



Delaware River Basin Commission

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Steven J. Tambini, P.E.
Executive Director

Minutes
Water Quality Advisory Committee
September 30, 2019

Members & Alternates:

NYS DEC

Sarah Rickard (remotely)

EPA

Kuo-Liang Lai (remotely)
Wayne Jackson (remotely)

NJDEP

Frank Klapinski

Environmental

Maya van Rossum (Delaware Riverkeeper Network)

Regulated Community Industrial

Bart Ruiters (Chemours)

DNREC

Dave Wolanski (remotely)

PADEP

Jennifer Orr-Greene

Academia/Science

John Jackson

Local Watershed Organizations

Abigail Pattishall

Regulated Community Municipal

Jay Cruz (PWD)
Bryan Lennon (Wilmington Public Works)

National Park Service

Rich Evans (remotely)

Other Attendees:

Alice Baker (Penn Future)
John Yagecic (DRBC)
Namsoo Suk (DRBC)
Ron MacGillivray (DRBC)
Elba Deck (DRBC)
Li Zheng (DRBC)
Elaine Panuccio (DRBC)
Jake Bransky (DRBC)
Helen Pang (NJDEP)
Ian Piro (Isle Utilities)
Tom Amidon (DRBC)
Kelly Somers (EPA)
Kelly Anderson (PWD)
Steve Seeberger (NJDEP)
Kristin Regan (EPA)

Bill Brown (PADEP, remotely)
Charles Hurst (Delcora, remotely)
Katherine Bently (EPA, remotely)
Don Hamilton (NPS, remotely)
Greg Voigt (EPA, remotely)
Greg Wacik (USACE, remotely)
Biswarup Guha (NJDEP)
Nicole Brown (AECOM)
Christopher Curran (AECOM)
Meg McGuire (Delaware Currents)
Eloise Gibby (Greeley and Hansen)
Marzooq Alebus (NJDEP)
Sheila Eyler (USFW, remotely)
Eric Vowinkel (Rutgers University)
Michael Dillon (Manko Gold Katcher & Fox)
Erik Silldorff (Delaware Riverkeeper Network)
Jean Malafronte (ANDRIS Consulting)

The meeting was called to order at approximately 9:40 AM by John Yagecic, temporarily filling in for Bart Ruiters.

Meeting Minutes

Draft minutes from the May 14, 2019 meeting had been previously provided to members for review.

John Jackson moved that the May 14, 2019 minutes be approved, and Frank Klapinski seconded the motion. The minutes were unanimously approved.

Approved minutes are posted on the DRBC web site at:

<https://www.nj.gov/drbc/library/documents/WQAC/051419/minutes.pdf>

Election of WQAC Chair

Bart Ruiters' term as chair of the WQAC ended. DRBC inquired with several members to see who might be available to serve as chair. Frank Klapinski of NJDEP is available. Jay Cruz moved to elect Frank Klapinski as chair and Maya van Rossum seconded the motion. Frank Klapinski's election as chair was unanimously approved. Frank Klapinski will serve as chair for a period of approximately one year.

Discussion of Draft Report on Non-DO Nutrient Endpoints

DRBC issued a task order to the Academy of Natural Sciences of Drexel University (ANSDU) in 2018 to query literature and experts with a goal of developing a limited prioritized list of non-DO estuary nutrient endpoints that could inform nutrient criteria selection. This task order was developed in response to discussions at a prior WQAC meeting. ANSDU completed a draft of the resulting report and DRBC sent the draft report to the WQAC and participants by e-mail dated September 3, 2019. DRBC allowed a 90-day review period, requesting comments by December 6, 2019.

The group discussed the draft report. John Jackson recommended that the report be expanded to include considerations of nutrient impacts on tidal marshes (ranging from submerged to terrestrial) and epiphytic density, for which a larger body of existing literature is understood to exist. Jackson also recommended that ANSDU add a summary or synthesis to the report. Erik Silldorff indicated that the report should consider site-specific endpoints to address indirect nutrient impacts. Silldorff recommended that ANSDU consider evaluations of broad findings developed for other systems including San Francisco Bay and coastal eutrophication studies. Silldorff indicated that each system is different and will respond differently. Silldorff indicated that the Delaware Estuary may be more similar to San Francisco Bay in some respects than it is to Chesapeake Bay. Maya van Rossum suggested that potential harms associated with high nutrient conditions are being overlooked.

Both Jackson and Silldorff agreed to provide comments and citations of other work that ANSDU should consider. Yagecic agreed to provide those items to ANSDU upon receipt to allow for additional time for consideration and incorporation.

Nutrient Criteria Plans

John Yagecic reviewed the time line of nutrient criteria plans developed by DRBC. DRBC published a nutrient criteria plan on its website in 2013. Under that plan, DRBC would address revised DO criteria first, followed by a more comprehensive effort to develop numeric nutrient

criteria. In subsequent years, the Commission deliberated on its approach to DO criteria and the completion date targets listed in the 2013 plan were not met.

As part of its Clean Water Act 106 Grant coordination, EPA indicated that 106 Grant funding could be withheld due to the missed completion date targets in the 2013 plan and DRBC not having developed a revised nutrient criteria plan. After discussion and negotiation, EPA agreed that 106 Grant funding would not be withheld provided that a revised nutrient criteria plan be submitted to EPA no later than November 30, 2017 and that the plan call for numeric nutrient criteria targets to be developed concurrently with revised DO criteria. DRBC agreed that providing criteria and/or limits (DO, ammonia, ammonia toxicity, TN, and TP) in the same rulemaking would provide a higher level of certainty to the regulated community.

DRBC submitted to EPA a revised draft nutrient criteria plan in November 2017 and shared the draft plan with the WQAC by e-mail dated March 29, 2018. The revised draft 2017 plan envisioned using the eutrophication model to identify ambient TN and TP levels consistent with new DO criteria and establish those TN and TP levels as nutrient criteria. Several stakeholders submitted comments to DRBC on the revised draft 2017 nutrient criteria plan. One agenda item for the May 2019 WQAC meeting was response to those comments. At that meeting, several members requested a special meeting in the fall focused primarily on the nutrient criteria plan. This meeting of the WQAC (September 30, 2019) was that special meeting. DRBC re-shared the revised draft 2017 nutrient criteria plan in preparation for the special meeting, which prompted a new round of comments including a second round of new comments from EPA and a letter to the WQAC from the Delaware Riverkeeper Network (attached).

Several stakeholders expressed dissatisfaction with the 2017 plan approach especially on single chemical (DO) endpoint. John Jackson pointed to a lack of cause and effect from TN and TP in the 2017 plan. Jackson indicated that the effects of low DO were more obvious but that the low DO might mask the impacts of elevated nutrients. John Yagecic and Tom Amidon explained that DRBC plans to evaluate the potential impact of nutrients on primary productivity utilizing the model currently under development, and to establish nutrient criteria concurrent with the designated use evaluation to the extent such criteria are scientifically defensible.

Erik Silldorff presented slides indicating that 1) the Delaware River estuary is a high nutrient system due largely to anthropogenic inputs; 2) the system is a high-energy system that does not stratify, preventing the pervasive DO depletions observed in other systems; and 3) scientific consensus that estuarine eutrophication manifested & measured with multiple water quality & ecological endpoints.

Jay Cruz indicated that DO is recognized as a problem and dischargers see the need to address that problem. Jay Cruz stated it was unclear what other nutrient problem existed in the Delaware.

Marco Alebus of NJDEP suggested that it might be better to deal with known impacts such as dissolved oxygen, rather than speculating on potential impacts. Also, Mr. Alebus noted that nutrients are not likely limiting productivity under current conditions.

The group discussed the previous activity and recommendations of the nutrient subcommittee from the 2008 – 2009 time period. In their letter, Delaware Riverkeeper Network recommended

re-convening nutrient criteria subcommittee. Bart Ruitter expressed support for this recommendation. The group discussed whether nutrient criteria plan development should be deferred until after the model is completed. There was also discussion about what the recommendation actually was regarding sequencing of revised DO criteria and nutrient criteria. Steve Tambini reminded the group that DRBC staff has an obligation to follow Resolution 2017-4. Committee members also asked about the levels of dissolved oxygen that will be considered in the use attainability analysis based on the DO needs study performed by ANSDU, and how the DRBC intended to perform its highest attainable use evaluation.

For the upcoming November meeting, the group sought to have DRBC summarize what it understood the consensus to be, and to better describe its approach to implementing Resolution 2017-04, for further discussion and consideration.

Follow-up Requests

Bart Ruitter requested that DRBC prepare to discuss how use attainability will be considered in the designated use / DO project at the next meeting.

Jay Cruz requested that PWD's comments on the DO needs report be addressed.

Adjournment

Bart Ruitter moved to adjourn and Jay Cruz seconded the motion. The motion passed unanimously and the meeting adjourned at approximately 1 PM.