

Waterworks Advisory Committee (WAC) Meeting Minutes

In person and by WebEx

10:00 am, Wednesday, April 20, 2022

Members Participation: Dwayne Roadcap (ODW), Chair; Bailey Davis, DCLS; Skip Harper, Virginia Plumbing & Mechanical Inspectors Association; Jesse Royall, PE, Sydnor; Scott Kudlas, DEQ; David Van Gelder, Water Operator; Steve Herzog, PE, VWEA; Mark Estes, VRWA.

Guests Participating: Chloe Van Zandt, VA Health Catalyst; Dr. William Mann, OBGYN retired; John Kingsbury, Fairfax Water; Russ Navratil, VA AWWA; Christopher Gill, Christian & Burton; Tom Fauber, VA ABPA; Gouri Mahadwar, DEQ; Elliot Popoff, VA Health Catalyst; James Dillon, SERCAP; J. Cherry, Bryant Mountioy, Shane Wyatt.

ODW Staff: Robert Edelman, Holly Brown, Tony Singh, James Reynolds, Julie Floyd, Barry Matthews, Brian Blankenship, Steve Kvech, Aaron Moses, Mark Wise, Jeremy Hull, David Dawson.

Meeting Overview:

The Waterworks Advisory Committee (WAC) met in person at the Madison Building on Wednesday, April 20 2022. Members of the WAC and the public also joined by electronic communication means (WebEx). Dwayne Roadcap called the meeting to order at 10:04 a.m. and reviewed the agenda. Members did not request any changes or additions to the agenda.

WAC members agreed to adopt the minutes from February 16, 2022 meeting. A copy follows the minutes from this meeting and will be marked as “final” on Town Hall.

PFAS Updates:

Dr. Tony Singh, Deputy Director, ODW, provided an update on PFAS. See the attached slides.

HB919, 2021 GA session: The Board can establish maximum contaminant levels (MCLs). A workgroup must analyze health effects, conduct a cost benefit analysis, and follow the same standards as the EPA’s Safe Drinking Water Act to promulgate regulations (absent US EPA establishing a MCL). ODW is receiving feedback from stakeholders. We expect the workgroup will have 16 to 22 members, including the VA Municipal Drinking Water Association, VA Rural Water Association, Virginia Section American Water Works Association, Private company owning a waterworks, NTNC, Environmental Organizations/Citizens Groups, such as the James River Association, Southern Environmental Law Center, Potomac Riverkeeper Network, Virginia League of Conservation Voters, Professional Organizations, such as the Association of

State Drinking Water Administrators, US Geological Survey, General Public, a Chemical Manufacturer, such as DuPont, treatment technology subject matter experts, water economists, and DEQ.

EPA is currently working on MCLs for PFOA and PFOS, but not 1,4-dioxane and chromium-6.

The Notice of Intended Regulatory Action (NOIRA) dealing with regulating PFAS was published on February 14, 2022. The Public Comment period ended March 16, 2022. The Board of Health received three comments: one from the VA Municipal Drinking Association (VMDWA), a second from the American Chemistry Council (ACC), and a third from 3M. Staff will form a workgroup after July 1.

PFAS Sampling Phase II

Staff is developing the Phase 2 PFAS sampling study. If you are interested in any information pertaining to this study, please visit our VDH ODW PFAS Website at www.vdh.virginia.gov/drinking-water/pfas.

Chickahominy River Watershed

PFAS was discovered in the Chickahominy River Watershed, at a surface water intake owned by the Newport News Waterworks. Henrico County subsequently detected PFAS at approximately 20 private wells and one well serving a waterworks within the White Oak Swamp Watershed. A workgroup, including Henrico County, VDH, and DEQ, is looking at a second round of more detailed testing from private wells and additional public wells. The workgroup is waiting on results of environmental samples.

Waterworks Operation Fee Regulations:

Barry Matthews, Director – Division of Training, Capacity Development and Outreach, provided an update on the Waterworks Operation Fee Regulations. See the attached slides.

The Board of Health received one comment during the NOIRA public comment period from the Virginia Health Catalyst, which promotes safe, affordable, trusted drinking water. The Waterworks Operation Fee Regulation Committee has held two meetings. The first meeting discussed background on revenues and ODW's budget and requested the average cost of certain activities.

The second meeting did not have a quorum, so no action was taken. ODW presented the following annual average costs:

- Cost to process an invoice is approximately \$21.00.
- Technical assistance costs are \$1,570 for NTNC, \$780 for TNC and \$3,020 for Wholesalers.

The workgroup discussed:

- Billing software for next year,
- The amount of revenue from possible changes,
- Charges for wholesale and transient noncommunity waterworks,
- Customer accounts verses services connections,
- Provisions for nonpayment and past due accounts, and
- Providing services or grants for out-of-compliance waterworks.

The workgroup discussed next steps, including if a virtual meeting for nontransient noncommunity and transient noncommunity waterworks representatives can be held.

Virtual Meetings

The WAC discussed policy for meeting virtually and voted to approve allowing members to meet virtually. Staff will review to determine the appropriate process for establishing a virtual meeting policy.

Centralized Plan Review:

Robert Edelman, PE, Director of the Division of Technical Services, provided an update on the Centralized Plan Review pilot. See the attached slides.

Some members had not received information on the review process and pilot. Members are to contact Bob Edelman at Robert.Edelman@vdh.virginia.gov to receive more information. Staff received comments from Sydnor, mostly editorial. Two field offices are piloting the Centralized Plan Review.

The Abingdon Field Office (AFO) reached out to consulting engineers and held two virtual meetings to discuss the pilot. They shared the checklist and certification statement and reached out to waterworks owners. The pilot started April 4. AFO is completing reviews. This pilot focuses on checklists and certification statements to streamline the plan review process.

The Culpeper Field Office (CFO) is piloting a different approach. CFO notified engineers as CFO becomes aware of a project. There are currently seven known projects (3 projects received). The first project arrived on Tuesday, April 5, 2022 and was approved on Monday, April 18, 2022. This pilot will figure out new issues, such as who is going to sign, send and how to avoid handling paper copies. We set up a SharePoint locations and follow a new folder-naming convention. The Centralized Review Team for CFO consists of Bennett Ragnauth and Aaron Moses.

Staff expects feedback and next steps by June. The goals include to streamline, improve consistency and efficiency.

Draft Field Manual:

From an internal staff review, the Division of Technical Services received many comments; some were technical and others format and typos. Staff expects final ready for posting to the Virginia Regulatory Town Hall by early May. The document is quite large (180+ pages) and incorporates many working memos. Staff is estimating that the program will have up to 6 manuals in total, which will eliminate need for working memos.

The Lead and Copper Rule Revision (LCRR)

- LCRR promulgated (1/15/21)
- LCRR effective (12/16/21)
- LCRR compliance date remains October 16, 2024
- EPA intends to improve LCRR

Water Systems will need to comply with the LCRR by October 2024. The Lead service line (LSL) inventory requirements will remain unchanged. EPA is working on guidance for the LSL inventory, which should be out next month. EPA has signaled that they will promulgate a new rule to improve the LCRR.

DRAFT Lead Service Line Chronology

The Uniform Statewide Building Code (USBC) was adopted, effective September 1, 1973. The USBC replaced local building codes. Some localities were granted an extension until 1975. Initially, the USBC allowed lead water service lines. Effective August 1, 1978, the USBC no longer allowed lead water service pipes. The USBC applies to customer services pipes and premise plumbing. By June 1988, the Federal Lead Ban prohibits the use of pipe, solder or flux not “lead free.” The Federal Lead Ban applies to waterworks owned distribution systems and service lines as well as customer service lines and premise plumbing. See the slide for more details.

FUNDING:

Dwayne Roadcap, Director, Office of Drinking Water, presented. The Office of Drinking Water is still accepting funding applications through May 5. Staff expects up to \$400 to \$600 million in funding application requests. Information can be found on Town Hall.

<https://www.townhall.virginia.gov/L/ViewNotice.cfm?gnid=2379>

<https://www.townhall.virginia.gov/L/ViewNotice.cfm?gnid=2367>

Budget, Vacancies and Hiring

Grant Kronenberg, Director, Compliance & Enforcement, started recently. We are waiting on the General Assembly and the final budget. Currently, ODW is holding 17 positions vacant. The vacancies have impacted different work units differently. We intend to hire as soon as we see the approved state budget.

Public Comment Period:

No one commented during the Public Comment Period.

New Business:

A member asked about the pass rate for Waterworks Operator licensure exams. The pass rates are about the same and holding steady. The overall pass rates are about 30%. Barry Matthews will ask Jason Yetter to get some information and report to the WAC. We can discuss further or even invite DPOR to the next WAC meeting to discuss.

Next Meeting:

The next meeting is scheduled for July 20, 2022. VDH intends to schedule an in-person meeting to vote on a virtual access policy, allowing virtual attendance. VDH will share a draft virtual access policy for the next meeting and reach out to members to ensure a quorum attends in person.

WATERWORKS ADVISORY COMMITTEE MEETING

109 Governor Street, Richmond VA (Upper Basement, Room 11) and by WebEx

April 20, 2022
10:00 AM – 12:30 PM
DRAFT AGENDA

Subject	Time
Connect to Webex	9:45 – 10:00 AM
Start meeting. Establish quorum. Finalize Agenda. Adopt 2/16/22 meeting summary.	10:00 – 10:15 AM
<p style="text-align: center;">Drinking Water Program Discussion</p> <ul style="list-style-type: none">• PFAS - Dr. Tony Singh<ol style="list-style-type: none">a. Review comments received on NOIRAb. Review HB919 and impact statementc. Discuss overview of reports to General Assembly (RD681 and RD877)d. Describe next sampling pursuant to EPA fundinge. Discuss next steps and recommendations; DEQ efforts• Waterworks Operation Fees – 12VAC5-600 – Barry Matthews<ol style="list-style-type: none">a. Review comments received on NOIRA;b. Review stakeholder work group discussions to datec. Discuss next steps and recommendations by the workgroup• Plan Review Pilot – Bob Edelman<ol style="list-style-type: none">a. Discuss current implementation of two pilot projectsb. Discuss next steps with the pilotc. Receive feedback and recommendations• Draft Field Manual implementation– Bob Edelman<ol style="list-style-type: none">a. Discuss staff feedback and contents of draft field manualb. Share when staff will post the draft manual on townhall for feedback• Updates and Reminders<ol style="list-style-type: none">a. Lead and Copper Rule Revisions – getting inventoriesb. American Rescue Plan Act, Bipartisan Infrastructure Law, and Drinking Water State Revolving Fund application deadline approachingc. Budget, vacancies, hiring, staff morale	10:15 – 11:45 AM
<p style="text-align: center;">Public Comment Period</p>	11:45 – Noon
<p style="text-align: center;">Other Business</p> <ul style="list-style-type: none">• Upcoming meeting dates: July 20, 2022; September 28, 2022, December 14, 2022	Noon – 12:30 PM

Information and Protocol for WebEx Meeting

You can access the meeting on your computer, phone or mobile device with the meeting link below:

<https://vdhoep.webex.com/vdhoep/j.php?MTID=mdd8f104f98945bfea75dd10c17c1ef8a>

If accessing via a mobile device, you will need to download the WebEx Meet app prior to joining the meeting.

When joining the meeting, please use the meeting number and password below:

Meeting number (access code): 2631 559 7248

Meeting Password: XJv4tsqWk26

You can use your computer audio or join via telephone by calling [1-844-992-4726](tel:1-844-992-4726) United States Toll Free.

Please log into the meeting at least 10 minutes before the meeting begins. (If you are having problems, please call Kris Latino@8046644403 and she will assist you)

Please sign into the meeting and identify yourself so we can verify that you are attending the meeting.

After you have identified yourself, please mute your phone to reduce any unwanted noise.

Driving Directions and Parking Information

Meeting Venue: James Madison Building, 109 Governor Street, Richmond 23219 VA

Driving Directions:

From the North: Follow I-95 South to Exit 74B (Franklin Street). Turn right at the light, keep straight through the intersection and the Madison Building is on the right (top of the hill) Follow directions below to selected parking option.

From the South: Take I-95 North to Exit 74C. Follow Exit 74C, and then take the Broad Street East ramp to the right. Turn right onto Broad Street. Go to the first traffic light that is N 14th Street and turn left. Go to traffic light and make a right turn, the Madison Building is on the right (top of the hill). Follow the directions below to selected parking options.

From the West: Take I-64 East. As you get into the central Richmond area, I-64 merges with I-95. Follow signs for I-95 South to Exit 74B (Franklin Street) (do not get back onto I-64). Turn right at the light, keep straight through the intersection and the Madison Building is on the right (top of the hill). Follow directions below to selected parking options.

From the East: Take I-64 West to I-95 South. Follow I-95 South to Exit 74B (Franklin Street). Turn right at the light; keep straight through the intersection and the Madison Building is on the right (top of the hill). Follow directions below to elected parking options parking option.

Public Parking

Parking is not permitted in State parking areas. Cars illegally parked in these areas are subject to ticketing and towing, Public Parking areas are available on nearby streets. Each of these streets are South of the Madison Building, although other parking facilities exist, the following are a few of the closest (costs may have changed since this document was created):

1. Main and N. 14th Street (AOPCOA Parking Lot)
Turn right onto Franklin Street off exit ramp. Go to N 14th Street – turn left. Go one block to Main Street. See parking lot on left (Small gravel lot.) \$5.00 all day.
2. Cary off N 14th Street (Public Parking Deck- AOPCOA)
Turn right onto Franklin Street off exit ramp. Go to N. 14th Street – turn left. Go two blocks to Cary Street. Turn left onto Cary. Parking deck will be on the left. Early bird rate – If in before 9:00 a.m. (unknown at this time) after 9:00 a.m. \$16.00 all day
3. Cary and 15th Streets (VA Park – Value Parking Lot)
Turn left onto Franklin Street off exit ramp. At first corner, turn right onto 15th Street. Go two blocks to Cary Street – turn left onto Cary, see parking lot on right corner \$5.00 all day.
4. Cary between 16 & 17th Streets (V Park – Value Parking Lot)
Turn left onto Franklin Street off exit ramp. At first corner, turn right onto 15th Street. Go two blocks to Cary Street – turn left onto Cary. See parking lot on right one block down. \$5.00 all day.

To get to parking lot from Broad Street; Turn left onto N. 14th Street. Go two traffic lights to Main Street and see parking lot #1 on the left or go three traffic lights to Cary Street and turn left. Parking lots #2, #3 and #4 will be seen as indicated above

Waterworks Advisory Committee (WAC) Meeting Minutes

109 Governor Street, Richmond VA (Upper Basement, Room 11) and by WebEx

10:00 am, Wednesday, February 16, 2022

Members Participating at 109 Governor Street: Dwayne Roadcap (ODW), Chair; Jesse Royall, PE, Sydnor; David Van Gelder, Water Operator; Steve Herzog, PE, VWEA

Members Participating through video conference: Geneva Hudgins, VA AWWA; Bailey Davis, DCLS; Skip Harper, Virginia Plumbing & Mechanical Inspectors Association; Hannah Somers (for Scott Kudlas), DEQ; Eric Lasalle, Smithfield Foods (NTNC);

Guests Participating: Laura Bauer, Virginia American Water; Chloe Van Zandt, Virginia Health Catalyst; Dr. William Mann, OBGYN retired; John Kingsbury, Fairfax Water; Russ Navratil, VA AWWA; John Kingsbury, Fairfax Water; Christopher Gill, Christian & Burton; James Linton, Whitman, Requardt and Associates; S. Scott Shirley, Western Virginia Water Authority; Doug Beaver, City of Norfolk; Travis Lane, Western Virginia Water Authority; Josh Harris, Aqua Virginia, Chris Pomeroy, Aqua Law; George Hayes, Chesterfield County; John Aulbach, Aqua Virginia; Bob Hicks, VDH; Tom Fauber, VA ABPA; Roger Arnold, Hazen and Sawyer

ODW Staff: Robert Edelman, Holly Brown, Tony Singh, James Reynolds, Dan Horne, Kelly Ward, Holly Brown, Julie Floyd, Barry Matthews, Brian Blankenship, Steve Kvech, Sherri Knight, David Dawson, Aaron Moses, Taylor Valencia, Taylor Broussard, Jack Hinshelwood, Josh Harris

Meeting Overview

The Waterworks Advisory Committee (WAC) met in person at the Madison Building, 109 Governor Street, Upper Basement, Richmond, Virginia on Wednesday, February 16, 2022. Members and the public also joined the meeting by WebEx. Office of Drinking Water (ODW) Director Dwayne Roadcap called the meeting to order at 10:00 a.m. and reviewed the agenda. Members did not request any changes or additions to the agenda.

WAC members agreed to adopt the minutes from September 22, 2021 meeting. A copy follows the minutes from this meeting and will be marked as “final” on Town Hall.

Budget

Dwayne Roadcap gave an update on the budget. See the attached slides. Governor Northam cancelled the layoffs of 14 full-time employees (FTEs) and provided funding through June 30, 2022. Governor Youngkin added an amendment to the budget of \$1.83 million to cover ODW’s budget deficit for the next fiscal year. Delegates Kilgore and Senator Pillion added an amendment to provide matches for federal grants of \$3.0 million for this fiscal year and \$3.5 million for next fiscal year, which is the expected state match of 10% for the Bipartisan

Infrastructure Law (BIL). ODW expects BIL funding of about \$89 million. Governor Northam's introduced budget also proposed the following for the drinking water program:

1. \$1.0 million for "Equal access to the drinking water"
2. \$0.73 million for return of unallotted funding for database upgrades and the Drinking Water State Revolving Fund (DWSRF) matching funds
3. \$2.5 million for 11 FTEs for the American Rescue Plan Act (ARPA) implementation
4. \$1.5 million to implement the Office of the State Inspector General (OSIG) recommendations for a quality assurance and quality control program for oversight over sampling. This would add one FTE in each Field Office to oversee sampling collections, verification program and one data management FTE to identify where to go to sample and verify. If this budget is approved, the ODW would vet this program with the WAC.

The House Appropriations and Senate Finance committees had some questions about ODW's budget. ODW expects action on the proposed budget and member amendments by March, 2022.

Vacancies

VDH announced a layoff of fourteen (14) employees in December 2021. Although the layoffs were cancelled, the planned action had a negative impact on the morale of staff and a corresponding negative impact on the drinking water program. Of the fourteen (14) slated for layoff, one retired, and another accepted employment elsewhere. The positions supported by the DWSRF program will be filled. ODW does not anticipate filling PWSS supported positions without additional funding or special consideration. Governor Youngkin's \$1.83 million budget amendment would ensure no layoffs. To address morale concerns, ODW leadership is meeting with teams to offer support and address the uncertainty.

PFAS Updates

Dr. Tony Singh, Deputy Director, ODW, provided a PFAS update, with assistance from Bob Edelman and Holly Brown. See the attached slides.

The Notice of Intended Regulatory Action (NOIRA) that proposes the regulation of PFAS was published on February 14, 2022. The agency does not intend to hold any public hearing during the NOIRA period. If you have any comment, please contact Tony Singh at Tony.singh@vdh.virginia.gov.

HB919 crossed over to the Senate for review. HB919 would provide additional guidance to the Board of Health for developing MCLs. Key points include:

- The Board of Health (Board) must establish MCLs for PFAS, PFOS, and for such other PFAS as the Board deems necessary, including Chromium-6 and 1,4-dioxane.
- Virginia MCLs shall not exceed any MCL or health advisory for the same contaminant adopted by the US EPA.
- The Board shall review the recommendations of any work group convened by the Commissioner after July 1, 2022

- The Board may initiate and continue a regulatory action, but shall not adopt, regulations establishing MCLs until a work group has completed a study of the occurrence of the contaminants and reported the results to the Governor and specific committees of the General Assembly.

HB1011 will monitor this bill and update as appropriate. The PFAS study included in HB 1011 rolled into HB 919. Stakeholders generally support funding for a study.

Phase 2 PFAS Sampling

Bob Edelman presented the Phase 2 PFAS sampling approach. ODW completed Phase 1 of PFAS sampling in 2021. See the attached slides. Phase 2 is a continuation from Phase 1 and uses a hybrid approach. ODW will sample surface water sources since PFAS detected in some surface water sources. ODW will sample at ground water under the influence of surface water sources since they also have a risk of PFAS contamination from surface water influence. ODW will sample at groundwater systems near potential sources of PFAS. ODW will use the remaining samples to test community ground water sources serving fewer than 3,300 persons. ODW will spread the remaining samples across different geographical areas of Virginia. There is insufficient resources to sample all entry points and all waterworks. ODW will perform the sampling. ODW anticipates sampling as follows:

Surface Water Sources	137
GUDI Sources	37
Ground Water systems	19
Small Community Systems	Balance of samples

Chickahominy River Watershed

Holly Brown presented on the PFAS contamination in the Chickahominy River Watershed. See the attached slides. PFAS was discovered in the Chickahominy River, a subsidiary of James River Watershed, at a surface water intake owned by the City of Newport News. Newport News studied the Chickahominy River Watershed in 2019-2021 and found elevated PFAS levels in the White Oak Swap Watershed. Newport News released the results to VDH and DEQ in October 2021. Henrico County, working with DEQ and VDH, sampled 260 wells within White Oaks Swamp, including 3 public wells within a 5 mile radius of the Richmond Airport. Sixteen percent (16%) of wells detected PFAS. Two public wells had PFAS below detectable levels and one well had PFAS above detectable levels but below EPA’s health advisory levels. ODW is working with the waterworks where FPAS was detected. DEQ is also completing follow-up testing on the environmental side, testing fish, fish and water, fish sediment and water and just water.

Drinking Water Infrastructure Funding

Kelly Ward, Drinking Water State Revolving Fund (DWSRF) Director, presented updates on the American Rescue Plan Act (ARPA), the Bipartisan Infrastructure Law (BIL), and the DWSRF programs. See the attached slides. The BIL applications are due April 8, 2022. The State

Revolving program applications are due May 6, 2022. ODW is waiting on final guidance from EPA. Details include:

- Supplemental infrastructure funding will be approximately \$29 million
- The lead service line replacement funding will be approximately \$47 million per year
- Emerging contaminants (100% principle forgiveness) will be \$12 million per year
- ODW expects FY 23 \$93 million; FY 24 \$97 million; final two years just over \$100 million per year
- Over the next five years, we expect \$480 million of new funding, in addition to the base DWSFR program (\$25 to \$30 million per year).
- BIL requires 49% principle forgiveness, but this does not apply to all projects and recipients.
- Justice40 requires that 40% of the benefit of federal money be realized in an environmental justice community. This could possibly mean heavily subsidized loans and principle forgiveness.
- DWSRF will use the state's disadvantaged community criteria.
- ODW will identify the disadvantaged communities, make sure their needs are met first, then go on to better-financed waterworks
- ODW is trying to blend infrastructure with the base program and adhere to the requirements of Justice40.

ODW has received \$100 million in ARPA funds. The first allotment from FY 22 has been awarded. ODW will ask for public comment on FY23 projects. There will be applications available to apply for the FY 23 funds. The ARPA funds are exclusive to disadvantaged communities. The disadvantaged community is the location receiving the construction. Small pockets of the populations could qualify as disadvantaged. DWSRF will post the ARPA project list for public comments and application solicitation in mid-March to early April.

ARPA Outreach

Barry Matthews reported on ARPA activities. See the attached slides. ODW does not have funding to complete on-site verification of construction work. ODW signed a memorandum of understanding (MOU) with six Planning District Commissions (PDCs) to carry out the on-site verifications. Most of the ARPA projects are currently in Southwest Virginia and South Side Virginia, and in the lower Shenandoah. ODW issued requests for proposals (RFPs) for private engineering firms to perform on site services outside the six PDC geographic regions. The procurement has not been finalized.

A study related to fluoridation and reporting of water quality results at waterworks was accepted from Virginia Health Catalyst. The study proposal includes research into barriers to fluoridation, recommendations on how to educate and outreach to communities for fluoridation, and new research to improve consumer confidence reports. ODW received one application in response to a request for application (RFA) for leak detection services. The application was not accepted and this RFA will be re-advertised.

Holly Brown reported that ARPA has supplied a small amount of money for cybersecurity. Holly also found a variety of free tools and services available to waterworks and owners. ODW intends to contract a cybersecurity firm to provide technical assistance to waterworks.

Dwayne Roadcap pointed out that the EPA is pushing to make cybersecurity a part of the sanitary survey program; however, ODW's staff of engineers and inspectors are not cybersecurity experts, so the analysis would likely be rudimentary. EPA is still considering whether to proceed with cybersecurity as part of the sanitary survey.

Centralized Review Program

Bob Edelman, Director of the Division of Technical Services, presented a proposal to change the plan review program. Refer to the attached slides. "Centralizing" plan review goals would be to:

- Decrease review and approval times,
- Streamline reviews for standard project elements,
- Increase review priority for ODW staff,
- Increase consistency across the state and
- Maintain plan review ability in the field office staff.

New Paradigms

- Plan Review is "Centralized," meaning that a staff person in the central office would lead oversight and implementation of the program
- Designated plan review staff dedicated to the work
- Design engineers would complete checklists and certify compliance with the Waterworks Regulations
- Applicants would submit through a central email address
- Submission of an electronic construction permit package required
- ODW would issue electronic construction permits
- District Engineers and Assistant District Engineers (DEs/ADEs) would be temporarily assigned to "Centralized Review" as a detail for a specific time period on a rotating basis
- During detail assignments, Field Offices would redistribute DE/ADE responsibilities

Bob presented that certain project elements such as waterlines, wells, and tanks would be approved based on the engineer's checklist and certification statement. Project elements that involve treatment for a maximum contaminant level (MCL) or treatment technique (TT), such as surface water treatment or corrosion control treatment, would be reviewed in detail by ODW.

The proposal includes new program goals to encourage rapid review and either issue an approval or provide comments for plan changes. See the attached slides for details.

Discussion:

Would the review program be a full-time assignment? Engineers would still answer the phone for his or her district, but other significant responsibilities would be assigned to others during the Centralized Review assignment. Some thought the rotating detail assignment could become unworkable and suggested a full-time assignment with plan review, helping out with other things

as time permits. Dwayne Roadcap stated that he agreed in concept that it would be more efficient to have full time staff dedicated to plan review; however, staff really wanted to share the responsibility. Right now, there are six Deputy Field Directors and about 18 to 25 staff who work on plan review with six different entry point locations for submissions of plans. The “centralized” proposal would limit have one entry point location (via webpage link) with one person supervising the program, and three FTEs on a detail assignment.

Another person asked about the scope of the review and whether it would be similar to DEQ’s plan review process for wastewater. One person believed that shifting people around could be hard to implement. Staff reviewing plans would not have the appropriate background information or complete understanding of the water treatment plant. Right now, staff know the water treatment plan and can provide helpful design comments. Another person suggested designating one person in each Field Office as responsible for plan review and fill any remaining time with other duties. If ODW were to make the changes to require checklists, engineer certifications, and a centralized submittal portal, then this streamlining could be done with the DE most familiar with the project. This person wondered whether rotation of reviewers would create the efficiencies desired.

One person agreed that a district engineer knows the waterworks best and would understand how the project fits in, that an outside reviewer would just not know. Another person commented that the idea of one reviewer in each field office is a great idea. In fact, that idea was pilot tested in the 1990s, work well, but was shelved for various reasons. The design engineer has responsibility for the design and the project, anyhow, so the review can be limited. Another person pointed out that the PE is doing a preliminary review of the plans and suggested that the checklist identify where specific, relevant information can be found in the plans and specifications.

Tony Singh pointed out that this is a proposal and ODW surveyed ODW staff for feedback. ODW plans a pilot and asked stakeholders for their feedback during the pilot. One person stated that he does not expect much change in the time to review and approve a waterline project for his system. He enjoys and values the relationship with his District Engineer. WAC members generally preferred one reviewer for each office rather than a rotating detail assignment. Waterworks value the relationship with the District Engineer.

ODW will finalize its roll out plan, including checklists in March, posting them on the website. ODW will pilot the business process at two field offices. If the pilot works, then the change would become a statewide business process.

Policy Updates

Bob Edelman explained that ODW has a number of guidance documents implementation of regulations. When Dwayne Roadcap arrived to ODW in 2018, ODW had nearly 100 working memos. Forty-six meet the definition of a guidance document and are posted on the Virginia Town Hall. ODW is not updating the working memos, but creating several manuals to replace working memos. ODW is working on a new Field Manual. Soon, ODW will post a notice on

the Virginia Register and on Town Hall for this manual. We are also working on an updated Sampling Manual, Enforcement Manual and Permit Manual, all due later this year.

Waterworks Operations Fee Regulations

Barry Matthews presented that the Waterworks Operation Fee Regulations are being revised. The NOIRA was published on January 28, 2022, opening a public comment period until March 3, 2022. ODW has established a stakeholder group and has listed the members on the attached slides. The first meeting is March 15, 2022. The meetings are open to WAC members and interested parties. If you are interested in participating, please feel free to contact Barry Matthews or Kris Latino for meeting information.

Fee revenue supports the positions covered by the PWSS grant and field office. ODW currently plans three meetings with the stakeholder group. The first meeting will provide introductions and assign homework; the second meeting will go over proposed changes; and the third meeting will provide an opportunity to make comments on the proposal.

Dwayne Roadcap asked whether the proposed members of the stakeholder workgroup included all who should be part of the conversation. WAC members were asked to review the list of stakeholders and offer edits or additions as necessary.

Lead and Copper Rule Revisions

Bob Edelman provided an update on the Lead and Copper Rule Revisions (LCRR). See the attached slides. ODW notified waterworks in January that the LCRR are effective, with a compliance date of October 16, 2024.

The EPA intends to promulgate a new rule to improve the LCRR rule by fall 2023. Because any new rule will follow the notice/comment rulemaking process, EPA does not know exactly what this rule will cover. EPA likely will look at requirements to replace all lead service lines, sampling requirements, reducing LCRR complexity, and prioritizing historically underserved communities. This means that the lead service line inventory (LSLI) requirements and deadline of October 16, 2024 will remain unchanged. However, compliance sampling locations and requirements for compiling a list of schools and childcare facilities, also due October 16, 2024, might change.

ODW recommends that the regulated community move forward with the LSLI and get started by gathering documents and information sources. EPA will probably provide more guidance by July 2022, and start training events. ODW does not have the capacity to do LSLIs, but does have the resources to provide technical assistance. ODW is looking into technical assistance providers to help waterworks complete the LSLI. Water systems should be looking at the inventory from an asset management perspective. Owners should identify information sources for developing the list of schools and day care facilities served by their waterworks. Owners should begin work to understand what is involved in the tap sample pool.

One person asked for more guidance on dates after which LSLs can be presumed to be no longer installed.

Waterworks Advisory Committee

The Waterworks Regulations contain new membership requirements. See the attached slides. Dwayne intends to share potential by-laws and formalize membership starting at the next meeting.

Public Comments

No comments.

Drinking Water Priorities for 2022

Dwayne presented priorities for 2022. See the slides for more details.

- Implement new initiatives:
 - o WIIN grants, Legionella, PFAS, ARPA, Infrastructure
 - o Lead in schools and childcare centers
- Make progress on our aspirational goals & metrics
 - o Conduct sanitary surveys on-time
 - o Reduce time for plan review & permitting
 - o Reduce the number of systems with health violations
- Public Health 3.0 agency wide initiative
- Implement OSIG recommendations
 - o New performance metrics
 - o Update manuals (Enforcement, Permit, Field, Sampling, etc.)
 - o Public Notice Oversight
 - o Strengthen Compliance Specialist position
- Finalize and decommission an old unsecured databases and Onboard new proprietary software
- Meet & Exceed EPA grant requirements
- Build relationships with external stakeholders
- Expand centralize services
 - o Plan review
 - o Compliance & Enforcement oversight
- Consider new business model for operations
- Narrow focus of field office activities
 - o Sanitary survey and inspections
 - o Sampling results
 - o Technical assistance
 - o Emergency preparedness

Conclusion

The next WAC meeting will be held on April 20, 2022. Other meetings date include: July 20, 2022, September 28, 2022 and December 14, 2022. Meeting concluded at 12:30.

WATERWORKS ADVISORY COMMITTEE MEETING

109 Governor Street, Richmond VA (Upper Basement, Room 11) and by WebEx

February 16, 2022
9:30 AM – 12:30 PM
DRAFT AGENDA

Subject	Time
Connect to Webex Instructions on Using Webex Protocol for Webex meeting and the chat feature	9:30 – 10:00 AM
Finalize Agenda and Adopt the 9/22/21 meeting summary	10:00 – 10:15 AM
Drinking Water Program Discussion	
<ul style="list-style-type: none"> • Budget and Vacancies <ul style="list-style-type: none"> a. Member Amendments b. Governor’s Introduced Budget c. Budget priorities • PFAS <ul style="list-style-type: none"> a. NOIRA published b. HB919 and HB1011 c. HB1257 (posted 11/22) and HB586 Reports d. Next phase of sampling e. Chickahominy Watershed • American Rescue Plan Act, Bipartisan Infrastructure Law, & DWSRF program <ul style="list-style-type: none"> a. Plan on use of funds b. Prioritizing waterworks that have immediate need c. Project management & use of planning district commissions • Planning a Process Change for Plan Review • Waterworks Operation Fees – 12VAC5-600 <ul style="list-style-type: none"> a. NOIRA Executive Branch Review; b. Stakeholder work group • Lead and Copper Rule Revisions • Establishing official membership for Waterworks Advisory Committee <ul style="list-style-type: none"> a. 12VAC5-590-45 	10:15 – 11:30 AM
Public Comment Period	11:30 – 11:45 AM
Other Business	
<ul style="list-style-type: none"> • Drinking Water Priorities for 2022 & Next Meeting Agenda • Upcoming meeting dates: April 20, 2022; July 20, 2022; September 28, 2022, December 14, 2022 	11:45 – 12:30 PM

Information and Protocol for WebEx Meeting

You can access the meeting on your computer, phone or mobile device with the meeting link below:

<https://vdhoep.webex.com/vdhoep/j.php?MTID=m77086b266e3745ea5df05c738f7b42e6>

If accessing via a mobile device, you will need to download the WebEx Meet app prior to joining the meeting.

When joining the meeting, please use the meeting number and password below:

Meeting number (access code): 2632 664 1159

Meeting Password: jhNHEDUu564

You can use your computer audio or join via telephone by calling [1-844-992-4726](tel:1-844-992-4726) United States Toll Free.

Please log into the meeting at least 10 minutes before the meeting begins. (If you are having problems, please call Kris Latino@8046644403 and she will assist you)

Please sign into the meeting and identify yourself so we can verify that you are attending the meeting.

After you have identified yourself, please mute your phone to reduce any unwanted noise.

Driving Directions and Parking Information

Meeting Venue: James Madison Building, 109 Governor Street, Richmond 23219 VA

Driving Directions:

From the North: Follow I-95 South to Exit 74B (Franklin Street). Turn right at the light, keep straight through the intersection and the Madison Building is on the right (top of the hill) Follow directions below to selected parking option.

From the South: Take I-95 North to Exit 74C. Follow Exit 74C, and then take the Broad Street East ramp to the right. Turn right onto Broad Street. Go to the first traffic light that is N 14th Street and turn left. Go to traffic light and make a right turn, the Madison Building is on the right (top of the hill). Follow the directions below to selected parking options.

From the West: Take I-64 East. As you get into the central Richmond area, I-64 merges with I-95. Follow signs for I-95 South to Exit 74B (Franklin Street) (do not get back onto I-64). Turn right at the light, keep straight through the intersection and the Madison Building is on the right (top of the hill). Follow directions below to selected parking options.

From the East: Take I-64 West to I-95 South. Follow I-95 South to Exit 74B (Franklin Street). Turn right at the light; keep straight through the intersection and the Madison Building is on the right (top of the hill). Follow directions below to elected parking options parking option.

Public Parking

Parking is not permitted in State parking areas. Cars illegally parked in these areas are subject to ticketing and towing, Public Parking areas are available on nearby streets. Each of these streets are South of the Madison Building, although other parking facilities exist, the following are a few of the closest (costs may have changed since this document was created):

1. Main and N. 14th Street (AOPCOA Parking Lot)
Turn right onto Franklin Street off exit ramp. Go to N 14th Street – turn left. Go one block to Main Street. See parking lot on left (Small gravel lot.) \$5.00 all day.
2. Cary off N 14th Street (Public Parking Deck- AOPCOA)
Turn right onto Franklin Street off exit ramp. Go to N. 14th Street – turn left. Go two blocks to Cary Street. Turn left onto Cary. Parking deck will be on the left. Early bird rate – If in before 9:00 a.m. (unknown at this time) after 9:00 a.m. \$16.00 all day
3. Cary and 15th Streets (VA Park – Value Parking Lot)
Turn left onto Franklin Street off exit ramp. At first corner, turn right onto 15th Street. Go two blocks to Cary Street – turn left onto Cary, see parking lot on right corner \$5.00 all day.
4. Cary between 16 & 17th Streets (V Park – Value Parking Lot)
Turn left onto Franklin Street off exit ramp. At first corner, turn right onto 15th Street. Go two blocks to Cary Street – turn left onto Cary. See parking lot on right one block down. \$5.00 all day.

To get to parking lot from Broad Street; Turn left onto N. 14th Street. Go two traffic lights to Main Street and see parking lot #1 on the left or go three traffic lights to Cary Street and turn left. Parking lots #2, #3 and #4 will be seen as indicated above

Waterworks Advisory Committee (WAC) Meeting Minutes

In person and by WebEx

9:00 am, Wednesday, September 22, 2021

Final

Members Participation: Dwayne Roadcap (ODW), Chair; David Van Gelder, Water Operator; Steve Herzog, PE, VWEA; Geneva Hudgins, VA AWWA; Skip Harper, Virginia Plumbing & Mechanical Inspectors Association; Jesse Royall, PE, Sydnor; Ignatius Mutoti, PE, VSPC; Bailey Davis, DCLS; Hannah Somers (for Scott Kudlas), DEQ; Mark Estes, HCSA; Roger Cronin, ACEC; Eric Lasalle, Smithfield Foods (NTNC)

Guests Participating: Laura Bauer, Virginia American Water; Chloe VanZandt, VA Health Catalyst; Callie Guy, Christian & Barton, LLP; Tom Fauber, VA ABPA; Amanda Waters, Aqua Law; Jessica Edwards-Brandt, Loudoun Water; Yann LeGuoellec, Newport News Waterworks; John Kingsbury, Fairfax Water; Ghan Young, Newport News

ODW Staff: Robert Edelman, Holly Brown, Tony Singh, James Reynolds, Jeremy Hull, Barry Matthews. Nelson Daniel, Mark Perry, Jeff Wells, Brian Blankenship, Dan Horne, Kelly Ward

1. Meeting Overview

The Waterworks Advisory Committee (WAC) met in person at the Madison Building on Wednesday, September 22, 2021. Members of the WAC and the public could also join the meeting by electronic communication means (WebEx) due to the ongoing coronavirus pandemic. Office of Drinking Water (ODW) Director Dwayne Roadcap called the meeting to order at 9:00 a.m. and reviewed the agenda. Members did not request and changes or additions to the agenda.

Dwayne said that the membership of the committee will continue as-is until the Commissioner re-appoints members and adds new members to be consistent with the requirements in the amendments to the Waterworks Regulations (12VAC5-590-45, effective June 23, 2021).

WAC members agreed to adopt the minutes from July 21, 2021 meeting. A copy follows the minutes from this meeting and will be marked as "final" on Town Hall.

Dwayne shared news that Jennifer Coleman died in early September due to a hiking accident in Glacier National Park. Jenn was the director of ODW's Compliance and Enforcement Division and, among other things, had established new enforcement processes and procedures. Her death is a huge loss to ODW and we will miss her both personally and professionally. Nelson Daniel will be the acting director for the Compliance and Enforcement Division.

2. Drinking Water Program

a. Virginia PFAS Workgroup, Study of the Occurrence of PFAS in Drinking Water in Virginia

Division of Technical Services Director Bob Edelman gave an overview of the results from the per- and polyfluoroalkyl substances (PFAS) sampling study ODW carried out from May through July, 2021. ODW, in conjunction with the Virginia PFAS Workgroup, conducted the study to fulfil the requirements of 2020 Acts of Assembly Chapter 611 (House Bill 586) which required the Department of Health to convene a

work group to study the occurrence of PFAS in the Commonwealth's public drinking water. Bob's presentation follows the meeting minutes.

Highlights include:

- 45 waterworks participated in the voluntary study; they provided a total of 63 samples (either from the entry point to the distribution system or from the untreated source water ("raw water"). Additional information about the sample study design and results will be available on the ODW web page (<https://www.vdh.virginia.gov/drinking-water/pfas/>).
- The laboratory that analyzed water samples used a U.S. Environmental Protection Agency (EPA) method for finished water samples that tested for 25 different PFAS. They used a Department of Defense method for raw water samples. It tested for the same 25 different PFAS.
- PFAS, if present in a sample, were below the practical quantification limit (PQL) – the minimum concentration of an analyte that can be measured with high confidence (99%) – at 48 of the 63 sample locations. The fact that laboratory analysis did not detect any PFAS above the PQL in the 48 samples does not mean PFAS are present. The PQL in most cases was 3.5 parts per trillion (ppt).
- PFAS was found above the PQL at 15 of 63 sample locations.
- The highest concentration of any compound was 57 ppt of GenX (July 2021). A prior sample from the same location (taken in May 2021 as part of the study) was 51 ppt.
- The levels of individual PFAS found in the samples did not exceed any of the regulatory limits other states established for drinking water.

Bob noted the sample study was limited in scale and scope. However, the General Assembly appropriated \$60,000 for ODW to do additional sampling in fiscal year 2022; ODW also has funding from EPA to study emerging contaminants. ODW expects to develop a plan for the next phase of sampling in the coming months. In addition, the U.S. Geological Survey plans to sample groundwater (that is used for drinking water) for PFAS at approximately 30 locations in Virginia and the Department of Environmental Quality (DEQ) is exploring options to require PFAS sampling at publicly-owned treatment works and other possible sources of PFAS contamination such as unlined landfills.

ODW's Policy and Program Director, Nelson Daniel provided an overview of the work ODW is doing to prepare and submit reports required by HB586 (ODW staff are drafting the report, which is due to the Governor and General Assembly by December 1, 2021) and 2020 Acts of Assembly Chapter 1097 (HB1257, requiring the Board of Health to establish maximum contaminant levels for two PFAS, 1,4-dioxane, and chromium-6). The report for HB1257 is due on October 1, 2021. ODW staff submitted the report to VDH leadership in August. Both reports will be available on the Legislative Information System website (<https://rga.lis.virginia.gov/>).

The Virginia PFAS workgroup will meet on October 8 in the Upper Basement of the Madison Building to provide feedback on the draft HB586 report before staff submit it to VDH leadership for review and approval. Workgroup members and the public that cannot attend in-person can join the meeting using WebEx. Information about joining the meeting will be on Town Hall.

b. American Rescue Plan Act of 2021

Dwayne provided an overview of the funding from the American Rescue Plan Act (ARPA) that will come to the drinking water program in Virginia. In total, Virginia received \$4.3 billion in funding for the General Assembly and Governor to allocate (local governments received additional funding directly). The state budget directs \$100 million to the drinking water program to support equal access to drinking water at small and disadvantaged community waterworks.

Dwayne noted that the budget also says the “funds shall be limited in their use to qualifying municipal and private drinking water projects and shall not be used for improvements to the department’s internal systems, staffing, or processes.” In other words, ODW cannot use any of the funds for things such as a database to track projects or pay employee salaries that will be overseeing funding, permitting, etc. for the projects. No other programs or use of the \$4.3 billion has this type of restriction.

Financial and Construction Assistance Program Director Kelly Ward described the work she and other ODW staff are doing to identify and prioritize a group of 60 projects for funding. The group considered recommendations from ODW’s field directors, the Drinking Water State Revolving Fund (DWSRF) Needs Assessment, and DWSRF projects that needed more principle forgiveness (because ARPA funds can supplement DWSRF funds). To date, ODW has identified projects totaling \$92 million at small and disadvantaged community waterworks across the state. ODW does not plan to commit the full \$100 million at this point to allow some funds for increasing materials costs, project budget increases, and other changes.

Training, Capacity Development, and Outreach Director Barry Matthews told WAC Members that, to be able to administer these funds, ODW will need 11 additional positions over the next 5-6 years at cost of approximately \$600,000 per year. Because ODW cannot use any funds for administration, ODW will need to procure services from non-agency personnel to administer and oversee a significant portion of the projects. Planning District Commissions (PDCs) have capacity and ability to do project management. ODW is looking enter into memoranda of understanding with specific PDCs. ODW also plans to issue a Request for Proposals (RFP) for engineering consulting services to cover localities where PDCs do not have capacity. ODW is planning to use some of the ARPA funds (approximately \$1.1 million) for cybersecurity and leak detection services, engaging both the Virginia Rural Water Association and SERCAP as sub recipients.

One other objective of the projects is to encourage waterworks to fluoridate their drinking water (if they don’t already), incorporate fluoridation into projects, and build more confidence and trust in tap water.

WAC members asked:

- What is the timeframe to use the ARPA funds?
 - o ODW’s current understanding is that we must spend or obligate the funds in the next four years.
 - o ODW is trying to figure out how to anticipate shortages of engineering services and materials because ARPA funds will be supporting projects all over the country, and include water and wastewater – driving up demand for engineering services, materials, etc. The GA and/or federal government could reflect on the timing of spending and spending requirements.
- What classifies a waterworks as small? disadvantaged?
 - o “Small” means the waterworks serves fewer than 10,000 consumers

- “Disadvantaged” is not specifically defined at the federal level, so ODW considers a waterworks to be serving a disadvantaged community if rates for drinking water exceed 1% of the median household income for the community.

c. Budget Update

Dwayne gave an update on the budget and problems that ODW is facing. He anticipates a \$1.2 million budget deficit in state fiscal year 2022 (July 1, 2021 through June 30, 2022), which may mean ODW cannot make payroll starting in April or May 2022.

Reasons:

- State raises (including the 5% raise that went into effect on July 1, 2021) increase only ODW’s general fund income stream. The state does not allocate additional funds for salaries supported by federal set asides from the DWSRF grant. This negatively impacted ODW’s budget by approximately \$175,000.00
- As discussed in prior WAC meetings, early in the coronavirus pandemic, the General Assembly unallotted \$484,000 from ODW’s fiscal year 2021 budget which had been added to provide the full required match for EPA’s DWSRF grant. The General Assembly did not return (or fund) the amount in fiscal year 2022, meaning ODW had to come up with the funds to make the full match two years in a row.
- The General Assembly also unallotted \$250,000 from the fiscal year 2021 budget (funding for required upgrades to databases). The General Assembly did not return (or fund) the amount in fiscal year 2022, meaning ODW had to come up with additional funds to support database costs two years in a row.
- Operation Fees are capped at \$160,000 and \$3.00 per connection. This fee has been fixed for 30 years. As a result, fee income has been flat while operating costs have risen with inflation over that period.

What ODW is doing to address the budget shortfall:

- To the extent possible, ODW has shifted positions from the budget sources that are short to set-asides that are allowed under the DWSRF grant. The set asides can only be used for certain types of work within ODW, so not all positions are eligible to shift to the DWSRF set asides.
- ODW is seeking to amend the Waterworks Operation Fee regulation (12VAC5-600).
 - This is part of the solution, but it will not address the problem in the short-term.
 - ODW submitted the Notice of Intended Regulatory Action (NOIRA) for the fee regulation to the Commissioner for approval. This is the first step in the process to amend the regulation. Based on ODW’s experience with the recent amendments to the Waterworks Regulations, the rulemaking process for the fee regulation could take 2 to 3 years.
 - Because the fee cap is in statute and the per-connection fee is specified in the budget, absent the General Assembly making a change to either, the amendments to the fee regulation may be limited to waterworks that aren’t paying fees (such a transient noncommunity waterworks) and waterworks paying fees that fall below the \$160,000 per year cap.
- ODW is considering other options to operate with reduced staff:
 - Holding 12 positions vacant;

- Reorganizing the process to conduct plan review by moving some or all of the plan review function from the field offices to the central office, and reducing the time and type of plan review ODW is doing – this change would, to some degree, rely on the expertise of the PE who signs plans to certify they are in compliance with the Waterworks Regulations; and
- Decreasing the inspection frequency – to match the federal requirements.
- ODW has submitted budget requests for the upcoming General Assembly session – these are being considered and may or may not be approved:
 - Increase ODW’s general fund support to fill the budget shortfall of \$1.2 million;
 - Return the unallotted funding from the last 2 fiscal years (roughly \$1.4 million in total);
 - Provide funding for the Office of State Inspector General’s recommendation to perform quality assurance/quality control sampling at waterworks (\$1.5 million/yr);
 - Provide another position (“full-time equivalent” or FTE) for the DWSRF program; and
 - Provide funding for a Data Management System.

WAC members asked:

- How does the centralized plan review help with budget?
 - It reduces the number of FTEs associated with plan reviews. Central plan review could be more limited, less robust, but would also be more consistent; ODW understands this may lead to discovering some consequences after construction.
- Why isn’t ODW renewing the lease to the Danville Field Office?
 - The current lease at the Danville Field Office is month-to-month. The objective is to reduce rent costs and only rent the space staff need. With increased teleworking, the central office reduced its footprint by one-half. Similar reductions may be possible in the field offices since they also have staff teleworking. Danville could be the first test case since the lease is up for renewal.
 - Staff are also moving to one phone (desk or mobile, not both) and one computer (desktop, laptop, or tablet).
 - The objective is to prioritize people over space.
- How will ODW meet the training and travel needs?
 - More training will be in-house and travel will be limited
- When will the NOIA for the amendments to the fee regulation be published
 - Once the Commissioner approves the NOIRA, it goes through Executive Branch review, which includes the Department of Planning and Budget, Secretary of Health and Human Resources, and Governor.
 - There will be a 30-day public comment period following publication of the NOIRA.
 - Nelson told WAC members that the draft NOIRA has been updated to indicate that proposed amendments to the regulation will also include adjusting the schedule for charges and payment of fees. This is the only substantive change to the objectives of the regulatory action that Nelson presented to WAC members at the July 2021 meeting.

3. U.S. Environmental Protection Agency Actions that Impact the Drinking Water Program
a. Drinking Water Contaminant Candidate List 5 – Draft (CCL5)

Nelson shared brief comments about CCL5, saying EPA published its draft CCL5 in the Federal Register on July 19, 2021, opening a 60-day public comment period.

<https://www.federalregister.gov/documents/2021/07/19/2021-15121/drinking-water-contaminant-candidate-list-5-draft> ODW did not submit comments, but did answer technical questions about CCL5 for Virginia's Office of the Attorney General. The Attorney General signed a public comment letter with other states' attorneys general, supporting EPA's proposal to include PFAS as a class of chemicals in CCL5, rather than considering them individually. The attorneys general also urged EPA to gather information to consider setting drinking water standards for PFAS as a class, in part because PFAS contamination in the environment is generally made up of mixtures of PFAS. ODW has a copy of the letter if any members are interested in reading it.

b. Fifth Unregulated Contaminant Monitoring Rule (UCMR5)

The proposed UCMR5 was published in the Federal Register on March 11, 2021. The final rule is scheduled for publication in late 2021/early 2022 with monitoring beginning in 2023 and continuing through 2025. As proposed, 29 PFAS are included (all PFAS for which a drinking water method has been validated – those within the scope of Methods 533 and 537.1) and all waterworks serving 3,300 or more consumers will sample. 800 randomly selected small waterworks (approximately 25 in Virginia) will also participate in the monitoring program.

Someone commented that EPA asked for comments about monitoring for legionella following publication of the proposed UCMR5. ODW does not know if or what will be included in the final rule re legionella when EPA publishes it.

More information about UCMR5 is available on EPA's website: <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule>

c. Consumer Confidence Reports (CCRs) (to comply with section 2008 of America's Water Infrastructure Act of 2018 (AWIA))

Southeast Virginia Field Office Director Dan Horne provided an overview of recent meetings that have focused on providing recommendations to EPA on updating CCRs to comply with the requirements in AWIA.

AWIA requires changes to the content, form, manner, and frequency of CCRs:

- Community waterworks serving more than 10,000 consumers must deliver CCRs biannually.
- Waterworks must increase the readability, clarity, understandability, accuracy of information and risk communication of CCRs.
- Waterworks may use electronic delivery.
- Community waterworks must include additional information on corrosion control efforts, and any lead action level exceedances that required corrective action.

EPA has not taken action to amend requirements for CCRs, so a court order has forced action. EPA tasked the National Drinking Water advisory Committee (NDWAC) with providing specific recommendations to implement the AWIA requirements. NDWAC formed a workgroup that started meetings in August 2021 (meetings will continue through September 2021) to develop recommendations. ODW staff member Renee Hall is not a member of the workgroup, but has been listening to the meetings and to keep ODW informed. The working group will present a summary of

recommended action in October-December to NDWAC. The NDWAC will make recommendations to EPA. Topics discussed by the working group have included:

- More information in CCRs
- Reduce the reading level
- Requirement for a larger font, brail, recorded versions
- How often to issue
- Languages other than English, requirement to translate.
- Electronic distribution, use of social media.

Representatives from the Association of State Drinking Water Administrators (ASDWA) are also listening to the NDWAC workgroup meetings so that ASDWA can provide comments to NDWAC and EPA on the CCR revisions.

4. Public Comment

Dwayne invited members of the public to speak if they wished. No one offered comments.

5. Other Business / Conclude Meeting

Dwayne said that ODW has offered up a legislative proposal to create a fund to help struggling waterworks in small or disadvantaged communities consolidate with or larger, more financially stable waterworks. The legislative proposal builds on the idea of “Water as a Human Right,” which the General Assembly recognized with a joint resolution during the 2021 Session. ODW would use the fund to help the receiving waterworks cover operation and maintenance costs associated with acquiring the smaller waterworks – assistance that is not available under the DWSRF. The idea came out of ODW’s enforcement program. VDH leadership supported the proposal and forwarded it to the Secretary of Health and Human Services and Governor’s Office for further consideration. ODW also submitted a budget request to support the fund.

The next WAC meeting will be on Wednesday, December 15, 2021. It is scheduled to be in-person at the Perimeter Center (Short Pump area). ODW will let the WAC and public know if WebEx is also an option for those who do not attend in-person.

Next year’s meetings are tentatively scheduled for February 16, 2022, April 20, 2022; July 20, 2022; September 28, 2022 (moved down one week for Water Jam), December 14, 2022 (moved up one week to accommodate the holidays)

Dwayne concluded the meeting at 11:14 a.m.

WATERWORKS ADVISORY COMMITTEE MEETING

WebEx, Office of Drinking Water, 109 Governor Street 6th Floor, Richmond, VA 23219

Wednesday, September 22, 2021

8:30 AM – 11:00 PM

DRAFT AGENDA

Subject	Time
Connect to Webex Instructions on Using Webex Protocol for Webex meeting and the chat feature	8:30 – 9:00 AM
Call to Order Meeting Overview Adoption of Minutes from the 7/21/21 meeting	9:00 – 9:05 AM
Drinking Water Program	9:05 – 10:30 AM
EPA drinking water program updates	10:30 – 10:50 AM
Public Comment Period	10:50 – 10:55 AM
Other Business - Upcoming 2021 meeting dates: December 15, 2021 (Parameter Center)	11:00AM
Conclude meeting	

Information and Protocol for WebEx Meeting

You can access the meeting on your computer, phone or mobile device with the meeting link below:

<https://vdhoep.webex.com/vdhoep/j.php?MTID=m2a18da057d5c138f88e11609d1277be6>

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Please sign into the meeting and identify yourself so we can verify that you are attending the meeting.

After you have identified yourself, please mute your phone to reduce any unwanted noise.

Waterworks Advisory Committee (WAC) Meeting Minutes

Webinar – WebEx

9:00 am, Wednesday, July 21, 2021

Final (adopted September 22, 2021)

Members Participating: Dwayne Roadcap (ODW), Chair; David F. Van Gelder, Water Operator; Steven Herzog, PE, VWEA; Russ Navratil, VA AWWA & Henrico County; Skip Harper, Virginia Plumbing & Mechanical Inspectors Association; Jesse L. Royall, PE, Sydnor; Geneva Hudgins, VA AWWA; Mark Estes, VRWA; James (Jay) Dillon, SERCAP

Guests Participating: Chris Pomeroy, Virginia Municipal Drinking Water Association; Brian McGurk substitute for Joe Grist, DEQ; Yann Le Gouellec, Newport News; Tom Fauber, VA ABPA; Laura Bauer, Virginia American Water; Christopher Gill, City of Norfolk; M. Ashworth; Jay Armstrong, Division of Consolidated Laboratory Services; John Kingsbury, Fairfax Water

Office of Drinking Water (ODW) staff: Tony Singh, Robert Edelman, Christine Latino, Nelson Daniel, Dan Horne, Jeremy Hull, James Reynolds, Brian Blankenship, Jeff Wells, Barry Matthews, Jennifer Coleman, Mark Perry

1. Meeting Overview

The Waterworks Advisory Committee (WAC) met in person at the Madison Building, Richmond, VA and by electronic communication means (WebEx) due to the ongoing public health emergency. ODW Director Dwayne Roadcap started the meeting at 9:00 a.m. and requested all meeting attendees who were joining by WebEx enter their name and affiliation in the chat box.

Since the WAC members present at the Madison Building did not establish a quorum, the WAC did not vote to adopt the minutes from the April 21, 2021 meeting.

Dwayne provided an overview of the meeting agenda.

2. Drinking Water Program

a. Waterworks Regulations

The amendments to the Waterworks Regulations became effective on June 23, 2021. Policy and Program Director Nelson Daniel thanked members of the WAC and public that worked with ODW staff on the long process to adopt the amendments. Nelson noted that ODW amended every section of the Regulations except Section 830 and only received one comment during the final notice period. The amended Regulations are on the Legislative Information System website, Town Hall, and the ODW website.

Training, Capacity Development, and Outreach Director Barry Matthews and Division of Technical Services Director Bob Edelman are developing training on the amendments for waterworks owners and operators. They are in the process of refining the content and logistics for the training and plan to work with the VA AWWA to promote training opportunities, which they anticipate will be offered starting in

August or September. If anyone has any suggests or ideas for training, please contact Barry (Barry.Matthews@vdh.virginia.gov) or Bob (Robert.Edelman@vdh.virginia.gov).

b. PFAS

Deputy Director Tony Singh updated members on ODW's efforts related to per- and polyfluoroalkyl substances (PFAS) in drinking water. Last fall, ODW formed a workgroup to study the occurrence of PFAS in drinking water and major sources of supply, as required by House Bill 586 (2020). ODW staff, in conjunction with the workgroup, designed a sampling study and identified 50 waterworks to sample. Only 38 of the 50 waterworks agreed to participate in the study, so ODW asked 7 additional waterworks to provide samples. To date, ODW has received provisional results from 42 of the 45 waterworks that participated in the sampling study. ODW staff are currently performing quality assurance/quality control (QA/QC) review of the provisional results. The review should be completed by mid-August. Tony plans to provide an overview of the provisional results next week during the PFAS Workgroup meeting on July 27, 2021 (from 1:00 p.m. to 3:30 p.m.) and expects ODW will release the full data set to the public once QA/QC review is complete.

ODW is required to report on the results of the study to the Governor and General Assembly by December 1, 2021. The workgroup will work with ODW staff to produce the report. Separately, ODW is also required to submit a report on the Board of Health's efforts to establish maximum contaminant limits (MCLs) for two PFAS and two other compounds, 1,4-dioxane and Chromium-VI.

Chris Pomeroy asked about the requirements to establish the MCLs for PFAS and how the state's process would adhere to EPA's process to establish limits under the Safe Drinking Water Act (SDWA). Dwayne answered that ODW will follow the requirements in Virginia's Administrative Process Act (VAPA), beginning with the issuance of a Notice of Intended Regulatory Action. Nelson noted ODW and the Board will have to take the requirements in the enabling legislation and VAPA into account in setting the MCLs. Chris felt that following the SDWA procedures could lead to conflicts with the timeline suggested by the amendments to the law that requires the Board to establish MCLs for PFAS and expressed concern that VDH's process would be truncated in comparison to EPA's process. He felt this might lead to a different result than EPA's process.

c. Lead and Drinking Water:

Tony provided an update on ODW's program to support testing for lead in drinking water at public schools and child day programs. ODW received grants from EPA under sections (§) 2107 and 2105 of the Water Infrastructure Improvements for the Nation (WIIN) Act to pay for lead testing (WIIN § 2107) and remediation (WIIN § 2105) – with a focus on schools and child day programs in small and disadvantaged communities. ODW has not made grant funds available yet because many facilities shut down or significantly reduced operations during the coronavirus pandemic. With students returning to schools this fall, ODW intends start its program and reach out to 600-800 schools and child day programs beginning in October. Working with the Department of Consolidated Laboratory Services and Virginia Tech, ODW expects to use grant funds to analyze 30,000 to 40,000 samples. ODW will target schools and child day programs that serve children age 6 or below who are also on a state or federally subsidized school lunch plan. If test results indicate lead sources within a school or child day program, ODW can use funds from the WIIN § 2105 grant to pay for remediation of the lead source.

ODW also received funding from the General Assembly to hire three new employees to assist with the lead testing program and review/manage lead testing plans and results required by recent amendments to state law (associated with SB 392, 393 and HB 797, 799 from 2020). Dwayne pointed out the difficulty of having to hold positions open because of ODW's budget issues and being able to hire 3 new positions that are not focused on drinking water at waterworks.

d. Office of State Inspector General (OSIG) Audit of the Drinking Water Program

Dwayne provide information about the recently completed OSIG audit and Report on the Drinking Water Program. (see https://www.osig.virginia.gov/media/governorvirginiagov/office-of-the-state-inspector-general/pdf/performance-audits/2021-PA-005-OSIG_ODW-Audit-Report_Final_6.24.21.pdf).

In late June, ODW leadership met with OSIG for an audit de-brief. OSIG gave several recommendations for program improvements and provided three commendations: (1) reorganization creating compliance specialist in each field office; (2) having performance metrics; and (3) updating the Enforcement Manual. The recommendations focused on many things related to compliance and enforcement, including adding more metrics, such as ODW monitoring time for waterworks to return to compliance, and continuing to revise the Enforcement Manual to ensure more consistency among field offices.

WAC members expressed concerns about field offices having some autonomy to address specific conditions in their areas. Dwayne talked about improving consistency through the development of manuals instead of having lots of working memos so that staff have the same answer to the same question in each field office. He also discussed horizontal communication and not setting limits on the ability of field directors to make decisions.

WAC members commented that manuals are good, but the regulated community wants decisions made at field office level – improves efficiency, reaction time. They are concerned about having field staff reluctant to make decisions because of too much central office oversight. Dwayne mentioned ODW's guidance on main breaks as example of a standardized procedure that gives flexibility to waterworks and field offices to make decisions. Having field directors sign operation permits is another example of moving decision making from the central office to the field offices.

Responding to a question about field director meetings, Southeast Virginia Field Office Director Dan Horne said that meeting generally cover metrics, current policies, and technical issues that may be of interest or need discussion, including interaction with ODW divisions.

Dwayne invited members to provide feedback as they encounter issues.

Enforcement Director Jenn Coleman commented on need to balance consistency with legal and regulatory requirements. She noted that the OSIG report recommends more centralized compliance and enforcement program and said that ODW is trying to balance this with more decision-making in the field offices – empowering compliance specialists to make more decisions about returning waterworks to compliance. She also wants to ensure ODW follows a consistent approach to compliance/enforcement statewide – similar noncompliance treated in the same manner statewide.

e. Annual Compliance Report

Jenn provided an overview of the Annual Compliance Report for the committee. EPA requires ODW to file the report each year. It contains information about all of the violations recorded in the Safe Drinking

Water Information System (SDWIS) database for the specified calendar year. Historically ODW compiled and provided raw data. This year ODW added analytics and trends with the data. The 2020 report and prior year's reports are available on the ODW website at:

<https://www.vdh.virginia.gov/drinking-water/office-of-drinking-water/virginia-annual-pws-compliance-report/>

Jenn noted that Virginia trends are better than Region 3 and national trends – fewer violations, fewer waterworks out of compliance. She also recognized the success of most waterworks in their efforts to maintain drinking water quality. If members have questions regarding the report or would like to provide feedback, please contact Jennifer Coleman at: Jennifer.Coleman@vdh.virginia.gov.

3. U.S. Environmental Protection Agency Actions that Impact the Drinking Water Program

a. Contaminant Candidate List (CCL) 5 (Draft)

Dan Horne gave a presentation on EPA's recently released draft of CCL5. EPA proposes to include 66 individual chemicals, plus three chemical groups, and 12 microbials. The disinfection byproducts group (DBPs) includes 23 unregulated DBPs - 4 HAAs, 2 haloacetonitriles, 3 halonitromethanes, 6 iodinated THMs, 6 nitrosamines, and 2 "others." The PFAS includes "anything besides PFOA and PFOS," because those are already on the path to regulation. The cyanotoxins "include but are not limited to" microcystin, cylindrospermopsin, anatoxin, and saxitoxin. The 12 microbials include 3 viruses, 8 bacteria, and 1 protozoan. Most of these, if not all, have been on CCLs before. Prime among them are *Legionella pneumonia* and *Naegleria fowleri*.

The draft CCL was published in the Federal Register on July 19, 2021. The 60-day public comment period closes on September 17, 2021. See: <https://www.federalregister.gov/documents/2021/07/19/2021-15121/drinking-water-contaminant-candidate-list-5-draft>

A member asked about limits for manganese, since it is on the proposed CCL. Dan responded by email following the meeting:

Health Canada set a Maximum Acceptable Concentration (MAC) for manganese in May 2019, of 0.12 mg/L. The MAC is applied at both the entry point and in the distribution system. The MAC was set on the basis of protecting infants against neurological effects (lowering of IQ, increase in hyperactivity, and lessened memory and motor function. Health Canada also set an Aesthetic Objective Level of 0.02 mg/L, measured at the entry point to the distribution system. (Note: the Health Canada standards are only guidelines - it's up to the Provincial authorities to set the enforceable standards.)

EPA set out current SMCL of 0.05 mg/L based on the understanding that (1) manganese is an essential nutrient, and (b) exceeding the SMCL would cause water so badly colored or with such a metallic taste that people would not voluntarily drink it (self-limiting or self-protective exposure). Recent research shows that's not correct.

Dan's presentation follows the minutes.

b. Lead and Copper Rule Revisions

Robert Edelman provided an update on EPA's activities to revise the Lead and Copper Rule. On June 10, EPA signed a final rule to extend the effective date of the LCR Revisions to December 16, 2021 and extend the compliance date to October 26, 2024. The extension gives EPA more time to review the rule issued in January and conduct listening sessions to get stakeholder input.

Bottom line, ODW doesn't have a clear idea of what EPA is thinking, and EPA is entering a period of silence while it deliberates what to do. Bob provided recommendations for what waterworks could/should be doing – focus, lead service line inventory while we are waiting on the final rule.

Bob's presentation follows the minutes.

4. Waterworks Operation Fee Regulation

Nelson discussed the next step in the process of amend the Waterworks Operation Fee regulation, 12VAC5-600, submitting a Notice of Intended Regulatory Action (NOIRA). The objective is to ensure the NOIRA encompasses all possible changes ODW is contemplating in the regulatory action. Subsequent changes can narrow the focus, but ODW cannot add additional topics that are not properly noticed in the NOIRA. Based on comments and feedback the draft NOIRA states amendments to the regulation will include:

1. Amending 12VAC5-600-10 as needed to define terms used in the chapter.
2. Amending 12VAC5-600-20 to expand the purpose of the regulation to include TNCs, wholesale waterworks, fair distribution of the costs of the drinking water program among all beneficiaries, and considerations of equity and environmental justice as they relate to fees waterworks pay.
3. Amending 12VAC5-600-50 to establish a minimum annual fee for all community waterworks.
4. Amending 12VAC5-600-60 to increase the nontransient noncommunity waterworks fee.
5. Adding a section that establishes an operation fee for transient noncommunity waterworks.
6. Adding a section that establishes an operation fee for wholesale waterworks.
7. Amending section 12VAC5-600-90 to distinguish between wholesale waterworks and community waterworks that have service connections (which serve as the basis for their operation fees) and also sell or deliver water to another waterworks.
8. Make other amendments as necessary to consider equity and environmental justice issues as they relate to the fees waterworks pay.

Members suggested including an owner of a private waterworks and an advocacy group representing churches in the stakeholder workgroup that ODW plans to form to develop proposed amendments to the regulations. Nelson invited members to contact him if they have suggestions for additional amendments to include in the NOIRA.

Nelson's presentation follows the minutes.

5. Waterworks Advisory Committee under 12VAC5-590-45

The amendments to the Waterworks Regulations changed the Waterworks Advisory Committee by deleting 12VAC5-590-40 5. and inserting 12VAC5-590-45. The new section follows:

12VAC5-590-45. Waterworks Advisory Committee.

A. A Waterworks Advisory Committee (WAC) shall be formed by the commissioner to review and make recommendations regarding the regulatory, policy, and legislative aspects of the department's authorities. WAC members shall consist of industry professionals employed outside the department with longstanding expertise or vested interest in waterworks operations and represent a diverse group of stakeholders. Members shall be experts in the fields of water treatment technologies, public health, water quality, economics, environmental science, public utilities, community development, or industry regulations. A minimum of nine persons shall be appointed to the committee by the commissioner.

B. The WAC will convene at least quarterly.

C. WAC meetings will be considered public meetings. Notice of scheduled meetings will be posted on the Virginia Regulatory Town Hall at least three working days before the date of the meeting. Meeting minutes will be posted to the Virginia Regulatory Town Hall within 10 working days after the meeting.

D. Each member of the WAC shall hold office for a term of three years, except that:

1. With approval by the commissioner, members are eligible for reappointment to consecutive terms.
2. Each member of the WAC serves at the pleasure of the commissioner.

E. The commissioner shall appoint the chair of the WAC.

F. The WAC shall have a member of the department serve as secretary.

Previously, the Commissioner appointed 13 persons for a period of 3 years to the Waterworks Advisory Committee. The new regulations specify that the Commissioner appoint a minimum of nine persons that will convene quarterly and will serve a period of 3 years. Nelson has asked the committee for their thoughts and opinions regarding the new membership and asked if the current members still wished to serve.

Members offered several suggestions:

- Dwayne – based on amended regulation, the Commissioner should appoint new members. However, many of the new members should be the people that have consistently attended WAC meetings and shown interest in and engagement in the drinking water program.
- Members thought that any membership over 20 would be too many. A couple of people suggested 13 members.
- Consider staggering terms.
- Keep ex-officio members on committee.

Tom Fauber, Skip Harper, Chris Pomeroy, Mark Estes, and Russ Navitril expressed interest in being part of the WAC going forward and representing their respective organizations.

Nelson's presentation on the amendments and implications for the WAC follows the minutes.

6. Public Comment Period

No one offered comments during the public comment period.

7. Other Business, Conclude Meeting

The next WAC meetings will be on Wednesday, September 22 (4th Wed), and December 15, 2021. ODW staff will let members know about the format (in-person, in-person with access via WebEx, or WebEx) and location for upcoming meetings, which may be impacted by current public health considerations associated with the coronavirus.

Dwayne concluded the meeting at 11:35 a.m.

PFAS Sample Study Summary

WAC Meeting
September 22, 2021

Robert D. Edelman, PE
Virginia Department of Health

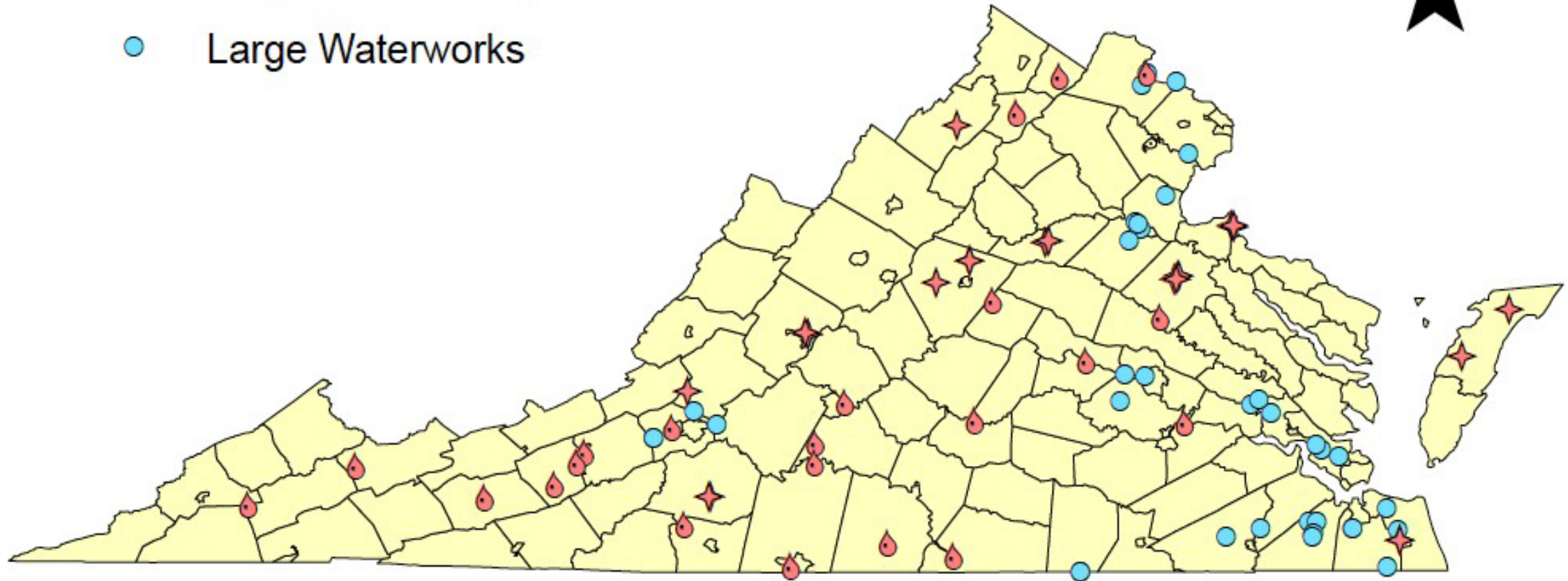
Sampling Plan: Hybrid Approach



	# Samples	# Systems	Population
17 Large Waterworks	31	17	4,541,619
GW – Potential High & Medium Risk	19	11	15,453
Major Water Sources	22	22	
Total	72	50	4,557,072

Planned Sampling Locations

- ✦ Groundwater Systems
- 💧 Source Water Intakes
- Large Waterworks



Sampling Program

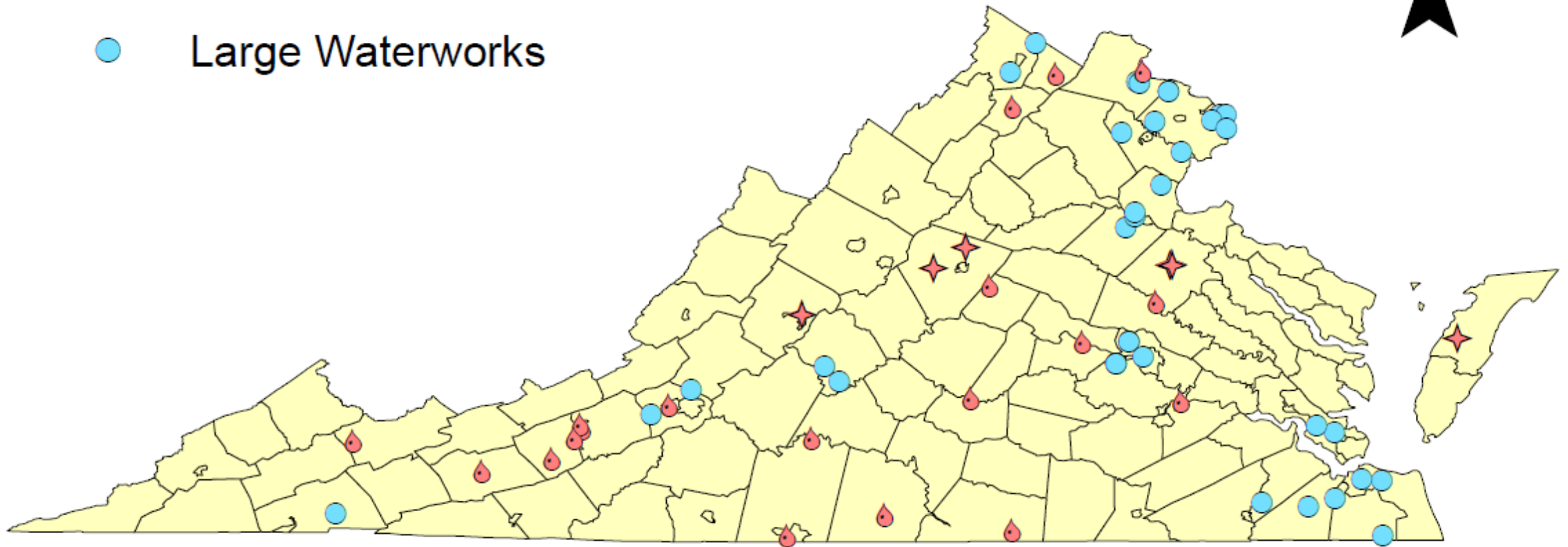
- 50 waterworks identified
- 38 agreed to participate in the study
- 7 more agreed to participate
- 45 waterworks participated
- 63 sample locations

Sampling Program

- Replacement Systems:
 - Large systems - Finished Water
 - Selected systems not already covered by other phases
 - Ground Water near airports and unlined landfills
 - Offered to sample entire list - no new candidates
 - Intakes downstream of potential PFAS sources
 - Selected additional systems

Resulting Sample Locations

- ✦ Groundwater Systems
- 💧 Source Water Intakes
- Large Waterworks



QA/QC Checks

4 Samples with data irregularities:

- FRB detects PFAS, water sample does not detect PFAS
- Both FRB and water sample detect PFAS
- Dilution necessary on FRB
- PFOS detected in water sample at WTP#2, not detected at WTP #1

- Resampled and reanalyzed four locations with data irregularities
- This addressed data irregularities

Results Summary

- Practical Quantification Limit (PQL) is the minimum concentration of an analyte that can be measured with high confidence (99%)
- “Detection” means above the practical quantification limit (PQL), typically 3.5 ppt
- PFAS below the PQL at 48 of 63 sample locations (76%)
- PFAS found at above the PQL at 15 of 63 sample locations
- 5 waterworks had one or more analyte above 10 ppt
- 54 ppt of hexafluoropropylene oxide-dimer acid (HPFO-DA) (GenX)
- All other detections \leq 20 ppt

Results Summary

- Six PFAS compounds in HB586
 - Five found above the PQL: PFOA, PFOS, Perfluorobutyrate (PFBA), Perfluoroheptanoic acid (PFHpA) Perfluorohexane sulfonate (PFHxS)
 - Perfluorononanoic acid (PFNA) was not detected in any samples at a concentration above the PQL.
- Four additional PFAS not listed in HB586 were measured above the PQL:
 - HPFO-DA (GenX), PFHxA (perfluorohexanoic acid, PFPeA (perfluoropentanoic acid) PFBS (perfluorobutanesulfonic acid)

Samples with analytes above the PQL

Waterworks Name	Virginia American Water Co. - Alexandria District		Arlington County	Fairfax County Water Authority		Loudoun Water - Central System		Prince William County Service Authority - East
City/County	City of Alexandria		Arlington County	Fairfax County		Loudoun County		Prince William County
Sample Location	From Fairfax Water		From Washington Aqueduct	Griffith WTP	From Washington Aqueduct	Trap Rock WTP	From Fairfax County Water Authority	From Fairfax County Water Authority
Water Type	Finished	Finished	Finished	Finished	Finished	Finished	Finished	Finished
PFOA (ppt)	*	4.2	*	5.5	*	*	4.5	5.5
PFOS (ppt)	*	3.9	*	5.1	*	*	*	4.1
PFBA (ppt)	7.7	9.2	*	7.7	4.3	4	4.6	12
PFHpA (ppt)	*	*	*	4.4	*	*	5.5	4.1
PFHxS (ppt)	*	*	*	*	*	*	*	*
PFNA (ppt)	*	*	*	*	*	*	*	*
HPFO-DA (Gen-x) (ppt)	*	*	*	*	*	*	*	
PFHxA (ppt)	6.8	9.3	3.7	12	4.4	*	*	11
PFPeA (ppt)	7.4	10	4.1	14	4.2	*	*	12
PFBS (ppt)	*	4.2	*	5.6	*	*	*	4.8

"Finished" means treated drinking water entering the distribution system.

"Raw Intake" means untreated water, before treatment.

"WTP" means water treatment plant.

Samples with analytes above the PQL

Waterworks Name	Stafford County Utilities		City of Newport News		Town of Altavista	Western Virginia Water Authority	Washington County Service Authority
City/County	Stafford County		City of Newport News		Campbell County	Roanoke County	Washington County
Sample Location	Smith Lake WTP	Lake Mooney WTP	Harwoods Mill WTP	Lee Hall WTP	Staunton River + Reed Creek	Spring Hollow WTP	Middle Fork Water Treatment Plant
Water Type	Finished	Finished	Finished	Finished	Raw Intake	Finished	Finished
PFOA (ppt)	*	*	*	*	*	*	*
PFOS (ppt)	6.4	*	7.1	4.4	*	*	5.2
PFBA (ppt)	*	5.9	4.3	4.3	*	*	*
PFHpA (ppt)	*	*	*	*	*	*	*
PFHxS (ppt)	*	*	4.9	*	*	*	*
PFNA (ppt)	*	*	*	*	*	*	*
HPFO-DA (Gen-x) (ppt)	*	*	*	*	4	54	*
PFHxA (ppt)	*	4.2	*	6.1	*	*	*
PFPeA (ppt)	*	5.5	*	4.5	*	*	*
PFBS (ppt)	*	*	*	*	*	*	*

"Finished" means treated drinking water entering the distribution system.

"Raw Intake" means untreated water, before treatment.

"WTP" means water treatment plant.

Samples with PFAS analytes below the PQL

Water System Name	City/County	Water Type	Sampling Point
Earlsville Forest	Albemarle County	Finished	Combined Wells
Peacock Hill Subdivision	Albemarle County	Finished	Combined Wells
Pungoteague Elementary School	Accomack County	Finished	Well
Town of Bowling Green	Caroline County	Finished	Combined Wells
Mountain View Elementary School	Rockbridge County	Finished	Well
Frederick Water	Frederick County	Finished	James Diehl WTP
Frederick Water	Frederick County	Finished	James T. Anderson WTP
Western Virginia Water Authority	Roanoke County	Finished	Carvins Cove WTP
City of Chesapeake - Northwest River System	City of Chesapeake	Finished	Northwest River WTP
City of Chesapeake - Northwest River System	City of Chesapeake	Finished	Lake Gaston WTP
City of Norfolk	City of Norfolk	Finished	Moores Bridges WTP
City of Norfolk	City of Norfolk	Finished	Kristen M Lentz WTP
City of Portsmouth	City of Portsmouth	Finished	Lake Kilby WTP
City of Virginia Beach	City of Virginia Beach	Finished	From City of Norfolk
Chesterfield County Central Water System	Chesterfield County	Finished	Addison Evans WTP
Chesterfield County Central Water System	Chesterfield County	Finished	From City of Richmond
Chesterfield County Central Water System	Chesterfield County	Finished	From Appomattox River Water Authority

Samples with PFAS analytes below the PQL

Water System Name	City/County	Water Type	Sampling Point
Henrico County Water System	Henrico County	Finished	Henrico WTP
Henrico County Water System	Henrico County	Finished	From City of Richmond
City of Richmond	City of Richmond	Finished	Richmond WTP
City of Lynchburg	City of Lynchburg	Finished	Abert Water Treatment Plan
City of Lynchburg	City of Lynchburg	Finished	College Hill WTP
Fairfax County Water Authority	Fairfax County	Finished	Corbalis WTP
Prince William County Service Authority - West	Prince William County	Finished	City of Manassas WTP
Prince William County Service Authority - West	Prince William County	Finished	Fairfax County Water Authority
Spotsylvania County Utilities	Spotsylvania County	Finished	Ni River WTP
Spotsylvania County Utilities	Spotsylvania County	Finished	Motts Run WTP
NRV Regional Water Authority	Montgomery County	Raw Intake	New River
Radford Army Ammunition Plant	Montgomery County	Raw Intake	New River
Pulaski County Public Service Authority	Pulaski County	Raw Intake	Claytor Lake
Town of Richlands	Tazwell County	Raw Intake	Clinch River
Town of Wytheville	Wythe County	Raw Intake	Reed Creek
City of Radford	City of Radford	Raw Intake	New River
Town of Berryville	Clarke County	Raw Intake	Shenandoah River
Lake Monticello	Fluvanna County	Raw Intake	Rivanna River

Samples with PFAS analytes below the PQL

Water System Name	City/County	Water Type	Sampling Point
Town of Front Royal	Warren County	Raw Intake	South Fork Shenandoah River
City of Salem	City of Salem	Raw Intake	Roanoke River
VA American Water Co., Hopewell District	City of Hopewell	Raw Intake	Appomattox River
James River Correctional Center	Goochland County	Raw Intake	James River
Hanover Suburban Water System	Hanover County	Raw Intake	North Anna River
Roanoke River Service Authority	Mecklenburg County	Raw Intake	Lake Gaston
Town of Farmville	Prince Edward County	Raw Intake	Appomattox River
City of Danville	City of Danville	Raw Intake	Dan River
Halifax County Service Authority - Leigh St Plant	Halifax County	Raw Intake	Dan River
Town of Leesburg	Loudoun County	Raw Intake	Potomac River

- "Finished" means treated drinking water entering the distribution system.
- "Raw Intake" means untreated source water, sampled at a water treatment plant.
- "WTP" means water treatment plant.
- "Well" means water from one well, after treatment, if provided.
- "Combined Wells" means water from two or more wells, after treatment, if provided.
- "From" indicates finished water purchased from a waterworks.

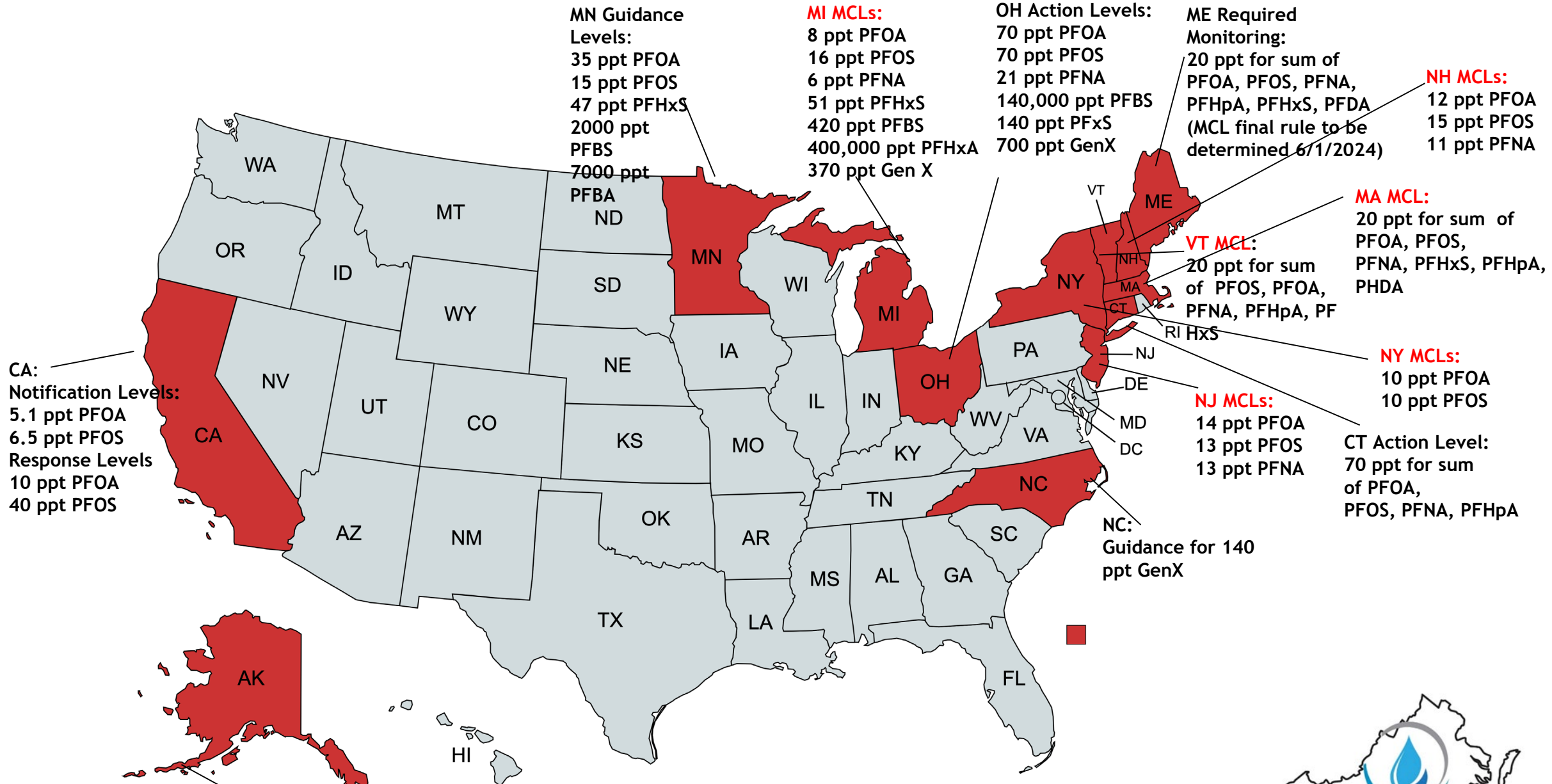
Other observations

- All samples with PFAS above the PQL were from surface water sources
- No wells with PFAS above the PQL
- Only one intake sample had PFAS above the PQL
- ODW and DEQ have not collected samples to identify potential sources of PFAS contamination
- Did not sample both source water and finished water for any waterworks - not able to look at PFAS removal across treatment

Putting things into perspective

Results are reassuringly low:

- No samples exceeded EPA's health advisory of 70 ppt for PFOA and PFOS
- No samples exceeded any of the maximum contaminant levels established by other states (8 to 14 ppt).
- Michigan adopted an MCL for GenX of 370 ppt
- North Carolina adopted a provisional health goal for GenX of 140 ppt



	California	Connecticut	Mass.	Michigan	Minnesota	New Hampshire	New Jersey	New York	Vermont	EPA*	avg
	Notice Level	Action Level	MCL	MCL	Health Advisory	MCL	MCL	MCL	MCL	Health Advisory	
PFOA	5.1	✓	✓	8	35	12	14	10	✓	✓	14.8
PFOS	6.5	✓	✓	16	15	15	13	10	✓	✓	18.2
PFNA		✓	✓	6		11	13		✓		10.0
PFHxS		✓	✓	51	47	18			✓		38.7
PFHpA		✓	✓						✓		
PFDA			✓								
PFBS				420	2 µg/L						
PFHxA				400,000							
Gen X				370							
PFBA					7 µg/L						
SUM		70	20						20	70	

Have any Question, Comment or Suggestion, contact Us

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Waterworks Operation Fee Regulation 12VAC5-600-10 et seq.

Nelson Daniel
Policy and Program Director

Waterworks Advisory Committee Meeting
September 22, 2021

Standard Rulemaking Process

1. Notice of Intended Regulatory Action (NOIRA)
 - Executive Branch Review
 - 30 day public comment period
2. Proposed Amendments
 - Executive Branch Review
 - 60 day public comment period
3. Final Amendments
 - Executive Branch Review
 - 30 day public notice period
4. Adoption

Operation Fee Regs - NOIRA

The public receives notification that a regulatory change is being considered, along with a description of the planned nature and scope of any regulatory changes.

Internal review process, typically approved by the State Health Commissioner

Submit to Town Hall to begin Executive Branch Review
-OAG, DPB, SHHR, Governor

Operation Fee Regs - NOIRA

Content:

- Brief Summary
- Acronyms and Definitions
- Mandate and Impetus
- Legal Basis
- Purpose
- Substance
- Alternatives to Regulation
- Public Participation

NOIRA - Objective

- Draft the TH-01 as broadly as need to encompass all possible changes that the VDH office is contemplating addressing in the regulatory action.
- The subsequent stages can narrow the focus, but VDH cannot add on additional topics to a Standard regulatory action that were not properly noticed in the NOIRA.

NOIRA - Revised Substance #1

Proposed Amendments to the regulation will include:

- Amending 12VAC5-600-50 (Community fee) to establish a minimum annual fee for all community waterworks, **adjust the fee for each customer account, and adjust the schedule for charges and payment of fees.**
- Amending section 12VAC5-600-60 (NTNC fee) to increase the nontransient noncommunity waterworks fee **and the schedule for payment of fees.**

NOIRA - Revised Substance #2

Proposed Amendments to the regulation will include:

- Adding a section that establishes an operation fee for transient noncommunity waterworks **and schedule for payment of fees for TNC.**
- Adding a section that establishes an operation fee **and schedule payment of fees** for wholesale waterworks.

NOIRA

Next Steps

- Undergoing internal (VDH) review
- Submit to Town Hall, begin Executive Branch Review
- Form stakeholder group
- Hold stakeholder meetings
- Develop proposed amendments

Possible Stakeholders

- Community waterworks > 10,000 (and/or 50,000) persons
- Community waterworks < 10,000 persons
- Community waterworks < 500 persons
- Organization(s) that represent waterworks in Virginia
- Organization that represents localities/local governments
- County or PSA representative
- Privately owned waterworks
- Wholesale (only) waterworks
- NTNC waterworks
- TNC waterworks
- Organization or advocacy group with members that own or operate TNC waterworks (campgrounds or restaurants)
- Organization representing churches

- ODW staff, VDH Shared Business Services (SBS) staff

Budget & Vacancies

- 17 vacancies (119 FTE for Max employment level)
- Governor Northam introduced budget
 - \$1.0 million for “Equal Access to Drinking Water”
 - \$0.73 million for return of unallotted funding
 - \$2.5 million (11 FTEs for ARPA implementation)
 - \$1.5 million (OSIG Recommendation)
- Member Amendments
 - Kilgore & Pillion - \$3.0 million & \$3.5 million
 - Governor Youngkin - \$1.83 million

PFAS

GA 2022 - HB919

House Bill 919: Maximum contaminant levels (MCLs) in water supplies and waterworks; Board of Health regulations

Patron: Delegate Orrock (prior to substitute)

Key Items:

- The Board shall adopt regulations establishing MCLs in all water supplies and waterworks in the Commonwealth for (i) PFOA, PFOS, and for such other PFAS as the Board deems necessary; (ii) Chromium-6; and (iii) 1,4-dioxane. and shall not exceed any MCL or health advisory for the same contaminant adopted by the U.S. EPA. In establishing such MCLs, the Board shall review *the recommendations of any work group convened by the Commissioner after July 1, 2022, to study the occurrence of such contaminants in public drinking water*, MCLs adopted by other states, studies and scientific evidences.
- The Board of Health may initiate and continue a regulatory action to develop, but shall not adopt, regulations establishing MCLs in water supplies and waterworks in the Commonwealth required by subsection B of § [32.1-169](#) of the Code of Virginia, as amended by the act,
 - (i) until a work group convened by the Commissioner of Health (the Commissioner) has completed a study of the occurrence of the contaminant proposed to be regulated in public drinking water in the Commonwealth and reported its findings and recommendations to the Governor and the the Chairmen of the House Committees on Agriculture, Chesapeake and Natural Resources and Health, Welfare and Institutions and the Senate Committees on Agriculture, Conservation and Natural Resources and Education and Health.

PFAS NOIRA - Vol 38 ISS.13 - 2/14/22

TITLE 12. HEALTH - DEPARTMENT OF HEALTH Chapter 590

The agency does not intend to hold a public hearing on the proposed action after publication in the Virginia Register.

Statutory Authority: §§ 32.1-12 and 32.1-170 of the Code of Virginia.

Public Comment Deadline: March 16, 2022.

Agency Contact: Tony Singh, Deputy Office Director, Office of Drinking Water, Virginia Department of Health, 109 Governor Street, 6th Floor, Richmond, VA 23219, telephone (804) 310-3927, FAX (804) 864-7521, or email tony.singh@vdh.virginia.gov.

Phase 2 PFAS Monitoring: Proposed Hybrid Approach

1. One sample at each surface water Entry Point
2. One sample at each GUDI Entry Point
3. One sample at each GW system at high/medium risk
4. Remaining samples at CWS with GW sources

Proposed Community GW Sources

Selection Criteria

1. Select CWS < 3,300 persons served
2. Spread across different geographic areas of Virginia
3. Select approximately the same number per county/city.
 - This works out to approximately 4 to 6 water samples per county
 - Some counties/cities will have fewer locations to sample

Proposed Sample Locations - Dilemma of not enough samples to cover everywhere

Entry Points:

1. Surface Water Sources	137
2. GUDI Sources	37
3. Groundwater systems at risk	19
4. Small Community Systems GW	1025

Chickahominy River Watershed Per- and Polyfluoroalkyl Substances (PFAS) Contamination

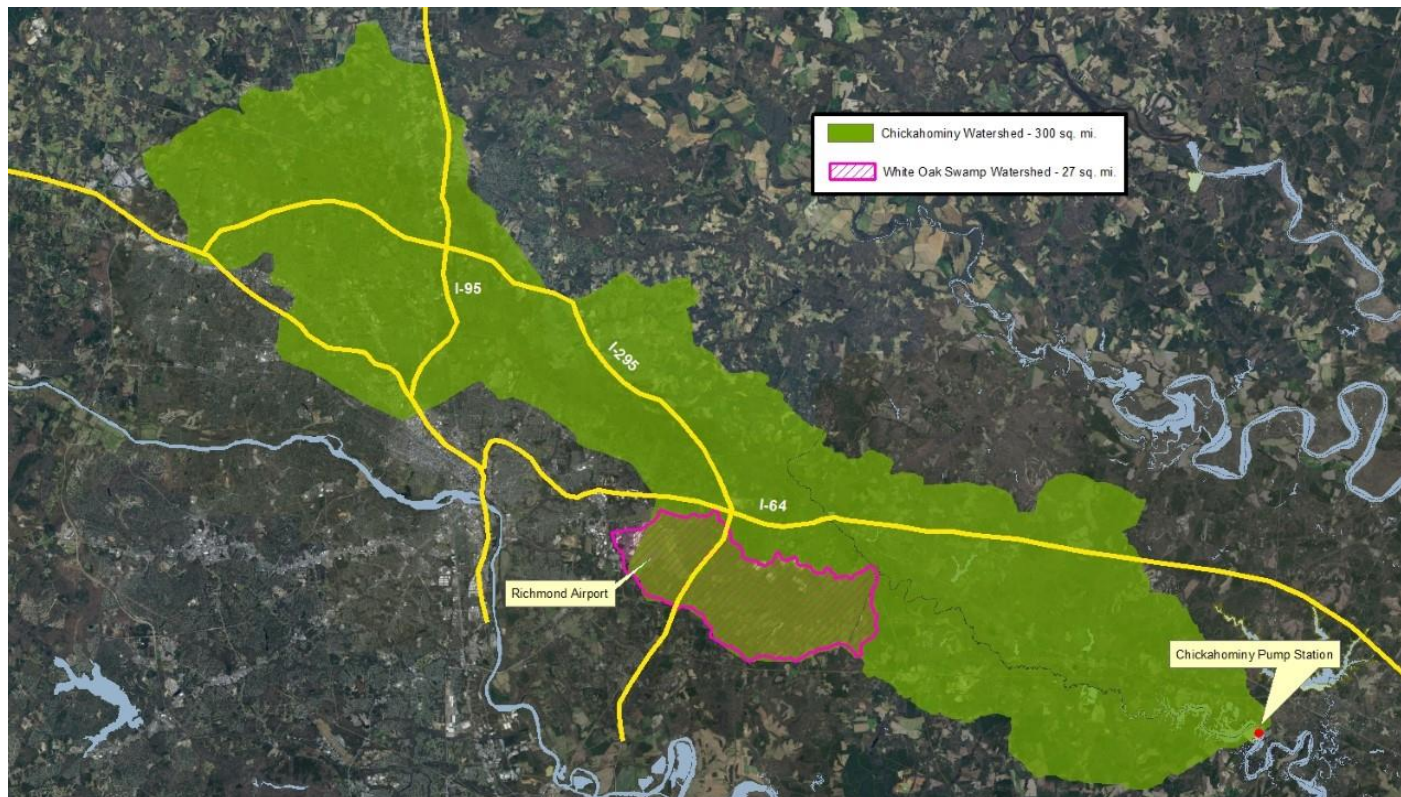
Holly Brown
Emergency Services Coordinator
Office of Drinking Water

PFAS



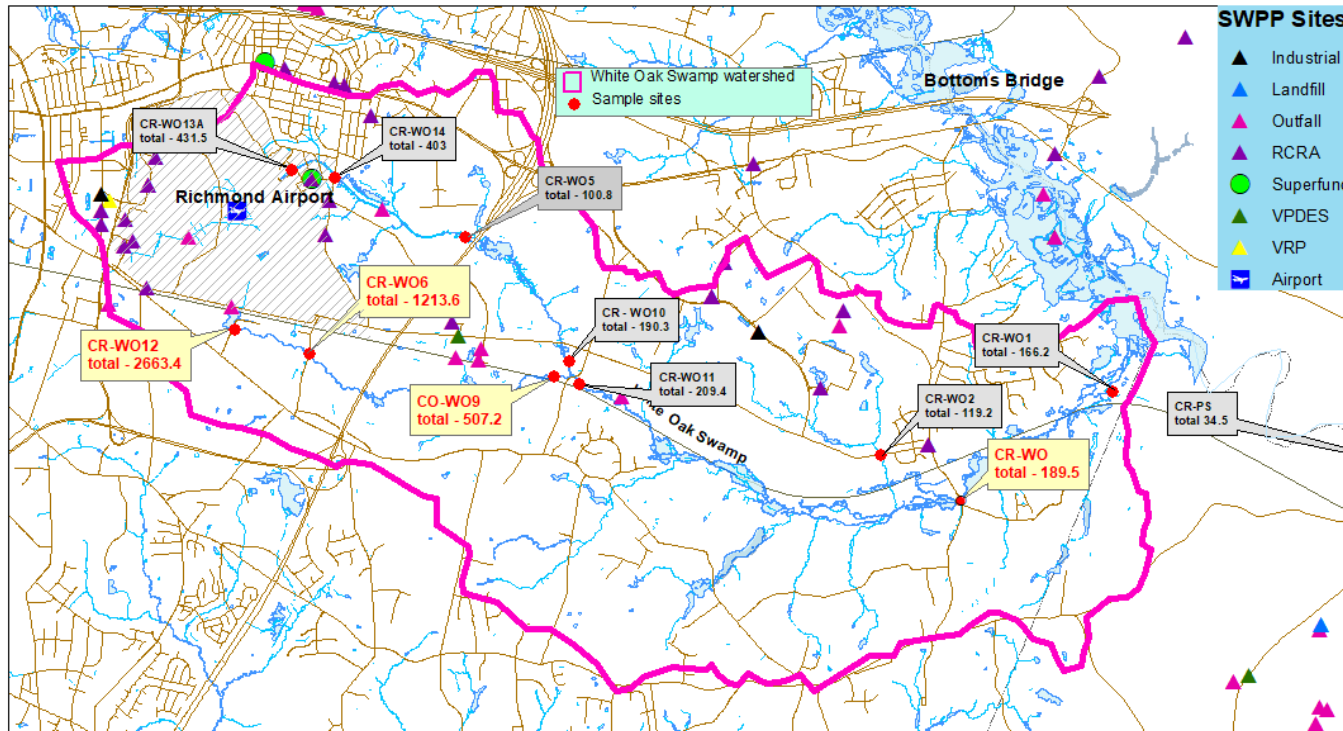
- What is it?
 - A group of human-made chemicals created for household and industrial uses
 - Include perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), and many others
- Where is it found?
 - Firefighting foam, food packaging, nonstick cookware, and more
- What are the health effects?
 - Not well known
 - May include elevated cholesterol levels, interference with thyroid function, preeclampsia, decreased fertility, cancer, and more
- Is it regulated?
 - Not regulated nationally or by Virginia at this time; ten other states have regulations
 - Environmental Protection Agency's lifetime Health Advisory Level:
 - 70 parts per trillion combined PFOA+PFOS (could decrease soon)

Chickahominy River Watershed



- Subsidiary of James River Watershed
- One surface water intake - Newport News
- 19 nearby public wells (within 1 mile of Chickahominy or 5 miles of RIC)

Newport News Waterworks PFAS Study

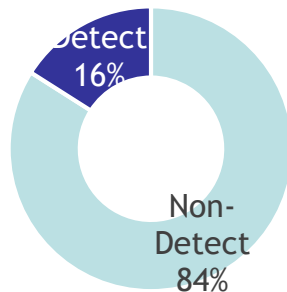


- Found elevated PFAS levels at Newport News Water intake
- Studied watershed 2019-2021
- Released results to VDH and DEQ in October 2021
- Found elevated PFAS levels in White Oak Swamp Watershed
- Possible source: Richmond Int'l Airport tenants

Follow-Up Testing - Public and Private Wells

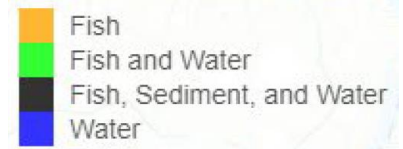
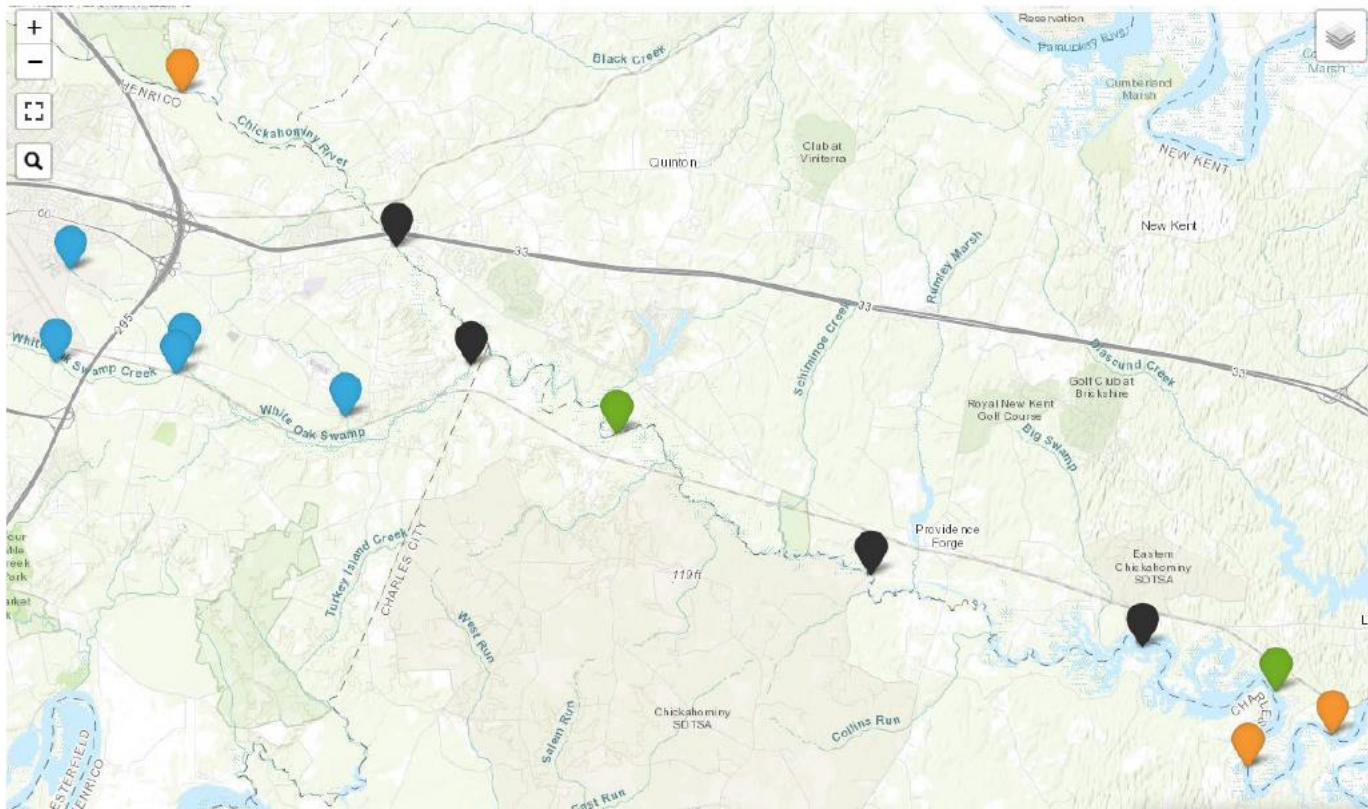
- White Oak Swamp (Henrico County)
 - 260 wells tested for PFAS

PFAS Detection in Private Wells



- 3 public wells within 5 miles of Richmond Int'l Airport
 - 2 Below Detectable Levels
 - 1 Above Detectable Levels, but Below EPA Health Advisory Limit

Follow-Up Testing - Environment



Funding Opportunities

<https://www.townhall.virginia.gov/L/ViewNotice.cfm?gnid=2367>

American Rescue Plan Act

Bipartisan Infrastructure Law

Drinking Water State Revolving Fund

Funding Opportunities

- * ALL applications may be submitted year round; however, VDH will conduct one round of evaluations submitted by the deadline.
- * FY 2023 DWSRF Intended Use Plan will be developed using your input on these issues. P
- * Public Comments and Set-Aside Suggestions deadline May 6, 2022
- * Construction, Consolidation, and Refinance Fund Requests due May 6, 2022
- * Loan funds are available to: (1) community and non-profit non-community waterworks to acquire land/conservation easements and (2) community waterworks, only to establish local voluntary incentive-based protection measures.
- * Lead Service Line (LSL) Replacement Program: (BIL Application deadline April 8, 2022; DWSRF Application deadline May 6, 2022)

ARPA On-site Evaluations

- ARPA construction work requires on-site verification
- Memorandums of Understanding (MOU) have been written for six Planning District Commissions
- ARPA specific modifications have been issued
- Agreements and modifications have been signed

- RFP was issued for firms interested in providing the same on-site services as the PDCs
- The procurement has not been finalized, although a firm was selected and negotiations begun.

ARPA Fluoridation and Water Quality / Leak Detection Studies

- ARPA funding can be utilized for programmatic initiatives
- A Request for Application (RFA) was issued for a study related to fluoridation and reporting of water quality results at waterworks.
- The Virginia Health Catalyst was selected to provide these services
- An RFA was also issued for Leak Detection Services, only one application was received.
- ODW plans to re-advertise this RFA in the future.

Centralized Review Program

Waterworks Advisory Committee
2/16/22

Centralized Review Program

Reorganize program with key objectives:

- Decrease review and approval times
- Streamline reviews for standard project elements
- Increase review priority for ODW staff
- Increase consistency across the state
- Maintain plan review ability in the field office staff

Considerations

- American Rescue Plan Act (ARPA) - \$100 MM
- Bipartisan Infrastructure Legislation (BIL) - \$89 MM/yr
- Fewer engineers (PWSS hiring freeze) until the budget is sorted out
- OCOM expects change to a centralized program

Centralized Review Program

New Paradigms:

- Plan Review is “Centralized”
- Designated plan review staff
- Design engineers complete checklists and certify compliance with the Waterworks Regulations
- Submit through central email address
- Electronic construction permit package
- Electronic construction permits

Centralized Review Program

- Supervision through the Central Office
- DEs/ADEs will be assigned to “Centralized Review” as a Detail for a specific time period on a rotating basis
- During Detail assignments, Field Offices will redistribute DE/ADE responsibilities

Project Elements using Checklist/Certification

CO/Addenda	See below
Corrosion Control Treatment	Review
Disinfection	Review
Distribution Storage (atmospheric)	Certification
Fe/Mn Removal	Certification
Fluoridation	Certification
Hydro Tanks	Certification
Ion Exchange	Certification
Other	Review
Distribution System Pump Stations	Certification
Std WL specification	Review
SWTP Modifications	Review
SWTP	Review
Membrane Filtration	Review
Waterlines	Certification
Well	Certification
Local Review Programs	Review

ODW will review the plans when treatment is required or impacts a TT or PMCL.

Program Goals

Description	Goal
ODW logs project into SWEPT, assigned to a reviewer	Within 5 business days of receipt
ODW reviews projects consisting of only waterlines, wells, storage tanks, pump stations, and voluntary treatment and either issues an approval or comments	Within 10 business days of receipt
For projects with elements listed as "Review" on the matrix, ODW completes a design review and either issues an approval or comments	Within 30 calendar days of receipt
For projects on "comments made" status, upon receipt of revisions, ODW will review the revisions and issue an approval or comments	Within 10 business days of receipt

12VAC5-590-210. Requirements for the submission of engineering data.

C. All reports, plans, and specifications shall be submitted to the department at least 60 days before the date upon which action by the department or commissioner is desired.

Project Return

Description	Goal
<p>For projects on “comments made” for ≥ 45 calendar days, with no response, ODW will notify the owner and engineer that the project is removed from the active project list and mark it as “returned”. ODW retains projects files, checklists, etc.</p>	<p>45 – 50 calendar days after “comments made”</p>
<p>When responses are received for projects marked as “returned” the timeframes and goals for review for a new project apply.</p>	

Checks and Balances

- Reviewers (DEs/ADEs on detail):
 - May audit engineer's completed checklists.
 - May audit projects by other reviewers.
- Program manager (full-time PE):
 - Will assign projects to specific reviewers
 - Will review and sign off on construction permits
 - Will sign off on PERs and Design Exceptions
 - May audit engineer's completed checklists.
 - Will audit selected projects reviewed by ODW staff
 - Responsible for metrics
- DTS:
 - Will oversee reviewers, program manager, audits.

Proposed Way Forward

- February
 - Feedback from staff – Redcap survey
 - Present to WAC
 - Finalize checklists
 - Document business process
 - Messaging to stakeholders
- March
 - Identify resources
 - Roll out checklists statewide: website and messaging
 - Begin pilot business process in CFO, another FO
- June
 - Feedback from Pilot
- July
 - Implement statewide

ODW Policy Manuals Update

Waterworks Advisory Committee
2/16/22

Definition of Guidance Document

"...any document developed by a state agency or staff that provides information or guidance of general applicability to the staff or public to interpret or implement statutes or the agency's rules or regulations,"

ODW Policy Manuals

Existing

- 97 total active WMs
- 46 WMs “meeting” the definition of a guidance document on Va Town Hall
- 51 WMs are “non-guidance”
- WMs within WMs
- WMs not routinely reviewed/updated
- Some WMs are outdated

Objective

- Consolidate relevant content by theme
- Suggested Manual Titles
 - i. Administration Manual
 - ii. Permit Manual
 - iii. Sampling Manual
 - iv. Enforcement Manual
 - v. Orientation & Training Manual
 - vi. Source Water Manual
 - vii. Communication Manual
 - viii. Field Manual
 - ix. Data Management Manual

What to Expect

1. Notice in Virginia Register
 2. Publication on Town Hall and a 30-day comment period
 3. Potential 30-day delay to address comments
 4. Manual becomes effective
 5. Revoke working related memos
- Field Manual – New
 - Sampling Manual – Update
 - Enforcement Manual – Update
 - Permit Manual - Update

Waterworks Operations Fees

Waterworks Operation Fee Regulations

- NOIRA published on January 28, 2022
- Public Comments open until March 3, 2022
- No Comments to date

- A Stakeholder Group has been assembled, contacted and invited to the first meeting (March 15).
- Requested approval of the Stakeholder Group from OComm; Acting Commissioner to sign
- All WAC and other interested parties welcome to attend
- Staff is working on a meeting agenda and reporting data

Waterworks Operation Fee Regulations

Stakeholder Group	
Doug Towne Plant Operations Superintendent, Richmond DPU Douglas.Towne@richmondgov.com	Eric LaSalle Director of Environmental Affairs, Smithfield Food elassalle@smithfield.com
Jamie Bain Hedges Manager, Fairfax Water jhedges@fairfaxwater.org	Dawn Lipscomb Operator, Virginia DCR dawn.liscomb@dcr.virginia.gov
Dwayne Schwartz Director of Water Utilities, City of Waynesboro SchwartzDS@ci.waynesboro.va.us	Robert Melvin VA Restaurant, Lodging, and Travel Association robert@vrlta.org
Deborah Kendall Town Manager, Gordonsville dkendall@gordonsville.org	Mitchel Smiley VA Municipal League msmiley@vml.org
Robert Wilson Plant Manager, Appomattox River WA rwilson@arwava.org	Steven Herzog Virginia Municipal Drinking Water Association spherzog@hanovercounty.gov
Tim Mitchell Member, VA AWWA timothy.mitchell@lynchburgva.gov	Mark Estes Halifax PSA Director, Halifax PSA mestes@hcsa.us
John Aulbach President, AQUA Virginia jjaulbach@aquaamerica.com	

Lead and Copper Rule Revisions (LCRR)

Waterworks Advisory Committee Briefing
2/16/22

EPA Briefing to States 12/15/21

Memo to Waterworks Owners 1/12/22

- LCRR become effective 12/16/21
 - LCRR went into the Federal Register
- LCRR compliance date remains October 16, 2024
 - Water systems must comply beginning this date
- EPA intends to improve the LCRR
 - Lead Service Line Inventories will remain
 - Critical to LSL Replacements
 - EPA will work with states to issue guidance for inventories – Draft in early 2022, final mid 2022

Lead and Copper Rule Improvements (LCRI)

- EPA will promulgate a new rule to improve the LCRR
 - Proposed Rule by Fall 2023
 - Will follow Notice/Comment Rulemaking process
 - Will likely look at:
 - Replacing all lead service lines
 - Compliance Tap sampling requirements
 - Action and Trigger Levels – options to reduce complexity
 - Prioritizing Historically Underserved Communities: Environmental Justice issues

What does this mean?

- EPA signaled that the LSL inventory requirements and deadline of October 16, 2024 will remain unchanged.
 - Water systems must move forward with the LSL inventory effort
- Topics in LCRR will be evaluated and may change:
 - Replacing all lead service lines;
 - Compliance tap sampling requirements;
 - Action and trigger levels – options to reduce complexity; and
 - Prioritizing historically underserved communities:
Environmental justice issues.

What does this mean?

- LCRI: proposed rule – public comment – final rule
 - Not possible to predict scope – what will change?
- Two items due October 16, 2024 may change:
 - Compliance tap sampling locations (LSLs, Galvanized Requiring Replacement, Unknown may trigger re-evaluating tap sampling locations)
 - Community waterworks must compile a list of schools and childcare facilities served by the system

ODW Recommendations

1. Move forward with LSL inventory requirements
 - Gather documents and records, ID information sources
 - Expect EPA guidance in mid-2022
 - ODW will provide training to staff and regulated community
 - ODW is looking into TA providers to help waterworks
 - Look at the inventory from an asset management perspective
2. Begin work to compile a list of schools and child care facilities in the service area – ID information sources
3. Begin work to understand likely changes to tap sample pool

Primacy Issues

- Now have two rules: LCRR and LCRI
- Exempt rulemaking process: no public comments
- What's the best way forward:
 - Incorporate the LCRR by reference
 - Copy and paste with minimal changes to language
 - Say it in our own words
 - Consider that LCRI will cause changes/updates
 - Combine LCRR and LCRI
- LCRR Primacy Package due 12/18/23 – extension of up to 2 years is available.

Process

- Develop LCRR on RIS
- EPA approves primacy package
- Submit LCRR to Registrar
- Publish in Virginia Register
- 30-day public comment period
- Regulations become effective

WAC Membership

12VAC5-590-45. Waterworks Advisory Committee.

A. A Waterworks Advisory Committee (WAC) shall be formed by the commissioner to review and make recommendations regarding the regulatory, policy, and legislative aspects of the department's authorities. WAC members shall consist of industry professionals employed outside the department with longstanding expertise or vested interest in waterworks operations and represent a diverse group of stakeholders. Members shall be experts in the fields of water treatment technologies, public health, water quality, economics, environmental science, public utilities, community development, or industry regulations. A minimum of nine persons shall be appointed to the committee by the commissioner.

B. The WAC will convene at least quarterly.

C. WAC meetings will be considered public meetings. Notice of scheduled meetings will be posted on the Virginia Regulatory Town Hall at least three working days before the date of the meeting. Meeting minutes will be posted to the Virginia Regulatory Town Hall within 10 working days after the meeting.

D. Each member of the WAC shall hold office for a term of three years, except that:

1. With approval by the commissioner, members are eligible for reappointment to consecutive terms.
2. Each member of the WAC serves at the pleasure of the commissioner.

E. The commissioner shall appoint the chair of the WAC.

F. The WAC shall have a member of the department serve as secretary.

Current Membership

- Roger Cronin – American Society of Engineering Companies
- Geneva Hudgins/Russ Navratil – Va AWWA
- Jesse Royall, Jr. – Community Systems
- Eric Lassalle – Va Manufacturer’s Assoc & NTNC
- Dave VanGelder – Class I Operator
- Andy Crocker – SE RCAP
- Chris McDonnel – VACO
- Caleb Taylor – VML
- Mark Estes – VRWA
- Ignatius Mutoti – VSPE
- Greg Broadman – Va Tech Engineering for higher education
- Steve Herzog – Va Water Environment Association
- John Danielson – Va Water Well Assoc
- Scott Kudlas – Va DEQ
- Bailey Davis – Va DCLS
- Dwayne Roadcap – VDH/ODW

For Next Meeting

- Consider By-laws
- Formalize new members
 - Send requests to Dwayne Roadcap

2022 Priorities & Strategic Planning

Aspirational Goals & Metrics

- No system with a health based violation
- All systems inspected on time
- All permits up-to-date
- Plan Reviews completed within 30 days
- No paper processes

2022 Priorities

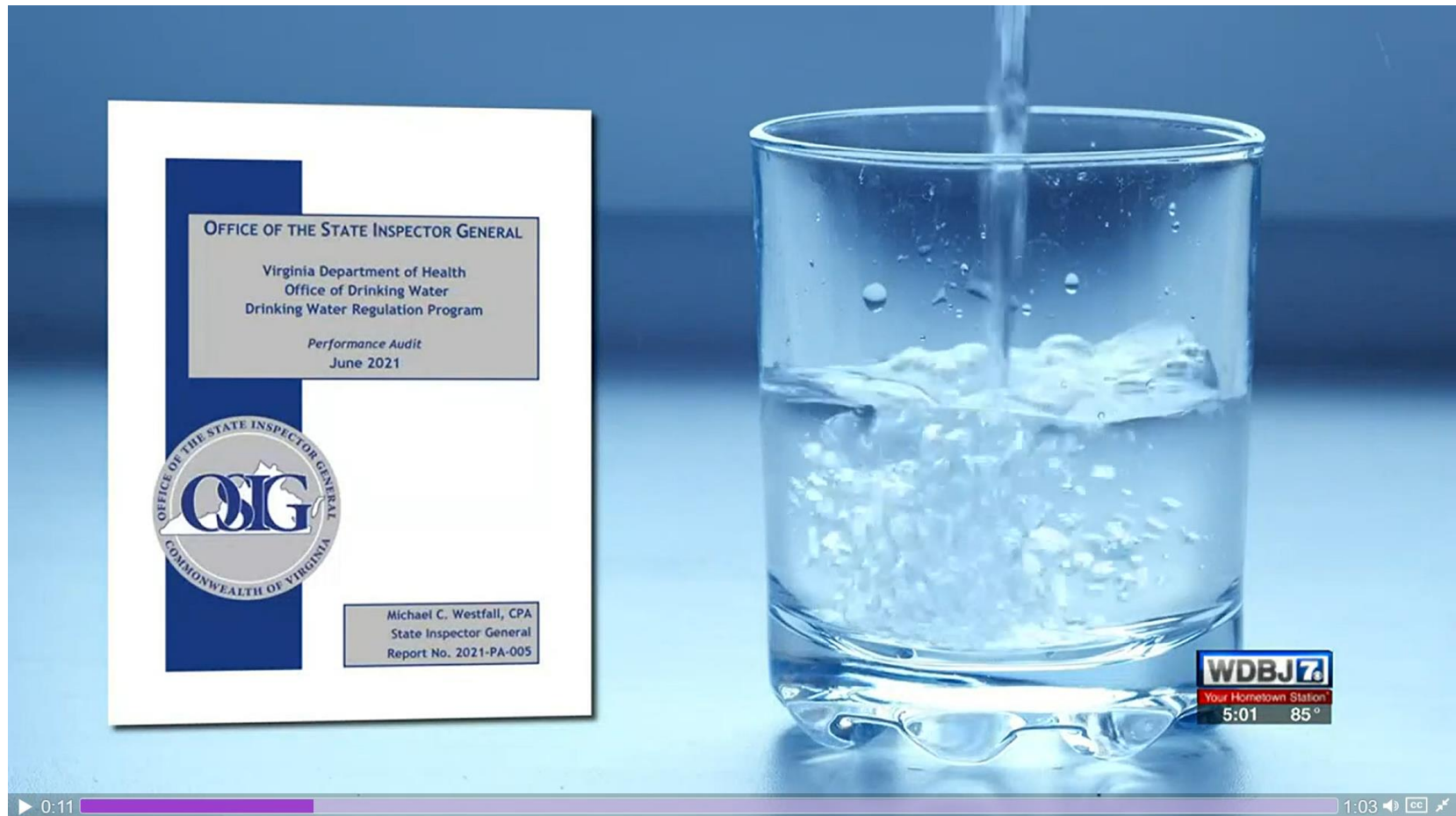
- Implement new initiatives
 - WIIN grants, Legionella, PFAS, ARPA, Infrastructure
 - Lead in schools and childcare centers
- Make progress on our aspirational goals & metrics
 - Conduct sanitary surveys & inspections on-time
 - Reduce time for plan reviews & permitting
 - Reduce the systems with health violations

2022 Priorities

- Public Health 3.0
 - Lean into the broader agency initiatives
- Implement OSIG recommendations
 - New performance metrics
 - Update manuals (Enforcement, Permit, Field, Sampling, etc.)

Virginia's inspector general urges Office of Drinking water to step up enforcement

By [Leanna Scachetti](#)
Published: Jul. 22,
2021 at 5:16 PM EDT



"One statewide agency says the office monitoring our drinking water needs to get tougher on enforcing state code."

Commendation #1 – ODW Recognized the Need for Regional Office Support.....	6
Commendation #2 – ODW Recognized the Need for Expanded Performance Measures	6
Commendation #3 – ODW Updated the Internal Enforcement Manual.....	6
Findings.....	7
Finding #1 – The ODW Inspection Program Needs To Ensure Consistency Statewide	7
Finding #2 – ODW Is Not Fully Utilizing Enforcement Tools to Ensure Compliance.....	9
Finding #3 – ODW Administrative and Civil Remedies Are Not Fully Supported By The Enforcement Manual.....	11
Finding #4 – Weaknesses In The ODW Water Sampling Oversight and Verification Process Were Identified.....	11
Finding #5 – ODW Performance Metric Reports Lack Monitoring and Compliance Elements ..	11
Finding #6 – ODW Public Notice Oversight Is Inconsistent	21
Finding #7 – ODW Regional Field Offices’ Monitoring and Oversight Policies Are Inconsistent	21
Finding #8 – ODW Regional Field Offices Lack Quality Assurance/Quality Control Practices ..	21
Finding #9 – ODW Regional Compliance Specialists Are Missing The Tools Necessary To Be Effective	31

OSIG #6 Improve Public Notice Oversight

- Ensure PWSs have issued public notices to consumers and that those notices are timely, especially for health based violations.
- Change policy to track all required Public Notices, run compliance determinations, and issue all Notices of Alleged Violations.
- Update policy on enforcement escalation for repeat violators of the Public Notification Rule.

OSIG #9 Strengthen Compliance Specialist Position

- “...*the challenge for the agency is still the decentralized nature of regional field office management that continues to contribute to the variances in how statewide processes are conducted.*”
- Centralize operations
- Improve performance tracking & metrics
- Expand and improve oversight policies

2022 Routine Expectations

- Meet & Exceed EPA grant requirements (annual audits)
 - Implement recommendations
- Decommission Outdated Access databases & Onboard New Proprietary Software
- Build on relationships with stakeholders
 - Va Health Catalyst, AWWA, VRWA, ASDWA, WAC, VMDWA, etc.

Strategic Plan - 2022

Consider new business model for operations

- More empowerment of private sector engineering work
- Expand “centralized” services
 - Plan review
 - Compliance & Enforcement oversight
- Narrow focus of field activities
 - Sanitary surveys & inspections
 - Monthly operation reports
 - Sampling results
 - Technical assistance
 - Emergency Preparedness

Status Update

Regulating Per & Polyfluoroalkyl Substances (PFAS) in Virginia Drinking Water

Tony Singh, Ph.D., MPH, PE, BCEE, CSP

Office of Drinking Water
Virginia Department of Health

Waterworks Advisory Committee meeting
April 20, 2022



VDH PFAS Activities

1. Legislative Bills/Actions:

2. PFAS Occurrence Study:

- Phase 2 Sampling Study

3. PFAS at RIC – Holly Brown, ODW

4. PFAS & VDEQ

<h2 style="text-align: center;">HB586</h2> <p style="text-align: center;">Acts of Assembly Chapter 611</p>	<h2 style="text-align: center;">HB1257</h2> <p style="text-align: center;">Acts of Assembly Chapter 1097</p>	<h2 style="text-align: center;">HB919</h2> <p style="text-align: center;">Acts of Assembly Chapter 585</p>
<p>Patron: Delegate Guzman (GA 2020)</p> <ul style="list-style-type: none"> • Convened a PFAS workgroup, • Conducted a detailed investigation on current literature and what other states are doing, • Conducted PFAS occurrence study at no more than 50 waterworks and source waters, • Submitted report: Due 12/01/2021 	<p>Patron: Delegate Rasoul (GA 2020)</p> <ul style="list-style-type: none"> • Establish MCLs for PFOA, PFOS, and other PFAS compounds, 1,4-Dioxane, and Chromium (VI) • Submitted report in November 2021 * October 01, 2022 • Effective : 01/01/2022: • NOIRA published 02/2022; • Public comment period ended on 03/16/2022 	<p>Patron: Delegate Orrock (GA 2022)</p> <ul style="list-style-type: none"> • Adopt EPA MCLs; • VDH continue with existing regulatory process; • Such regulation will not be effective until HB919 requirements are met • Form a Workgroup; Conduct a study; Analysis of health effects; Cost benefit analysis • Effective Date: 07/01/2022:

PFAS NOIRA Status

- Public comment period ended: 03/16/2022
- 3 Comments
 - Virginia Municipal Drinking Water Association (VMDWA)
 - American Chemistry Council (ACC)
 - 3M
- Form a RAP/Workgroup

VDH PFAS Activities Timeline

**VA PFAS
Workgroup
convened**
October 2020

**HB1257 Report
submitted**
October 2021

**PFAS NOIRA
published**
Feb 2022

**HB919 signed
into Law**
April 2022

**New VA PFAS
Workgroup**
July - Aug 2022

**Phase 1 PFAS
Sampling Study**
April –July 2021

**HB586 Report
submitted**
December 2021

**NOIRA Public
comment
period ended**
March 2022

HB919 effective
July 2022

**Status
Report due**
December
2022

VA PFAS Workgroup – 2.0 Challenges

Waiting on EPA - EPA is working on PFAS and NOT on 1,4-Dioxane and Chromium (VI)

One vs Two workgroups & Timing - Forming a RAP now for NOIRA vs forming PFAS Workgroup on/after July 1, 2022

Limited Resources- VDH is conducting a Phase 2 PFAS sampling study

Proposal - Form a VA PFAS Workgroup in July 2022 instead of now



SEEKING feedback from stakeholders at this time on:

- VA PFAS Workgroup Membership selection process
- Workgroup Composition & Timing

PROPOSED - VA PFAS Workgroup – 2.0

Stakeholder Group	#	Proposed Organization(s)
Waterworks	7	VA Municipal Drinking Water Association, VA Rural Water Association, VA American Waterworks Association, Private company, NTNC
Environmental Organizations/Citizen Groups	3	James River Association, Southern Environmental Law Center, Potomac Riverkeepers Network, Virginia League of Conservation Voters
Professional Organizations	2	Association of State Drinking Water Administrators, US Geological Surveys
General Public	1	
Chemical Manufacturer	1	DuPont/3M
Treatment Technology SME	3	Nonprofits, Academics
Health/Toxicology SME	3	State Toxicologist, ATSDR, Academics
Water Economists	1	UVA Darden Business School, UNC EFC, Water Utility Water Finance Experts
Virginia DEQ	1	

PFAS Sampling Study

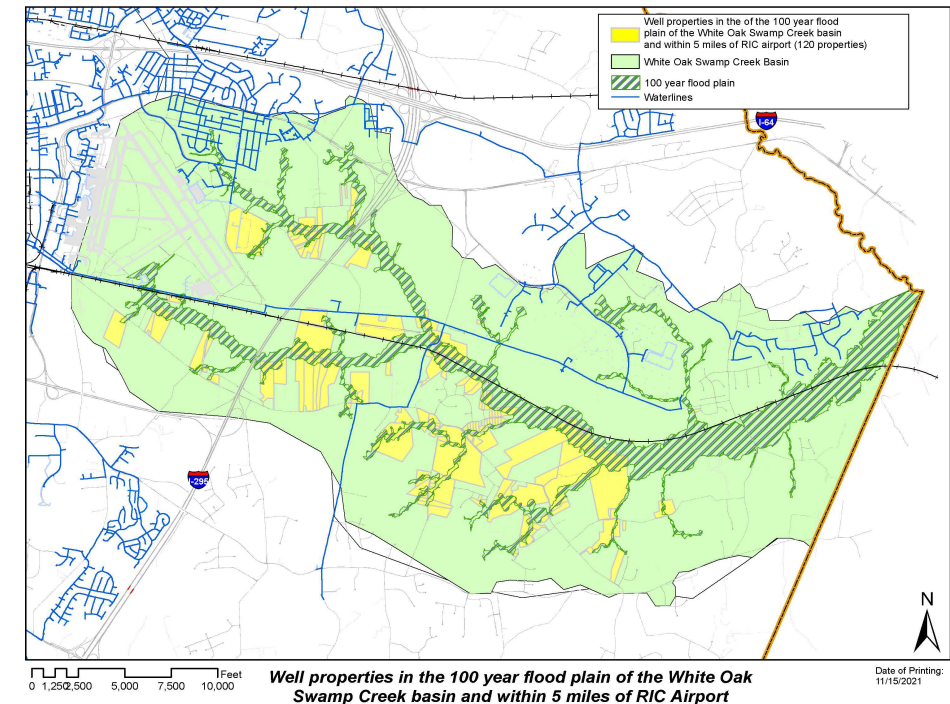
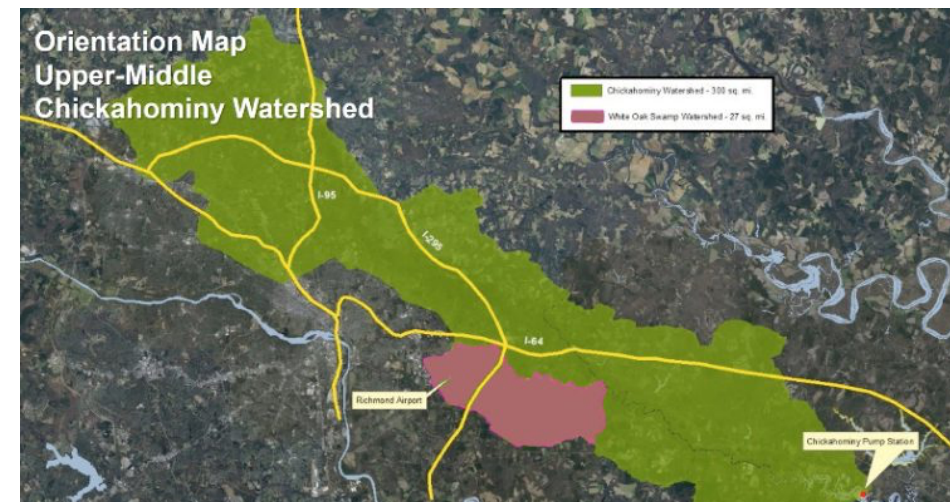
	Phase 1	Phase 2
Timeline	Summer 2021	May - July 2022
# of Waterworks	45	~400
# of Sampling Locations	63	~440
Type of Sampling Locations	Entry points 7 Source waters	Entry points
Results	15*	In Progress
Report /More Info	RD877 RD681	VDH ODW PFAS Webpage
	*detected at least one PFAS	

PFAS near RIC

Holly Brown, ODW

PFAS @ VDEQ

- Surface water sampling study
- PFAS Survey



Have any Question, Comment or Suggestion!!!

Tony S. Singh

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804-310 3927

Dwayne Roadcap

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804-864 7522

Waterworks Operation Fee Regulations

Summary



NOIRA Comments

“In order for all Virginians to have equitable access to safe, affordable, trusted drinking water, equity must remain a priority and emphasis in all of our work.”

Sarah Holland

Chief Executive Officer, Virginia Health
Catalyst

Discussions

- Meeting 1 – Background on Revenues and Budget. Discussions focused on budget issues and requests for data for decisions.
- Processing Invoices Cost
 - \$21.00
- Technical Assistance costs
 - \$1,570 / NTNC
 - \$780 / TNC
 - \$3,020 / Wholesaler

Discussions

- Meeting 2 – No quorum, no actions taken
- Billing Software
- How much new revenue does VDH want to bring in through the OpFee modifications?
- Defining and determining charges to Wholesale waterworks are equitable

Discussions

- Determining charges to Transient Noncommunity waterworks are equitable.
- Customer Accounts versus Service Connections for OpFee billing process.
- Need for non-payment provisions

Next Steps

Determine if a virtual meeting for NTNC and TNC waterworks representatives can be held.

Update proposed language for corrections noted and related to ODW staff discussion on service connections versus customer accounts.

Request written comments from Stakeholder Group

Set Next Meeting (Meeting 2 needs to be repeated)

Centralized Review Program

Waterworks Advisory Committee

4/20/22

Status Update

- Central Review Program Website
 - Program Description
 - Email Address
 - Checklists and Certification Statement
- Shared website with WAC mailing list – limited interest
- Comments on checklists from Sydnor
 - Mostly editorial
 - Language reflects WWR
 - Clarifications consistent with WWR

Abingdon Field Office Pilot

- March 18 reached out to Consulting Engineers
 - Virtual meeting to discuss pilot program (March 29 and 31)
 - Shared checklists and certification statement
- March 28 reached out to Waterworks Owners
 - Mandatory for all submittals
 - Presented in the FCAP, ARPA, BIL and LEAP Funding Application Discussion meetings
- Pilot effective April 4, 2022
- PM and Review by AFO team
- Pilot focus on checklists and certification statement

Culpeper Field Office Pilot

- Notifying Engineers as CFO becomes aware of a project
- Seven known projects in the near-term (3 projects received)
- First project arrived on Tuesday, 4/5, approved Monday 4/18.
- Set up SharePoint location and folder naming convention
- Centralized Review Team consists of Bennett Ragnauth and Aaron Moses (PT) = External to CFO
- SWEPT (Oracle) installation on team member computers
- ODWConstructionPermits@vdh.virginia.gov
- Pilot includes checklists and certification statement, outside reviewer, new business process
- Working out new business process, SOPs, transmitting approvals, etc.

Way Forward

- April
 - Evaluate comments on checklists
 - Complete Oracle and SWEPT installation on team computers
- June
 - Feedback from Pilot
 - Decisions
- July
 - Implement statewide

Field Manual

- Thank you to many reviewers
- Many, many comments
 - Format and typos – easy to correct
 - Clarifications – most are straightforward
 - Technical changes – need DTS/SME input and deliberation
- Bennett Ragnauth is addressing:
 - Moved document back to MS Word
 - Tracking and responding to each comment/change
 - ID technical changes that need DTS/SME input
- Expect updated Field Manual by May 1, 2022

Lead and Copper Rule Revisions (LCRR)

Waterworks Advisory Committee
April 2022 Briefing

EPA Briefing to States 12/15/21

Memo to Waterworks Owners 1/12/22

- LCRR promulgated 1/15/21
- LCRR become effective 12/16/21
 - LCRR went into the Code of Federal Regulations
- LCRR compliance date remains October 16, 2024
 - Water systems must comply beginning this date
- EPA intends to improve the LCRR
 - Lead Service Line Inventories will remain unchanged
 - Critical to LSL Replacements
 - EPA will work with states to issue guidance for inventories – Draft came out early 2022, final expected May 2022

Lead and Copper Rule Improvements (LCRI)

- EPA will promulgate a new rule to improve the LCRR
 - Proposed Rule by Fall 2023
 - Will follow Notice/Comment Rulemaking process
 - Will likely look at:
 - Replacing all lead service lines
 - Compliance Tap sampling requirements
 - Action and Trigger Levels – options to reduce complexity
 - Prioritizing Historically Underserved Communities: Environmental Justice issues

What does this mean?

- EPA signaled that the LSL inventory requirements and deadline of October 16, 2024 will remain unchanged.
 - Water systems must move forward with the LSL inventory effort
- Two items due October 16, 2024 may change:
 - Compliance tap sampling locations (LSLs, Galvanized Requiring Replacement, Unknown may trigger re-evaluating tap sampling locations)
 - Community waterworks must compile a list of schools and childcare facilities served by the system

DRAFT Lead Service Line Chronology

Effective Date	Description
September 1, 1973	Virginia Uniform Statewide Building Code (USBC) adopted. Some localities granted an extension to September 1, 1975. Allowed lead water service lines.
August 1, 1978	Lead water service pipe not allowed. (USBC)
July 16, 1982	USBC included grace period language connecting permit date or design date to the USBC edition.
April 1, 1986	USBC limits solder and flux to more than 0.2% or less lead in water service or water distribution piping.
June 19, 1988	Federal Lead Ban prohibits use of pipes, solder or flux not “lead free”. “Lead free” was defined as solder and flux with no more than 0.2% lead and pipes with no more than 8% lead.

1. USBC applies to service pipes and premise plumbing. Likely this applies only to the private portion of the service pipe.
2. Federal Lead Ban applies to waterworks, service pipes, and premise plumbing.