

# MODELING WORKGROUP CONFERENCE CALL November 28<sup>th</sup>, 2012 1PM – 3PM

http://www.chesapeakebay.net/calendar/event/19010/

#### **PARTICIPANTS**

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Lee Currey –	Dave Montali – WV	Lewis Linker –	Amanda Pruzinsky –
MDE/Modeling WG	DEP/Modeling WG	EPA/Modeling WG	CRC/Modeling WG
Co-Chair	Co-Chair	Coordinator	Staff
Bill Angstadt – DE	Bill Keeling – VA	Steve Gladding –	Clifton Bell –
MD Agribusiness	Dep. of Conservation	NYSDEC	Malcolm Pirnie Inc.
Association	and Recreation		
Tertra Tech	Hassan Mirsajadi –	Helen Stewart – MD	Greg Busch – MDE
	DNREC	DNR	
Jack Meisinger –	Karl Berger –	Arthur Butt – VA	Gene Yagow – VA
USDA-ARS/STAC	Metropolitan	DEQ	Tech
	Washington Council		
	of Government		
Bill Brown – PA DEP	Normand Goulet –	Mary Jane Rutkowski	Dave Koran –
	Northern VA	– MDE	USACE
	Regional Commission		
Dinorah Dalmasy –	George Onyullo –	Ross Mandel –	Sheryle Quinn – US
MDE	DDOE	ICPRB	Dep. of Navy
Ted Tesler – PA DEP	Richard Tian –	Vimal Amin – MDE	Katherine Antos –
	UMCES/CBPO		EPA/CBPO
Gopal Bhatt – Penn	Guido Yactayo –		
State/CBPO	UMCES/CBPO		

#### **ACTION ITEMS**

- Modeling Workgroup Members were asked to send corrections and comments on both the Development of the Phase 6 Prototype Model (PQUAL) and Refinements to the Phase 6 Prototype PQUAL Model to Lewis Linker and Amanda Pruzinsky via track changes by Monday 12PM (noon) December 3<sup>rd</sup>, 2012.
  - o **Amanda Pruzinsky** and **Lewis Linker** will translate these work plans into the form that the Water Quality GIT needs for the December 3<sup>rd</sup>, 2012 deadline.
    - Development of the Phase 6 Prototype Model (PQUAL) task 2 will be reworded to clearly state that the AGCHEM sensitivities will be documented and analyzed with the purpose of determining its flaws and anomalous outputs, in order to improve the model during the switch to PQUAL.
    - Years will be added to the start and end dates of the work plans.

- Modeling Workgroup members were asked to send corrections and comments on both the Midpoint Assessment and Phase III WIP Schedule and the Guiding Principles to Katherine Antos and Lewis Linker via track changes by Monday 12PM (noon) December 3<sup>rd</sup>, 2012.
  - **Katherine Antos** and **Lewis Linker** will update the documents for the Water Quality GIT needs for the December 3<sup>rd</sup>, 2012 deadline.
- Clifton Bell recommended model collaboration and validation steps and was asked to send write up to Lewis Linker.
- **Bill Keeling** will be working with **Gary Shenk** to layout a concept for a review/collaboration period.
- The Modeling Workgroup will work to evaluate and document the scalability of the Phase 6 Model. The model may not be applicable on local scales. May need to evaluate separate tools for scalability issues.

#### **NEXT MEETING**

Modeling Quarterly January 8<sup>th</sup> – 9<sup>th</sup>, 2013 10AM – 3PM Suggested Topics:

- Review high priority work plans and progress
  - o PQUAL Update Gary Shenk and Lewis Linker
- Draft low priority work plans All
- Conowingo Reservoir USACE
- CMAQ updates and bidirectional Ammonia Robin Dennison
- Review/collaboration period Bill Keeling
- Additional Information that can be obtained from the Progress Runs (ex. estimate of hydrology) Bill Keeling

More information can be found on the event page: http://www.chesapeakebay.net/calendar/event/18873/

## **MINUTES**

Welcome and Introductions - Lee Curry, Dave Montali, and Lewis Linker

Chesapeake Bay Midpoint Assessment: Principles, Priorities, and Next Steps – Lee Currey and Dave Montali

Lee Currey and Dave Montali reviewed Larry Merrill's (WQGIT Chair) proposed presentation to the Management Board.

To view this presentation:

http://www.chesapeakebay.net/channel\_files/18150/proposed\_psc\_presentation\_11.2.12.pdf

Summary of Midpoint Assessment Priorities http://www.chesapeakebay.net/channel\_files/19010/summary\_of\_mpa\_leads\_2.pdf

### **Discussion and Questions**

- Will there be a change in state allocations?
  - O Virginia believes there is no option, but to change.
  - No official decision has been made.

## Development of the Phase 6 Prototype Model (PQUAL) – Lewis Linker

Initial work in the development of the Phase 6 Model for the 2017 Midpoint Assessment is to convert the current Phase 5.3.2 Model, which is a combination of AGCHEM and PQUAL module applications, to an entirely PQUAL application. This resultant PQUAL version will be the prototype Phase 6 Watershed Model that will be further refined by the addition of simulation years, monitoring stations, and updated BMP efficiencies for application to the 2017 Midpoint Assessment.

#### To view this document:

http://www.chesapeakebay.net/channel\_files/19010/development\_of\_phase\_6\_prototype\_model\_11-28-12.pdf

#### **Discussion and Questions**

- **ACTION:** Modeling Workgroup Members were asked to send corrections and comments on both the Development of the Phase 6 Prototype Model (PQUAL) and Refinements to the Phase 6 Prototype PQUAL Model to Lewis Linker and Amanda Pruzinsky via track changes by Monday 12PM (noon) December 3<sup>rd</sup>, 2012.
  - o **ACTION:** Amanda Pruzinsky and Lewis Linker will translate these work plans into the form that the Water Quality GIT needs for the December 3<sup>rd</sup>, 2012 deadline.
    - Development of the Phase 6 Prototype Model (PQUAL) task 2will be reworded to clearly state that the AGCHEM sensitivities will be documented and analyzed with the purpose of determining its flaws and anomalous outputs, in order to improve the model during the switch to PQUAL.
    - Years will be added to the start and end dates of the work plans.

# Refinements to the Phase 6 Prototype PQUAL Model – Lewis Linker

The initial prototype Phase 6 Model version essentially replicated the Phase 5.3.2 results in PQUAL. With acceptance of the initial Phase 6 Model work in March 2013, work will begin to add additional years to the simulation period to extend the simulation period from 1985 to 2011. This will also allow additional flow and water quality stations to be added to the Phase 6 Model. Refinements to the Phase 6 Model prototype will include 'nudging' loading/export sensitivities toward land-segment aggregate values associated with different of physiographic regions.

#### To view this document:

http://www.chesapeakebay.net/channel\_files/19010/refinements\_to\_the\_phase\_6\_prototy\_pe\_pqual\_model\_11-28-12.pdf

### **Discussion and Questions**

- **ACTION**: Modeling Workgroup Members were asked to send corrections and comments on both the Development of the Phase 6 Prototype Model (PQUAL) and Refinements to the Phase 6 Prototype PQUAL Model to Lewis Linker and Amanda Pruzinsky via track changes by Monday 12PM (noon) December 3<sup>rd</sup>, 2012.
  - o **ACTION**: Amanda Pruzinsky and Lewis Linker will translate these work plans into the form that the Water Quality GIT needs for the December 3<sup>rd</sup>, 2012 deadline.
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### Midpoint Assessment and Phase III WIP Schedule - Katherine Antos

Develop schedule to achieve an effective balance between sufficient review time for tool revisions/review/concurrence and sufficient time for target development and implementation planning. Actions on the schedule will include soliciting and prioritizing input from the Partnership, gathering data and conducting analyses to address midpoint assessment priorities, incorporating findings into the Chesapeake Bay Program modeling tools, as appropriate, reviewing results, developing Watershed Implementation Plans (WIPs) and milestones, and modifying the Bay TMDL, as necessary. The schedule will include approximate dates as well as recommended timeframes for completing actions. The schedule will be an appendix of the Midpoint Assessment Guiding Principles, and will be subject to change as the midpoint assessment progresses.

## To view the work plan:

http://www.chesapeakebay.net/channel\_files/19010/mpa\_priority\_workplan\_schedule\_11\_28\_12.pdf

To view the draft Guiding Principles document:

http://www.chesapeakebay.net/channel\_files/19010/guiding\_principles\_working\_draft\_1 1.26.12.pdf

## **Discussion and Questions**

- **ACTION**: Modeling Workgroup members were asked to send corrections and comments on both the Midpoint Assessment and Phase III WIP Schedule and the Guiding Principles to Katherine Antos and Lewis Linker via track changes by Monday 12PM (noon) December 3<sup>rd</sup>, 2012.
  - o **ACTION**: Katherine Antos and Lewis Linker will update the documents for the Water Quality GIT needs for the December 3<sup>rd</sup>, 2012 deadline.

# General Discussion of the Priorities and Topics - All

- **ACTION:** Evaluate and document the scalability of the Phase 6 Model. The model may not be applicable on local scales. May need to evaluate separate tools for scalability issues.
- **NOTE**: The WQGIT will accept grouping of related priorities into one work plan.
- **SUGGESTION:** Begin to use the word "clarity" instead of "transparency."
- **ACTION**: Clifton Bell recommended model collaboration and validation steps and was asked to send write up to Lewis Linker.