

## Memorandum Requesting Enhanced Participation from Federal Agencies to Improve Chesapeake Bay Program (CBP) Technical Basis for Pollutant Modeling and Accounting



November 18, 2014

To: Wayne Honeycutt, USDA-NRCS, Deputy Chief for Science and Technology  
Rich Batiuk, USEPA-CBPO, Associate Director for Science, Analysis and Implementation  
Scott Phillips, USGS, Chesapeake Bay Coordinator

First, the Scientific and Technical Advisory Committee (STAC) would like to express our appreciation and gratitude for the contributions and collaboration from your federal agencies in Chesapeake Bay restoration activities to date. As you may recall, the role of STAC is to provide independent scientific guidance in the efforts to restore and sustain the water quality and living resources of the Chesapeake Bay. With more than 35 independent scientists from over a dozen universities, scientific organizations, and agencies, STAC has been on the forefront of communicating scientific information to decision-makers.

The 2017 Mid-Point Assessment (MPA) is rapidly approaching and expanded collaboration is essential for continuing the excellent progress we have begun. As signatories to the Chesapeake Bay Watershed Agreement (CBWA), the Federal agencies, States, D.C., and the Chesapeake Bay Commission (CBC) have all committed to restoring the Chesapeake Bay, as evidenced by the current, large, and sustained effort to reduce nutrient and sediment loads from the watershed to the estuary. STAC views your continued participation and collaboration as essential to helping jurisdictions meet these restoration goals.

Due to increased demands on all partners in ramping up for the 2017 MPA and the ultimate implementation goal for 2025, there is an even greater need for enhanced technical expertise to inform the partnership in the Chesapeake Bay restoration process, particularly as we move forward with a refined Chesapeake Bay Watershed Model (CBWM), the use of a multiple-model approach, and other decision support tools. It is crucial that the appropriate technical expertise be available for informing the CBP for this effort.

A more concerted effort is needed to integrate and compare the models used by different agencies in order to effectively use multiple modeling to improve knowledge, quantify model uncertainty, and better inform management decisions. STAC has previously recommended the use of multiple models to the CBP because the scientific community sees great value for testing model robustness to alternative assumptions and data inputs. The value of the U.S. Department of Agriculture (USDA) models is recognized as STAC further recommended inclusion of the Conservation Effects Assessment Project (CEAP) farm-scale modeling in a hierarchical manner with the larger watershed models of the CBP modeling suite. The U.S. Geological Survey's (USGS) SPARROW model already has been used in support of the previous version of the CBWM.

USDA has modeling expertise with small scale farm models that could contribute to the CBP decision support tools as the CBP considers how to use multiple models, a wealth of research experience on pollutant fate and transport, and is on the front line of implementation and maintenance of agricultural conservation practices and their spatial variability. USGS has a long history of expertise in the monitoring field, as well as assessment of how actions/factors on the land affect trends in water quality, including applications of the SPARROW model. EPA-CBPO serves as the key integrator of knowledge in the current Phase 6 development of the CBWM. STAC encourages your agencies to fully utilize provisions in Executive Order (EO13508) and the existing interagency agreements in effect to share knowledge and data at scales that comply with confidentiality agreements, while communicating with each other about your respective modeling efforts to allow them to be mutually reinforcing, adaptive, and contributing to cooperative problem-solving.

**Request 1:** Towards that end, STAC would like to request that your agencies identify appropriate technical staff in your respective organizations to participate in on-going scheduled meetings of the following Chesapeake Bay partnership committees which typically meet monthly. Although an initial in-person attendance at these meetings is highly preferable, video-conferencing is also an option:

- Watershed Technical Workgroup ([http://www.chesapeakebay.net/groups/group/watershed\\_technical\\_workgroup](http://www.chesapeakebay.net/groups/group/watershed_technical_workgroup))
- Modeling Workgroup ([http://www.chesapeakebay.net/groups/group/modeling\\_team](http://www.chesapeakebay.net/groups/group/modeling_team))

Once you have identified representatives for each committee, STAC will be happy to make the appropriate introductions to the committee leadership.

**Request 2:** STAC also would like to request that EPA-CBPO convene a meeting of the three agencies to discuss a mutual “response” or plan of action on how to enhance collaboration in your technical support of the partnership’s modeling and accounting efforts.

Once again, STAC is greatly appreciative of the current and past cooperation between USDA, USGS, and EPA in the Chesapeake Bay Program partnership. Indeed, the restoration of the Chesapeake Bay will depend heavily on this cooperation. We hope that your agencies will redouble your efforts in improving inter-agency communication and strengthening our ability to learn from all agencies’ technical and modeling expertise on the road to improving the health of the Chesapeake Bay.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'KH', with a long horizontal line extending to the right.

Kirk Havens  
Chair, Scientific and Technical Advisory Committee