UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
Chesapeake Bay Program Office
410 SEVERN AVENUE
ANNAPOLIS, MARYLAND 21403

November 8, 2013

Dr. Kirk Havens, Chair
CBP Scientific and Technical Advisory Committee
645 Contees Wharf Road
P.O. Box 28
Edgewater, MD 21037

Dear Dr. Havens: Kirk

Thank you for the opportunity to respond to the STAC Workshop on *Using Multiple Models for Management in the Chesapeake Bay: A Shallow Water Pilot Project.* The Chesapeake Bay Program (CBP) recognizes and understands the potential value of multiple models and supports development of multiple models in the Chesapeake Bay and watershed. The Program agrees that a community of scientists and engineers actively using multiple models of the Chesapeake watershed and estuary provides for greater collaboration and useful comparisons among various models. As you know, the CBP is a direct contributor to the objective of multiple community models and actively supports the Chesapeake Community Modeling Program, through staff and some financial support for the symposium, which champions the application of multiple models in the Chesapeake.

Specific responses to the workshop recommendations follow:

Workshop Recommendation 1. Pilot Project Goal
The Shallow Water Multiple Model Pilot Project goal which is to "improve Bay shallow water simulations of dissolved oxygen (DO) and water clarity in order to better understand the impacts of alternative management strategies on living resources in the tidal Chesapeake Bay" is directly aligned with CBP's interest in refining the simulation of shallow water DO and water clarity for the 2017 Midpoint Assessment. The CBP appreciates STAC's initiative in developing the multiple model issues and for the practical strategy outlined in the report for collaboration between the CBP partners and the scientific community to develop and demonstrate the application of multiple models in the proposed shallow water model project.

Workshop Recommendation 2. Rationale for Shallow Water Modeling Efforts
The practical application of the shallow water prototype to the CBP problem areas of Open Water and Water Clarity has the potential to contribute to the 2017 Midpoint Assessment and will provide a real assessment of multiple models for management in the Chesapeake Bay Program. The CBP is highly motivated to address shallow water

simulation refinements because the 2010 TMDL *Appendix N: Resolution of Segments Failing to Attain the Jurisdictions' Water Quality Standards* documents cases where failures of the water quality simulation in some shallow waters of the Chesapeake led to alternate means of Open Water or Water Clarity assessment. This is a model limitation that the CBP intends to address and correct by the 2017 Midpoint Assessment. The proposed shallow water prototype will help to move this work forward.

In addition, the timing of the STAC Shallow Water Model Project proposal is also good because it comes at a time when the watershed, airshed, and estuary model simulation periods are being extended to recent years and the CBP has completed several years of shallow water monitoring in the Chesapeake, which were two necessary antecedent steps for the proposed project.

Workshop Recommendation 3. Rationale for Multiple Models

The field of watershed, atmospheric, and estuarine environmental modeling is active and dynamic, and the field is still riding on a wave of technological innovation and improvements that are a source of challenge and opportunity in how we do environmental modeling in the Chesapeake Bay Program. The CBP supports the application of multiple models in the Chesapeake and agrees with the rationale STAC has presented in the workshop report. The EPA is drafting a Request for Proposal (RFP) to support a two year effort in a shallow water pilot project as proposed by STAC. The RFP is anticipated to be available for public review and submission of RFP proposals in the fall of 2013.

In closing, please extend my thanks to the workshop steering committee and participants for their time and effort in developing the report *Using Multiple Models for Management in the Chesapeake Bay: A Shallow Water Pilot Project*. We remain, as always, very appreciative of STAC's role in providing independent reviews and guidance for improving our management of the Chesapeake Bay TMDL and restoration effort.

Sincerely,

Nicholas A. DiPasquale
Director

ec: Management Board
Water Quality Goal Implementation Team
Modeling Workgroup