

Richmond Regional Water Workgroup Meeting 1 Notes

August 28, 2026, 9:00am - 1:00pm

OCME Classroom 2830

8850 Times Dispatch Blvd, Mechanicsville, VA 23116

Overview: The General Assembly passed HB 30 including provisions for a group process around the Richmond regional utility issue. This was the first meeting of the Richmond Regional Water Workgroup.

The Workgroup is charged with the following per HB30, Item 283:

The Richmond Regional Water Workgroup shall: (i) review and make recommendations concerning the program for maintenance of and capital improvements and repairs to the City of Richmond's Water Treatment Plant to ensure its reliability as a supplier of drinking water; (ii) review and make recommendations concerning the staffing, operations, and long term sustainability of the City of Richmond's Water Treatment Plant to ensure its reliability as a supplier of drinking water; (iii) review and identify compliance concerns for any party to a wholesale water contractual agreement for the provision of drinking water; and (iv) prepare, publish, and deliver a report of its findings, recommendations, and use of funding in this Item to the Governor, the Chair of the Senate Finance and Appropriations Committee and the Chair of the House Appropriations Committee, and the chief elected officers of the City of Richmond, and the counties of Chesterfield, Hanover, and Henrico each year by November 1. The Workgroup shall continue to monitor compliance with the grant agreement until all funds provided in this Item have been disbursed and the projects for which the funds were provided have been completed, or until such time as any other state funds appropriated or granted for the Richmond Water Treatment Plant are similarly disbursed and executed.

The meeting was organized by the Virginia Department of Health (VDH) and facilitated by mediators from the University of Virginia's Institute for Engagement & Negotiation (IEN). What follows is a high-level summary of key areas of discussion. Comments and key areas of discussion are paraphrased and summarized, without attribution.

Attendee List:

Workgroup:

Kevin A. Catlin – County Administrator, County of Chesterfield

Bentley Chan – Director of Public Utilities, Henrico

Odie Donald II – Chief Administrative Officer, City of Richmond

Todd Kilduff – Deputy County Administrator, Hanover County

Matt Longshore – Director of Public Utilities, Hanover County

Jeff McBride – Director of Water and Admin, City of Richmond

Scott Morris – Director of Public Utilities, City of Richmond

Matt Rembold – Director of Utilities, Chesterfield County

Dwayne Roadcap – Director of Office of Drinking Water, VDH, Chair of the Workgroup

John Vithoulkas- County Manager, Henrico County

Sandra Whitehead – Director of Architecture and Professional Services, Virginia Department of General Services (DGS)

Subject Matter Experts:

Lee Crowell – Deputy Director of Public Utilities, City of Richmond

Bailey Davis – Chief of Field Operations, VDH

Richmond Regional Water Workgroup Meeting Notes - DRAFT

Marcello Forehand – Public Utilities Director, Goochland County

Anthony Hess – Director FCAP, VDH

James Reynolds – Field Director, Richmond Field Office, VHD

Tony Singh – DPU Deputy Director, City of Richmond

Jarrett Talley – Director TCDO, VDH

Al Wiggins – Deputy Chief Administrator for Operations, City of Richmond

Jessica Cooper – Legal Counsel, VDH

Katie Sallee – Executive Assistant, VDH

Mediation Team: [Institute for Engagement & Negotiation, University of Virginia Weldon Cooper Center for Public Service](#)

Sophie Delzell, Project Consultant

Tanya Denckla Cobb, Director

Kristina Weaver, Project Consultant

Public:

Grahm Moomaw – The Richmonder

Dwayne Roadcap (VDH and Chair) called the meeting to order and welcomed the members of the Workgroup and introduced the mediators, Dr. Kristina Weaver and Tanya Denckla Cobb, Director of the University of Virginia Institute for Engagement & Negotiation (IEN) at the Weldon Cooper Center for Public Service. Following a brief explanation of their role, the mediators asked members of the Workgroup to introduce themselves and share their hope for the first meeting.

I. Introductions: Members of the Workgroup and meeting attendees introduced themselves and shared their hopes for the meeting, which included hopes that the Workgroup can reach consensus on how best to use state funding, meet the regulatory charge, and continue regional collaboration and cooperation.

II. Legislative Charge: Following a review of the agenda by the IEN mediators, the Chair reviewed the legislative charges of the Workgroup. The Workgroup is charged with the following:

- (i) review and make recommendations concerning the program for maintenance of and capital improvements and repairs to the City of Richmond's Water Treatment Plant to ensure its reliability as a supplier of drinking water;
- (ii) review and make recommendations concerning the staffing, operations, and long-term sustainability of the City of Richmond's Water Treatment Plant to ensure its reliability as a supplier of drinking water;
- (iii) review and identify compliance concerns for any party to a wholesale water contractual agreement for the provision of drinking water; and
- (iv) prepare, publish, and deliver a report of its findings, recommendations, and use of funding by November 1, 2026.

The Chair noted that all members of the Workgroup share the same goal for safe, dependable, and affordable water for the region.

III. Meeting Procedures & Decision Rules Overview: IEN mediators described the meeting procedures and decision rules, including requirements for going into an Executive Session. The following guidelines were shared:

- **Meeting quorum (required by HB 30):** To hold the meeting, there must be a quorum of at least 6 members with at least 1 member from 3 of the 4 participating localities.
- **Election of Vice-Chair (required by HB 30):** Meeting 1 will include the election of a Vice-Chair. While the role of the Vice-Chair is not stipulated by HB 30, IEN envisioned that this individual will participate in meeting debriefs with the Chair and IEN mediators and will serve as an active member of the Workgroup, including voting on any decisions, and serving as the interim Chair in the event that the Chair is unable to attend.
- **Use of Executive Session:** An Executive ("Closed") Session may be called at any time by any member to allow for closed room workgroup discussion about issues of critical infrastructure. Technical experts, including the IEN mediators, may be included in these sessions, and their inclusion would be publicly announced as applicable. Discussions held in Executive Session are not subject to the Freedom of Information Act (FOIA). Assistant Attorney General Jessica Cooper will be on hand during all meetings to field questions about FOIA and to ensure that the Executive Session option is used appropriately.

- **Meeting Summaries:** At the end of each meeting, IEN will produce a high level and actionable summary that focuses on key dialogue areas, information requests, areas of agreement / disagreement, and any decisions reached. Information in summaries will be presented in an aggregate manner, without attribution for individual points or comments. IEN will also draft the final report, and members will have an opportunity to provide input on how it is presented.
- **Role of Alternates:** All Workgroup members were asked to designate an alternate who is capable of serving as a full voting member in the case of absence. To the extent possible, IEN asked designated alternates to attend all meetings in a listen-only mode so that they will be fully able to step up if needed. Given the rapid timeline to accomplish the charge laid out in HB 30, preparation and authority of alternates will be important should members need to miss any meetings.
- **Consensus building as a deliberative tool:** Consensus building, as a deliberative technique, is effective at increasing the efficiency, productivity, and inclusiveness of dialogue. For this process, the IEN mediators proposed using this tool to help Workgroup members surface concerns and options, to probe for areas where there may / may not be common ground, and to refine potential proposals that members may then wish to vote on. Because voting will be reserved for final decisions, consensus-based deliberation will not be “binding.” As needed, representative members of the Workgroup will have opportunities to consult with additional decisionmakers between meetings and ahead of final votes.
- **Majority voting as a decision-making tool:** The Workgroup will use majority voting to make any decisions in relation to the HB 30 legislative charge. Any member may ask for a vote on a proposal at any time. The IEN mediators will actively work to help members shape consensus-based dialogue into refined proposals that are ready to be voted on. Unless new information surfaces, IEN requested that decisions made in one meeting are viewed as enduring in subsequent meetings.
- **Request to bring issues to the group first:** Meetings will be open to the public and open to the media. Should members of the Workgroup have concerns about the process or outcomes, IEN requested that concerns be brought to the group before they are shared publicly. This practice promotes candor and protects trust, which are essential to open deliberation and robust outcomes.
- **Speak for one’s own perspective / organization:** Members were asked to represent their own perspectives – or the perspectives of organizations and stakeholders they represent – when speaking about the Workgroup to third parties, including the media. Members were asked to refrain from speaking on behalf of the workgroup as a whole or speak for other parties to the process.
- **All perspectives welcome:** An attitude of inquiry and openness to new information and new ideas generally allows for the most robust outcomes.
- **Etiquette:** Given limited time and the need to prioritize focused dialogue, members were asked to refrain from digital multi-tasking where possible and to step out for any necessary interruptions.
- **Body breaks as needed:** Given limited time, meeting agendas will feature working lunches and only a few brief breaks. Members were encouraged to take additional breaks as needed while remaining as present as possible.

Key points of dialogue in this segment on Meeting Procedures included:

- **Group Request:** The group discussed a recommended guideline encouraging members to bring any concerns directly to the Workgroup before speaking for the Workgroup to media / social media (summarized as: “Speak for one’s own perspective / organization”). IEN mediators explained that this proposed request can be helpful to promote trust and candid deliberation, but subsequent discussion led to a decision to strike it from the list of process guidelines. Workgroup members affirmed that they collaborate often, work well together, already steward trust effectively, and thus do not need to specify that request.
- **FOIA:** IEN mediators reviewed Freedom of Information Act (FOIA) requirements for the Workgroup process. A member noted that FOIA can be weaponized and asked that subjects discussed and put into writing should be thoughtful. Correspondence about meetings should be limited to two Workgroup members or less. IEN clarified that, because the Workgroup meetings have been deemed mediations, communications among and with the mediation team are exempt from FOIA, per The Virginia Uniform Dispute Resolution Act (Va. Code § 8.01-576.4 et seq.).

IV. Nominations / Elections for Vice-Chair: As the legislative charge includes a requirement to elect a Vice-Chair, the Workgroup was tasked with voting on a Vice-Chair. A member asked whether the position could be rotated across meetings, and it was clarified that legal review confirmed this was not possible. Members asked to take a break to discuss nominations for the Vice-Chair position. After the break, John Vithoulkas nominated Sott Morris, Todd Kilduff seconded, and the motion to elect Scott Morris as Vice-Chair was passed unanimously.

V. Existing Conditions of Richmond’s Water Treatment and Overview of Essential Background Information: The City of Richmond presented the existing conditions of Richmond’s Water Treatment system and planned improvements. The City has a 10-year modernization plan, which includes projects related to foundation building, core system modernization, resilience and optimization, and long-term sustainability. The City created 52 Standard Operating Procedures, restructured the organization, added staff, and is completing annual drills. There is a Filter Optimization Preventative Maintenance Review and Multiple Condition Assessments. The City is completing a water treatment plant (WTP) Master Plan Update and has re-established regional coordination meetings. For more details, please see the presentation included in the Appendix. Paraphrased and summarized questions and discussion items included:

- Q: Has Richmond identified resources for projects?
 - A: Yes. The budget is approved annually, and rate increases are expected to fund projects.
- Q: What are the timelines for projects?
 - A: Projects are happening at the same time, and issues are addressed as the City is able. The Department of Public Services (DPU) is working to comply with regulatory requirements from the Virginia Department of Health (VDH). One project may address different priorities.
- Q: How do you make sure that all staff experience emergency drills?
 - A: DPU works with a scheduler at the plant to make sure that all staff, regardless of their shift, are able to participate in drills. Some trainings are also available on an online platform.
- Q: Are security enhancements included in upcoming projects?
 - A: Yes. There are security measures in place including guard systems, locks for pump stations and storage tanks, and cameras. A vulnerability assessment also incorporates cyber security.

- Q: The Workgroup has a minimum of \$20 million to allocate. Will there be a list of projects presented or a visit to the facility?
 - A: In 2025, Mayor Avula sent a letter to Governor Youngkin listing projects that were needed for the WTP. This list is a good representation of candidate projects.
 - During a July 15 meeting among the utility directors from the City of Richmond, Hanover, Henrico, and Chesterfield, members of the Richmond Regional Water Workgroup discussed system upgrades at the WTP. A lot of work has been done by the utility directors to identify challenges and opportunities for regional coordination. There is agreement on a candidate project for the funding provided by Item 283 of the Budget Bill – the WTP Filtration System and Filter Media Replacement project.
- Several members of the group expressed that they were encouraged by the improvements made by the City, the projects being undertaken, and the coordination between the City and counties. There is still work to do, but progress is being made.

VI. VDH Report and Capital Improvement Options: VDH presented a summary of its April 8, 2025, *Comprehensive Waterworks Evaluation and Cost Estimate* Report, and the capital improvement options identified in that report. For more details, see the Appendix. Paraphrased and summarized questions and discussion items included:

- Q: Is the diesel generator the backup for the backup Uninterruptible Power Supply (UPS) batteries?
 - A: Yes. The back-up diesel generators can maintain service and provide time to address power deficiency.
- Q: Is the primary power feed to the WTP underground?
 - A: Yes. The City is in discussions with Dominion to put other power feeds underground as well.
- Q: How does the City's plant compare to Chesterfield and Henrico?
 - A: The City's electrical systems and pumps are underground in the basement, whereas the Counties' are elevated such that there is not a flooding risk like that found at the City's WTP. Because of this, if the Counties lose power, the concerns about critical equipment being flooded are not the same.
- Q: Are there automatic transfer switches?
 - A: Dual power feeds are a requirement. The Capital Improvement Plan (CIP) to upgrade critical infrastructure is phased through multiple years. The diesel back-up generators now have automatic transfer, which was not the case in 2025.
- Q: Is the estimate of cost for the City's proposed WTP filter upgrade project tied to a date?
 - A: Cost for the project is estimated in 2025 dollars and could go up or down depending on when projects are completed.
- Q: How do the projects in the letter from Avula compare to the projects in the VDH report?
 - A: They are very similar, equivalent in order of magnitude.
- Q: Are the projects listed (in the PowerPoint slides) in order of priority?
 - A: No, they are not listed in a particular order. Anything from the City's CIP is on the list.
- Choosing a candidate project for funding depends on four criteria: its regional benefit, readiness to proceed, cost, and value in improving the water system. The General Assembly (GA) funding is time limited, so it is best to choose a project that is ready to go.

- Q: Is funding in place to proceed with the filter upgrade even if GA, Budget Bill Item 283 funding is not allocated?
 - A: No. The City's rate model for this year assumed that the GA would fund part of the City's proposed filter upgrade project. If GA funding is not allocated toward this upgrade, then the City would need to find other funding, which would likely mean an increase in rates or deferment of other projects.
 - It's important to understand that the project must go forward so that the City is in compliance with VDH's consent order, regardless of the funding source. And it is the most shovel-ready of all the projects.
 - The letter from Mayor Avula to Governor Youngkin requested \$80 million. The City was seeking a much larger amount of funding than was provided in the Budget Bill. The City's rate model represents the City's share of capital improvements, which are a fraction of the project's whole cost. Projects at the WTP are funded by all localities in relative percentages. For the proposed \$32.8 million of requested funding from the Budget Bill for the filter upgrade project, the City reported that if the Budget Bill funding was not available and not recommended by the workgroup, then the City believes the full \$43.8 million would need to come from other possible sources: (1) reserve funds, (2) delayed project start, (3) and/or increased customer charges. The proportional project costs from the neighboring jurisdictions pursuant to contractual agreements for capital improvement projects would increase without the Budget Bill funding. With the \$32.8 million from the Budget Bill, the region's local share of costs for the project would be about \$11 million. The regional partners would receive approximately \$21.6 million of the grant based on contractual agreements and the City would receive approximately \$11.2 million.
- Q: Has the project's costs been encumbered?
 - A: No, but the City has authorization to spend funding on the project.
- Q: Would the City have to go through another competitive process to apply for \$12.8 million in additional funding from VDH?
 - A: Likely, no. There is \$32.85 million available to go to the City and regional projects. This Workgroup can make recommendations that additional funding should go to the City.
- Q: Did bids for the filter project come in within budget?
 - A: Believe so but will confirm.
- Q: Are any other projects shovel ready?
 - A: No other projects are ready to be constructed at this time.
- Q: Which other projects would be next in readiness, and along what timeline?
 - A: Some research would need to be done on this, but there are a few that would become ready in 2027.
- Q: Is there a secondary project that should be considered?
 - A: There are no other projects that cost close to \$20 million.
- Workgroup members want to make sure they are doing everything possible to prevent another water crisis.
- General acknowledgment of, and confidence in, the expertise of the Utility Directors was expressed by the city and county administrators. They all expressed confidence and trust in the solutions recommended by the Utility Directors.
- Some concern was expressed, however, about the compressed timeline in which the workgroup was being asked to make decisions, and that time for visiting the plant and building understanding of what exactly was needed and being proposed was not reasonable.

- There was concern that the City's proposed WTP filter upgrade project was being forced upon the workgroup as the only viable option. Despite the July 15, 2026, utility director discussion, some felt that more information and time was needed to consider all possible projects.
- The IEN mediators, along with some members of the Workgroup, emphasized that, despite the time pressure of the process, it was nevertheless important for all member concerns to be heard and addressed.
- This discussion ultimately led to an agreement that the Workgroup should have a joint site visit before making a final decision.

VII. Introduction of Consensus Building Technique: The IEN mediators introduced the consensus building process, reiterating that it would be used as a tool for deliberation (i.e., efficiently and inclusively surfacing areas of agreement / disagreement as well as issues, concerns, and ideas). They also reiterated that the Workgroup would use majority voting for all final decisions, per the HB30 charge, and clarified that consensus testing would be used only for the deliberation part of discussions and not for the final votes. Workgroup members were asked to practice the consensus building technique, using cue cards of three colors (green, yellow, red) to indicate their willingness to use this tool as part of the Workgroup process. *Full consensus was achieved on that proposal.*

VIII. Deliberation on Capital Improvement Options: The Workgroup proceeded to discuss the proposed capital improvement project for the City of Richmond, described as the WTP filter upgrade project that costs about \$43 million, of which there was about \$32.85 million available from the Budget Bill funding after accounting for other priority projects. Summaries of key discussion areas are captured below:

- In the course of deliberation and consensus testing, one Workgroup member raised objections about the overall process. Concerns included that it seemed the outcome of a capital improvement process was a foregone conclusion, and that the use of colored cue cards was not necessary.
 - The mediators and VDH acknowledged the member's concerns, affirming that the legislative timeline is extremely challenging, and that the report to the GA would include whatever the Workgroup could reach agreement. It was clarified and affirmed that, should the Workgroup not reach an agreement on use of capital funds in the short time available, the report would document that initial outcome. The Workgroup will continue to meet beyond the initial three-meeting process as required by Item 283 of the Budget Bill.
 - Questions were raised about what would happen if the Workgroup could not reach a decision on the amount of funding for the City's proposed WTP filter upgrade project or the City's recommended project for grant funding, especially in light of the VDH grant timeline. VDH clarified that VDH would still be required to allocate the Budget Bill's grant funds, and VDH would have to do so even in the absence of a recommendation from the Workgroup. VDH acknowledges that \$32.85M could be allocated to the City for the filter replacement project, and in the absence of a Workgroup decision, VDH would likely try to move forward with this funding amount as it addresses one of the key problems identified by the VDH engineering report, helps a large population, and helps avoid a future water crisis.
 - The mediators also explained that their role was to ensure that the process was fair and credible, and that they viewed it as important to slow down the process to surface and adapt to member concerns. IEN mediators emphasized that, while there was a

recommendation from the VDH and the Utility Directors to proceed with recommending the proposed capital improvement project, any recommendations from the Workgroup would be determined by the Workgroup members, hopefully within the next three scheduled meetings.

- The Workgroup discussed whether to undertake consensus testing or a formal vote on the City's proposed WTP filter upgrade project.
- Members raised questions and concerns about timing and how not voting could impact the Memorandum of Agreement (MOA) that was supposed to be completed by August 31, per the Budget Bill's charge. VDH affirmed that it could send a draft MOA to the City of Richmond with an understanding that final details are awaiting Workgroup recommendations.
- Some members commented that the WTP filter upgrade project is a good candidate project, which addresses root issues and would be a good use of the funding. They expressed that the project needs to happen because it addresses the improvements required in the VDH report, the Consent Order, and provides regional benefits. Additionally, they noted that it is a shovel-ready, large project, and that the City's proposed project would expend the GA funds within the required timeframe.
- Continued frustration was expressed about the process timeline and the inherent misalignment between the legislative timeline and the City and project timelines. This was adding unwanted pressure to the Workgroup decision-making timeline and process. Discussion on this reality also affirmed the opportunity on the table – to make use of the funding – and the desire to make good use of it.
- IEN mediators tested for consensus about the following proposals (reiterating that these tests are to be seen as straw polls and *not* binding votes):
 - 1. *Viability of the filter upgrade as a candidate project*, meaning that it met the four criteria laid out at the beginning of the meeting.
 - TEST: All green (strongest possible consensus).
 - 2. *It would be helpful to have the next meeting at the plant.*
 - TEST: All green (strongest possible consensus).
- One member asked that a site visit to the WTP be considered. In discussing this, another member noted the meaningful difference between “consensus and comfort,” acknowledging the value of slowing down for information gathering even if there is broad agreement. Waiting for a final vote until after a site visit would give Workgroup members time to consider and feel comfortable with the proposal.
- Q: If one project goes forward and other projects don't, is there a chance the WTP filter upgrade project won't work if not fully funded at \$32.85 million?
 - A: Other projects will move forward pursuant to the City's CIP and available funding. The Workgroup can offer additional recommendations on repairs and infrastructure projects at the WTP. VDH will move forward with allocating the funding available after understanding the Workgroup's recommendations.

- The City is willing to have additional one-on-one conversations with individual Workgroup members between meetings if specific members want more information about the proposed WTP filter upgrade project. Conversations about the WTP's critical infrastructure must be in closed session with the Workgroup as a whole.
- Q: If bids come in less than the estimates, is there more money on the table?
 - A: Grants can be amended. It is easier to reduce costs than increase them.
 - Not all of the bids have come in.
- IEN tested for consensus on the following two final proposals (a straw poll, not a binding vote):
 - *3. The likelihood, that after consultation with others, that they would vote to approve spending \$20 million on the proposed filter upgrade project.*
 - TEST: All green (strongest possible consensus).
 - *4. The likelihood, that after consultation with others, that they would vote to approve spending \$32.85 million on the proposed filter upgrade project.*
 - TEST: All green (strongest possible consensus).

IX. Additional Requests for Information to be Provided at Meeting #2:

- Concerns and questions were raised about other projects on the City's list of capital improvements, and whether some of them would be good alternative candidates for the VDH funding. The City responded that they are willing to speak with individual Workgroup members on a one-on-one basis about other projects needed at the WTP and how they compare in readiness and timelines, but that a formal exercise to prioritize all projects for the Workgroup might not be a good use of time. The City expressed that the proposed WTP filter upgrade project best meets all criteria for the available Budget Bill funding, and that addressing it first would help to advance other projects (while delaying the Budget Bill funding for the WTP filter upgrade project would conversely delay other capital improvement projects at the WTP).
- Members asked for more information about project costs and bids that have been received. The City agreed to provide that information.

X. Next Steps and Action Items: The Workgroup discussed the time and location of the next meeting. Because a tour of the WTP will require a closed meeting considering the need to visit critical infrastructure, there was discussion regarding the best way to arrange this in full compliance with public meeting guidelines and FOIA. The Workgroup considered options and ultimately decided to convene an open meeting at the WTP on the date of the next scheduled meeting (September 11, 9:00AM). After opening the meeting, members anticipated that the Workgroup would enter a closed session to conduct an inspection of critical infrastructure. The Workgroup could then reconvene in a public meeting to continue discussion on the proposed WTP filter upgrade project. An agenda with logistical details will be publicly posted before the next meeting on 9/11/26.

Specific action items stemming from Meeting 1 included:

- The City will provide information about the filter upgrade costs and project bids to the Workgroup.
- VDH will circulate a draft MOA for the Workgroup to review ahead of the next meeting.
- The Workgroup will reconvene on September 11 at the WTP, with the intention of going into a closed executive session site visit to evaluate critical infrastructure of the Richmond WTP,

following which the Workgroup would conduct an open meeting for discussion and formal vote on the proposed project.

APPENDIX – City of Richmond Presentation

City of Richmond Handout

VDH Presentation



Department of Public Utilities

Project Scope Summary – Richmond WTP Filter Upgrades

Project Information

The City of Richmond Department of Public Utilities is undertaking a comprehensive upgrade of the Water Treatment Plant's (WTP) 22 gravity filters across Plant 1 and Plant 2. The project follows findings from the 2020 Filter Evaluation Report, which identified aging equipment, media condition, and system reliability improvements. This Filter Evaluation Report outlines the scope and design basis for the Filter Upgrade Project.

1. Filter Media & Trough Replacement

Both treatment trains will receive:

- Replacement of all filter media due to useful life, reduced depths, and excessive solids retention.
- New wash water troughs to modernize backwash hydraulics and improve filter performance.

2. Instrumentation & Controls Upgrades

All filter instrumentation has is near or at its useful life and will be replaced, including:

- Effluent flow meters (Plant 1 venturis replaced with magnetic flow meters; Plant 2 mag meters replaced in-kind).
- Differential pressure transmitters (head loss monitoring).
- Ultrasonic level switches.
- Replacement of turbidimeters.
- Updated SCADA integration and installation spacing to reduce risk of leak-related equipment damage.



3. Valve, Gate, and Actuator Replacements

- Any identified actuators not already replaced will be replaced
- Plant 2 hydraulic actuators will be fully converted to electric operation.
- Existing PLC control logic will be retained; only the actuation hardware is replaced.



DEPARTMENT OF
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Project Scope Summary – Richmond WTP Filter Upgrades

4. Air Scour System Improvements

- Replacement of blowers and associated electrical components.
- Electrical upgrades to Motor Control Center, integration of VFDs, and structural modifications to support new blower configurations.



What is the overall purpose of these upgrades, and what are the benefits to regional stakeholders?

- Improve overall filtration performance.
- Replace aging, maintenance-intensive equipment.
- Improve backwash performance and reduce turbidity spikes after filter ripening.
- Enhance operational resilience through blower redundancy and addition of modern instrumentation.
- Ensures regulatory compliance and enhances overall facility reliability

City of Richmond Department of Public Utilities (DPU)

Richmond Regional Water Workgroup
08/28/2026



DEPARTMENT OF
**PUBLIC
UTILITIES**

Agenda

Existing CIP
Program

System
Enhancements

Regional
Coordination

Compliance Update

Wholesale Partner
Updates



Drinking Water System At-a-Glance

- 132 MGD WTP: First part built in 1924, expanded in 1950, serves Richmond, Henrico, Chesterfield, Hanover
- 9 pump stations
- 9 zones
- 10 storage tanks, including 55 MG Byrd Park Reservoir
- 1,000+ miles of transmission lines and water mains
- ~20k valves
- ~60k service lines



Byrd Park Reservoir, roof under construction

Existing CIP Program

Approved Budget

Water Distribution System Improvements

Category	Utilities	Department	Public Utilities
Location	Citywide	Award #	500059,61,62,63,64/500656
District	CW	Project #	Multiple



Description & Scope Provide funding for installation of water mains to serve new customers and meter programs for the rehabilitation of existing water mains and services. Also included are ancillary projects to renew or replace mains in conjunction with projects being done by other City of Richmond agencies or the State. This project also allows for the purchase of replacement vehicles and equipment used to provide services throughout the Department of Public Utilities' Water Utility service territory.

History & Key Milestones This project has been funded continuously over a historical period of time, but only to the extent to be reactive to emergency situations. However, recent funding has been on a more proactive basis as many of the water mains have reached or surpassed their useful lives.

Funding Sources(s) Utility Revenue Bonds, Pay-as-you-go (Cash)

Financial Summary

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2027 - 2031
FY 2027 Adopted	-	82,182,000	57,722,000	55,733,000	57,742,000	60,218,000	313,597,000
FY 2026 Adopted	41,277,000	30,230,000	30,271,000	30,313,000	30,357,000	-	121,171,000
Change	-	51,952,000	27,451,000	25,420,000	27,385,000	60,218,000	192,426,000

Operating Impact (Amount & Explanation)

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2027 - 2031
Amount	-	-	-	-	-	-	-

Explanation

N/A

		FY 2027 Budget Distribution	
		Amount	
Total Project Cost	728,493,907		
Prior Year Appropriation	414,896,907		
Prior Year Available	44,284,598		
FY 2027 Adopted	82,182,000		
FY 2028 - 2031 Planned	231,415,000		
Remaining Need	-	Total	82,182,000
		Planning/Design	-
		Acquisition	-
		Site Improvement	-
		Construction	75,455,769
		Furniture/Fixtures/Equipment	2,066,231
		Other	4,660,000

Note: The distribution amounts shown are estimated and are subject to change.

City of Richmond, Virginia Adopted Budget 2027

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Water Plant & Pumping Improvements

Category	Utilities	Department	Public Utilities
Location	Citywide	Award #	500074,76,78/500105,06,07,16,17/501060
District	CW	Project #	Multiple



Description & Scope Provide funding to replace systems that have reached or surpassed their useful service lives, maintain compliance with new drinking water quality regulations, and to meet county wholesale water contract capacity requirements.

History & Key Milestones A comprehensive study of the City of Richmond's water purification plant and pumping system indicated that substantial improvements were needed to meet projected water demand and to comply with the requirements of the Safe Drinking Water Act and State Health Department regulations. The program for accomplishing these improvements began in the mid-1970s.

Funding Sources(s) Utility Revenue Bonds, Utility Pay-as-you-go

Financial Summary

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2027 - 2031
FY 2027 Adopted	-	130,483,000	8,535,000	8,738,000	14,579,000	25,149,000	187,484,000
FY 2026 Adopted	37,984,000	7,533,000	11,641,000	1,483,000	1,542,000	-	22,199,000
Change	-	122,950,000	(3,106,000)	7,255,000	13,037,000	25,149,000	165,285,000

Operating Impact (Amount & Explanation)

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2027 - 2031
Amount	-	-	-	-	-	-	-

Explanation

N/A

		FY 2027 Budget Distribution	
		Amount	
Total Project Cost	745,451,175		
Prior Year Appropriation	557,967,175		
Prior Year Available	222,541,317		
FY 2027 Adopted	130,483,000		
FY 2028 - 2031 Planned	57,001,000		
Remaining Need	-	Total	130,483,000
		Planning/Design	-
		Acquisition	-
		Site Improvement	-
		Construction	96,419,275
		Furniture/Fixtures/Equipment	34,063,725
		Other	-

Note: The distribution amounts shown are estimated and are subject to change.

City of Richmond, Virginia Adopted Budget 2027

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Approved Budget

Water Transmission Main Improvements

Category	Utilities	Department	Public Utilities
Location	Citywide	Award #	500065,66,67,68,69,71,73
District	CW	Project #	Multiple



Description & Scope	Provide funding for construction of water transmission mains and tanks to provide service to the City of Richmond as well as Henrico, Hanover, and Chesterfield Counties, maximizing use of the City's water purification plant. All projects undertaken for the exclusive benefit of Henrico, Hanover, and Chesterfield Counties are funded 100 percent by each county.
History & Key Milestones	Past projects included new transmission mains to facilitate increased water sales to Henrico, Chesterfield, and Hanover Counties, and in FY 2012, the Hioaks Elevated Water Tank in the southwestern portion of the City was completed. In FY 2013, DPU completed the replacement of a large section of the 36" Korah 3 transmission main in the Kanawha Canal.
Funding Source(s)	Utility Revenue Bonds, Utility Pay-as-you-go

Financial Summary

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2027 - 2031
FY 2027 Adopted	-	24,583,000	28,690,000	16,720,000	34,106,000	29,256,000	133,355,000
FY 2026 Adopted	6,205,000	13,706,000	6,157,000	6,300,000	12,817,000	-	38,980,000
Change	-	10,877,000	22,533,000	10,420,000	21,289,000	29,256,000	94,375,000

Operating Impact (Amount & Explanation)

	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Total FY 2027 - 2031
Amount	-	-	-	-	-	-	-

Explanation

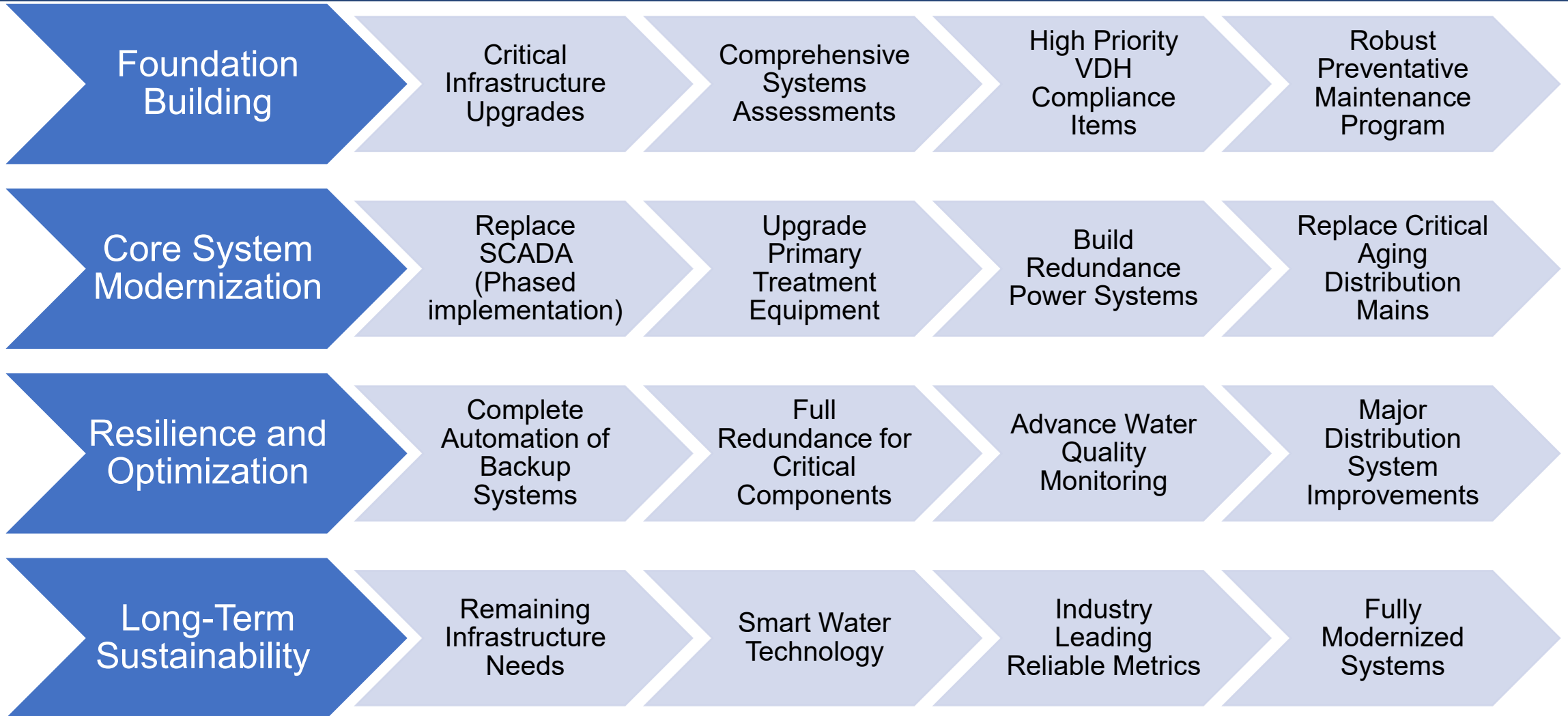
		FY 2027 Budget Distribution	
		Amount	
Total Project Cost	283,295,169	Planning/Design	-
Prior Year Appropriation	149,940,169	Acquisition	-
Prior Year Available	70,430,964	Site Improvement	-
FY 2027 Adopted	24,583,000	Construction	24,583,000
FY 2028 - 2031 Planned	108,772,000	Furniture/Fixtures/Equipment	-
Remaining Need	-	Other	-
		Total	24,583,000

Note: The distribution amounts shown are estimated and are subject to change.

City of Richmond, Virginia. Adopted Budget 2027

Capital Improvement Program

10 Year Modernization Plan



System Enhancements

System Enhancements - Planning

- Created 52 Standard Operating Procedures
- Restructured Organization
- Additional Operational Staff Added
- Annual Training/Drills
- Filter Optimization Plan
- Preventative Maintenance Review
- Multiple Condition Assessments
- Water Treatment Plant Master Plan Update
- Project Execution Rate near 80%
- COOP Revised



Regional Coordination

Re-established Regional Coordination

- **Quarterly DPU Director Meetings**
- **Capital Improvement Project Meetings (Held July 15, 2026)**
- **Regional Tabletop Exercise Meeting (Held August 25, 2026)**
- **Regional Drought Response Coordination**
- **Regional Demand Management for Operational Coordination**
- **Planned Emergency Operational Drills**

Compliance Update

Quarterly Update



DEPARTMENT OF PUBLIC UTILITIES

To: Compliance Specialist
VDH - Office of Drinking Water - Richmond Field Office
109 Governor Street, 6th Floor
Richmond, Virginia 23219

From: Scott Morris, DBA, P.E.
Director, Department of Public Utilities
City of Richmond

Date: July 10, 2026

Subject: Quarterly Progress Report Pursuant to Consent Order for City of Richmond Waterworks (PWSID No. VA4760100) -- Appendix A, Paragraphs (a) and (e)

In accordance with the Consent Order issued by the State Board of Health on June 12, 2025, for the City of Richmond (City) Waterworks (PWSID No. VA4760100), the City hereby submits this quarterly progress report for the second quarter of 2026.

Paragraph (a) requires quarterly progress reports on the City's efforts to address the significant deficiencies identified in the Sanitary Survey Report, as detailed in the Significant Deficiencies Corrective Action Plan (CAP). Paragraph (e) requires quarterly updates on the progress of corrective actions derived from various compliance documents, including the EPA Inspection Report, the Sanitary Survey Report, the After-Action Assessment Report, and the Comprehensive Waterworks Evaluation and Cost Estimate.

As permitted under paragraph (e), this submission combines the reporting requirements for both paragraphs (a) and (e) into a single comprehensive update.

Executive Summary of Progress

During the second quarter of 2026, the City demonstrated measurable progress toward full compliance with the Consent Order, achieving two additional completions during the quarter (AOC-31 on June 1, 2026, and HTNB-11 confirmation in June 2026) and advancing critical infrastructure improvement projects into active procurement and construction phases.

The City's overall compliance rate has improved to 94.0%, reflecting the completion of AOC-31, and HTNB-11 in June 2026. Of the 233 total items being tracked, 219 are now fully resolved, with 14 items continuing in progress with defined timelines and responsible parties. During the second quarter of 2026, the City advanced multiple capital improvement projects from procurement phases into active construction, with significant progress on clearwell overflow system improvements and several other critical infrastructure projects.

Wholesale Partner Updates

Thank you



Jeff McBride

Director of Water and
Administration

Department of Public Utilities

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Department of Public Utilities

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Comprehensive Waterworks Evaluation and Cost Estimate Report Overview

Agenda



Budget Bill requirement to utilize Comprehensive Waterworks Evaluation and Cost Estimate



How the Waterworks Evaluation came about



Brief discussion of January 6, 2025 events and root cause



Summary of condition assessment and recommended projects



City of Richmond's proposed project

Budget Bill HB30 (Chapter1), 2026 Session, Item 283

...the Department shall allocate no less than \$20,000,000 to the City of Richmond which shall be designated for the purposes of capital improvements and repairs to the City of Richmond's Water Treatment Plant as set forth in the Virginia Department of Health's Comprehensive Waterworks Evaluation and Cost Estimate report dated April 8, 2025, and pursuant to recommendations of the Richmond Regional Water Workgroup established in this Item.

Richmond Work Group Shall:



Review and make recommendations concerning the program for maintenance of and capital improvements and repairs to the City of Richmond's Water Treatment Plant to ensure its reliability as a supplier of drinking water

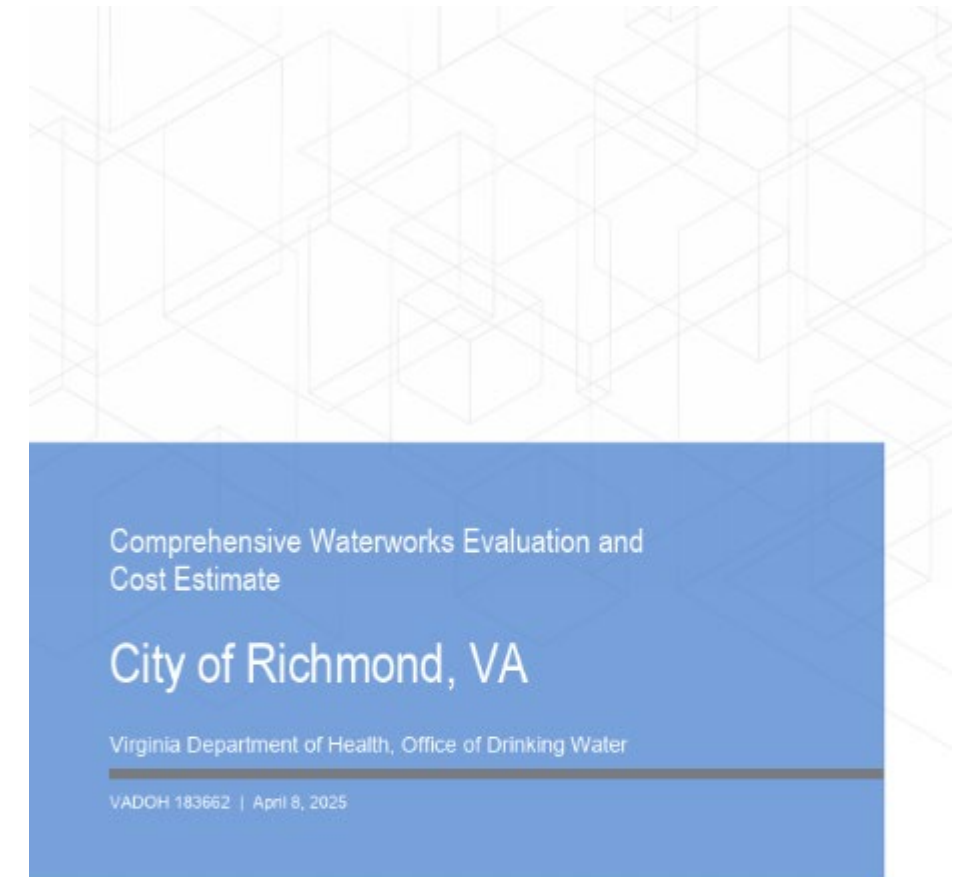
January 6, 2025 Event

On January 6, 2025, the City of Richmond Water Treatment Plant experienced a power outage from a winter weather event

- Facility without power for about 1.5 hours, significant flooding and impacts to electrical, filtration, and pumping facilities
- Water storage volumes and distribution system pressure fell below 20 psi requiring a Boil Water Advisory
- Full production restored by January 9
- Boil Water Advisory lifted January 11

Comprehensive Report

- At the direction of Governor Youngkin, VDH hired Short Elliott Henderson, Inc. (SEH) to perform:
 - Root Cause Evaluation
 - Condition Assessment



Root Cause Evaluation

- Develop timeline of events between January 5, 2025, and January 11, 2025;
- Provide recommendations related to capital improvements, operational procedures, maintenance, and emergency preparedness

Condition Assessment



Comprehensive on-site evaluation of physical condition, capacity, reliability, performance, and operational and maintenance procedures



Evaluation of design to current waterworks design regulations



Evaluation of general deficiencies and recommendations for potential improvements

Root Cause Evaluation

- “The plant contains a vulnerability built into the filter buildings dating to the original construction 100-years ago.”
 - Gravity flow from intake through filters into small clearwell;
 - Filtered water pumps in basement (subject to flooding)
 - Electrical equipment placed in basement (subject to flooding)
 - Water level in clearwell must be constantly controlled or flooding will occur
 - New designs would require overflow piping to avoid flooding

Root Cause Evaluation

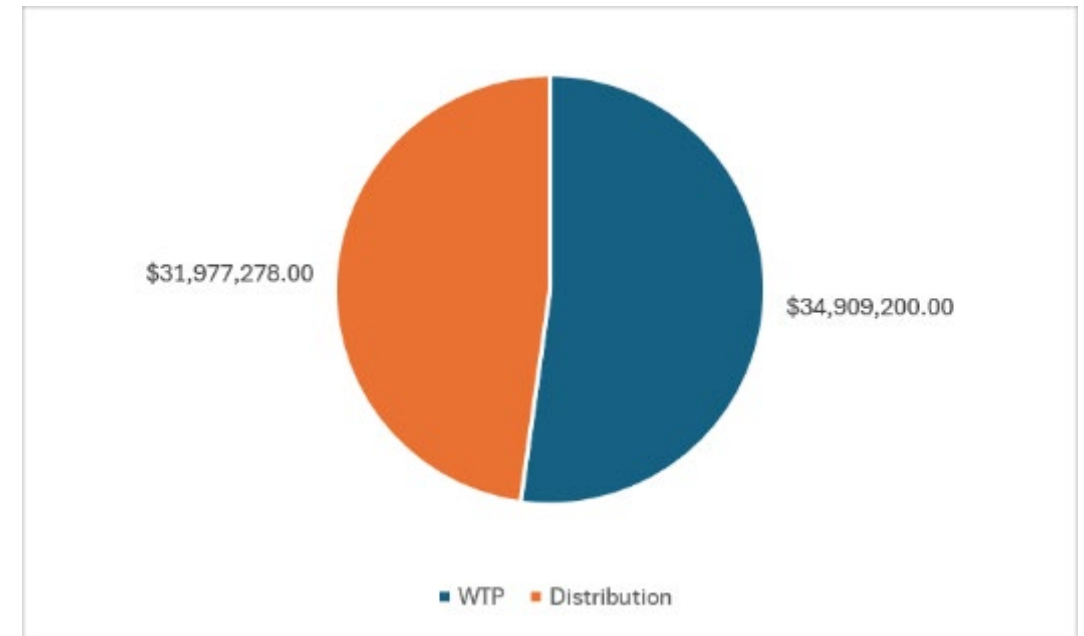
- Critical Failures (Infrastructure)
 - Power Redundancy Failures
 - City has addressed since Jan 2025
 - Capacity constraints of existing clearwell
 - Site limitations pose challenges
 - Critical equipment at risk of flooding
 - Proposed project resolves some of these concerns
 - Delays in full recovery due to equipment



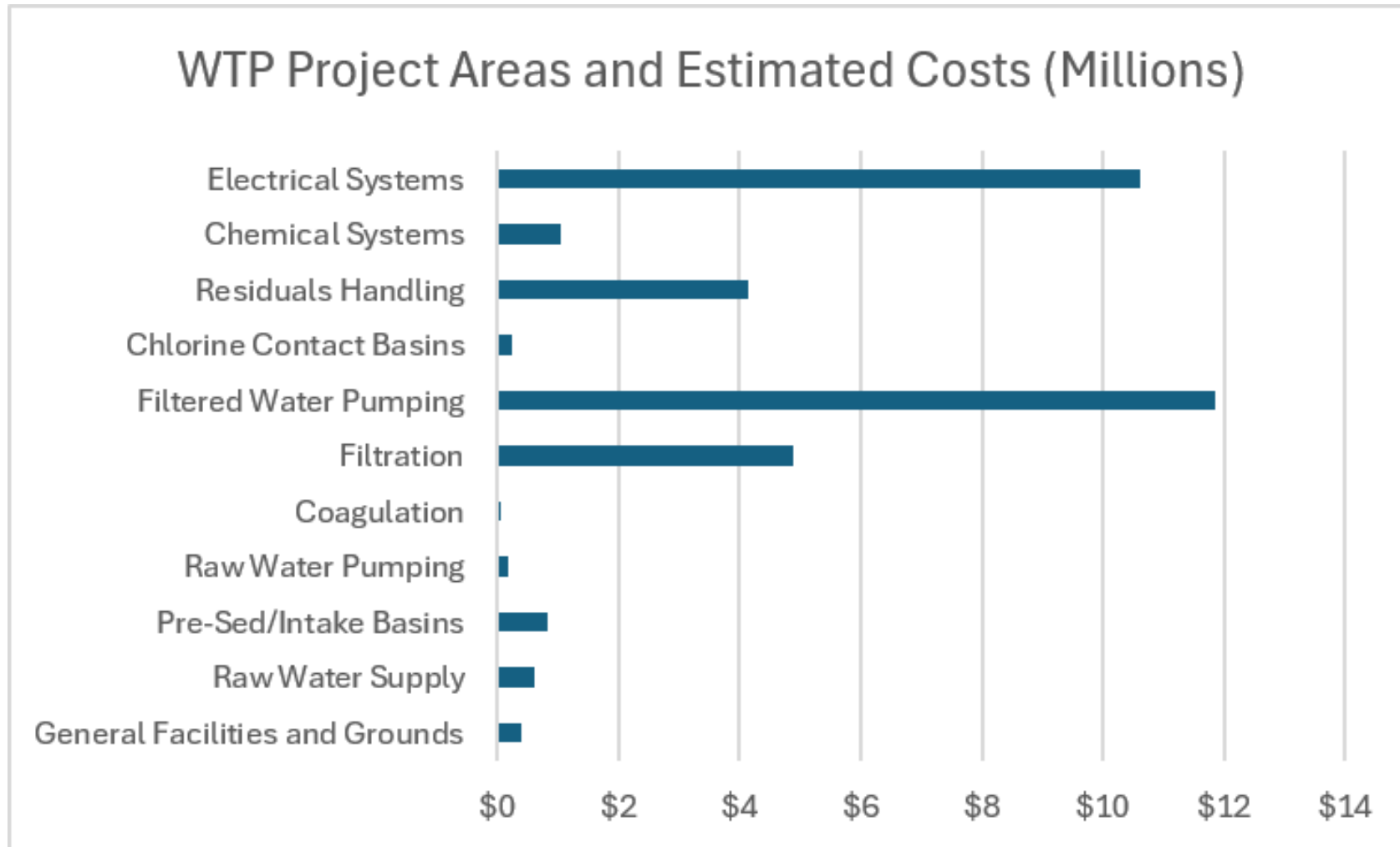
Condition Assessment

- SEH, Inc. identified critical infrastructure and potential vulnerabilities
- Evaluated existing infrastructure
- Recommended capital improvements
- Offered new maintenance activities

Total \$67 million infrastructure improvements



Condition Assessment



WTP Site Constraints

- Site constrained by flood wall, railroad tracks/James River, Kanawha Canal
- Previous upgrades and projects have taken up nearly all available footprint
- Condition Assessment recommends moving pumps out of basement
 - Richmond proposal includes moving critical electrical equipment out of basement



Projects in Letter from Mayor Avula to Gov. Youngkin 2025

Project Name	FY27/28 Cost	Total Cost	VDH Report	Regional Project	Eligible
Pumping Process Control Project Phase 3B (SCADA DPC Replacements)	\$1.8M	\$4.3M	Yes	Yes	Yes
Pumping Process Control Project Phase 3C	\$2.0M	\$3.3M	No	Yes	No
Waste Pumping & Control Sys Improvements	\$4.6M	\$7.3M	No	Yes	No
Feeder Channel Renovations Phase 1B	\$3.4M	\$11.5M	Yes	Yes	Yes
Feeder Channel Renovations Phase 2	\$18.0M	\$30.5M	Yes	Yes	Yes
Feeder Channel Renovations - Retaining Wall Restoration	\$1.7M	\$3.0M	Yes	Yes	Yes
Water Treatment Plant (WTP) Filtration System and Filter Media Replacement	\$31.1M	\$43.8M	Yes	Yes	Yes
WTP Electrical Reliability & Resilience Improvements Phase 1 and 2	\$2.5M	\$5.0M	Yes	Yes	Yes
WTP Lime Storage and Feed System Replacement	\$1.2M	\$2.1M	Yes	Yes	Yes
Clearwell and Triple Conduit Concrete Restoration	\$3.3M	\$4.2M	Yes	Yes	Yes
Sodium Hydroxide (Caustic Soda) Tanks Replacement	\$1.5M	\$2.5M	No	Yes	No

Projects in Letter from Mayor Avula to Gov. Youngkin 2025

Project Name	FY27/28 Cost	Total Cost	VDH Report	Regional Project	Eligible
Kanawha West Canal Improvements	\$3.5M	\$3.8M	No	Yes	No
PLC and SCADA Upgrade at the Water Treatment Plant	\$1.6M	\$11.5M	Yes	Yes	Yes
Korah Pump Station (PS) #2 - Pump Motor Starter & Korah 1 DPC Replacement	\$5.5M	\$7.8M	Yes	No	No
VFD Replacements - Korah 3 PS, K3-3, K3-4, K3-5	\$13.6M	\$18.7M	Yes	No	No
Byrd Park Reservoir Rehabilitation	\$30.0M	\$103.7M	Yes	No	No
Byrd Park Main PS Renovations	\$24.5M	\$30.3M	Yes	No	No
Trafford PS Upgrade and Generator/Substation/Transformer/UPS System Upgrades	\$3.6M	\$20M	Yes	No	No
Columbus PS Structure Repairs and Roof Replacement	\$1.1M	\$1.5M	No	No	No
Columbus PS VFD Replacement	\$2.0M	\$2.0M	No	No	No
Cofer Road PS VFD Replacement	\$2.0M	\$2.0M	No	No	No
Church Hill PS VFD Replacement	\$1.5M	\$1.5M	No	No	No

Projects in Letter from Mayor Avula to Gov. Youngkin 2025

Project Name	FY27/28 Cost	Total Cost	VDH Report	Regional Project	Eligible
Critical Valve and PRV Station Replacement Project 7A & 7 Zone	\$8.3M	\$8.3M	No	No	No
24" Gravity Transmission Main Relocation	\$4.9M	\$6.0M	No	No	No
Jahnke Road Main Relocation	\$3.2M	\$5.3M	No	No	No
Ginter Park Tank Rehab	\$2.4M	\$2.6M	Yes	No	No
Jahnke Rd Tank Rehab	\$1.5M	\$2.3M	Yes	No	No
Woodside Tank Rehab	\$2.9M	\$2.9M	Yes	No	No
Transmission Main Byrd Park Main to Reservoir	\$11.0M	\$23M	No	No	No
Korah-3 Pipe Replacement:	\$4.5M	\$17.5M	No	No	No
Belvidere St Bridge 16" Pipe Replacement	\$2.2M	\$2.2M	No	No	No
16" Waterline Replacement - E Cary St	\$1.1M	\$1.1M	No	No	No
Water Distribution Pipe Replacement (End of Useful Life or Leak Prone)	\$63.7M	Ongoing	No	No	No

Proposed Project

- The Project will include:
 - Replacement of filter valves; structural repairs, demolition, electrical improvements, and other related work.
 - Media replacement for 22 filters.
 - Filter concrete rehabilitation/replacement where necessary.
 - Replacement and relocation of the associated electrical equipment to a new electrical room one level up from the existing (basement) level.
 - Miscellaneous structural and architectural improvements, which include new electrical room HVAC improvement.
 - Plant 2 filter concrete deck topping and pipe gallery catwalk replacement, and Plant 1 Filter Building roof repair.

Funding Drinking Water Projects

- Budget Bill Item 283 - <https://budget.lis.virginia.gov/item/2026/2/HB30/Chapter/1/283>
 - Established Richmond Regional Water Workgroup
 - Provides \$50 Million funding to upgrade or replace existing drinking water infrastructure
 - Locality must provide proof of at least 25% match for the cost of the project
 - No grant to a locality shall fully fund a drinking water project
 - Identified 5 localities for priority consideration
 - City of Richmond
 - Town of Orange
 - Town of Jarratt
 - Town of Blackstone
 - Fairfax County

Priority Ranking: Health-Based Criteria

FCAP's scoring system places the greatest weight on **direct public health impact**. Projects addressing acute threats receive the highest priority, followed by chronic health concerns and broader public health improvements. Understanding these tiers helps utilities frame their applications effectively.

1

Acute Health Issues — Highest Priority

Active enforcement actions, Boil Water Notices (BWN), SWTR/TCR violations, GUDI determinations

2

Chronic Health Issues

PMCL violations including proposed PFAS, lead/copper rule issues, ETT exceeding 10, disinfection byproduct concerns

3

Public Health

Inadequate pressure, leakage reduction, insufficient home water supplies, SMCLs, elevated treatment techniques (ETT 5–10)

4

Compliance with Regulations

Projects advancing regulatory compliance with applicable drinking water standards

Priority Ranking: Other Scoring Factors

Beyond health-based criteria, FCAP evaluates a range of additional factors that reflect a project's affordability, regional impact, readiness to proceed, and long-term sustainability. These factors can meaningfully influence a project's ranking on the PPL.



Rates vs. Median Household Income

Projects serving communities where water rates represent a significant burden relative to median household income receive additional scoring consideration.



Readiness to Proceed

Projects further along in design and procurement receive priority — demonstrating the ability to close loans and begin construction on schedule.



Regionalization

Projects that consolidate or connect smaller systems to improve reliability, reduce costs, and strengthen long-term operational capacity.



Sustainability & Green Project Reserve

Availability of other funding sources, projected cost per connection, asset management plan, and Green Project Reserve eligibility all factor into the final score.

Other Funding Applications- Budget Bill HB30, Item 283

Funding Applications				
Applicant	Total	GA eligible 75%	Local Match 25%	Project Name
City of Richmond Application	\$ 43,846,000.00	\$ 32,850,421.50	\$ 10,995,578.50	WTP Filter Upgrades
Town of Orange	\$ 2,100,000.00	\$ 1,575,000.00	\$ 525,000.00	WTP Liquid Feed Building
Fairfax County - Tauxemont Community Water System	\$ 4,656,000.00	\$ 3,492,000.00	\$ 1,164,000.00	Conversion to Surface Water
Town of Blackstone	\$ 9,000,000.00	\$ 6,750,000.00	\$ 2,250,000.00	18" Raw Waterline Replacement
Town of Jarratt - Greensville Co. W&S Authority	\$ 6,443,438.00	\$ 4,832,578.50	\$ 1,610,859.50	Jarratt Water System Improvements
VDH Administration of Grants	\$ 500,000.00	\$ 500,000.00		
Totals if Richmond receives 75% of application	\$ 66,545,438.00	\$ 50,000,000.00	\$ 16,545,438.00	
Note: City of Richmond's 75% GA eligible was reduced by \$34,078.50 to facilitate 75% funding of other projects				

Options

- Option A – City of Richmond Proposal
 - Application received
 - Meets budget bill requirements, including deadline
 - High scoring project
 - Project advertised for bid
 - Substantial completion August 2027
- Option B – Any other project identified on list from Mayor Avula that checks “yes” on list of all categories

Questions?

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Director, FCAP

Anthony.Hess@vdh.virginia.gov