



Delaware River Basin Commission

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Steven J. Tambini, P.E.
Executive Director

Minutes

Water Quality Advisory Committee

March 1, 2018

Members & Alternates:

NYS DEC

Not in Attendance

EPA

Kuo-Liang Lai (remotely)

Brent Gaylord (remotely)

NJDEP

Frank Klapiński

Biswarup Guha

Environmental

Maya van Rossum (Delaware Riverkeeper Network)

Erik Silldorff (Delaware Riverkeeper Network)

Regulated Community Industrial

Bart Ruiters (Chemours)

Chris Conroy (Exelon)

DNREC

Dave Wolanski

PADEP

Tom Barron (remotely)

Academia/Science

John Jackson (remotely)

Local Watershed Organizations

Abigail Pattishall (Wildlands Conservancy)

Regulated Community Municipal

Jay Cruz (PWD)

Bryan Lennon (Wilmington Public Works)

National Park Service

Don Hamilton (remotely)

Eutrophication Model Expert Panel

Steve Chapra (Tufts University)

Carl Cerco (USACE, retired)

Robert Chant (Rutgers University, not present at WQAC)

Tim Wool (EPA Region 4)

Other Attendees:

Evelyn MacKnight (EPA)

John Yagecic (DRBC)

Namsoo Suk (DRBC)

Li Zheng (DRBC)

Tom Fikslin (DRBC)

Elaine Panuccio (DRBC)

Ron MacGillivray (DRBC)

Greg Cavallo (DRBC)

Steve Tambini (DRBC)

Edward Buchak (ERM & WRADRB)

Rohan Menon (Waste Management)

Phil Duzinski (PWD)

Joe Duris (USGS)

Peter Eschbach (DRBC)

Angela Padeletti (Partnership for the Delaware Estuary)

Susan Rosenwinkel (NJDEP)

Meg McGuire (Delaware Currents)

Eric Vowinkel (Rutgers University)

Michael Dillon (Manko Gold Katcher & Fox)

Marco Alebus (NJDEP)

Hernan Quinodoz (DRBC)

Jake Bransky (DRBC)

Helen Pang (NJDEP)

Steve Seeberger (NJDEP)

Andy Thuman (HDR)

Vic Bierman (LTI, modelling consultant to DRBC)

This was a special meeting between the Eutrophication Model Expert Panel and the Water Quality Advisory Committee. The meeting was called to order at 1:00 PM.

Presentation on work of the Eutrophication Model Expert Panel

Dr. Vic Bierman, LimnoTech Inc. (modeling consultant to DRBC) presented a summary of the Eutrophication Model Expert Panel meeting, which had occurred the previous day and the morning before the WQAC meeting. The presentation focused on the goal and approach of the modeling effort, described the progress on a linked EFDC and WASP8 model for the Delaware River and Bay, and provided an update on the progress of model development to date. The presentation is available at:

<http://www.nj.gov/drbc/library/documents/WQAC/030118/ExpertPanelUpdate.pdf>

Question and Answer Session

The remainder of the meeting was a question and answer session between the WQAC and the Eutrophication Model Expert Panel. Discussions included:

- Several members asked about how phytoplankton might be represented in the model. The panel indicated that WASP8 may include up to 5 classes of phytoplankton. For the Delaware Estuary, phytoplankton groups will be determined later in the project guided by data. Dr. Chapra noted that a principle of modeling called the “Principle of Parsimony” states that that a goal of model development is to use the simplest model that incorporates all essential elements related to the problem being addressed. There was a brief discussion about the state of the knowledge about Delaware Estuary submerged aquatic vegetation (SAV) and whether that might be included in the model. The panel indicated that WASP8 was sufficiently extensible to allow inclusion of SAV if needed. DRBC indicated that EPA3 is in the process of performing SAV mapping in the estuary.
- One participant indicated the importance of computer processor speeds in minimizing model run times and recommended that investment in high speed processing computers would be an efficient means of reducing the overall model development time.
- The group discussed the importance of representing light extinction in the model and discussed an upcoming DRBC light extinction field measurement project.
- Several members indicated the important role of marshes in both water storage and solids dynamics. The panel again cited the extensibility of WASP8 as allowing incorporation of important functions.
- One participant mentioned that DRBC should generate and distribute a list of target after monitoring parameters for other organizations or agencies to coordinate and share information.

Adjournment

The meeting was adjourned at approximately 3:00 PM.