Pennsylvania Chesapeake Bay Phase 3 Watershed Implementation Plan (WIP) Steering Committee September 27, 2017 Meeting Minutes Approved:

Members Present:

Name	Agency
Patrick McDonnell	Department of Environmental Protection
Russell Redding	Department of Agriculture
Cindy Dunn	Department of Conservation and Natural Resources
Sara Nicholas, Alternate	
Brion Johnson	Pennvest
Andrew Dehoff	Susquehanna River Basin Commission (SRBC)
Andrew Gavin, Alternate	
Carlton Haywood	Interstate Commission of the Potomac River Basin
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
Davitt Woodwell (via webinar)	Local Planning Goals Co-Chair
Steve Taglang	Local Planning Goals Co-Chair
John Brosious	Wastewater Workgroup Co-Chair
Jay Patel	Wastewater Workgroup Co-Chair
Felicia Dell	Stormwater Workgroup Co-Chair
Sean Furjanic	Stormwater Workgroup Co-Chair

Other Attendees:

Federal Agencies:

Rich Batiuk, EPA Chesapeake Bay Program Office John Clune, US Geological Survey Matt Johnston, EPA Chesapeake Bay Program Office Mike Langland, US Geological Survey Curtis Schrefkler, US Geological Survey Emily Trentacoste, EPA Chesapeake Bay Program Office Mark Zolandz, EPA

DEP:

Brianne Campbell	Lisa Daniels
Sean Gimbel	Katie Hetherington-Cunfer
Hayley Jeffords	Nicki Kasi

Lee McDonnell	
Cheryl Vazquez	

Jessica Shirley Ted Tesler Kristen Wolf

Other State Agencies:

Kelly O'Donnell, Department of Agriculture Kenda Gordner, PennDOT Sam Robinson, Governor's Office Teddi Stark, DCNR Katie Woodbury, DCNR

Other Governmental Agencies:

Kyle Kessler, Susquehanna River Basin Commission Andrew King, Susquehanna River Basin Commission Kevin McGonigal, Susquehanna River Basin Commission Tyler Shenk Susquehanna River Basin Commission Jamie Shallenberger, Susquehanna River Basin Commission Pam Shellenberger, York County Planning Andrew Watson, Susquehanna River Basin Commission

Other:

Dennis Auker (via webinar) Phil Briddell, Susquehanna Real Estate (via webinar) Harry Campbell, Chesapeake Bay Foundation Andrea Danucalov, FERC (via webinar) Priscilla Eberly, State Representative Zimmerman's Office (via webinar) Charlene Espenshade, Lancaster Farming (via webinar) Rachel Felver, Alliance for the Chesapeake Bay (via webinar) William Fink, CVCC/CFG Mary Gattis, Local Government Advisory Committee Shannon Gority, Capital Region Water (via webinar) Tom Graupensperger, Dewberry (via webinar) Jennifer Handke, Consulting with a Purpose (via webinar) David Hess, Crisci Associates Ruth Hocker, City of Lancaster (via webinar) Brian Kauffman (via webinar) Kimberly Long, Exelon (via webinar) Casey Martin, PA House of Representatives, 99th District (via webinar) Bruce McClure, EBA Engineering (via webinar) Donna Morelli, Bay Journal John Nikoloff, ERG Partners Renee Reber, Chesapeake Bay Foundation Kristen Saacke Blunk, Headwaters LLC Ray Schilling, (via webinar) Kim Snell-Zarcone, Choose Clean Water Ezra Thrush. PennFuture

Kristopher Troup, North Londonderry Township Roland Wall, Patrick Center for Environmental Research (via webinar)

Welcome and Introductions – Patrick McDonnell, Secretary, DEP

Secretary McDonnell opened the meeting at 1:00 pm. Those in the room introduced themselves. It was agreed that those on the phone should be listed in the minutes, as they started interrupting each other to introduce themselves. Secretary Dunn announced that DCNR recently released the request for proposals for the first round of grants for income-generating riparian buffers with \$1,000,000 of funding from Pennvest. Brion Johnson added that the hope is that this would become an annual announcement. They are looking for projects that are ready to go.

Update on Membership of Local Area Goals, Priority Areas and Practices Workgroup – Lisa Schaefer, Co-Chair

Lisa Schaefer provided a list of proposed members for the Local Area Goals, Priority Areas and Practices Workgroup. She also said they are looking for three more members; one from a conservation district and two with a municipal background. She asked for the approval of the list of proposed members along with the proposed background for the three additional members, so that they wouldn't have to wait until the next steering committee to include these three additional people. Brion Johnson moved the committee approve Lisa's request, John Brosious seconded. Motion passed unanimously.

Follow-up from August Steering Committee Monitoring Presentation – Tyler Shenk, SRBC

Tyler Shenk opened the series of presentations with a review of August's Steering Committee Meeting presentation on monitoring and modeling data and interactions. Discussions from the August meeting led towards interest in looking into the "top" watersheds of interest and potential, thus the technical assistance team (DEP, SRBC, EPA Bay Program Office) decided to dive into more specifics regarding some of the long-term monitoring sites. Ten year yields for nitrogen, phosphorus and suspended sediment for all monitoring stations were used to illustrate the highest contributing watershed, ranked and summed to give the top five demonstration watersheds of Pequea, Conestoga, Swatara, West Conewago and Octoraro. Basic watershed characteristics of size, stream miles, population and public water suppliers were illustrated as each could have its own impact or cause for concern. Characterizing landuse within the watershed started to show similar trends with cultivated lands dominating most watersheds while a few had substantial developed areas as well. As discussed in August, impaired stream coverage very much aligned with the top contributing watershed as well with the majority of impairments caused by siltation and/or nutrients. Finally, trends for nitrogen, phosphorus and sediment were depicted for all five watersheds for the last ten years, with most parameters showing a decreasing trend. However there is still significant room to improve to even reach basin wide average loading yields.

Example Priority Watershed Analysis – Emily Trentacoste, US Geological Survey

Emily Trentacoste from EPA's Chesapeake Bay Program Office presented a deep dive into one of the five focus watersheds, the Swatara Creek watershed. The case study focused on nitrogen and demonstrated how managers can use the latest science to understand the drivers and sources of nitrogen within a local watershed, identify opportunities to address those issues, and focus restoration efforts moving forward into the Phase III WIP development process. She described how USGS research, water quality monitoring data, and USGS and Chesapeake Bay Program models can be integrated together, demonstrating that in the Swatara Creek watershed there are mixed sources of nitrogen including agricultural and developed areas. She showed that the way in which nitrogen is transported to local streams matters, and that in Swatara Creek this involves groundwater. A number of data layers were presented that can be used to focus restoration efforts including where loads are coming from geographically, and where the more vulnerable groundwater areas are within the watershed. Finally, she connected these scientific pieces to management implications. The presentation showcased how counties within one watershed can differ in practices that generate nitrogen loads, and that there are opportunities to better focus restoration practices on Swatara Creek's specific issues. Combining the scientific data with restoration practice and management information can help inform decisions and focus restoration efforts moving forward by sector, geography, and practices.

Progress, Practices and Next Steps for the Rest of the Watershed – Matt Johnston, University of Maryland, Chesapeake Bay Program Office

Matt described estimated trends in nitrogen delivery and best management practice implementation provided by the Chesapeake Bay Program Partnership's newest modeling tools, and presented information about the most cost-effective practices for reducing pollution.

The newest modeling tools suggest that Pennsylvania has increased implementation of practices and reduced nitrogen pollution to local waters and the Chesapeake Bay significantly since 1985, but that more actions are needed to meet the Chesapeake Bay Total Maximum Daily Load (TMDL) pollution reduction requirements. Additionally, the modeling tools suggest there are significant opportunities available to increase implementation of popular practices in order to further reduce nutrient and sediment pollution. The tools also suggest that while a large portion of the required reductions could be achieved through implementing practices in five key watersheds in south-central Pennsylvania, efforts are certainly needed elsewhere across the watershed in order to achieve the TMDL requirements.

Matt suggested that necessary reductions could be met if Pennsylvania utilized geographic targeting to implement cost-effective practices in the right places, and that the modeling tools could provide some guidance on where and what to implement. As an example, he presented how a geographically targeted forest buffer program could achieve greater nutrient reductions and save costs, and offered to continue to conduct similar analyses for Phase III WIP workgroups and localities over the coming year.

Discussion Points of Presentations:

Highlights of the discussion around the three presentations above include:

• Matt Royer and Felicia Dell wanted clarification on the Municipal Separate Storm Sewer System (MS4) boundaries used. Matt Johnston's answer was these boundaries were

provided by the state, program staff will have to provide additional detail as to how these boundaries were defined. Felicia wants clarification as to whether or not the boundaries are the boundaries of the entire municipality, or that of the urbanized area. Matt Johnston also reminded everyone that these boundaries can be updated as part of the two year milestones for WIP implementation and provisions for the update of these boundaries can be part of the WIP.

- Felicia Dell noticed the land use categories in the Watershed Model do not match those used by SRBC. A crosswalk between the different land uses and a definition is needed.
- Based on the recent data on the age of groundwater, actions and practices installed on the land will result in water quality improvement quicker than originally thought.
- The progress run results presented by Matt are still preliminary. Some final cleanup of the data is still going on. For example, the forest buffer numbers are low and will be updated to reflect a better calculation methodology.
- The land use/land cover data used in the model is based on 1 meter resolution LIDAR data collected in 2012/2013.
- More work is needed to capture progress. For example, for the first time last year, there was buy-in through the Penn State survey to use producer data to capture implementation.
- The results presented provide a good baseline to facilitate future local engagement for further on-the-ground verification and additional implementation.
- Matt Keefer asked if the work presented by Emily was reasonable to do in other watersheds. The answer was yes, it was; realizing that it can't be done everywhere, that the effort would need to be prioritized and focused. However, efforts by the EPA Bay Program Office are underway to put this data into a central place so that users can access it and the states can do these analyses on their own.
- John Brosious stated that doing "Everything, Everywhere by Everyone" in the top five watersheds picked based on the results of the SRBC work doesn't get Pennsylvania where it needs to be, but the progress is still substantial and it is a start. The next step is the back and forth needed to capture the human and political element that will impact implementation. Secretary McDonnell agreed that he didn't think anyone expected that these five watersheds would be the final answer, but it is a very good start. He asked about using a "no impairment bar", rather than an E3 approach. In other words, define a level of implementation that addresses the impairment in the local stream as the level of commitment needed.
- John Bell added that previous data had land retirement as a needed practice to achieve the TMDL. This was very concerning, in that it meant farms would have to be taken out of production to achieve the load reduction goals. These new numbers look much better.
- Members want to see the same progress graphs Matt Johnston presented for urban practices and the most expensive practices, along with the level of implementation of these practices.
- The CAST Model has cost data incorporated into it for the states to use. However, if the states have better data, they can provide that data.
- Secretary Dunn stated that there are over 35,000 acres of lands impacted by abandoned mines on public lands. Reclaiming those lands is something that should be considered.

Other Watershed Benefits and Outcomes, the 2014 Watershed Agreement – Sean Gimbel, Water Programs Office

Sean Gimbel gave an overview of the different Chesapeake Bay Agreements that have been in place since 1983. The latest one was signed in 2014 and defined 31 different outcomes and associated strategies to address those outcomes. Pennsylvania is involved in 27 of these outcomes. The outcomes are categorized around Sustainable Fisheries, Vital Habitats, Water Quality, Toxic Contaminants, Healthy Watersheds, Stewardship, Land Conversion, Public Access, Environmental Literacy and Climate Resiliency. He stated that this is the first time that the Bay Program has attempted to recognize the social and economic factors impacting the Bay, not just the science. The workplans and management approaches developed around these outcomes can help with the messaging and implementation of the Phase 3 WIP. The Bay Program is in the process of looking at these outcomes to "stack" the benefits for incorporation into the Phase 3 WIP.

Secretary Dunn added that this can be very helpful to us. We need to knit the two efforts together. Sean added that the Agreement can help us identify gaps and influencing factors that are impacting success; such as funding, public awareness, science and research needed and coordination. Secretary Dunn added that it is just a matter of identifying who does what, where and when.

Matt Royer added that a key element is local input, stewardship is important. Secretary Dunn and Redding both questioned why the slide representing our current participation did not indicate any participation in this category of outcomes. For example, DCNR is heavily involved in the Diversity Outcome.

A question from someone in the audience was raised about the inclusion of drinking water in the outcomes. Lisa Daniels, Acting Deputy Secretary for Water Programs added that if drinking water is not mentioned, she would love to see that it is added. Sean Gimbel responded that he thought he had seen it mentioned, but he couldn't remember which outcome.

Marel King emphasized the significance of the "partnership". This partnership has grown over the years, and was in existence long before the TMDL was created. This is an important part of the ongoing success of the Bay Program.

Summary and Next Steps – Secretary Patrick McDonnell

Secretary McDonnell had the following closing points to the discussion:

- 1. The data and tools exist for us to move forward, to set the right direction.
- 2. The task now is to figure out what is achievable, identify the gaps and address those gaps.
- 3. Targeting and prioritization will be key to achieve the most reductions with the lowest transaction costs. This effort must be done at the local level with a bottom up approach.
- 4. The stacking of benefits needs to be explored, like adding consideration of drinking water. Other examples include legacy sediment impacts on habitat, flooding and public safety.

5. The Watershed Agreement can help to build capacity for implementation of the Phase 3 WIP by capturing and relying on what is being done by the Partnership under the Agreement. This Agreement can help start the conversation to recognize available resources and work being done.

Public Comment

Mary Gattis, Chesapeake Bay Local Government Advisory Committee, emphasized the importance of getting comparable numbers, like those in Matt Johnston's presentation, for practices on developed lands. These are needed for engagement with local government.

Kim Snell Zarcone, Choose Clean Water Coalition, raised an issue of transparency. She believes the workgroup meetings should be open to the public. The fact that they are not could be a violation of the Sunshine Law. She suggests these meetings be opened to the public, with meeting dates and minutes posted on the website.

Brion Johnson moved to adjourn. Secretary Dunn second. Meeting adjourned at 4:00 pm.