



**Minutes of the  
March 28, 2019 Meeting of the  
Water Resources Advisory Committee (WRAC)**

**Call to Order, Introductions and Attendance** –John Jackson called the meeting to order at 9:30 am on Thursday, March 28, 2019 in Room 105 of the Rachel Carson State Office Building, Harrisburg, PA. Participation in this meeting of 16 members represents a quorum.

**The following committee members were present:**

Shirley Clark, Pennsylvania State University  
Kent Crawford  
Andrew Dehoff, Susquehanna River Basin Commission  
John Jackson, Stroud Water Research Center  
Kevin Gilmore, Bucknell University  
Gary Merritt, NSG  
Cory Miller, UAJA/PDMA  
Stephen Rhoads  
Jeff Shanks, Waste Management  
Steve Tambini, Delaware River Basin Commission  
Charles Wunz, Wunz Associates

**The following committee members were present (via phone):**

Harry Campbell, Chesapeake Bay Foundation  
Jenifer Christman, Western Pennsylvania Conservancy  
Jeff Hines, York Water Company  
Dean Miller, Pennsylvania Water Environment Association  
Sara Whitney, Pennsylvania Sea Grant

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

Myron Arnowitz, PA Clean Water Action  
Theo Light, Shippensburg University

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

Jay Braund, Bureau of Clean Water  
Sean Furjanic, Bureau of Clean Water  
Keith Salador, CAC  
Steve Taglang, Bureau of Clean Water  
Matt Walderon, Office of Water Resource Planning  
Jill Whitcomb, Bureau of Clean Water  
Diane Wilson, Bureau of Clean Water

**The following guests were also present:**

Mark Bowen, NTM Engineering  
Jodie Gasky, PACA  
Grant Gulibon, PA Farm Bureau



Matt Genchur, White Township, Indiana County  
Amanda Hess, Villanova  
Renee Reber, American Rivers  
Alex Ridyard, Philadelphia Water Department  
Grant Gulibon, PA Farm  
Rob Traver, Villanova  
Tom Wilson, W Engineering, LLC

**Review and Approval of Minutes from January 24, 2019 Meeting** – Andrew Dehoff made a motion to approve the minutes. Gary Merritt seconded the motion. The motion was approved by unanimous vote.

**Delaware Estuary Program - Matt Walderon – Office of Water Resource Planning,** discussed a program undertaken by DEP’s Coastal Zone Resources Management Program to explore the utility of sidescan sonar imaging for freshwater mussel mapping in the tidal Delaware River. The goal is to create qualitative data for the mussel beds in four density categories: None/Sporadic/Common/Bed. Using this data, the researcher creates polygons for GIS. Researchers did imaging for Trenton to Little Tinicum Island and Trenton to Tioga Marine Terminal. The conclusions of the research are that sidescan imagery can be an effective screening and mapping tool for mussels primarily in soft sediments. Ground-truthing is vital to accurate interpretation of acoustic data, especially in hard substrates. Next steps for the project include completion of sidescans, videos and polygons.

**PAG-01 Technical Recommendations and Stormwater Manual Updates – Sean Furjanic, Bureau of Clean Water,** explained that DEP conducted a series Chapter 102 Listening Sessions in 2017 which identified a “small project general NPDES permit” as the number one need for both the regulated community and County Conservation Districts. Work on this permit (PAG-01) has been ongoing since 2017 and DEP may be reaching the point of publishing a draft soon. PAG-01 would apply to earth disturbances less than 5 acres, subject to additional qualifiers such as ineligibility in Special Protection Waters (High Quality and Exceptional Value). The goal is to produce a generalized stormwater analysis that meets regulatory requirements and simplifies preparation and reviews for low risk projects. DEP engaged Villanova to assist with developing technical criteria. Mr. Furjanic then handed the discussion over to Villanova to discuss the preliminary technical approach for PAG-01 and progress made to date in updating the Pennsylvania Stormwater BMP Manual, which DEP plans to rename the Post Construction Stormwater Management (PCSM) Manual. It is noted that development of PAG-01 technical criteria was an exercise separate from the PCSM Manual although this effort has helped inform its development. **All the concepts presented are preliminary and are subject to change.**

**Robert Traver and Amanda Hess, Villanova University,** discussed their research and work to date.

Regarding the stormwater analysis for PAG-01, Dr. Hess explained that the focus is on the following:

- Limiting areas of impervious surface
- Impervious to pervious surface ratio of 4 to 10% is generally considered the point where impact caused by runoff from impervious surfaces to the stream can be measured
- Sustainable green solutions (disconnection practices)
  - low maintenance / longevity
  - similar flow pattern to natural performance
- Removal of 1.5-inch storm
  - “First flush” of pollutants
- Meeting  $\Delta 2$  volume and peak rate from 10-, 25-, 50-, and 100-year/24-hour storm events

About the Stormwater Manual Update, Dr. Traver stated that the Best Management Practices (BMPs) also known as Stormwater Control Measures (SCMs) must meet the **Commonwealth’s Title 25, Chapter 102.8 (g) to:**

***(2) – manage the net change for storms up to and including the 2-year/24-hour storm event when compared to preconstruction runoff volume and water quality.***

***(3) – manage the net change in peak rate for the 2-, 10-, 50-, and 100-year/24-hour storm events in a manner not to exceed preconstruction rates.***

The Stormwater Manual will include:

- SCM (BMP) Objectives/Hierarchy
- Stormwater Strategies
  - Descriptive Approach- Storm based
  - Performance Approach - Continuous simulation

The purpose of the SCM Hierarchy is to:

- Assist designer in SCM selection – Require a progression of design from Low Impact Development, through volume reduction and peak flow mitigation
- Consider the long-term resilience of the facility
- Identify which SCMs require more robust maintenance to be considered resilient
- Stress importance of pretreatment
- Provide direction on SCMs roles to meet the PCSM objective

The objectives of the SCM Hierarchy include:

A: Protect natural landscape features and encourage use of natural landscape SCMs.

B: Manage  $\Delta 2$  volume and quality through infiltration and/or evapotranspiration.

----- or when infiltration is not available -----

C: Manage  $\Delta 2$  volume and quality through managed release concept.

D: Provide rate control for storm events up to and including the 100-year/24-hour storm.



WRAC members had numerous questions and comments including the need to consider other pollutants in addition to Phosphorus, Nitrogen and Sediment that may be found in urban stormwater. There is also a need to provide PCSM guidance for Industry. There should be clear guidance on maintenance of the SCMs.

**Agricultural Erosion and Sediment Control Technical Guidance Document -Jill Whitcomb, Bureau of Clean Water**, indicated that the public comment period for this document ended on March 6, 2019. DEP received 38 comments from 5 public entities and over 100 comments from County Conservation Districts and other partner agencies. An ad-hoc subcommittee of WRAC members had previously provided comments to DEP. Despite the guidance, many farmers will still need technical assistance. They are encouraged to contact County Conservation District staff who have extensive training. There is a robust inspection program that is limited to the Chesapeake Bay watershed. There are over 60,000 regulated farms statewide. The goal is to inspect 10% within the Bay watershed each year. WRAC members indicated they feel that farmers have operated without oversight. Failure to comply with regulations should be penalized. Approximately 4,000 inspections have been completed. 66% had E&S and/or Manure Management Plans. The other 34% received Notices of Violation from DEP's Bureau of Investigation. Over 100 referrals came to DEP's Bureau of Clean Water for non-compliance. WRAC members requested a follow-up presentation after the second year of the program.

**General Discussion-** No additional discussion.

### **Action Items**

1. DEP presentations requested by WRAC members:
  - a. ePermitting for Chapter 102 during beta-testing
  - b. Ongoing measures of adaptive management using Alternative Restoration Plans
  - c. Agricultural Operations Inspections
2. 6-9 month look ahead on potential regulatory and non-regulatory topics to WRAC for comment:
  - a. 2018 Integrated Waters Report
  - b. Triennial Review of Water Quality Standards
  - c. Chesapeake Bay Update
  - d. Emerging Contaminants
  - e. Water Allocation Permit Applications
  - f. Act 162 of 2014 Implementation Plan
  - g. Design Standards for Wastewater Facilities
3. Topics for discussion with DEP's Secretary from WRAC members should be sent to Diane Wilson. He has been invited to the 5/23/19 WRAC meeting.

Future WRAC meeting dates include:

- April 18, 2019



- May 23, 2019
- July 25, 2019
- September 26, 2019
- November 21, 2019

**Public Comment-** No comments from the public

A motion was made for the meeting to adjourn by Shirley Clark and was seconded by Kevin Gilmore. The meeting adjourned at 12:15 p.m.

DRAFT