



**Modeling Lab Action Team Meeting
October 25th, 2012**

<http://www.chesapeakebay.net/calendar/event/18844/>

MINUTES

PARTICIPANTS

Mark Bennett – USGS	Gary Shenk – EPA/CBPO	Lewis Linker – EPA/CBPO	Amanda Pruzinsky – CRC/CBPO
Howard Townsend – NOAA	Kevin Sellner – STAC/SERC	Lee Currey – MDE	Larry Band – UNC
Don Weller – SERC	Ted Tesler – PA DEP	Bill Keeling – VA Dep. of Conservation and Recreation	Dave Montali – WV DEP
Marjy Friedrichs – VIMS			

ACTION ITEMS

- **NEXT MLAT MEETING** – December 10th, 2012 10AM – 3PM
 Location: USGS Baltimore Office Conference Room A, 522 Research Park Drive
 Baltimore, MD 21228
 Event Webpage: <http://www.chesapeakebay.net/calendar/event/18997/>
 Discussion Topics:
 - Discuss the governance of the Modeling Laboratory
 - Needs of the states (Bill, Ted, Lee, and Dave), River Basin Commissions, and universities
 - Review Guiding Principles, Mission Statement, and draft Modeling Lab Structure
 - Create an outline for the final report
 - Discuss overall cost of the Modeling Laboratory
- Mark Bennett will draft a Mission Statement and Guiding Principles for discussion at the December Meeting.
- Gary Shenk to write up short draft of Modeling Lab recommendations.
 - Larry Band and Don Weller will review Gary Shenk’s write up before the December Meeting.
- Bill Keeling will work on categorizing the WQGIT priorities and send to Gary Shenk, Dave Montali, and Lee Currey.
- MLAT will present initial findings and recommendations to the Management Board at their meeting January 10th, 2013.

TIMELINE

DECEMBER 10th, 2013

NEXT MLAT MEETING – December 10th, 2012 10AM – 3PM

JANUARY 10th, 2013

PROGRESS REPORT AND FEEDBACK – Present initial findings and recommendations to Management Board in January 10th, 2013.

JANUARY – MARCH 2013

MLAT will meet monthly to draft initial report.

MARCH 30th, 2013

DRAFT REPORT – Send out to members for internal review March 30th, 2013.

- Members should review the draft report before the April meeting.

APRIL 2013

The final report and presentation will be reviewed at the April meeting in preparation for the May 16th, 2013 Management Board meeting.

MAY 16th, 2013

DRAFT FINAL REPORT – Deliverable before summer 2013 – Draft final report to present to Management Board at May 16th, 2013 MB Meeting.

JANUARY MANAGEMENT BOARD PRESENTATION NOTES

- Strategic plan vs. implementation plan
 - Governance and structure must be part of the strategic plan
 - Scenarios for implementation should be included to help focus the effort
- Rational and justification – Focus this first presentation on why we need a Modeling Laboratory.
 - Gaining buy-in from stakeholders
 - Communicating understanding
 - Testing of the Model
 - In order to make the changes that the jurisdictions would like to see in the modeling structure, we must invest in it.
 - NAS Recommendation
 - Water Quality Goal Implementation Team – Goals and recommendations for the Midpoint Assessment
 - Operations, development, vs. research priorities
 - Address the fact that the Modeling Team cannot cover all of the priorities of the partnership with the current structure

- Must be a sustained effort
 - Core foundation and funding
 - Not based on proposals
 - Sustainable funding for core functions and staff with flexibility for work plans
 - Core professional staff that is sustainable
 - Research AND software professionals
- Vision Statement: (1) 5 year deliverables and (2) compare to what CBP would have without the Modeling Lab
- Could include an example of a Modeling Laboratory.
- Possible Presentation Breakdown: Objectives/Mission, Justification, Resource Needs, Funding Options, Governance, Vision Statement, Implication Scenarios.

RESEARCH, DEVELOPMENT, AND OPERATIONS DISCUSSION

- Should research and development occur together or can they occur separately?
 - There is development associated with research and operations separately
 - Research, translation, testing, development, and operations
 - Development standards for research
 - Operations to include applied research (climate change effects, etc.)
- Must be very clear about what we mean by “research.”
 - Actionable research of watershed restoration
 - Management driven science
 - Mission motivated with concrete deliverables
- Bay restoration focus with flexibility for TMDL focused research when needed
- Must define where short and long term development issues are handled
- Expand modeling structure to include cost benefit analysis, uncertainty analysis, sensitivity analysis, etc.
- Liaison between the Modeling Laboratory and the WQGIT (Lee Currey).
- Management driven science
 - Research is management focused based on the priorities of the Management Board and other Chesapeake Bay Program Partners

MISSION STATEMENT

The purpose of the Modeling Laboratory effort is to improve and communicate watershed and estuarine modeling to support the protection and restoration science which informs and guides management decisions in Chesapeake Bay Program Partnership

- Accelerate the translation of research into operational models and utilities
- Facilitate testing and bench marking of appropriate models for Chesapeake Bay Program operations
- Allow rapid modification of the code to allow for adaptive management
- Maximize operational efficiency of the Bay Modeling
- Provide credible modeling tools for stakeholders and facilitate operations for states, researchers, and other partners
- The governance of the Modeling Laboratory should be inclusive of major stakeholders and foster adaptive management

VISION STATEMENT

- 5 year deliverables
 - Compare to what CBP would have without the Modeling Lab

MODELING LABARTORY GUIDING PRINCIPLES

- 1) Research, development, and operations must all be addressed
 - a. Clear budgeting between the three components
 - b. These three components do not necessarily need to be physically located in the same place, but must have regular communication
 - c. Operations need to be connected to the Chesapeake Bay Program and Office
- 2) Sustainable dedicated core funding
- 3) Transferability
 - a. Regional focus with the ability to expand

- 4) Research and development is management focused
- 5) Scientific research must be of publishable quality
- 6) Formal methods to track and openly distribute model input data and products of the data (with meta data according to current standards)
- 7) Consider both regional and local issues across the watershed and estuary
- 8) Open source and modular
- 9) Transparency and communication should be considered in development and operations
 - a. Timely modeling documentation
 - b. Communication includes introductory operations documentation, programs, and training
- 10) Support co-development of Chesapeake Bay models

OTHER GOALS

- Incorporate post doc programs
- Cost effective