



**Delaware River Basin Commission**

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**Carol R. Collier**  
 Executive Director

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**SUMMARY MINUTES  
 WATER QUALITY ADVISORY COMMITTEE  
 DECEMBER 12, 2012**

**ATTENDEES:**

<b>Members:</b> <b>NYS DEC</b> ( <i>via telephone</i> ) Scott Stoner	<b>DE DNREC</b> Dave Wolanski ( <i>via telephone</i> )
<b>NJ DEP</b> Debra Hammond	<b>PA DEP</b> Tom Barron ( <i>via telephone</i> )
<b>EPA</b> Wayne Jackson, EPA, Region II ( <i>via telephone</i> ) <i>Not represented, EPA, Region III</i>	<b>Academia Representative</b> John Jackson, Stroud Water Research
<b>Environmental Organization Representatives</b> Maya van Rossum, Delaware Riverkeeper	<b>Regulated Community Representatives</b> Al Pagano, E.I. DuPont
<b>National Park Service</b> <i>Not represented</i>	<b>Local Watershed Organization</b> Abigail Pattishall, Wildlands (alt. for C.Kocher)
<b>DRBC:</b> Greg Cavallo, Geologist Carol Collier, Executive Director Tom Fikslin, Manager, Model. Mon.& Assess. Jeff Iudicello, Water Resource Eng./Modeler Bob Limbeck, Watershed Scientist Ron MacGillivray, Env. Toxicologist Ken Najjar, Manager, Plan. & Info. Tech. Erik Silldorff, Aquatic Biologist Namsoo Suk, Supervisor, Modeling John Yagecic, Supervisor, Stds. & Assmt.	<b>Other Attendees:</b> Kelly Anderson, PWD Vic Bierman, Jr., LimnoTech Carl Cerco, US ACOE Bob Chant, Rutgers Steve Chapra, Tufts University Jason Cruz, PWD Jeff Fischer, USGS-NJ Jack Gibs, USGS-NJ Len Gipson, PWD Dennis Greene, O'Brien & Gere Josef Kardos, PWD Andy Thuman, HDR/HydroQual Kirk White, USGS-PA Biswarup Guha, NJDEP

The meeting was called to order at 9:40 am by Erik Silldorff, WQAC Liaison (chair and vice-chair were absent)

**1. Administrative**

- Members of the Modeling Expert Panel (Dr. Carl Cerco, Dr. Bob Chant, Dr. Steve Chapra, Dr. Vic Bierman) were introduced and each provided a broad overview of their background, experience, and relevant expertise for modeling estuaries and the dynamics of nutrients and dissolved oxygen.

- Meeting minutes from March 21, 2012 were approved without changes.
- Organization: Denise Hakowski (USEPA-R3) has been re-assigned and will no longer serve on the WQAC.

## **2. Review of Nutrient Management Strategy**

Tom Fikslin gave a PowerPoint presentation<sup>1</sup> entitled, “Nutrient Management Strategy for the Delaware River Estuary” describing the background, motivations, and directions for addressing nutrients for the Delaware Estuary. This sparked a number of discussions related to monitoring and modeling in the estuary, including the likely need to accurately model the Delaware Bay.

## **3. Expert Panels for Nutrient Criteria Development**

Erik Silldorff gave a PowerPoint presentation<sup>1</sup> entitled, “Delaware Estuary Nutrient Criteria: Need & Use of Expert Panels.” The presentation covered the original ideas for convening experts around nutrient questions, and the different roles and different groups of expertise needed during the process. Like with the previous presentation, these slides sparked further discussions about the modeling efforts and how the later phases of ecological consideration might interact with the near-term modeling. A recommendation was made to have DRBC serve as liaison among expert panels, with additional direct interaction among the Expert Panels as-needed.

## **4. Review of Past Modeling Efforts**

Namsoo Suk gave a PowerPoint presentation<sup>1</sup> entitled, “Development of Delaware Estuary Hydrodynamic and Eutrophication Model,” including a review of past modeling efforts and topics to be discussed with the Modeling Expert Panel. This presentation provided an opportunity for direct interaction between WQAC members and the Modeling Expert Panel members on a broad suite of the modeling issues for the estuary. Among the topics discussed were:

- domain and dimensions, including extent of tributary modeling
- the value of including sediment transport algorithms
- the need, value, and challenge of modeling tidal marshes
- the role of 1-D models in the overall modeling effort
- modeling and quantifying tributary and non-point source loads of nutrients
- computing resources as a possible limitation for model complexity

One question that was raised was the value of adding expertise to complement the existing 4 members on the Modeling Expert Panel. Although a number of possible areas of expertise were identified, the WQAC and Expert Panel members generally agreed that the current complement was sufficient to initiate and guide modeling effort, and that any additional expertise would be clarified later in the process and could be added at that time.

Meeting Adjourned @ 12:45 pm.

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<sup>1</sup> Presentations from the meeting are available at <http://www.state.nj.us/drbc/about/advisory/quality/>