The Potomac River Basin Drinking Water Source Protection Partnership

Quarterly Meeting, August 7, 2019
Location: ICPRB Offices, Lower Level, 30 West Gude Drive, Rockville, Maryland

Attendees

Utilities

Berkeley County:
Steve DeRidder

City of Rockville:
Susan Straus

DC Water:
John Deignan
Saul Kinter
Matt Ries
Mauren Schmelling

Fairfax Water:
Nichole Belleza
Steve Edgemon
Scott Powers
Greg Prelewicz
Niffy Saji
Joel Thompson

Frederick Co. DUSWM:
Terri Snyder-Kolovich

Loudoun Water:
Cathy Cogswell
Pam Kenel
Mark Peterson

Washington Aqueduct:
Anna Hayden
Anne Spiesman

WSSC:
Joel Caudill
Martin Chandler
Robin Forte
Jin Shin

State and Local Agencies

DOEE:
Joshua Rodriguez

MDE:
Paula Araneda
Yen-Der Cheng
John Grace
Saeid Kasraei
Robert Peoples
Rebecca Warns

PA DEP:
Rhonda Manning*

VDH:
Raven Jarvis

WV BPH:
Monica Whyte

Federal and Regional Agencies

EPA Region 3:
Beth Garcia
Cathy Magliocchetti

ICPRB:
Renee Bourassa
Curtis Dalpra
Heidi Moltz
Michael Nardolilli

MWCOG:
Steve Bieber
Lisa Ragain

USGS:
Matthew Pajerowski

Others

NRCS
Stacey Bradshaw*
Terron Hillsman
Ashley Lenig

*Participated via teleconference

Welcome, Introductions and Agenda Review

Joel Caudill, WSSC

Business Meeting

1. **The State of CSOs in Maryland**
   Yen-Der Cheng, MDE (presentation)

   Y. Cheng gave an overview of the combined sewer systems (CSS) within the state of Maryland. There are more than 700 CSSs in 32 states across the country. When a CSS discharges untreated wastewater it is known as a combined sewer overflow (CSO). CSOs impact water quality downstream. The number of CSO events increases with the number of significant wet weather events.

   Maryland currently has five CSSs, all within Allegany County in the western part of the state. Stormwater systems in this part of the state face an increased challenge due to the peaks and valleys terrains in the surrounding area leading to intense deluges during a wet weather event.

   CSS operators are regulated by federal policies and regulations implemented through the National Pollutant Discharge Elimination System (NPDES) permit. The City of Cumberland is in the permit renewal process for its CSO permit. The permits for the other 4 CSSs expire in 2023. Monitoring and reporting of each CSO event are mandatory in these permits.

   Through the NPDES discharge permit, each CSS community is required to implement Nine Minimum Control (NMC) to eliminate or reduce CSO flow during wet weather. These are technology-based controls that municipalities can install before implementing more costly, long-term control measures. The permit also requires the CSS to develop the Long Term Control Plan (LTCP) to ultimately meet the water quality criteria and protect designated use of the receiving stream. All five of the CSSs have implemented measures to achieve a reduction or elimination of CSOs in their system to meet the goal set by the MDE consent order by 2023. An example was given in the presentation showing the City of Cumberland is expected to make drastic CSO flow reduction (up to 86%) during wet weather through the installation of a 5 million gallon underground holding tank at treatment plant as well as a 78 inches diameter sewer line system within the City boundary. The facility is expandable to 20 million gallons.

2. **Workgroup Updates**

Agricultural Issues

Pam Kenel, Loudoun Water

The workgroup members have been attending meetings, reaching out, and making connections with Natural Resources Conservation Service (NRCS) to look for opportunities to participate in

the source water protection projects. Each state's NRCS office is taking a different approach to the 2018 Farm Bill guidelines for funding source water protection projects.

Contaminants of Emerging Concern

Martin Chandler, WSSC

The workgroup has focused on four main topics over the past quarter:

- UCMR4 tracking:
  - Some of the 50 utilities involved in UCMR4 have completed their monitoring.
  - All the reporting utilities (n=27) in the basin had no detection of pesticides, semi-volatile organic compounds or alcohols, cyanotoxins, or germanium.
  - Manganese showed up in 73% of the samples. Most of the sample levels were low.
  - The 3 halo acetic acid compounds that were monitored had a 100% detection rate.
- PFAS/PFOA:
  - These compounds became a priority after UCMR3.
  - The workgroup is monitoring legislation on the compounds.
  - EPA has an action plan with a timeline for regulatory action.
- Microplastics
  - The workgroup is monitoring news and research on microplastics.
- Harmful Algal Blooms
  - Information gathering is ongoing.
  - There has been one occurrence this season of a harmful algal bloom in Maryland, but it was not in the Potomac River basin.

Reaching Out

John Deignan, DC Water

- The workgroup completed the 2018 DWSPP Annual Report.
- Reaching out materials (a brochure and postcard) were developed and are available on the Samepage.io website.
- The Reaching Out Workgroup worked with the Contaminants of Emerging Concern Workgroup to develop talking points for PFAS/PFOA. These should be completed in the next few weeks.

Steve DeRidder noted that the CDC is starting a research project in Berkeley County to test community water system users for PFAS.

Urban and Industrial Issues

Greg Prelewicz, Fairfax Water

The workgroup continues to monitor NPDES permits across the basin. Relevant information is uploaded to the Samepage.io website.

There have been recent updates to WaterSuite, including a Tier II chemical storage data layer. The members are involved in a project to utilize WaterSuite to identify potential sources of PFAS/PFOA in the basin.

DWSPP organizations are involved in the Virginia Department of Environmental Quality's Salt Management Strategy.

Members are working to update the list of MS4 permit holding jurisdictions to engage in discussions regarding source water protection.

Water Quality

Niffy Saji, Fairfax Water (presentation)

- The workgroup has updated the DWSPP Utility Spill Response Plan. This will be updated on an annual basis.
- As part of that update, the members worked in conjunction with the Early Warning and Emergency Response Workgroup to develop a protocol (Appendix F – Spill Response File Protocol) for uploading documents to Potomac Spills Groups.io website.
- The two workgroups also worked together to plan and execute an online exercise to implement the Spill Response File Protocol.
- A presentation on the protocols was provided.

Early Warning & Emergency Response

Joel Thompson, Fairfax Water

- In conjunction with the Water Quality Workgroup, an online exercise was organized to practice the Spill Response File Protocols on the Potomac Spills Groups.io website. During the exercise, there were 50+ emails sent, and several documents uploaded.
- Some organizations used the exercise as an opportunity to practice their internal protocols.
- Some technical issues were found and corrected during the exercise.

3. Panel: Partnering in the Potomac

Terron Hillsman, Maryland State Conservationist, USDA-NRCS

Natural Resources Conservation Services (NRCS) was formed 80 years ago to address soil erosion. It has expanded to include conservation services on agricultural land. Their programs promote voluntary, incentive-based conservation practices that are available to any private landowner. The Farm Bill sets the agenda for their work.

Rulemaking, regulations, and guidelines are still in development for the 2018 Farm Bill. The most recent Farm Bill provided a target of 10% of conservation funds be spent on source water

protection. NRCS is in the process of developing regulations and policies including prioritizing the best use of those funds for source water protection.

There are a few ways that DWSPP and NRCS can work together:

- Assist in identifying priority watersheds and sub-watersheds for source water protection.
- Provide outreach and information to private landowners to introduce them to NRCS programs.
- Engage with local conservation partners, including the Maryland Association of Soil Conservation Districts, USDA, NRCS, and Soil Conservation Districts. These organizations work together closely to implement their programs.

Ashley Lenig, Pennsylvania National Water Quality Initiatives Manager, USDA-NRCS (presentation)

NRCS provides technical and financial assistance to the agricultural producers and non-industrial private forestland owners. An overview of these programs was provided. These include the Environmental Quality Incentives Program (EQIP) and the Agricultural Conservation Easement Program (ACEP).

The National Water Quality Initiative (NWQI) is a program within NRCS. Its main purpose is to improve water quality through voluntary agricultural-related conservation projects. There are certain requirements for the program, including the project must be within an NWQI designated watershed. The main resource concern for NWQI is water quality degradation in surface water, but there are secondary concerns. The program was in the readiness phase during the fiscal year 2019. It will be in the implementation phase the following year. There are no NWQI watersheds in the Potomac basin region of Pennsylvania.

Pennsylvania NRCS is conducting a remote sensing pilot project that is documenting best management practices in the state. There have been 5,790 farms inventoried in 5 counties.

Stacey Bradshaw, Virginia Soil Conservationist, USDA-NRCS (presentation)

From 2009 to 2016, Virginia NRCS provided $291 million in financial assistance to Virginia farmers and forest landowners. Their main focus is controlling nutrients and manure in watersheds with high nutrient and sediment pollution reduction potential.

Conservation Practice Physical Effects (CPPE) is used as a planning tool for choosing conservation practices that are most effective at addressing specific parameters.

Virginia NRCS has installed 686,0377 feet of fence line in the Potomac River basin. They plan to utilize the Regional Conservation Partnership Program (RCPP) to implement the majority of the projects in the future. The 2018 Farm Bill allowed for utilities to be a partner in RCPP projects. They have completed 11 RCPP projects to date.

4. Activity Updates

a. WSSC Spill Exercise

Jin Shin, WSSC

WSSC recently held a 3-day tabletop exercise involving the WSSC lab and the rapid response team. The scenario involved a waterborne pathogen that was released after flooding in the Potomac River. The exercise involved response partners, including MDE and the Maryland Department of Health. The exercise also tested WSSC's resilience to an extended water outage. Results of the exercise helped improve understanding and awareness of utility operations and recognize the need to better coordinate public messaging during an emergency.

b. Virginia Forests and Drinking Water Forum Report

Mike Nardolilli, ICPRB

Members of DWSPP were involved in planning this 2-day workshop on forests and drinking water in Charlottesville, Virginia. A full summary of the event can be found on the South Eastern Partnership's website. The main takeaways from the events were:

- Communication among all different stakeholders is critical.
- The Farm Bill will be key to project implementation in the future.
- Sharing information among organizations is paramount.

c. West Virginia Table Top Exercise Recap

Monica Whyte, WVBPH

DWSPP members were involved in the planning of this exercise. It was a 1-day tabletop exercise held on May 9, 2019, in Kearneysville, West Virginia. At least 56 people attended, including staff from utilities, healthcare facilities, and emergency responders. The exercise scenario involved a train derailment with a subsequent public health component when the contaminant made it through the intake of a utility. Lessons learned from the event included a lag time in the DEQ spill hotline and the need for utilities to be more aware of available resources.

d. Potomac Interceptor Outreach Events

John Deignan, DC Water

On June 5-6, 2019, DC Water held information sharing and preparedness events for Potomac Interceptor Critical Stakeholders in Maryland and Virginia. These events provide an opportunity to discuss information related to the Potomac Interceptor (PI) and emergency response efforts based on a fictitious incident. Each event included informative presentations, an emergency preparedness sand-table exercise and an odor control facility tour. These events were an opportunity to continue to enhance the relationship between DC Water and PI Critical Stakeholders, and to identify best practices and areas for improvement. Attendees included: Montgomery County Fire & Rescue, WSSC, MDE, ICPRB, Fairfax County WW Design & Construction Division, Arlington County, PWCSA, Town of Vienna, Loudoun Water, Fairfax

County Health Department, Fairfax County Department of Public Works and Environmental Services, MWCOG, VDT.

Two interesting outcomes of this event include:

- Develop a Parallel Interceptor Bypass Committee to develop plans, as well as associated policies and procedures for initiating a bypass of the PI or parallel interceptor. Both WSSC and Loudoun Water have interceptors that parallel portions of the PI and it may be possible to temporarily divert a portion of the flow from the PI to those interceptors and vice versa.
- Determine each community's capacity/capability to divert or hold backflow from entering the PI under emergency circumstances. PI jurisdictions have some capability to divert or hold backflow from the PI (e.g. Fairfax operating its auxiliary wastewater treatment plant) but that information has not been fully determined or shared with DC Water.

An after-action report is available upon request.

e. Next Generation Water Observing System

Matthew Pajerowski, USGS (presentation)

The Next Generation Water Observing System is a new initiative by USGS. Ten watersheds across the United States will be selected that are representative of other water resources in a broader area. The project would increase the number of sites monitored and the number of parameters monitored at each site. Modern, state-of-the-art equipment will be used. The collected data will be used to improve modeling and predictive capabilities which will benefit all watersheds. A pilot project has begun on the Delaware River basin. An FAQ sheet is available with more information. This fall, USGS will be looking for stakeholder interest for specific watersheds. The Potomac River basin is one of the 35 finalists in the running for the program. The finalists will be selected in FY2020 and implementation will begin in FY2021.

A longer, more comprehensive presentation on the Next Generation Water Observing System will be given at the DWSPP Annual Meeting in November.

DWSPP members noted that the Metropolitan Washington Council of Governments' Water Security Monitoring Group has been working on water quality monitoring stations along the Potomac for over a decade. They are currently putting together a plan in the Potomac River mainstem and the Occoquan Reservoir to monitor for water quality, safety, and security.

5. Administrative Updates

Renee Bourassa, ICPRB

The Town of Romney, West Virginia, was welcomed as they recently joined the DWSPP.

The draft FY2020 Financial Workplan is available for review. Input and edits were requested by the end of August. If no revisions are requested, the workplan will be finalized in September.

The proposed meeting dates for the 2020 DWSPP meetings are below. It was requested that members compare the dates with conferences and events to see if there are any conflicts. If the proposed meeting dates are not changed, in the next month or so, members will receive a save-the-date calendar invite for the meetings.

Upcoming Events

Meeting Dates for 2019:

- Wednesday, November 13 (USGS MD-DE-DC Water Science Center, 5522 Research Park Drive, Baltimore, MD)

Tentative Meeting Dates for 2020:

- February 5
- May 6
- August 5
- November 4