

**Minutes of the  
January 25, 2018 Meeting of the  
Water Resources Advisory Committee (WRAC)**

**Call to Order, Introductions and Attendance -**

**The following committee members were present:**

Myron Arnowitz, PA Clean Water Action  
Harry Campbell, Chesapeake Bay Foundation  
Robert Cavett, Merck & Co  
Kent Crawford  
Andrew Dehoff, Susquehanna River Basin Commission  
Jeff Hines, York Water Company  
John Jackson, Stroud Water Research Center  
Gary Merritt, NSG  
Dean Miller, Pennsylvania Water Environment Association  
Steven Rhoads  
Jeff Shanks, Waste Management

**The following committee member was present (via phone):**

Chuck Wunz, Wunz Associates

**The following committee members were not present:**

Theo Light, Shippensburg University  
Cory Miller, UAJA  
Steve Tambini, Delaware River Basin Commission

**The following DEP staff members were present:**

Sean Gimbel, Office of Water Programs  
Mark Hoger, Bureau of Clean Water  
Hayley Jeffords, The Policy Office  
Hoss Liaghat, Office of Water Resources Planning  
Josh Lookenbill, Bureau of Clean Water  
Lee McDonnell, Bureau of Clean Water  
Michele Moses, Bureau of Regulatory Counsel  
Jay Patel, Bureau of Clean Water  
Tim Schaeffer, Office of Water Programs  
Dustin Shull, Bureau of Clean Water  
Steve Taglang, Bureau of Clean Water  
Gary Walters, Bureau of Clean Water

**The following guests were also present:**

John Yagecik, Delaware River Basin Commission

**Review and Approval of Minutes** – Harry Campbell made a motion to approve the minutes of the October 25, 2017 meeting. Steven Rhoads seconded the motion. The minutes were approved by unanimous vote.

**Integrated Water Quality Report** – Gary Walters, Bureau of Clean Water - gave an overview of what the format for the 2018 Integrated Water Quality Report. The goal is to make sure that the public can more accurately understand and access the report. Currently, the data is presented via tables, but the new report will use graphs and charts to increase accessibility. The raw data tables will still be accessible in the new report, but will not be the focus. This report overall will give the Department the opportunity to highlight progress (the intermediate steps) and not just the end goal.

**Continuous Instream Monitoring Protocol** – Mark Hoger, Bureau of Clean Water – explained streams, rivers and lakes are dynamic systems that often require monitoring on a frequent basis to better understand the larger picture of water quality. As a result, the Division of Water Quality Standards uses deployable instream monitors that collect data up to every 15 minutes. The monitors measure four parameters: water temperature, specific conductance, pH and dissolved oxygen. Monitors can also be configured to measure additional stream properties such as turbidity and water depth. Deployments are usually for one year, but may be shortened to capture time periods of specific interest. For example, during the summer, dissolved oxygen can become critically low compared to other times of the year. Continuous data are valuable for a variety of purposes including: characterizing baseline stream conditions; describing seasonal and diel (24 hour period) fluctuations; documenting potential violations of water quality criteria. Continuous data can also be used in conjunction with other measurements to estimate loading or establish continuous data for parameters that are difficult to collect frequently. Most importantly, operation of a continuous water quality monitor produces a record that can be processed and reported to the public. Sensors that are used to measure water quality require meticulous field observation, cleaning, and calibration procedures. Additionally, the data require correction, grading, and final approval

**Macroinvertebrate Story Map** – Dustin Shull, Bureau of Clean Water – demonstrated a new online tool: “Looking Below the Surface” (the macroinvertebrate story map), which is designed to inform and educate the public about PA DEP's benthic macroinvertebrate dataset. Not all streams and rivers are created equal, so DEP has developed unique macroinvertebrate collection methods for various stream types. DEP uses these differing methods to get a picture of water quality and ecosystem integrity. This story map touches on why benthic macroinvertebrates are so important and how they are used to measure water quality. In addition, the Department has developed a macroinvertebrate taxa viewer. Macroinvertebrates are used throughout the world as indicators of water quality. Macroinvertebrate community assessments are efficient and powerful because they offer the ability to assess short-term and long-term, cumulative effects of many ecosystem stressors, including both chemical and physical factors. To address the complexities of different types of streams and the macroinvertebrate communities that may prefer certain physical or chemical features, the Department has created three unique macroinvertebrate collection methods. There is an app which allows users to view and download macroinvertebrate and associated data collected across the state. These data can be exported into several file types including gif, jpg, pdf, png, xlsx, and csv.

**Wastewater Guidance Update** - Jay Patel, Bureau of Clean Water - Jay Patel, Bureau of Clean Water followed up on his presentation at the October 25, 2017 WRAC meeting on the update to the “Domestic Wastewater Facilities Manual (DWFm) which was last revised in 1997. The DWFm provides guidance to both permitting staff and those preparing Water Quality Management Permit Applications for projects that propose design and construction standards for domestic wastewater sewer systems, pumping stations, and wastewater treatment facilities. The document updates existing design standards and establishes design standards for new technologies for domestic wastewater treatment that had no design standards in 1997. The changes will improve the ability of the Department to be consistent in the permitting of domestic wastewater facilities statewide. Unless stated otherwise, most of the proposed changes in this pre-draft document bring the manual into alignment with the 10 States Standards. The Department requests comments from WRAC in the May/June 2018 timeframe. Rob Cavett offered to touch base with Cory Miller, who is coordinating these comments.

**General Discussion** – Members asked for clarification on the following topics in the future: Recent Supreme Court Ruling on Waters of the United States; Recent settlement on discharges from power plants; Effluent Limitations Guidelines.

**Public Comment Period** – No comments from the public.

John Jackson motioned to adjourn the meeting. The motion was seconded by Kent Crawford.

The meeting adjourned at 12:35 p.m.