



Modeling Workgroup- Quarterly Meeting Minutes
April 17, 2012 10am-2:30pm
Chesapeake Bay Program Office, Joe Macknis Memorial
Conference Room (Fish Shack)
Annapolis, MD

<http://www.chesapeakebay.net/calendar/event/18188/>

Participants:

Lewis Linker- EPA/CBPO	Gary Shenk- EPA/CBPO	Billy Johnson- USACE/ERDC	Cathy Wazniak- MDDNR
Raleigh Hood- UMCES/CCMP	Mark Bennett- USGS	Sara Ahmed- ICPRB	Cherie Schultz- ICPRB
Ross Mandel- ICPRB	Gopal Bhatt- PSU	Qian Zhang- JHU	Kim de Mutsert- GMU
Arthur Butt- VADEQ	Ping Wang- VIMS/CBPO	Richard Tian- UMCES	Lee Currey- MDE
Bill Hunley- HRSD	Norm Goulet- NVRC	Mark Dubin- UMCES	Mike Langland- USGS
Anna Burnett- CRC	Karl Berger- MWCOG	Bill Keeling- VA	Craig Thomas- USACE
Carl Cerco- USACE	Larry Sanford- UMCES		

Announcements - Linker

- Due to a full agenda Ping's presentation will be taken off today's agenda and will be discussed in more detail at the July Quarterly Review
- Welcome of Dr. Richard Tian of UMCES to the CBPO Modeling Team.

Modeling Lab Action Team Status – Bennett (USGS)

Mark Bennett discussed the status of the action team formed to respond to the NAS recommendation for a Chesapeake Modeling Laboratory.

- Approved at the Principal Staff Committee and Management Board level
 - Action team will report back to the Management Board
- Should take less than a year; 8 academic members, jurisdiction members, federal, USDA, COE, NOAA, and USGS
- Probably a lot of conference call meetings rather than face to face
- Questions/comments:
 - a. Important to keep the end in mind (equitable, cost effective, way to restore and protect the bay), need full program participation
 - b. What role do the basin commissions play?
 - c. What is EPA's role?
 - d. Action team should keep in mind the importance of the assessment, under time constraints
 - e. What is the value added?

Expert Team Assessments of BMP and Management Action Refinements – Dubin (UMCES)

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

- New BMPs are being developed
- Refinements and improvements to current BMP efficiencies
- BMP protocol already established
 - Nutrient management group
 - Poultry litter group
 - Conservation tillage panel
 - LID Panel
 - Stream conservation
 - Forestry workgroup
 - Wastewater workgroup (looking at septic systems & new technologies)

For more information the presentation is available at

<http://www.chesapeakebay.net/calendar/event/18188/>

“CBP expert review panels”

Identification of Needs and Recommended Approach for the 2017 Mid-Point Assessment – Linker (EPA/CBPO)

Lewis Linker discussed the initial plans for refinements that are 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 Water Quality Goal Implementation Team.

- ✓ **Decision: Air recommendations approved by CBP Modeling Team to go forward to WQGIT**

For more information the presentation is available at

http://www.chesapeakebay.net/channel_files/18188/2017_next_gen_models_intro_linker.pdf

Identification of Needs and Recommended Approach for the 2017 Watershed Assessment – Shenk (EPA/CBPO)

Gary Shenk discussed initial plans for refinements that needed for the watershed model for 2017 assessment. He requested feedback, comments, ideas, and direction from the modeling team.

1. Lots of panels to incorporate into the watershed model
 - Question/comment: hard to understand, but thoughtful proposal, any way to put it into a white paper to be vetted?
2. Need consistency between tools
3. How will climate change be assessed?
4. PR is an essential aspect

6. No answer to the transparency issue

- **CBP Modeling Team needs to better understand the “3 Model” approach described and requested a white paper be developed on the topic by the July Quarterly Review. Need to better understand the trade-offs in this option and a White Paper is requested on subject to be distributed prior to the July Quarterly Review ready for WQGIT review**

For more information the presentation is available at

http://www.chesapeakebay.net/channel_files/18188/2012_04_17_gshenk_2017_wsm_modwg_.pdf

Identification of Needs and Recommended Approach for the 2017 Assessment of Tidal Waters – Linker (EPA/CBPO)

Lewis Linker lead a discussion about the initial plans for refinements needed for the estuarine and living resource models for the 2017 Assessment. He requested comments, ideas, and direction from the Modeling Team; initial plans were presented and discussed.

For more information the presentation is available at

http://www.chesapeakebay.net/channel_files/18188/2017_next_gen_models_wqstm_linker.pdf

Update on the CCMP Modeling Symposium – Hood (UMCES/CCMP)

Raleigh Hood discussed plans for the upcoming CCMP 2012 Modeling Symposium in May 2012. He proposed an April STAC workshop on a multiple model test case for shallow water simulation of the clarity/SAV water quality standard.

Chesapeake Bay TMDL Simulation and Management Support to the Army- Thomas (USACE)

Craig Thomas presented an innovative approach for an inventory of BMPs and land use on DOD sites in the Chesapeake Bay watershed. BMP data base tracks DOD Federal sites for each state. He noted that field verification is critical to determining load contributions and land boundaries; data was lacking for most federal facilities.

For more information the presentation is available at

http://www.chesapeakebay.net/channel_files/18188/army_tmdl_modeling_17apr12.pdf

James Chlorophyll Study – Butt

Arthur Butt discussed plans for a detailed multiyear study of chlorophyll in the tidal James River using augmented monitoring and modeling approaches will be discussed. Anticipated study availability in May 2015; trying to integrate with the CBP Modeling Lab.

For more information the presentation is available at

http://www.chesapeakebay.net/channel_files/18188/james_river_chlorophyll_study_4_17_12_aib.pdf

Status of the Lower Susquehanna Dams Study – Cerco (USACE)

Carl Cerco presented 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.

- **Regular updates on the status of this study will be provided to the Modeling Team.**

For more information the presentation is available at

http://www.chesapeakebay.net/channel_files/18188/mars_lswra_update.pdf

Coordination of Susquehanna Flats 2012 Sampling- Sanford (UMCES)

Larry Sanford reviewed some of the key studies that are underway or planned in the Susquehanna Flats this year with consideration of opportunities for coordination.

- An “SAV Bed of Unusually Large Size” appeared in 2005 in Susquehanna Flats and has been there ever since. It now is greater than SAV biomass ever seen historically in Susquehanna Flats.
- It’s postulated that it a result of an alternate ecological state in the Flats.
 - The question is, “What happened?”
- As of 2012 we have a lot of shallow water monitoring program data available in the Flats.
- Larry’s presentation and discussions among the various research teams is aimed to help organize collaborative efforts in the 2012 field work in the Flats.
 - **Notify Larry Sanford if you would like to be added to the listserv to get more information on the Susquehanna Flats efforts.**

For more information the presentation is available at

http://www.chesapeakebay.net/channel_files/18188/sfplans2012.pdf