

WATER RESOURCES ADVISORY COMMITTEE

January 20, 2022 9:30 a.m.

Rachel Carson State Office Building – Room 105
400 Market Street, Harrisburg, PA 17105

and

Teams Meeting

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AGENDA

9:30 a.m. Call to Order, Introductions and Attendance – John Jackson, Chair

The meeting of the Water Resources Advisory Committee was called to order by John Jackson at 9:30 a.m., virtually via Microsoft Team and in-person in room 105, Rachel Carson State Office Building, Harrisburg, PA. A roll call was conducted, and of the 15 members of the committee, 12 were present, 3 were not present.

The following committee members were present:

Myron Arnowitt-Clean Water Action
Jenifer Christman-Western Pennsylvania Conservancy
Shirley Clark, Ph.D., P.E.-Pennsylvania State University
Kent Crawford, Ph.D.-Retired, USGS
Andrew Dehoff-Susquehanna River Basin Commission
Matthew Genchur-White Township
John Jackson, Ph.D.-Stroud Water Research Center
Cory Miller-University Area Joint Authority
Dean A. Miller-Pennsylvania Water Environment Association
Stephen Rhoads-Retired, Shell
Jeff Shanks-Waste Management
Charles Wunz, P.E.-Wunz Associates

The following committee members were not present:

Harry Campbell-Chesapeake Bay Foundation
Theo Light, Ph.D.-Shippensburg University
Steven Tambini-Delaware River Basin Commission

9:40 a.m. Review and Approval of Minutes from September 23, 2021 Meeting – John Jackson, Chair

No corrections or suggested edits to the November 18, 2021 meeting minutes were proposed by any Committee members. Kent Crawford motioned to approve the meeting minutes. Dean Miller seconded the motion. The meeting minutes were unanimously approved.

9:45 a.m. Draft 2022 Integrated Report StoryMap – Amy Williams, Water Program Specialist, Bureau of Clean Water

Ms. Williams presented on the Draft 2022 Integrated Report, specifically focusing on the StoryMap created for this report currently on the DEP website. Ms. Williams highlighted new sections of the Integrated Report and briefly discussed the data contained within and compared formats with the 2020 Integrated Report StoryMap. Ms. Williams pointed out that more miles of streams were assessed for recreational use for this Integrated Report and by virtue of assessing more streams, more streams were found to be impaired based on the 2020 Integrated Report numbers.

John Jackson asked about the number of chemistry lab samples collected as shown on a bar graph and wanted to know the timeframe for the number. Ms. Williams replied that it is since samples started being collected back around the year 2000.

Kent Crawford asked about trends on the Water Quality Trends section of the Integrated Report StoryMap and wanted to know how to view the trends for each parameter. Ms. Williams demonstrated how to view the trends for Mr. Crawford. Mr. Crawford also asked about the lack of information on stream restoration information similar to the information on lake restoration efforts in the Restoration Efforts section of the StoryMap. Ms. Williams explained that the Turtle Creek story was highlight for stream restoration efforts and since a lake restoration story was not highlighted information on lake restorations was included.

Mr. Jackson asked about the section on Wetlands restoration and wanted to know if that was a new section. Ms. Williams explained that DEP does not assess wetlands but provided some basic information on wetlands.

Jenifer Christman asked about the recent reports that the impaired stream number has increased by thousands of miles and wanted to know if that is due to the number of streams that were not assessed previously but were assessed during this reporting period and if that had an impact on increasing the impaired stream miles. Ms. Williams explained that DEP assess streams based on uses and for this report DEP assessed more unassessed streams for recreational use and many of those streams were impaired for fecal coliform. These impairments added to the total of overall impaired streams, but not necessarily to impairments for each use. Ms. Williams cited an example that a stream may be attaining for aquatic life, but impaired for recreational use.

Mr. Jackson wanted to know what percentage of new streams assessed in this report were impaired for recreational use. Ms. Williams navigated to the section of the StoryMap that showed 19, 976 miles of streams were attaining for recreational use and 10,412 miles were impaired. Mr. Jackson summarized it as about 2:1. Dustin Shull, Environmental Group Manager, Assessment section, Bureau of Clean Water, added that, for this report, streams were targeted to be assessed for recreational use and it was about a 50/50 split of impaired to attaining.

Mr. Crawford raised a question to DEP about climate change and monitoring water temperature and the usefulness of a stream temperature monitoring network and including its data in the Integrated Report. Mr. Crawford cited a few examples of existing continuous monitoring networks already in existence. Ms. Williams explained that DEP has lots of data on temperature as temperature is recorded with every water sample collected. Ms. Williams added that DEP has lots of temperature monitoring around the state as well. Mr. Shull concurred with Ms. Williams and added that DEP has looked at the WQN (Water Quality Network) data sets and has done some preliminary comparative analysis on the data and is seeing an increasing trend with regard to temperature. Mr. Shull added that with some refinement this data could be added to future reports. Mr. Crawford suggested that DEP collaborate with PA Fish and Boat due to Fish and Boat's investment with cold-water fisheries. Mr. Crawford further suggested extending monitoring network to lower Penn's Creek and the West Branch of the Susquehanna and to develop a well formulated network to track summertime maximum temperatures. Mr. Shull informed Mr. Crawford and the committee that DEP and Fish and Boat plan to collaborate on using the recently developed the Thermal Fish Index assessment tool to get a better picture of the effects of temperature. Ms. Williams added that she believes there are WQN stations in the areas Mr. Crawford suggested.

Mr. Jackson commented that he recently reviewed a data analysis on temperature from the Chesapeake Bay program on temperature data in the Bay and its tributaries and suggested that DEP access that data and expand the analysis to the Ohio and Delaware basins. Mr. Jackson added that the Chesapeake Bay program assessment looked and air temperature trends as well as water temperature trends and and stated that there is a noticeable lag with water temperature compared to air temperature, and some other factors that contribute to the thermal changes. Mr. Jackson continued that information from this analysis would jumpstart DEP's statewide analysis as there would be no reason to replicate what is already done, but duplicate efforts for outside of the Chesapeake. Mr. Crawford offered that the WQN sites miss some of the critical areas like the smaller streams that the SRBC (Susquehanna River Basin Commission) Continuous Monitoring Network covers. Mr. Crawford reiterated his suggested that all of the monitoring data needs to be better coordinated.

10:15 a.m. Committee Officer Elections – John Jackson, Chair

Committee officer elections were conducted. The Nominating committee of John Jackson and Kent Crawford, put forth Jenifer Christman as Chair and Andrew Dehoff as Vice-chair. A motion was made by Dean Miller to accept and vote on the nomination of Jenifer Christman as Chair. The motion was seconded by Stephen Rhoads. The motion was unanimously approved.

A second motion was made by Shirley Clark to accept and vote on the nomination of Andrew Dehoff as Vice-Chair. The motion was seconded by Jenifer Christman. The motion was unanimously approved.

10:25 a.m. General Discussion/Agenda Item Request – John Jackson, Chair

Jenifer Christman requested more information/future presentation to WRAC regarding the groundwater monitoring network highlighted in the 2022 Integrated Report StoryMap.

11:10 a.m. Public Comment Period – John Jackson, Chair

Mark Hirsch, Citizens Coal Council volunteer and former PA Department of Environmental Resources employee, commented on a spreadsheet for the 2022 Integrated Report StoryMap and stated that when the spreadsheet is opened the data lacks headings to explain what the data is, which can be confusing for a typical user. Dustin Shull, DEP Bureau of Clean Water, stated that the issue will be addressed and thanked Mr. Hirsch for bringing it to DEP's attention.

Mr. Hirsch continued that his other comments relate to longwall coal mining in Greene and Washington counties and how, in reviewing this integrated report, he did not see streams that were impaired for coal mining listed in category 4c (impairment not caused by a pollutant) in Greene and Washington counties. Mr. Hirsch stated that he did see streams in the 4c category impaired for coal mining in Schuylkill county. Mr. Hirsch added that the Bureau of Mining programs puts out a 5-year report on Act 54 and the results of the changes that occurred from coal mining and the latest report in 2020 was from the years 2013 to 2018. Mr. Hirsch stated that he felt there was a disconnect between the Bureau of Mining and the Bureau of Clean Water in getting these impaired waters reported. Mr. Hirsch informed that longwall coal mining causes subsidence and often causes problems with ground water and surface water interactions, which can impact streams by loss of flow and pooling. Mr. Hirsch added that the coal companies sometimes do a good job of assessing streams before coal mining happens and those stream assessments should be added to DEP's assessed inventory. Finally, Mr. Hirsch suggested that new coal mining projects in Greene and Washington counties are in Exceptional Value/High Quality watersheds and felt that these waters should be recognized in the Integrated Report.

Mr. Hirsch added that these comments will also be made during the public comment period for the Draft 2022 Integrated Report.

Mr. Shull addressed a few of Mr. Hirsch's comments. Mr. Shull stated that staffing in the Southwest region has been limited and DEP is catching up on assessments for that area which should help to address some of Mr. Hirsch's concerns.

Mr. Shull discussed the Bureau of Mining's technical guidance document (TGD) for longwall mining relied on a draft multi-habitat protocol for assessments, which assumed a low-gradient environment that would be taken as a baseline and used again after to measure the success or failure of a stream restoration or subsidence. Mr. Shull added that recently the Bureau of Clean Water has worked with Bureau of Mining to revamp the TGD to account for the fact that actually these streams were high-gradient streams to start with and will be measured as such. Mr. Shull added that the hope is the outcome of the collaboration on the TGD will lead to better decisions on the ground when it comes to permitting and that the Bureaus are working to address the issue raised by Mr. Hirsch.

Finally, Mr. Shull added that the goal of the Integrated Report is working towards a more accurate assessment regime which means less "sources unknown" classifications for impairments and more refined decisions in cause determinations.

11:15 a.m. Adjourn – John Jackson, Chair

Kent Crawford moved to adjourn the meeting. Shirley Clark seconded the motion. The motion to adjourn the meeting was unanimously approved.