

**Draft Minutes of the
February 18, 2015, Meeting of the
Water Resources Advisory Committee (WRAC)**

Dr. Robert Traver called the meeting to order at 9:36 a.m. on Wednesday, February 18, 2015, in Room 105 of the Rachel Carson State Office Building, Harrisburg, PA.

The following committee members were present:

Myron Arnowitz, Clean Water Action
Harry Campbell, Chesapeake Bay Foundation
Robert Cavett, Merck & Co.
Andrew Dehoff, Susquehanna River Basin Commission
Jeff Hines, York Water Supply
John Jackson, Stroud Water Research Center
Gary Merritt, NSG
Cory Miller, University Area Joint Authority
Dean Miller, Pennsylvania Water Environment Association
Stephen Rhoads, Shell Oil
Jeff Shanks, Waste Management
Dr. Robert Traver, Villanova University

The following committee members were not present:

Don Bluedorn, Babst, Calland, Clements, Zomnir
Arthur Gazdik, Groundwork Civil, LLC
Sherene Hess, League of Women Voters
Jennifer Reed-Harry, PennAg Industries Association
John Schombert, 3 Rivers Wet Weather
Chuck Wunz, Wunz Associates

The following DEP staff members were present:

Tom Barron, Bureau of Point and Non-Point Source Management
Heidi Biggs, Bureau of Point and Non-Point Source Management
Bill Brown, Bureau of Point and Non-Point Source Management
Sean Gimbel, Office of Water Management
Rod Kime, Bureau of Point and Non-Point Source Management
Rod McAllister, Bureau of Point and Non-Point Source Management
Charlie McGarrell, Bureau of Point and Non-Point Source Management
Kevin McCleary, Bureau of Point and Non-Point Source Management
Michelle Moses, Bureau of Regulatory Counsel
Jen Orr, Bureau of Waterways Engineering and Wetlands
Molly Pulket, Bureau of Point and Non-Point Source Management
Kristen Schlauderaff, Bureau of Point and Non-Point Source Management
Dustin Shull, Bureau of Point and Non-Point Source Management
Paula Sviben, Office of Water Management
Gary Walters, Bureau of Point and Non-Point Source Management

The following guests were also present:

Will Dando, PA Coal Alliance

Jim Erb, API

Steve Frank, NRG

Josie Gaskey, PACA

Nick Kratz, Capital Associates

Aaron Maurer, Waste Management

Approval of Minutes – A motion to approve the minutes of the September 26, 2014, meeting was made by Stephen Rhoads and seconded by Gary Merritt. The minutes were approved by unanimous vote.

Triennial Review of Water Quality Standards (TR16) – Tom Barron of the Bureau of Point and Non-Point Source Management discussed the projected scope and purpose of the next Triennial Review of Water Quality Standards. The Triennial Review is a requirement of Section 303(c)(1) of the federal Clean Water Act, which requires states to review and revise as necessary their water quality standards at least once every three years. Mr. Barron included the following items for consideration in this triennial review: updates to Table 3 at 25 Pa Code § 93.7 (relating to specific water quality criteria) for ammonia and *E. coli*; clarification and specific reference in 25 Pa Code § 93.8d(c) to use the Biotic Ligand Model for development of site-specific water quality criteria for copper; methyl mercury human health fish tissue-based criterion updates and guidance; Methyl Tertiary-Butyl Ether (MTBE) human health criterion and advisory updates; chloride and sulfate aquatic life criteria pending the results of current research and toxicity testing; upgrade site-specific and/or provisional criteria to statewide, regional or site-specific criteria in 25 Pa Code Ch. 93; clarification and update for Great Lakes water quality criteria to default to statewide criteria if none are available at the regional level; further clarification in 25 Pa Code §93.2(b), § 93.9(b), and drainage lists about the application of water quality standards established under interstate or international compacts or agreements; reaffirm the existing exclusions of “fishable/swimmable” use portions of the Delaware River and Lake Erie basins are still applicable; and updates to correct typographical errors. Mr. Barron also discussed the scope of changes anticipated for 25 Pa Code Ch. 16 (relating to the Water Quality Toxics Management Strategy – Statement of Policy), which include the following: updates to methodologies/protocols for the development of aquatic life and/or human health criteria; create an online resource to store site-specific and provisional criteria; updates to 25 Pa Code §16.102 (relating to Approved EPA Analytical and Detection Limits) and corrections to referenced documents and legal citations. Mr. Barron said that DEP hopes to conclude this Triennial Review in November 2016.

Ionic Composition of PA Reference Streams – Molly Pulket of the Bureau of Point and Non-Point Source Management presented the results of studies conducted by DEP to characterize the ionic composition of Pennsylvania’s surface waters. These studies were performed in order to address concerns raised over development of chloride and sulfate criteria during the previous triennial review. Ms. Pulket described the major cations (calcium, magnesium, and sodium), anions (bicarbonate, chloride, and sulfate) and the

formulas used to calculate the milligram equivalents and charge imbalance used to determine the quality of the data. Ms. Pulket described the location of the 56 reference stations used in DEP's study and summarized the ionic composition of waters according to the three major physiographic provinces of Pennsylvania (Appalachian Plateau, Ridge and Valley, and Piedmont). Bicarbonate and calcium were the major ions in all three provinces. Ms. Pulket then described a second study that used SRBC's ion data, which included samples collected between 1985 and 2013. SRBC's data revealed that calcium and bicarbonate were the major ions in the Ridge and Valley Province and Piedmont Province, while calcium and sulfate were the major ions in the Appalachian Plateau Province.

Stroud Study: Impact of Sulfate on Mayflies – Rod McAllister of the Bureau of Point and Non-Point Source Management presented an overview of a study DEP has contracted with Stroud Water Research Center that will determine the impact of sulfate on mayflies. Mr. McAllister explained that this study is modeled after a similar study Stroud performed in 2014 regarding the toxicity of chloride on mayflies. In the sulfate study, Stroud will use water from Spruce Run, Union County, East Branch White Clay Creek, Chester County, and Cedar Run, Clinton County to test the acute and/or chronic toxicity of sulfate on the following species: *Centroptilum triangulifer*, *Centroptilum semirufum*, *Procladius fragilis*, *Ephemerella invaria*, *Leptopheblia cupida*, and *Maccaffertium modestum*. Mr. McAllister noted that Stroud is expected to complete the sulfate study by December 31, 2015.

Nutrient Assessment Protocol – Charles McGarrell of the Bureau of Point and Non-Point Source Management delivered a presentation on a proposed methodology for identifying nutrients as a cause of aquatic life use impairments in wadeable streams. Mr. McGarrell indicated the proposed methodology will rely on the following three components: macroinvertebrate community characteristics, phosphorus and nitrogen levels, and diurnal dissolved oxygen fluctuations.

Atlantic Watersheds Warm Water Wadeable Fish IBI – Dustin Shull of the Bureau of Point and Non-Point Source Management presented material on the development of a fish index of biotic integrity for warm water wadeable streams. Mr. Shull noted the Delaware watershed was removed from the proposal because it has a significantly different distribution of sensitive species than the Susquehanna and Potomac watersheds. As a result the proposal will apply to Susquehanna and Potomac River watersheds. Using Wyalusing Creek as an example, Mr. Shull showed how the proposed IBI would work. Mr. Shull also pointed out that dams are a major problem because they can block the natural movement of sensitive fish species.

Implementation of Act 162 of 2014 – Jen Orr of the Bureau of Waterways Engineering and Wetlands gave an overview of DEP's efforts to implement Act 162 of 2014. Ms. Orr described how Act 162 amended the Pennsylvania Clean Streams law to allow applicants for individual NPDES stormwater construction permits to choose either to implement riparian buffers or implement equivalent best management practices in certain cases. Act 162 also added provisions pertaining to offsetting riparian buffers. Ms. Orr explained

how Act 162 would impact applications for new permits, permit renewals, permit modifications, and phased permits. Ms. Orr also noted the materials DEP has made available to the public via the Department's website (keyword: Act 162), which include webinars, interim final technical guidance, and frequently asked questions. Ms. Orr also noted DEP was developing a technical guidance document to address equivalency demonstration projects and another to deal with offsetting.

General Discussion – WRAC members requested additional involvement in reviewing relevant materials early in the development process. Members cited the Act 162 guidance documents as an example of DEP falling short in engaging the Committee on important policies. Members also discussed the potential for lengthening meetings, either by starting earlier or continuing through the afternoon, in order to accommodate the consideration of additional materials. The Chair thanked DEP for delivering the meeting materials for the meeting well in advance of the meeting. However, members also requested additional time to review meeting materials in the future, especially with respect to the upcoming Triennial Review.

Public Comment Period – No comments were made by the public.

Next Meeting Date – The next scheduled WRAC meeting is May 27, 2015. The meeting will be held in the Susquehanna Room of DEP's Southcentral Regional Office.

Adjourn – The meeting adjourned at 11:25 a.m.