Pennsylvania Chesapeake Bay Phase 3 Watershed Implementation Plan (WIP)
Steering Committee
July 31, 2017 Meeting Minutes
Approved: August 24, 2017

Members Present:

Name	Agency
Patrick McDonnell	Department of Environmental Protection (DEP)
Russell Redding	Department of Agriculture
Cindy Dunn	Department of Conservation and Natural Resources (DCNR)
Sara Nicholas, Alternate	
Brion Johnson	Pennvest
Karl Brown	State Conservation Commission
Andrew Dehoff	Susquehanna River Basin Commission (SRBC)
Andrew Gavin, Alternate	
Marel King, Alternate	Chesapeake Bay Commission
Matt Keefer	Forestry Workgroup Co-Chair
Katie Ombalski	Forestry Workgroup Co-Chair
Matt Royer	Agriculture Workgroup Co-Chair
John Bell	Agriculture Workgroup Co-Chair
Doug Goodlander	Agriculture Workgroup Co-Chair
Greg Hostetter	Agriculture Workgroup Co-Chair
Lisa Schaefer	Local Planning Goals Co-Chair
John Brosious	Wastewater Workgroup Co-Chair
Jay Patel	Wastewater Workgroup Co-Chair
Felicia Dell	Stormwater Workgroup Co-Chair

Other Attendees:

US Environmental Protection Agency:
Rich Batiuk

DEP/DCNR:
Sean Gimbel
Hayley Jeffords
Lee McDonnell
Jill Whitcomb
Teddi Stark
Katie Hetherington-Confer
Nicki Kasi
LeeAnn Murray
Kristen Wolf

Other Governmental Agencies:
Rob Boos, Pennvest
Matt Johnson, University of Maryland, Chesapeake Bay Program Office
John Seitz, York County Planning

Other:
Dominic Bassani, Bion

Harry Campbell, Chesapeake Bay Foundation
Molly Cheatum, Chesapeake Bay Foundation
Ben Daniels, Greenlee
William Fink, CVFF
Ron Furlan
David Hess, Crisci Associates
Donna Morelli, Bay Journal
John Nikoloff, ERG Partners
Jennifer Reed Harry, Penn Ag Industries
Renee Reber, Chesapeake Bay Foundation
Brenda Shambaugh, PACD
Ezra Thrush, PennFuture

Welcome and Introductions

Secretary McDonnell opened the meeting at 1:00 pm. Those in the room and attending via webinar introduced themselves.

Approval of May 8 Meeting Minutes -- All

Karl Brown made the motion to approve the draft meeting minutes for the May 8 2017 meeting. Brion Johnson seconded the motion. Nicki Kasi highlighted a few changes made by EPA to the draft minutes that were shared with the members via email. These changes emphasized: (1) the importance of the plan having a clearly articulated *strategy to achieve the Bay TMDL* and (2) that as long as the proposed plan is implementable *and achieves the goals,* the plan would be acceptable to EPA, even if the plan proposed alternatives to those listed in the Pennsylvania-specific expectations document. Motion passed unanimously.

Finalization of Watershed Implementation Plan Workgroups – Secretary Patrick McDonnell

Secretary McDonnell started the discussion with an overview of where we have been and the progress made. He thanked the panelists today who have been through this process in the past and will be working with the Committee as we move forward with Phase 3. He highlighted the following achievements since the last meeting:

1. In late June, funding for 17 municipal stormwater projects was announced. These projects target those counties in the Bay watershed with the highest pollutant loadings from urban stormwater. Collectively, the projects will remove, 396 pounds of nitrogen, 2800 pounds of phosphorus and 800,000 pounds of sediment from local waters. Projects are funded with EPA Chesapeake Bay Implementation Grant monies.
2. The Agriculture Farm Inspection effort completed the first year of inspections. As of June, 2080 inspections were completed for a total of 245,664 acres inspected in Pennsylvania's Bay watershed. These are in addition to those performed under other programs that review and verify compliance with regulatory requirements, including the Act 38 Nutrient Management Program.

He went on to say work on the WIP planning has been ongoing. The WIP workgroup co-chairs have been meeting monthly. At the last meeting of the Workgroup Co-chairs, a finalized list of members for all but the Local Planning Goals Workgroup was developed. A small core group for the Local Planning Goals Workgroup will be formed to begin working on the criteria and methodology for the definition of

local planning goals. Once those goals are agreed upon, the rest of the membership for this workgroup can be finalized. John Bell moved to approve the list of members for the workgroups per Handout #4. Brion Johnson seconded the motion. Motion passed unanimously.

Phase 1 and 2 Watershed Implementation Plans -- Panel Discussion

Felicia Dell, Director, York County Planning Commission

Felicia Dell started her talk identifying the vital role counties can play in addressing water quality. Counties do not have a regulatory role; they do not issue permits, nor do they have the decision-making authority that is at the local level. However, they can bridge the two. Planning Commissions can be a key agency to help with this task. These commissions or departments all function a little differently, but have the same general scope of responsibilities. They have different funding options and tools available to them to accomplish what needs to be done. They can help get work done on the ground.

York County has a unique cultural and geographic perspective. Municipalities have more opportunity to recognize the importance of the Bay and the Susquehanna River due to the proximity of the County to Maryland. There is a strong connection with Baltimore and the Maryland shore in York County.

Key partners to this effort have to be the local municipalities. These local officials have the planning and zoning authority. In most cases they are the approval body for subdivision and land developments where stormwater improvements are constructed. They have a very narrow, limited understanding of the Chesapeake Bay Program and Phase 1 and Phase 2 of the WIP. To them, Phase 1 was about wastewater treatment, Phase 2 about urban stormwater. How all the layers of the Chesapeake Bay Program are combined or end up impacting the local audience may or may not matter, depending on the audience and the issue being discussed. They do not have an understanding of the scope or amount of time devoted to this effort. They may not have an understanding of the TMDL, but what they do know is that EPA has assigned numbers through the use of a model. Even though efforts so far have gotten the attention of local governments, these officials do not have a good understanding of their local impaired streams.

During Phase 1 and 2, there were a number of large workgroups created, but it is unclear whether or not the most impacted people were included. There was an over-emphasis on the model without a good understanding of what data and assumptions went into the model, or how the model was developed. A more holistic approach is needed to make progress. The concept of sectors is divisive.

For Phase 3, she would like to see:

1. The use of the Chesapeake Bay issue as a framework to address local impaired waters, to frame the issue as a local issue. Key to this is a clear definition of "local". Is it a county, local government, a watershed?
2. Strategic identification of priority areas and the identification of current efforts within those areas.
3. Incentives for multi-region, multi-municipality and multi-sector efforts within some geographic or governmental boundaries. Tighter links between agencies is needed for this.
4. Development and implementation of a watershed permit for multi-sector efforts.
5. A base level permit for all municipalities, not just the urbanized municipalities, that includes a numeric target for reductions like the defined urban baseline. Although tedious, it would be an effective method to get people's attention.

6. This effort needs to be an inter-departmental priority including Department of Transportation, Department of Community and Economic Development, Department of Conservation of Natural Resources and the Department of Environmental Protection.

Jennifer Reed-Harry, Assistant Vide-President, PennAg Industries Association

Jennifer Reed-Harry focused her comments in three areas:

1. The past – Phase 1 had full force engagement by many sectors with a new approach to public/private partnerships. There was an emphasis on the link between the Bay and local water bodies. Phase 2 outcomes were unrealistic. The effort to include everyone at the table resulted in a lack of focus and made it impossible to assemble clear and concise deliverables. The approach for Phase 3 for stakeholder groups is the right approach.
2. Some perspective of what needs addressed/acknowledged – There must be some basic assumptions for each sector to which everyone agrees. For example, for agriculture, she suggested that the assumption be that Agriculture is vital to the economy of the Commonwealth and that all agree that Pennsylvania agriculture should continue to grow and expand to offering residents of Pennsylvania and the market a variety of safe, nutritious food while also being good stewards of the land, air and water for future generations while allowing meaningful careers and economic stimulus to those involved in Agriculture.
   Phase 1 and 2 were successful in generating awareness. The implementation of the farm inspections has confirmed a high percentage of the farms have the necessary plans. Farms have been balancing nutrients for a long time. The problem is that the Commonwealth has never properly tracked and reported this. Phase 3 has to also address the issue of the need for sediment reductions related to Conowingo Dam. A better understanding and quantification of the manure transport out of the Bay watershed is also needed. Agricultural business can help with this.
3. Thoughts and suggestions to hit the ground running with Agriculture -- She had the following:
   a. Poultry data – Dr. Paul Patterson is finalizing a study to show the actual poultry numbers for Pennsylvania, where the manure goes and the actual volume produced.
   b. PSU Survey data – Make sure all this data is captured and incorporated into the model.
   c. Utilize the REAP concept to address the sediment behind Conowingo Dam as well as for other agricultural best management practices.
   d. Get the manure transport data correct. This could be a joint solution between the State Conservation Commission and the Agricultural community.
   e. Need to enhance the tracking and reporting of nutrient management and manure management plans and plan implementation.

In closing she suggested, due to her business background, that government and regulators should follow a business model where "everything is negotiable and we need to cut the best deal for the Commonwealth." In doing so, those developing the WIP also need to be mindful not to "change the standard just because the process was not implemented." She stressed the Phase 3 WIP needs to be:

1. Equitable, realistic and achievable.
2. A public/private partnership where stakeholders who can ensure delivery and implementation of the plan are engaged.
3. With perhaps an extended time line.

John Brosious, Deputy Executive Director, Pennsylvania Municipal Authorities Association (PMAA)

John Brosious started his talk with the 2005 Tributary Strategy and the identification of the pie chart contributions from wastewater. This precipitated PMAA to convene a wastewater sector workgroup, with the belief that they could identify a better plan than what was identified in this strategy. The original plan was a non-starter for them. This plan required all treatment plants to limit their total nitrogen discharge to 8 mg/l and 1.0 mg/l total phosphorus at their 2010 flow levels. This allowed for no growth, resulting in these wastewater systems always being in a state of non-compliance. This workgroup developed a plan where they defined limits of 6 mg/l total nitrogen and 0.8 total phosphorus, but at the capacity of the wastewater system. The original group of 15 people expanded to 25 to include Pennvest, the Chesapeake Bay Foundation, the Chesapeake Bay Commission, the Department of Environmental Protection and others to reach final agreement.

One of the major disagreements was the amount of money needed to upgrade the wastewater systems to achieve these levels of treatment. This disagreement led to an independent study of the costs done by Metcalf and Eddy. This study identified the costs at $1.4 billion. In conclusion, they put together a plan that worked. They have achieved the necessary allocations early. This success wasn't without a significant amount of time and effort. They took the time upfront to find the right people with the right expertise.

During Phase 2, the wastewater sector stayed the course. The wastewater sector is ahead of the curve for Phase 3. The disconnects he sees are:

1. There have been discussions since 2004 about trading, since before the tributary strategy. However, trading has continued to be an elusive solution. It easy to do point source to point source trades. What is difficult is a trade between point sources and nonpoint sources or a trade between two nonpoint sources. It may be time to put a couple people in a room and re-visit the Trading Program. There may be new innovative concepts that would make the program more viable; such as credits that last more than one year, inter-basin trading or inter-state trading. These new concepts could be piloted as a new experimental program.
2. How is stormwater going to be addressed and how much is it going to cost? A comprehensive analysis of this needs to be done.
3. There has been a significant amount of agricultural best management practices started, but this is not enough, more is needed; including more technical and financial assistance, inspections and possibly local limits and mandates where the conditions are so bad something must be done.

<u>Discussion and Questions</u>

Secretary McDonnell asked how to get farmers engaged to track and report nutrient management planning and implementation, rather than through the inspection process with a message of forcing them to have the plan as a requirement. Jennifer Reed Harry's response was to highlight the plan as part of their plan, show the return on investment the farmer can get from the plan, how the farmer can use the plan to expand or improve the operation of the farm.

Secretary McDonnell then asked for more details on the watershed permit approach highlighted in Felicia Dell's presentation. Her response was that these permits would need to include all the municipalities and any other permittees in the watershed and identify what they would all do collectively together, not individually. The benefit would be to leverage activities and resources to meet the requirements. Through this approach, Department of Transportation improvements and requirements and other industrial permittees could also be included in their progress.

Brion Johnson asked about the sources and availability of technical assistance. Jennifer Reed Harry responded that most assistance is provided by the conservation districts, but those people get hired quickly by private industry. They are looking to expanding the number of people capable of providing this service by expanding university programs to have students graduate certified to assist in the development and implementation of these plans. This is all part of one of the Pennsylvania in the Balance initiatives and priorities. Matt Royer added that the Penn State College of Agricultural Sciences now has a 15 credit certificate program as part of their four year degree program for just this purpose. Karl Brown added that Thaddeus Stevens College is looking to adding a nonpoint source track to their point source training program.

Secretary McDonnell then turned the discussion to trading; what has worked, what hasn't and what should the focus be? John Brosious responded that the fast track should be to work on something that will work quickly, to find a best management practice or set of practices that can be easy to implement and finance those. John Bell added that there could also be some private financing in credits. Greg Hostetter questioned whether or not municipalities are willing to pay farmers to control stormwater. Felicia Dell responded that the issue revolves around the need to address the runoff in the urban areas, that perhaps a approach to address this loading in the headwaters needs to be developed.

Bay Program Resources for Phase 3 Watershed Implementation Plan – Matt Johnston, University of Maryland, Chesapeake Bay Program Nonpoint Source Data Analyst

Matt Johnston opened his presentation with a brief overview of all the factors to consider in putting together the Phase 3 plan. Those factors include such things as practicality, cost per acre, reductions per acre, the effectiveness of the practices, the best location to install practices and the amount of land available for the installation of practices. There are now several tools available to assist the states with the consideration of all these factors. He went on to state that these tools can be applied at different planning scales; statewide, county and locally. In addition, there is now data on the most effective practices on a cost per pound basis. These tools can also facilitate the identification of the most effective locations in the watershed to install practices. He then presented an example in York County for forest buffers, looking at where the buffers can be located, at what cost and what will the level of reduction be from the amount of investment. In his example, there are about 65,000 acres of available acres within 30 meters of a stream, of which 21,000 acres is herbaceous ag land. If 50% of this ag land were to be buffered, the cost would be $3.1 million. Using CAST, this investment will produce a 9.7% reduction in nitrogen delivered to the Bay, 5.8% phosphorus and 10.8% in total suspended sediment. If these assumptions were then expanded to the entire watershed, using CAST, this will result in an investment of $64.4 million and 10% of the total reduction needed to meet the 2025 target. This same exercise can then be done with other programs to see what additional reductions can be achieved. In addition finer, local scale analysis is also possible with Bayfast. For example, on a parcel, an implementation level for a particular practice can be entered. From that, the estimated costs and pounds of nitrogen, phosphorus and sediment reduced can be calculated. In conclusion, the numbers matter; but with the tools and research completed by the Chesapeake Bay Program Office the states now have the data needed to develop a comprehensive, detailed plan.

Committee members questioned the cost data and whether or not this data can be adjusted. Further information as to how this data was generated is needed.

Secretary Dunn asked about the level of data needed to create a verifiable credit based on the implementation of a buffer. John Bell responded that it depends on the state. Rob Boos, from

Pennvest, stated that verification is the role of t DEP, but it depends on the frequency of the practice, is it in place and is it functioning as designed. Some practices are easier to verify than others. Lee McDonnell, Director of the Bureau responsible for the implementation of the Trading Program in DEP summarized that before a credit can be verified and generated, the generator must meet a baseline. This baseline needs to be re-defined as part of the Phase 3 WIP process to be consistent with the TMDL. This is needed in order for stormwater and agriculture to trade. EPA has imposed a 3:1 trading ratio on the existing program due to the current inability to define a baseline that meets the TMDL. Once this this baseline is redefined, this 3:1 ratio can be eliminated. DEP is also looking at different tools to facilitate calculation of this baseline.

John Bell stated that he just recently reviewed the webinars on the CAST model. He believes the model to be a manageable program. It appears to be a tool that will provide a good opportunity to run numbers, be creative and see what is possible. It is simpler to use than the past versions. He also allowed it will take time to adjust and tweak the scenarios that would be run through CAST. Matt Keefer responded that it is critical that the committee know and understand the capability of the tools and the universe of options in order to keep focused. Matt Johnston also reminded everyone that this will be more meaningful if the committee keeps scale in mind, results need to be at the local level and these tools now provide the ability to do these analyses at that level. Rich Batiuk, EPA Chesapeake Bay Program Office, then provided an overview of the people in his office now devoted to assisting Pennsylvania with this effort, their background and expertise. These people will be able to assist with the necessary analyses and provide input and feedback on the results.

Lisa Schaefer also added that we need to also consider the ancillary benefits of the practices we are installing and asked if there are tools to help with that. Rich responded that yes, there was a Science and Technical Advisory Committee workshop on this topic, to start to quantify the multiple benefits from a number of different practices. In addition, Tetratech, an EPA contractor, has recently completed a project where they developed a matrix that provides the states with a tool to help with this multiple benefit analysis of different practices. John Bell cautioned that these multiple benefits should not compete with the prime goal of what needs to be accomplished through this process; that is, a priority can not be given to residual benefits where the focus on nitrogen, phosphorus and sediment is lost. Secretary McDonnell stated that the focus has to be on nitrogen, phosphorous and sediment reductions, but a co-benefit like flood protection may be why a local group would be engaged. Brion Johnson added that a business case for co-benefits needs to be made.

Next Steps – Nicki Kasi, Manager, DEP Chesapeake Bay Office

Nicki Kasi went over the briefing schedule, highlighting the presentations planned for August and September. She went on further to describe the excellent feedback that was received from the Kickoff Listening Session held in Camp Hill on June 5, followed by the written comment period that ended July 9. Chesapeake Bay Office staff are now working with the facilitation team headed by Dr. Dukes to finish compiling the input with the hope to share the final summary with everyone before the August meeting.

Secretary McDonnell closed the discussion by encouraging everyone to continue the momentum started by the June 5 meeting, to continue soliciting feedback and engagement.

Public Comment

There were no public comments.

Brion Johnson moved to adjourn. Karl Brown second. Meeting adjourned at 3:30 pm.