POTOMAC WATERSHED ROUNDTABLE
Quarterly Meeting – April 12, 2019
George Mason University – Potomac Science Center, Woodbridge

MINUTES

Members and Alternates

Hon. Penny Gross, Chair, Voting Member, Fairfax County
Kirsten Conrad, Advisory Member, Virginia Cooperative Extension
Curtis Dalpra, Voting Alternate, ICPRB
Laura Grape, Voting Alternate, Northern Virginia SWCD
Charlie Grymes, Voting Member, Environment
Jim McGlone, Advisory Member, Virginia Department of Forestry
Hon. Robert Pickett, Voting Member, Northern Neck SWCD
Rebecca Shoemaker, Advisory Member, Virginia DEQ
Hon. Elizabeth Ward, Voting Alternate, Prince William SWCD
Hon. Bob Wernsman, Voting Member, Tri-County City SWCD

Interested Parties

Randy Bartlett, Fairfax County
Nicki Bellezza, Fairfax Water
Emily Burton, Fairfax County
Craig Carinci, Fairfax County
Kristina Clarin, Northern Virginia SWCD
Bill Dickinson, Chesapeake Bay Citizens Advisory Group
Alvi Dongmei
Martin Gary, Potomac River Fisheries Commission
Norm Goulet, Northern Virginia Regional Commission
Diane Hoffman, Northern Virginia SWCD
John Kennedy, Virginia DEQ
Lori Kledaras, FEDEX
Egils Milbergs
Ashley Palmer, Northern Virginia SWCD
Doreen Peters, George Mason University Doctoral Candidate
Hon. Jerry Peters, Northern Virginia SWCD
Juan Reyes, Fairfax County
Marjorie Roddy, INOVA Fairfax Hospital
Nancy Rybicki, USGS
Peggy Sanner, Chesapeake Bay Foundation
Heather Shackley, Northern Virginia SWCD
Veronica Tangiri, Prince William SWCD

Call to Order. Ms. Gross called the meeting to order at 10:05 AM and thanked the Northern Virginia Soil and Water Conservation District and George Mason University for hosting the meeting.

Introductions. Ms. Gross asked those in attendance to introduce themselves.

Welcome. Ms. Gross invited Dr. Chris Jones, Director of the Potomac Environmental Research and Education Center (PEREC) to provide an overview of the Potomac Science Center. Dr. Jones distributed a flyer about the Potomac Science Center and the research faculty of PEREC. He highlighted the long-standing research efforts with Fairfax County DPWES-Wastewater Management on Gunston Cove and Alexandria ReNew on Hunting Creek. He noted the facility has an extensive laboratory and active K-12 education program. A neighboring commercial marina donated a slip for the University's use as it does not have a dock onsite. All of the water running off the building goes through a series of rain gardens, conservation landscaping, a cistern, and living wall. Dr. Jones shared that the facility would not have been built if not for state funding.

Minutes. Ms. Gross noted that the minutes from the January 11th Roundtable meeting will be distributed at a later time and asked that any corrections be sent to Ms. Grape.

Update from the Chair. Ms. Gross noted that as a member of the WIP III Stakeholder Advisory Group, she participated in a strategy meeting in Richmond to discuss to effect policy change at the local level. She noted that those that work solely under congressional or state regulation may not understand local government budgeting and structure. She noted the importance of reframing the way the Chesapeake Bay Program communicates and engages with local governments.

In addition, Ms. Gross shared that Dr. Sara Via with the University of Maryland presented on the benefits of healthy soils as it relates to water quality, carbon sequestration, and agriculture at a recent meeting of the Chesapeake Bay and Water Resources Policy Committee meeting at the Metropolitan Washington Council of Governments. She suggested inviting Dr. Via to a future Roundtable meeting to share her insights on the topic.

State of the Bay 2018. Ms. Peggy Sanner, Virginia Assistant Director and Senior Attorney with the Chesapeake Bay Foundation, provided an overview of the 2018 State of the Bay Health Index. Since 1998, the Foundation has been reporting progress toward meeting the baseline condition of the Chesapeake Bay as described by Captain John Smith. The Foundation uses monitoring data collected by the US Geologic Survey on pollutant, habitat, and fisheries indicators to create an overall state of the bay health grade. The condition at the time of Captain John Smith sets the upper threshold, at a score of 100. Ms. Sanner noted that the overall score for the Chesapeake Bay is 33, or a D+. This is slightly down from a year ago due to the increased flow caused by the record-breaking rainfall. Overall, she noted that the Foundation has growing optimism about the Bay's restoration effort.

Ms. Sanner reviewed the elements of the Chesapeake Bay TMDL and Watershed Implementation Plans as the Clean Water Blueprint. She noted that this approach provides a framework for accountability, reasonable assurances that efforts would be adequate toward meeting the goals, set milestones and provide for adaptive management. She complemented the Commonwealth's efforts to support the Bay's restoration, noting its work on all aspects of the pollution-reduction programs.

She reviewed Virginia's progress under the Blueprint, noting steady progress in nitrogen reductions from most sectors, except urban/stormwater. She noted the challenges faced in the

urban/stormwater sector and highlighted the importance of the Stormwater Local Assistance Fund (SLAF) to support initiatives in the urban/stormwater sector. However, the program is often on the chopping block by the General Assembly and the value that the SLAF funding provides needs to be relayed regularly and especially to new General Assembly members. She noted that Fairfax County has a strong voice on this topic, with Delegate David Bulova as a strong champion. The Chesapeake Bay Foundation is pushing for an allocation of $50 million every year in the Governor's budget. In 2019, $10 million was awarded.

Several additional challenges were noted by the Roundtable participants that may have influenced the reductions in the urban/stormwater sector, including:

- Increases in population
- Changes in rainfall intensity and duration
- Categorizing stream restoration in the BMP warehouse, as "other"
- Consistent documentation of progress in regulated versus unregulated areas

Ms. Sanner pointed out that the 2018 State of the Bay report reflected falling grades from the 2016 report largely due to increased rainfall events. She noted that there are signs of progress including increasing dissolved oxygen and decreasing the size of the dead zone, an indicator that the Bay may be recovering on its own. Ms. Sanner reinforced the significance of this finding and noted that its importance cannot be overstated. She also highlighted that record water clarity was observed in 2016, but the 2018 number were likely impacted due to the rainfall.

In regards to habitat indicators, including forested buffers, wetlands, underwater grasses, and resource lands, Ms. Sanner noted that improvements have been seen across the board. Maintaining forest buffers is especially challenging across all Bay Act areas. The Foundation is establishing the Keystone 10 million tree partnership focused in Pennsylvania, which needs additional assistance in order to meet its goals. Ms. Sanner noted that efforts to minimize impacts to wetlands need reinvigoration and that the current rate of establishment of new areas will take significantly longer to meet expectations. Results of monitoring Submerged Aquatic Vegetation (SAV) continues to indicate great progress. The Foundation is hopeful that this will continue. Ms. Sanner described Resource Lands as farmlands, forests, and natural open areas. The results are mixed and reflect the classic struggle between development and protecting lands. She noted this is an area for creative policy making and protection strategies.

Fisheries indicators include iconic species, including rockfish, blue crabs, oysters, and shad. Ms. Sanner noted that results for 2018 are mixed. Rockfish population numbers have been steady due to good management practices. However, while the juvenile numbers are strong, adult numbers have recently declined. Additional management strategies are being considered by both Virginia and Maryland to ensure the decline is reversed. Mr. Gary with the Potomac River Fisheries Commission invited anyone with an interest in the fishery to be involved in the conversation. Wild oysters are particularly stress in Maryland. The Chesapeake Bay Foundation has established the Chesapeake Bay Oyster Alliance with the intent of increasing the number of oysters in the Bay by 10 billion by 2025. It was noted that oyster populations benefit from habitat improvement and limiting harvesting. However, approaches to both management strategies are different between Virginia and Maryland. Mr. Gary pointed out that Virginia has more baby oysters because of higher salinity levels. Populations in Maryland struggle because of the lower salinity. It was also noted that rains in the upper bay and diseases in the lower bay regions both cause significant oyster

mortality. Mr. Kennedy noted that scientists with the Virginia Institute of Marine Sciences (VIMS) think there is a need to leave adult oysters in the environment longer to encourage more genetic diversity that is more disease resistant. Ms. Sanner shared that Blue Crab abundance is improving, but there are year-to-year fluctuations in population. The Shad population seems to be at an all-time low. Removal of dams to try and bring back shad have not had the desired results. Mr. Gary noted that he would consider the grade in the Potomac River to be an A+. However, Shad are a big part of by-catch for off-shore fishing and there may be a relationship with the population Bay wide. Mr. Dalpra noted the efforts of the Interstate Commission of the Potomac River Basin in restoring shad populations at Little Falls.

Ms. Sanner noted that while the Bay may still be receiving a score of D+, overall improvement in Bay health is occurring. While challenges continue are still ahead, there is considerable hope that by 2025, natural improvements will begin to take place. Mr. Dickenson and Ms. Gross both suggested providing more local results to encourage buy-in from communities to improve local water and have downstream results.

Drafting the Commonwealth's Phase III Watershed Implementation Plan. Mr. John Kennedy, Director with Virginia DEQ-Office of Ecology, provided a brief overview of the watershed implementation planning effort and draft proposals the Commonwealth is considering for its Phase III WIP. He noted that local involvement will be key for the implementation of the Phase III WIP. The comment period will be open through June 7 and the final WIP document is due to EPA on August 9. Mr. Kennedy reviewed the results of Virginia's efforts in achieving the midpoint goal for nitrogen and phosphorus. He noted that the Commonwealth did meet the goal of 60 percent reduction for both nitrogen and phosphorus in 2017. The phase III WIP are being prepared to reach the full reduction targets by 2025.

He noted that modeling work is indicating progress, as is resource monitoring. The 2018 Water Quality Assessment Integrated Report is the result of an evaluation of several years' worth of monitoring data and indicates improvements in several Bay segments, including the James and Rappahannock. He also highlighted the Commonwealth's success with restoring SAV, noting that increase acreages are helping the Bay to demonstrate more resilience.

Governor Northam shared that there is more to be done and communicated his Administration's commitment to the Phase III WIP process and tackling the impacts of climate change, at the Environment Virginia conference in April 2018. Mr. Kennedy noted that if the implementation of best management practices continued at the current rate, the Commonwealth will see a shortfall of 6.5 million pounds of nitrogen. In addition, the increased load anticipated from climate change causes additional challenges in achieving the 2025 goals.

Mr. Kennedy reviewed the nine goals developed for the Phase III WIP, including:

- Restore the Chesapeake Bay.
- Achieve state basin planning targets for the Potomac, Rappahannock, York, and James River, and the Eastern Shore.
- Achieve our goals no later than December 31, 2025.
- Tackle additional pollution expected from growth.
- Tackle the impacts of climate change.

- Continue to engage partners, including local governments, planning district/regional commission, and soil and water conservation districts.
- Develop a plan that is practical and cost effective.
- Maximize the potential for co-benefits.
- Meet the Environmental Protection Agency's expectations.

Mr. Kennedy noted that EPA released an expectations document in June 2018, to primarily focus on reasonable assurances through policies, technical assistance, or cost-share programs in place. He noted that EPA needs to be convinced that the Commonwealth has the wherewithal, political will and stakeholders to implement the plan. He reviewed the stakeholder involvement program, which engaged 32 soil and water conservation districts and 15 planning district commissions.

The Virginia Department of Conservation and Recreation met with the Soil and Water Conservation Districts (SWCDs) over eight meetings from May through October, as well as other agricultural organizations such as Farm Bureau, Virginia Agribusiness, and Virginia Department of Forestry to prepare key recommendations for the agriculture sector. The Secretary of Natural Resources and Virginia Department of Environmental Quality work with Planning District Commissions (PDCs) on the unregulated stormwater sector. PDCs were the mechanism for reaching out to local governments to develop the recommendations and programmatic actions.

Mr. Kennedy noted there are 51 new state initiatives that are under consideration broken down into five categories and highlighted the following:

- Agriculture
    - Update and fully fund the Virginia Agricultural BMP Cost-Share Program; Cost Share and Technical Assistance
    - Seek Livestock Stream Exclusion on all perennial streams
    - 85% implementation of nutrient management plans on cropland.
- Wastewater
    - Achieve additional reductions from significant municipal wastewater treatment plants.
- Developed lands
    - Fund VCAP, Fund SLAF, Define SLAF needs
    - Establish long-term partnership with PDCs
- Septic systems
    - Pilot shifting oversight of septic maintenance from local governments to Virginia Department of Health
- Multiple sectors
    - Coastal resilience master plan

Mr. Kennedy reviewed the public comment process and noted that webinars will take place on May 13 at 9:00 AM and 6:00 PM. Comments will be accepted through June 7th. Mr. Bartlett noted that the WIP III does not include associated costs. Ms. Gross reinforced the need to recognize the cost of implementing this plan and noted that there shouldn't be punitive reactions if the goals aren't met because the associated costs are too high. In response to a question from Ms. Tangiri regarding new creditable BMPs, Mr. Kennedy remarked that there are a variety of BMPs that are not included in the clearinghouse. The Commonwealth need to keep an open mind to innovation and encourage their inclusion in the model. Credit is only given to practices that can be modeled.

Roundtable Discussion.

Water Chestnut Invasion

Ms. Gross invited Dr. Nancy Rybicki with the U.S. Geological Survey to share the work she is doing regarding an invasive water chestnut. Ms. Rybicki noted that she serves as a volunteer with the Virginia Department of Game and Inland Fisheries and discovered the water chestnut in Pohick Bay. At that time, she was able to remove it. However, she noted that it is one of the biggest threats to the Potomac. This particular species originates in Taiwan and the locations in Fairfax and Prince William Counties are the only known locations in North America. She noted that once it is in a waterbody, it quickly covers the surface through 6 to 10 feet of water depth and along the edge.

She noted that the plant changes the ecology of the waterbody because it creates a mat. It reproduces from seeds and waterfowl often transfer it from pond to pond, because the seeds stick to their feathers. Small colonies have been treated in Pohick and Occoquan waterways. Management of the plant requires manual pulling in spring.

Ms. Rybicki noted that the number of colonies has double in the last several years. It is now in 33 different locations, mostly stormwater retention and amenity ponds in Fairfax and Prince William Counties. However, it has also been seen in Stafford and Westmoreland Counties. Ms. Rybicki was seeking support from the Roundtable to assist with its eradication.

Mr. Bartlett mentioned that the water chestnut is prevalent at the ponds at the Fairfax County Government Center. Currently there isn't a plan in place to manage invasive plants in stormwater features. Ms. Rybicki noted that DGIF volunteers were able to pull roughly 1/3 acre in 2-3 hours. Ms. Conrad noted that the Virginia Cooperative Extension has an upcoming pesticide applicators training coming up and offered to raise this issue. Dr. Rybicki noted that applying pesticides is often cost-prohibitive for private pond managers and that a financial incentive might be beneficial.

Retrofitting Grey Infrastructure in Older Communities

Ms. Roddy noted that she lives in a neighborhood in the Mt. Vernon area of Fairfax County that was built in the 1950s. The stormwater management is primarily through a series of hardened ditches and culverts draining to Little Hunting Creek. She would like to retrofit these features to green infrastructure practices, but ran into roadblocks with the Virginia Department of Transportation, which will not prioritize this type of project. Mr. Carinci and Mr. Bartlett noted that this is a common theme across Fairfax County, particularly in communities that were densely developed prior to the advent of stormwater regulations. Mr. Kennedy recommended that Ms. Roddy contribute a comment through the WIP III process. Since VDOT is a municipal separate storm sewer system (MS4) permitee and there is a challenge with getting water off of the road as quickly as possible and identifying infiltration opportunities. He noted that it would take a large funding appropriation from the General Assembly to accomplish this work, but it could be considered cost-avoidance of having to do stream restoration.

Member Time and Announcements. Ms. Gross invited attendees to share new and events taking place in their communities. The following was shared:

- Ms. Buhl distributed an information card regarding the invasive Spotted Lanternfly. The card includes a website to report sightings: https://ext.vt.edu/spotted-lanternfly.

- Mr. Dickenson shared an update on the efforts by Alexandria ReNew to resolve the Combined Sewer Overflows. He shared that an Environmental Impact Assessment will need to be completed, since the lines will be routed through federal property. The effort must be completed by 2025, it is estimated to cost $100 million to complete.
- Ms. Bellezza noted that the deadline for the Fairfax Water grant is May 15th.
- Mr. Dalpra shared that the Potomac Watershed Clean-up is kicking off this weekend.
- Mr. McGlone shared that the Virginia Department of Forestry still has money in its Emerald Ash Borer Treatment Grant. He recommended contacting your local area forester for more information.

Adjournment. Ms. Gross thanked everyone for their attendance and engagement in the meeting dialogue. She expressed appreciation to George Mason University and the Northern Virginia SWCD for their hospitality and noted that the next meeting will be on July 12, 2019 in the Northern Neck. The meeting adjourned at 1:43 PM.