



# The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary

Loudoun Water Headquarters, Ashburn, VA

## November 6, 2024

### Attendees

#### Guest Speakers

Dr. Samantha Zuhlke  
Abby Hileman

#### Water Suppliers

##### *Berkeley Water:*

Alison Auvil  
Mitchell Henson

##### *City of Rockville:*

Jim Woods  
Yaolin Fennell

##### *DC Water:*

Maureen Schmelling

##### *Fairfax Water:*

Erica Brown  
Jojean Bolton  
Bethany Clatterbuck  
Katie Kennedy  
Samantha Ntuk  
Niffy Saji  
Michelle Siminari  
Anne Spiesman  
Amanda Wheeler

##### *Loudoun Water:*

Thomas Barrack  
Brian Carnes  
Brent Campbell

Catherine Cogswell  
Susan Crosby  
Christina Davis  
Jessica Edwards-Brandt  
Carolyn Hannoeh  
Darrin Geldert  
Thomas Lipinski  
Mark Peterson  
Bradley Schmitz

Town of Leesburg  
Melissa Andrews

##### *WSSC Water*

Assata Harris  
Eric Liang  
Kishia Powell  
Priscilla To  
Aklile Tesfaye

#### State and Local Agencies

##### *DC DOEE:*

Jayne Brown

##### *VDH:*

Raven Jarvis

##### *VDEQ*

Weedon Cloe

##### *WV DHHR*

Monica Whyte

#### Federal and Regional Agencies

##### *EPA Region 3:*

Chris Anderson

##### *ICPRB:*

Renee Bourassa  
Heidi Moltz  
Serena Moncion  
Mike Nardolilli  
Renee Thompson  
Carlington Wallace

##### *MWCOG:*

Steven Bieber  
Caitlin Bolton  
Lisa Ragain

##### *USACE:*

Audrey Litz  
Tayina Tardieu

### Business Meeting

The November 6, 2024 Quarterly Meeting was held in person. There were 51 attendees, including one virtual presenter.

## Welcome

Renee Thompson, ICPRB's new Water Resources Planner and coordinator of the Potomac Drinking Water Source Protection Partnership (DWSPP), welcomed the audience and introduced Brian Carnes, General Manager, Loudoun Water, who welcomed the group to the facility.

Kishia L. Powell, General Manager, WSSC Water, and DWSPP chair, then made welcoming remarks and began a round of introductions. She emphasized a whole watershed approach to meet the needs of customers and funding needs for water infrastructure, noted the coming change in government post-election, and highlighted communication and public messaging as a timely topic. Powell thanked the group for the honor of being Chair this year of the Drinking Water Source Protection Partnership.

## Public Perceptions of Drinking Water

### **Samantha Zuhlke, Ph.D., Author, Assistant Professor School of Public Affairs, University of Iowa**

Samantha Zuhlke is an assistant professor in the School of Planning and Public Affairs at the University of Iowa. Her research examines how individuals relate to government and nonprofit organizations, particularly in the wake of government failure. Her work has been published by Cambridge University Press and the Journal of Public Administration Research and Theory. She previously worked at the National Geographic Society. *The Profits of Distrust: Citizen-Consumers, Drinking Water, and the Crisis of Confidence in American Government* (Cambridge University Press, 2022) explores how Americans' relationship with drinking water informs their trust in government. This is a co-authored book with Manny Teodoro (Associate Professor, University of Wisconsin-Madison) and David Switzer (Assistant Professor, University of Missouri).

Water kiosks are ubiquitous in many parts of the United States. Texas water kiosks charge 25 to 35 cents per gallon, which is 7,000 times more expensive than public water. The researchers' study focused on locating and classifying the growth of drinking water kiosks in the U.S.

The research team found an inverse relationship between the location of kiosks, and a positive relationship with community populations of People of Color. Nationwide, kiosks are more likely to locate in non-white areas.

The bottled water industry makes 40 million dollars a year, while most, though not all, Americans have access to more affordable and high-quality tap water. Tap water is highly regulated by the Safe Drinking Water Act, while bottled water is (lightly) regulated by the FDA. For all intents and purposes, water from the kiosks is unregulated. Yet, sales are booming.

People's perception of government impacts their purchasing of bottled water by "defensive spending." Primo, a water kiosk company, listed declining trust in government as a growth opportunity in their reporting. Dr. Zuhlke showed one advertisement, which showed some rusty piping and the sentence: "your tap water can hang out in some pretty seedy joints." Zuhlke

shared several examples of bottled water companies conspicuously marketing to nonwhite individuals.

A vicious cycle results, where water users no longer participate in the normal feedback process with their suppliers and exit to commercial water, reducing the incentives and resources for water utilities to perform highly. People who report that they mistrust the government, as a result, are more likely to rely on bottled water for their drinking water. Research has found that individuals don't need to experience their own local tap water quality decline or crisis, and that high-profile incidents in other communities or in the media such as the Flint, Michigan water crisis, can influence people to buy bottled water.

However, communities can take steps to feed "The virtuous cycle," which is characterized by excellent service, leading to increased trust in utilities and government, lessening consumer exit for commercial alternatives, increasing citizen political participation, and, incentivizing and providing resources for agency performance, leading to more excellent service.

Drinking water providers should strive for:

- Excellence
- Openness
- Equity

Conclusions from the team's (University of Iowa School of Planning and Public Affairs, Center for Health Effects of Environmental Contamination, Des Moines Water Works, Polk County, & the City of Des Moines Public Works) research in Iowa were that non-white, low-income individuals are more likely to rely on bottled water as a drinking water source, and white affluent individuals are more likely to drink tap water (but also use filters). In Polk County, among discussion groups including new arrivals (immigrants who have been in the U.S. for less than a year) and refugee populations, researchers ascertained that bottled/commercial water is advertised heavily, and people are not provided the same quantity of information about tap water safety and quality.

Some recommendations:

1. Address water quality concerns and perceptions – Excellence
2. Improve utility communications – Openness
3. Target outreach to underserved populations – Openness and Equity
4. Increase and diversify tap water infrastructure – Equity

Water users define good quality and service differently than utilities do, partly because utilities are only required to communicate when there are issues, and customers might only notice their water when there are (aesthetic) issues.

## Salt Watch: Monitoring & Communications

### **Abby Hileman, Salt Watch Coordinator, Izaak Walton League of America**

Abby Hileman is the Salt Watch Coordinator at the Izaak Walton League of America. In her role, Abby leads the efforts of the Salt Watch program, expanding the project into new regions across

the country, reaching new groups of volunteers, and providing resources to make lasting change—from data to action. Abby grew up in Western Pennsylvania, where she began her journey as a lifelong conservationist. She has a passion for connecting people to their communities and to nature and believes that small scale actions add up to make a big impact on conservation success.

IWLA is a conservation organization that was founded in 1922. IWLA is headquartered in Montgomery County, Maryland. Hileman began by talking about how she and IWLA approach basic water education: i.e. what is a watershed, how do pollutants spread, and how does that dynamic impact our source water, to then tackle the misconceptions about winter salt use. Salt and chloride are referred to interchangeably, since winter salt types all have chloride. Hileman showed how salt can be applied in different ways, such as with rock salt or brine lines. An important fact is that once salt enters the environment, it cannot be removed. One teaspoon of salt permanently pollutes five gallons of water. Therefore, it is imperative to reduce the amount of salt used, and “the most sustainable type of road salt you can use is the salt that stays in the bag.”

A Gaithersburg, MD road salt spill in 2017 was the trigger for the Salt Watch Program. The program’s goals are to raise awareness in the general public about the connection between salt and stream health, to identify chloride hotspots, and to advocate for smarter road salt application.

Salt Watch Program kits contain everything citizen scientists need to monitor salt in streams and/or tap water. Since 2018, IWLA has received 22,678 data points. Trends are higher in northern urban areas. The Clean Water hub, IWLA’s national water quality database, is meant to be easy to access and understand, and is shared with the US EPA. Findings are shared with the media, volunteers/advocates, and the general public through other communication channels. The goal is to turn data into action, even if the action is something small or individual. IWLA volunteers have used their voices and have even taken their representatives to visit the impacted streams in their communities.

Road salt stakeholders are numerous, diverse, and interconnected. Different audiences may need different messages and media to speak to their concerns. For example, the New Hampshire Green Snow Pro program combines insurance incentives with winter salt training/certification.

Salt Watch resources and communications include focused fact sheets based on the motivation categories, flyers, an advocacy guide for volunteers, resources in Spanish and other languages, and template letters to representatives. IWLA also has several different toolkits for different audiences. They have started Paint the Plow events in partnership with local governments, making fun, large “billboards” on the plows that clear the snow about salt pollution prevention. They seek out several forms of outreach and communications in this region and nationwide.

## Reservoir Park: A Partnership for the Community

### **Mark Peterson and Susan Crosby, Loudoun Water**

Reservoir Park is a project a decade in the making, and an opportunity to tell a story about the future of water resource protection, allowing people to make a connection to their water. In 1972, Beaverdam Reservoir was built as a backup to Goose Creek Reservoir. It holds about 1.4 billion gallons of water. The property around Beaverdam Reservoir transferred ownership from Fairfax City to Loudoun Water and was not managed for public use. This partnership between NOVA Parks and Loudoun Water improves access points for the public and uses the land to its maximum potential for education.

### **Susan Crosby, Loudoun Water**

There were passionate users of Beaverdam Reservoir before it was developed into the park it is today. Extensive public involvement went into the planning of the facility. The two different sides of the park have educational and ecological focuses, respectively. A “living lab” at Reservoir Park complements the educational value of the Aquary, a water education experience at Loudoun Water headquarters. Reservoir Park is designed to follow the journey of a water drop, from rain to reservoir. Crosby shared extensive photos to show the educational value of various park features.

## PFAS Ad-hoc Workgroup Vision and Plans

### **Priscilla To, Ph.D., Senior Scientist, WSSC Water**

PFAS are “a new generation” of chemicals, following a legacy of many other pollutants that have caused concern, including pathogens, salts, spills, and unknowns. To use the metaphor of a patient addressing high cholesterol: We are relying on source water that is not yet “high” in PFAS but could use a “diet” i.e. source water protection before we pursue “medication” or (water) treatment. We are dealing in terms of parts per trillion with PFAS.

The objective of the PFAS Ad-hoc workgroup in 2025 is to advance PFAS source reduction through a concentrated DWSPP focus on improving data tools, strategic resources and outreach in order to stop ongoing sources. The workgroup is requesting additional members, especially from the Water Quality and Reaching Out Workgroup to commit to 4-6 focused discussions in 2025 to collaborate toward these goals on key projects. Reach out to Priscilla or Renee Thompson to indicate your interest in participating.

## PFAS Variability Study Update

### **Bradley Schmitz, Ph.D., Senior Scientist, Loudoun Water**

This is a tailored collaboration project funded by the Water Research Foundation. The goal of the study is to understand variability in data, not track sources.

Project design:

1. Complete: Prioritize and select sample locations based on certain considerations and feedback from DWSPP members.

- a. Separate “River Access” study near intakes.
2. Collect and process samples over 12 months. So far, one month in, 72 samples have been collected.
3. Statistical evaluation for variability.
4. Best management practices and brainstorming with DWSPP members.

## DWSPP Workgroup Year in Review

### Anne Spiesman, Fairfax Water

Spiesman opened with some questions to reflect upon: Did DWSPP improve SW quality in the basin? Did we learn something new about SWP? Did we contribute to regional efforts?

The Quarterly Meeting Topics in 2024 were: Emergency Response, PFAS, and Climate Resiliency. Meeting notes and recordings are available for reference on the Potomac DWSPP website.

The 6 DWSPP workgroups:

- Early Warning/Emergency Response (EW/ER)
  - Potomac Spills had an active year, unfortunately. SSOs and CSOs, and various other types of spills occurred.
  - Exercises: October 2023 EPA/DWSPP Oil Spill/booming & March 2024 CISA National Capital Region Exercise
  - Workgroup goals in 2024 and 2025:
    - Integrate water utilities into large response – draft Incident Action Plans
    - Leverage mapping resources
    - Work with WQ workgroup to update the Regional Utility Spill Response Plan
- Water Quality (WQ) Workgroup
  - Data for salt monitoring locations
  - Hosted a Colonial pipeline spill event
  - Collaboration with other workgroups
- Reaching Out Workgroup (ROW)
  - Hosted 2<sup>nd</sup> annual Small Systems Roundtable to meet with smaller utilities in the western part of the basin. The planning committee for 2025 would welcome any members.
  - Source Water Protection Week 2024 was in September; the workgroup requests feedback for planning the 2025 publicity and awareness event.
- Contaminants of Emerging Concern (CEC): PFAS WRF Study was the main focus.
- Urban and Industrial Issues (U&II)
  - Salt and sodium MS4 permit language
  - Support for EPA R3 PFAS source maps
  - WaterSuite source tracking tool
  - NPDES Permit Review
  - Comments on permits

- Agricultural Issues

You do not have to be the chair of a workgroup in order to contribute great ideas! Reach out to the DWSPP coordinator if you are interested in joining one of the workgroups.

## Administrative Updates

### **Renee Thompson, Water Resources Planner, ICPRB**

- In an aim to chart a more sustainable balance, there is a new plan and calculation for DWSPP member contributions. The 2024 workplan is available on the DWSPP website. The 2024 budget is at a slight deficit.
- Plan for 2025 and future
  - DWSPP members adopted a 5-year budget plan that splits the cost between utilities and government agencies 50/50 and allows for a 2.5% annual increase for inflation.
  - ICPRB's contribution stays steady at 17%
  - Equitable distribution based on withdrawals among utilities.

Save the date for 2025 meetings: \*February 5, May 7, \*August 6, November 5 (\* = virtual)

Renee Thompson's email: [rthompson@icprb.org](mailto:rthompson@icprb.org)

Congratulations to two DWSPP members who are retiring soon, Monica Whyte and Thomas Lipinski!

## Passing of the Gavel

**Kishia L. Powell, WSSC Water to Jayne Brown, Associate Director, Inspection and Enforcement, DOEE**

Adjourn for lunch at Beaverdam Reservoir Park