



# The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary

February 4, 2026

## In-person Attendees

### **Water Suppliers**

*Berkeley Water:*  
Alison Auvil

*City of Rockville:*

James Boone  
Mark Mathis

*DC Water:*

Rabia Chaudhry  
Matthew Brown  
Moussa Wone

*Fairfax Water:*

Anne Spiesman

*WSSC Water*

Katie Foreman  
Deborah Vacs Renwick  
Steven Nelson  
Jin Shin

### **State and Local Agencies**

*DC DOEE:*

Lakisa Blocker

*MDE:*

Brian Picard

### **Federal and Regional Agencies**

*ICPRB:*

Sarah Ahmed  
Lily Bedwell  
Renee Bourassa  
Claire Buchanan  
Serena Moncion  
Mike Nardolilli  
Mike Selckmann  
Cherie Schultz  
Renee Thompson

*Washington Aqueduct/USACE:*

Robert Hoffa  
Tayina Tardieu

## Virtual Attendees

### **Water Suppliers**

*DC Water:*

Matt Ries  
Maureen Schmelling

*Fairfax Water:*

Nicki Bellezza  
Amanda Wheeler  
Greg Prelewicz

*Frederick County Water and*

*Sewer:*

Joshua Smith

*Loudoun Water:*

Catherine Cogswell  
Christina Davis  
Jessica Edwards-Brandt  
Carolyn Hanoach  
Pam Kenel  
Anurag Mantha

*Town of Leesburg*

Melissa Andrews  
Joe Phillips

*WSSC Water*

Robin Forte  
Priscilla To  
Deborah Pitts  
Sydney Williams

### **State and Local Agencies**

*DC DOEE:*

Jayne Brown

*MDE:*

John Anthony  
Gregory Busch  
Robert Peoples

*PA DEP:*

Duke Adams  
Jason Minnich

### **Federal and Regional Agencies**

*EPA Region 3:*

Chris Anderson  
Beth Garcia  
Virginia Hogsten  
Payton Wood

*ICPRB:*

Garrett Pignotti

*MWCOG:*

Steven Bieber

*Washington Aqueduct/USACE:*

Audrey Litz

*USGS:*

Jennifer Graham

### **Other guests**

*Water Research Foundation:*

Julie Minton

*Hazen and Sawyer:*

Dulci Avouris  
Josh Weiss



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

### Business Meeting

The February 4, 2026 Quarterly Meeting was held in-person at ICPRB's offices in Rockville, Maryland and virtually on Microsoft Teams. There were 24 attendees in-person and 35 attendees who joined virtually.

### Welcome, Introductions and Meeting Objectives

#### **Katie Foreman, WSSC Water**

Katie is the director of the new Water Resources Protection division at WSSC. Katie's background is diverse and includes 25 years of source water protection experience including water quality monitoring and assessment, water infrastructure finance, the Chesapeake Bay Program and most recently over a decade at the U.S. EPA Office of Water's Office of Ground Water and Drinking Water. Katie knows firsthand from directing the national source water program at EPA that the Potomac Drinking Water Source Protection Partnership (DWSPP) is one of the most advanced source water collaboratives in the country.

Katie's expertise is vast including expertise in source water from both the ambient and drinking water perspectives. While at U.S. EPA, she led the national Harmful Algal Blooms (HABs) in source water and drinking water efforts for 8 years. Today's conversation will be a timely continuation of the October DWSPP research workshop. Katie stated that HABs are a top water quality concern across the nation requiring source water approaches, and emphasized that current drinking water challenges require multidisciplinary, long-term collaboration.

It is source water's moment. These challenges are multi-faceted and the people in the room today making the time show how important source water is among all the next generation of drinking water challenges.

#### *Integrated Science and Research Session:*

[Harmful Algal Blooms \(HABs\): Modeling and Early Warning for Drinking Water Protection](#) (click hyperlink to view presentation)

#### **Jennifer Graham, USGS**

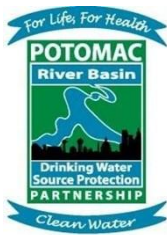
Jennifer Graham, Supervisory Research Hydrologist at the USGS New York Water Science Center. She has over 25 years of research experience on HABs and is known as a national expert in the subject.



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

### HABs

- What is a HAB?
  - The definition can depend on the type of water environment being managed, so a definitional framework can help define the term: what is meant by “harm” “algae” and “bloom”?
  - For freshwater environments, we focus on cyanobacteria for its potential to produce all types of harmful effects, especially to human health.
- What causes HABs?
  - Watershed inputs such as nutrients, temperature, and light can cause algal blooms in watershed (rivers)
  - HABs are typically a summer phenomenon (but not always)
  - Downstream transport; cyanobacteria *can* grow on stream bottom and can dislodge and move downstream with their toxins.
- Unique HAB Challenges
  - Diversity
    - Cyanobacteria are a diverse group of organisms, that produce a diversity of toxins.
    - Research is developing and there are still many unknown factors in the production of toxins from cyanobacteria. The environmental factors that are driving the occurrence of cyanobacteria blooms are not necessarily the same as those that are driving the production of cyanotoxins by those organisms.
  - Scale
    - The organisms are microscopic and the process of toxin production subcellular
    - Intersecting at the very fine scale to the very large scale accumulations that can be seen with the naked eye or from space
  - Where and when to measure. Case study: Rock Creek Lake beach closure, Iowa (2006)
    - Beach closure announced by Iowa Department of Natural Resources after sampling on July 31 (based on appearance)
    - By August 3, the bloom on the lake was gone. Conditions changed, cyanobacteria mixed and accumulated when the water calmed, and then reappeared at the boat access area.
  - What to measure
    - Chlorophyll: indicator of overall algal biomass. Won't identify what types of algae, but how much.
    - Algae: algal community composition, count, or otherwise identify algae. Finer resolution information, but more time consuming and expensive.
    - Phycocyanin: a pigment that is unique to cyanobacteria; will help tell you how much cyanobacteria, but not what kinds.
    - Toxigenic algae: identify which algae produce toxins, genetic potential to produce toxins



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- Cyanotoxins: human health endpoint of most interest; most expensive, time-intensive and challenging level
- Tools for Early Warning
- Discrete Sample Collection
  - Owasco Lake, NY: drinking water and recreational use
    - A goal of the study was to identify discrete sample collection options for an early warning system. The study compared the timing of the following indicators:
      - Shoreline HAB reports from volunteer observers
      - Measured for microcystin
      - consideration for early warning system for Owasco Lake: 3 scales of monitoring approaches
        - shoreline program
        - drinking water supplies
        - microcystin/cyanobacteria biovolume, and genetic
          - genetic potential was detected weeks before any other method. This suggested that genetic sample of the open water location could be a heads-up for microcystin conditions, and could be used to trigger monitoring of other areas
- Simple camera can also be used to show dynamic changes over time and give you information for management. This method is low cost and does not need to be attended much.
- Fluorometers
  - based on algal properties/pigment detection
  - fluorometers can measure chlorophyll (algal biomass), phycocyanin, and pigments indicating other algal groups
- Satellites
  - Some have the ability to discriminate between overall algae and potential cyanotoxin-producing algae.
  - [USGS Remote Aquatic Chlorophyll-a Tracker \(REACT\)](#) tool shows a time series of the Potomac River in the presentation
- Model Applications
  - NowCast: what is happening in the system under conditions right now
    - estimate probability of detection (only site-specific models that do need to be maintained over time)
  - Forecast: what will happen in the near future
    - Example: 30-day forecast for three southeastern US rivers
    - [EFI-USGS River Chlorophyll Forecasting Challenge](#)
    - predictive modeling based on condition change (temperature, flow)
  - Process-Based Understanding
    - within a watershed, there are connections and upstream transport that may impact different conditions at different sites
    - Example: Illinois River basin



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- analysis of growth within reach, transport from upstream, addition from tributaries, and loss of algae within reach.
- River Modeling Literature Review
  - About a quarter of models were cyanobacteria-related
  - model types:
    - data-driven (nowcast and forecast)
    - process-based (ex: transport model (Illinois River))
  - South Korea has an exceptional monitoring/modeling program for HABs
  - The Ohio River has a sustained river [HAB forecast](#) (developed by US EPA and Orsanco) using streamflow conditions to estimate the probability of cyanobacteria bloom on the entire Ohio River
  - Key Findings
    - ~75% of models used algal biomass or a proxy such as chlorophyll as the modeling endpoint.
    - Nutrients, light, and streamflow were key predictor variables.
    - There is no consensus (or commonly used) approach to river-HAB model development.
    - Environmental settings and model performance metrics are poorly reported.
- Challenges
  - Overlooked transport processes and riverine environments (e.g. benthos, side/back channel areas).
  - Lack of process-based understanding for key drivers
  - Integration of multiple data streams
- Water Research Foundation Project 5120: [Utility Field Guide for Developing a Cyanobacteria and Cyanotoxin Monitoring Program](#)

### Key Points

1. Defining HABs is complex — “harmful,” “algal,” and “bloom” differ based on context (drinking water, recreation, toxin risk), organism type, and metric used.
2. Drivers of HABs are multifactorial: nutrients, timing of loads, hydrology, temperature, light, biological interactions, and upstream transport. Blooms can also occur in winter or under ice.
3. Monitoring challenges: cyanobacteria vary in toxin production, sampling can easily miss mobile algae, and determining what to measure (chlorophyll, phycocyanin, genetics, toxins) requires tailored approaches.
4. Early-warning tools: range from low-cost shoreline camera monitoring to fluorometers, satellites, genetic analyses, and multi-site networks for real-time changes.
5. Modeling insights:
  - Nowcasts estimate current bloom/toxin probabilities.
  - Forecasts project 30-day conditions using sensors + weather.
  - Predictive models explore scenarios (climate, flow).
  - Major gaps: limited river-focused HAB models and lack of integration across datasets (field, sensors, satellite).



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

6. Research challenges: understanding transport in flowing rivers, bottom-attached cyanobacteria, and bridging multiple data streams using advanced analytics and AI.

### **A brief Q and A followed the presentation:**

A question was raised related to integrated AI concepts into HAB modeling and data-stream integration, and whether AI/ML could be helpful for pulling together disparate datasets (e.g., satellites, cameras, monitoring data) to drive models.

Answer

AI and machine learning are already being used significantly in:

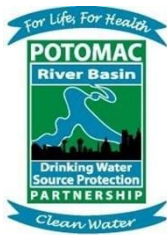
- interpreting satellite information
- interpreting camera-based information

However, she said she had not yet seen a strong example of AI being used for full synthesis across multiple data streams in HAB modeling and expects that is coming soon also adding that AI will likely become critical because many of these tools generate millions of data points, and AI will help identify what matters and what can be ignored.

## DWSPP Research Outcomes and Discussion

### **Katie Foreman, WSSC Water**

- Status update on the process following the October 2025 DWSPP research prioritization workshop
  - top of list: algal predictive modelling and data exchange, PFAS, salt and other topics
  - research concepts ranking by organization type (chart)
  - [draft research workshop summary](#) is ready for review
- DWSPP Research Steering Committee formed to guide next steps
  - developing research plan
    - Draft project scopes/objectives using outcomes from workshop
    - Goal to match projects with research partners and funding sources
    - Projects to build-on each other in phases and limit number of ongoing projects and pace timelines based on capacity
  - Regular updates to be provided to members of DWSPP on project proposals and status
  - Next steps
    - Algae research identified as focus this year for the Partnership
    - Develop objectives of work for smaller phases of projects with clear deliverables such as:
      - Data hub/standardization/visualization/dashboards
      - Targeted data analysis
      - Surrogate parameter correlation analysis
      - Indicator development/early warning system development
      - Tailored satellite/remote sensing tools
      - Regional monitoring program recommendations



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- Other predictive tools
- Identify research partners/sponsors, funding sources/mechanisms and timeline for funding
- Chart priorities and plan for the year

### Facilitated Discussion and Q & A

- Anne Spiesman, Fairfax Water. Perchlorate – opportunity for DWSP members who are interested or already monitoring to take a coordinated approach? She suggested staggering or overlaying monitoring plans to improve coverage and sharing data on perchlorate occurrence to benefit the group as a whole.
- Mike Selckmann, ICPRB, raised a technical monitoring limitation affecting HAB work: in the lower Potomac/DC area, there is an emerging reliance on drones and near-field imaging as a stopgap or calibration tool for satellite-based monitoring.
  - He explained that:
    - drone/near-field imaging can help fill gaps and calibrate satellite tools as they improve,
    - but the DC no-fly zone prevents drone deployment in a key stretch of the river,
    - his team had a proposal pending that had to shift upstream outside the no-fly zone to keep research moving,
    - and this will create a spatial data gap in the very area that includes major drinking water withdrawals and a large portion of the river.
  - He suggested exploring whether partners like JVAB or other military installations that already operate in restricted airspace might be able to support imagery collection legally, because otherwise the group will have an “imaging choke point” for model development in that section of the river.

### Potomac Interceptor– Incident Update and Jurisdictional Discussion

#### DC Water | ICPRB | MDE ([Link to Presentation](#))

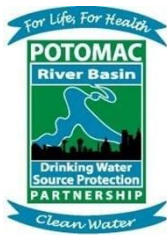
**Matt Brown, Chief Operating Officer at DC Water** - Briefing on the Potomac Interceptor

- Priorities: employee safety and returning wastewater flow back to the Potomac Interceptor
- About the Potomac Interceptor:
  - pictured, map of Potomac Interceptor and break location
  - 86<sup>th</sup> US Congress authorized Public Law 86-515 for the funding of the construction of the Potomac Interceptor (PI) on June 12, 1960 to serve Dulles Airport and safeguard the Potomac River
  - Serves 376 square miles (511,000 people)
  - Serves Fairfax & Loudoun Counties, Town of Vienna, Herndon, Dulles Airport VA and Montgomery County, MD



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- about 54 miles long
- 30 to 96 inches in diameter
- conveys 60 million gallons per day of sanitary sewage (average)
- constructed in the early 1960s
- Flows treated at Blue Plains Advanced Wastewater Treatment Plant
- Pipe break: specific location along Clara Barton parkway east of 495
  - detected motion from odor control sensor on January 19
- timeline [diagram]
  - DC water is thankful for cooperation of National Park Service
  - January 19 report of overflow
    1. reported in evening
    2. Washington Aqueduct notified directly; confirmed that drinking water intake at little falls is closed.
    3. secured site
    4. prelim assessment
  - January 20: Investigate and plan
    1. investigate sewer/flows
    2. bypass plan developed
    3. NPS cooperation
  - January 21- 24: Bypass implemented (6 pumps, 40± mgd)
    1. Pumps, fuel, support equipment
    2. Discharge piping
    3. Clear canal
    4. Remove lock gates
    5. Downstream channels
    6. Strengthen PI to receive flow
    7. Document Canal Locks
  - January 25 – 27: Additional pumping (Amid Snow/Ice) (8 pumps total, 60+ mgd)
    1. 2 additional pumps added
    2. Individual pumps require manual cleaning every 20-30± min
    3. Freezing temperatures affect equipment
  - January 28 – ongoing: Clean Pipe (ongoing)
    1. Pump down sewage
    2. Construct support of excavation
    3. Stabilize excavation
    4. Excavate to pipe
    5. Prepare site for specialized cleaning equip (30-60 ton trucks)
  - Emergency Response: Bypass System Schematic
  - Response & Repair Plan
    1. Completed: Install bypass pumping to reroute flow through canal, around break
    2. Underway: Install support of excavation, excavate to break, remove debris, and restore flow to pipeline



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- Until this step is complete, small overflows can occur due to pump outages due to cold, debris in pumps, rags, grease in sewer. Backup pumps and staff in place to minimize risk
- Overflows eliminated once this phase is complete
- 3. Permanent repair (sliplining)
- Potomac River Bacteria Sampling
  1. Old Anglers Inn
  2. Drainage channel at overflow
  3. Fletcher's Boathouse
  4. Georgetown (Wisconsin Ave)
  5. Anacostia River @ South Capitol St
  6. National Harbor
- Environmental Restoration
  - DC water committed to cleaning/restoring impacted areas
  - will work with NPS, MDE and other agencies to determine means, methods and scope
  - Environmental consultant retained, has performed initial site walks to assess conditions
  - Impacted areas:
    1. C&O Canal
    2. Drainage channel along Clara Barton Parkway to Potomac River
    3. Potomac River from shore to Swainson Island
  - Targeting cleanup as soon as possible after emergency ends to minimize impacts to high-use areas before weather turns warm
- Coordination and Communication
  - Daily± updates to public
  - Calls/updates to multiple agencies: EPA, DOEE, MDE, Montgomery County, Washington Aqueduct, town of Glen Echo, NPS, ICPRB and others
  - Signage along C&O towpath and at river discharge location
  - On-site and in-person interviews with media
  - DC Water communications department on daily coordination calls
- Moussa Wone, Chief Engineer: DC Water has a Capital Improvement Program Planned for Potomac Interceptor
  - \$350 million over next 5 years, more than \$600 million over 10 years
  - 3 projects on schedule and emergency response for PI failure
    1. identify all areas where there are "drops in alignment" and add to the high priority project (3 PIs pictured in chart)
    2. reprioritization in internal process based on this new information
  - Gratitude for support from the community. A community member provided chili for workers on January 24.
  - Next steps:
    1. clear pipe, restore flow
    2. permanent repair
    3. environmental restoration



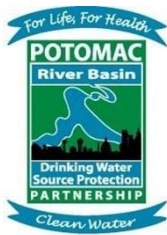
## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

### 4. rehabilitation

- Questions:
- any estimate on step 2 (clearing and excavating the pipe?)
  - no, challenges on site have included a steel lining, boulders
- do you expect that this will set back the goal of investing in the PI?
  - likely will be reordered. downstream portion will be sliplining pulled forward
  - RedZone consulting
- Historical restoration of C and O canal locks? Yes.
- How does drinking water protection (anything upstream of the drinking water intakes) get factored into rehab prioritization?
  - break was under the intake and certain portions of the PI are encased in rock
  - already planned on looking at grading in that portion, also reprioritizing as mentioned before
- Is DC Water open to receiving input from DWSPP in the reprioritization?
  - Yes, all the information we can get, we will take it.
- Who is leading the ICS structure/Emergency response, any challenges or lessons learned?
  - Emergency Incident Command was managed by the Operations Force, then the Engineers to determine the best way to repair
  - challenges yes, people have been determined to make it happen, from DC water employees to the other agencies, early for lessons learned.
- Little Falls recreation and contact risk? Also sampling?
  - Daily monitoring in progress, sampling on the shore
  - counts very high, coming down
- Overflows present in the summer?
- on the order of weeks to get the overflow back into the PI
- Is the only impacted area in the Potomac the area near Swainson island?
- sampling data and advice from consultant, MDE and NPS will inform the plan

### Key Points

1. Incident overview: A 72 inch section of the 54mile Potomac Interceptor collapsed on January 19, causing sewage to flow into a drainage channel and into the Potomac River.-inch section of the 54-mile Potomac Interceptor collapsed on January 19, causing sewage to flow into a drainage channel and into the Potomac River.
2. Emergency response:
  - Multi-day 24/7 effort installed 8 bypass pumps (60 MGD capacity).
  - C&O Canal was used as a temporary conveyance, with protective sheeting and flumes to redirect flow back into the interceptor.
  - Freezing temperatures, rags/grease, and boulders in the pipe complicated the response.
3. Current status: Major flow is now contained and diverted; crews are removing debris and assessing pipe damage. Restoration of full flow will take *weeks*.
4. Repair planning:
  - 2,000 ft of nearby pipe will be rehabilitated earlier than scheduled.

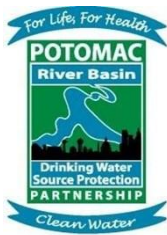


## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- Broader PI rehabilitation (\$600M+ CIP) may be reprioritized based on new inspection results.
- RedZone (environmental consultant) inspecting upstream segments for vulnerability.
- 5. Environmental & public communication:
  - Daily public updates; signage installed for recreation areas.
  - Environmental assessment underway for three impact zones: drainage channel, C&O Canal, and Potomac entry point.
  - Coordination with NPS, MDE, EPA, DOEE, and water suppliers.

### **Sarah Ahmed, ICPRB** – Preliminary Modeling of Potomac Interceptor Spill

- Aerial photos of Potomac River (courtesy of Potomac Conservancy)
- Timeline – for ICPRB Spill Team
  - Mon. 19 Jan., 4:00 PM
    - Collapse of portion of Potomac Interceptor – just east of I-495 along Clara Barton Parkway
  - Mon. 19 Jan., 11:30 PM
    - Notification of ICPRB Spill Response Team from MDE via spill answering service
  - Tue. 20 Jan., 1:00 AM
    - ICPRB Spill Response Team posts notification on PotomacSpills; Cherie Schultz phones Rudy Chow
  - Sat. 24 Jan.
    - DC Water activates pumps to by-pass Potomac River and divert sewage flow from the river to the C&O Canal
  - Sun. 25 Jan.
    - ICPRB provides plume analysis results to MDE and EPA Region 3
  - Sun. 25 Jan. – 26 Jan.
    - DC Water by-pass system nears full containment
- Modeling tool: ICPRB's ERSM\* (Emergency River Spill Model)
  - Spatial extent: Most of Potomac basin above Little Falls
  - Spatial scale: Major tributaries
  - Calibrated with 6 dye studies ->flow/velocity relationships
  - Physical processes modeled
    - Longitudinal advection
    - Longitudinal dispersion
    - Contaminant decay
  - Data inputs include
    - USGS real-time stream flows
    - Contaminant decay rates
  - Model outputs
    - Peak concentrations
    - Travel times of plume peak, leading edge, trailing edge
- ICPRB plume analysis
  - ERSM inputs/assumptions
    - Contaminant: 107 coliform bacteria/100 ml (raw sewage)



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- Release location: Potomac River mile 5.1 – Clara Barton east of I-495
- Initiation of release: 4:00 PM, January 19
- Duration of release: 5 days (assumed ending was January 24)
- Rate of release: 40 MGD and 60 MGD (Interceptor capacity)
- Decay rate: 0.221/day (half-life ~3.2 days)
- Potomac River flow: 2050 cfs
- Preliminary results: 120 hour/40 MGD release
  - rough estimate, spill not fully contained
  - within 26 hours, we assumed there was a uniform concentration of bacteria in the river
  - the leading edge would reach the Little Falls at 10.9 hours after the release and Chain Bridge at 16.2 hours after.
- Preliminary results: 120 hour/60 MGD release
  - same as 40 MGD release
- Key takeaways from plume analysis
  - Release was downstream of all water supply intakes except Little Falls (Washington Aqueduct's "backup" intake)
  - Model results indicated bacteria levels of ~1000 times typical water quality criteria levels
  - Upon end of release, river flow and bacteria die-off attenuated bacteria concentrations levels fairly quickly – due to river flow and decay (die off)
    - At Little Falls: within 16 hours
    - At Chain Bridge: within about 25 hours
  - Caveats: considerable uncertainties in bacteria concentration in sewage and in bacteria decay rate

### Questions/discussion:

- Significant uncertainties included decay rates, full mixing assumptions, and unknown initial bacteria levels.
- Delay in the notification of the event
- Not able to model past Chain Bridge.
- Real-world data from USACE/WA at Little Falls can be provided
- A lesson learned? Official notifications breaking down if they were only through ICPRB
  - WA was high on the notification list since backup intake is downstream of spill
  - additional models are available but need more lead time

### Jayne Brown, DOEE – Potomac Interceptor Failure: Tracking Impacts in the District

This presentation will be slightly modified to complement what's already been presented as the slides were prepared before DC water could confirm attendance.

#### Introduction & DOEE's role

- While the spill took place in Maryland, DC has interest in responding to downriver impacts of water quality (other than drinking water, in this case: boating, fishing, recreation (immersion))
- DC Water's NPDES permit oversight which includes maintenance and repair of large assets such as the Potomac Interceptor. EPA is the direct permit-holder and DOEE supports via MOA with inspections.



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- “not prepared for the public assumption that the event was in DC” and the assumption that DOEE was the primary oversight agency: response actions and messaging were vital

### Timeline

- Jan 19: Failure occurs at 4pm
  - 9:30 PM DOEE/EPA notified (MDE?)
  - 1:00 AM ICPRB notifies Potomac Spills
  - opinion: DOEE missed opportunity to get ahead of messaging
- Jan 24: Bypass initiated
- Jan 25-27: Adding pumps, troubleshooting
- Jan 28: NPDES inspection with MDE, EPA, DOEE
- Jan 29: DC Water reports “clean pipe”
- Jan 29: Daily monitoring begins

### Brief synopsis of the bypass operation

#### What now?

- Jurisdictions that may conduct environmental monitoring in the future are coordinating
- DC Water is monitoring at 6 locations
  - Early data shows E. coli levels dropping fast
  - Background at National Harbor
- MD and VA planning downstream after ice melts
- DOEE planning modified transect (shoreline) within the District - filling in some sampling gaps within between Georgetown to National Harbor
- Wildlife surveys?
- Messaging? Shellfish, swimming and other advisories downstream.
- planning bacteria monitoring in icy conditions
  - aerial imagery (courtesy of HSEMA)
  - cooperation with Metropolitan Police Department to break some ice for sampling
- endpoints considered: diving and special operations that require full immersion

### Key Points

1. DOEE played roles in river monitoring, public messaging, and oversight of DC Water’s permit obligations.
2. Public confusion required DOEE to issue clarifying communications despite the incident occurring in Maryland.
3. DOEE conducted shoreline surveys, visual assessments, and coordinated with EPA, MDE, and DC Water on sampling plans.
4. Ice cover limited boat based sampling; DOEE coordinated with police for potential icebreaking access and with federal partners for aerial imagery.-based sampling; DOEE coordinated with police for potential ice-breaking access and with federal partners for aerial imagery.
5. Future monitoring will involve aligned multi-state transects, wildlife assessment, and unified public advisories.

**Michael Nardolilli, ICPRB** – Remarks on Potomac Interceptor Incident



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

- ICPRB is a compact of the five jurisdictions in the Potomac basin approved by Congress in 1940. ICPRB has no regulatory authority.
- DC Water hosted a 2018 exercise on Potomac Interceptor break at logwall on the C&O canal: at that time, the “plan” was to use the canal as a diversion in the case of a PI break
  - ICPRB continues to participate in annual exercises preparing for an emergency such as the one that has occurred
  - This incident occurred downstream of drinking water intakes but could have just as easily occurred upstream, so continued preparedness is important.
- Nardolilli is a Board member of the Northern Virginia Regional Park Authority. in Feb 2024, saw break in PI upstream which was contained.
- January 19: Day 0
- January 20: PotomacSpills notification shared
- January 23: ICPRB secured funding for additional spill work
- January 25: ICPRB completed plume analysis, sent to EPA and MDE
- January 29: ICPRB letter to EPA
  - requesting update to permit language:
    - immediate notification of ICPRB’s spill response team by DC Water of any discharges from the Potomac Interceptor by direct communication or via our spills report line
    - prioritization by DC water of repairs to the Potomac Interceptor to portions that could break at locations upstream of drinking water intakes
    - better communication by DC Water to the public concerning the nature and extent of discharges from the Potomac Interceptor
- January 30: new position created (Associate Director of Spills, Sarah Ahmed to begin May 1)

DWSPP Administrative and Workgroup updates will be included in the next Potomac DWSPP Member News Drop in February.

### Summary of Meeting Highlights & Strategic Priorities

#### **1. Harmful Algal Blooms (HABs) Identified as Top Research Priority**

HABs were the central technical focus. Partners agreed that advancing predictive modeling and data sharing for algal blooms is the #1 new research priority for the coming year.

#### **2. Need for Integrated Monitoring & River-Based Modeling**

Participants emphasized improving early warning systems through:

- Integrated monitoring (field sampling, sensors, satellite, genetics)
- Timely alerts
- Modeling tools designed for river systems
- Better understanding of cyanobacteria transport and toxin decay



## The Potomac Drinking Water Source Protection Partnership Quarterly Meeting Summary Feb 4, 2026

### **3. Advancing Coordinated Research Planning**

The Research Steering Committee is formalizing a phased research plan focused on HAB modeling and data integration, while continuing coordinated work on PFAS and salinity.

### **4. Emergency Notification & Interagency Coordination Gaps**

The Potomac Interceptor collapse highlighted the need for faster notification and tighter coordination among utilities and agencies. Timely data sharing is essential for effective spill modeling and intake protection.

### **5. Infrastructure Risk & Protection of Intakes**

The aging Potomac Interceptor presents ongoing risk. Prioritizing rehabilitation of segments near and upstream of drinking water intakes was emphasized.

### **6. Unified Public Communication During Incidents**

Lessons learned included the need for clear, coordinated public messaging across agencies to avoid confusion and ensure consistent advisories.

### **7. DWSPP's Regional Role**

The meeting reinforced DWSPP's importance in aligning research priorities, strengthening emergency coordination, and supporting basin-wide source water protection efforts.

## **Actions for Consideration:**

- Circulate draft Research Workshop Summary for review.
- Advance phased algae research plan and identify funding partners.
- Explore coordinated perchlorate monitoring among interested members.
- Assess options for remote sensing data collection in restricted DC airspace.
- Provide source water protection input to DC Water regarding PI rehabilitation prioritization.
- Share monitoring data with ICPRB to support spill model validation.
- Update spill response modeling with new data and to inform future spill response.
- Review and strengthen emergency notification protocols.

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