolis, MD

#### For Remote Access:

Adobe Connect <a href="https://epa.connectsolutions.com/modsc/">https://epa.connectsolutions.com/modsc/</a> (Enter as guest)
Conference Bridge: TBD

- 10:00 am Announcements and Amendments to the Agenda Linker
- 10:05 am Developing Land Use Data for the 2017 Midpoint Assessment Claggett
  Peter Claggett will discuss the preliminary plans to refine Chesapeake land
  use data for the 2017 Mid-Point Assessment
- 10:45 am A Cloud Approach for Watershed Model Data Duffy-Bhatt
  Chris Duffy and Gopal Bhatt will provide a presentation on how to establish the cloud approach for watershed model input data.
- 11:10 am A Refined and Expanded CBP Precipitation Timeseries Bhatt
  The NLDAS precipitation data was used to improve and expand the
  Watershed Model simulation period from 1980 to 2011. Examples of the
  refined and expanded hydrodynamic simulation will be presented along with
  preliminary results of a fine scales distributed hydrology calibration of the
  Juniata test watershed.

#### 12:00 noon LUNCH

### 1:00 pm A Delmarva Groundwater Model – Sanford

Ward Sanford (USGS) will provide an overview of a new groundwater model of the Delmarva which provides, among other things, insights to ages of ground water.

1:45 pm Developing Satellite Imagery-Based Forest Disturbance Metrics – Deel Lindsay Deel (West Virginia University) will present progress in developing satellite imagery-based forest disturbance metrics to improve predictions of nitrogen, phosphorus, and sediment loads to the Chesapeake Bay. The satellite processing used to create forest disturbance classifications in sample watersheds within the Chesapeake Bay basin will be described and the potential for using these newly created land-use classes to predict nitrogen, phosphorus, and potentially sediment loads to the Bay will be discussed.

#### 2:30 pm ADJOURN

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### 10:00 am Announcements and Amendments to the Agenda – Linker

### 10:05 am Modeling Lab Action Team Status - Bennett

The status of the team formed to respond to the NAS recommendation for a Chesapeake Modeling Laboratory will be described.

# 10:15 am Expert Team Assessments of BMP and Management Action Refinements – Dubin

Mark Dubin will briefly describe several expert groups that are examining long range plans for potential refinements to the 2017 watershed assessment and tracking tool.

# 10:40 am Identification of Needs and Recommended Approach for the 2017 Mid-Point Assessment – Linker

Initial plans for refinements needed for the airshed model for the 2017 Mid-Point Assessment will be discussed. This and the following agenda topics will be used to begin a conversation on what the State and other CBP partners see as needed refinements to the CBP modeling tools that will support the 2017 Mid-Point Assessment. The evolving discussion will help to develop a schedule for 2017 modeling refinements which will be forwarded to the WQGIT.

# 11:00am Identification of Needs and Recommended Approach for the 2017 Watershed Assessment – Shenk

Initial plans for refinements needed for the watershed model for the 2017 Assessment will be discussed and comments, ideas, and direction from the Modeling Team will be solicited.

# 11:30 am Identification of Needs and Recommended Approach for the 2017 Assessment of Tidal Waters – Linker

Initial plans for refinements needed for the estuarine and living resource models for the 2017 Assessment will be discussed and comments, ideas, and direction from the Modeling Team will be solicited.

## 1:50 am Update on the CCMP Modeling Symposium – Hood

Raleigh will discuss plans for the upcoming CCMP 2012 Modeling Symposium in May 2012 and a proposed April STAC workshop on a

multiple model test case for shallow water simulation of the clarity/SAV water quality standard.

### 12:00 noon LUNCH

# 1:00 pm CoE Experience WIP Development for Federal Lands – Cisar-Johnson

Heather Cisar and Billy Johnson of the Corps of Engineers will describe the Corps experience in developing WIPs for federal lands in the Chesapeake. Challenges and difficulties in this first WIP application for Federal lands will be described, as well as a watershed simulation the CoE developed that was tailored to the land uses and activities of DOD bases and facilities in the Chesapeake watershed.

## 1:45 pm James Chlorophyll Study – Butt

Plans for a detailed multiyear study of chlorophyll in the tidal James River using augmented monitoring and modeling approaches will be discussed. (Have Rusty present this for about 30 minutes.)

# 2:00 pm Status of the Lower Susquehanna Dams Study – Cerco

Carl will present an update of the recently launched study of the accumulation, erosion, and transport of sediment and other pollutants behind the lower three dams on the Susquehanna River. The Lower Susquehanna River Watershed Assessment – Phase I will develop broad, planning-level strategies and anticipated Chesapeake Bay impacts and benefits, particularly with respect to the SAV clarity water quality standard in the upper Bay.

# 2:15 pm Water Quality Sediment Transport Model (WQSTM) Test of Winds Influence on CB Anoxia – Wang

A status report on recent WQSTM work examining the influence of prevailing winds on Chesapeake hypoxia will be presented.

#### 2:30 pm ADJOURN