

**POTOMAC WATERSHED ROUNDTABLE**  
**Quarterly Meeting – February 5, 2021**  
**Held Virtually Via WebEx Conference Platform**  
**MINUTES**

**Meeting Recording**

**Voting Members/Alternates**

Hon. Penny Gross, Potomac Watershed Roundtable Chair, Fairfax County  
Hon. Woody Hynson, Potomac Watershed Roundtable Vice Chair, Westmoreland County  
Hon. John Flannery, Loudoun SWCD  
Hon. Jim Gehlsen, Prince William SWCD  
Harry Glasgow, Northern Virginia SWCD, Prince William SWCD  
Laura Grape, Northern Virginia SWCD  
Hon. Amy Jackson, Councilmember, City of Alexandria  
Hon. Will Lintner, Director, Prince William Soil and Water District  
Karen Pallansch, Alexandria Renew  
Hon. Robert Pickett, Northern Neck SWCD  
Michael Trop, John Marshall SWCD

**Advisory Members/Alternates (Non-Voting)**

Kirsten Conrad, Virginia Cooperative Extension  
Debbie Cross, Virginia Department of Conservation and Recreation  
Curtis Dalpra, ICPRB  
Jim McGlone, Virginia Department of Forestry  
Daniel Moore, Virginia Department of Environmental Quality  
Rebecca Shoemaker, Virginia DEQ

**Presenters**

Justin Williams, Director, Office of Watersheds and Local Government Assistance, VA DEQ  
Molly Mitchell, PhD, Center for Coastal Research Management at the Virginia Institute of Marine Sciences

**Interested Parties**

Heather Ambrose, Fairfax County Stormwater Planning Division  
Randy Bartlett, Fairfax County Department of Public Works  
John Bateman, Northern Neck Planning District  
Nicki Bellezza, Fairfax Water  
Karl Berger, Metropolitan Washington Council of Governments  
Craig Carinici, Fairfax County Stormwater Planning Division  
Patrick Coady  
Kirsten Conrad, Virginia Cooperative Extension in Arlington/Alexandria  
Ross Cooper, Alexandria Renew  
Dennis Cumbie, Loudoun County  
Becky Epamchin-Niell, Resources for the Future  
Dave Evans, Virginia Department of Environmental Quality  
Judy Fraser, Northern Virginia SWCD  
Randy Freed, Environmental Scientist, Retired  
Marty Gary, Potomac River Fisheries Commission  
Adil Godrej, Virginia Tech—Occoquan Watershed Monitoring Laboratory  
Norm Goulet, Northern Virginia Regional Commission  
Maria Harwood, Northern Virginia SWCD  
Jordan Herring, Virginia Department of Forestry  
Kinner Ingram, Virginia Department of Forestry  
Chris Koerner, Northern Virginia SWCD  
Anne “Sunny” Matheson, Home Waters Foundation

Jerry Peters, Northern Virginia SWCD  
Harold Post, Virginia Tech—Occoquan Watershed Monitoring Laboratory  
Heather Shackley, Northern Virginia SWCD  
Veronica Tangiri, Prince William SWCD  
Kendall Tyree, Virginia Association of Soil and Water Conservation Districts  
Allie Wagner, Northern Virginia Regional Commission  
Elizabeth Ward

**Call to Order.** Ms. Gross called the meeting to order at 10:02 am and welcomed all to the meeting. She asked meeting participants to please remain muted throughout the presentations, to turn off individual videos, and to use the WebEx “raise your hand” feature to ask a question. She noted that there would be time at the end of the meeting for announcements.

The agenda had been sent out to participants before the meeting, and presentation recordings will be posted to the [potomacroundtable.org](http://potomacroundtable.org) website following the meeting.

**Updates from the Roundtable Chair.** Ms. Gross expressed her appreciation for the opportunity to gather virtually. She misses the opportunity to share and connect with one another in person but is grateful that virtual meetings are possible.

Ms. Gross noted that the 2021 *Protecting the Natural Beauty of the Chesapeake Bay* calendar is gorgeous. It is produced by the Audubon Society, contains beautiful photos, and provides information about problems and solutions within the Chesapeake Bay. The calendar may be purchased on the [Audubon Society of Northern Virginia's website](http://Audubon Society of Northern Virginia's website).

Ms. Gross reported that the Washington Metropolitan Transit Authority has been experiencing flooding because of recent, intense storms. She has also been made aware of the increasing prevalence of “sunny day” flooding. This affects Virginia’s Tidewater area, but also affects more urban locations, such as in the City of Alexandria. She stated that more attention needs to be paid to sea level rise. She reported that Andrea McClellan of the Norfolk City Council is talking with Governor Northam about the creation of a statewide flooding commission.

**Potomac Council Update.** Ms. Gross invited Mr. Peterson to provide an overview of the discussion that was held at this morning’s Potomac Council meeting.

Mr. Peterson reported that the Potomac Council met this morning for the first time since last January. He expressed his hope that the council and the roundtable will be able to return to in-person meetings soon.

One item discussed at the council meeting was the need to elect a roundtable Second Vice Chair as Marty Nohe, who had filled that role, is no longer an elected official. The council leadership will work with Ms. Gross and Mr. Hynson to select a Second Vice Chair. In addition, there are some membership positions that have never been filled. The council will work with Ms. Gross and Mr. Hynson to discuss these vacancies, determine if there are new membership and advisory categories that can be added to the roundtable, as well as to discuss upcoming roundtable meetings and possible programs. Ms. Gross encouraged meeting participants to suggest industries or segments of the community that might be considered for roundtable roles. She stressed that this should be areas or industries rather than specific names.

Mr. Flannery suggested a possible future roundtable topic about the problem of farmers accepting fees to have garbage “tipped” on their land. He noted that this is an increasing problem. The roundtable may want to hear what is happening in other counties and what is being done about it.

Another possible topic for discussion is soil health. Ms. Gross concurred that soil health is a fascinating topic. She recalled that there was a presentation at the Metropolitan Council of Governments (MWCOG) in which a University

of Maryland professor brought samples of various soils and did exercises to help the group understand soil. She said this is especially important now as Fairfax County is looking into the composting of food scraps.

Ms. Gross added that one additional area to consider for member categories is to have a spot for a healthcare provider on the roundtable. There is a direct connection between the environment and health and a need for community members to connect with the environment.

At Ms. Gross' request, Ms. Grape provided an update to the roundtable about its financial position. Ms. Grape noted that she has submitted a grant to the Virginia Department of Environmental Quality (DEQ) for Potomac Watershed Roundtable support for calendar year 2021. She expressed her appreciation for the continued support of DEQ. She further noted that the roundtable is in sound fiscal shape. There were modest expenses this past month to maintain functionality of the website and there is a nice reserve in the bank.

Mr. Peterson announced that the Vice Chairman of the Potomac Council is Robert Pickett, elected director of the Northern Neck Soil and Water Conservation District (NNSWCD).

Mr. Dalpra announced that the Potomac River Swim for the Environment was cancelled again this year. This event is traditionally held at the end of May and had to be cancelled this year and last because of the pandemic.

### **Update on WIP III Goals in the time of COVID-19**

Ms. Gross introduced Justin Williams, Director of the Office of Watershed and Local Government Assistance Programs at DEQ.

Mr. Williams used a PowerPoint presentation to share an update with the roundtable on Virginia's Phase III Watershed Implementation Plan (WIP III) goals.

Ms. Gross thanked Mr. Williams for his presentation and asked if there were any questions.

In response to a question from Ms. Gross to confirm her understanding that the 2025 deadline for Phase III had not been advanced to account for delays related to the pandemic, Mr. Williams stated that there has not yet been a specific revision. However, he noted that DEQ is aware of the challenges of the past year and noted that there is still an opportunity to discuss this further.

Ms. Gross noted that Senate Bill 1309 has passed the senate and is now waiting hearing in the committee. It would allow Stormwater Local Assistance Funds (SLAF) to be used for comprehensive flood mitigation but does not expand the amount of money for the fund. Does DEQ have a comment? Mr. Williams replied that DEQ is aware of the bill but cannot take a position or comment. He welcomed any feedback that he could pass along to those who work on policy development at DEQ. Ms. Gross noted that every year SLAF funding gets put on the chopping block and expressed her feeling that the pie needs to be made bigger rather than making the slices smaller.

Ms. Gross reported that a recent article in the [Bay Journal](#) had some interesting and disturbing information about the disappearance of eel grass from the Chesapeake Bay, creating a significant impact across the bay. Eel grass is important for crabs and other marine life and is being impacted by water temperature.

Mr. Williams responded by noting that DEQ also works with localities through the Chesapeake Bay Preservation Act (CBPA) and will bring this information to the attention of the technical staff who work in this area.

In response to a question from Mr. Litner about the "state of the Potomac Watershed" and the aim to reduce overall pollution levels for the Chesapeake Bay—specifically, what are the targets for nitrogen, phosphate, and sediment—Mr. Goulet reported that this information is not currently available. He said that the progress numbers are currently being submitted and that it will be a couple of months before the newest information is available. Mr. Goulet added that older information is available on the [Chesapeake Bay Phase III WIP page of the DEQ Website](#).

Ms. Grape expressed her desire to have Mr. Williams come back to a future roundtable meeting and keep the group updated. Mr. Williams said he would be happy to come back. He added that it is fortunate to have Daniel Moore working on the CBPA. Ms. Gross concurred that Mr. Moore has been a fabulous resource and a consistent participant at the roundtable.

In response to a request from Mr. Dalpra for Mr. Williams to speak about the 2021 milestones and the water quality improvement layer, Mr. Williams noted that [milestones information](#) is available on the website. Information on the water quality improvement layer is an element of the work being done by the Virginia Department of Conservation and Recreation (DCR). Additional information may be found on the DCR website: <https://www.dcr.virginia.gov/conservevirginia/>.

Mr. Dalpra reported that the Potomac River Commission is working on a land prioritization tool which would show land areas that would be particularly good to conserve to preserve drinking water quality.

In response to a question from Mr. Bateman about whether DEQ is closely following the transfer of septic pump-out authority from local governments to the Virginia Department of Health (VDH) in three regions, and whether there has been any discussion about expansion of septic pump-out funding, Mr. Williams replied that he is aware of the efforts and that DEQ is working with VDH on this issue. He said the report is being finalized, that they continue to look for funding opportunities, and that the actual funding for transition would be an issue between VDH and the Virginia General Assembly.

In response to a question from Ms. Bellezza about grant programs for private owners to install “living shorelines,” Ms. Grape reported that the Virginia Conservation Assistance Program (VCAP), funded by the state through the Virginia Association of Soil and Water Conservation Districts, provides cost share funding for living shorelines practices along tidal waterways. The VCAP Steering Committee is working in close coordination with the Shoreline Erosion Advisory Service and the Virginia Marine Resources Commission. However, this only applies to tidal areas and does not affect stream restoration. There has not yet been a living shorelines project through VCAP in Fairfax County.

Mr. Pickett reported that the NNSWCD has used VCAP funding for living shorelines and that requests currently exceed funding availability.

Mr. Evans stated that he believes that both the National Oceanic and Atmospheric Administration and the U.S. Fish and Wildlife Service have funding programs for living shorelines.

Ms. Gross thanked Mr. Williams for his presentation and noted that she looks forward to inviting him back to another meeting so that he may update provide updates to the roundtable.

Ms. Grape noted that she will preserve the chat when the meeting ends so that the resources and links being shared can be posted to the roundtable website.

### **Prediction of Future Septic System Failure Sites**

Ms. Gross introduced Dr. Molly Mitchell, Research Assistant Professor with the Center for Coastal Research Management at the Virginia Institute of Marine Sciences. Dr. Mitchell provided information to the roundtable, using a PowerPoint presentation, on the *Prediction of Future Septic System Failure Sites*.

Ms. Gross thanked Dr. Mitchell for her presentation and asked if there were any questions.

There was some discussion about septic fields and the fact that property owners do not have to pay sewer fees but have expenses when the septic field needs to be replaced.

Ms. Ward commented about the tendency to turn a blind eye to septic problems until septic backs up into the home. She asked Dr. Mitchell if she felt that testing areas of high-density failures may have turned up communities where

action should be taken, and outreach might be helpful. Dr. Mitchell agreed and noted that the failures are visible, but the problems remain hidden.

Mr. Bateman noted that it appears that there is a severe lack of data. He expressed his feeling that data collection on existing systems is necessary before the problem can be addressed. In addition, innovative alternatives should be explored. The technology is 100 years old and is no longer sufficient. Dr. Mitchell concurred that there is an issue with the data. She added that some of the newer solutions are expensive and high maintenance. Finally, she expressed her belief that there is hope but there needs to be funding to address these issues.

In response to a question from Mr. Peters in which he noted that onsite systems fail in several ways—not just backing up into houses—and asked how system failures that resulted in repair permits were identified. Dr. Mitchell replied that the data was not divided in that way. VDH provided data on all the failures that resulted in repairs. Sometimes there are failures that are occurring but not noticed. Alternatively, there may have been repairs done in situations where there was not a complete failure.

Mr. Evans noted that VDH was able to provide a dataset of all permitted repair installations within a predefined set of watersheds. There is a lot of potential for analysis of this data if there is local interest and Geographic Information Systems (GIS) capability.

Mr. Goulet reported that the Northern Virginia Regional Commission (NVRC) has collected a regional GIS inventory on septic systems, and it differs greatly for several northern Virginia localities as compared to **CBAP**. He said the data set will be available in NVRC's geodata hub later this year.

Mr. Bartlett reported that Fairfax County has been working with the United States Geological Survey (USGS) to monitor streams in real time. They have found large increases in nitrogen downstream from older neighborhoods with septic systems. He emphasized that this is not associated with a failure but rather it is his understanding that the septic systems do not remove nitrogen. Over the years soil gets saturated into the soil and that ends up in the streams. Dr. Mitchell showed a slide on the impacts on septic systems of sea level rise. There are systems that do not have the perfect type of soil in which the soil could get saturated and eventually released. This would not necessarily be evident because the system would not fail in ways that are obvious. Dr. Mitchell noted that sometimes the only solution in such situations is an alternative system.

Ms. Gross commented on the map which shows so many septic systems within a confined area. Mr. Goulet cited a USGS Survey in the Difficult Run watershed and noted that the mass of nitrogen available from septic system leachate could be much greater from that of fertilizer. This impact is from density rather than failure of septic systems.

Mr. Bateman commented that it seems a case is being made for small scale community systems in dense areas where public sewer is not available.

Dr. McGlone added that soil saturation needs to be considered. The Virginia Department of Forestry (VDof) follows this very closely. In the period from May to December last year, there was above average rainfall. Soil has been pretty much completely saturated since last October.

Mr. Bartlett added that the theory on the data collected in the Difficult Run watershed, mentioned by Mr. Goulet, is that it was not rainfall causing the problem. Rather, it was the water usage by people which kept the area wetter than other areas.

Mr. Goulet noted that there were still some questions about this and that USGS would be investigating the issue.

Ms. Ward referred to an old New York Department of Health study in Dutchess County about the amount of land necessary to dissipate nitrogen levels in septic was two to three acres.

Dr. Mitchell said that when there is a lot of rain in a small catchment, there is quick flushing; nutrients then move out to the Chesapeake Bay. She said things are changing, but it is hard to generalize about the impacts on a specific body of water because there are so many variables.

Ms. Grape asked Dr. Mitchell about the next planned steps with her research and how the roundtable could help. Dr. Mitchell responded by saying that they are working with DEQ to look at the location of private wells, in addition to septic systems, to gather as much data as possible. She noted that a lot of data is captured on paper. The Northern Neck Planning District Commission's access database is taken out of paper records. She encouraged those who are aware of local databases that include records that are not in the state databases to let her know. They are currently digitizing some of these types of records, but it is a slow process.

It was suggested that Mr. Bartlett might be able to connect Dr. Mitchell with available resources in Fairfax County.

Ms. Gross thanked Dr. Mitchell for her participation in today's meeting. She noted that her additional questions may be sent directly to Dr. Mitchell at [molly@vims.edu](mailto:molly@vims.edu).

Mr. Hynson stated that both speakers were excellent. He reported that, based on his observations and talking with other farmers, the high ground water has caused many problems this past year. For example, farmers have spent a lot of money pulling their machinery out of holes this past year because of high ground water. With this much rain, the tides are running swifter and higher than normal—and he would expect that calculations of nutrients and runoff to also be higher as a result. Farmers are usually complaining about how dry it is, but not this year. Further, Mr. Hynson complimented the discussion on the importance of eel grass. Without eel grass, there is no place for crabs, oysters, and fish to create a habitat.

### **Roundtable Discussion**

Ms. Gross asked members of the roundtable for updates from around the region.

Ms. Conrad reported that for its work on public outreach and education related to deer management, the Arlington Regional Chapter of the Virginia Master Naturalists was selected as the 2020 recipient of the A. Willis Robertson Award presented by the Virginia Chapter of The Wildlife Society. The award honors a wildlife non-professional or group that has exercised outstanding conservation practices on their own land or have made significant contributions to conservation activities in the Commonwealth.

Dr. McGlone reported that VDOF's Trees for Clean Water Grants program is open through February 16, 2021. This grant program is designed to improve water quality in the Chesapeake Bay through on-the-ground efforts to plant trees where they are needed most.

Dr. McGlone added that the Governor's Budget included funding for four new VDOF watershed forester positions to help meet the tree planting goals established under WIP III.

Dr. McGlone amplified earlier comments by noting that deer are a big issue for water quality because they eat trees.

Ms. Bellezza announced that applications are currently being accepted for Fairfax Water's 2021 Water Supply Stakeholder Grant Program. Applications must be received or postmarked no later than May 17, 2021. Additional information, including the guidelines and application form are available at: [www.fairfaxwater.org/grants](http://www.fairfaxwater.org/grants)

Mr. Moore noted that he read [an interesting article in the Huffington Post](#) about tree planting, with a cautionary tale about why tree planting programs fail because of lack of follow-up. The article makes the argument that when these programs are developed, they need to include emphasis on proper maintenance and care for the trees as they grow.

Ms. Gross reported that a report from a recent meeting of MWCOG's Regional Tree Canopy Subcommittee indicated that a tree planting "cookbook" is in the works. She hopes to have an update by the next roundtable meeting.

Ms. Grape noted that the Fairfax County Tree Commission and the Fairfax County Urban Forest Management Division have developed a “tree basics” booklet which helps readers understand how to plant and care for trees. She added that, through its annual native plant Seedling Sale, the Northern Virginia Soil and Water Conservation District has seen an uptick in interest in tree planting, particularly native species, in recent years. This year, the seedlings sold out in less than 12 hours. She has seen a tremendous shift in people wanting to incorporate native species into their landscapes.

**Adjournment.** Ms. Gross thanked everyone for their attendance and engagement in the meeting. She noted that the next meeting will be held virtually on Friday, April 9, 2021. The meeting adjourned at 12:24 pm.