

Evaluation of Options for a Chesapeake Modeling Laboratory

CBP and Knowledge Systems for
Sustainability Coordination Meeting

Mark Bennett, USGS

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“Establishing a Chesapeake Bay modeling laboratory would ensure that the CBP would have access to a suite of models that are state-of-the-art and could be used to build credibility with the scientific, engineering, and management communities.”

- Achieving Nutrient and Sediment Reduction Goals in the Chesapeake Bay: An Evaluation of Program Strategies and Implementation; National Research Council

Why a Modeling Lab?

- evaluating uncertainty in model simulations and assessing monitoring data needs
- improving the predictive skill of the models
- improve model credibility
- incorporating multiple modeling approaches
- emphasize open-source models exercised cooperatively with the scientific community

MB Recommendations on Modeling Lab

- Commit to proceeding forward with more in-depth evaluation of the recommendation for establishing a Chesapeake Bay Modeling Laboratory and other alternatives to achieve the recommendations of the NRC committee.
- Establish an action team charged with responsibility for developing a more definitive set of implementation options.
- Appoint action team members with well recognized expertise in modeling, monitoring data and management decision making in order to represent multiple perspectives.

Modeling Lab Action Team

- The action team's charge would include:
 - Evaluation of other existing modeling laboratories and adaptive management programs that encompass modeling, addressing how they function and how applicable their structure and mandate is to the Chesapeake Bay Program Partnership.
 - Consideration of the range of options for what would constitute a Chesapeake Bay modeling laboratory, a virtual laboratory, or responsive program reorganization that is capable of carrying out the functions outlined by the NRC committee and addressing the series of existing STAC and the jurisdictions' recommendations on modeling.

Modeling Lab Action Team

- The action team's charge would include:
 - Development of options and recommendations for actual institutional sponsorship and how the laboratory would function for carrying out mandates.
 - Assessment of the possible range of financial investments and funding mechanisms required.

Modeling Lab Action Team

- The action team will report back to the Management Board on its findings, options, and recommendations. In turn, the Management Board would then decide on what specific recommendations to put forward for deliberation and final decisions by the Principals' Staff Committee.

Modeling Lab Action Team

- Recommendation for Action Team membership
 - 7 jurisdiction members; Maryland, Virginia, Pennsylvania, New York, Delaware, Washington DC , and West Virginia. Nomination will come from Management Board representative.
 - 8 academic members; to be nominated by STAC.
 - 4 Federal agency members; COE, USDA, NOAA, and USGS (Mark Bennett). Nomination will come from Management Board representative.

Timeline

- First meeting of the Modeling Lab Action was June of 2012
- Monthly meetings
- We have begun development of a draft report which should be completed in June.

Questions?