

## **WATER RESOURCES ADVISORY COMMITTEE**

**November 19, 2020**

**9:30 a.m**

**Skype Meeting**

Join Skype 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 AM, via Skype due to the social distancing orders enforced during the covid-19 pandemic. A roll call was conducted, and of the 18 members of the committee, 12 were present.

#### **The following committee members were present:**

Harry Campbell-Chesapeake Bay Foundation

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

Gary Merritt, P.G.-Northern Star Generation

Cory Miller-University Area Joint Authority

Jeff Shanks-Waste Management

Steven Tambini-Delaware River Basin Commission

Sarah Whitney-Pennsylvania Sea Grant

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

Myron Arnowitt-Clean Water Action

Jeffrey Hines, P.E.-York Water Supply

Theo Light, Ph.D.-Shippensburg University

Dean A. Miller-Pennsylvania Water Environment Association

Stephen Rhoads-Retired, Shell

Charles Wunz, P.E.-Wunz Associates

**9:35 a.m. Review and Approval of Minutes from July 29, 2020 Meeting** – John Jackson, Chair

Andrew Dehoff motioned to approve the meeting minutes from the July 29, 2020 meeting. Jennifer Christman seconded the motion. The minutes from the July meeting were unanimously approved as presented.

**9:45 a.m. Update to draft Engineering Manual for Surface Mining Operations** – Sharon Hill, Bureau of Mining Programs -Permitting and Compliance Division

Ms. Hill provided a brief presentation which included updates regarding the revised draft of the Engineering Manual for Surface Mining Operations and information as to why mining has its own engineering manual.

There are several regulatory requirements and specific mentions that are unique to the mining Engineering Manual versus the Department's manual which includes but is not limited to: maintaining hydrologic balance; allowing for upslope diversions; specific mentions of sedimentation controls, dams, and impoundments; protection for mining operators in areas that contain preexisting discharge so they are not subject to full liability; as-built or yearly Pond certifications depending on the type of operation; a 10 year, 24 hour storm event standard which goes beyond the Chapter 102 standard; precipitation exemption for settleable solids when precipitation exceeds the aforementioned standard; Best Available Technology (BAT) limits for iron, sediment, pH, and acidity.

The manual was last published in 1999 so it was evident that the manual needed to be revisited. The revision includes general language updates to match the format of the previous version, a collaboration by DMO staff and industry consultants, and the addition of an anti-degradation section. Ms. Hill explained that this revision has been in the making for several years and has been reviewed by the water program via counsel. The TGD draft is currently published for comments. The revision draft was also presented to MRAB and AAB which will likely bring about additional changes after further discussion commences with these boards.

Jennifer Christman asked if the 10-year rain event parameter should be revisited in light of heightened precipitation events from climate change. To Ms. Hill's knowledge, the 10-year storm is characterized

based on the NOAA weather data which gets adjusted. The criteria changes based on the calculations that currently exist for a 10-year, 24-hour storm.

John Jackson asked if Ms. Hill knew what went into the revision over the years in terms of the picture of a 10-year, 24-hour storm. Ms. Hill responded that she does believe the 10-year, 24-hour storm is a moving target. Mr. Jackson then asked if it resulted in engineering for bigger storms than were proposed when the manual was last revised in 1999. Ms. Hill was not able to answer that question.

Gary Merritt added that the 10-year storm event guidelines come from the federal regulations. The reference to 10-year is usually tied to the federal program which is one of the issues that has been raised at the Statewide Water Planning Water Resources Advisory Committee. While mining continues to look at data, they are ultimately limited by federal guidelines and statutes.

Kent Crawford voiced his interest in the addition of an anti-degradation section to the revision draft. Mr. Crawford asked what protection had already existed under the current guidelines. Ms. Hill explained that she is confident that the 1999 version was inaccurate in terms of how to handle questions about activities in special protection watersheds. About 10 years ago, they developed a new process for the anti-degradation evaluation for their permits which includes a supplement for projects in HQ/EV watersheds

10:15 a.m. **Agricultural TMDLs and the Evolution of Fishing Creek Alternative Restoration Plan** – Scott Heidel, Bureau of Clean Water, Water Quality Division

Scott Heidel began his presentation by explaining what agricultural TMDLs are, why they are necessary, and the calculations involved in the process. These TMDLs address polluted stream segments and identify pollution sources and their level of pollution in watersheds which aids in developing maximum numeric pollution load limits and reduction goal using the Reference Watershed Approach.

Mr. Heidel emphasized the fact that creating a TMDL is not enough to get a watershed to be fully attaining – the implementation is equally as important, especially for non-point source pollution. To aid in this process, the national TMDL program introduced a new tool called Alternative Restoration Plans (ARPs). ARPs mirror TMDLs as they address stream impairments, identify pollution types/sources, and develop maximum numeric pollution load limits. However, ARPs help to add to traditional TMDLs by teaming up with local partners on BMP implementation, providing ongoing BMP modeling to local partners, providing enhanced ecological monitoring to track environmental responses to BMP implementation, assisting in the grant process, and conducting Adaptive Management over time to attain pollution reduction goals and watershed restoration.

Pertaining specifically to the Fishing Creek ARP, DEP received a large grant from the National Fish and Wildlife Foundation to do a study with stream bank fencing as it relates to higher milk profits. Partners including Plain sect Farmers and Donegal Trout Unlimited are helping to implement the BMPs. The theory behind this study is that by fencing cattle out of a degraded stream environment and putting them upslope, water sources will become cleaner and milk sales/profits will increase due to higher purity of the product. The monitoring of cow health and the integrity of the milk is monitored using microbiological somatic cell counts.

DEP has collected data on this study and will be creating and distributing a report on the progress of this study based on the analysis of the BMPs they currently have. Adaptive management and protecting the Chesapeake Logperch (a PA threatened species) continue to be areas of focus for DEP.

Mr. Heidel then gave an overview of the Fishing Creek ARP reduction goal. Overall, DEP is aiming for a pretty aggressive allowable sediment load reduction rate of 47% for the entire Fishing Creek watershed.

Kent Crawford inquired as to how we can get fish and wildlife services involved in the local project. Mr. Crawford also asked if the local watershed association would be responsible for the labor charges associated with work being done for the Fishing Creek ARP or if the labor charges would be paid for by the workers' salaries. Mr. Heidel responded that the beauty of having either US Fish and Wildlife or the Fish and Boat Commission do the designs is that they pay for the labor charges. The agency contracted to do the work would pay for labor and have specific employees whose job it is to focus on these projects. DEP prefers to use these associations because not only will they perform work that is of a high standard, but the work that is done can also act as a match if grant funds are being used on the project. Construction of the designs would be done by consultants. Mr. Heidel said that grant funds should definitely be used in terms of construction due to the high associated costs.

Mr. Crawford wanted to make everyone aware that the Pennsylvania budget is currently over-expended by an immense amount. There is some concern that the Growing Greener Fund and the Keystone Fund might be tapped in order to help account for the budget deficit. Legislature is considering that possibility right now, but Mr. Crawford was not optimistic about the potential outcome.

Mr. Jackson was curious as to the total amount of money spent so far on stream restoration versus all of the other agricultural BMP planning and BMP implementation in this particular watershed. Mr. Heidel did not have a financial figure at the time the question was raised, but he did say that the Conservation Commission has a pretty decent handle on the NFWF grant that is being utilized and also that DEP's 319 section will be covering the remainder of the project costs that are not grant eligible.

In response, Mr. Jackson said that he asked how much money had been spent so far because he believes more could be done to differentiate work that was done in the past that would in turn likely yield a better result. Mr. Jackson stated that Mr. Heidel highlighted a lot of in-channel work which he believes is an old approach to stream and watershed restoration. The buffers that Mr. Heidel presented were relatively narrow and close to the stream which meant work was being done in the channel. In-channel work first started being done 25 years ago. If DEP wants to use Fishing Creek ARP as an example moving forward, Mr. Jackson thinks that DEP may need to raise the bar and come up with something better than what has been done in the past given that old techniques have not resulted in the desired measurable changes. Mr. Jackson stated that the buffers Mr. Heidel touched on during his presentation (i.e. planting 600 trees along the water) were not overly significant when considering the overall size of the watershed. Donegal Trout Unlimited will prove to be a great partner for DEP moving forward to help DEP get to the point of being able to obtain measurable change. In addition, Mr. Jackson noted that Mr. Heidel did not highlight information relating to modernized manure management, barnyard clean up, or cover cropping which may be areas that can address the 85% of sediment input and the nutrients that may be tied to it.

Mr. Heidel agreed with Mr. Jackson's points. When focusing on stream restoration, Mr. Heidel said there were many legacy sediments, cattle were in the stream, and the agricultural community knows that DEP

cannot force fencing to be placed. While they try to place as big of a buffer as they possibly can, DEP staff are limited as to what they can do based on the landowner's agreeability towards their suggestions. With this being funded through NFWF, they didn't place restrictions on sizes like is typically the case for Growing Greener and 319, so the portions upstream of the NFWF area will have the ranges and widths of larger buffers of which Mr. Jackson was referring. One thing that was very successful that Mr. Heidel said he should have highlighted as well was that they got everyone up to speed with implementing a conservation plan.

Mr. Jackson stated that the visible legacy of past agricultural activities does not always translate into an impaired waterway. Mr. Heidel agreed, but also explained how many times buffers along legacy sediments end up getting washed away over time. Mr. Heidel thinks that if they are going to plant buffers, they need to address legacy sediments first to avoid the risk of losing the buffers. Mr. Jackson replied that perhaps DEP needs to be looking into other factors given a stream will move and cannot be controlled. Mr. Jackson believes DEP needs to look at what they have been doing over the past 25 years and figure out what has proven to be successful and move forward from there. In general, the science of legacy sediments and in-channel work has showed that the problem lies elsewhere. A good example Mr. Jackson mention of this exact scenario was a report that came out of Maryland in which they found no measurable changes associated with in-channel work. Mr. Jackson will be passing along a copy of this study to Mr. Heidel.

Mr. Crawford spoke in defense of DEP and believes the work that has done should be commended. Mr. Jackson replied that he believes it is a double-edged sword because while DEP is trying to implement new approaches towards TMDLs, the science does not signify change that is measurable. Overall, Mr. Jackson believes that now is the time to do better seeing as though the public expects more from DEP and the district when noticeable impact is not being achieved.

Harry Campbell spoke up and said that legislature does realize that the investments that have been made need to be results-driven. Results need to be presented so that there is certainty that the extremely limited resources that are available are being used effectively and efficiently. Mr. Campbell stated that DEP would continue to receive criticism from lawmakers and others if the resources we do have are being put towards projects that do not show positive results. Without proven results, it will be difficult to defend or acquire additional resources in the future, which remains critically necessary.

To follow his statements, Mr. Campbell asked if there would be any consideration in this process to include an efficiency analysis. Mr. Heidel replied that DEP put forward a best-case scenario for no-till, cover crops, grassed waterways, terraces, etc. that would have gotten DEP above the goal for TMDL. However, when trying to actually implement the TMDLs, it must be realized that DEP is working with farmers that are already operating on a tight budget. Farmers have to foot the bill for cover crops and the idea of no-till hasn't been fully sold yet to the agriculture community. The financial chaos over the past few years has made it very challenging to implement the TMDLs.

11:00 a.m. **Update to Chapters 91 and 92a Fee Package** – Sean Furjanic, Bureau of Clean Water, NPDES Permitting Division

Mr. Furjanic presented a minor change to the final rulemaking for Chapter 91 and 92a fees. He briefly reminded the committee about three major changes from the proposed rulemaking that were previously discussed with the committee: a change in fees for categories of permits which were most likely to be sought by small businesses and agricultural operations, the removal of a provision to increase fees based on an index of inflation, and the addition of a provision for fee exemptions for financially distressed municipalities.

DEP is now planning on finalizing this rulemaking for consideration by the Environmental Quality Board with one additional change. The change involves fees associated with general NPDES permits and the Notices of Intent (NOIs) that are submitted for coverage under a general NPDES permit. The current regulation places a cap of \$2,500 on general permit NOI fees. The language in the proposed rulemaking specified that NOI fees cannot exceed application fees and annual fees associated with individual permits for the equivalent activity, which DEP determined after further review, leaves room for confusion and complicates administration of fees due to differences in fee structures for individual and general NPDES permits. To avoid confusion and reduce administrative burden, DEP revised the final rulemaking to maintain the specific dollar amount cap on NOI fees, but to increase the NOI fee cap from \$2,500 to \$5,000. This cap would still apply over a 5-year period (\$1,000/year maximum) and does not imply that fees for each NOI submitted thereafter will automatically increase; it simply clarifies the language in the regulation.

Mr. Crawford asked who would be mostly impacted by the change to the cap. Mr. Furjanic replied that DEP has not made any decisions as to who this would potentially affect in the future, but there are 12 NPDES general permits right now and it is something that DEP will reassess once each general NPDES permit needs to be reissued. Mr. Crawford strongly recommended that DEP put in writing something that explains who will be charged to the fullest extent of the NOI fee cap. Mr. Furjanic responded by explaining that DEP establishes fee amounts on a case-by-case basis after assessing DEP's workload, resources, and the amount of NOIs that are received for each general permit.

Mr. Jackson asked what the expectation is in terms of additional revenue with the increased cap. Mr. Furjanic said that if DEP increased all general permits to utilize the \$5,000 cap, an estimated additional \$4 million would be generated for DEP per year. However, DEP does not have the intent to increase the NOI fees for every general permit.

11:45 a.m. **General Discussion** – John Jackson, Chair

Nothing was brought to the attention of the committee in terms of general discussion.

12:15 p.m. **Public Comment Period** – John Jackson, Chair

A Mr. Ken Mullen provided a public comment related to a private matter outside the business of the Committee.

12:30 p.m. **Adjourn** – John Jackson, Chair

Mr. Crawford motioned to adjourn the meeting. Jeff Hines seconded that motion. The meeting was adjourned with no objections.

**Next Meeting: January 27, 2021**

DRAFT