RIVANNA
WATER & SEWER AUTHORITY

Board of Directors Meeting

February 24, 2026

2:15pm

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
434.977.2970
434.293.8858
www.rivanna.org

BOARD OF DIRECTORS

Regular Meeting of the Board of Directors of the Rivanna Water & Sewer Authority

DATE: **FEBRUARY 24, 2026**

LOCATION: **Albemarle County Service Authority**
168 Spotnap Road, Charlottesville, VA 22911

TIME: **2:15 p.m.**

AGENDA

1. ***CALL TO ORDER***
2. ***AGENDA APPROVAL***
3. ***MINUTES OF PREVIOUS BOARD MEETING ON DECEMBER 16, 2025***
4. ***RECOGNITION***
5. ***EXECUTIVE DIRECTOR'S REPORT***
6. ***ITEMS FROM THE PUBLIC***
   Matters Not Listed for Public Hearing on the Agenda
7. ***RESPONSES TO PUBLIC COMMENTS***
8. ***CONSENT AGENDA***
   a. *Staff Report on Administration and Communications*
   b. *Staff Report on CIP Projects*
   c. *Staff Report on Finance*
   d. *Staff Report on Information Technology*
   e. *Staff Report on Operations*
   f. *Staff Report on Drought Monitoring*
   g. *Staff Report on Wholesale Metering*

9. OTHER BUSINESS

a. *Presentation and Consider Vote to Approve: Contribution to Channel Restoration Project*
   Bethany Houchens, Water Resources Coordinator
   Lisa Wittenborn, RCA Executive Director

b. *Presentation: Infrastructure Update*
   Bill Mawyer, P.E., Executive Director

d. *Presentation: Introduction of the FY 27-31 Capital Improvement Program*
   Jennifer Whitaker, P.E., Director of Engineering and Maintenance

c. *Presentation: Capital Projects Funding and Credit Rating Review*
   Lonnie Wood, Director of Finance
   Ted Cole, Senior Vice-President of Public Finance, Davenport & Company

10. OTHER ITEMS FROM BOARD/STAFF NOT ON THE AGENDA

11. CLOSED MEETING

12. ADJOURNMENT

GUIDELINES FOR PUBLIC COMMENT AT RIVANNA BOARD OF DIRECTORS MEETINGS

If you wish to address the Rivanna Board of Directors during the time allocated for public comment, please raise your hand or stand when the Chairman asks for public comments.

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for "Items From The Public, Matters Not Listed for Public Hearing on the Agenda." Each person will be allowed to speak for up to three minutes. When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

During public hearings, the Board will attempt to hear all members of the public who wish to speak on a subject, but it must be recognized that on rare occasion comments may have to be limited because of time constraints. If a previous speaker has articulated your position, it is recommended that you not fully repeat the comments and instead advise the Board of your agreement. The time allocated for speakers at public hearings are the same as for regular Board meetings, although the Board can allow exceptions at its discretion.

Speakers should keep in mind that Board of Directors meetings are formal proceedings and all comments are recorded on tape. For that reason, speakers are requested to speak from the podium and wait to be recognized by the Chairman. In order to give all speakers proper respect and courtesy, the Board requests that speakers follow the following guidelines:

- Wait at your seat until recognized by the Chairman.
- Come forward and state your full name and address and your organizational affiliation if speaking for a group;
- Address your comments to the Board as a whole;
- State your position clearly and succinctly and give facts and data to support your position;
- Summarize your key points and provide the Board with a written statement, or supporting rationale, when possible;
- If you represent a group, you may ask others at the meeting to be recognized by raising their hand or standing;
- Be respectful and civil in all interactions at Board meetings;
- The Board may ask speakers questions or seek clarification, but recognize that Board meetings are not a forum for public debate; Board Members will not recognize comments made from the audience and ask that members of the audience not interrupt the comments of speakers and remain silent while others are speaking so that other members in the audience can hear the speaker;
- The Board will have the opportunity to address public comments after the public comment session has been closed;
- At the request of the Chairman, the Executive Director may address public comments after the session has been closed as well; and
- As appropriate, staff will research questions by the public and respond through a report back to the Board at the next regular meeting of the full Board. It is suggested that citizens who have questions for the Board or staff submit those questions in advance of the meeting to permit the opportunity for some research before the meeting.

The agendas of Board meetings, and supporting materials, are available from the RWSA/RSWA Administration office upon request or can be viewed on the Rivanna website.

Rev. September 7, 2022

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RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
December 16, 2025

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on December 16, 2025 at 2:15 p.m. at Albemarle County Service Authority, 168 Spotnap Road, Charlottesville, VA 22911.

Board Members Present: Mike Gaffney, Jeff Richardson, Sam Sanders (arrived at 2:27 p.m.), Ann Mallek, Brian Pinkston, Quin Lunsford, Lauren Hildebrand.

Board Members Absent: None.

Rivanna Staff Present: Bill Mawyer, Dave Tungate, Lonnie Wood, Jennifer Whitaker, Betsy Nemeth, Daniel Campbell, Austin Marrs, Dyon Vega, Steve Minnis, Sr., Jay Young, Jeff Southworth, Westley Kern, Jacob Woodson, Jon Williams, Leah Beard, Deborah Anama.

Attorney(s) Present Valerie Long

1. CALL TO ORDER

Mr. Gaffney convened the December 16, 2025 regular meeting of the Board of Directors of the Rivanna Water and Sewer Authority at 2:15 p.m.

2. AGENDA APPROVAL

Mr. Gaffney asked if there were any changes or suggestions regarding the agenda. Hearing none, he asked if there was a motion.

Ms. Mallek moved that the Board of Directors approve the agenda. Mr. Pinkston seconded the motion, which carried unanimously (6-0). (Mr. Sanders was absent)

3. MINUTES OF PREVIOUS BOARD MEETING ON NOVEMBER 18, 2025

Mr. Gaffney asked if there were any comments or changes to the minutes of the previous meeting. Hearing none, he asked if there was a motion.

Ms. Mallek moved that the Board of Directors approve the minutes of the previous meeting on November 18, 2025. Mr. Pinkston seconded the motion, which carried unanimously (6-0). (Mr. Sanders was absent)

4. RECOGNITION

a. Resolution of Appreciation for Mr. Jay Young, Assistant Information Systems Administrator

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Resolution of Appreciation for Mr. Jay Young

WHEREAS Mr. Young has served in the Information Technology Department in various positions including Assistant Information Systems Administrator for 17 years; and

WHEREAS over the same period of 17 years, Jay Young's knowledge and understanding of the Authority's Information Technology systems as well as his unwavering dedication and loyalty to the Authority have positively impacted the Authority, its employees, and its customers; and

WHEREAS Mr. Young's authentic commitment to the Authority's values of Integrity, Teamwork, Respect and Quality has guided his leadership in building a professional, responsive and dynamic Information Technology Department that has provided outstanding support for the Authority as well as our community.

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority Board of Directors recognizes, thanks, and commends Mr. Young for his many years of distinguished service, efforts, and achievements, and presents this Resolution as a token of esteem, with best wishes in his retirement.

BE IT FURTHER RESOLVED that this Resolution be entered upon the permanent Minutes of the Rivanna Water and Sewer Authority.

Michael Gaffney, Chairman
Lauren Hildebrand
Quin Lunsford
Ann Mallek Brian Pinkston
Jeff Richardson
Sam Sanders

Mr. Pinkston moved that the Board of Directors approve the Resolution of Appreciation for Mr. Jay Young. Ms. Mallek seconded the motion, which carried unanimously (6-0). (Mr. Sanders was absent)

Jay Young, Assistant Information Systems Administrator, accepted the Resolution. He stated that it had been wonderful and he would miss everyone he had worked with.

Mr. Gaffney thanked Mr. Young for keeping them out of trouble for many years.

Mr. Mawyer stated that in addition to being an IT whiz and helping him with every IT problem, Mr. Young was also a disc jockey, so whenever they had team-building events, Mr. Young would bring the music. He stated that Mr. Young had been a valuable member of their team for 17 years and they appreciated all he had done. He thanked him very much.

b. Resolution of Appreciation for Ms. Betsy Nemeth, Director of Administration and Communications

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Resolution of Appreciation for Ms. Betsy Nemeth

WHEREAS Ms. Nemeth has served as our first Director of Administration and Communications since 2023 managing Human Resources, office administration, public communications and safety programs after joining the Authorities as Human Resources Manager in April 2016, and

WHEREAS over the same period of 10 years, Ms. Nemeth provided expert guidance in employee relations, recruiting, retention, training, benefits planning, and oversight of federal and state employer regulatory compliance issues which positively impacted the Authority, its employees, and its customers; and

WHEREAS Ms. Nemeth's commitment to the Authority's values of Integrity, Teamwork, Respect and Quality has guided her leadership in building a professional and responsive Division that has provided outstanding support for the Authority.

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority Board of Directors recognizes, thanks, and commends Ms. Nemeth for her years of distinguished service, efforts, and achievements, and presents this Resolution as a token of esteem, with best wishes in her retirement.

BE IT FURTHER RESOLVED that this Resolution be entered upon the permanent Minutes of the Rivanna Water and Sewer Authority.

Michael Gaffney, Chairman
Lauren Hildebrand
Quin Lunsford
Ann Mallek
Brian Pinkston
Jeff Richardson
Sam Sanders

Mr. Pinkston moved that the Board of Directors approve the Resolution of Appreciation for Ms. Betsy Nemeth. Ms. Mallek seconded the motion, which carried unanimously (6-0). (Mr. Sanders was absent)

Ms. Nemeth accepted the Resolution. She stated that it had been an absolute pleasure and privilege and she appreciated it. She stated that she was excited for what the future would hold, and she thought a lot was going to happen and it would be great to sit back and watch. She thanked the Board very much.

Mr. Mawyer stated that Ms. Nemeth had done a great job as their first Director of the Administration Communications Division over the last two years. He stated that she had played a big role in helping him develop the organization's growth and development plan, as well as their succession management plan. He stated that Ms. Nemeth had been a confidante at times, always willing to offer her advice and provide a candid perspective. He stated that they appreciated her support over the past 10 years. He stated that one thing that had become apparent was that Ms.

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Nemeth had a strong desire to live in Portugal, which she often shared with them when discussing her adventures. He stated that they wished her the best of luck in her future endeavors.

Mr. Gaffney asked if she had picked out a town in Portugal yet.

Ms. Nemeth stated yes; the town of Espinho, about a half-hour train ride south of Porto, Portugal.

Mr. Gaffney asked if there was a lot of good coast.

Ms. Nemeth stated of course.

Mr. Gaffney stated that it sounded great and congratulated Ms. Nemeth.

c. Resolution of Appreciation for Mr. Brian Pinkston, RWSA Board Member

Resolution of Appreciation for Mr. Brian Pinkston

WHEREAS, Mr. Pinkston has served as a member of the Rivanna Water and Sewer Board of Directors since January 2022; and

WHEREAS, over that same period Mr. Pinkston's demonstrated leadership and understanding of the operations of the Water & Sewer Authority has supported a strategic decision-making process that provided benefits to the customers served by the City of Charlottesville as well as the community as a whole.

During Mr. Pinkston's tenure, major initiatives and projects were strategically implemented to complete the community's long-term drinking water supply plan as well as to enhance other services provided by the Authorities. Significant infrastructure repair and improvement projects totaling over $500M were completed or initiated including construction of:

- *An 8-mile-long raw water pipeline and pump station between the South Rivanna Reservoir and the Ragged Mountain Reservoir*
- *A 5-mile-long raw water pipeline and pump station between the Ragged Mountain Reservoir and the Observatory Water Treatment Plant*
- *Raising the Pool Level at the Ragged Mountain Reservoir to increase storage capacity by 700 MG*
- *Renovations and additional Granular Activated Carbon water treatment facilities at the South Rivanna, Observatory, Crozet and Red Hill Water Treatment Plants*
- *The Central Water Line, a 5-mile-long major drinking water pipeline to serve the Urban Area*
- *The Airport Road Water Pump Station and Piping Project*
- *The South Rivanna River Crossing Project to improve drinking water reliability and capacity in the northern Urban System*
- *A renovation and addition, including an Education Center, of the Moores Creek Administration Building*
- *and a 5-year Strategic Plan to provide direction for the programs of the Authority*

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NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Board of Directors recognize, thank, and commend Mr. Pinkston for his distinguished service, efforts, and achievements as a member of the Rivanna Water and Sewer Authority and present this Resolution as a token of esteem with best wishes in his future endeavors.

BE IT FURTHER RESOLVED that this Resolution be entered upon the permanent Minutes of the Rivanna Water and Sewer Authority.

Michael Gaffney, Chairman
Lauren Hildebrand
Quin Lunsford
Ann Mallek
Jeff Richardson
Sam Sanders

Ms. Mallek moved that the Board of Directors approve the Resolution of Appreciation for Mr. Brian Pinkston. Mr. Richardson seconded the motion, which carried unanimously (6-0). (Mr. Sanders was absent)

Mr. Pinkston stated that he wanted to commend all of his colleagues for the wonderful work that all of them did. He stated that Rivanna was a remarkable example of how exceptional skills and diverse backgrounds came together to address practical needs for their community. He stated that the professionalism, technical mastery, confidence, and passion for the work that he saw in this organization started at the top and permeated through the whole organization. He stated that it started at the Board.

Mr. Pinkston stated that also, this organization embodied the importance of regionalism. He stated that if the City or County tried to do this work by themselves, it would cost a lot more and not be nearly as productive. He stated that this was a wonderful Board that worked well, and the kinds of things they were trying to pull off here were epic. He stated that he encouraged everyone to hold the course.

5. EXECUTIVE DIRECTOR'S REPORT

Mr. Mawyer stated that this was an exciting day for the Rivanna Water and Sewer Authority. He stated that they not only got to congratulate two of their senior managers, Ms. Nemeth and Mr. Young on their retirement and thank them for all their contributions, but also got to thank their Board member Mr. Pinkston for the insightful guidance he had provided to many of them during his tenure. He stated that they appreciated the dedication and commitment Mr. Pinkston had shown to the Board and staff. He stated that it had been a positive relationship and they appreciated his contributions.

Mr. Mawyer stated that today, they would have the opportunity to award the largest single construction project in the history of the Rivanna Water and Sewer Authority, the South Rivanna to Ragged Pipeline project. He stated that this project would bring water to their community, a goal they had been working toward for 23 years, starting with the drought of 2002. He stated that he would elaborate on this project in a moment. He stated that before he did, he would like to highlight some of staff's achievements this holiday season. He stated that their environmental

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stewardship team collected holiday donations to be given to the Jefferson School Foundation. Mr. Mawyer stated that staff had also upgraded the siren at the Sugar Hollow Dam, adding four speakers instead of one. He stated that he had included a short video so they could hear how the sirens sounded.

Ms. Mallek asked if there was a recording of how it sounded at the bridge.

Mr. Mawyer stated not yet; they planned to extend the system, although they were still unsure how far the new speakers could be heard. He stated that the new speakers were approximately 30% louder than the existing speakers. Their goal was to grow the system and add more speakers in the future to increase the reach of the audible alarm system.

Mr. Mawyer stated that last night, they had held a virtual meeting with the Jefferson Park Avenue, Fry's Spring, and Johnson Village neighborhoods about stage two of the Central Water Line project. He stated that eight residents attended the meeting and were informed about the next phase, which was expected to begin in January. He stated that currently, they were working on the north side of the railroad track on Lewis Street, and in January, they planned to go under the railroad track and begin construction on the south side of the railroad track along Jefferson Park Avenue and Cleveland Ave.

He stated that their Director of Engineering and Maintenance, Jennifer Whitaker, presented to the UVA Civil Engineering fourth-year class about public sector engineering careers. Mr. Mawyer stated that additionally, their South Rivanna Water Treatment Plant Supervisor, Keith Covington, and Communications Manager, Westley Kern, had given a tour to second and third-grade students from the Free Union Country School at the South Rivanna Water Treatment Plant. He stated that they partnered with the City and Service Authority again this year on the Imagine a Day Without Water program, with a theme focused on "Water Works". He stated that the program had been successful, and noted the winners from various schools.

Mr. Mawyer stated that as part of their strategic plan priority of infrastructure and planning, renovations were underway at the Moores Creek Administrative Building. He stated that the first and second floors had undergone changes, and a temporary trailer office suite had been set up for staff. He stated that although the floor was cold, they were surviving in the trailer suites and the project was progressing. He stated that the project to install a new water line from Ragged Mountain to the Observatory Treatment Plant continued, and photos showed installation of the pipe. He stated that they had discussed the Central Water Line stage one, which was currently underway on Lewis Street, with equipment digging a trench to install the 30-inch waterline.

Mr. Mawyer stated that the exciting part was that they were nearing the end of the start-up phase for generational water supply projects. He stated that he had a chronology to share with the Board, which included several projects, such as the completion of a new dam at Ragged Mountain in 2014, renovation of the South Rivanna and Observatory Water Treatment Plants in 2024, replacement of the pipe and pump station to supply water from Ragged Mountain to the Observatory WTP (2029), and construction of a new pipe between the Observatory treatment plant and the Long St bridge (2029). He stated that the strategy was to raise the water level in the Ragged Mountain Reservoir to add 700 million gallons and increase the water supply at Ragged Mountain to 2.1 billion gallons.

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Mr. Mawyer stated that they would replace the existing pipe from Sugar Hollow Reservoir to Ragged Mountain with a new pipe from South Rivanna Reservoir to Ragged Mtn Reservoir which would serve as the water source for the Ragged Mountain Reservoir, as RMR did not have a natural watershed to supply itself. He stated that the community investment for these projects would be approximately $275 million when completed. He stated that in terms of chronology, the drought that prompted these efforts occurred 23 years ago in 2002. He stated that the community took 10 years to develop the water supply plan, which included building a new dam at Ragged Mountain to make it the primary and largest reservoir. He stated that they would supply water to Ragged Mountain from the South Rivanna Reservoir instead of Sugar Hollow.

Mr. Mawyer stated that in 2014, the new dam at Rivanna had been completed. He stated that when he arrived in 2016, they were in a waiting period for completion of the remaining water supply piping projects. He stated that they developed a plan and presented four alternatives for construction of the pipeline to the Board in 2018. The Board selected the middle timeframe of 2027-2035, which coincided with the expected decrease in debt at that time. He stated that they worked proactively and installed one mile of the Ragged to Rivanna pipeline in 2018 and 2019, as part of the UVA Foundation's renovation of Birdwood Golf Course.

Mr. Mawyer stated that they also completed the South Rivanna and Observatory Water Treatment Plant Renovations and Improvements from 2020 to 2024. He stated that upon completion, staff recommended accelerating the pipeline project due to changing climate conditions and predictions of extended droughts. He stated that the Board concurred, and in 2024, they awarded the Ragged to Observatory Pipeline Project, which was expected to be completed by 2029. He stated that today, staff would be proposing award of the capstone project, the South Rivanna to Ragged Mountain Pipeline and Pump Station Project, which would be completed over the next four years.

Mr. Mawyer stated that to provide historical perspective, he pulled out a newspaper article from 1925, which described the original pipe from Sugar Hollow to Ragged Mountain. He stated that the pipe was approximately 100 years old and recently had been leaky. He stated that before that, there was the 1922 lease agreement between the City and UVA for the Observatory Treatment Plant property, which had been renegotiated with UVA in 2020 and would remain in effect for 49 years, with a 49-year renewal option if no objections were raised.

Mr. Mawyer stated that today, if the Board decided to move forward, they would award the contract and begin the water line and pumping station work which would transfer water from the South Rivanna Reservoir to the expanded Ragged Mountain Reservoir. He stated that as a result, the pipe from Sugar Hollow would be closed. He stated that with this historical context, it was clear that today marked a significant milestone.

Mr. Pinkston asked if the 1925 pipe was still conducting water.

Mr. Mawyer stated that yes, but it was prone to leaks.

Mr. Pinkston asked if it had ever been replaced.

Mr. Mawyer replied no it had not been replaced. He stated that when the community developed the water supply plan between 2002 and 2012, they were aware that the existing pipe was old

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and needed to be replaced. He stated that they also recognized that the dam at Ragged Mountain was deficient and required replacement. He stated that to address both issues in one program, they proposed building a new dam at Ragged Mountain, which would also serve as the largest reservoir, despite the fact that it lacked a natural water source.

Mr. Mawyer stated that they had to pipe water from somewhere to fill Ragged Mtn reservoir, so the South Rivanna Reservoir was the logical source since it has the largest watershed. He stated that this would allow them to replace the 100-year-old Sugar Hollow pipe with a new one from South Rivanna to Ragged Mountain, making the entire plan logical and cohesive.

Mr. Gaffney stated that the land between Sugar Hollow and Ragged Mountain no longer looked like the photos from 1925. He stated that it had become completely forested.

Ms. Mallek stated that she believed that there were also no easement documents, it was all handshake agreements and rough estimates for the pipe placement.

Mr. Mawyer stated that for this new Rivanna to Ragged project, it had taken almost seven years to acquire easements from 20 different parties. He stated that they purchased property from the UVA Foundation to build the pump station. He stated that the acquisition process was challenging, as they had to negotiate with both private and public entities, including Albemarle County Public Schools, the City of Charlottesville, which granted easements near the reservoir, the Department of Forestry, and a local church on Reservoir Road. He stated that they had to work with a diverse group to obtain these easements. He stated that although it was a significant effort, they were now ready to move forward with construction on this generational project.

Mr. Mawyer stated that he had provided a map of the RWSA water system within the County, which displayed how they would be able to decommission the Sugar Hollow to Ragged Pipeline and build the Rivanna to Ragged Pipeline and increase their community's drinking water supply. He stated that the Central Water Line was not part of the water supply plan but was essential for their water treatment and distribution operations. He stated that all these projects would be awarded and under construction if approved by the Board today, except for the final piece of the Central Water Line, Phase II.

Ms. Mallek stated that she was struck by the 80% ACSA -20% City cost allocation for the pipeline from South Fork to Ragged. She stated that the pipe served the entire community, and the customers were half and half, so she was surprised that it was divided in that way.

Mr. Mawyer stated that was the agreement reached by the City, County, ACSA and RWSA in 2012. Mr. Gaffney stated that it was very challenging to get it.

Ms. Hildebrand stated that it may have something to do with the original infrastructure, which was built by the City.

6. ITEMS FROM THE PUBLIC

There were none.

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7. RESPONSES TO PUBLIC COMMENTS

There were no comments; therefore, there were no responses.

8. CONSENT AGENDA

a. Staff Report on Administration and Communications

b. Staff Report on Finance

c. Staff Report on Information Technology

d. Staff Report on Operations

e. Staff Report on Drought Monitoring

f. Staff Report on Wholesale Metering

g. Approval of Term Contract for Biosolids Processing: McGill Environmental

Mr. Lunsford asked if Mr. Mawyer could speak to projects 24 through 26 on the CIP report. He stated that he believed they were new and added this month. He stated that they were related to the northern area of Powell Creek, Airport Road, and the river crossing.

Mr. Mawyer stated that those three projects would be discussed by Ms. Whitaker today, seeking authority to initiate the design process. He stated that these projects involved upgrading the Powell Creek sewer line as well as installing a water storage tank and additional pumps at the Airport Road Pump Station. He stated that they may also need to install a pipe under the North Rivanna River to reliably get water to the north area of the County. He stated that these three projects would be discussed in more detail during Ms. Whitaker's presentation.

Mr. Lunsford asked if they were looking to do a study for those projects.

Mr. Mawyer stated that it would be preliminary engineering.

Mr. Lunsford asked if the Board was being asked to approve $103 million of projects today.

Mr. Mawyer stated that the request was only for the initial planning and design studies for those projects. He stated that construction costs for those projects would be considered in the proposed CIP the Board would receive in February.

Ms. Hildebrand asked if it would be more effective or clearer to modify the listing of projects to simply reflect the dollars allocated for the studies, rather than including the entire dollar amount of the entire project. She stated that at this point, those were the best estimates.

Mr. Mawyer stated that yes, the budget would reflect only the study costs approved today.

Mr. Lunsford asked if those projects would be included in the planning and study section of the CIP Report, not the design-build section.

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Mr. Mawyer stated that was correct.

Mr. Lunsford stated that he would like to request that any changes or additions be highlighted in some way, so it was clear what had been modified. Mr. Mawyer said they would highlight changes in the CIP Report in the future.

Mr. Pinkston moved that the Board of Directors approve the consent agenda subject to the proposed amendments. Ms. Mallek seconded the motion, which carried unanimously (7-0).

9. OTHER BUSINESS

a. Presentation and Consider Vote to Accept: FY 25 Audit Report

Matthew McLearen, Robinson, Farmer, Cox Associates, stated that his firm performed the Fiscal Year 2025 Audit, and he would present the results of that audit and the required communications with the governance body, which is in a separate document issued to the Authority. He stated that to describe this letter, it outlined the required communication responsibilities under the audit. He stated that management of the Authority was responsible for implementing appropriate accounting policies, applying new accounting policies, and ensuring the financial statements were accurate and reliable. He stated that they were also responsible for maintaining records sufficient to audit and implementing a system of internal controls throughout the entire fiscal year.

Mr. McLearen stated that as the auditor, his responsibility was to audit those documents, test the internal controls, and provide an opinion on the financial statements. He stated that the next item described in this letter concerned accounting estimates. He stated that most financial statements included consideration for accounting estimates, which could vary greatly but were generally based on similar authorities and entities. He stated that significant estimates included in this set of financial statements related to the depreciable lives of fixed assets, as well as the measurement of pension and other post-employment benefit (OPEB) liabilities, which did come from other third-party professionals.

Mr. McLearen stated that he would like to report that there were no difficulties encountered during the audit. He stated that the next item concerned audit adjustments. He stated that most audits included proposed adjustments, which were considered corrected misstatements. He stated that he was pleased to report that they had very few audit adjustments this year, and all of them were considered corrected. He stated that lastly, they were also required to disclose their knowledge of whether management had sought a second opinion and opinion shopping, which he was pleased to report they had no such knowledge.

Mr. McLearen stated that reports had been issued, which were contained in the Annual Comprehensive Financial Report. He stated that the first report was the independent auditor's report, which was an unmodified or plain opinion. He stated that this was dated October 29, 2025, for the year-end June 30, 2025. He stated that the second report was an independent auditor's report on internal controls. He stated that they had tested the internal control structure in place, which was designed to support financial reporting throughout the year, not just at year-end. He stated that it included segregation of duties and controls to mitigate misappropriation of assets and financial reporting errors.

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Mr. McLearen stated that he was pleased to report that they had disclosed that there were no material weaknesses or significant deficiencies in the internal control structure. He stated that he would like to briefly point out the financial statements in this document. He stated that there were three financial statements. He stated that the first, Exhibit 1, was the statement of net position, similar to a balance sheet for a for-profit entity on pages 30 and 31. He stated that the second page reported the Authority's net position, which was the term for equity, and at June 30, 2025, the Authority's net position was approximately $196 million. He stated that the second financial statement, Exhibit 2, was the statement of revenues, expenses, and changes in that position, similar to a profit and loss statement for a for-profit entity.

Mr. McLearen stated that the key number on this statement was the change in equity or net position, which the Authority reported as an increase of $12.8 million for the year ending June 30, 2025. He stated that the third and final financial statement was the statement of cash flows, which reported the ending cash balance. He stated that as of June 30, 2025, the Authority's ending cash position was approximately $135 million.

Mr. Pinkston moved that the Board of Directors accept the Annual Comprehensive Financial Report year ended June 20, 2025 (FY25). Ms. Mallek seconded the motion, which carried unanimously (7-0).

Mr. McLearen stated that he would like to take a moment to acknowledge Mr. Wood and his team for their assistance throughout this process.

b. Presentation and Consider Vote to Approve: Purchase of Portable Emergency Power Generator: Moores Creek

Steven Minnis, Maintenance Department Manager, stated that he had been with the Authority for 33 years in Maintenance. He stated that as a Mechanic at the Water and Sewer Department, emergency generators had been a significant part of his work responsibility. He stated that he would like to start by discussing their current situation. He stated that most of their sites had permanent emergency backup power generators. He stated that their existing portable generator, which had been purchased in 2011, was a 1988 model that they had bought used. He stated that it had largely outlived its useful life due to their facilities' growth, making it too small. He stated that although it still ran, it was no longer sufficient.

Mr. Minnis stated that he took great pride in their generators, which were critical to their operations. He stated that they were only needed when needed, and he was proud to say they were well-maintained and of high quality. He stated that the new portable generator they were hoping to purchase would upgrade their capabilities, allowing them to serve 18 of their facilities, as opposed to four with the current generator. He stated that this new portable generator offered a significant upgrade, as it could operate at 208 three-phase, 277, and 480 three-phase voltages, a major step up in versatility and reliability.

Mr. Minnis stated that with this new generator, they would be able to power the Glenmore, Scottsville, Stone Robinson, and Crozet Pump Stations 1 through 4 on the wastewater side, and on the water side, North Rivanna Water Plant, Scottsville Water Plant, Crozet Raw Water Pump Station, Red Hill Water Treatment Plant, and five water pump stations to include Airport Road,

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Stillhouse, Royal, Scottsville, and Stadium Road, along with the Ragged Mountain Dam and Sugar Hollow Dam.

Mr. Minnis stated that this purchase was a significant investment for the Maintenance Department, and he would like to highlight its potential benefits. He stated for example, they had recently experienced an issue at Moores Creek, where a new transformer malfunctioned, causing an 8-hour time period of modified operations while they waited for a rental generator to be delivered from Richmond and connected. He stated that if they had their own portable generator, it would have likely reduced their response time to around an hour and a half, allowing them to get the building back up and running more quickly.

Mr. Mawyer asked what had happened to the wastewater during those hours.

Mr. Minnis stated that the plant was operating in a bypass mode, where they bypassed the sludge building. He stated that Operations redirected the flow to another clarifier. He stated that he believed they were able to avoid bringing in additional holding ponds, if he was correct. He stated that they were able to maintain everything within the single clarifier. He stated that once the generator was back online and the sludge building was operational again, they were able to resume normal operations.

Mr. Mawyer asked if they were using the rental generator today.

Mr. Minnis stated that yes, they were. He stated that Nelson Electric from Richmond had been there today, and Hitachi, the manufacturer of the transformer, sent their specialists to address the problem. He stated that upon inspection, it was discovered that two high-voltage fuses had blown inside the transformer, which operates at 4160 volts. He stated that this required specialized expertise to repair. He stated that Hitachi's specialists were called in, and they were still awaiting the exact outcome. He stated that they would get the system back online, but currently, it was running on the generator.

Ms. Mallek stated that the new portable generator would be able to serve one location at a time. She stated that the logistics would be around where it was most needed, because it may be needed at a specific building more than another.

Mr. Minnis stated that yes, it was a matter of triage, determining what was most important. He stated that they did have redundant emergency power at their facilities, and this portable generator would minimize the potential for multiple issues.

Ms. Mallek stated that she would never forget the propane running out for the large generator located in Crozet during the snow and shoveling out to allow the gas truck there.

Ms. Hildebrand stated that she had a clarifying question. She asked if this generator was for redundancy at locations that already had permanent generators. She stated that if the primary generator failed, this backup generator was brought in, but now they had generators at all these locations.

Mr. Minnis stated that that was correct. He stated that they had permanent generators everywhere except for Royal, Stone Robinson, and Totier Creek pump stations.

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Ms. Hildebrand asked if the sludge pump building was hooked to a primary generator.

Mr. Minnis stated that it was connected to the main plant generator, but with the failure of the transformer, power could not be transmitted from the electrical switch gear through the transformer to the motor control center. He stated that it was indeed a redundant system.

Ms. Hildebrand asked if they had main generators at Moores Creek, so there were not pockets of generators.

Mr. Minnis stated that they had the main plant emergency generator which had a new upgrade around 2008 or 2009, the Rivanna Pump Station, and one for Moores Creek Pump Station.

He stated that the request from staff was to authorize the Executive Director to execute a Purchase Order with Carter Machinery for the purchase of a CAT portable power generator for an amount not to exceed $299,430.

Mr. Mawyer stated that their purchasing rules permitted Mr. Wood and himself to purchase up to $300,000. He stated that this amount was close to the maximum that could be authorized by staff, so they wished to bring it to the Board for approval and provide the Board with insight into some of the equipment they needed to purchase.

Mr. Pinkston moved that the Board of Directors authorize the Executive Director to execute a Purchase Order with Carter Machinery for the purchase of the CAT portable power generator, not to exceed $299,430. Ms. Mallek seconded the motion, which carried unanimously (7-0).

c. Presentation and Consider Vote to Approve: Glenmore Water Resource Recovery Facility Improvements

Dyon Vega, P.E., Civil Engineer, stated that he would present on the Glenmore Water Resource Recovery Facility, specifically on the proposed upgrades for blowers, Ultraviolet light (UV) disinfection system, and manual transfer switch improvements. He stated that he had provided an aerial view that showed the UV disinfection channel on the left, the manual transfer switch in the middle, and the blower building enclosure on the right.

Mr. Vega stated that for background, Glenmore was constructed in 1992. He stated that in 2022, they added a third influent pump, and in 2023, they conducted a needs assessment to identify potential future infrastructure repairs needed. He stated that the assessment identified three items: the aeration blowers, the UV disinfection system, and the need for a manual electric power transfer switch. He stated that the provided photos in the presentation showed the air blower unit enclosure and the existing air blower units.

Mr. Vega stated that the current blowers had a noise issue, were only partially covered, and had reached the end of their useful life. He stated that additionally, the existing blowers did not have the capability to be connected to an external generator, as Mr. Minnis discussed. He stated that the original UV disinfection system was deteriorated and no longer supported by the manufacturer; it was recently replaced through an emergency procurement contract, and that cost was included in this overall CIP project.

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Mr. Vega stated that the diagram showed the wastewater flow as it moved through the aerobic digesters to remove nutrients, to the UV lamps for disinfection before exiting to the Rivanna River. He stated that the UV system operated continuously and was a critical component of the overall system. He stated that the new blowers would have their own confinement system to reduce noise and operate similarly to the existing blowers. Mr. Vega stated that there was also a canopy to be installed over the UV unit, allowing for maintenance to be performed without exposure to the weather. He stated that there was a manual transfer switch, which would enable easy connection to the existing backup generator. He stated that the manual transfer switch was already located in a box and could be easily connected to the generator.

Mr. Vega stated that they received two bids, with Maverick Construction LLC as the lowest bid at $1,067,125. He stated that the total project budget was $1.955 million, and the FY 26-30 budget for Phase 1 was $1.95 million. He stated that they anticipated construction to begin in June 2026 and be completed by January 2028.

Mr. Pinkston moved that the Board of Directors authorize the Executive Director to execute a construction contract with Maverick Construction, LLC totaling $1,067,125 to provide two aeration air blowers, a metal canopy over the existing UV system, and a manual transfer switch and receptable for a portable generator, as well as any change orders to the construction contract up to 10% of the original construction contract amount. Ms. Mallek seconded the motion, which carried unanimously (7-0).

d. Presentation and Consider Vote to Approve: South Rivanna to Ragged Mountain Reservoir Pipeline, Intake, & Pump Station Construction Award

Austin Marrs, P.E., Senior Civil Engineer, stated that he was fortunate to dive deeper into the project that Mr. Mawyer had discussed earlier, the South Rivanna to Ragged Mountain Reservoir Pipeline, Pump Station and Intake Project. He stated that he would review the scope of work and recommend a construction contract award. He stated that as Mr. Mawyer had mentioned earlier, this was their last project from the 2012 Community Water Supply Plan. He stated that it would include 6.5 miles of 36-inch ductile iron raw water pipeline.

Mr. Marrs stated the pipeline would run from the South Rivanna Reservoir to the Birdwood Golf Course at Route 250 West in Ivy. He stated that the project would also include a raw water intake and pump station with a 41 million gallon per day (MGD) capacity, which would replace the existing pump station that was built in the 1960s. He stated that the system could transfer 25 MGD to Ragged Mountain Reservoir, 10 MGD to Observatory Water Treatment Plant, and 16 MGD to South Rivanna Water Treatment Plant.

Mr. Marrs stated that the project also included several ancillary items, such as a one-megawatt emergency power generator, a new chemical storage building at South Rivanna Water Treatment Plant, a waterway barrier across the South Rivanna Reservoir, and additional pumps at the Ragged Mountain Raw Water Pump Station. He stated that they were recommending a construction contract be awarded to Garney Companies of Fairfax, Virginia at a cost of just under $88 million. He stated that the pipeline was approximately 6.5 miles long, and the route's map was shown on the screen. He stated that this leg of the project would extend from the South Rivanna Reservoir to the Birdwood Golf Course. It would involve a mixture of roadway-based

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construction, including Hydraulic Road, Lambs Road, and Lambs Lane, as well as construction in easements along the way.

Mr. Marrs stated that as a result, they had had extensive coordination with several organizations, including Virginia Department of Transportation, Albemarle County Public Schools, the UVA Foundation, and the Colthurst Homeowners Association. He stated that they also had a time-of-year restriction for tree clearing, like their previous community water supply projects, due to restrictions associated with the northern long-eared bat, an endangered species; they can only clear trees between November 15 and March 31.

Mr. Marrs stated that the intake and pump station was a large facility, with a capacity of 41 MGD. He stated that this system would be able to transfer 16 million gallons to the South Rivanna Treatment Plant, as well as 25 million gallons south toward the Ragged Mountain Reservoir and Observatory Water Treatment Plant, where it would interact with the Ragged Mountain Raw Water Pump Station. He stated that this would allow them to split the flow as desired. He stated that two sets of raw water intake screens would be tunneled into the South Rivanna reservoir, designed in accordance with Department of Environmental Quality (DEQ) permit requirements to protect aquatic wildlife and prevent the introduction of fish and other small creatures into the treatment plant.

Mr. Marrs stated that this system would replace the existing 12 MGD pump station located at the South Rivanna dam. He stated that renderings were provided, showing the system in two different scenarios: one depicting the station as seen from the South Rivanna Reservoir, and the other showing the system within the pump station.

Ms. Mallek asked if the depth of the water for the screens was at six or eight feet.

Mr. Marrs stated that one intake was approximately eight to 10 feet below the surface, while the other was closer to 15 feet. He stated that the intake screens were quite large, so even the 10-foot intake could effectively pull water from a 5-foot elevation, which had historically been their preferred elevation for achieving the best water quality in the reservoir.

Ms. Mallek asked how much depth there was below the deeper screen before reaching the sludge.

Mr. Marrs stated the elevation of 367 feet is the bottom of the usable storage area. He stated that he believed there was another 15 to 20 feet below that, but historically, this area had been considered the sedimentation zone for the reservoir. He stated that it was possible that the reservoir could silt in over time, so they were trying to avoid that situation.

Ms. Mallek asked if there was a barrier installed.

Mr. Marrs stated yes and that he had a better map he would show later. He stated that he would like to touch on the other improvements. He stated that there were renderings of the new chemical building that would be built at the South Rivanna Treatment Plant, replacing the existing building and ultimately providing a larger and more reliable system. He stated that they would also construct the waterway barrier system that they had previously discussed. He stated that this would be a public safety enhancement, replacing the buoy system currently in place,

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which frequently washed up against the dam. He stated that it would keep boaters away from the dam and the intake screens.

Mr. Marrs stated that three additional pumps would be installed under this contract at the Ragged Mountain Pump Station currently being constructed by Thalle Construction in a separate contract. He stated that these final three pumps would enable the water to be transferred from South Rivanna to Ragged Mountain and/or Observatory Water Treatment Plant.

He stated that he would like to provide details about the existing facilities. He stated that the existing raw water pump station was from the early 1960s and had limited pumping capabilities at 12 MGD, which was not sufficient for the future anticipated demands for the South Rivanna Treatment Plant. Mr. Marrs stated that the building itself was in decent shape, so they may repurpose and salvage it for potential storage space in the future.

He stated that the existing permanganate building was a mid-1980s construction and had outlived its useful service life. He stated that it had served as a powdered activated carbon feed building and a permanganate feed building over the past 40 years. He stated that this building would be demolished, and the new building would be constructed next to it. He stated that they would not demolish it until the new chemical feed building was complete.

He stated that the waterway barrier that they had discussed was shown on the right-hand side of the presentation slide, outlined in red. Mr. Marrs stated that it would keep boaters away from the intake screens. He stated that the actual system would have two screens as well as an air burst cleaning system to clean the screens from leaves and debris. He stated that they would also want to keep boaters away from the dam. He stated that the barrier would be designed to prevent someone from boating over the dam.

Mr. Gaffney asked what happened when trees floated into the barrier.

Mr. Marrs stated that the barrier system was set up with a breakaway link in the chain, which was designed to fail under a certain amount of pressure. He stated that once the trees accumulated against it, the breakaway link exceeded its loading capacity, it would break away, letting the trees pass. He stated that after the storm had passed and the trees had been cleared, crews would reassemble the barrier. He stated that the system was intended to allow the trees to pass through without causing damage.

Ms. Mallek asked if there was any other curtain part of the barrier.

Mr. Marrs stated yes; there was a curtain that went below the surface.

Mr. Marrs stated that in reviewing the budget and bidding results, their adopted CIP value for this project was $123 million, with an engineer's estimate of about $103 million for construction. He stated that they had advertised this project in November and received four competitive construction bids. He stated that the lowest bid was from Garney Companies, which they had reviewed with their consultant engineer and found to be responsive and responsible to the contractual requirements.

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Mr. Marrs stated that incorporating that bid into the construction budget brought the total to $119.5 million. He stated that the project schedule started in February 2026 and would run through 2030. A more detailed overview of the budget was then provided. He stated that the construction project with a contingency gave them a total of $95.25 million. He stated that they were proposing to pre-procure an emergency generator and a waterway barrier, which would cost approximately $1 million combined. He stated that this amount was also included in the Board packet.

Mr. Marrs stated that they were allocating $1.5 million for Dominion Energy coordination, as they would need a reliable power service for this infrastructure. He stated that they were actively working with Dominion to achieve the most effective solution, which may require realigning the power service to eliminate an existing river crossing. He stated that they anticipated some costs associated with this process. He stated that there was also a budget of $500,000 for legal and miscellaneous fees. He stated that the Ragged Mountain Pool Raise Project was also included in this budget, which totaled $13.3 million. He stated that when they added up all these costs, they got a total of $119.5 million, which represented a $3.5 million dollar savings over the adopted CIP value.

Mr. Lunsford asked if Mr. Marrs could walk through the full process of the generator and waterway barrier.

Mr. Marrs stated that regarding the generator, the Authority has attempted to standardize Caterpillar equipment, as they had existing service contracts with them. He stated that most of their generators were Caterpillar; however, in a bidding environment, they could not easily sole-source on a particular manufacturer, so they decided to purchase the equipment that they worked with Mr. Minnis and his team to identify as necessary.

Mr. Marrs stated that they wrote the contract to minimize their risk, while also clearly outlining the responsibilities. He stated that regarding the waterway barrier system, they found that Worthington was the only option available, and they conducted thorough research. He stated that from a contractual standpoint, it seemed simpler for Rivanna to provide the equipment to the low-bid contractor. He stated that the contract also included language to mitigate both their risk and the contractor's risk.

Mr. Mawyer asked if Mr. Marrs could explain the Sourcewell program.

Mr. Marrs stated that Carter Machinery did participate in the Sourcewell program, which is a cooperatively procured contract the Authority participates in. This means that competitive pricing with discounted rates was provided.

Ms. Mallek asked if Worthington was a Virginia-based company.

Mr. Marrs stated that they were based out of Ohio, but they had provided waterway barriers to numerous facilities, including one in Spotsylvania and some in Richmond. He stated that they worked closely with many municipalities in this region.

Mr. Mawyer stated that Fairfax Water used them.

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Mr. Marrs stated that there was a 30-year warranty on the systems, and the company truly stood behind their product. He stated that they had conducted thorough research before selecting this path and obtained samples, meeting with them extensively. He stated that as a result, they were quite confident in their product.

Ms. Hildebrand asked if they would be purchasing the generator currently or if it would be purchased as it was incorporated into the project.

Mr. Marrs stated that they were currently purchasing the equipment, and they would provide it to the contractor for installation. He stated that the purchase order would be between Rivanna and Carter. He stated that in this arrangement, they would hand the generator over to the contractor, and they would install it, test it, and complete the necessary work.

Ms. Hildebrand asked if it would be sitting for a few years or if it would be installed immediately.

Mr. Marrs stated they had worked with Carter to sequence out the manufacturing process to minimize the time before installation. He stated that if a gap did occur, they could implement a preventive maintenance program, which involved keeping the equipment on Carter's yard and helping to preserve it. He stated that Carter would also use a special oil additive to prepare the equipment for storage. He stated that the warranty was long enough that it did not actually begin until the equipment was delivered to the site, so they were covered.

Mr. Gaffney asked Ms. Long if the motion for this item needed to include the entire document.

Ms. Long stated that was not necessary. She stated that they could refer to the prepared motion on the screen and included in the agenda packet, but they could read the entire language out loud if they wanted to.

Ms. Mallek moved that the Board of Directors authorize the Executive Director to execute a (1) construction contract with Garney Companies, Inc. for a total amount of $87,633,497 and any change orders to the contract necessary for completion of the work not to exceed 10% of the original construction contract amount; (2) Purchase Order with Carter Machinery Company, Inc. for a CAT generator and associated appurtenances as owner-supplied equipment for an amount not to exceed $612,362, and to execute necessary amendments up to 10% of the initial authorization; (3) Purchase Order with Worthington Products, Inc. for an ODIN series waterway barrier system as owner-supplied equipment for an amount not to exceed $469,687.80, and to execute necessary amendments up to 10% of the initial authorization. Mr. Pinkston seconded the motion, which carried unanimously (7-0).

Mr. Marrs stated that he appreciated the Board's support for this plan and thanked Operations and Maintenance for their assistance throughout the design process.

Mr. Mawyer stated that he would like to extend his gratitude to Jennifer Whitaker, Scott Schiller, and Austin Marrs for their efforts in planning, designing, and securing easements for these projects. He stated that they were excited to now move forward with the construction phase.

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e. Presentation and Consider Vote to Approve: Amendment of the FY 26-30 Capital Improvement Plan – Northern Service Area Utility Projects

Jennifer Whitaker, P.E., Director of Engineering and Maintenance stated that she would like to touch on a few projects in the northern area of Albemarle County and explain why they were being proposed now. She stated that the Urban Service Area was a topic that has been discussed before, but to help illustrate the concept, she had included two maps: one for their wastewater system and one for their water system. She stated that although they were not identical, they shared very similar shapes. She stated that they provided water and sewer services to approximately 125,000 people in the urban area, with three water treatment plants and one wastewater plant serving these areas.

Ms. Whitaker stated that she would focus on the northern area, which was defined as everything utility-wise north of the Route 29 Bridge over the South Rivanna River. She stated that the graphic on the right highlighted the South Rivanna River in red, and thus, the Northern Service Area encompassed everything north of that point. She stated that on the water side of their existing infrastructure, they had several key facilities, including the Airport Road Finished Water Pump Station in the Hollymead area, the North Rivanna Water Treatment Plant behind the Camelot subdivision, the North Rivanna Water Line running north-south along Route 29, and the Piney Mountain Tank, which was located near the Greene County line.

Ms. Whitaker stated that on the sanitary sewer side, the Powell Creek Interceptor was shown in green on the right-hand side. She stated that all other sewer services in the area are provided by Albemarle County Service Authority. She stated that it was worth noting that they had planned to decommission the North Rivanna Water Treatment Plant, but this has been delayed due to some of the work that she would discuss today. She stated that earlier this year, she presented the 2024-2025 Northern Area Utilities Master Plan, which was based on data from 2024, while being presented in 2025.

Ms. Whitaker stated that the master plan had four goals: (1) analyze upcoming developments to better understand their utility capacity and potential needs, (2) utilize their water and sewer models to assess the impact of additional demands, (3) develop the specific capital improvement program to serve the area and its future needs, and (4) compare this plan to their 2019 Urban Finished Water Master Plan. She stated that to illustrate the outcome of this study, she had included a table that highlighted key sentinel years. She stated that they used the years 2030, 2045, and 2070, and for each of those years, they calculated their existing or planned capacity, water demand, and peak water or sewer demand.

Ms. Whitaker stated that of import to today's discussion was the modeling for the projected demand in the north zone. She stated that the 2019 Urban Finished Water Master Plan was in the first two columns of the chart and indicated that by 2030, they anticipated a demand of approximately 0.86 million gallons per day in the northern area under maximum day conditions. She stated that however, when they completed the 2024-25 Northern Area Master Plan, that number increased to 1.69 million gallons per day, based on growth projections from major developers and general area growth. She stated that this represented a 0.83 million gallons per day increase in maximum daily demand.

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Ms. Whitaker stated that in October 2025, AstraZeneca announced plans to build a facility in the Rivanna Futures property. She stated that they had also been in ongoing conversations with the UVA Foundation regarding their properties. She stated that there were several other key commercial properties in the northern area, such as the GE Fanuc plant, as well as residential areas such as North Pointe. She stated that they continued to receive site plans and interest from these facilities and entities. She stated that as part of their conversation, they considered whether they need to look beyond their Northern Area Utilities Master Plan, and the answer immediately was yes.

Ms. Whitaker stated that the AstraZeneca facilities were coming online between 2027 and 2029, noting there was some debate about the exact timeline. She stated that they were currently having ongoing conversations with County staff and AstraZeneca, and the timeline could be anytime between 2027 and 2030, depending on the planning process. She stated that they anticipated gaining clarity on the demands and timeline over the next six months. She stated that it was essential to note that shortly after releasing the Northern Area Utilities Master Plan, they received this new information related to projected demand.

Ms. Whitaker stated that in terms of what this meant, the Urban Finished Water Master Plan showed 0.86 million gallons per day demand, while the Northern Area Master Plan showed 1.69 million gallons per day demand. She stated that based on the information they had received to date, they were now looking at a demand difference of almost 3 million gallons per day. She stated that this would result in significantly different projects for both water and sewer. She stated that again, they expected to receive more refined information from January to June 2026, which would allow them to update these numbers.

Ms. Whitaker stated that staff previously presented a table showing the updated Northern Area Water System Improvement Projects through 2070. She stated that they had outlined the projects they anticipated in 2024 and 2025 that would need to be constructed over time. She stated that if they examined the column with the purple arrow at the top, they would see the anticipated completion dates for those projects. She stated that when they looked at the green arrow, they would see that it was their current proposed Capital Improvement Plan, which they were working through with the Board subcommittee.

Ms. Whitaker stated that based on those accelerated demands and increased numbers, the completion dates had to be revised significantly. She stated that they would see a yellow arrow, which was another projection they had done that advanced those numbers even further. She stated that she would like to draw the Board's attention to the red boxes. She stated that these were key projects that, if they wanted to have these facilities online by the time AstraZeneca and others were ready for service, they needed to begin the preliminary engineering, evaluation and permitting process now.

Ms. Whitaker stated that she would like to speak more about these highlighted projects. She stated that on the water side, there were several key projects. She stated that currently, the South Fork Rivanna River Crossing was under construction. She stated that they also had the Airport Road Finished Water Pump Station Addition, and the Berkmar Drive Water Main Extension was part of a VDOT project already planned for the next couple of years. She stated that they were considering one, and potential two, water storage tanks at Airport Road. She stated that they

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were also planning a second crossing of the North Fork Rivanna River, which currently only had a single crossing.

Ms. Whitaker stated that they were looking at replacing the late 1960s- early 1970s vintage water main for a portion of the North Fork Rivanna Water Main, which was prone to breaks and operated under about 180 pounds per square inch of pressure. She stated that this is a key vulnerability for them. She stated that even before the demand growth, they felt that this project needed to proceed. She stated that there were also private development piping plans, and they were working with the Service Authority on those as well.

Ms. Whitaker stated that on the sewer side, they had the Powell Creek Interceptor, which ran from Forest Lakes North to Forest Lakes South. She stated that initially, their evaluation indicated that Powell Creek sections 4 and 5 of the sewer line most likely needed to be upsized. She stated that as demand numbers became clearer, they would know better when and how those sections needed to be upgraded. She stated that additionally, sections 1 through 3 may need to be upgraded either with the initial tranche or at a later date as well. She stated that the conclusions from all this work were that the 2025 Northern Area Utilities Master Plan showed faster growth than what they had anticipated in 2019, which was not a surprise.

Ms. Whitaker stated that the addition of AstraZeneca and other large developments in the northern area significantly increased the anticipated demand, and several capital projects now required advancement to meet this need. She stated that with the projected manufacturing start date ranging from 2027-2029 or 2028-2030, depending on the data used, they needed to initiate preliminary engineering evaluation and permitting on some of these projects. Consequently, they had included these projects in the proposed FY 27-31 CIP. She stated that for the time being, they were requesting $500,000 for each of the three projects, totaling $1.5 million to initiate preliminary design, permitting, and surveying activities for the Airport Road tank and pump station improvements, the North Fork River crossing and select piping replacement, and the Powell Creek Interceptor.

Ms. Mallek stated that on page 93, it looked like the peak flow had tripled. She asked if Ms. Whitaker could explain that.

Ms. Whitaker stated that on the water side, the difference between an average day and a peak day was typically around 1.5. She stated that this was primarily due to hot weather, evaporation, increased use of laundry and showers, and industrial cooling. She stated that this was reflected in the industry-wide average, which ranged from 1.3 to 1.6. She stated that as a general guideline, 1.5 was considered a reasonable peak factor. She stated that on the wastewater side, there were several factors that contributed to peak flow, including inflow and infiltration of stormwater and industrial inputs. She stated that the latter factor would be specific to industrial production and would significantly impact their understanding of peak hour, peak day, and peak wastewater flow. She stated that once they had more detailed information on this, it would help them refine their estimates.

Ms. Mallek asked if hookup fees would depend on the costs of installing all of the infrastructure or if it was strictly based on a household's consumption, or a combination.

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Mr. Lunsford stated that from the perspective of ACSA, these projects would undoubtedly result in additional charges that would need to be incurred.

Ms. Mallek asked if these users would get their own category.

Mr. Lunsford stated that they would be considered a large and unusual customer, warranting special consideration.

Mr. Gaffney asked if that meant they would have large and unusual fees.

Mr. Lunsford stated that engineering calculations would be necessary to support these costs. He stated that if they were treated differently from others, it was because they had to recognize the unique needs and requirements they brought. He stated that it would not be until they truly understood the demand that they could determine the necessary fees.

Ms. Hildebrand asked if there needed to be additional language in the Board action to clarify that these were studies, because it referred to preliminary engineering.

Ms. Whitaker stated that she would suggest adding the language from the third bullet point, where it referenced the preliminary engineering, evaluation and permitting.

Ms. Hildebrand stated that adding that language would improve it immensely.

Ms. Mallek stated that instead of saying they were adding the projects and funding them, they were adding the preliminary engineering.

Ms. Whitaker stated that the tank permitting process in particular was expected to take as long as a year and a half. She stated that they were very interested in moving forward with this process and obtaining the necessary approvals.

Ms. Hildebrand moved that the Board of Directors approve an Amendment to the FY 2026-2030 Capital Improvement Plan to advance $1.5M in funding for three projects: Airport Road Tank(s) and Pumping Improvements; North Fork Rivanna River Crossing and Select Piping Replacement, and the Powell Creek Interceptor Upgrade, to begin preliminary engineering, evaluation, and permitting. Ms. Mallek seconded the motion, which carried unanimously (7-0).

10. OTHER ITEMS FROM BOARD/STAFF NOT ON THE AGENDA

Ms. Mallek stated that she had a question she had forgotten to ask earlier. She asked if Rivanna staff received reports from McGill that provided details of their services, other than receiving their local solid waste. She stated that she was trying to clarify their responsibilities and how they handled the funds to quell any rumors that may be circulating.

Mr. Tungate stated that they made the compost product commercially available, primarily for large retail customers.

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Ms. Mallek asked if they provided information about what they were mixing into the materials they sent them. She stated that they were paying them a lot of money.

Mr. Mawyer stated that they had not received any specific information on that topic. He stated that they did go to McGill's site and observe their processes, and they used a variety of materials to make compost including cash from the Federal Reserve, food waste, and other various components.

Ms. Mallek stated that she was mostly concerned about the stuff being delivered, and that was what she was trying to find out.

Mr. Mawyer stated that on behalf of the staff, he would like to thank the Board for the support they had provided this year. He stated that he hoped they had a happy holiday season and looked forward to another dynamic year in 2026.

11. CLOSED MEETING

There was no reason for a closed meeting.

12. ADJOURNMENT

Ms. Mallek moved that the Board of Directors adjourn the meeting. Mr. Pinkston seconded the motion, which carried unanimously (7-0).

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RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
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MEMORANDUM

TO: **RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS**

FROM: **BILL MAWYER, EXECUTIVE DIRECTOR**

SUBJECT: **EXECUTIVE DIRECTOR'S REPORT**

DATE: **FEBRUARY 24, 2026**

Welcome New Board Member

We are pleased to have Lloyd Snook, Charlottesville City Councilor, join our Board again. Mr. Snook served on our Board from January 2020- December 2021. Welcome back, Mr. Snook!

STRATEGIC PLAN PRIORITY: EMPLOYEE DEVELOPMENT

Welcome New Human Resources Manager

Welcome to LaToya Smith, our new Human Resources Manager. LaToya holds a Bachelor's and Master's degrees in Business Administration, with a concentration in Human Resources Management, and certifications in Leadership Development and Engagement & Inclusion. Prior to joining us, LaToya served as Employee Relations Manager with a nationwide IT consulting firm.

Recognitions

The professional qualifications of our staff continue to improve and enhance our services. We congratulate the following employees for successfully completing professional certification requirements:

- Madeleine Munce, Wastewater Operator Class 3. Madeleine started here in March 2025 and holds a BS with a Chemistry major and Biology minor from Ferrum College.
- Michelle Derryberry, Water Operator Class 2. Michelle started here in September 2025 and has a Certification in Environmental Technology from Folsom Lake College, Folsom, CA and holds Water and Wastewater Operator Licenses in California.

Our Maintenance Department staff completed the following Apprenticeship Program:

- Matt Walker - completed Industrial Maintenance Mechanic Apprenticeship Program classes and is now eligible for a Journeyman's card. Mr. Walker completed 8000 hours as a Maintenance Mechanic, as required by the Virginia Apprenticeship Program.

STRATEGIC PLAN PRIORITY: COMMUNICATION AND COLLABORATION

General Assembly News

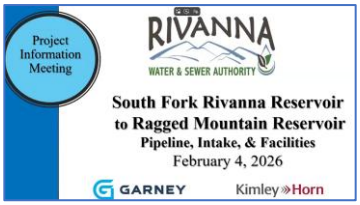
SB138- Requires quarterly monitoring for PFAS in industrial wastewater sources and requires results submitted to DEQ. – *Read third time and Passed Senate 39-0 on Feb 13.*

SB386 – Regulates land application of sewage sludge/ biosolids containing PFAS

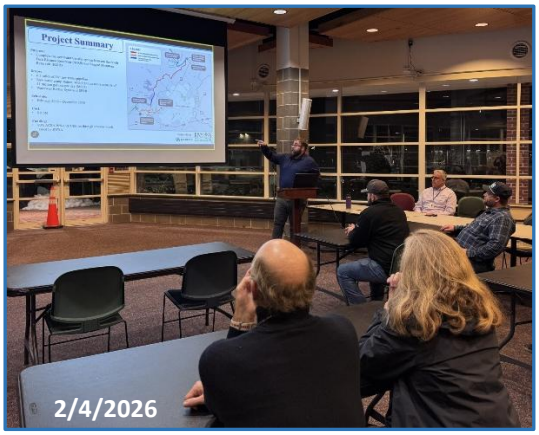
Facility Tours

We were pleased to provide a "windshield" tour of our facilities along with a presentation to Lloyd Snook, Board Member and City Councilor, Jen Fleisher, City Councilor, and Evan Pilachowski, Assistant City Manager on January 22nd. We also provided a windshield tour and presentation for Board member Ann Mallek on February 9th.

Public Information Sessions



On February 4, an in-person and virtual public information session was held at the Albemarle County Office Building on 5th Street, SW. Information was presented about the South Fork Rivanna Reservoir to Ragged Mountain Reservoir Pipeline, Pump Station, and Intake Construction Project.

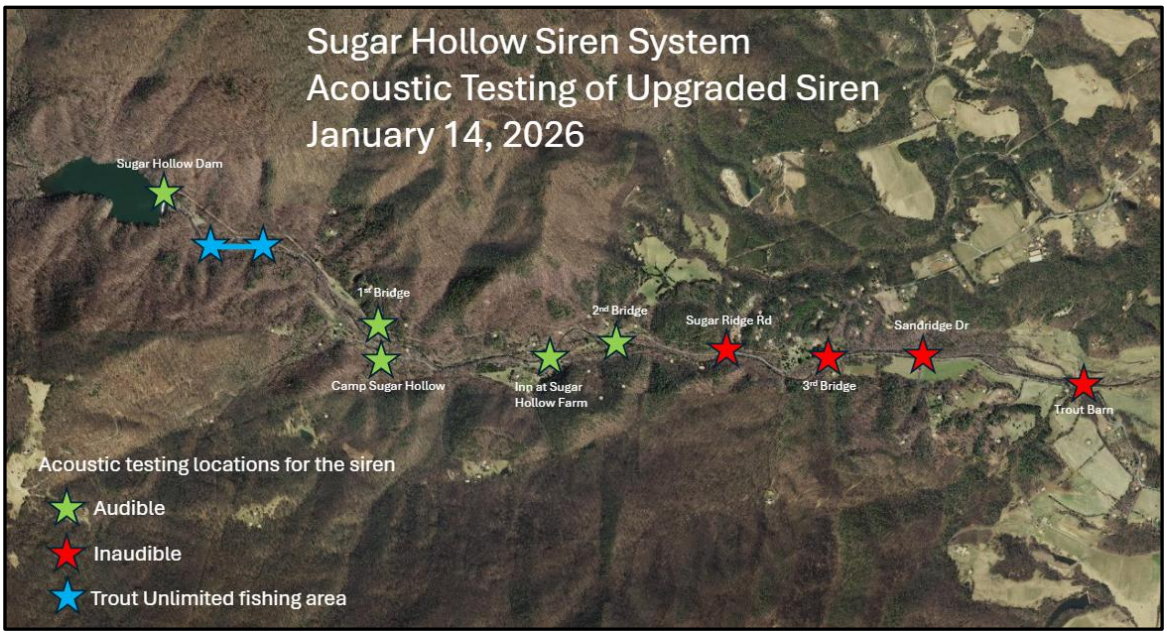




Our staff attended the Fry's Spring Neighborhood Association in-person meeting on February 11th and shared information with attendees about construction Phase 2 and 3 of the Central Water Line Project.

Sugar Hollow Siren

Testing of the upgraded 4-horn siren at Sugar Hollow Dam was conducted on January 14th and was audible about 2.1 miles downstream, near the 2nd bridge on Sugar Hollow Rd.



STRATEGIC PLAN PRIORITY: PLANNING AND INFRASTRUCTURE

Budget Subcommittee Meetings

A "subcommittee" of City and ACSA staff, including Ms. Hildebrand and Mr. Lunsford, met with RWSA staff on January 14th to review the projects included in the FY 27 – 31 CIP.

The "subcommittee" also met on February 12th with our staff to review the proposed FY 27 Budget.

Administration Building


Foundation and elevator tower for the addition – January 22, 2026

Ragged Mountain Reservoir Pool Raise



January 9, 2026 - Clearing along the perimeter

Ragged Mtn Reservoir to Observatory WTP Pipe and Pump Station Project





Pump Station
February 9, 2026



Fontaine Research Park - Clearing for water line - January 23, 2026

South Fork Rivanna River Second Crossing



Central Water Line – Phase 1



RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
434.977.2970
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www.rivanna.org

MEMORANDUM

TO: **RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS**

FROM: **LEAH BEARD, DIRECTOR OF ADMINISTRATION & COMMUNICATIONS**

REVIEWED BY: **BILL MAWYER, EXECUTIVE DIRECTOR**

SUBJECT: **ADMINISTRATION & COMMUNICATIONS REPORT**

DATE: **FEBRUARY 24, 2026**

Grants & Sustainability

Annie West, *Grants & Sustainability Coordinator*, has recently been elected as the Secretary for the *Water for People Committee* for the Virginia Water Environment Association (VWEA). Annie is fine tuning a Greenhouse Gas Dashboard to track energy usage across Rivanna facilities. This initiative supports the Authority's Environmental Stewardship Strategic Plan goal.

Safety

George Cheape, *Safety Manager*, has been actively visiting our Capital Improvement Project sites to ensure that our contractors are maintaining safe environments for not only themselves, but also our community members. George has been visiting our various sites to ensure employees are cautious with snow removal and reiterating the importance of Slip & Fall Trainings. He has implemented additional in-person training for our Team Members around vehicle safety.

Communications & Outreach

Westley Kern, *Communications & Outreach Coordinator*, continues to support public awareness efforts through press releases, signage updates, newsletters, and digital communications related to ongoing capital projects, including:

- Sugar Hollow Siren Test Reminders
- After the Storm Solid Waste e-Newsletter
- Updates on our ongoing projects, including the Central Water Line, South Fork to Ragged Mountain pipeline, and the Ragged Mountain Reservoir Pool Fill
- February 4, 2026 – South Rivanna Reservoir to Ragged Mountain Pipeline In-Person and Virtual Public Meeting (six attendees)
- February 11, 2026 – Central Water Line In-Person Public Meeting with Fry's Spring Neighborhood Association (seven attendees)

Human Resources

LaToya Smith has joined the Authority as our new *Human Resources Manager*. She has been actively recruiting for three newly opened positions. LaToya has been collaborating with Alisa Cooper, *Payroll & Benefits Coordinator,* to plan an engaging and informative Open Enrollment Information Session to enable team members to better understand their total benefits packages.

RWSA Fiscal Year 2026 turnover is 11.3% through February 13, 2026, for the fiscal year beginning July 1, 2025. This figure includes three retirements.

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MEMORANDUM

TO: **RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS**

FROM: **SCOTT SCHILLER, ENGINEERING MANAGER**

REVIEWED BY: **DAVE TUNGATE, DEPUTY EXECUTIVE DIRECTOR**
BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: **CIP PROJECTS REPORT**

DATE: **FEBRUARY 24, 2025**

This memorandum reports on the status of the following major Capital Projects as well as other significant operating, maintenance, and planning projects. *Recent budget changes, if any, are highlighted in the project information below.*

For the current CIP and additional project information, please visit: https://www.rivanna.org/wp-content/uploads/2024/06/2025-2029-CIP-Final-Draft.pdf

Summary

	Project	Construction Start Date	Construction Completion Date
1	Central Water Line, Phase 1	October 2025	December 2029
2	Red Hill Water Treatment Plant Upgrades	January 2025	June 2027
3	South Fork Rivanna River Crossing	December 2024	January 2027
4	RMR to OBWTP Raw Water Line and Pump Station	February 2025	June 2029
5	MC Building Upfits and Gravity Thickener Improvements	May 2025	May 2027
6	MC Structural and Concrete Rehabilitation	May 2025	May 2027
7	Crozet Pump Stations Rehabilitation	December 2025	July 2027
8	MC Administration Building Renovation and Addition	August 2025	December 2027
9	SRWTP – PAC Upgrades	June 2026	June 2027
10	RMR Pool Raise	September 2025	December 2026
11	Sewer and Manhole Repairs, Phase 2	December 2025	June 2027
12	Crozet WTP GAC Expansion, Phase 1	March 2026	May 2028
13	SVWRRF Generator Replacement	March 2026	June 2027
14	SRR to RMR Pipeline, Pump Station & Intake	April 2026	December 2030
15	Glenmore WRRF Upgrade, Phase 1	June 2026	August 2027
16	Sodium Hypochlorite Tank Replacement, OBWTP	September 2026	July 2027

17	Central Water Line, Phase 2	October 2026	March 2029
18	MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades	October 2026	May 2028
19	Beaver Creek Dam Spillway Modifications	January 2029	June 2031
20	Beaver Creek Raw Water Pump Station, Intake, and Piping	September 2026	June 2029
21	Upper Schenks Branch Interceptor, Phase 2	2027	2029
22	Dam Concrete and Steel Repairs	August 2026	November 2027
23	SVWRRF Permit Modification Upgrades	May 2026	May 2027

Under Construction

1. Central Water Line, Phase 1
2. Red Hill Water Treatment Plant Upgrades
3. South Fork Rivanna River Crossing
4. RMR to OBWTP Raw Water Line and Pump Station
5. MC Building Upfits and Gravity Thickener Improvements
6. MC Structural and Concrete Rehabilitation
7. Crozet Pump Stations Rehabilitation
8. MC Administration Building Renovation and Addition
9. SRWTP – PAC Upgrades
10. RMR Pool Raise
11. Sewer & Manhole Repairs, Phase 2
12. Crozet WTP GAC Expansion, Phase 1
13. SVWRRF Generator Replacement
14. SRR to RMR Pipeline, Pump Station & Intake
15. Glenmore WRRF Upgrade, Phase 1
16. Sodium Hypochlorite Tank Replacement, OBWTP

Design and Bidding

17. Central Water Line, Phase 2
18. MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades
19. Beaver Creek Dam Spillway Modifications
20. Beaver Creek Raw Water Pump Station, Intake, and Piping
21. Upper Schenks Branch Interceptor, Phase 2
22. Dam Concrete and Steel Repairs
23. SVWRRF Permit Modification Upgrades

Planning and Studies

24. MCAWRRF Biogas Upgrades
25. Flood Protection Resiliency Study
26. *Powell Creek Interceptor Upgrade (PC1-PC5)*
27. *Airport Rd WSTs and Pumps*
28. *NR River Crossing and Piping*

29. *Crozet Drinking Water Infrastructure Plan Update*

Other Significant Projects

30. Urgent and Emergency Repairs
31. Security Enhancements

Under Construction

1. Central Water Line, Phase 1

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	Sagres Construction Corporation (Alexandria, VA)
Construction Start:	October 2025
Percent Complete:	8%
Base Construction Contract + Change Order to Date = Current Value:	$47,450,000
Completion:	December 2029
Budget:	$58 M

Current Status: Contractor has installed approx1,228 linear feet of 30-inch water line in Hereford Drive, Stadium Rd, Price Ave, and Lewis St, in addition to 130 linear feet of 2-inch water line for City Utilities in Lewis St through the end of January 2026 as part of Stage 1. An in-person meeting was held on Feb. 11th at 7 PM with the Fry's Spring neighborhood to provide an update on the work beginning in JPA for Stage 2 in late February.

2. Red Hill Water Treatment Plant Upgrades

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Anderson Construction (Lynchburg, VA)
Construction Start:	January 2025
Percent Complete:	22%
Base Construction Contract + Change Order to Date = Current Value:	$2,067,000 - $324,625 = $1,742,375
Completion:	June 2027
Budget:	$2.05 M

Current Status: Construction of the new Chemical Storage and GAC building continues.

3. South Fork Rivanna River Crossing

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	Faulconer (Charlottesville, VA)
Construction Start:	December 2024
Percent Complete:	70%
Base Construction Contract + Change Order to Date = Current Value:	$4,916,940 + $734,933 = $5,651,873
Completion:	January 2027
Budget:	$6.55 M

Current Status: Horizontal Directional Drilling subcontractor had equipment problems when completing the final reaming pass for the 1,200 LF directional drill. He may have to provide additional drilling before the HDPE pipe can be pulled into the hole. A portion of Old Rio Mills Road will be closed for several more months during construction of the new 24" water line.

4. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Pump Station

Design Engineer:	Kimley-Horn
Construction Contractor:	Thalle Construction (Hillsborough, NC)
Construction Start:	February 2025
Percent Complete:	20%
Base Construction Contract + Change Order to Date = Current Value:	$56,532,000 - $2,779,390 = $53,752,610
Completion:	June 2029
Budget:	$61.49 M

Current Status: Pipeline construction continues between Ragged Mountain Reservoir and the new pump station. Construction of the pump station foundation, walls, and electrical conduits under the pump station slab, is underway.

5. MCAWRRF Building Upfits and Gravity Thickener Improvements

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	English Construction (Lynchburg, VA)
Construction Start:	May 2025
Percent Complete:	19%
Base Construction Contract+ Change Order to Date = Current Value:	$9,821,000 - $189,500 = $9,631,500
Completion:	May 2027
Budget:	$11.8 M

Current Status: Contractor completed improvements to the Duty Station and Operations personnel have relocated to this temporary office and storage space. The Contractor has begun demolition of the Blower Building. Foundation work for the new office space under the Vehicle Maintenance Shop canopy and test pitting of utilities for the new Chemical Feed Building at the Gravity Thickeners are ongoing.

6. MCAWRRF Structural and Concrete Rehabilitation

Design Engineer:	Hazen and Sawyer (Hazen)
Construction Contractor:	WM Schlosser (Hyattsville, MD)
Construction Start:	May 2025
Percent Complete:	19%
Base Construction Contract+ Change Order to Date = Current Value:	$13,866,000 - $898,500 = $12,967,500
Completion:	May 2027
Budget:	$15.5 M

Current Status: Roofing and gutter installation on the North Maintenance Shed is anticipated this month. Concrete repairs are ongoing in the equalization basins as weather permits, and work will begin in one primary clarifier this month.

7. Crozet Pump Stations Rehabilitation

Design Engineer:	Wiley | Wilson
Construction Contractor:	Waco, Inc. (Sandston, VA)
Construction Start:	December 2025
Percent Complete:	5%
Base Construction Contract+	
Change Order to Date = Current Value:	$9,583,350
Completion:	July 2027
Budget:	$12.35 M

Current Status: Contractor mobilized to Pump Station No. 2 to install and test the bypass pumping system prior to beginning demolition work.

8. Moores Creek Administration Building Renovation and Addition

Design Engineer:	SEH
Construction Contractor	Martin Horn (Charlottesville, VA)
Construction Start:	August 2025
Percent Complete:	17%
Base Construction Contract+	
Change Order to Date = Current Value	$22,094,000
Completion:	December 2027
Budget:	$27.6 M

Current Status: Site and foundation work for the addition and demolition of the interior of the existing building continue. An issue identified with the brick façade of the existing building is being evaluated.

9. SRWTP – PAC Upgrades

Design Engineer:	SEH
Construction Contractor	Waco, Inc (Sandston, VA)
Construction Start:	June 2026
Percent Complete:	5%
Base Construction Contract+	
Change Order to Date = Current Value	$1,497,000
Completion:	June 2027
Budget:	$1.82 M

Current Status: Submittals for the powdered activated carbon tank are being processed and materials are being ordered. Based on the anticipated lead time for the PAC system, onsite mobilization is anticipated in June 2026.

10. RMR Pool Raise

Design Engineer:	Schnabel Engineering
Construction Contractor:	Faulconer Construction (Charlottesville, VA)
Construction Start:	September 2025

Percent Complete:	35%
Base Construction Contract+	
Change Order to Date = Current Value	$12,329,000 - $1,310,950 = $11,018,050
Completion:	December 2026
Budget:	$13.3 M

Current Status: Tree clearing activities continue to complete tree felling by March 31st due to restrictions associated with the Northern Long-Eared Bat. Work has also started on the lower parking lot expansion efforts along Reservoir Road, and for the new boat ramp at the reservoir.

11. Sewer and Manhole Repairs, Phase 2

Design Engineer:	CHA Consulting, Inc.
Construction Contractor:	Vortex Services, LLC (Chesapeake, VA)
Construction Start:	December 2025
Percent Complete:	15%
Base Construction Contract+	
Change Order to Date = Current Value	$1,439,440
Completion:	June 2027
Budget:	$2.185 M

Current Status: Manhole rehabilitation and sewer inspections continue. Pipeline rehabilitation is anticipated to begin in March.

12. Crozet WTP GAC Expansion, Phase 1

Design Engineer:	SEH
Construction Contractor:	English Construction Company (Lynchburg, VA)
Construction Start:	March 2026
Percent Complete:	0%
Base Construction Contract +	
Change Orders to Date = Current Value	$9,920,000
Completion:	May 2028
Budget:	$12.165 M

Current Status: Notice to Proceed is anticipated in February 2026 following final site plan approval by Albemarle County. Onsite work is expected to begin in March 2026. VDH has committed grant funds totaling $7.24 M that will support the project.

13. SVWRRF Generator Replacement

Design Engineer:	Wiley|Wilson
Construction Contractor:	Carrick Contracting Corp. (Williamsburg, VA)
Construction Start:	March 2026
Percent Complete:	0%
Base Construction Contract +	
Change Orders to Date = Current Value	$825,245
Completion:	June 2027
Budget:	$1.36 M

Current Status: As FEMA's criteria for grant funding was clarified, it was necessary to expand the

scope of this project to account for a 500-year flood plain as part of the design. Unfortunately, the additional expense associated with this expanded scope no longer met the metrics required to qualify for the grant. As such, the scope of the project was reduced to install the generator on a concrete pad, resilient to the 100-year floodplain, in lieu of the structural steel platform previously being proposed to account for the 500-year floodplain. An updated cost proposal has been received from the Contractor, and is under review by Staff. Notice to Proceed is anticipated to be issued by the end of the month. Approximately $50,000 previously awarded to RWSA by FEMA for the design of the project was able to be retained.

14. SRR to RMR Pipeline, Intake, and Facilities

Design Engineer:	Kimley Horn
Construction Contractor:	Garney Construction (Fairfax, VA)
Construction Start:	April 2026
Percent Complete:	1%
Completion:	December 2030
Budget:	$107 M

Current Status: The Notice to Proceed was issued on February 2nd, and an informational meeting for adjacent residents and the public was held on February 4th at the Albemarle County Office Building. The Contractor is working with Albemarle County to obtain its Land Disturbance Permit, and once the permit has been obtained, will begin clearing efforts.

15. Glenmore WRRF Upgrade, Phase 1

Design Engineer:	SEH
Construction Contractor:	Maverick Construction, LLC (Grasonville, MD)
Construction Start:	June 2026
Percent Complete:	0%
Completion:	August 2027
Budget:	$1.8 M

Current Status: The notice to proceed was issued on January 30th. Contractor is working through submittals.

16. Sodium Hypochlorite Tank Replacement, OBWTP

Design Engineer:	Short Elliott Hendrickson (SEH)
Construction Contractor:	Waco, Inc. (Sandston, VA)
Construction Start:	September 2026
Percent Complete:	0%
Base Construction Contract + Change Order to Date = Current Value:	$227,000
Completion:	July 2027
Budget:	$293,000

Current Status: Project includes the replacement of two existing hypochlorite tanks. Contractor is completing tank submittals prior to the tanks being released for production.

Design and Bidding

17. Central Water Line, Phase 2

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2024
Project Status:	90% Design
Construction Start:	October 2026
Completion:	March 2029
Budget:	$21 M

Current Status: Engineers completed 90% design drawings and site plan permit applications for stakeholder review. Site plan will be submitted to the City this month. A private easement has been acquired and easements on two City parcels will be requested from City Council.

18. MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades

Design Engineer:	Hazen and Sawyer (Hazen)
Project Start:	June 2023
Project Status:	90% Design
Construction Start:	October 2026
Completion:	May 2028
Budget:	$10.2 M

Current Status: Final design is proceeding with the additional work on the south side septage station and 100% design documents are anticipated this month for review. Acquisition of a small parcel outside the MC fence line is needed for construction and negotiations are underway.

19. Beaver Creek Dam Spillway Modifications

Design Engineer:	Schnabel Engineering
Project Start:	February 2018
Project Status:	80% Design
Construction Start:	*January 2029*
Completion:	*June 2031*
Budget:	$33.5 M

Current Status: Final design of the dam spillway upgrades is ongoing, with efforts focusing on primary spillway riser modifications to meet new seismic criteria. Changes to the spillway bridge design are being completed based on feedback from VDOT. A significant ($20 M) construction grant from the NRCS is anticipated.

20. Beaver Creek Raw Water Pump Station, Intake, and Piping Improvements

Design Engineer:	Hazen & Sawyer
Project Start:	February 2018
Project Status:	90% Design
Construction Start:	Sept 2026
Completion:	June 2029
Budget:	$39.0 M

Current Status: 90% Plans and Specifications are under review by staff. Discussions with the County are underway regarding a lease for the Pump Station property. Easement negotiations for the new raw water main continue with residents adjacent to the alignment.

21. Upper Schenks Branch Interceptor, Phase 2

Design Engineer:	CHA Consulting
Project Start:	July 2021
Project Status:	Design
Construction Start:	2027
Completion:	2029
Budget:	$7.1 M for RWSA section; $11 – 15 M including City section

Current Status: Meetings with the County and City are ongoing to finalize the piping alignment.

22. Dam Concrete and Steel Repairs

Design Engineer:	GAI Consultants
Project Start:	January 2025
Project Status:	90% Design
Construction Start:	August 2026
Completion:	November 2027
Budget:	$2.82 M

Current Status: Preliminary Design Drawings for the Project have been completed and are under review by staff. Some additional field assessment work is needed to finalize repair needs.

23. SVWRRF Permit Modification Upgrades

Design Engineer:	Short Elliot Hendrickson
Project Start:	July 2025
Project Status:	100% Design
Construction Start:	May 2026
Completion:	May 2027
Budget:	$827,000

Current Status: This project includes influent pump station and headworks upgrades, aeration piping rehabilitation, a new storage and chemical feed building, and flood resiliency improvements. 100% design documents have been completed and the project was advertised for bids on Monday, February 9th. The Pre-Bid Meeting for the project will be held on Thursday, February 12th with the Bid Opening taking place on March 4th.

Planning and Studies

24. MCAWRRF Biogas Upgrades

Design Engineer:	SEH
Project Start:	October 2021

Project Status:	Preliminary Engineering/Study (100%)
Completion:	December 2026
Budget:	$7.8 M

Current Status: After further review, RWSA and the City determined that now was not the right time to proceed with a renewable natural gas (RNG) system. As such, staff has closed out preliminary engineering efforts with SEH. Staff will continue to explore additional options for the beneficial reuse of biogas in the interim.

25. Flood Protection Resiliency Study

Design Engineer:	Hazen
Project Start:	August 2024
Project Status:	Preliminary Engineering/Study
Completion:	April 2026
Budget:	$278,500

Current Status: This project will identify individualized flood mitigation measures for various facilities to increase their resiliency from a 1% to a 0.2% flooding event and will focus on facilities located at the Moores Creek AWRRF within those flood event boundaries. This project received $198,930 in grant funding from FEMA and VDEM and the analysis process has begun with site visits and data collection. A meeting to discuss initial findings and the next steps has been scheduled for Wednesday, February 25th.

26. Powell Creek Interceptor Upgrade (PC1-PC5)

Design Engineer:	*Hazen*
Project Start:	*December 2025*
Project Status:	*PER*
Construction Start:	*TBD*
Completion:	*TBD*
Budget:	*$0.5 M*

Current Status: Developing scope of work to replace this sewer pipe.

27. Airport Rd Water Storage Tanks and Pumps

Design Engineer:	*SEH*
Project Start:	*December 2025*
Project Status:	*PER*
Construction Start:	*TBD*
Completion:	*TBD*
Budget:	*$0.5 M*

Current Status: Developing scope of work to provide 2 water storage tanks and pumps.

28. NR River Crossing and Piping

Design Engineer:	*Kimley-Horn*
Project Start:	*December 2025*
Project Status:	*PER*

Construction Start: *TBD*
Completion: *TBD*
Budget: *$0.5 M*

Current Status: Developing scope of work to provide a second water pipe under the N. Rivanna River and upsize water piping in the area.

29. Crozet Drinking Water Infrastructure Plan Update

Design Engineer: *Hazen*
Project Start: *October 2025*
Project Status: *Study Underway*
Completion: *October 2026*
Budget: *$450,000*

Current Status: Engineer is gathering available records and data to develop a land use model for demand forecasting.

Other Significant Projects

30. Urgent and Emergency Repairs

Staff are currently working on several urgent repairs within the water and wastewater systems as listed below:

Project No.	Project Description	Approx. Cost
2023-01	Finished Water System ARV Repairs	$150,000
2025-03	Rivanna Interceptor Stream Crossing Repairs	TBD

- RWSA Finished Water ARV Repairs: RWSA Engineering staff recently met with Maintenance staff to identify a list of Air Release Valves (ARVs) that need to be repaired, replaced, or abandoned. Several of these locations will require assistance from RWSA On-Call Maintenance Contractors, due to the complexity of the sites (proximity to roadways, depth, etc.). The initial round will include seven (7) sites, all along the South Rivanna Waterline. Three replacements have been completed at this time, with a fourth site in progress. This in progress site included abandonment of an existing manual ARV located in the middle of the Route 29-Hydraulic intersection, which has been completed, and was a major coordination effort with VDOT, as they intend to pave this area in the coming weeks. The Contractor is working with VDOT on permits for the final sites. The remaining replacements will be scheduled pending Contractor availability.
- Rivanna Interceptor Stream Crossing Repairs: In Spring 2025, during annual inspections performed by the RWSA Maintenance Department, erosion was identified at two stream crossings along the Rivanna Interceptor to the North of the Dunlora subdivision. RWSA On-Call Maintenance Contractor, Digs, temporarily stabilized the worst of the two stream crossing sites with sandbags, to protect the pipe as the design of the repair is finalized. RWSA will be utilizing Design Engineer, SEH, for assistance with plans and USACOE permitting.

31. <u>Security Enhancements</u>

Design Engineer:	Hazen & Sawyer
Construction Contractor:	Security 101 (Richmond, VA)
Construction Start:	March 2020
Percent Complete:	99% (WA #12)
Based Construction Contract + Change Orders to Date = Current Value:	$718,428 (WA1) + $1,006,804 (WA2-12)
Completion:	June 2025 (WA9), December 2025 (WA12)
Budget:	$2.98 M

<u>Current Status:</u> WA12 includes installation of card access on all exterior doors at the Observatory WTP, as well as two small electrical buildings at MCAWRRF. Design of MCAWRRF entrance modifications with Hazen & Sawyer continues, with discussions with Dominion Energy also ongoing, as relocation of existing electrical infrastructure will be required. This relocation process will need to be finalized prior to the project proceeding to the bidding phase. Relocation of existing electrical infrastructure will require coordination with the adjacent landowner, as the infrastructure must be completely relocated from the entrance area. These discussions continue. The WPO documents were approved by Albemarle County in September.

RIVANNA WATER & SEWER AUTHORITY
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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: LONNIE WOOD, DIRECTOR OF FINANCE

REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: DECEMBER MONTHLY FINANCIAL SUMMARY – FY 2026

DATE: FEBRUARY 24, 2026

Financial Snapshot

The Authority's actual operating revenues for the first six months of this fiscal year are $1,782,400 over the prorated annual budget estimates, and operating expenses are over the prorated budget by $98,000, resulting in an operating surplus of $1,684,300. Urban Water flows and operating rate revenue for this month are 6.8% over budget estimates. Urban Wastewater flows and operating rate revenue are 2.9% under budget. The two Urban rate centers generated $240,000 in excess revenues related to these flows. The Authority has received $1,036,900 in PFAS litigation funds this fiscal year, which is another source of excess revenues. These excess revenues are offset by some quarterly and annual payments of operating expenses discussed on the next page. Revenues and expenses are summarized in the table below:

December 2025 Year-to-Date Budget vs Actual Results:

	Budget	Actual	Variance
Operations			
Revenues	$ 15,322,951	$ 17,105,308	$ 1,782,357
Expenses	15,322,951	15,420,987	(98,036)
Surplus (deficit)	$ -	$ 1,684,321	$ 1,684,321
Debt Service			
Revenues	$ 16,706,622	$ 16,674,231	$ (32,391)
Expenses	16,706,622	16,668,596	38,026
Surplus (deficit)	$ -	$ 5,635	$ 5,635
Total			
Revenues	$ 32,029,573	$ 33,779,539	$ 1,749,966
Expenses	32,029,573	32,089,583	(60,010)
Surplus (deficit)	$ -	$ 1,689,956	$ 1,689,956

A more detailed financial analysis is in the following monthly report and reviews more closely actual financial performance compared to budgeted estimates. There are comments listed that will reference the applicable line items in the financial statement for each rate center and each support department in the following pages. Please refer to the Budget vs Actual financial statements when reviewing these comments.

Detailed Financials

The following comments help explain most of the other budget vs. actual variances.

A. Annual and Quarterly Transactions - Some revenues and expenses exceed the prorated annual budget due to up-front annual receipts of revenue and quarterly or annual payments of expenses. These transactions appear to significantly impact the budget vs. actual monthly comparisons, but they usually even out as the year progresses. Septage receiving support revenue of $109,440 is billed to the County annually in July. Annual payments are made in July for certain maintenance agreements and for employer contributions to employees' health savings accounts. The annual payment to UVA for the Observatory lease ($175,000) is made in August. Insurance premiums are generally paid at the beginning of each quarter.
B. Personnel Costs (most departments) – For several departments, salaries are slightly over the prorated budget, but the overages are offset by health insurance premium rebates.
C. Professional Services (Urban Water, Crozet Water, Administration, Finance/IT – pages 2,3,8,9) – Urban Water and Crozet Water are over the prorated budget in this category by $93,500 and $22,300 respectively for engineering and technical services. Urban Water incurred $15,300 in unbudgeted legal fees, and the Administration department is currently $22,400 over half of the annual budget for legal fees. The Finance/IT department is $39,000 over budget in this category for an unbudgeted engineering report to the bond trustee.
D. Communication – (Urban Water, Finance/IT – pages 2,9) – Urban Water and Finance/IT are $11,700 and $21,600, respectively, over the prorated budget in this category for telephone and data services.
E. Information Technology (Administration – page 8) – The Administration department paid for unbudgeted annual renewal fees for safety training and incident reporting software and website maintenance fees.
F. Operations and Maintenance (Urban Water, Crozet Water, Maintenance – pages 2,3,6) – Urban Water is currently over the prorated budget $168,900 for line break repairs, $59,800 for chemicals, and $235,400 for other maintenance and repairs. Crozet Water is $80,900 over the prorated budget for chemical costs and repairs. The Maintenance department is currently $16,400 over budget in this category for vehicle repairs.
G. Equipment Purchases – (Urban Water – page 2) – Urban Water's equipment rental costs are slightly higher than budget estimates.

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025
Fiscal Year 2026

Consolidated Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
Operations Rate Revenue		$ 28,565,847	$ 14,282,924	$ 14,522,989	$ 240,065	1.68%
Lease Revenue		120,000	60,000	73,722	13,722	22.87%
Admin., Finance/IT, Maint. & Engineering Revenue		998,000	499,000	520,395	21,395	4.29%
Other Revenues		689,654	344,827	1,728,990	1,384,163	401.41%
Interest Allocation		272,400	136,200	259,212	123,012	90.32%
Total Operating Revenues		**$ 30,645,901**	**$ 15,322,951**	**$ 17,105,308**	**$ 1,782,358**	**11.63%**
Expenses						
Personnel Cost	**B**	$ 14,179,052	$ 7,089,526	$ 7,029,392	$ 60,134	0.85%
Professional Services	**C**	777,950	388,975	521,033	(132,058)	-33.95%
Other Services & Charges	**A**	4,580,981	2,290,491	2,235,509	54,982	2.40%
Communication	**D**	291,328	145,664	169,766	(24,102)	-16.55%
Information Technology	**E**	2,398,380	1,199,190	929,241	269,949	22.51%
Supplies		60,031	30,016	33,486	(3,470)	-11.56%
Operations & Maintenance	**A,F**	6,856,926	3,428,463	3,815,615	(387,152)	-11.29%
Equipment Purchases	**G**	551,250	275,625	211,945	63,680	23.10%
Depreciation		950,000	475,000	475,000	(0)	0.00%
Total Operating Expenses		**$ 30,645,898**	**$ 15,322,949**	**$ 15,420,987**	**$ (98,037)**	**-0.64%**
Operating Surplus/(Deficit)		**$ 3**	**$ 1**	**$ 1,684,321**		

Debt Service Budget vs. Actual

Revenues						
Debt Service Rate Revenue		$ 31,290,304	$ 15,645,152	$ 15,645,150	$ (2)	0.00%
Septage Receiving Support - County		109,440	54,720	109,440	54,720	100.00%
Buck Mountain Lease Revenue		10,000	5,000	381	(4,619)	-92.38%
Trust Fund Interest		456,900	228,450	183,983	(44,467)	-19.46%
Reserve Fund Interest		1,546,600	773,300	735,277	(38,023)	-4.92%
Total Debt Service Revenues		**$ 33,413,244**	**$ 16,706,622**	**$ 16,674,231**	**$ (32,391)**	**-0.19%**
Debt Service Costs						
Total Principal & Interest		$ 21,245,638	$ 10,622,819	$ 10,622,819	$ -	0.00%
Reserve Additions-Interest		1,546,600	773,300	735,277	38,023	4.92%
Debt Service Ratio Charge		725,000	362,500	362,500	-	0.00%
Reserve Additions-CIP Growth		9,896,000	4,948,000	4,948,000	-	0.00%
Total Debt Service Costs		**$ 33,413,238**	**$ 16,706,619**	**$ 16,668,596**	**$ 38,023**	**0.23%**
Debt Service Surplus/(Deficit)		**$ 6**	**$ 3**	**$ 5,635**		

Summary

Total Revenues	$ 64,059,145	$ 32,029,573	$ 33,779,539	$ 1,749,966	5.46%
Total Expenses	64,059,136	32,029,568	32,089,582	(60,014)	-0.19%
Surplus/(Deficit)	**$ 9**	**$ 4**	**$ 1,689,956**		

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Urban Water Rate Center
Revenues and Expenses Summary

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Operating Budget vs. Actual						
Revenues						
Operations Rate Revenue		$ 12,376,260	$ 6,188,130	$ 6,609,651	$ 421,521	6.81%
Lease Revenue		90,000	45,000	56,441	11,441	25.42%
Grants		-		251,558	251,558	
Other Revenue		-	-	941,224	941,224	
Interest Allocation		120,000	60,000	113,535	53,535	89.22%
Total Operating Revenues		**$ 12,586,260**	**$ 6,293,130**	**$ 7,972,408**	**$ 1,679,278**	**26.68%**
Expenses						
Personnel Cost	**B**	$ 2,725,694	$ 1,362,847	$ 1,363,632	$ (785)	-0.06%
Professional Services	**C**	220,500	110,250	215,391	(105,141)	-95.37%
Other Services & Charges	**A**	1,210,134	605,067	616,860	(11,793)	-1.95%
Communications	**D**	91,500	45,750	57,446	(11,696)	-25.56%
Information Technology		197,100	98,550	60,325	38,225	38.79%
Supplies		10,031	5,016	5,393	(377)	-7.52%
Operations & Maintenance	**A, F**	3,116,833	1,558,417	2,022,558	(464,142)	-29.78%
Equipment Purchases	**G**	26,900	13,450	26,253	(12,803)	-95.19%
Depreciation		300,000	150,000	150,000	-	0.00%
Subtotal Before Allocations		$ 7,898,692	$ 3,949,346	$ 4,517,856	$ (568,511)	-14.40%
Allocation of Support Departments		4,687,568	2,343,784	2,225,960	117,824	5.03%
Total Operating Expenses		**$ 12,586,259**	**$ 6,293,130**	**$ 6,743,817**	**$ (450,687)**	**-7.16%**
Operating Surplus/(Deficit)		**$ 1**	**$ 0**	**$ 1,228,592**		
Debt Service Budget vs. Actual						
Revenues						
Debt Service Rate Revenue		$ 15,733,661	$ 7,866,831	$ 7,866,828	$ (3)	0.00%
Trust Fund Interest		200,000	100,000	80,566	(19,434)	-19.43%
Reserve Fund Interest		744,800	372,400	354,403	(17,997)	-4.83%
Lease Revenue		10,000	5,000	381	(4,619)	-92.38%
Total Debt Service Revenues		**$ 16,688,461**	**$ 8,344,231**	**$ 8,302,179**	**$ (42,052)**	**-0.50%**
Debt Service Costs						
Total Principal & Interest		$ 8,904,860	$ 4,452,430	$ 4,452,430	$ -	0.00%
Reserve Additions-Interest		744,800	372,400	354,403	17,997	4.83%
Debt Service Ratio Charge		400,000	200,000	200,000	-	0.00%
Est. New Debt Service - CIP Growth		6,638,800	3,319,400	3,319,400	-	0.00%
Total Debt Service Costs		**$ 16,688,460**	**$ 8,344,230**	**$ 8,326,233**	**$ 17,997**	**0.22%**
Debt Service Surplus/(Deficit)		**$ 1**	**$ 1**	**$ (24,055)**		
Rate Center Summary						
Total Revenues		$ 29,274,721	$ 14,637,361	$ 16,274,587	$ 1,637,226	11.19%
Total Expenses		29,274,719	14,637,360	15,070,050	(432,690)	-2.96%
Surplus/(Deficit)		**$ 2**	**$ 1**	**$ 1,204,537**		
Costs per 1000 Gallons		$ 3.70		$ 3.72		
Operating and DS		$ 8.62		$ 8.30		
Thousand Gallons Treated		3,397,700	1,698,850	1,814,841	115,991	6.83%
or						
Flow (MGD)		9.309		9.863		

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Crozet Water Rate Center
Revenues and Expenses Summary

	Notes	Budget FY 2026	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Operating Budget vs. Actual						
Revenues						
Operations Rate Revenue		$ 1,562,184	$ 781,092	$ 781,092	$ -	0.00%
Lease Revenue		30,000	15,000	17,282	2,282	15.21%
Other Revenue		-	-	77,691	77,691	
Interest Allocation		15,000	7,500	14,257	6,757	90.09%
Total Operating Revenues		**$ 1,607,184**	**$ 803,592**	**$ 890,321**	**$ 86,729**	**10.79%**
Expenses						
Personnel Cost		$ 379,359	$ 189,680	$ 191,554	$ (1,874)	-0.99%
Professional Services	C	19,500	9,750	32,363	(22,613)	-231.93%
Other Services & Charges		177,582	88,791	81,719	7,072	7.96%
Communications		15,300	7,650	8,543	(893)	-11.68%
Information Technology		64,400	32,200	16,835	15,365	47.72%
Supplies		1,100	550	1,764	(1,214)	-220.81%
Operations & Maintenance	F	449,085	224,543	305,472	(80,929)	-36.04%
Equipment Purchases		3,800	1,900	1,900	(0)	0.00%
Depreciation		60,000	30,000	30,000	-	0.00%
Subtotal Before Allocations		$ 1,170,126	$ 585,063	$ 670,150	$ (85,087)	-14.54%
Allocation of Support Departments		437,056	218,528	207,482	11,046	5.05%
Total Operating Expenses		**$ 1,607,183**	**$ 803,591**	**$ 877,632**	**$ (74,041)**	**-9.21%**
Operating Surplus/(Deficit)		**$ 1**	**$ 1**	**$ 12,689**		
Debt Service Budget vs. Actual						
Revenues						
Debt Service Rate Revenue		$ 3,103,992	$ 1,551,996	$ 1,551,996	$ -	0.00%
Trust Fund Interest		32,000	16,000	12,879	(3,121)	-19.51%
Reserve Fund Interest		118,000	59,000	55,881	(3,119)	-5.29%
Total Debt Service Revenues		**$ 3,253,992**	**$ 1,626,996**	**$ 1,620,756**	**$ (6,240)**	**-0.38%**
Debt Service Costs						
Total Principal & Interest		$ 1,126,391	$ 563,196	$ 563,196	$ -	0.00%
Reserve Additions-Interest		118,000	59,000	55,881	3,119	5.29%
Estimated New Principal & Interest		2,009,600	1,004,800	1,004,800	-	0.00%
Total Debt Service Costs		**$ 3,253,991**	**$ 1,626,996**	**$ 1,623,877**	**$ 3,119**	**0.19%**
Debt Service Surplus/(Deficit)		**$ 1**	**$ 1**	**$ (3,121)**		

Rate Center Summary

Total Revenues	$ 4,861,176	$ 2,430,588	$ 2,511,077	$ 80,489	3.31%
Total Expenses	4,861,174	2,430,587	2,501,509	(70,922)	-2.92%
Surplus/(Deficit)	**$ 2**	**$ 1**	**$ 9,568**		
Costs per 1000 Gallons	$ 7.93		$ 7.12		
Operating and DS	$ 23.98		$ 20.28		
Thousand Gallons Treated	202,697	101,349	123,333	21,985	21.69%
Flow (MGD)	0.555		0.670		

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Scottsville Water Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
Operations Rate Revenue		$ 851,940	$ 425,970	$ 425,970	$ -	0.00%
Other Revenue		-	-	17,997	17,997	
Interest Allocation		7,700	3,850	7,258	3,408	88.52%
Total Operating Revenues		**$ 859,640**	**$ 429,820**	**$ 451,225**	**$ 21,405**	**4.98%**
Expenses						
Personnel Cost		$ 248,090	$ 124,045	$ 125,833	$ (1,788)	-1.44%
Professional Services		15,000	7,500	15,511	(8,011)	-106.81%
Other Services & Charges		79,887	39,944	38,366	1,578	3.95%
Communications		18,550	9,275	14,529	(5,254)	-56.65%
Information Technology		57,000	28,500	17,009	11,491	40.32%
Supplies		200	100	1,045	(945)	-944.56%
Operations & Maintenance		137,220	68,610	45,141	23,469	34.21%
Equipment Purchases		2,400	1,200	1,801	(601)	-50.05%
Depreciation		40,000	20,000	20,000	0	0.00%
Subtotal Before Allocations		$ 598,347	$ 299,173	$ 279,234	$ 19,939	6.66%
Allocation of Support Departments		261,289	130,645	123,524	7,120	5.45%
Total Operating Expenses		**$ 859,636**	**$ 429,818**	**$ 402,758**	**$ 27,060**	**6.30%**
Operating Surplus/(Deficit)		**$ 4**	**$ 2**	**$ 48,466**		

Debt Service Budget vs. Actual

Revenues						
Debt Service Rate Revenue		$ 304,128	$ 152,064	$ 152,064	$ -	0.00%
Trust Fund Interest		4,200	2,100	1,693	(407)	-19.40%
Reserve Fund Interest		4,800	2,400	2,206	(194)	-8.09%
Total Debt Service Revenues		**$ 313,128**	**$ 156,564**	**$ 155,962**	**$ (602)**	**-0.38%**
Debt Service Costs						
Total Principal & Interest		$ 148,127	$ 74,064	$ 74,064	$ -	0.00%
Reserve Additions-Interest		4,800	2,400	2,206	194	8.09%
Estimated New Principal & Interest		160,200	80,100	80,100	-	0.00%
Total Debt Service Costs		**$ 313,127**	**$ 156,564**	**$ 156,369**	**$ 194**	**0.12%**
Debt Service Surplus/(Deficit)		**$ 1**	**$ 1**	**$ (407)**		

Rate Center Summary

Total Revenues	$ 1,172,768	$ 586,384	$ 607,187	$ 20,803	3.55%
Total Expenses	1,172,763	586,382	559,128	27,254	4.65%
Surplus/(Deficit)	**$ 5**	**$ 2**	**$ 48,059**		
Costs per 1000 Gallons	$ 49.89		$ 37.69		
Operating and DS	$ 68.07		$ 52.32		
Thousand Gallons Treated	17,230	8,615	10,686	2,071	24.04%
or					
Flow (MGD)	0.047		0.058		

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Urban Wastewater Rate Center
Revenues and Expenses Summary

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Operating Budget vs. Actual						
Revenues						
Operations Rate Revenue		$ 12,610,887	$ 6,305,444	$ 6,123,988	$ (181,455)	-2.88%
Stone Robinson WWTP		19,654	9,827	105,593	95,766	974.51%
Septage Acceptance		620,000	310,000	281,152	(28,848)	-9.31%
Nutrient Credits		50,000	25,000	53,777	28,777	115.11%
Miscellaneous Revenue		-	-	-	-	
Interest Allocation		120,000	60,000	115,090	55,090	91.82%
Total Operating Revenues		**$ 13,420,541**	**$ 6,710,271**	**$ 6,679,599**	**$ (30,672)**	**-0.46%**
Expenses						
Personnel Cost	**B**	$ 1,725,025	$ 862,512	$ 857,826	$ 4,686	0.54%
Professional Services		205,000	102,500	66,993	35,507	34.64%
Other Services & Charges		2,742,631	1,371,316	1,328,886	42,430	3.09%
Communications		15,100	7,550	4,035	3,515	46.56%
Information Technology		187,600	93,800	81,616	12,184	12.99%
Supplies		2,600	1,300	1,393	(93)	-7.15%
Operations & Maintenance		2,523,628	1,261,814	1,152,801	109,013	8.64%
Equipment Purchases		73,500	36,750	36,750	-	0.00%
Depreciation		470,000	235,000	235,000	(0)	0.00%
Subtotal Before Allocations		$ 7,945,084	$ 3,972,542	$ 3,765,300	$ 207,241	5.22%
Allocation of Support Departments		5,475,458	2,737,729	2,597,595	140,134	5.12%
Total Operating Expenses		**$ 13,420,542**	**$ 6,710,271**	**$ 6,362,896**	**$ 347,375**	**5.18%**
Operating Surplus/(Deficit)		**$ (1)**	**$ (1)**	**$ 316,703**		
Debt Service Budget vs. Actual						
Revenues						
Debt Service Rate Revenue		$ 11,948,147	$ 5,974,074	$ 5,974,074	$ 1	0.00%
Septage Receiving Support - County		109,440	54,720	109,440	54,720	100.00%
Trust Fund Interest		220,000	110,000	88,551	(21,449)	-19.50%
Reserve Fund Interest		675,000	337,500	320,581	(16,919)	-5.01%
Total Debt Service Revenues		**$ 12,952,587**	**$ 6,476,294**	**$ 6,492,646**	**$ 16,352**	**0.25%**
Debt Service Costs						
Total Principal & Interest		$ 11,040,988	$ 5,520,494	$ 5,520,494	$ -	0.00%
Reserve Additions-Interest		675,000	337,500	320,581	16,919	5.01%
Debt Service Ratio Charge		325,000	162,500	162,500	-	0.00%
Est. New Debt Service - CIP Growth		911,600	455,800	455,800	-	0.00%
Total Debt Service Costs		**$ 12,952,588**	**$ 6,476,294**	**$ 6,459,375**	**$ 16,919**	**0.26%**
Debt Service Surplus/(Deficit)		**$ (1)**	**$ (1)**	**$ 33,271**		
Rate Center Summary						
Total Revenues		$ 26,373,128	$ 13,186,564	$ 13,172,244	$ (14,320)	-0.11%
Total Expenses		26,373,130	13,186,565	12,822,270	364,295	2.76%
Surplus/(Deficit)		**$ (2)**	**$ (1)**	**$ 349,974**		
Costs per 1000 Gallons		$ 3.96		$ 3.86		
Operating and DS		$ 7.78		$ 7.79		
Thousand Gallons Treated		3,390,400	1,695,200	1,646,676	(48,524)	-2.86%
or						
Flow (MGD)		9.289		8.949		

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Glenmore Wastewater Rate Center
Revenues and Expenses Summary

	Budget FY 2026	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Operating Budget vs. Actual					
Notes					
Revenues					
Operations Rate Revenue	$ 673,248	$ 336,624	$ 336,624	$ -	0.00%
Interest Allocation	5,500	2,750	5,184	2,434	88.52%
Total Operating Revenues	**$ 678,748**	**$ 339,374**	**$ 341,808**	**$ 2,434**	**0.72%**
Expenses					
Personnel Cost	$ 142,586	$ 71,293	$ 71,191	$ 102	0.14%
Professional Services	10,000	5,000	861	4,139	82.77%
Other Services & Charges	45,136	22,568	25,328	(2,760)	-12.23%
Communications	20,300	10,150	10,996	(846)	-8.34%
Information Technology	53,450	26,725	13,708	13,017	48.71%
Supplies	-	-	0	(0)	
Operations & Maintenance	152,435	76,218	39,730	36,488	47.87%
Equipment Purchases	3,500	1,750	1,750	(0)	0.00%
Depreciation	60,000	30,000	30,000	-	0.00%
Subtotal Before Allocations	$ 487,407	$ 243,704	$ 193,565	$ 50,139	20.57%
Allocation of Support Departments	191,344	95,672	89,725	5,947	6.22%
Total Operating Expenses	**$ 678,752**	**$ 339,376**	**$ 283,290**	**$ 56,086**	**16.53%**
Operating Surplus/(Deficit)	**$ (4)**	**$ (2)**	**$ 58,518**		
Debt Service Budget vs. Actual					
Revenues					
Debt Service Rate Revenue	$ 144,948	$ 72,474	$ 72,474	$ -	0.00%
Trust Fund Interest	500	250	221	(29)	-11.69%
Reserve Fund Interest	-	-	-	-	
Total Debt Service Revenues	**$ 145,448**	**$ 72,724**	**$ 72,695**	**$ (29)**	**-0.04%**
Debt Service Costs					
Total Principal & Interest	$ 18,746	$ 9,373	$ 9,373	$ -	0.00%
Estimated New Principal & Interest	126,700	63,350	63,350	-	0.00%
Reserve Additions-Interest	-	-	-	-	
Total Debt Service Costs	**$ 145,446**	**$ 72,723**	**$ 72,723**	**$ -**	**0.00%**
Debt Service Surplus/(Deficit)	**$ 2**	**$ 1**	**$ (28)**		

Rate Center Summary

Total Revenues	$ 824,196	$ 412,098	$ 414,503	$ 2,405	0.58%
Total Expenses	824,198	412,099	356,013	56,086	13.61%
Surplus/(Deficit)	**$ (2)**	**$ (1)**	**$ 58,490**		
Costs per 1000 Gallons	$ 16.39		$ 11.25		
Operating and DS	$ 19.91		$ 14.14		
Thousand Gallons Treated	41,401	20,701	25,181	4,481	**21.64%**
or					
Flow (MGD)	0.113		0.137		

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Scottsville Wastewater Rate Center
Revenues and Expenses Summary

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Operating Budget vs. Actual						
Revenues						
Operations Rate Revenue		$ 491,328	$ 245,664	$ 245,664	$ -	0.00%
Interest Allocation		4,200	2,100	3,888	1,788	85.15%
Total Operating Revenues		**$ 495,528**	**$ 247,764**	**$ 249,552**	**$ 1,788**	**0.72%**
Expenses						
Personnel Cost		$ 142,484	$ 71,242	$ 71,192	$ 50	0.07%
Professional Services		5,000	2,500	486	2,014	80.54%
Other Services & Charges		30,936	15,468	19,652	(4,184)	-27.05%
Communications		6,050	3,025	144	2,881	95.23%
Information Technology		54,750	27,375	1,572	25,803	94.26%
Supplies		-	-	0	(0)	
Operations & Maintenance	F	53,680	26,840	41,329	(14,489)	-53.98%
Equipment Purchases		3,500	1,750	1,750	(0)	0.00%
Depreciation		20,000	10,000	10,000	(0)	0.00%
Subtotal Before Allocations		$ 316,400	$ 158,200	$ 146,126	$ 12,074	7.63%
Allocation of Support Departments		179,127	89,563	84,073	5,491	6.13%
Total Operating Expenses		**$ 495,527**	**$ 247,763**	**$ 230,199**	**$ 17,565**	**7.09%**
Operating Surplus/(Deficit)		**$ 1**	**$ 1**	**$ 19,353**		
Debt Service Budget vs. Actual						
Revenues						
Debt Service Rate Revenue		$ 55,428	$ 27,714	$ 27,714	$ -	0.00%
Trust Fund Interest		200	100	74	(26)	-26.39%
Reserve Fund Interest		4,000	2,000	2,206	206	10.29%
Total Debt Service Revenues		**$ 59,628**	**$ 29,814**	**$ 29,993**	**$ 179**	**0.60%**
Debt Service Costs						
Total Principal & Interest		$ 6,526	$ 3,263	$ 3,263	$ -	0.00%
Reserve Additions-Interest		4,000	2,000	2,206	(206)	-10.29%
Estimated New Principal & Interest		49,100	24,550	24,550	-	0.00%
Total Debt Service Costs		**$ 59,626**	**$ 29,813**	**$ 30,019**	**$ (206)**	**-0.69%**
Debt Service Surplus/(Deficit)		**$ 2**	**$ 1**	**$ (25)**		
Rate Center Summary						
Total Revenues		$ 555,156	$ 277,578	$ 279,546	$ 1,968	0.71%
Total Expenses		555,153	277,576	260,218	17,359	6.25%
Surplus/(Deficit)		**$ 3**	**$ 2**	**$ 19,328**		
Costs per 1000 Gallons		$ 20.96		$ 25.51		
Operating and DS		$ 23.48		$ 28.84		
Thousand Gallons Treated		23,643	11,822	9,024	(2,798)	**-23.66%**
or						
Flow (MGD)		0.065		0.049		

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Administration and Communication

Operating Budget vs. Actual

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
Payment for Services SWA		$ 417,000	$ 208,500	$ 208,631	$ 131	0.06%
Miscellaneous Revenue		-	-	599	599	
Total Operating Revenues		**$ 417,000**	**$ 208,500**	**$ 209,230**	**$ 730**	**0.35%**
Expenses						
Personnel Cost	**B**	$ 1,657,525	$ 828,763	$ 856,192	$ (27,430)	-3.31%
Professional Services	**C**	103,950	51,975	75,003	(23,028)	-44.31%
Other Services & Charges		162,450	81,225	64,675	16,550	20.37%
Communications		9,200	4,600	1,189	3,411	74.16%
Information Technology	**E**	5,700	2,850	17,321	(14,471)	-507.75%
Supplies		19,600	9,800	7,941	1,859	18.97%
Operations & Maintenance		66,050	33,025	29,009	4,016	12.16%
Equipment Purchases		9,000	4,500	4,500	-	0.00%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 2,033,475**	**$ 1,016,738**	**$ 1,055,830**	**$ (39,093)**	**-3.84%**

Department Summary

Net Costs Allocable to Rate Centers	**$ (1,616,475)**	**$ (808,238)**	**$ (846,600)**	**$ 38,362**	**-4.75%**
Allocations to the Rate Centers					
Urban Water	44.00% **$ 711,249**	**$ 355,625**	**$ 372,504**	**$ (16,879)**	
Crozet Water	4.00% **$ 64,659**	**32,330**	**33,864**	**(1,534)**	
Scottsville Water	2.00% **$ 32,330**	**16,165**	**16,932**	**(767)**	
Urban Wastewater	48.00% **$ 775,908**	**387,954**	**406,368**	**(18,414)**	
Glenmore Wastewater	1.00% **$ 16,165**	**8,082**	**8,466**	**(384)**	
Scottsville Wastewater	1.00% **$ 16,165**	**8,082**	**8,466**	**(384)**	
	100.00% **$ 1,616,475**	**$ 808,238**	**$ 846,600**	**$ (38,362)**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Finance and Information Technology

Operating Budget vs. Actual

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
Payment for Services SWA		$ 581,000	$ 290,500	$ 290,500	$ 0	0.00%
Bond Proceeeds Funding Bond Issuance Costs		-	-		-	
Miscellaneous Revenue		-	-	8,995	8,995	
Total Operating Revenues		**$ 581,000**	**$ 290,500**	**$ 299,495**	**$ 8,995**	**3.10%**
Expenses						
Personnel Cost	**B**	$ 2,411,906	$ 1,205,953	$ 1,211,678	$ (5,725)	-0.47%
Professional Services	**C**	47,000	23,500	62,549	(39,049)	-166.17%
Other Services & Charges		55,200	27,600	30,734	(3,134)	-11.36%
Communication	**D**	73,900	36,950	58,523	(21,573)	-58.38%
Information Technology		1,550,650	775,325	631,271	144,054	18.58%
Supplies		14,000	7,000	8,345	(1,345)	-19.22%
Operations & Maintenance		5,000	2,500	8,006	(5,506)	-220.25%
Equipment Purchases		7,500	3,750	3,750	-	0.00%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 4,165,156**	**$ 2,082,578**	**$ 2,014,857**	**$ 67,721**	**3.25%**

Department Summary

Net Costs Allocable to Rate Centers	**$ (3,584,156)**	**$ (1,792,078)**	**$ (1,715,362)**	**$ (76,716)**	**4.28%**
Allocations to the Rate Centers					
Urban Water	44.00% **$ 1,577,029**	**$ 788,514**	**$ 754,759**	**$ 33,755**	
Crozet Water	4.00% **$ 143,366**	**71,683**	**68,614**	**3,069**	
Scottsville Water	2.00% **$ 71,683**	**35,842**	**34,307**	**1,534**	
Urban Wastewater	48.00% **$ 1,720,395**	**860,198**	**823,374**	**36,824**	
Glenmore Wastewater	1.00% **$ 35,842**	**17,921**	**17,154**	**767**	
Scottsville Wastewater	1.00% **$ 35,842**	**17,921**	**17,154**	**767**	
	100.00% **$ 3,584,156**	**$ 1,792,078**	**$ 1,715,362**	**$ 76,716**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Maintenance

Operating Budget vs. Actual

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
Payment for Services SWA		$ -	$ -	$ -	$ -	
Miscellaneous Revenue		-	-	1,206	1,206	
Total Operating Revenues		**$ -**	**$ -**	**$ 1,206**	**$ 1,206**	
Expenses						
Personnel Cost	**B**	$ 1,836,099	$ 918,049	$ 910,123	$ 7,926	0.86%
Professional Services		10,000	5,000	525	4,475	89.50%
Other Services & Charges		40,350	20,175	12,539	7,636	37.85%
Communications		20,000	10,000	4,128	5,872	58.72%
Information Technology		7,500	3,750	2,409	1,341	35.77%
Supplies		3,500	1,750	18	1,732	98.98%
Operations & Maintenance	**F**	130,300	65,150	81,522	(16,372)	-25.13%
Equipment Purchases		395,750	197,875	120,420	77,455	39.14%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 2,443,499**	**$ 1,221,749**	**$ 1,131,683**	**$ 90,067**	**7.37%**

Department Summary

Net Costs Allocable to Rate Centers		**$ (2,443,499)**	**$ (1,221,749)**	**$ (1,130,476)**	**$ (88,860)**	**7.27%**
Allocations to the Rate Centers						
Urban Water	30.00%	**$ 733,050**	**$ 366,525**	**$ 339,143**	**$ 27,382**	
Crozet Water	3.50%	**85,522**	**42,761**	**39,567**	**3,195**	
Scottsville Water	3.50%	**85,522**	**42,761**	**39,567**	**3,195**	
Urban Wastewater	56.50%	**1,380,577**	**690,288**	**638,719**	**51,569**	
Glenmore Wastewater	3.50%	**85,522**	**42,761**	**39,567**	**3,195**	
Scottsville Wastewater	3.00%	**73,305**	**36,652**	**33,914**	**2,738**	
	100.00%	**$ 2,443,499**	**$ 1,221,749**	**$ 1,130,476**	**$ 91,273**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Laboratory

Operating Budget vs. Actual

	Budget FY 2026	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*	**Notes**
Revenues						
N/A						
Expenses						
Personnel Cost	$ 503,003	$ 251,501	$ 244,014	$ 7,488	2.98%	
Professional Services	-	-	-	-		
Other Services & Charges	9,800	4,900	3,887	1,013	20.68%	
Communications	800	400	7,261	(6,861)	-1715.14%	
Information Technology	-	-	-	-		
Supplies	2,300	1,150	2,871	(1,721)	-149.66%	
Operations & Maintenance	146,357	73,179	50,609	22,570	30.84%	
Equipment Purchases	3,900	1,950	2,322	(372)	-19.09%	
Depreciation	-	-	-	-		
Total Operating Expenses	**$ 666,160**	**$ 333,080**	**$ 310,963**	**$ 22,117**	**6.64%**	

Department Summary

Net Costs Allocable to Rate Centers	**$ (666,160)**	**$ (333,080)**	**$ (310,963)**	**$ (22,117)**	**6.64%**
Allocations to the Rate Centers					
Urban Water 44.00%	**$ 293,110**	**$ 146,555**	**$ 136,824**	**$ 9,731**	
Crozet Water 4.00%	**26,646**	**13,323**	**12,439**	**885**	
Scottsville Water 2.00%	**13,323**	**6,662**	**6,219**	**442**	
Urban Wastewater 47.00%	**313,095**	**156,548**	**146,153**	**10,395**	
Glenmore Wastewater 1.50%	**9,992**	**4,996**	**4,664**	**332**	
Scottsville Wastewater 1.50%	**9,992**	**4,996**	**4,664**	**332**	
100.00%	**$ 666,160**	**$ 333,080**	**$ 310,963**	**$ 22,117**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - December 2025

Engineering

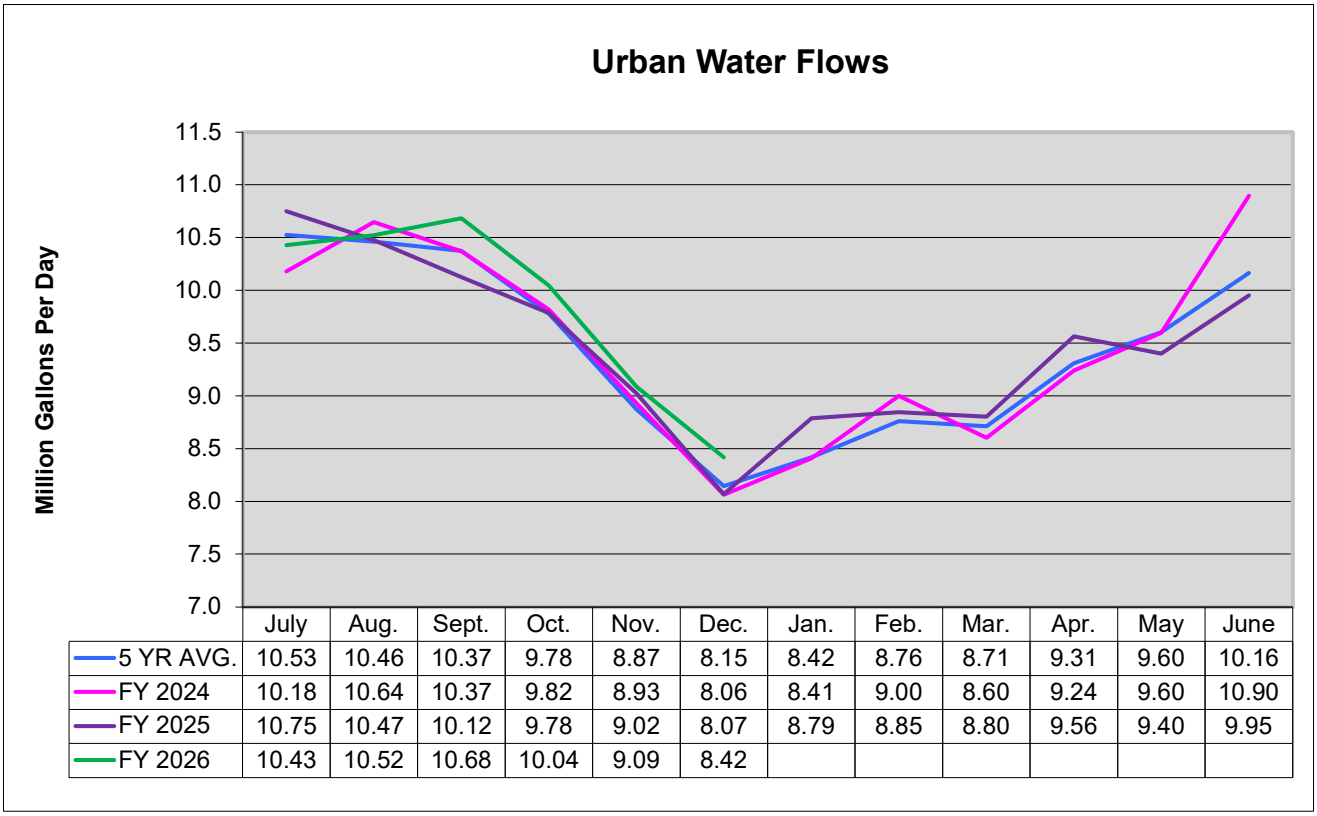
Operating Budget vs. Actual

	Notes	*Budget FY 2026*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
Payment for Services SWA		$ -	$ -	$ 10,463	$ 10,463	
Total Operating Revenues		**$ -**	**$ -**	**$ 10,463**	**$ 10,463**	
Expenses						
Personnel Cost		$ 2,407,282	$ 1,203,641	$ 1,126,157	$ 77,484	6.44%
Professional Services		142,000	71,000	51,350	19,650	27.68%
Other Services & Charges		26,875	13,438	12,863	574	4.27%
Communications		20,628	10,314	2,972	7,342	71.18%
Information Technology		220,230	110,115	87,175	22,940	20.83%
Supplies		6,700	3,350	4,715	(1,365)	-40.73%
Operations & Maintenance		76,338	38,169	39,438	(1,269)	-3.33%
Equipment Purchases		21,500	10,750	10,750	0	0.00%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 2,921,553**	**$ 1,460,776**	**$ 1,335,421**	**$ 125,356**	**8.58%**

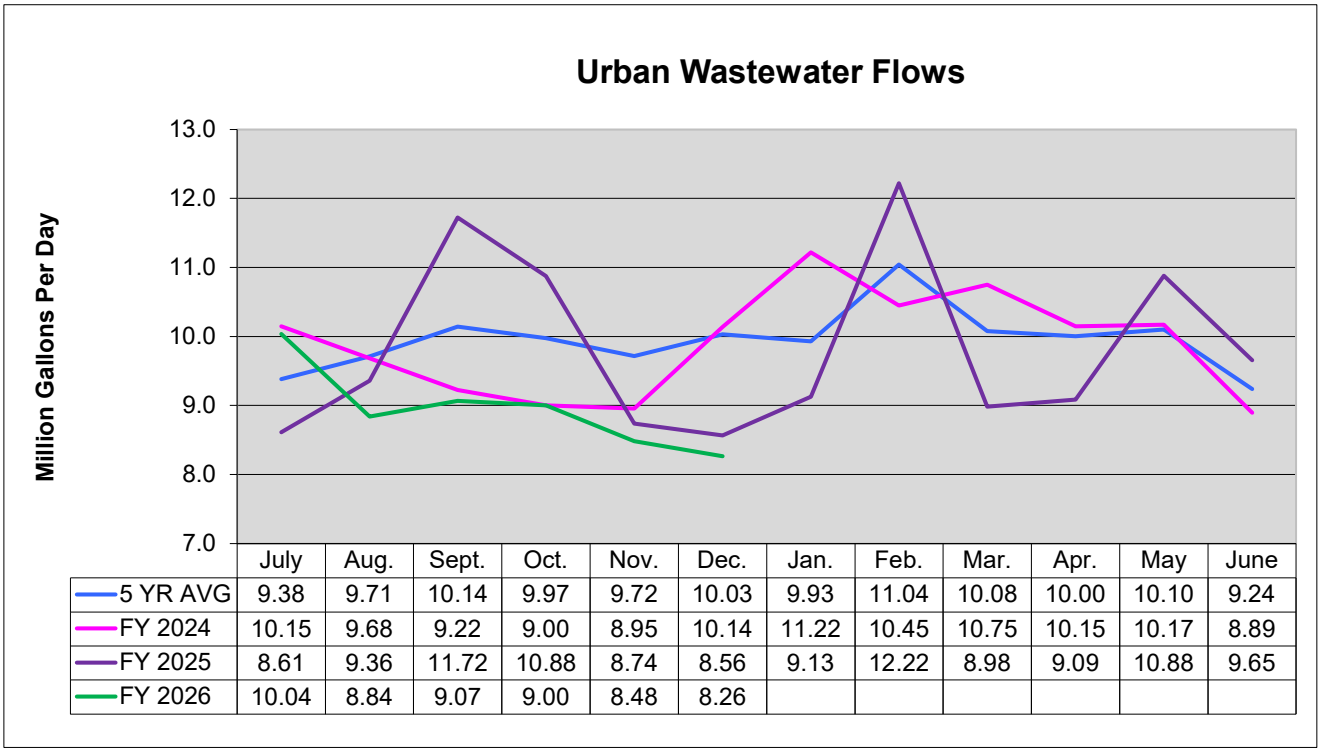
Department Summary

Net Costs Allocable to Rate Centers		**$ (2,921,553)**	**$ (1,460,776)**	**$ (1,324,958)**	**$ (114,893)**	**7.87%**
Allocations to the Rate Centers						
Urban Water	47.00%	**$ 1,373,130**	**$ 686,565**	**$ 622,730**	**$ 63,835**	
Crozet Water	4.00%	**116,862**	**58,431**	**52,998**	**5,433**	
Scottsville Water	2.00%	**58,431**	**29,216**	**26,499**	**2,716**	
Urban Wastewater	44.00%	**1,285,483**	**642,742**	**582,982**	**59,760**	
Glenmore Wastewater	1.50%	**43,823**	**21,912**	**19,874**	**2,037**	
Scottsville Wastewater	1.50%	**43,823**	**21,912**	**19,874**	**2,037**	
	100.00%	**$ 2,921,553**	**$ 1,460,776**	**$ 1,324,958**	**$ 135,818**	

Rivanna Water and Sewer Authority
Flow Graphs



	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
5 YR AVG.	10.53	10.46	10.37	9.78	8.87	8.15	8.42	8.76	8.71	9.31	9.60	10.16
FY 2024	10.18	10.64	10.37	9.82	8.93	8.06	8.41	9.00	8.60	9.24	9.60	10.90
FY 2025	10.75	10.47	10.12	9.78	9.02	8.07	8.79	8.85	8.80	9.56	9.40	9.95
FY 2026	10.43	10.52	10.68	10.04	9.09	8.42						



	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
5 YR AVG	9.38	9.71	10.14	9.97	9.72	10.03	9.93	11.04	10.08	10.00	10.10	9.24
FY 2024	10.15	9.68	9.22	9.00	8.95	10.14	11.22	10.45	10.75	10.15	10.17	8.89
FY 2025	8.61	9.36	11.72	10.88	8.74	8.56	9.13	12.22	8.98	9.09	10.88	9.65
FY 2026	10.04	8.84	9.07	9.00	8.48	8.26						

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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS

FROM: JEFF SOUTHWORTH, MANAGER OF INFORMATION TECHNOLOGY

REVIEWED BY: DAVE TUNGATE, DEPUTY EXECUTIVE DIRECTOR
BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: JANUARY 2026 INFORMATION TECHNOLOGY REPORT

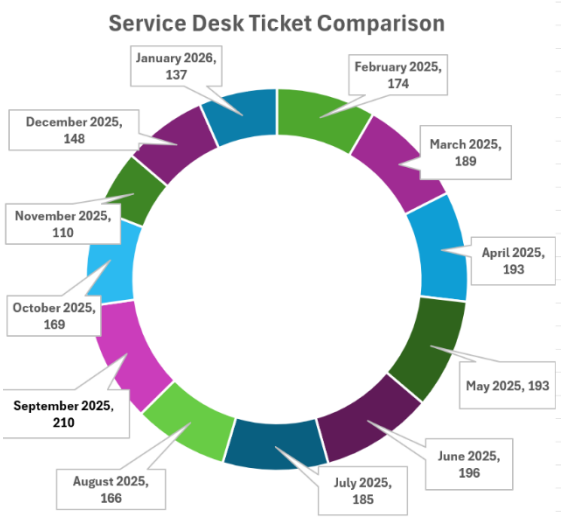
DATE: FEBRUARY 24, 2026

INFRASTRUCTURE – CORE SYSTEMS

Background: Includes network operations, system administration, software and hardware deployment, and security management.

January 2026 the team:

- Resolved **137** Service Desk Tickets



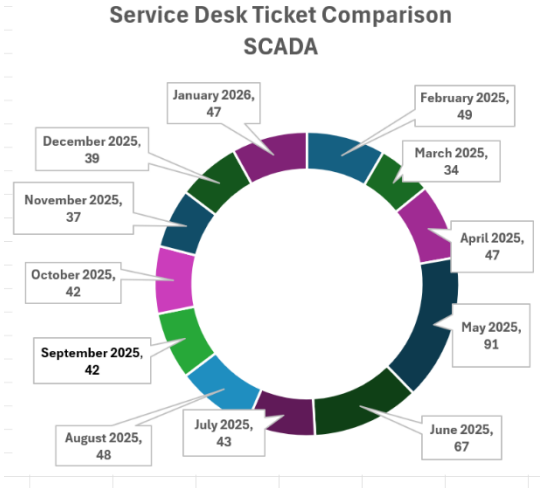
SCADA / OPERATIONAL SYSTEMS

(SUPERVISORY CONTROLS AND DATA ACQUISITION)

Background: Oversite includes PLCs, operational data collection and software applications for water and wastewater operations.

January 2026 the team:

- Completed **47** SCADA service desk requests



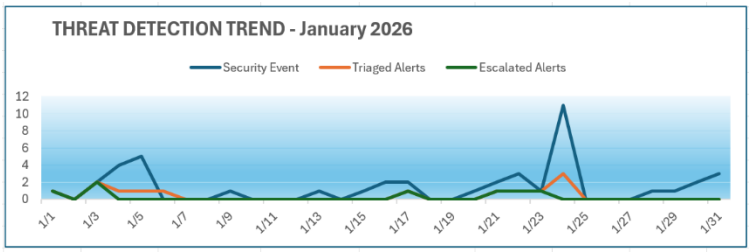
DIGITAL & PHYSICAL SECURITY - JANUARY

Background: Network Firewall Security for **28** Devices

January 2026 there were:

- **1.0B** Security logs Analyzed for suspicious network traffic
- **44** Threat Detections – All blocked
- **13** Categorized Security Alerts resolved
- **7** Escalated Alert – resolved

Spikes were from Malicious Phishing Campaigns and a virus on 1 laptop – quarantined immediately and reimaged.



GIS (GEOGRAPHICAL INFORMATION SYSTEMS)

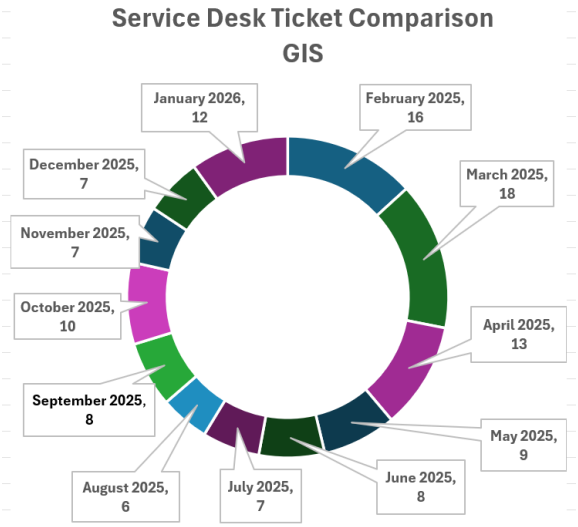
Background: Strategic data system that collects, processes, manages, and displays spatial data that supports engineering and maintenance workflows. Our system is managed by the RWSA GIS Coordinator.

January 2026 the GIS Coordinator:

- Digitalized **9** features (points, lines, polygons)
- Completed **118** Daily Inspection reports (for CIPs)
- Processed **33** MISS Utility reports
- Processed **66** Water inspections (GIS attributes adjusted)
- Processed **118** Sewer inspections
- Completed **9** Internal map requests
- Completed **18** Drone site visits for pictures of CIPs

Major Projects

- Audited maintenance reports from last year for any data incongruities
- Update website for CIPs, GIS data from City, County, ACSA and UVA



IT Department's Large Project Participation

Infrastructure

In progress: The project to secure all network equipment by placing them in locked network cabinets/racks and secured closets at all plants continues with 5 of the 6 plants completed.

SCADA System

In progress: We are actively supporting several capital improvement projects, including the RMR to OBWTP Raw Water Line and Pump Station, SRWTP – PAC Upgrades, SFRR to RMR pump station, and the Crozet WTP GAC Expansion. The IT Commissioning Program for the MC Pump Station reinspection and the RMR to SRR projects are currently underway.

RIVANNA WATER & SEWER AUTHORITY
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MEMORANDUM

TO: **RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS**

FROM: **DANIEL G. CAMPBELL, DIRECTOR OF OPERATIONS & ENVIRONMENTAL SERVICES**

REVIEWED BY: **DAVE TUNGATE, DEPUTY EXECUTIVE DIRECTOR**
BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: **OPERATIONS REPORT FOR JANUARY 2026**

DATE: **FEBRUARY 24, 2026**

WATER OPERATIONS:

The average and maximum daily water volumes produced in January 2026 were as follows:

Water Treatment Plant	***Average Daily Production (MGD)***	***Maximum Daily Production in the Month (MGD)***
South Rivanna	7.66	8.72 (1/27/2026)
Observatory	0.79	1.66 (1/6/2026)
North Rivanna	0.33	0.75 (1/12/2026)
Urban Total	8.78	9.98 (1/27/2026)
Crozet	0.54	0.62 (1/29/2026)
Scottsville	0.06	0.07 (1/24/2026)
Red Hill	0.002	0.003 (1/20/2026)
RWSA Total	9.38	-

- All RWSA water treatment facilities were in regulatory compliance during the month of January.

Status of Reservoirs (as of February 18, 2026):

- Urban Reservoirs are 93% of Total Useable Capacity
  - South Rivanna Reservoir is 100% full
  - Ragged Mountain Reservoir is 89% full
- Sugar Hollow Reservoir is 94% full
- Beaver Creek Reservoir (Crozet) is 100% full
- Totier Creek Reservoir (Scottsville) is 100% full

WASTEWATER OPERATIONS:

All RWSA Water Resource Recovery Facilities (WRRFs) were in regulatory compliance with their effluent limitations during January 2026. Performance of the WRRFs in January was as follows compared to the respective VDEQ permit limits:

WRRF	*Average Daily Effluent Flow (MGD)*	*Average $CBOD_5$ (ppm)*		*Average Total Suspended Solids (ppm)*		*Average Ammonia (ppm)*	
		RESULT	*LIMIT*	*RESULT*	*LIMIT*	*RESULT*	*LIMIT*
Moores Creek	8.13	<QL	9	1.3	22	0.36	6.4
Glenmore	0.143	2	15	6.1	30	NR	NL
Scottsville	0.045	<QL	25	3.7	30	NR	NL
Stone Robinson	0.0015	NR	30	NR	30	NR	NL

NR = Not Required

NL = No Limit

<QL: Less than analytical method quantitative level (2.0 ppm for CBOD, 1.0 ppm for TSS, and 0.1 ppm for Ammonia).

Nutrient discharges at the Moores Creek AWRRF were as follows for January 2026.

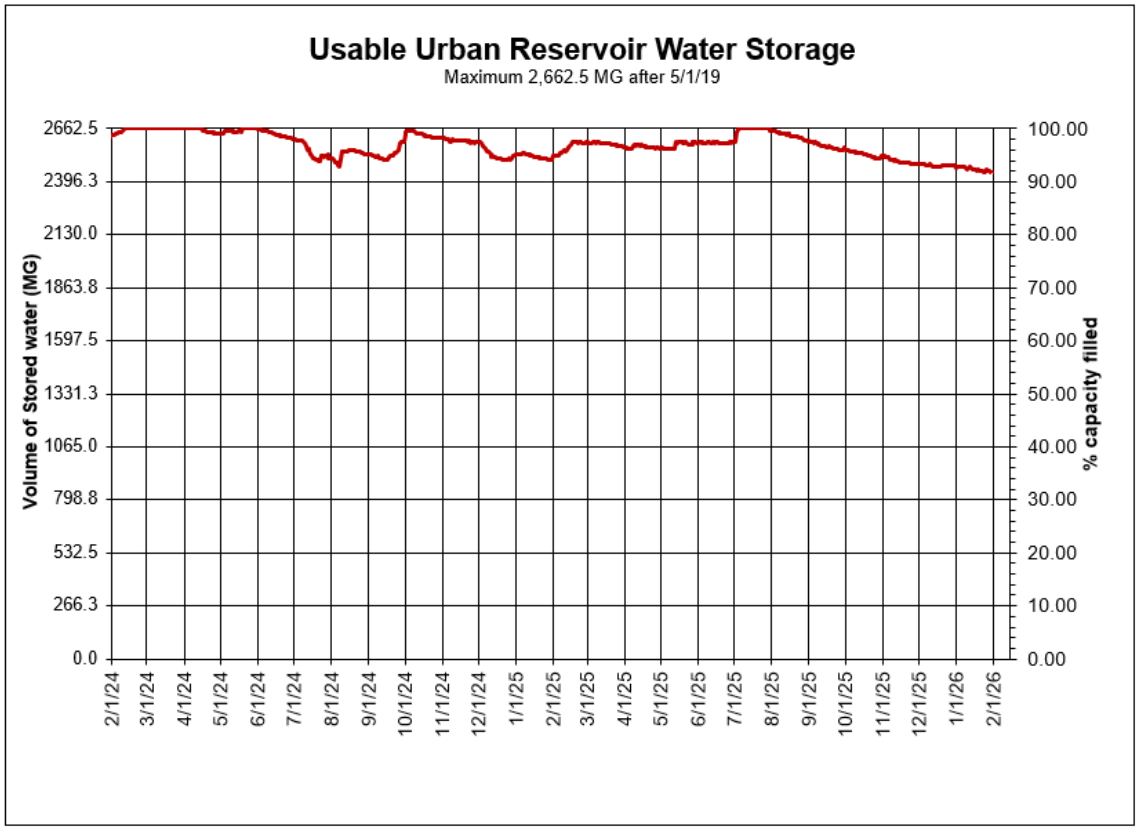
State Annual Allocation (lb./yr.) Permit		*Average Monthly Allocation (lb./mo.) **	*Moores Creek Discharge January (lb./mo.)*	*Performance as % of monthly average Allocation**	*Year to Date Performance as % of annual allocation*
Nitrogen	282,994	23,583	10,698	45%	4%
Phosphorous	18,525	1,636	250	15%	1%

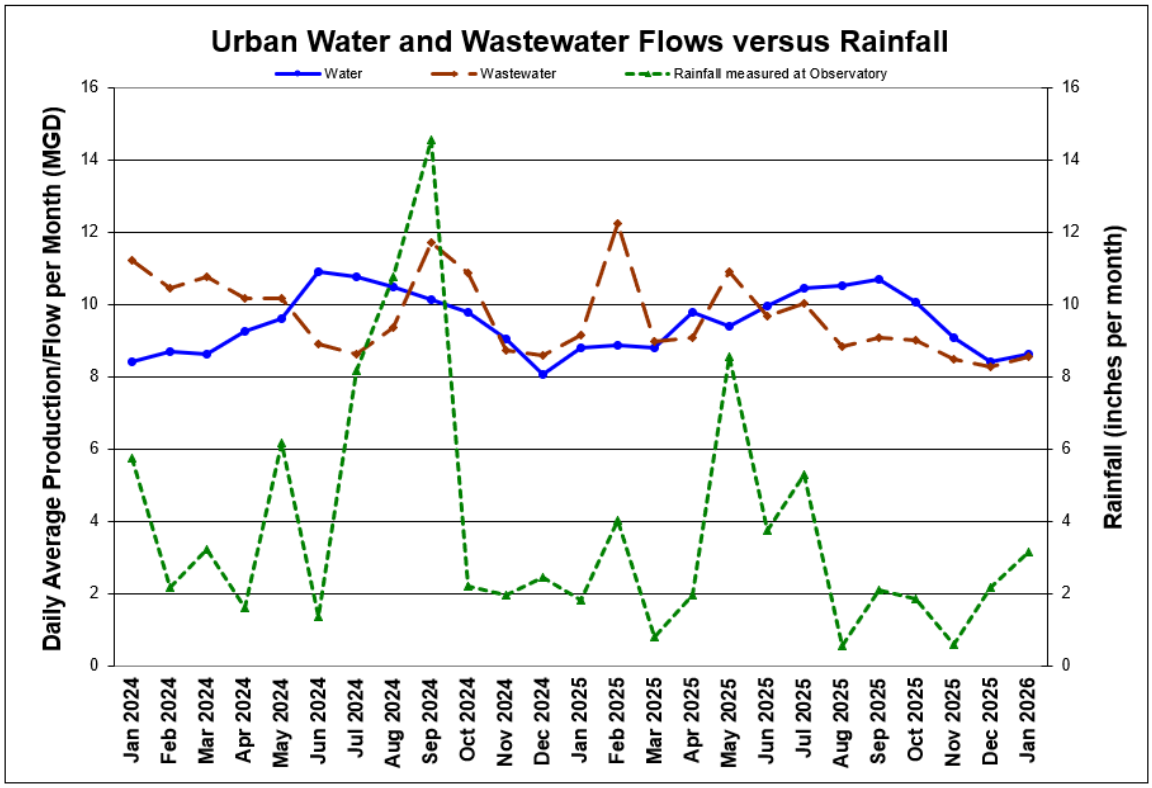
*State allocations are expressed as annual amounts. One-twelfth of that allocation is an internal monthly benchmark for comparative purposes only.

WATER AND WASTEWATER DATA:

The following graphs are provided for review:

- Usable Urban Reservoir Water Storage
- Urban Water and Wastewater Flows versus Rainfall


Usable Urban Reservoir Water Storage
Maximum 2,662.5 MG after 5/1/19
Volume of Stored water (MG)
% capacity filled
2662.5
2396.3
2130.0
1863.8
1597.5
1331.3
1065.0
798.8
532.5
266.3
0.0
100.00
90.00
80.00
70.00
60.00
50.00
40.00
30.00
20.00
10.00
0.00
2/1/24
3/1/24
4/1/24
5/1/24
6/1/24
7/1/24
8/1/24
9/1/24
10/1/24
11/1/24
12/1/24
1/1/25
2/1/25
3/1/25
4/1/25
5/1/25
6/1/25
7/1/25
8/1/25
9/1/25
10/1/25
11/1/25
12/1/25
1/1/26
2/1/26


Urban Water and Wastewater Flows versus Rainfall
Water
Wastewater
Rainfall measured at Observatory
Daily Average Production/Flow per Month (MGD)
Rainfall (inches per month)
16
14
12
10
8
6
4
2
0
Jan 2024
Feb 2024
Mar 2024
Apr 2024
May 2024
Jun 2024
Jul 2024
Aug 2024
Sep 2024
Oct 2024
Nov 2024
Dec 2024
Jan 2025
Feb 2025
Mar 2025
Apr 2025
May 2025
Jun 2025
Jul 2025
Aug 2025
Sep 2025
Oct 2025
Nov 2025
Dec 2025
Jan 2026

695 Moores Creek Lane | Charlottesville, Virginia 22902
434.977.2970
434.293.8858
www.rivanna.org

TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS

FROM: BETHANY HOUCHENS, WATER RESOURCES COORDINATOR

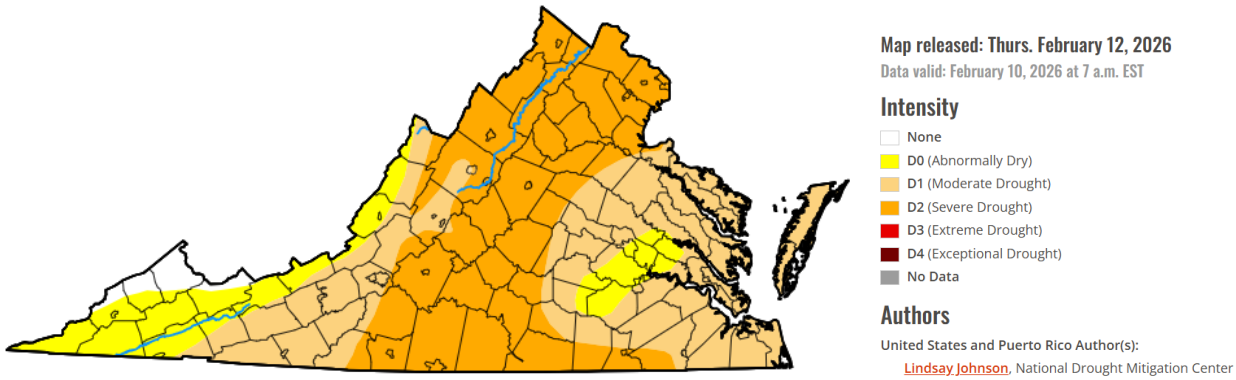
REVIEWED: DAVE TUNGATE, DEPUTY EXECUTIVE DIRECTOR
BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: DROUGHT MONITORING REPORT

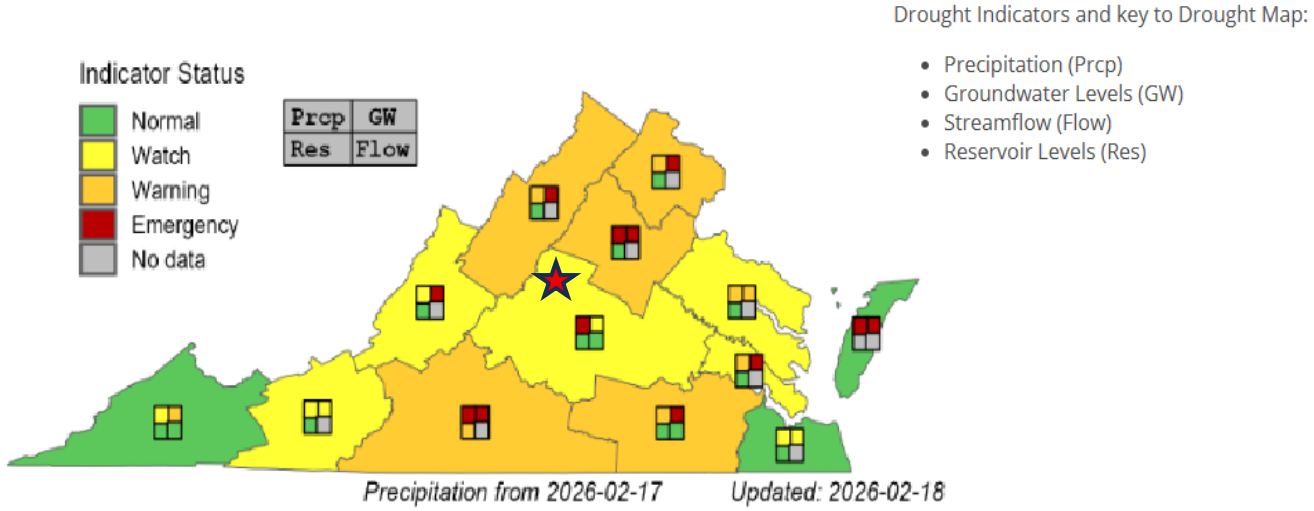
DATE: FEBRUARY 24, 2026

State and Federal Drought Monitoring as of February 16, 2026:

- U.S. Drought Monitoring Report: Indicates Albemarle County and the City of Charlottesville are in severe drought conditions.



- VDEQ Drought Status Report: Our region is listed as being in a "Normal" level for streamflow and Reservoir Levels. Groundwater is in a "Watch"status. Precipitation is in an "Emergency" status.



Charlottesville and Albemarle County

Precipitation & Stream Flows

Charlottesville Precipitation					
Year	Month	Observed (in.)	Normal (in.)	Departure (in.)	Comparison to Normal (%)
2022	Jan - Dec	43.53	41.61	+1.92	+5
2023	Jan – Dec	26.95	41.61	-14.66	-35
2024	Jan - Dec	39.56	41.61	-2.05	-5
2025	Jan-Dec	32.59	41.61	-9.02	-22
2026	Jan	2.87	3.08	-0.21	-7

Source: National Weather Service, National Climatic Data Center, Climate Summary for Charlottesville, Charlottesville Albemarle Airport station

USGS Stream Gaging Station Near the Urban Area (Feb 10- Feb 16)				
Gage Name	Rolling 7-day Avg. Stream Flow		2025 Mean Streamflow	
	cfs	mgd	cfs	mgd
Mechums River	94.2	29.7	412.9	266.8
Moormans River	47.8	18.4	371.4	240
NF Rivanna River	129.1	43.9	447.3	289.1
SF Rivanna River	164.8	95.9	971.6	627.9

Mean streamflow for Feb 10th – Feb 16th 2025

Status of Reservoirs as of Feb 18, 2026

- Urban Reservoirs are 93 % of Total Useable Capacity
- Beaver Creek Reservoir (Crozet) is 100% of Total Useable Capacity
- Totier Creek Reservoir (Scottsville) is 100% of Total Useable Capacity

Drought History in Central Virginia

- Severe: 1838, 1930, 1966, 1979, 2002
- Longest: May 2007 - April 2009; 103 weeks
- Significant: every 10 -15 years
- Drought of Record: 2001- 2002; 18 months

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
434.977.2970
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www.rivanna.org

MEMORANDUM

TO: **RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS**

FROM: **JENNIFER WHITAKER, DIRECTOR OF ENGINEERING & MAINTENANCE**

REVIEWED BY: **DAVE TUNGATE, DEPUTY EXECUTIVE DIRECTOR**
BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: **WHOLESALE METERING REPORT FOR JANUARY 2026**

DATE: **FEBRUARY 24, 2026**

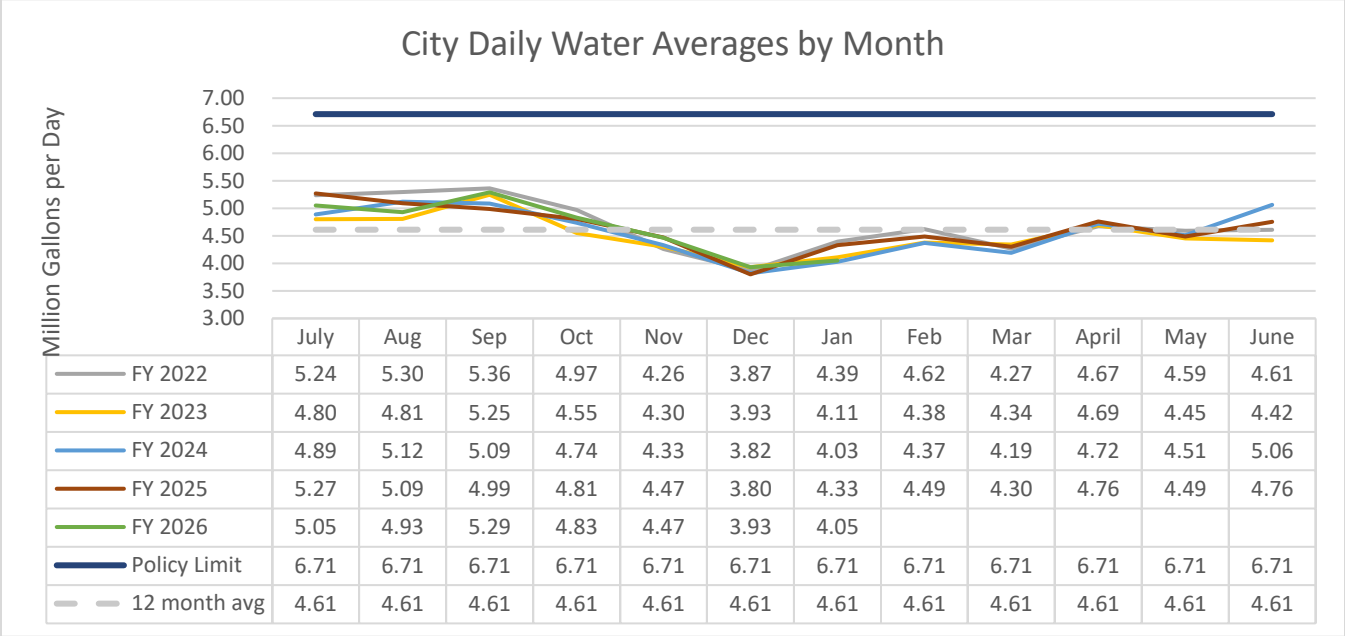
The monthly and average daily Urban water system usages by the City and the ACSA for January 2026 were as follows:

		Month	***Daily Average***	
City Usage (gal)		125,587,226	4,051,201	**47.7%**
ACSA Usage (gal)		137,578,150	4,438,005	**52.3%**
Total (gal)		263,165,376	**8,489,206**	

The *RWSA Wholesale Metering Administrative and Implementation Policy* requires that water use be measured based upon the annual average daily water demand of the City and ACSA over the trailing twelve (12) consecutive month period. The *Water Cost Allocation Agreement (2012)* established a maximum water allocation for each party. If the annual average water usage of either party exceeds this value, a financial true-up would be required for the debt service charges related to the Ragged Mountain Dam and the SRR-RMR Pipeline projects. Below are graphs showing the calculated monthly water usage by each Utility dating back to the beginning of FY 22, the trailing twelve-month average (extended back to February 2025), and that usage relative to the maximum allocation for each party (6.71 MGD for the City and 11.99 MGD for ACSA). Completed in 2019 for a cost of about $3.2 M, our Wholesale Metering Program consists of 25 remote meter locations around the City boundary and 3 finished water flow meters at treatment plants.

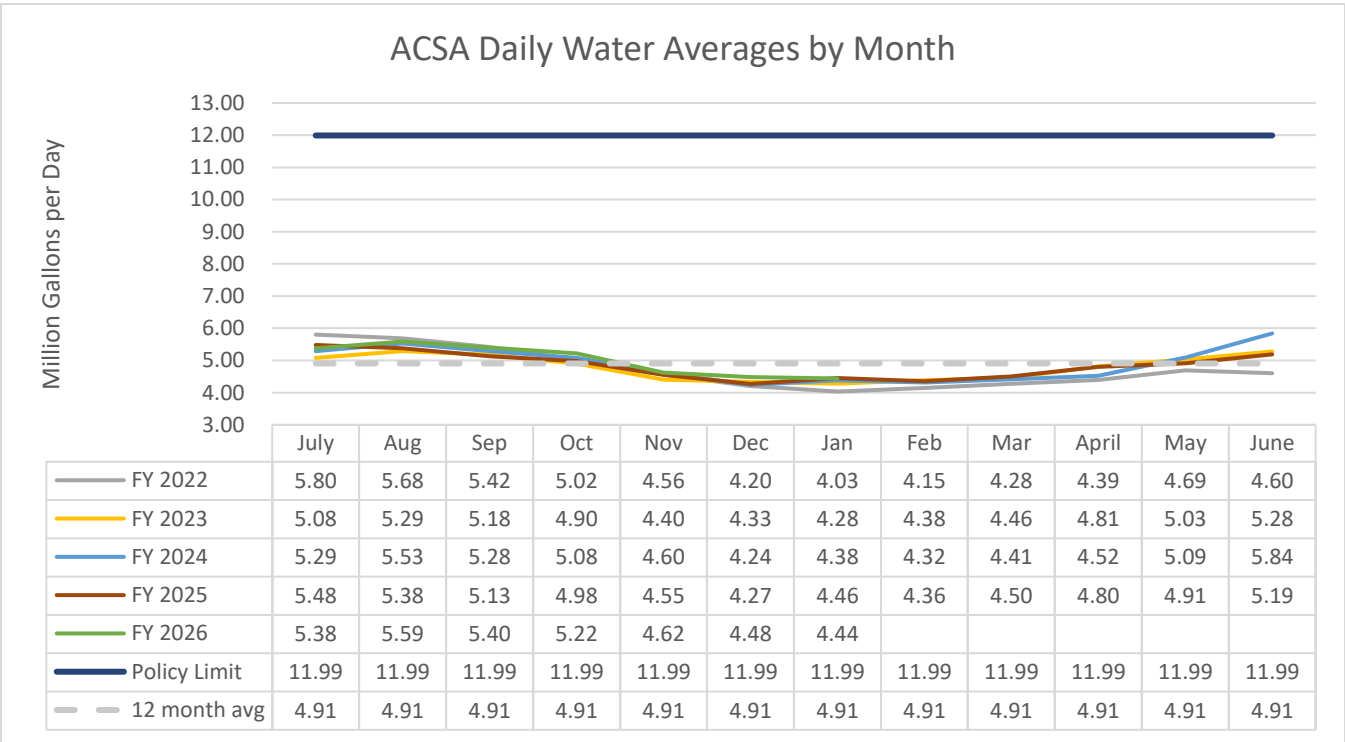
Note 1: Meter 14 was offline for a period of 14 days in January. Maintenance replaced the battery and reset the endpoint. The meter is working properly now.

Figure 1: City of Charlottesville Monthly Water Usage and Allocation



	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
FY 2022	5.24	5.30	5.36	4.97	4.26	3.87	4.39	4.62	4.27	4.67	4.59	4.61
FY 2023	4.80	4.81	5.25	4.55	4.30	3.93	4.11	4.38	4.34	4.69	4.45	4.42
FY 2024	4.89	5.12	5.09	4.74	4.33	3.82	4.03	4.37	4.19	4.72	4.51	5.06
FY 2025	5.27	5.09	4.99	4.81	4.47	3.80	4.33	4.49	4.30	4.76	4.49	4.76
FY 2026	5.05	4.93	5.29	4.83	4.47	3.93	4.05					
Policy Limit	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71	6.71
12 month avg	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61

Figure 2: Albemarle County Service Authority Monthly Water Usage and Allocation



	July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
FY 2022	5.80	5.68	5.42	5.02	4.56	4.20	4.03	4.15	4.28	4.39	4.69	4.60
FY 2023	5.08	5.29	5.18	4.90	4.40	4.33	4.28	4.38	4.46	4.81	5.03	5.28
FY 2024	5.29	5.53	5.28	5.08	4.60	4.24	4.38	4.32	4.41	4.52	5.09	5.84
FY 2025	5.48	5.38	5.13	4.98	4.55	4.27	4.46	4.36	4.50	4.80	4.91	5.19
FY 2026	5.38	5.59	5.40	5.22	4.62	4.48	4.44					
Policy Limit	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99	11.99
12 month avg	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91	4.91

Contribution to Channel Restoration Project



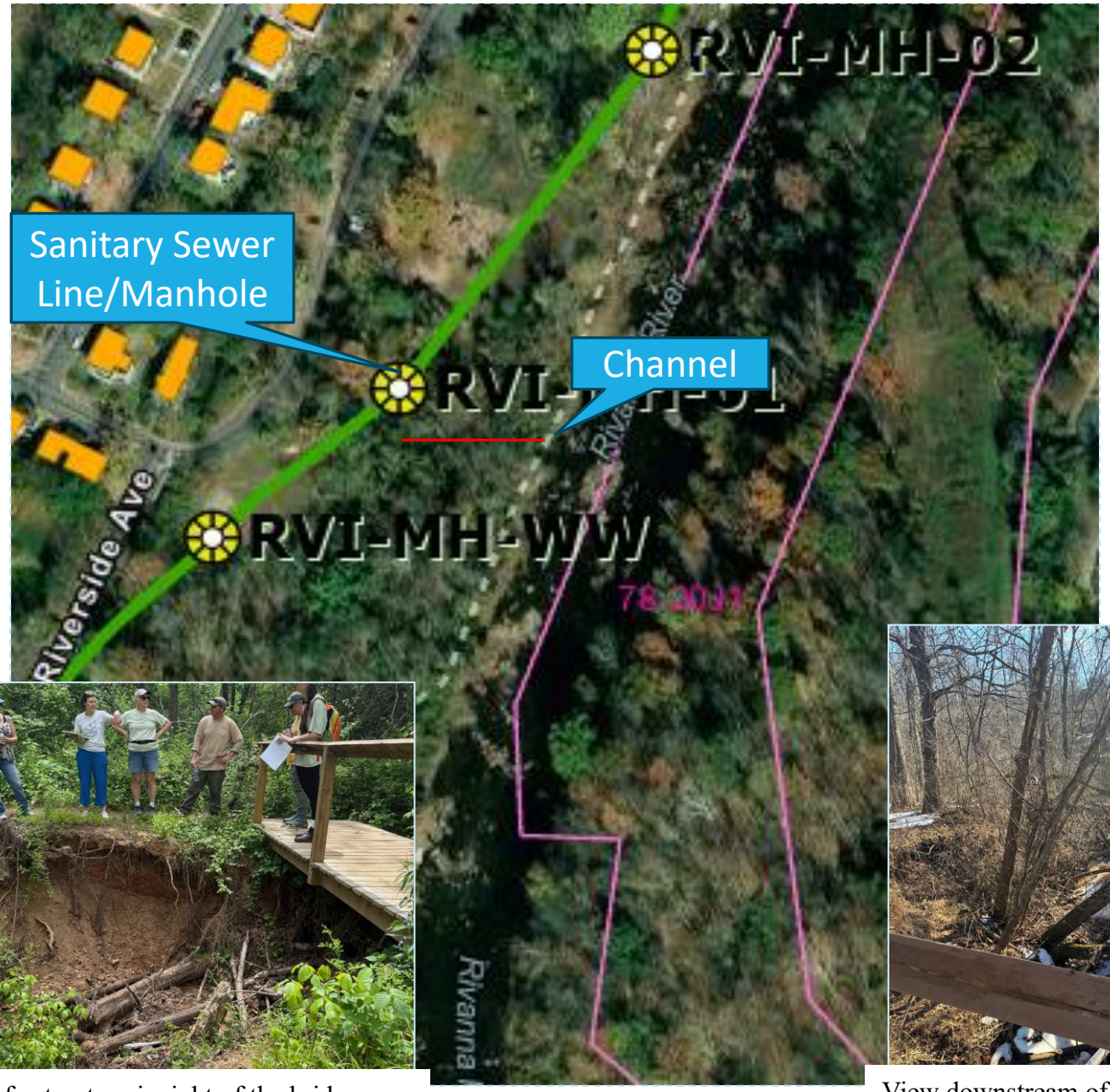
Bethany Houchens, Water Resources Coordinator
Lisa Wittenborn, RCA Executive Director

Presented to the Board of Directors
February 24, 2026



Community Partners

- Rivanna Conservation Alliance (RCA) spearheading restoration project
- Funding from City



RWSA Infrastructure is right of the bridge

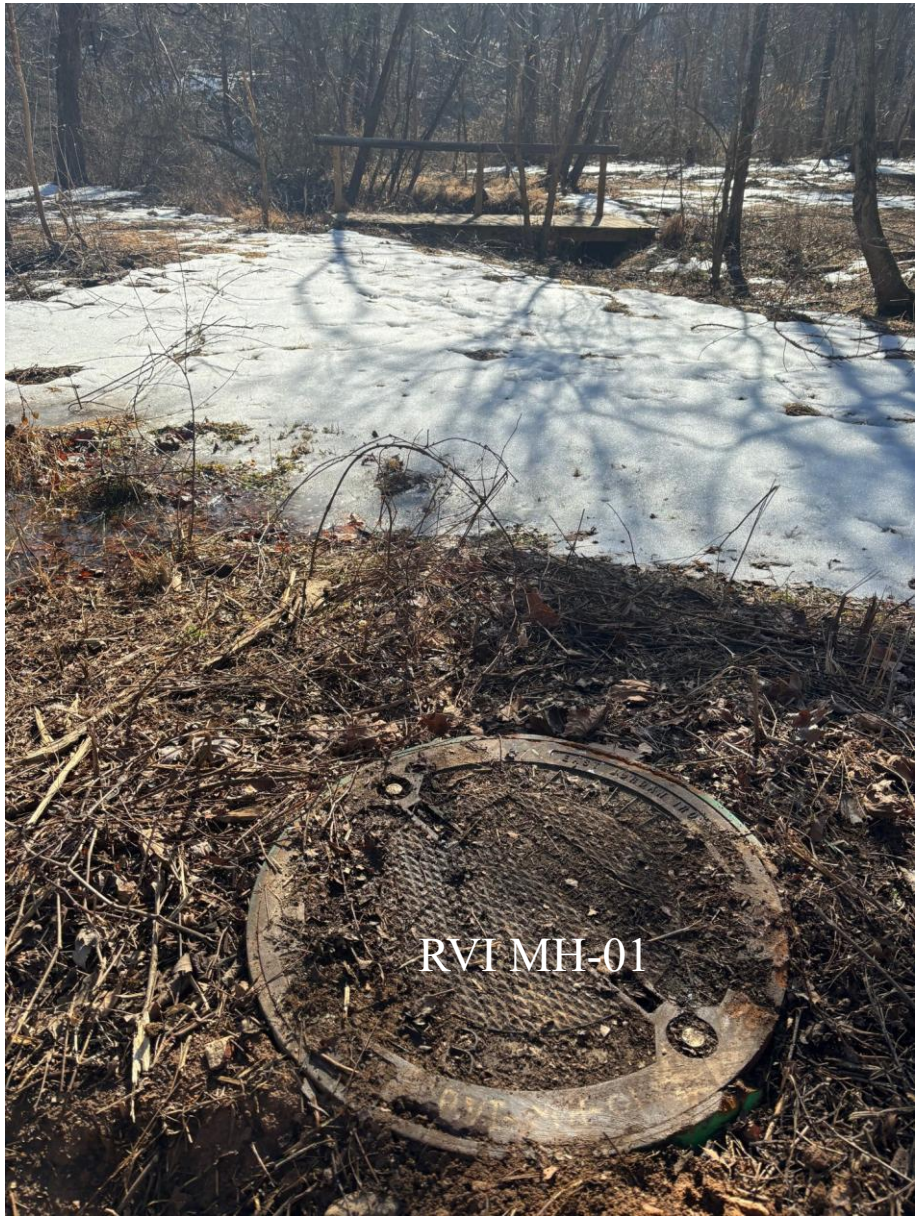
View downstream of bridge

Project Scope and threat to RWSA Infrastructure

- Stabilization of 144 feet of rapidly eroding channel adjacent to RWSA sanitary sewer line and manhole RVI MH-01.
- Since 2016 channel has continued to erode towards RWSA pipe and manhole.



Looking upstream of the channel



Looking Downstream of the channel

How was contribution amount calculated?

- Comparison of a similar engineering project to stabilize riverbank erosion on Ivy Creek (~80 LF) that had exposed a section of the transmission watermain ($60,000 in 2025)

- RWSA is proposing a $40k contribution to reduce the erosion that jeopardizes RWSA sewer line and manhole RVI MH-01.



2025 Ivy Creek Repair



Questions?

SOUTH RIVANNA RIVER

Board Action Requested:

Authorize a contribution of $40,000 to the Rivanna Conservation Alliance to stabilize the channel adjacent to RWSA sanitary sewer line and manhole.


South Rivanna WTP


New South Rivanna
Pump Station Rendering


New Pipe RMR to
Observatory WTP


Moores Creek AWRRF

Infrastructure Update

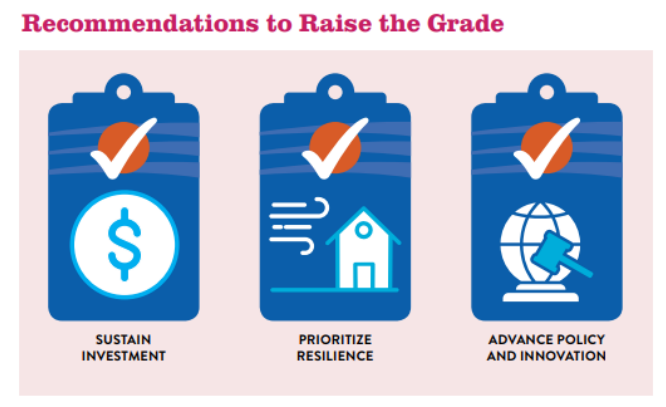
PRESENTED TO THE BOARD OF DIRECTORS

BY BILL MAWYER, P.E., EXECUTIVE DIRECTOR

FEBRUARY 24, 2026

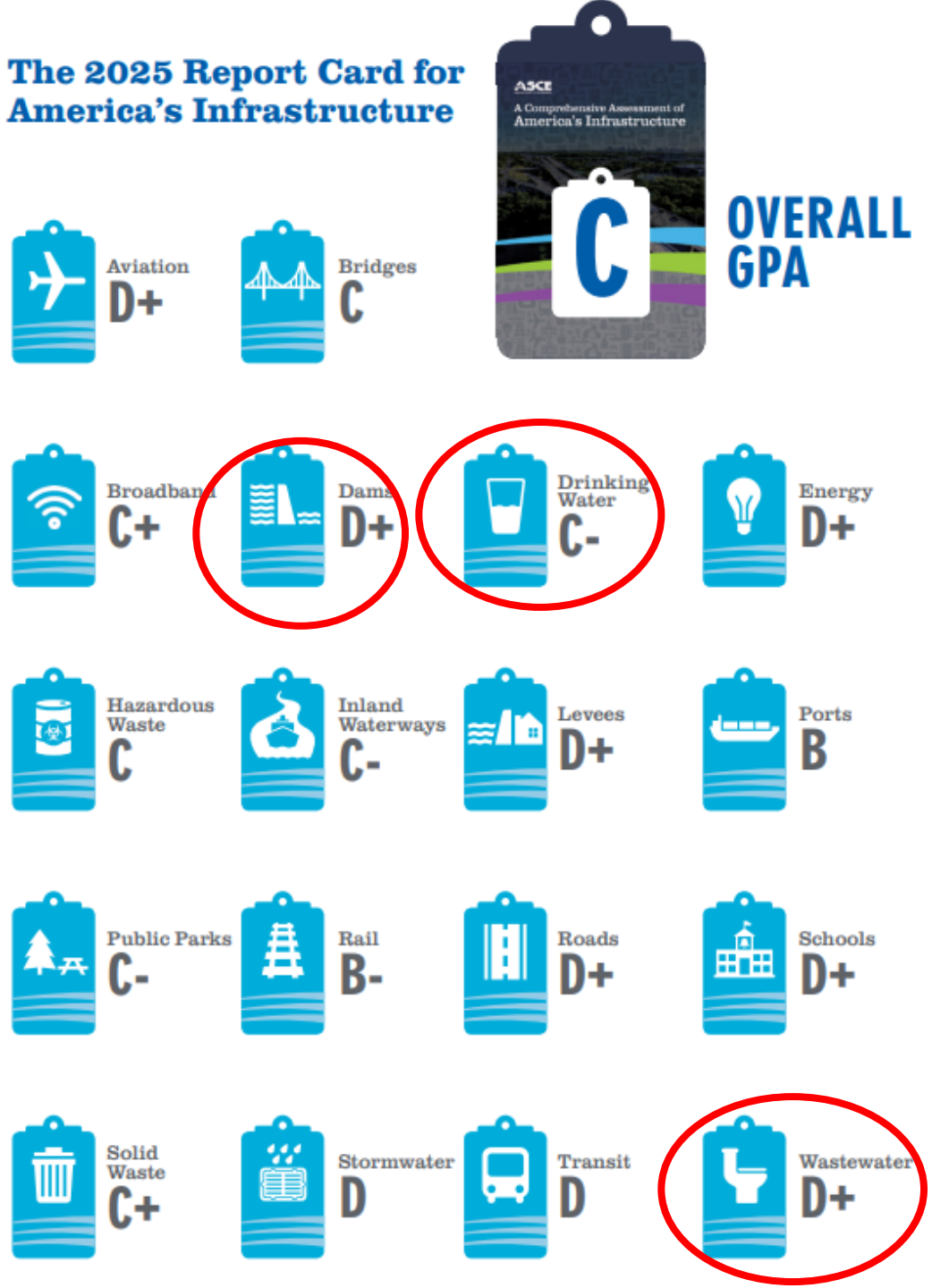
RIVANNA
WATER & SEWER AUTHORITY

ASCE AMERICAN SOCIETY® OF CIVIL ENGINEERS



In 2021, federal Bipartisan Infrastructure Law provided $1.2 trillion for numerous programs.

In 2023/24, EPA determined our nation's *drinking water* and *wastewater* infrastructure needed *$1.2 trillion* over the next 20 years.





Potomac River Suffers Massive Sewage Spill

January 26, 2026 by ECWQ

DC Water & Sewer Authority's Potomac Interceptor

January 19, 2026

- 72-inch sewer pipe in Montgomery County, MD, upstream of Washington, DC, ruptured and spilled about 250 million gallons of untreated sewage into the Potomac River.

- Built in the 1960s, pipe had known deterioration issues; repairs on nearby sections had just been completed.

- EPA and local agencies are monitoring the situation, while environmental groups warn of ongoing risks from aging wastewater infrastructure.

- Sewage spill sends E coli bacteria surging in the Potomac River - contamination level is nearly 12,000 times the safe limit for human contact.

Grand Canyon South Rim hotels closed due to water line breaks for second time ever

December 4, 2025 / 5:32 AM EST / CBS/AP

- The Transcanyon Waterline, a 12.5-mile-long pipeline built in the 1960s, serves the inner rim and South Rim of Grand Canyon National Park.
- A major waterline break at Grand Canyon's South Rim shut all in-park lodges and campgrounds.
- The pipe experiences frequent failures creating temporary shutdowns for nearby hotels and limits access to the canyon and visitors. 85 major breaks since 2010.
- $208 M project is underway to replace the waterline, raw water tanks, and renovate water treatment plants. Work to be completed in 2027.







Uptown New Orleans remains under boil water advisory after water main break

New Orleans, LA 1/31/26



New Orleans officials signed an emergency declaration to allow for expedited repairs to the 48-inch water main, which created a sink hole. The pipe was first installed more than a century ago in 1908 and broke in two places.

Pittsburg Water Main Break

Pittsburgh, PA 4/16/2025

Pennsylvania America Water recently completed an emergency repair on one of the existing 35-inch mains. This 72-hour, round-the-clock project involved a special crew to make the necessary repairs on the century old lines .



Oroville Spillway Failure

February 2017

Oroville Dam – tallest dam in America, 770 feet high
Northern CA





- Oroville Dam's' concrete spillway, completed in 1968, shattered under intense water pressure the first time the spillway was activated.

- During a permit renewal process in 2005, environmental groups raised concerns about the condition of the spillway and significant erosion that could occur if used.

- 200,000 people were evacuated when the spillway failed after heavy storms. There was concern about failure of the dam. Cost to rebuild the spillway, $1.1 billion.

Richmond Water Crisis

January 6 - 11, 2025



Richmond Water Treatment Plant Shutdown

- Aged equipment failed and caused the WTP to flood and shutdown after a loss of primary electric power.
- Regional supply of treated water was limited and a “Boil Water Advisory” was issued for 700,000 customers in the City and 2 Counties for about 1 week.
- Richmond's audit identified aging infrastructure, communication, and planning struggles as the main causes of the crisis.
- VDH issued a “Corrective Action Plan” with 155 items.

Local Water Infrastructure

Staunton, Augusta County remain under boil water advisory; service restored



A major water main break in Staunton has disrupted service in the city and has started to impact some Augusta Water customers in Augu

Water service resumes in Stanardsville after main burst

Stanardsville residents have reported that water service has resumed after Greene County shut it down in the wake of a main burst reported Wednesday.

DAILY PROGRESS STAFF Jan 29, 2026 0

1/29/2026

1/13/2026

Town of Louisa, Virginia
Press Release

Town of Louisa Press Release

Date: January 13, 2026

FOR IMMEDIATE RELEASE

Subject: Water Line Repair – West Street

The Town of Louisa Public Works Department is conducting emergency repairs to a water line on West Street.

Boil-water advisory issued for Greene Mountain Lake, Twin Lakes

Residents in the Greene Mountain Lake and Twin Lakes subdivision in Greene County are advised to boil water before consumption after an unexplained drop in water pressure.

DAILY PROGRESS STAFF Dec 22, 2025 0

12/22/2025

State finds 'catastrophic' pump failure at water treatment plant caused the strong odor that left eastern Orange County without usable water for a week

by ANASTASIIA CARRIER
SEPTEMBER 27, 2024 Updated OCTOBER 17, 2024

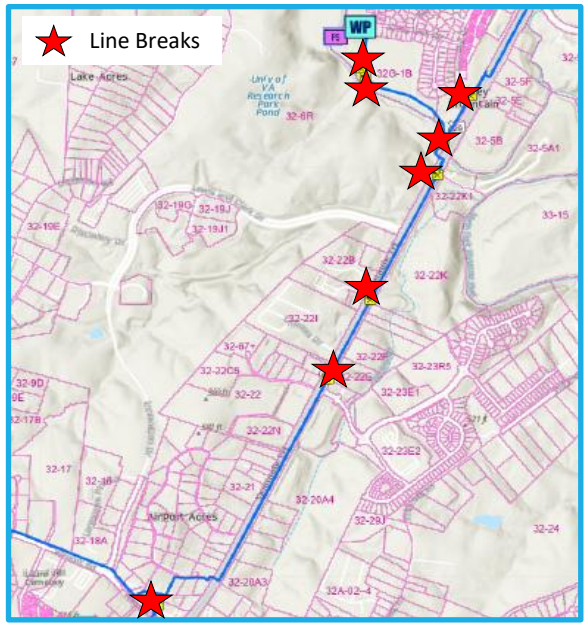


On Aug. 20, 2024, one of Rapidan Water Authority's water pumps failed.

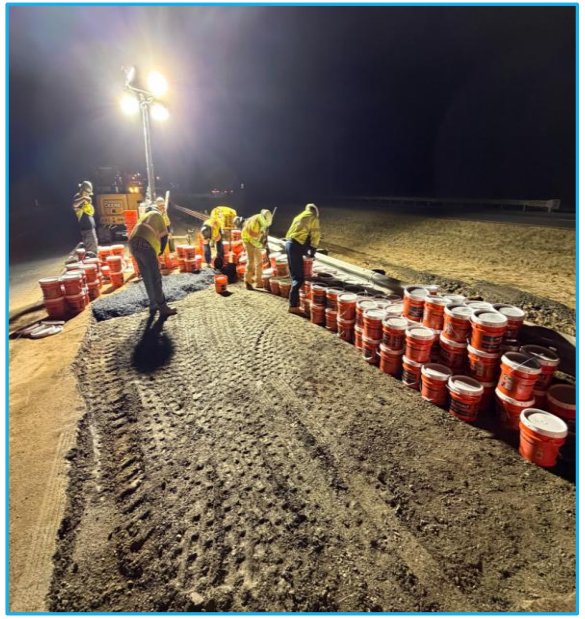
North Rivanna Water Line Break and Boil Water Advisory

located under Rt. 29N

Break detected – 12/24/25, staff worked overnight to replace the 12-inch cast iron pipe installed in 1960s. Pipe has broken 8 times since 2010.

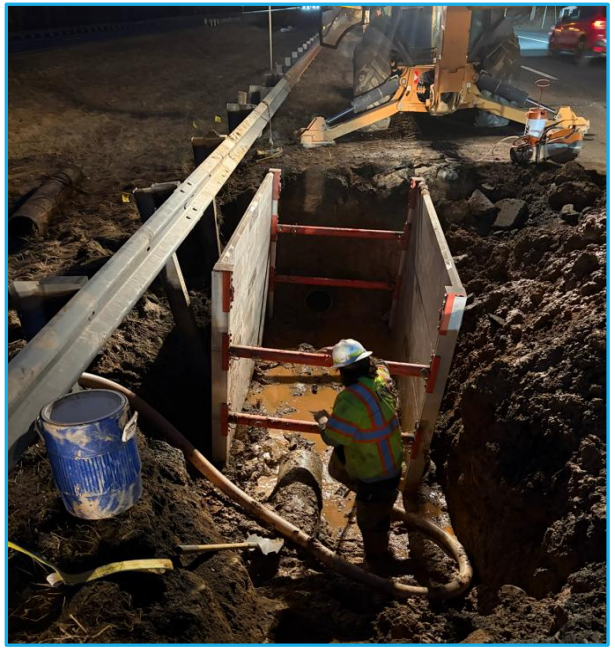












Sanitary Sewer Improvements

Regional Cooperation & Environmental Stewardship

August 28, 2012

Albemarle County Service Authority
Serving Conserving

CHARLOTTESVILLE - VIRGINIA - 1762

RIVANNA
WATER & SEWER AUTHORITY

History

- 2006 RWSA Sanitary Sewer Capacity Study
- Three Agencies Develop Capital Improvement Plans
- 2010 City, ACSA, RWSA set Joint I/I Reduction Goals
- April 2010 DEQ Initiates Consent Agreement Process
- CIP Programs Previously Adopted and Implemented are Adopted by DEQ
- August 2011 DEQ Incorporates Programs into Consent Order

Total System Improvements

- 1,193,773 LF of Pipe Inspected
- 142,061 LF of Pipe Lined
- 1,705 Manholes Rehabilitated
- Reduction in Sanitary Sewer Overflows (SSOs)
- Expanded Regional Pump Station Capacity
- Higher Level and Quantity of Wastewater Treatment
- $ 125.2 M Spent to Date by Three Agencies

Key Operational & Infrastructure Renewal Programs

Completed

- 1999 Began Tank Painting, Monitoring, and Renewal efforts – routine rehabilitation every 15-20 years
- 1999, 20-21 Sugar Hollow Dam Upgrade and Rehabilitation; Replace Rubber Bladder
- 2014 Ragged Mountain Dam Replacement
- 2006 Moores Creek Headworks Rehabilitation
- 2004 Sanitary Sewer System – Planning, Program, Master Planning, Rehabilitation efforts
- 2005 Replacement of the Dell Water Line
- 2006 Filter Upgrades at NR, Crozet, SVL WTPs
- 2006, 2021 Crozet and Scottsville Lagoon Rehabilitation
- 2011 Moores Creek Enhanced Nutrient Removal and Wet Weather Upgrade
- 2013 Stillhouse Pump Station (Woodburn Rd) – replaced the Canterbury Pump Station
- 2014 Meadow Creek Interceptor Replacement
- 2015 Rehabilitation of Alderman Road Pump Station
- 2015 Crozet Water Main Replacement
- 2017 Odor control at Crozet WW PS
- 2018 Crozet WTP – Upgrade, Expansion, Finished Water Pump Station
- 2018 Schenks Branck Interceptor Upgrade and Replacement, Phase 1
- 2018 Odor control at Moores Creek
- 2018 GAC Installation at Urban WTP's
- 2018 Moores Creek Roofing Replacements
- 2022 Corrosion Control: Transition to Orthophosphate at WTP's
- 2025 Observatory and SRWTP – Upgrade and Rehabilitation
- 2025 Moores Creek 5kV Improvements
- 2025 Airport Road FWPS


Airport Rd PS


MC Internal Seal Coat the Roof of Digester – Odor Controls

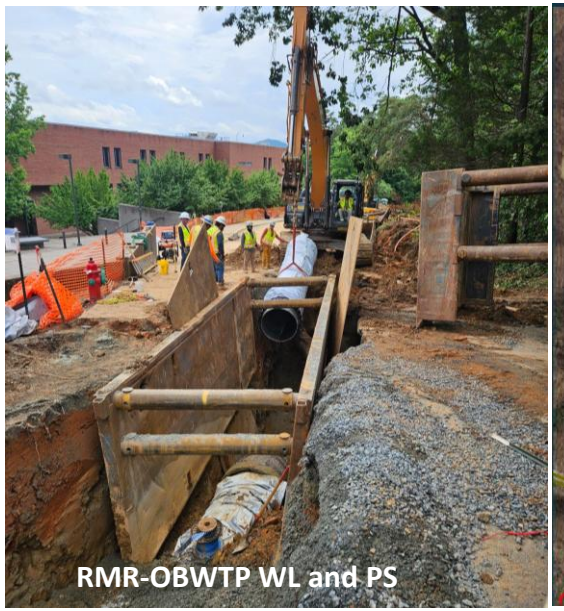

Crozet GAC

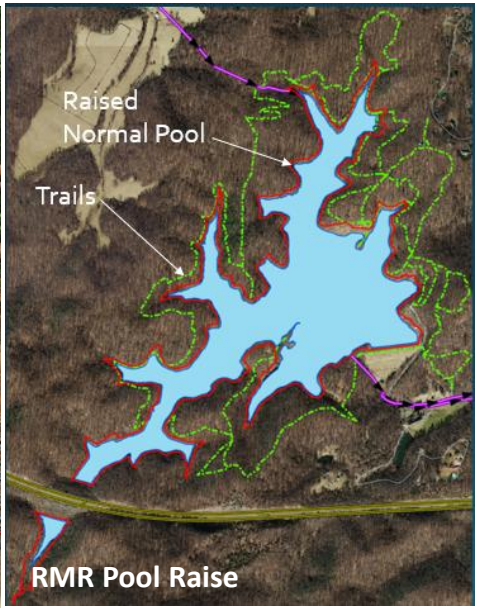

MC – New Roofing

Key Operational & Infrastructure Renewal Programs

Underway & Pending: 2024 -2030

- SRR – RMR WL, Pump Station & Intake
- Ragged Mountain to Observatory WL and Pump Station
- Central Water Line
- Glenmore WWTP Rehabilitation; Ph 1
- BCR Pump Station
- Dam Public Safety Enhancements
- Powell Creek SS Upgrade
- Airport Rd Pumps and Water Storage Tanks
- NRR Crossing & WL
- Schenks Branch SS, Upper Interceptor
- Red Hill WTP Upgrade

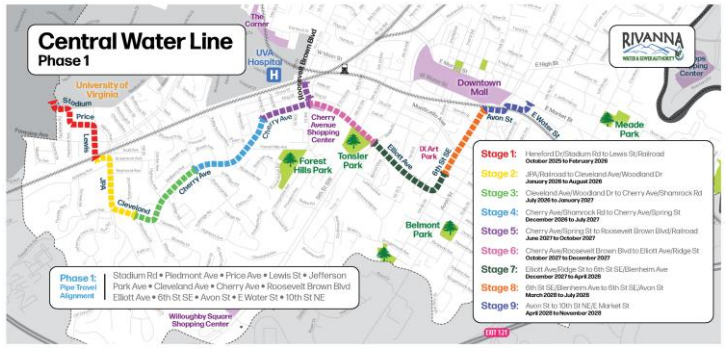

RMR-OBWTP WL and PS



RMR Pool Raise


Red Hill WTP

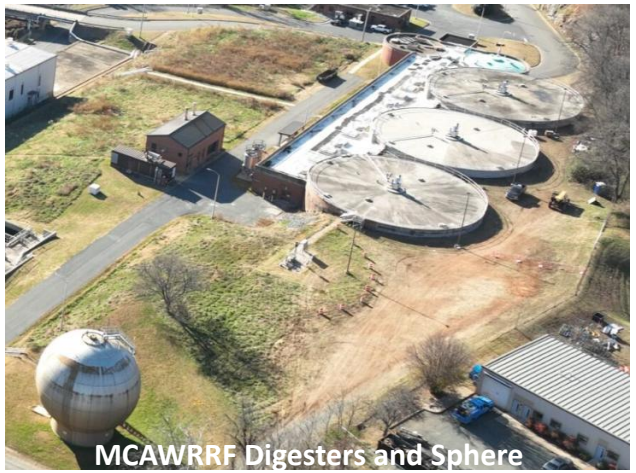
Central Water Line Phase 1 – Sagres Stages and Schedule of Work



Key Operational & Infrastructure Renewal Programs

<u>Next 20 years: 2030 - 2050</u>

- Crozet Water Pump Station
- Beaver Creek Dam Spillway Upgrade
- Flood Protection Facilities
- Scottsville WTP upgrade
- Glenmore WRRF Upgrade, Ph 2
- Scottsville WRRF Upgrade
- NRWTP Decommissioning
- Emmet Street Waterline Replacement
- Urban WTPs Additional GAC
- Elimination of Large Sewer Aerial Crossings – Meadowcreek, Powell Creek
- Gas Sphere Rehabilitation
- Glenmore to MC SS Pipe
- SRWTP Upgrade to 16 MGD: $40 M
- MC Upgrade to 17.5 MGD: $75 M
- Replace W & WW Piping: 55 miles $275 M
- MC Replace Digesters & Mech Thickeners: $190 M


MCAWRRF Digesters and Sphere

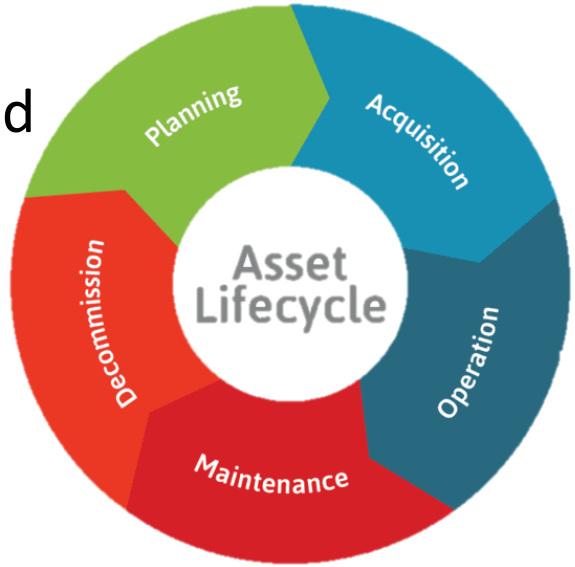

MCAWRRF


S. Rivanna WTP

ASSET MANAGEMENT AT THE RIVANNA AUTHORITIES 2026

- *Supports the Strategic Plan Goal: Infrastructure & Master Planning*

- A ***long-term*** program to attain and sustain the chosen level of service for the life of our assets in the most ***cost-effective*** manner.
- Asset Management Program consists of a Computerized Maintenance Management Software (CMMS) called *"Cityworks"* implemented in 2023.



RWSA Assets

Horizontal Assets

What you can't see – pipes, valves, manholes, etc. in the ground



Total Assets: 4,244 segments

- Manholes – 714
- Wastewater Flow Meters - 15
- Water Valves - 964
- Wastewater Valves – 26
- Water Pipe – 72 miles (1726 segments)
- Wastewater Pipe – 42 miles (723 segments)



Vertical Assets

What you can see – treatment plants, pump stations, and the equipment within them

Total Assets: 4,634 / Asset Categories – 89

- Actuators – 257
- Electrical – 257
- HVAC - 246
- Instrumentation – 548
- Motors – 369
- Pumps - 373
- Valves – 823
- Vehicles - 65
- Equipmt- 24
- Trailers - 20
- Boats - 2





Asset Lifecycle

Asset lifecycle is based on Physical Effective Life + (Rehab Frequency x No. of Rehabs) = Maximum Potential Life

	Asset Class	Quantity	Service Life-Yrs	Rehab Frequency-Life Extension	# of Rehabs	Maximum Potential Service Life-Yrs
Horizontal Assets (average - years)	Manholes	714	65	50	1	115
	Wastewater Pipe	42 miles	65	50	1	115
	Water Pipe	72 miles	80	0	0	80
	Water Valves	961	50	0	0	50
Vertical Assets (years)	Gear Drive	10	15	15	3	60
	HVAC – Unit Heater	39	10	10	2	30
	Pump-Sump	45	10	0	0	10
	Valve - Control	40	15	0	0	15



Total Assets Expired - Based on Age FY 26	
Manholes	32 of 714 = 4.5%
Wastewater Pipe	2.3 of 42 miles = 5.5%
Water Pipe	15.7 of 72 miles = 22%
Water Valves	290 of 964 = 30%
Vertical - Water	122 of 2087 = 6%
Vertical - Wastewater	297 of 2547 = 12%

Horizontal Infrastructure History and Future

Wastewater Pipe	Feet Installed	Miles	Replacement
	1950s - 1,200.07	0.227	2020s
	1960s - 0	0	--
	1970s - 102,655.14	19.442	2030s **
	1980s - 59,557.12	11.280	2040s **
	1990s - 2,263.51	0.429	2050s
	2000s - 2,095.30	0.397	2060s
	2010s - 38,667.32	7.323	2070s
	2020s - 3,752.20	0.711	2080s
Water Pipe	1900s - 16,150.34	3.059	2020s
	1920s - 66,992.69	12.688	2020s
	1930s - 0	0	
	1940s - 15,844.73	3.001	2020s
	1950s - 63.12	0.012	2030s
	1960s - 67,439.65	12.773	2040s
	1970s - 67,662.32	12.815	2050s
	1980s - 47,372.91	8.972	2060s
	1990s - 35,080.10	6.644	2070s
	2000s - 15,149.85	2.869	2080s
	2010s - 32516.28	6.158	2090s

Summary:

Our Authority has:

- *a responsive infrastructure replacement program to mitigate the risk of failures and service impacts*
- *replaced a significant number of horizontal and vertical assets thru past and ongoing piping and building projects*
- *a maturing Asset Management Program – Cityworks; 9000 assets - with dedicated staff (1)*
- *expansive infrastructure systems which provide benefits to our community while increasing costs*
- *significant infrastructure investment requirements from 2030 – 2050*



2026 INFRASTRUCTURE GRADE

Questions?

<u>Action Requested by the Board:</u>

Continue to support investments in our infrastructure.

Fiscal Years
2027 to 2031

CAPITAL IMPROVEMENT PLAN















RIVANNA
WATER & SEWER AUTHORITY

695 Moores Creek Lane, Charlottesville, Virginia 22902

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Introduction

The Capital Improvement Plan (CIP) for Fiscal Years 2027-2031 has been prepared as a strategic and financially responsible plan for the Rivanna Water and Sewer Authority (RWSA) to complete major infrastructure construction projects. The projects included in the CIP are necessary to achieve the RWSA's core mission of providing safe, high-quality drinking water and environmentally responsible wastewater treatment services for the City of Charlottesville and the Albemarle County Service Authority (ACSA). The CIP is a 5-year planning document which provides an estimated budget and schedule for projects as they advance through the design and construction process.

The infrastructure requirements of the Capital Improvement Plan are developed through our Asset Management and Master Planning programs to address water and wastewater capacity demands, regulatory mandates and rehabilitation needs. Each year, these projects are reviewed and prioritized by the RWSA management team and brought forth for review by the Board of Directors.

During the past year, several capital projects were completed or are nearing the end of multi-year construction and as such are being removed from the 2027-2031 CIP. These projects account for approximately $6.6 million or 1.2% of the FY 2026-2030 CIP. These projects include:

- 55 Moores Creek AWRRF 5kV Electrical System Upgrade
- 72 Radio Upgrades
- 69 IT Infrastructure (partial)

The total 5-year 2027-2031 CIP is approximately $604.2 million, with the previous expenditures on active projects totaling $35.8 million, leaving a net proposed 5-year projected expenditure of $568.4 million.

There are nine (9) new projects added to the CIP this year. The total estimated expenditures for the projects equal $35.44 million and include:

- 15 South Rivanna Water Treatment Plant Dedicated Backwash Line
- 16 Dam Public Safety Enhancements
- 17 Vertical Asset Renewal - Urban Water
- 32 Northern Area Pressure Zone Improvements
- 43 Vertical Asset Renewal - Crozet Water
- 48 Vertical Asset Renewal - Scottsville Water
- 57 Powell Creek Int. Upgrade (PC4-PC5) (Planning PC1-PC5)
- 67 Moores Creek AWRRF UV System Upgrade
- 75 Vertical Asset Renewal - Scottsville Wastewater

There were nine (9) projects with mid-year cost additions. The total budget for these is $13.1 million.

- 03 South Rivanna Reservoir to Ragged Mountain Reservoir
- 06 South Rivanna Water Treatment Plant PAC Upgrade
- 22 Airport Road Tank and Pump Improvement
- 24 South Fork Rivanna River Crossing
- 25 Second North Fork Rivanna River Crossing and North Rivanna Water Main Replacement
- 37 Crozet Water Treatment Plant Full GAC
- 50 Interceptor Sewer and Manhole Repair (Phase 2)
- 57 Powell Creek Interceptor Upgrade
- 70 Scottsville WRRF Whole Plant Generator and ATS

The FY 27-31 Capital Improvement Plan prioritizes the completion of the Community's Water Supply Plan to increase capacity and reliability by 2030; to advance water and wastewater infrastructure projects to support near term growth, and maintain best management practices for water and wastewater storage, treatment and conveyance facilities. In order to maintain a balance between cost and renewal, several projects were delayed beyond the five-year planning horizon. The impact of all cost factors can be seen in Table 1 below:

Table 1

Summary	**Cost**
FY 26-30 Capital Improvement Plan	$550,278,280
Mid-year Additions -- FY 26-30 Amendments	$13,103,000
Completed Projects	($6,605,875)
(FY 26-30) Anticipated FY 31 Project Funding	$36,236,800
New Projects (9) + New Funding	$37,755,000
Inflation and Scope Changes	($26,597,695)
Total	**$604,169,150**

FINANCIAL SUMMARY

MAJOR SYSTEM CATEGORIES

FINANCIAL SUMMARY
Major System Categories – Water

	Five-Year Capital Program			Projected Future Expenses by Year						
System Description	**Current CIP**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress**
Urban Water (UW)										
Community Water Supply Plan	$182,693,000	($1,078,000)	$42,975,000	$36,795,000	$31,870,000	$30,035,000	$22,065,000	$17,875,000	$181,615,000	$9,172,890
Urban Water Treatment Plants & Reservoirs	$14,948,400	$12,357,600	$3,228,000	$6,334,000	$6,812,000	$3,399,000	$6,115,000	$1,418,000	$27,306,000	$144,884
Finished Water Storage/Distribution	$115,602,400	$22,984,600	$35,547,000	$21,310,549	$36,815,822	$25,444,129	$14,784,500	$4,685,000	$138,587,000	$5,897,283
Subtotal (UW)	$313,243,800	$34,264,200	$81,750,000	$64,439,549	$75,497,822	$58,878,129	$42,964,500	$23,978,000	$347,508,000	$15,215,057
Non-Urban Water (NUW)										
Crozet Water System	$82,401,000	$17,644,000	$19,410,000	$16,255,000	$20,981,000	$23,546,000	$16,805,000	$3,048,000	$100,045,000	$4,214,418
Scottsville Water System	$9,262,000	($467,000)	$2,050,000	$154,000	$713,000	$1,842,000	$690,000	$3,346,000	$8,795,000	$172,242
Subtotal (NUW)	$91,663,000	$17,177,000	$21,460,000	$16,409,000	$21,694,000	$25,388,000	$17,495,000	$6,394,000	$108,840,000	$4,386,660
WATER TOTAL	$404,906,800	$51,441,200	$103,210,000	$80,848,549	$97,191,822	$84,266,129	$60,459,500	$30,372,000	$456,348,000	$19,601,717

FINANCIAL SUMMARY
Major System Categories – Wastewater

	Five-Year Capital Program			Projected Future Expenses by Year						
System Description	**Current CIP**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress**
Urban Wastewater (UWW)										
Wastewater Interceptors and Pumping Stations	$51,607,000	$7,518,000	$37,995,000	($2,315,000)	$4,745,000	$8,402,000	$8,955,000	$1,343,000	$59,125,000	$12,082,386
Moores Creek AWRRF	$73,556,000	($4,129,000)	$57,190,000	$5,650,000	$5,347,000	$652,000	$39,000	$549,000	$69,427,000	$3,592,629
Subtotal (UWW)	$125,163,000	$3,389,000	$95,185,000	$3,335,000	$10,092,000	$9,054,000	$8,994,000	$1,892,000	$128,552,000	$15,675,015
Non-Urban Wastewater (NUWW)										
Glenmore WRRF	$6,717,000	$3,976,000	$2,265,000	$274,000	$634,000	$741,000	$1,309,000	$5,470,000	$10,693,000	$58,992
Scottsville WRRF	$1,810,000	$2,119,000	$1,102,000	$638,000	$838,000	$644,000	$453,000	$254,000	$3,929,000	$79,110
Subtotal (NUWW)	$8,527,000	$6,095,000	$3,367,000	$912,000	$1,472,000	$1,385,000	$1,762,000	$5,724,000	$14,622,000	$138,102
WASTEWATER TOTAL	$133,690,000	$9,484,000	$98,552,000	$4,247,000	$11,564,000	$10,439,000	$10,756,000	$7,616,000	$143,174,000	$15,813,117
All Systems Security & Technology	$5,075,605	($428,095)	$4,379,605	$267,905	$0	$0	$0	$0	$4,647,510	$371,974
TOTAL	$543,672,405	$60,497,105	$206,141,605	$85,363,454	$108,755,822	$94,705,129	$71,215,500	$37,988,000	$604,169,510	$35,786,808

PROJECT DETAILS

Page	8	**Completed Projects**
Page	10	**Urban Water**
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Completed Projects

During fiscal year 2026, several capital improvement projects were completed, were advanced to the final phases of close-out, or were largely completed. Presented in the table below are the five (5) completed projects, pertinent information on the adopted budgets, as well as the projected final costs and any anticipated savings. There was a total completed project cost savings of $0.5 million.

55. Moores Creek AWRRF 5kV Electrical System Upgrade: After discussions through the Moores Creek Facilities Master Plan, it was identified that several areas of the MCAWRRF, including the Blower Building, Sludge Pumping Building, Grit Removal Building, Moores Creek Pumping Station, and the Administration Building were all still connected to the original 5kV switchgear in the Blower Building. This equipment, including the associated cabling, switchgear, transformers, and motor control centers (MCCs), has a useful life expectancy of 20-30 years. Most of this equipment was installed around 1980. With the equipment having well exceeded its useful life expectancy, safety is a concern given the large electric loads that the cabling and other equipment are handling on a day-to-day basis. Failure of the existing 5kV infrastructure could also result in temporary outages of treatment processes, and repairs could take weeks to months given the lead times associated with equipment of this age. This project ultimately include replacement of all remaining original 1980s-vintage 5kV cables, switchgear, transformers, and selected motor control centers (MCCs). All work was coordinated with the Moores Creek Facilities Master Plan.

72. Radio Upgrades: The regional 800 MHz Public Safety Communication System, in which the Rivanna Water and Sewer Authority participates in to provide internal and emergency radio communication, was nearing the end of its service life. Because of technology changes (software and hardware) the Charlottesville-UVA-Albemarle County Emergency Communications Center (ECC) needed to upgrade or replace the system to keep it useable. This project planned for the upgrade or replacement of major technology components and equipment of the existing system include electronic components at all tower sites and the prime site at the ECC facility; new console equipment at the regional ECC; equipment such as tower site generators and UPS systems; an additional tower site (to improve service in southern Albemarle County); microwave backbone; and replacement of the system recording facilities. RWSA was apportioned a part of the project cost proportionately based on the number of radios. In addition to this assessment from the ECC, the Authority replaced its fleet of portable radios.

69. IT Infrastructure: There are several ongoing projects that will fall into this project category. The Authority has implemented the initial stages of creating a Disaster Recovery (DR) site. This will include over the next year everything from the hardware, software, data line redundancy configurations and the appropriate 3rd party providers of cloud storage and back-up/retention services. It also includes the installation of proper uninterruptible power supplies (UPS). The DR site will ultimately be able to take on all Administrative and SCADA services should something happen to the Moores Creek AWRRF Date Center. There are several PLC's in the various plants that have reached end of life and will fall under this project for replacement with dual-redundant which will involve significant coordination for the major high-priority primary PLC's.

Completed Projects

			Five-Year Capital Program			
Line No.	**Proj. No.**	**Project Description**	**Adopted Budget 5/2025**	**Previous Expenditures (6/30/2025)**	**Final Projected Costs/Close Out**	**Savings**
55	21.18	Moores Creek AWWRF 5kV Electrical System Upgrade	$6,200,000	$5,401,990	$5,515,000	$685,000
72	25.10	Radio Upgrades	$210,988	$440,400	$440,400	($229,412)
69	20.47	IT Infrastructure	$194,887	$194,887	$194,887	$0
		TOTAL	$6,605,875	$6,037,277	$6,150,287	$455,588

CIP 26-30 Total	**CIP 26-30 Completed or Removed**	**CIP 26-30 Remaining**	**CIP 27-31 New Funding**	**CIP 27-31 New Total**
$550,278,280	$6,605,875	$543,672,405	$60,497,105	$604,169,510

Community Water Supply Plan

The Community Water Supply Plan represents the program developed with substantial community input to fulfill RWSA's contractual obligation to the City of Charlottesville (City) and the Albemarle County Service Authority (ACSA) to provide adequate drinking water for their future needs. This initiative started in 2003 to find a long-term solution that could achieve both local support and meet federal and state requirements. After multiple community meetings, updates with local officials, and frequent consultations with federal and state agencies, local support was obtained to apply for federal and state permits to expand the Ragged Mountain Reservoir and build a future pipeline between the South Rivanna and Ragged Mountain Reservoirs, with stream and wetlands mitigation to be provided through property in the Buck Mountain Creek area and property adjacent to a lower reach of Moores Creek near its confluence with the Rivanna River. Federal and state permits were granted in 2008 and amended in 2011.

The first phase of this long-term program centered around the expansion of the Ragged Mountain Reservoir, a project that would simultaneously address a legal obligation to correct safety deficiencies on the existing site. Through a combination of technical investigations, engineering evaluations, and continued public discussion, a decision was reached in February 2011 through the City Council and Board of Supervisors to build the new dam as an earthen dam, with the initial phase raising the reservoir pool height by 30 feet. The decision also outlined an objective of the further pursuit of water conservation through the City and ACSA, and the pursuit of opportunities for dredging of the South Rivanna Reservoir, with the second phase of reservoir expansion in the future. The Ragged Mountain Dam Agreement was amended in late 2023 and authorized the implementation and modifications for the additional 12 feet of storage at the Ragged Mountain Reservoir.

Project Descriptions:

1. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line: Raw water is transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant (OBWTP) by way of two 18-inch cast iron water lines which have been in service for more than 110 and 70 years, respectively. In addition to the need to increase transfer capacity between the RMR and OBWTP, increased frequency of emergency repairs and expanded maintenance requirements necessitates replacement of these water lines with a single, new raw water main. This new raw water main is expected to be constructed of 36-inch ductile iron pipe and will span a distance of approximately 21,400 linear feet, including the connection of the proposed RMR raw water pump station with the Southern terminus of the Birdwood raw water line completed in 2019, which will allow the pump station to integrate with the SFRR-RMR transfer system as well.

2. Ragged Mountain Reservoir to Observatory Water Treatment Plan Raw Water Pump Station: The Ragged Mountain Reservoir (RMR) to Observatory Water Treatment Plant (OBWTP) raw water pump station is planned to replace the existing Stadium Road and Royal Pump Stations, which have exceeded their design lives and would require significant upgrades to reliably meet the upgraded capacity of the Observatory WTP. The pump station will be designed to pump up to 10 million gallons per day (MGD) to the expanded Observatory WTP and will also be

integrated with the planned South Fork Rivanna Reservoir (SFRR) to RMR pipeline for improved operational flexibility and cost efficiencies. This integrated pump station will include the capacity to transfer up to 16 MGD of raw water from RMR back to the South Rivanna WTP, as well as boost up to 25 MGD of raw water from SFRR up to RMR and/or OBWTP. The pump station property was purchased as part of the SFRR to RMR raw water main preliminary design and right of way acquisition project.

3. South Fork Rivanna Reservoir to Ragged Mountain Pipeline, Intake and Facilities: The South Fork Rivanna Reservoir (SFRR) to Ragged Mountain Reservoir (RMR) Pipeline is a part of the approved and permitted Community Water Supply Plan. The pipeline and associated facilities will give RWSA the ability to move water between the two reservoirs, further enhancing the management capabilities of the Urban System water supply. The SFRR to RMR Pipeline, Intake, and Facilities Project will include construction of a 36" raw water pipeline, connecting SFRR and RMR, a new raw water intake and pump station at SFRR to bring total withdrawal capacity from SFRR to 41 MGD, and raising of the pool level at RMR 12' to allow for an additional 700 million gallons of storage at that reservoir. Approximately 6.5 miles of 36" ductile iron piping will be installed under this project, connecting to the existing 36" pipeline constructed in the Birdwood Golf Course, and subsequently connecting to the 36" pipeline currently being constructed under the RMR to Observatory WTP Raw Water Pipeline and Pump Station Projects. This work will also include construction of a new permanganate building, located at the South Rivanna WTP site near the new raw water pump station, for efficiency purposes as opposed to performing that work in a separate project as previously intended. Construction of the new intake and pump station will permanently close the existing boat ramp on RWSA property at SFRR to the public.

4. South Fork Rivanna Reservoir Aeration & Ragged Mountain Reservoir HLOS Systems: Through RWSA's ongoing Reservoir Water Quality Monitoring Program and the South Fork Rivanna Reservoir (SFRR) to Ragged Mountain Reservoir (RMR) Pretreatment Evaluation Study, water quality benefits for an Aeration System at SFRR and a Hypolimnetic Oxygenation System at RMR have been identified. While these systems would be configured differently for each reservoir, the purpose of each system is to inject Oxygen into the depths of each reservoir. Iron and manganese concentrations are reduced, thus improving water quality within the reservoir and for downstream treatment processes.

Community Water Supply Plan

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
1	20.03	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line	$40,760,000		$12,850,000	$7,910,000	$7,905,000	$7,905,000	$4,190,000		$40,760,000	$3,958,739
2	20.04	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station	$20,730,000	$625,000	$8,630,000	$4,235,000	$4,235,000	$4,255,000			$21,355,000	$1,524,789
3	20.48 20.49 23.01 22.01 26.2	South Fork Rivanna Reservoir to Ragged Mountain Pipeline, Intake & Facilities (and Permanganate)	$111,933,000	$7,567,000	$21,495,000	$24,650,000	$19,730,000	$17,875,000	$17,875,000	$17,875,000	$119,500,000	$3,689,362
4	23.02	South Fork Rivanna Reservoir Aeration & Ragged Mountain Reservoir HLOS Systems	$9,270,000	($9,270,000)								
		TOTAL	$182,693,000	($1,078,000)	$42,975,000	$36,795,000	$31,870,000	$30,035,000	$22,065,000	$17,875,000	$181,615,000	$9,172,890

Urban Water Treatment Plants and Reservoirs

The Urban Water Treatment Plants and Reservoirs consist of the Observatory Water Treatment Plant (OBWTP) and Ragged Mountain/Sugar Hollow Reservoir System which is comprised of the water treatment facility on Observatory Mountain and the associated raw water infrastructure that stores and conveys source water to the plant. The raw water storage system includes the new Ragged Mountain Dam (constructed in 2014, with a useable raw water storage capacity of 1.44 billion gallons) and the Sugar Hollow Dam (originally constructed in 1947, upgraded in 1999 and downstream discharge improvements completed in September 2014, with a useable raw water storage capacity of 339 million gallons as updated by a 2015 bathymetric survey). The system also includes 17.6 miles of 18-inch raw water cast-iron mains, originally installed in 1908, 1922, and 1946. The Sugar Hollow Raw Water Main historically conveyed water from the Sugar Hollow Dam to the Observatory Water Treatment Plant, however, as a result of the New Ragged Mountain Dam project, the main now discharges directly into Ragged Mountain Reservoir. The remaining downstream section of the Sugar Hollow main now conveys raw water from the Ragged Mountain Reservoir to the treatment plant. The line crosses the Mechums River (where an abandoned pumping station is sited) on its way to Ragged Mountain Reservoir, and eventually passes through the Royal Pumping Station and terminates at the OBWTP. The Ragged Mountain Raw Water Main conveys water from the Ragged Mountain Reservoir through the Stadium Road Pumping Station and terminates at the OBWTP.

It also includes the South Rivanna Water System which is comprised of the source water, storage, conveyance and treatment infrastructure currently serving the urban area from the South Fork Rivanna River. The system includes the South Fork Rivanna Reservoir and Dam (built in 1966) with a raw water storage capacity of 1,248 MG of which 885MG is useable. The Dam is co-located with the raw water intake and pump station, as well as a small hydroelectric generation facility. The source water from the South Rivanna Reservoir is treated at the South Rivanna treatment plant (12-mgd rated capacity).

The North Rivanna Water System is also a part of this area and is comprised of a river intake and raw water pumping station on the North Fork of the Rivanna River, as well as the North Fork Water Treatment Plant (2-mgd rated capacity built in 1973). The North Rivanna System provides water to the ACSA service area located along US Route 29, between Forest Lakes subdivision and Piney Mountain Road.

Project Descriptions:

5. Observatory Water Treatment Plant – Hypo Tank Replacements: The Hypochlorite Building at the Observatory Water Treatment Plant (OBWTP) was constructed in 1999. The facility is designed to house all necessary sodium hypochlorite feed equipment as well as two (2) 12,000-gallon fiberglass reinforced plastic (FRP) storage tanks. With the tanks being more than 20 years old, the RWSA has elected to replace the tanks with new, similar size and volume tanks.

6. South Rivanna Water Treatment Plant – PAC Upgrades: The SRWTP currently utilizes a repurposed lime silo reconfigured to feed powdered activated carbon (PAC). PAC is fed in the mixing basin where it is mixed with the raw water prior to entering the rapid mix basins. The PAC storage silo and feed system has reached the end of its useful life and requires frequent

maintenance attention to maintain operations. The purpose of this project is to replace the existing PAC system with a new modern PAC storage and slurry feed system similar to the one installed at the Crozet WTP and the one under construction at the Observatory WTP. This project would include demolition of the existing PAC silo and feed pumps, site work and grading required for the new PAC silo location and installation of a new PAC storage and slurry feed system complete with all necessary dry feed equipment, metering pumps, HVAC equipment and electrical and control equipment.

7. South Rivanna Water Treatment Plant – Main Plant Generator Replacement: During recent treatment plant upgrades, the condition of the existing main plant generator was evaluated, and it was determined that while the generator was capable of meeting our current needs at the plant, we should plan for a future replacement. This replacement would help ensure the appropriate level of electrical service resiliency for the plant and would include a new prime rated generator, automatic transfer switch, associated electrical switchgear, feeder cables and other appurtenances necessary to allow this replacement to take place while still providing the plant with backup power during the construction process.

8. South Rivanna Water Treatment Plant Improvements (Plate Settlers, Floc – PAC removed): In an effort to continue to improve and enhance treatment capabilities at the plant and perform necessary equipment replacements, this project will include the installation of plate settlers in the sedimentation basins, replacement of the two rapid mixers, replacement of the existing freight elevator and other minor miscellaneous improvements.

9. South Rivanna Water Treatment Plant – Floc Basin Improvements: This work was originally intended to be included in the SRWTP Treatment Improvements project, but based on feedback from Water Department staff, it was determined that replacement of the flocculation basin paddles and associated accessories was critical and needed to be advanced in the schedule. This project will replace the existing components in the three existing flocculation basins.

10. South Rivanna Water Treatment Plant – 16 mgd Upgrade: The South Rivanna Water Treatment Plant is a 12 MGD capacity plant that was originally constructed in 1964 that has had major upgrades in recent years to include Granular Activated Carbon (GAC) treatment and capacity resiliency improvements. As future demands increase, RWSA has plans to increase the plant's capacity to 16 MGD. During completion of a Finished Water Master Plan in 2022, expansion of this facility within the planning horizon of 50 years (through 2070) was not expected. However, with the recent anticipated growth in the Northern Area of Albemarle County, this expanded capacity is expected much sooner. Expansion of the facility to 16 MGD will include, but not be limited to, additional flocculation capacity, three additional filters, GAC treatment expansion, a second chlorine contact tank, UV disinfection, and additional residual equalization storage.

11. South Rivanna Water Treatment Plant – Sanitary Sewer Connection: Residual liquids and solids produced during the water treatment process at the South Rivanna Water Treatment Plant are routed through an equalization basin to two residuals clarifiers. Sludge is pumped to a belt filter press in the Solids Handling Facility, and clarified water is discharged to the South Fork Rivanna River under a VPDES permit issued by the Virginia DEQ. In the future, anticipated increases in

solids processing will necessitate an alternative means of disposing of sludge from the treatment process. This project includes preliminary and final design of a new sewer connection to convey sludge to the sanitary sewer system, as well as right of way acquisition, permitting, and construction costs

12. North Rivanna Water Treatment Plant Decommissioning: The North Rivanna Water Treatment Plant (NRWTP) has been in use since the 1970's with minimal upgrades aside from the addition of Granular Activated Carbon in 2018. A Needs Assessment was performed that identified additional improvements that would be required for the plant to continue to reliably provide drinking water to the North Rivanna Pressure Zone. Due to the anticipated expense of these proposed improvements, a feasibility study was performed to determine if the NRWTP should be upgraded or decommissioned. The study concluded that the plant should be decommissioned, and expenses saved could be better applied to other improvements throughout the Urban Water System. As a result, this project includes demolition of the plant facilities, removal of the low head dam on the North Fork Rivanna River and returning the property to its pre-existing conditions.

13. Dam Concrete and Steel Repairs: RWSA operates several dams for water supply and sediment storage. These include concrete gravity dams and earthen embankment dams, ranging in age from 10 to over 80 years. Over time, normal wear and tear from water passage and weather can cause degradation of concrete and steel structures. To ensure continued safe operation of these dams into the future, it is imperative to complete periodic maintenance and repairs. This project includes funding for the evaluation, design, and construction of concrete and steel repairs at the Lickinghole Creek Dam, Totier Creek Dam, South Rivanna Dam, and Sugar Hollow Dam. Repairs are expected to include injection grouting of voids in concrete structures, concrete surface repairs, recoating steel hoist beams, and installation of new hoist trolleys, among others.

14. Urban Water Treatment Plants – GAC Building Dehumidification: Granular Activated Carbon (GAC) treatment was installed at the Urban water treatment plants (South Rivanna and Observatory) in 2018. The buildings constructed around the GAC vessels were not conditioned and only included unit heaters and portable dehumidifiers. As a result of the large GAC vessels in these buildings, the humidity levels in the area tend to promote condensation which can then lead to corrosion of the equipment and general degradation. While the portable dehumidifiers were beneficial, they tended to be unreliable and insufficient to maintain lower humidity levels in the buildings. As a result, the purpose of this project is to install permanent industrial dehumidification systems in the GAC buildings associated with the Urban water treatment plants. This project would include the dehumidification units as well as the necessary ductwork, electrical improvements, and architectural modifications required for a complete installation.

15. South Rivanna Water Treatment Plant – Dedicated Backwash Line: RWSA's South Rivanna Water Treatment Plant currently has two large diameter waterlines leaving the facility. The 36" Urban Waterline is used solely for the transmission of potable water to the Urban Pressure Zone, and the 24" South Rivanna Waterline is a dedicated filter backwash and process waterline, that carries water back to South Rivanna WTP from the Woodburn Elevated Water Storage Tank for those purposes. In an effort to make the RWSA distribution system more efficient, reliable, and resilient to emergency conditions, this project will include installation of a third waterline,

currently anticipated to be 12", that would be utilized for filter backwash and plant process water, allowing the 24" South Rivanna Waterline to also be utilized for the transmission of potable water to the Urban Pressure Zone.

16. Dam Public Safety Enhancements: RWSA operates four high-hazard dams, three low-hazard dams, and three small, non-regulated dams for water supply, sediment storage, and other purposes. RWSA completes regular inspections and maintenance of these facilities; however, dams are inherently hazardous structures and can pose risks to the general public and facilities within their respective breach inundation zones. This project provides funding for installation of various public safety improvements at these facilities. Proposed improvements include audible warning systems for the Sugar Hollow, Ragged Mountain, and South Rivanna dams, new signage at all RWSA dam facilities to inform and warn the public about potential hazards, and debris and boat booms where appropriate to protect boaters from spillways and intake structures.

17. Vertical Asset Renewal – Urban Water: The asset management program at Rivanna Water & Sewer Authority is a strategic process of tracking, maintaining, and optimizing physical assets to maximize their value, lifespan, and operational efficiency while reducing costs. When assets reach the end of their serviceable life, proactive replacement becomes cost beneficial to the Authority. Assets within facilities in the Urban Water system were examined using factors, such as lifecycle and cost of maintenance versus cost of replacement, and risk, to determine when they would meet the end of their serviceable life. These assets have been captured in the vertical asset renewal program, which will ensure equipment continues to run reliably, supports compliance, and provides a high level of service for our customers.

18. Observatory Water Treatment Plant – Backwash Basin Sludge Removal and Inspection: The concrete backwash basins were built in the 1920's and 1950's as part of the original water treatment plant to be used as open storage for the filtered water. They are currently used to settle solids out of the backwash water before it is decanted to the sanitary sewer system. This project involves removal of the settled sludge and a complete inspection of the basins to determine the extent of concrete repairs needed to extend their useful life.

Urban Water Treatment Plants and Reservoirs

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
5	25.05	Observatory Water Treatment Plants - Hypo Tank Replacements	$371,000	$42,000	$167,000	$246,000					$413,000	$8,180
6	24.01	South Rivanna Water Treatment Plant - PAC Upgrades	$1,258,000	$562,000	$1,258,000	$562,000					$1,820,000	$85,397
7	22.08	South Rivanna Water Treatment Plant - Main Plant Generator Replacement	$480,000	$366,000				$71,000	$450,000	$325,000	$846,000	
8	22.05	South Rivanna Water Treatment Plant Improvements - (Plate Settlers, Floc - PAC removed)	$552,000	$450,000					$512,000	$490,000	$1,002,000	
9	26.14	South Rivanna Water Treatment Plant - Floc Basin Improvements	$2,400,000	$500,000	$180,000	$1,555,000	$1,165,000				$2,900,000	
10	26.05	South Rivanna Water Treatment Plant - 16 mgd Upgrade		$970,000				$400,000	$500,000	$70,000	$970,000	
11	23.11	South Rivanna Water Treament Plant - Sanitary Sewer Connection	$924,000	$181,000		$120,000	$555,000	$430,000			$1,105,000	
12	20.18	North Rivanna Water Treatment Plant - Decommissioning	$3,512,000	$78,000	$680,000				$2,525,000	$385,000	$3,590,000	

Urban Water Treatment Plants and Reservoirs
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
13	25.01	Dam Concrete and Steel Repairs	$1,453,000	$1,367,000	$943,000	$1,877,000					$2,820,000	$51,307
14	23.04 23.09	Urban WTPs - GAC Building Dehumidification	$3,300,000	$660,000			$310,000	$1,670,000	$1,980,000		$3,960,000	
15	27.04	South Rivanna Water Treatment Plant - Dedicated Backwash Line		$3,290,000		$440,000	$2,170,000	$680,000			$3,290,000	
16	27.02	Dam Public Safety Enhancements		$3,850,000		$1,386,000	$2,464,000				$3,850,000	
17	27.15	Vertical Asset Renewal - Urban Water		$740,000		$148,000	$148,000	$148,000	$148,000	$148,000	$740,000	
18	23.05	Observatory Water Treatment Plant - Backwash Basin Sludge Removal and Inspection	$698,400	($698,400)								
		TOTAL	$14,948,400	$12,357,600	$3,228,000	$6,334,000	$6,812,000	$3,399,000	$6,115,000	$1,418,000	$27,306,000	$144,884

Finished Water Storage/Transmission – Urban System

The urban finished water storage and transmission system serves to provide transmission of treated water from the three RWSA water plants (Observatory, South Rivanna, and North Rivanna) to the distribution networks of the Albemarle County Service Authority, the City of Charlottesville, and the University of Virginia. The system includes approximately 40 miles of pipeline, six water storage tanks: Avon Street (2 MG), Pantops (5 MG), Piney Mountain (0.7 MG), Stillhouse (0.7 MG), Observatory (3 MG), and Lewis Mountain (0.5 MG), and the Alderman Road and Stillhouse pumping stations.

Project Descriptions:

19. Valve Repair – Replacement (Phase 3): RWSA owns and operates over 500 isolation and control valves along its over 70 miles of raw and finished water mains. As many of these critical pieces of infrastructure were installed in the 1960s and 1970s, age starts to become a concern, especially for isolation valves, which are critical to ensure that water main breaks can be turned off safely and effectively, minimizing damage to adjacent features such as roadways and service restoration times.

    Phase 3 of the Valve Repair-Replacement Program will continue the replacement of isolation valves, as well as air release valves, along RWSA's water mains. Phase 3 will focus on the highest priority valves to be replaced, leaving the remaining valves for replacement under Phases 4 & 5 of this program. Prioritization will be performed using RWSA's Asset Management Software, Cityworks, as well as inspection reports submitted by the RWSA Maintenance Department through their annual valve maintenance and exercising program.

20. Avon, Pantops, and Observatory Tank Painting: The Avon, Pantops and Observatory Ground Storage Tanks have volumes of 2-million, 3-million, and 5-million gallons respectively, and each of the tanks are located within the Urban Pressure Band of RWSA's Finished water Distribution System. The Urban Pressure Band services most of the City and ACSA critical customers (UVA, UVA/MJ Hospital, Senior Living Facilities, Defense Contractors, etc.). Each of the tanks play a pivotal role in maintaining system pressures and providing increased flows during fires and other system emergencies.

    RWSA inspects its tanks on a regular basis and following recent inspections of the interior and exterior of each of the three tanks it was determined that these tanks are due for rehabilitation and necessary repairs. Each tank is slated to have its interior and exterior coatings rehabilitated, taken out of service, in turn, in order to complete repairs. While each tank is offline, roofing/structural repairs and safety enhancements will be made as appropriate to further protect the integrity of the tank.

21. Stillhouse, Lewis Mountain and Woodburn Road Tank Painting: The Stillhouse, Lewis Mountain, and Woodburn Tanks have volumes of 0.7-million, 0.5-million, and 1.0-million gallons respectively, Lewis Mountain and Stillhouse operate at their own pressure band. The Woodburn Road Tank is used primarily for backwash of the South Rivanna water treatment plant. Each of the tanks play a pivotal role in maintaining system pressures and providing increased flows during fires and other system emergencies. Stillhouse and Lewis Mountain

tank combined serve mostly the northwestern section of charlottesville city and the Albemarle County directly adjacent to it.

RWSA inspects its tanks on a regular basis and following recent inspections of the interior and exterior of each of the three tanks it was determined that these tanks are due for rehabilitation and necessary repairs. Each tank is slated to have its interior and exterior coatings rehabilitated, taken out of service, in turn, in order to complete repairs. While each tank is offline, roofing/structural repairs and safety enhancements will be made as appropriate to further protect the integrity of the tank.

22. Airport Road Tank No. 1: The newly completed Airport Road Finished Water Pump Station (APFWPS) serves to provide finished water from the Urban pressure band to the North Rivanna pressure band and following decommissioning of the North Rivanna Water Treatment Plant (NRWTP), will be the primary means of supplying finished water to the North Rivanna pressure band. Extensive modeling work performed in previous studies and the recently completed Northern Area Utilities Master Plan indicates that suction side pressures for the APFWPS may trend lower than recommended, mainly during heavy pumping scenarios or during time periods where the South Rivanna Water Treatment Plant (SRWTP) is offline or operating at a reduced output. To ensure that APFWPS can operate reliably with increasing demands in the North Rivanna pressure demand, a new 1-million-gallon ground storage tank at the pump station is recommended for construction. This project will include design and construction of the new tank. The tank will be installed at the APFWPS site, as the site was sized for two tanks of this size, with the second tank to be installed in the decades to come as demands dictate.

23. Central Water Line: The southern half of the Urban Area water system is currently served by the Avon Street and Pantops storage tanks. The Avon Street tank is hydraulically well connected to the Observatory Water Treatment Plant while the Pantops tank is well connected to the South Rivanna Water Treatment Plant. The hydraulic connectivity between the two tanks, however, is less than desired, creating operational challenges and reducing system flexibility. In 1987, the City and ACSA developed the Southern Loop Agreement, outlining project phasing and cost allocations, as envisioned at the time. The first two phases of the project were constructed shortly thereafter. The third phase, known as the "Eastern Branch" is the subject of the current project. The initial funding for this project was used for route alignment determination, hydraulic modeling, and preliminary design. Due to the complicated nature of our finished water systems, it was decided at the August 2018 Board meeting that a more comprehensive approach was warranted and we should complete the Finished Water Master Plan prior to moving forward with final design and construction of the Avon to Pantops Water Main. The Finished Water Master plan was completed in 2021 and the Central Water Line project was prioritized for design and construction in coordination with the City and ACSA. The project will consist of approximately 5 miles of new 24-inch and 30-inch water main through the City to connect the Observatory Water Treatment Plant to an existing RWSA transmission main at East High and Long St. to ensure the increased hydraulic capacity of 10 MGD from the water treatment plant upgrades can be utilized. As part of this project, several City water mains will be replaced where co-located with the Central Water Line and the City will reimburse RWSA for that work. The project has been split into 2 construction contracts

and Phase 1 includes 4-miles of the water line work and is under construction, and bidding of Phase 2 will occur in summer 2026.

24. South Fork Rivanna River Crossing: RWSA has previously identified through master planning that a 24-inch water main will be needed from the South Rivanna Water Treatment Plant (SRWTP) to Hollymead Town Center to meet future water demands. Two segments of this water main were constructed as part of the VDOT Rt. 29 Solutions projects, including approximately 10,000 linear feet (lf) of 24-inch water main along Rt. 29 and 600 lf of 24-inch water main along the new Berkmar Drive Extension, behind Kohl's department store. To complete the connection between the SRWTP and the new 24-inch water main in Rt. 29, there is a need to construct a new river crossing at the South Fork Rivanna River. The selected alternative will include a 1,200 lf trenchless river crossing to minimize environmental impacts. Acquisition of right-of-way was required for the river crossing and along Rio Mills Road. The project is under construction.

25. Second N. Rivanna River Crossing & NR Water Main Replacement: The North Rivanna water distribution system has a 12-inch water line crossing of the North Rivanna River which is difficult to access and vulnerable to erosion and washout. The Finished Water Master Plan recommended we install a second redundant river crossing to ensure water can be conveyed north of the river to the Piney Mountain Tank from the new Airport Road Pump Station once the North Rivanna Water Treatment Plant is decommissioned. Approximately 1.2 miles of cast iron water line which has the highest system pressures and has experienced numerous emergency line breaks will be replaced as part of this project to improve system resiliency.

26. Berkmar Drive Ext. Waterline Phase 2: This water line project will be completed as betterment with the construction of the last section of the VDOT Berkmar Drive Extended project. VDOT has begun preliminary design, however, the construction is not anticipated for several years. This betterment will include approximately 1,200 feet of 16-inch waterline which will connect the new Airport Road Pump Station to an RWSA main in Airport Road. This second feed out of the new pump station will provide more redundancy to supply the North Zone once the North Rivanna Water Treatment Plant is decommissioned.

27. Urban Storage Evaluation and Tank(s) Addition: The Finished Water Master Plan outlined the need to evaluate our water storage system for fire suppression, to address frequent tank cycling, and to evaluate alternatives for realizing more useable volume in each tank. Once an evaluation is completed, this project will determine the best pressure bands to add storage to ease operational constraints. This project envisions the addition of two more water storage tanks which may be at existing tank locations or new ones.

28. SCADA Panel Relocations: At many remote water storage tank sites, control panels and PLCs associated with operation and monitoring of the tanks are located in valve vaults. These locations are a concern based on limited access to the electrical and instrumentation components as well as the condition of the space and the associated impact to the longevity of the devices. This project includes installation of new control panels and PLCs aboveground in weatherproof enclosures under a self-supporting canopy that would protect staff from direct weather impacts during operation or maintenance activities at seven water storage tank sites throughout the

RWSA water distribution system. The components located in the valve vaults would be demolished after the new components were installed to minimize monitoring downtime.

29. Finished Water Master Plan Update 2030: The Authority has a goal to plan, deliver, and maintain dependable infrastructure in a financially responsible manner and asset master planning is a priority strategy to accomplish this and improve overall system development. This project will account for this process as it relates to the urban finished water system and will use demand forecasting from the Urban Area Water Demand and Safe Yield Analysis to evaluate the system and identify needed improvements for capital planning purposes.

30. Urban Area Water Demand and Safe Yield Analysis 2030: In January 2012, the City of Charlottesville, Albemarle County Service Authority, and RWSA entered into the Ragged Mountain Dam Project Agreement. Within the agreement are provisions to monitor the bathymetric capacity of the Urban water reservoirs as well as a requirement to conduct reoccurring demand analysis, demand forecasting and safe yield evaluations. The purpose of this project is to perform the next recurring analysis and use the resulting information as part of the next Finished Water Master Plan update. The population projection efforts will be used in conjunction with the Finished Water Master Plan update, the Comprehensive Sewer Model and Study Update and the Crozet Drinking Water Infrastructure Plan update.

31. Emmet Street Betterment: The Urban Finished Water Master Plan identified several necessary upgrades to the urban water distribution system to improve system performance and reliability. One of the identified improvements is an upgrade and extension of the existing RWSA water main along the Emmet Street corridor from the UVA Dell Pond to Hydraulic Road. This project will utilize planned road, streetscape, utility, and development projects along the Emmet Street corridor to complete portions of the Emmet Street water main improvements as betterment. The project scope includes planning and coordination between RWSA, UVA, the City of Charlottesville, and VDOT, design services for the betterment and "gap" sections of water line, construction funding, and construction management services. Current identified projects with betterment opportunities include: the UVA Ivy Corridor Redevelopment, UVA Contemplative Commons, and the City of Charlottesville Emmet Streetscape Project.

32. Northern Area Pressure Zone Improvements (AR Zone and PMT): The northern portion of the Urban Water system consists of customers served by the Urban Pressure Zone or the Piney Mountain Pressure Zone. The Urban Pressure Zone is maintained by a variety of finished water storage tanks and finished water produced at the South Rivanna and Observatory Water Treatment Plants. The Piney Mountain Pressure Zone is served by either continued operation of the North Rivanna Water Treatment Plant or the Airport Road Pump Station and then the Piney Mountain Tank. As a result of an expected significant increase in water demand in the northern portion of the Urban Water system, this project will analyze the benefits and costs associated with creation of a new Airport Pressure Zone and then how that potential change impacts the service area connected to the Piney Mountain Tank and the boundary of the Urban Pressure Zone.

Finished Water Storage/Transmission – Urban System

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
19	20.62	Valve Repair - Replacement (Phase 3)		$600,000						$600,000	$600,000	
20	20.50 20.51	Avon, Pantops and Observatory Tank Painting	$6,120,000	($1,605,000)		$200,000	$1,800,000	$1,565,000	$950,000		$4,515,000	
21	20.52 20.53 20.54 22.02	Stillhouse, Lewis Mtn and Woodburn Rd Tank Painting	$264,000	($184,000)						$80,000	$80,000	
22	26.06 24.05	Airport Road Tank No. 1 and Pump Improvements	$5,834,400	$1,415,600		$533,000	$3,086,000	$3,631,000			$7,250,000	
23	20.10	Central Water Line	$79,000,000		$24,490,000	$18,800,000	$24,710,000	$11,000,000			$79,000,000	$3,202,528
24	20.12	South Fork Rivanna River Crossing	$6,250,000	$300,000	$6,250,000	$300,000					$6,550,000	$1,437,369
25	20.58	Second North Rivanna River Crossing and NR Water Main Replacement	$3,520,800	$12,824,200		$500,000	$875,000	$4,860,000	$7,765,000	$2,345,000	$16,345,000	
26	24.09	Berkmar Drive Ext. Waterline - Phase 2	$1,756,000		$220,000		$321,000	$605,000	$610,000		$1,756,000	$28,530

Finished Water Storage/Transmission – Urban System
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
27	24.12	Urban Storage Evaluation and Tank(s) Addition	$4,680,000	$820,000	$72,000	$311,000	$477,000	$650,000	$3,990,000		$5,500,000	
28	24.13	SCADA Panel Relocations	$247,200	$697,800				$91,500	$177,500	$676,000	$945,000	
29	26.11	Finished Water Master Plan Update 2030	$290,000	$101,000				$15,000	$292,000	$84,000	$391,000	
30	26.17	Urban Area Water Demand and Safe Yield Analysis 2030	$240,000	$15,000				$255,000			$255,000	
31	23.06	Emmet Street Betterment	$7,400,000		$4,515,000	$185,000	$2,245,000	$455,000	$0	$0	$7,400,000	$1,228,856
32	27.21	Northern Area Pressure Zone Improvements (AR Zone and PMT)		$8,000,000		$481,549	$3,301,822	$2,316,629	$1,000,000	$900,000	$8,000,000	
		TOTAL	$115,602,400	$22,984,600	$35,547,000	$21,310,549	$36,815,822	$25,444,129	$14,784,500	$4,685,000	$138,587,000	$5,897,283

Crozet Water System

The Crozet Water System includes the source water, raw water conveyance, finished water treatment, transmission and storage infrastructure for the Crozet community in western Albemarle County. The source water for this system is the Beaver Creek Reservoir and Beaver Creek (Garnett) Dam which were built in 1964 with a current useable storage capacity of 521 million gallons. Raw water is treated at the Crozet Water Treatment Plant (2.0 mgd rated capacity) and provides finished water to the Albemarle County Service Authority. The system includes the Crozet Elevated (Waterball) Tank (0.05 MG) for water treatment plant backwash; the Crozet Ground Storage Tank (0.5 MG) and pump station, and the Buck's Elbow Storage Tank (2.0 MG).

Project Descriptions:

33. Buck's Elbow Tank and Waterball Painting: The 2,000,000-gallon Buck's Elbow Ground Storage Tank provides finished water storage for the Crozet Area while the 50,000-gallon Crozet Waterball Tank serves as filter backwash storage at the Crozet Water Treatment Plant (CZWTP). Routine inspections of these tanks in 2012 indicated that the tanks would require recoating by 2020. The current coating system has lasted beyond this initial prediction and as such was moved to 2028. The project includes recoating the interior and top-coating the exterior of both tanks to prevent corrosion. Minor repairs and improvements to both tanks will also be included in this work, such as foundation repairs and safety enhancements. The repairs will precede the painting work due to necessity of repairs.

34. Crozet Drinking Water Infrastructure Plan Update 2025: In 2019, staff completed a Drinking Water Infrastructure Plan for the Crozet Service Area to determine the water system improvements needed to meet area demands for a 50-year design period (to 2070). Since this plan was completed, rapid growth trends and Virginia Water Protection (VWP) Permit requirements issued in late 2024 by the Virginia Department of Environmental Quality (DEQ) have prompted a need to update and revise this plan. Work will include a review of the assumptions from the previous report and updates to the analysis with newly available population and water usage data and VWP Permit requirements. Various options for water system improvements will be assessed and detailed in the updated report to meet the long-term water needs of the Crozet community.

35. Beaver Creek Dam Alteration: RWSA operates the Beaver Creek Dam and reservoir as the sole raw water supply for the Crozet Area. In 2011, an analysis of the Dam Breach inundation areas and changes to the Virginia Department of Conservation and Recreation (DCR) Impounding Structures Regulations prompted a change in hazard classification of the dam from Significant to High Hazard. This change in hazard classification requires that the capacity of the spillway be increased. Following the completion of a planning study in 2023, staff is proceeding with final design and construction of a labyrinth spillway and chute with a bridge to allow Browns Gap Turnpike to cross over the new spillway. Work for this project will be coordinated with the new relocated raw water pump station and intake. Federal funding through the Natural Resources Conservation Service is being pursued to cover the design and a portion of construction costs.

36. Beaver Creek New Raw Water Pump Station & Intake: The existing Raw Water Pump Station and Intake at the Beaver Creek Reservoir was constructed in 1964 and is located at the foot of the Beaver Creek Dam. Obligatory dam safety upgrades to the Beaver Creek Dam spillway necessitate moving the pump station away from its current location downstream of the dam. Additionally, the Drinking Water Infrastructure Plan for the Crozet water service area recommends installation of a new raw water pump station and intake to meet new minimum instream flow requirements while increasing raw water pumping capacity to serve the growing needs of the Crozet community. The new pump station will be constructed adjacent to the dam on the Beaver Creek Reservoir. The new intake structure will include enhanced controls as well as an aeration/destratification system to enhance water quality within the reservoir.

37. Crozet Water Treatment Plant – Full GAC Treatment: In order to enhance RWSA's resiliency and commitment to long term finished water quality, the Authority has committed to expanding the Granular Activated Carbon (GAC) capacity at the Crozet WTP to match the current plant capacity. GAC has been identified as a leading best management practice to remove disinfection by product pre-cursers and similar potential contaminants from source water and can be used to manage removal of other emerging contaminants and compounds that are under consideration for regulation in the future. As a result, GAC treatment capacity will provide the Crozet WTP with the flexibility to provide high quality drinking water under various future conditions. This project includes the construction of a second GAC building, two additional GAC vessels, a new, larger clear well, and the necessary pumps, piping, and electrical components to connect the expanded facility to the existing treatment plant.

38. Crozet Water Treatment Plant – Disinfection Upgrades: During design of the Crozet Water Treatment Plant (WTP) GAC Expansion project, chlorine contact time (CCT) requirements for finished water were reviewed to confirm compliance with Virginia Department of Health guidelines for disinfection. Currently, the ground storage tank at the WTP provides sufficient CCT, but this does not allow for shutdowns of the tank for maintenance work or future higher flows from the treatment plant. Various disinfection alternatives are under consideration to address these conditions, including increased free chlorine residuals, installation of baffles in the existing ground storage tank to promote passive mixing, construction of additional storage for added CCT, or installation of a UV disinfection system. This project includes design and construction of the selected alternative.

39. Crozet Finished Water Grayrock Pump Station: RWSA's Bucks Elbow Ground Storage Tank (BET) currently can only be cycled as low as 26-feet (11-feet below overflow), due to the high elevation of several homes in the Grayrock area of Crozet. This results in about 0.6 million gallons (MG) of the total 2 MG being available for use. As a part of the proposed improvements, a small booster station will be installed near the tank site with a series of pressure reducing valves in order to allow the tank to cycle as low as 18-feet, making an additional 0.4 MG of water inside BET available for use. This will allow RWSA staff to cycle the tank lower, reducing water age and improving overall water quality in this area of the distribution system.

40. Crozet AC Pipe Replacement: This project includes the installation of approximately 5,000 linear feet of new 18-inch ductile iron water line along Three Notched Road in Crozet. It will

replace the final remaining section of 12-inch RWSA transite (asbestos cement) pipe built in the 1970's which is difficult to repair due to health and safety hazards. The new water line will connect the new Crozet Finished Water Pump Station at the Water Treatment Plant to the end of the previous transite replacement project at the entrance to Western Ridge and will provide more reliable service to carry the capacity of the recent water treatment plant upgrades.

41. Crozet Water Treatment Plant – GAC Building Dehumidification: Granular Activated Carbon (GAC) treatment was installed at the Crozet Water Treatment Plant in 2018. The building constructed around the GAC vessels was not conditioned and only included unit heaters and portable dehumidifiers. As a result of the large GAC vessels in this building, the humidity levels in the area tend to promote condensation which can then lead to corrosion of the equipment and general degradation. While the portable dehumidifiers were beneficial, they tended to be unreliable and insufficient to maintain lower humidity levels in the building. As a result, the purpose of this project is to install a permanent industrial dehumidification system in the GAC building. This project would include the dehumidification units as well as the necessary ductwork, electrical improvements, and architectural modifications required for a complete installation.

42. Crozet Ground Tank Painting: The 500,000-gallon Crozet Ground Storage Tank provides Chlorine Contact Time at the Crozet Water Treatment Plant (CZWTP) and serves as a clearwell for the Crozet Finished Water Pump Station. Inspections of this tank in 2018 and 2022 indicated that the tank's exterior will require top-coating by 2028 to prevent corrosion. The project includes design, construction, and bid-phase services for top-coating of the tank exterior plus minor repairs and safety improvements as needed. Removed from 5-year CIP.

43. Vertical Asset Renewal – Crozet Water: The asset management program at Rivanna Water & Sewer Authority is a strategic process of tracking, maintaining, and optimizing physical assets to maximize their value, lifespan, and operational efficiency while reducing costs. When assets reach the end of their serviceable life, proactive replacement becomes cost beneficial to the Authority. Assets at the Crozet Water Treatment Plant were examined using factors, such as lifecycle and cost of maintenance versus cost of replacement, and risk, to determine when they would meet the end of their serviceable life. These assets have been captured in the vertical asset renewal program, which will ensure equipment continues to run reliably, supports compliance, and provides a high level of service for our customers.

Crozet /Water System

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
33	21.01	Buck's Elbow Tank and Waterball Painting	$1,993,000	($118,000)	$85,000	$52,000	$1,238,000	$500,000			$1,875,000	
34	26.09	Crozet Drinking Water Infrastructure Plan Update 2025	$450,000	$10,000	$235,000	$225,000					$460,000	
35	20.19	Beaver Creek Dam Alteration	$28,160,000	$5,325,000	$5,995,000		$1,370,000	$14,810,000	$11,310,000		$33,485,000	$1,936,877
36	20.20 21.15	Beaver Creek New Raw Water Pump Station & Intake	$33,020,000	$6,050,000	$6,150,000	$13,020,000	$13,960,000	$5,940,000			$39,070,000	$1,866,280
37	23.14	Crozet Water Treatment Plant - Full GAC Treatment	$10,120,000	$2,045,000	$6,345,000	$2,520,000	$3,300,000				$12,165,000	$411,261
38	26.01	Crozet Water Treatment Plant - Disinfection Upgrades	$840,000	$160,000	$600,000	$400,000					$1,000,000	
39	23.30	Crozet Finished Water Grayrock Pump Station	$2,658,000	$427,000			$260,000	$890,000	$1,545,000	$390,000	$3,085,000	
40	23.13	Crozet AC Pipe Replacement	$3,756,000	$3,964,000			$735,000	$635,000	$3,730,000	$2,620,000	$7,720,000	
41	23.10	Crozet WTP - GAC Building Dehumidification	$822,000	$173,000			$80,000	$733,000	$182,000		$995,000	
42	20.55	Crozet Ground Tank Painting	$582,000	($582,000)								
43	27.16	Vertical Asset Renewal - Crozet Water		$190,000		$38,000	$38,000	$38,000	$38,000	$38,000	$190,000	
		TOTAL	$82,401,000	$17,644,000	$19,410,000	$16,255,000	$20,981,000	$23,546,000	$16,805,000	$3,048,000	$100,045,000	$4,214,418

Scottsville Water System

The Scottsville Water System is comprised of the raw water conveyance, finished water treatment, transmission and storage infrastructure for the Town of Scottsville in southern Albemarle County. The source water for this system is the Totier Creek Intake, and the backup supply is the Totier Creek Reservoir, which was built in 1971 with a current useable capacity of 182 million gallons. Raw water is treated at the Scottsville Water Treatment Plant (0.25 mgd rated capacity) and provides finished water to the Albemarle County Service Authority. The system includes the Scottsville Storage Tank (0.25 MG). In 2023 ACSA conveyed to RWSA the Scottsville Finished Water Pump Station on James River Road, the Rt. 795 Tank (0.7 MG) and the piping in between.

Project Description:

44. Scottsville AC Pipeline Replacement: This project is intended to replace all remaining RWSA waterline in Scottsville that is currently constructed of asbestos-cement not included under ACSA's Phase 4 Waterline Replacement Project. The scope of the project generally includes approximately 500 LF of raw waterline replacement between the filter building and Totier Creek intake behind Scottsville WTP. The proposed budget includes design for the new watermain, as well as bid/quote package assistance.

45. Red Hill Water Treatment Plant – Upgrades & GAC Addition: The Red Hill Water Treatment Plant was constructed in a joint effort of ACSA and RWSA in 2009 and consists of a well, pneumatic tank and pump house that provides treated water to the Red Hill Elementary School and adjoining neighborhood. Originally the facility was operated primarily as a well head and pump house. More recently the facility has operated as a water treatment facility with a well as source water. As such, there have been several chemical process additions, automation, online monitoring and an increase in operator wet chemistry testing. The current building is well beyond its physical capacity and this project will serve to expand the building and improve the configuration of the process and laboratory needs of the WTP.

    Furthermore, to enhance RWSA's resiliency and commitment to long term finished water quality, the Authority has committed to adding Granular Activated Carbon (GAC) treatment at the Red Hill WTP, sized to match the current plant capacity. GAC has been identified as a leading best management practice to remove disinfection by product pre-cursers and similar potential contaminants from source water and can be used to manage removal of other emerging contaminants and compounds that are under consideration for regulation in the future. As a result, full GAC treatment capacity will provide the Red Hill WTP with the flexibility to provide high quality drinking water under various future conditions. This project includes a building expansion to independently house sodium hypochlorite, fluoride and GAC treatment as well as piping, valves and pumping improvements necessary to incorporate these components into the existing treatment plant.

46. Scottsville Water Treatment Plant – Upgrade: The Scottsville Water Treatment Plant was originally constructed in 1967, and other then the addition of Granular Activated Carbon (GAC) treatment and interior finished water piping improvements, much of the original plant, including process and electrical equipment, remains in service. As a result, a needs assessment for the plant was completed that identified a number of additional improvements required to

maintain a high level of treatment and water quality for the Scottsville community. Improvements include upgrades to the raw water pump stations, general electrical system upgrades, construction of a building addition to allow for more effective chemical storage and other general space needs, rehabilitation of the existing lab space, and other treatment process-based upgrades.

47. Scottsville Water Treatment Plant – GAC Building Dehumidification: Granular Activated Carbon (GAC) treatment was installed at the Scottsville Water Treatment Plant in 2018. The building constructed around the GAC vessels was not conditioned and only included unit heaters and portable dehumidifiers. As a result of the large GAC vessels in this building, the humidity levels in the area tend to promote condensation which can then lead to corrosion of the equipment and general degradation. While the portable dehumidifiers were beneficial, they tended to be unreliable and insufficient to maintain lower humidity levels in the building. As a result, the purpose of this project is to install a permanent industrial dehumidification system in the GAC building. This project would include the dehumidification units as well as the necessary ductwork, electrical improvements, and architectural modifications required for a complete installation.

48. Vertical Asset Renewal – Scottsville Water: The asset management program at Rivanna Water & Sewer Authority is a strategic process of tracking, maintaining, and optimizing physical assets to maximize their value, lifespan, and operational efficiency while reducing costs. When assets reach the end of their serviceable life, proactive replacement becomes cost beneficial to the Authority. Assets at the Scottsville Water Treatment Plant were examined using factors, such as lifecycle and cost of maintenance versus cost of replacement, and risk, to determine when they would meet the end of their serviceable life. These assets have been captured in the vertical asset renewal program, which will ensure equipment continues to run reliably, supports compliance, and provides a high level of service for our customers.

Scottsville Water System

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
44	23.16	Scottsville AC Pipe Replacement	$390,000	$75,000			$65,000	$400,000			$465,000	
45	22.07 23.17	Red Hill Water Treatment Plant - Upgrades & GAC Addition	$2,050,000	$100,000	$2,050,000	$100,000					$2,150,000	$172,242
46	22.06	Scottsville Water Treatment Plant - Upgrade	$6,000,000	($1,085,000)			$514,000	$655,000	$454,000	$3,292,000	$4,915,000	
47	23.18	Scottsville Water Treatment Plant - GAC Building Dehumidification	$822,000	$173,000			$80,000	$733,000	$182,000		$995,000	
48	27.17	Vertical Asset Renewal - Scottsville Water		$270,000		$54,000	$54,000	$54,000	$54,000	$54,000	$270,000	
		TOTAL	$9,262,000	($467,000)	$2,050,000	$154,000	$713,000	$1,842,000	$690,000	$3,346,000	$8,795,000	$172,242

Wastewater Interceptors/Pumping Stations

The RWSA wastewater interceptors and pumping stations convey wastewater from the collection systems of the City of Charlottesville and Albemarle County Service Authority to the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF). This grouping includes: the Crozet Interceptor and four associated pumping stations; the Moores Creek Interceptor and Relief Sewer; the Morey Creek, Maury Hills, Powell Creek, Meadow Creek, Schenks Branch, Woodbrook and Rivanna Interceptors; as well as the Albemarle-Berkley Interceptor and associated Albemarle Pumping Station. Also included in this system are the two primary pump stations into the MCAWRRF, the Rivanna and Moores Creek Pump Stations.

Project Descriptions:

49. Albemarle Berkley Pump Station Upgrade: The Albemarle-Berkeley Pump Station was constructed in 1975 and conveys flows from several Albemarle County Public Schools (ACPS) and other ACSA customers into RWSA's gravity Albemarle-Berkeley Interceptor. Recently, the pump station's run times have increased, with the pumps running nearly continuously for some periods. It is anticipated that much of the pumping infrastructure has reached or exceeded its expected lifespan, and that the equipment may be in need of replacement.

    A Capacity Analysis of the existing pump station has been completed, utilizing present flow rates, area-specific population projections, and known development projects on and adjacent to the ACPS campus in order to provide pump station buildout sizing to serve the area for the next 50 years. With the Capacity Analysis complete, this Pump Station Upgrade Project will utilize consultant assistance in order to formulate a set of bidding documents that will include the construction of a new pumping station that is sized to meet the current and future flows as determined by the Capacity Analysis, along with all equipment necessary for staff to safely remove individual pumps from service for maintenance purposes or temporarily bypass the station entirely as needed. Once the new pump station has been constructed and is in service, the existing pump station will be demolished, with that portion of the site returned to pre-existing conditions. This project is also being coordinated with the ongoing ACPS Master Planning Process.

50. Interceptor Sewer and Manhole Repair - Phase 2: This project is used to conduct assessments of various interceptors as well as rehabilitation of interceptors that do not have a separate CIP project. Phase 1 of the Interceptor Sewer and Manhole Repair Project included completion of the baseline evaluation of all RWSA interceptors (except the 42/48" Upper Rivanna Interceptor & those replaced with new pipe), as well as completion of rehabilitation on the Upper Morey Creek Interceptor and high-priority rehabilitation on the Powell Creek and Woodbrook Interceptors. Planned projects for Phase 2 include completion of the baseline evaluation by performing closed-circuit television inspections of the Upper Rivanna Interceptor. In addition, the force mains on the Crozet and Albemarle-Berkely Interceptors will be inspected, as well as inverted siphons on the Powell Creek and Moores Creek Interceptors. These inspections will require specialty equipment to complete due to the vastly different flow conditions in these portions of the interceptors. Additional high-priority rehabilitation, possibly on the Maury Hills Branch Interceptor and other sewers, will be completed under this phase as funds allow, with additional rehabilitation efforts to take place under Phase 3. Sanitary sewer evaluation

includes identification of inflow & infiltration (I & I), as well as structural defects and other maintenance issues to enable overall program planning and future rehabilitation scoping. Rehabilitation of existing sanitary sewer pipe and manholes reduces Inflow & Infiltration (I & I) in the system, thus reducing the chance for sanitary sewer overflows (SSOs) during high flow events and protecting downstream treatment processes.

51. Interceptor Sewer and Manhole Repair - Phase 3: This project is used to conduct assessments of various interceptors as well as rehabilitation of interceptors that do not have a separate CIP project. Phase 2 of the Interceptor Sewer and Manhole Repair Project, which is currently underway, includes completion of the baseline evaluation of all RWSA interceptors, including the 42-48" Upper Rivanna Interceptor, gravity portions of the Crozet Interceptor (downstream of Crozet Pump Station No. 4), force mains on the Crozet and Albemarle-Berkeley Interceptors, as well as inverted siphons on the Powell Creek and Moores Creek Interceptors. Phase 3 of this project will take data from the previous two phases and utilize that to perform rehabilitation on RWSA's largest interceptors, including the Moores Creek Interceptor, Upper Rivanna Interceptor, Crozet Interceptor, and others. Rehabilitation is anticipated to include continued usage of cured in place piping (CIPP) and point replacements of pipe as necessary, as well as cementitious manhole coatings and frame and cover replacements.

52. Crozet Pump Station 1, 2, and 3 Rehabilitation: The Crozet Interceptor Pump Stations were constructed in the 1980's and many of the components are original. This project initially included the replacement of pumps and valves at Pump Station 2 in order to improve pumping capabilities at this location and provide spare parts for the pumps at Pump Station 1. It also included roof replacements at all four pump stations, siding replacement for the wet well enclosure at Pump Station 3, and installation of new wells at Pump Stations 3 and 4. The pump station improvements now also include new electrical motor control centers as they are obsolete and past their useful life, generators, power transfer switches, pumps and valves at all pump stations.

53. Comprehensive Sewer Model and Study Updated 2030: Due to wet weather inflow and infiltration (I/I), projected growth, and infill; the RWSA interceptor system requires periodic evaluations of current and future flows. A consultant conducted flow metering and developed a system-wide computer modeling evaluation in 2006 which allowed RWSA, the City and ACSA to collectively identify system deficiencies, develop inflow and infiltration reduction goals, and project and prioritize future capital needs. The study was finalized in 2010. Subsequently, RWSA installed 12 permanent sanitary sewer flow meters to better understand the system operations. In April 2014 the City, ACSA, and RWSA entered into a Wastewater Projects Cost Allocation Agreement (Agreement) with the purpose of allocating costs for capacity-related projects. As part of that agreement, RWSA must routinely update future flow projections, and measured dry and wet weather flows, for each the City and ACSA. These projections are made through a calibrated wastewater model from flows measured in sewer pipes. To assist in this process. additional temporary flow meters will be installed to collect discrete flow data from the City and ACSA entering the RWSA system in order to update the model and evaluate I/I reduction goals and future capital project needs in accordance with the requirements of the Agreement. Data from both the temporary flow meters and the permanent flow meters will be used to determine the impacts of wet weather on

the collection system as necessary for modeling and flow projection analyses. The project will also include updated population projections for the region, capacity evaluations, and the completion of flow tables for the Wastewater Projects Cost Allocation Agreement.

54. Upper Schenks Branch Interceptor: The Schenks Branch Interceptor is located in the eastern part of the City of Charlottesville and ties into the Meadowcreek Interceptor. The interceptor was constructed in the mid-1950s of 21-inch clay and concrete pipe. The existing interceptor is undersized to serve present and future wet weather flows as determined by the City, and is to be upgraded to 30-inch pipe. The Upper Schenks Branch Interceptor consists of two sections along McIntire Road. Both of these sections have been designed with the first phase of this project located in the City's Schenks Branch Greenway, completed in early 2016. The second phase of the Upper Schenks Interceptor will be replaced by RWSA in coordination with the City of Charlottesville's sewer upgrades as easement negotiations with Albemarle County are completed.

55. Rivanna Pump Station Rehabilitation: On January 9, 2024, the area served by the MCAWRRF experienced heavy rain and over the course of the day, both influent pump stations to the facility saw increasing flows and water levels. The Moores Creek WWPS was able to pass the flow, while the Rivanna WWPS unfortunately experienced a series of control malfunctions that resulted in an a completely inundated wet well, dry well and stairwells. As a result, the equipment within the dry well of the pump station was damaged and needed to be replaced. This project includes refurbishment of the existing six wastewater pumps, replacement of the corresponding motors, replacement of impacted electrical system components, HVAC system modifications and improvements to the station control system to avoid similar issues from occurring again in the future.

56. Maury Hill Branch Sewer Replacement: The Maury Hill Branch Sewer is an 8-inch diameter clay sewer constructed in the 1970's. It ties into the Morey Creek Interceptor and primarily collects wastewater from the UVA Fontaine Research Park and a small portion of the adjacent City of Charlottesville neighborhoods. As a result of growth at the research park and increasing wastewater flows, the sewer line will need to be upsized to 12-inch diameter ductile iron pipe to properly convey flows for current and future needs. Removed from the 5-year CIP.

57. Powell Creek Interceptor Upgrade (PC4-PC5) (Planning PC1-PC5): The Powell Creek Interceptor (PCI) is a vitrified clay sewer pipe installed in the early 1970s and conveys wastewater from the northern area of RWSA's sanitary sewer system, to the downstream Rivanna Interceptor and ultimately the MCAWRRF. During the 2016 Comprehensive Sanitary Sewer Study, it was found that PCI was adequately sized to handle projected flows through 2065. However, with an increasing amount of growth in the Northern Area of Albemarle County, recent sewer modeling efforts revealed that the two most upstream reaches of PCI, PCI-4 & PCI-5, will need to be upsized from 18" to 24". This project will include preliminary engineering design for the eventual upsize of the entire interceptor, as well as detailed design, bidding, and construction of the upsizing of reaches PC-4 and PC-5.

Urban Wastewater Interceptors/Pumping Stations

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
49	20.31	Albemarle Berkley Pump Station Upgrade	$1,086,000	$244,000		$140,000	$605,000	$575,000	$10,000		$1,330,000	
50	21.07	Interceptor Sewer and Manhole Repair (Phase 2)	$1,492,000	$793,000	$1,090,000	$1,195,000					$2,285,000	$346,914
51	24.02	Interceptor Sewer and Manhole Repair (Phase 3)	$3,450,000	$1,000,000			$530,000	$1,310,000	$1,305,000	$1,305,000	$4,450,000	
52	20.30	Crozet Pump Station 1, 2, 3 Rehabilitation	$12,350,000	$280,000	$10,180,000	$2,450,000					$12,630,000	$852,051
53	26.07	Comprehensive Sewer Model and Study Update 2030	$564,000	$56,000				$242,000	$340,000	$38,000	$620,000	
54	20.25	Upper Schenks Branch Interceptor	$6,375,000	$735,000	$4,725,000		$1,910,000	$475,000			$7,110,000	$50,787
55	25.10a	Rivanna Pump Station Rehabilitation	$22,000,000	($7,700,000)	$22,000,000	($7,700,000)					$14,300,000	$10,832,634
56	20.29	Maury Hill Branch Sewer Replacement	$4,290,000	($4,290,000)								
57	27.10	Powell Creek Interceptor Upgrade (PC4-PC5)(Planning PC1-PC5)		$16,400,000		$1,600,000	$1,700,000	$5,800,000	$7,300,000		$16,400,000	
		TOTAL	$51,607,000	$7,518,000	$37,995,000	($2,315,000)	$4,745,000	$8,402,000	$8,955,000	$1,343,000	$59,125,000	$12,082,386

Moores Creek Advanced Water Resource Recovery Facility

The Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF) is the largest wastewater treatment facility within the RWSA system. The plant was originally constructed in 1958 and upgraded and expanded in 1981 and 1982, and currently has a rated capacity of 15 mgd. From 2009 thru 2012 the facility was again upgraded to provide enhanced nutrient removal, and increased wet weather pumping and treatment capacity. This site includes the infrastructure for the wastewater treatment process as well as the RWSA administration facilities.

Project Descriptions:

58. Moores Creek AWRRF Building Upfits and Gravity Thickener Improvements: This project will address the renovation needs of the current Maintenance and Operations building space requirements, improvements to the existing gravity thickener system, and installation of actuators on the secondary clarifier influent gate valves. The Moores Creek Maintenance and Operations Department facilities are over 40 years old, no longer meeting current staffing and operational needs. In accordance with the Moores Creek Master Plan, this project will increase and update personnel spaces such as offices, lunchrooms, labs, and locker rooms in the Maintenance, Blower, and Sludge Pumping Buildings to meet needs over an interim timeframe of approximately 15 years. Additionally, the project will construct increased oil and grease storage that will meet all current best practices for safety and address the need for additional parts storage. As part of the existing gravity thickener system, RWSA added temporary provisions to dose polymer to improve settling and thickening performance, which has proved to be effective and increased operational performance. The current polymer feed system consists of a bulk polymer tote stored on grade adjacent to the gravity thickener rapid mix and splitter structure. The current system is uncovered and manually operated with totes being moved as needed for chemical feed. This project will allow for a permanent polymer feed system with proper provisions for chemical deliveries and weather protection, including additional space for sodium hypochlorite chemical storage and feed as part of the gravity thickener odor control system. The relocation of the sodium hypochlorite storage and feed will also allocate spacing needs as part of the previously discussed operational building renovations in the existing Sludge Pumping Building. Furthermore, access points will be installed on the thickener effluent line feeding the existing sludge pumps to allow for flushing, cleaning and inspection efforts to occur. Finally, the current secondary clarifier influent gate valves are manually operated, which can be time consuming, and during a wet weather event, the clarifiers need to be placed in service as quickly and safely as possible. The use of SCADA controlled actuators would streamline the process immensely. This work includes the installation of six (6) new actuators on the influent gates of the secondary clarifiers.

59. Moores Creek AWRRF Yard Piping Upgrades: The original 36-inch Rivanna Pump Station force main was constructed around 1980 and carried flow from the original 25 MGD pump station in Riverview Park. Now that the pump station has been relocated to MCAWRRF and upsized to 53 MGD, it is desirable to install a second force main based on the age of the pipe and for redundancy. This work will include construction of a second parallel 36-inch force main from the Rivanna Pump Station, across Moores Creek, and up to the headworks. A

routing study will be completed prior to completion of the new Administration Building to minimize potential conflicts with future force main construction.

60. Moores Creek AWRRF Structural and Concrete Rehabilitation: This project comprises rehabilitation, repair and installation of multiple structural components throughout the MCAWRRF facility, to include concrete repairs in both the equalization basins and holding ponds, rehabilitation to the existing primary clarifiers and associated influent splitter box, installation of a bridge crane over the aeration basins for NRCY pump removal, and rehabilitation to both the digester complex and compost shed roof and drainage system.

    The existing holding ponds and equalization basins were constructed in 1977 and are showing signs of degradation. With now completed condition assessment inspections and subsequent recommendations, this project includes crack repair, spalling repair, joint repair, and coating of miscellaneous metals and valves associated with these critical structures.

    Inspections performed on the two existing primary clarifiers and associated influent splitter box noted several deficiencies including structural and mechanical components, concrete degradation and corrosion around pipe penetrations in need of repair or replacement, and due to advanced corrosion of metal components within the clarifiers, coatings were recommended to avoid additional deterioration. This project will provide for the rehabilitation, replacement and/ or coatings of these previously identified components within the primary clarifiers and influent splitter box.

    The aeration basins located at Moores Creek are a series of chambers that each have uniquely controlled oxygen and nutrient loading conditions. Mid-way thru the basins is ten nutrient recycle (NRCY) pumps. When maintenance or replacement of these pumps are required, staff must currently hire a long boom crane, which can be costly and disruptive to operations, especially in emergency conditions. This project will provide for the permanent means to remove and reinstall existing NRCY pumps.

    Moores Creek AWRRF has five digester vessels. The two smaller digesters were part of the original 1958 plant construction. The three larger digesters were part of the 1979 plant upgrades following construction of the bridge over Moores Creek and the south side of the plant. Although numerous upgrades have been constructed at the digester complex over the last 11 years (including heating, mixing, gas compression, and roof repairs), the overall condition of the concrete and complex is reaching its useful life. This project includes addressing remaining repairs to the existing digester complex, including safety repairs, to extend the useful life approximately 10-15 years while RWSA plans, designs, and constructs a new digester complex at another location on the Moores Creek site.

    Finally, in the early 1980's a large metal-framed roof was constructed to house the biosolids composting operations, which has subsequently ceased operation. The area was repurposed as a covered equipment maintenance yard, solids handling facility and material storage lock-up. The roof system is exhibiting signs of rafter deterioration and ongoing drainage and leakage issues. This project will evaluate and perform remediation needs at this facility.

61. Moores Creek AWRRF MCPS Slide Gates, Valves and Bypass & Septage Receiving Upgrades: Through separate procurements, previous inspections of the large aluminum slide gates at the influent side of the Moores Creek Pump Station have been conducted to determine the extent of repairs needed to stop them from leaking. Results of these investigations will be used to design the repair of the existing slide gates and add new gates and actuators so staff can have the flexibility to stop or divert flow to perform maintenance activities. In addition, this project will include the repair of 3 control valves within the pump station and provide permanent bypass connections so the entire pump station can be bypassed more efficiently in the future when needed. To reduce odors and address maintenance concerns at the existing north septage receiving station, the project will enclose the leachate discharge pit, provide for better containment of discharged materials, provide a new septage receiving software, and install rock traps and grinders with all associated process piping to prevent downstream blockages at the Moores Creek Pump Station.

62. Moores Creek AWRRF Primary Clarifier Mechanical Upgrade: Due to the end of useful life of the existing mechanical components within the primary clarifiers at the Moores Creek facility, this project will replace all interior mechanisms of the two (2) clarifiers. Work will include replacement of all components related to the center drive units, scraper arms and associated supports, weirs and baffles, electrical and instrumentation modifications and upgrades, and structural modifications as necessary.

63. Moores Creek AWRRF Blower Building Ventilation Improvements: The existing blower building at the MCAWWRF currently experiences issues related to high temperatures occurring within the building. The original building was designed for aeration blowers and a plant generator and was retrofitted to remove all this equipment and now houses upgraded blowers for the plant aeration treatment system. However, the heat generation from the newer equipment has been creating intermittent issues with high ambient temperatures causing blower equipment to fault out in warmer months due to current ventilation not being adequate. This project will look to evaluate and upgrade the ventilation system to ensure reliability for critical process operation and eliminate the excessive heat generation issues.

64. Moores Creek AWRRF Engineering and Administration Building: RWSA currently has its administrative headquarters in two buildings on the grounds of the Moores Creek Advanced Water Resource Recovery Facility. The two-story Administration Building was constructed in the late 1970's and houses offices, IT server space, meeting space and a full-service laboratory. The second building is a series of trailers installed between 2003-2010 that house the Engineering department. There is currently a need to house additional staff; increase office and meeting space; plan for the replacement of the trailers; increase available parking; bring the IT server workrooms to modern standards; and provide exhibit and classroom space for educational outreach. This project will provide an approximate 18,500 square feet addition to the existing administration building and refurbish the existing 12,500 square foot administration building in order to meet current and future growth needs of the Authority. This project was coordinated with the recent MCAWRRF Master Plan and expansion of the building will take place primarily in the lower parking lot adjacent to the existing building.

65. Moores Creek AWRRF Flood Resilience Enhancements: RWSA owns and operates multiple water and wastewater facilities that may be at risk of future flooding. One of the ways Climate

Change is expected to manifest in Central Virginia is via more frequent and intense rainfall and flooding events. While RWSA facilities were generally designed to perform during 100-year flood level conditions, future flooding could result in higher water levels, requiring RWSA to implement facility improvements to ensure continued operation during such events. This project includes installation of flood mitigation measures at vulnerable assets/facilities throughout the RWSA system that are likely to be impacted by higher flood levels. Necessary improvements have been identified at six RWSA facilities. Improvements include raising electrical and control equipment to higher elevations, replacement of existing pumps with submersible style/rated pumps, raising HVAC intakes and exhausts to higher elevations, and dry floodproofing structures when feasible to minimize floodwater intrusion. Furthermore, emergency access points are to be evaluated as well in the event staff is not able to enter facilities through standard means.

66. Moores Creek AWRRF Biogas Upgrades: The MCAWRRF has an existing cogeneration facility that was constructed in 2011. The purpose of the facility was to provide a beneficial purpose for using the gas produced by the digester process at the plant, and in doing so provide both process heating fluid to the digester tanks and electrical energy to the plant's electrical distribution system. As a result, a Cogeneration System Analysis was performed to determine a recommended approach for proceeding with improvements to the existing facility, installation of a new cogeneration facility without the issues of the previous facility or removing the cogeneration facility altogether and providing a backup boiler. Following this analysis and the initial decision to proceed with replacement of the cogeneration facility, a State of the Industry study was performed, which found that many of the aforementioned issues are common across almost all cogeneration installations. This prompted staff to perform a wider study of the industry as a whole in which it was found that many facilities are transitioning to treating the digester gas produced and transferring the gas into local natural gas pipelines so it can be reused by residential and commercial consumers. While this is still being examined by RWSA and the City of Charlottesville, whom operates the gas utility in this area, the current project budget assumes implementation of this type of system. In addition to the gas conditioning system, this project also includes rehabilitation of the existing Methane Sphere at MCAWRRF, in order to extend its service life in accordance with the MCAWRRF Master Plan.

    As the preliminary biogas evaluation is completed and a method to beneficially reuse the gas is finalized, staff will utilize consultant assistance to design and bid a project that not only allows the chosen technology to be implemented, but also performs critical spot and coating repairs to the existing gas sphere that was constructed in the 1980s. The work will also include adjustments as appropriate to the biogas processing system. Removed from the 5-year CIP.

67. Moores Creek AWRRF UV System Upgrade: As part of our Asset Management Program and approach to address equipment at the end of its serviceable life, the UV system at the Moores Creek facility was identified as being at the end of its useful life. Due to the existing system no longer being supported by the manufacturer, renewal of this asset will require upgrading the facility to the newer version currently available. As a result, this project will include replacement of the eight UV banks in the system, which is anticipated to be performed by RWSA operations and maintenance staff.

Moores Creek Advanced Water Resource Recovery Facility

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
58	20.68	Moores Creek AWRRF Building Upfits and Gravity Thickener Improvements	$11,800,000		$11,800,000						$11,800,000	$721,481
59	22.10	Moores Creek AWRRF Yard Piping Upgrades		$529,000				$116,000	$39,000	$374,000	$529,000	
60	22.12	Moores Creek AWRRF Structural and Concrete Rehabilitation	$15,500,000		$15,500,000						$15,500,000	$1,047,305
61	24.08	Moores Creek AWRRF MCPS Slide Gates, Valves, Bypass and Septage Receiving Upgrades	$9,711,000	$505,000	$6,351,000	$1,158,000	$2,707,000				$10,216,000	$155,349
62	26.02	Moores Creek AWRRF Primary Clarifier Mechanical Upgrade		$175,000						$175,000	$175,000	
63	25.07	Moores Creek AWRRF Blower Building Ventilation Improvements	$704,000	$428,000	$704,000		$428,000				$1,132,000	
64	20.34	Moores Creek AWRRF Engineering and Administration Building	$27,600,000		$18,500,000	$7,850,000	$1,250,000				$27,600,000	$1,597,716
65	24.06	Moores Creek AWRRF Flood Resilience Enhancements	$1,954,000	($1,454,000)	$970,000	($470,000)					$500,000	
66	20.67	Moores Creek AWRRF Biogas Upgrades	$6,287,000	($6,287,000)	$3,365,000	($3,365,000)						$70,778
67	27.07	Moores Creek AWRRF UV System Upgrade		$1,975,000		$477,000	$962,000	$536,000			$1,975,000	
		TOTAL	$73,556,000	($4,129,000)	$57,190,000	$5,650,000	$5,347,000	$652,000	$39,000	$549,000	$69,427,000	$3,592,629

Glenmore Wastewater System

The 0.381-mgd water resource recovery facility, located within the Glenmore subdivision, is owned by ACSA and operated by RWSA. The facility includes an influent pumping station located immediately adjacent to the treatment facility.

Project Descriptions:

68. Glenmore WRRF - Upgrade: The Glenmore WRRF was originally constructed in 1993 and much of the original facility remains in service. As a result of the age several needs assessment for the facility were completed that identified a number of additional improvements required to maintain quality service for the Glenmore community. The most recent needs assessment included improvements to the influent pump station coarse screen, influent pump station dry well ventilation, aeration blower, aeration basin, RAS/WAS pump station, chemical feed system, flocculator paddle, UV disinfection channel, non-potable water system, emergency generator, and capital equipment replacement or rehabilitation.

69. Stone Robinson Elementary School Plant Upgrade: The Stone Robinson WRRF currently uses steel process tanks that are in need of repair. During a recent inspection there were several holes found in the tank where leakage is occurring. These holes need to be repaired for proper functionality of the tank. Other items that may be addressed are site drainage issues, the control building needs replacement, and access road repairs.

Glenmore Water Resource Recovery Facility

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
68	24.14 26.04 23.26	Glenmore WRRF Upgrade	$6,231,000	$3,702,000	$1,779,000		$634,000	$741,000	$1,309,000	$5,470,000	$9,933,000	$58,992
69	26.19	Stone Robinson ES Plant Upgrade	$486,000	$274,000	$486,000	$274,000					$760,000	
		TOTAL	$6,717,000	$3,976,000	$2,265,000	$274,000	$634,000	$741,000	$1,309,000	$5,470,000	$10,693,000	$58,992

Scottsville Wastewater System

The Scottsville Wastewater System includes the influent pumping station, the Water Resource Recovery Facility (WRRF) constructed in 1983, and the historical treatment lagoon (now incorporated into the plant operation). The water resource recovery facility has a rated capacity of 0.2 mgd.

Project Descriptions:

70. Scottsville WRRF Whole Plant Generator and ATS: The current back-up power generator at the Scottsville Water Resource Recovery Facility does not power the entire plant. It serves only the facilities needed to send flow to the lagoon for storage and UV disinfection. This project will provide back-up power for the entire plant and influent pump station and will offer greater treatment flexibility and monitoring capability for the operations staff, particularly when the plant is unmanned and monitored remotely. As this project will be funded by FEMA and VDEM through the Hazard Mitigation Program, per FEMA/VDEM guidelines, this project will now also include a platform, to raise the generator and associated equipment, above the 500-year floodplain.

71. Scottsville Lagoon Outfall Rehabilitation: The Scottsville Wastewater Lagoon outfall is original to the wastewater plant from its construction. The overflow tower was recently inspected in 2021 by Bander Smith and recommended a few repairs. The concrete tower has 4 intakes, and the 4th intake is currently buried under debris. The tower is in fair condition and could use some general concrete repairs, the 4th intake is buried under material. All valves are recommended for replacement and removal of 2-3 feet of material is recommended from around the outflow tower.

72. Scottsville WRRF Polymer Feed Addition: The Scottsville WRRF Polymer Feed system has reached the end of its useful life and needs replacement. This project will focus on constructing a new polymer feed system and an enclosure to house the chemicals for the plant.

73. Scottsville WRRF Permit Modification Upgrade: Due to new VPDES permit limits, a needs assessment was performed for the Scottsville WRRF. The needs assessment confirmed what short-term improvements were required to meet these new limits as well as future improvements to account for plant age, reliability, efficiency and function. The purpose of this project is to account for the short-term improvements which include new aerated grit equipment at the Headworks, a new Alkalinity Feed System and Structure, and an electrically controlled influent slide gate.

74. Scottsville WRRF Improvements – Phase 1: The Scottsville Water Resource Recovery Facility (WRRF) was constructed in the 1960s with substantial upgrades performed in 1993. Due to the facility's age, a needs assessment was performed that identified short-term improvements needed to meet new effluent permit limits and then longer-term improvements to account for facility age, reliability, efficiency and then eventual permit compliance with increased inflow. These long-term improvements were broken into two phases. The purpose of this project is to account for the first phase of longer-term improvements to focus on plant age, reliability and

efficiency and includes influent pump station and headworks improvements, aeration piping rehabilitation, a new chemical storage and feed building, and flood resiliency improvements.

75. Vertical Asset Renewal – Scottsville Water: The asset management program at Rivanna Water & Sewer Authority is a strategic process of tracking, maintaining, and optimizing physical assets to maximize their value, lifespan, and operational efficiency while reducing costs. When assets reach the end of their serviceable life, proactive replacement becomes cost beneficial to the Authority. Assets at the Scottsville Water Treatment Plant were examined using factors, such as lifecycle and cost of maintenance versus cost of replacement, and risk, to determine when they would meet the end of their serviceable life. These assets have been captured in the vertical asset renewal program, which will ensure equipment continues to run reliably, supports compliance, and provides a high level of service for our customers.

Scottsville Water Resource Recovery Facility

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
70	21.12	Scottsville WRRF Whole Plant Generator and ATS	$520,000	$843,000	$520,000	$248,000	$595,000				$1,363,000	$79,110
71	23.24	Scottsville WRRF Lagoon Outfall Rehabilitation	$366,000	$99,000			$56,000	$409,000			$465,000	
72	23.25	Scottsville WRRF Polymer Feed Addition	$336,000	$104,000			$42,000	$90,000	$308,000		$440,000	
73	26.03	Scottsville WRRF Permit Modification Upgrade	$588,000	$239,000	$582,000	$245,000					$827,000	
74	26.15	Scottsville WRRF Improvements - Phase 1		$109,000						$109,000	$109,000	
75	27.19	Scottsville WRRF Vertical Asset Renewal		$725,000		$145,000	$145,000	$145,000	$145,000	$145,000	$725,000	
		TOTAL	$1,810,000	$2,119,000	$1,102,000	$638,000	$838,000	$644,000	$453,000	$254,000	$3,929,000	$79,110

All Systems

Project Descriptions:

76. Security Enhancements: Water utilities are required by federal law to conduct vulnerability assessments (VA) and have emergency response plans. RWSA completed an update of its VA for the water system in collaboration with other regional partners and identified a number of security improvements that could be applied to both its water and wastewater systems. The purpose of this project will be to install security improvements at RWSA facilities, with the initial focus on an enhanced access control program. Other improvements may include: industrial strength door and window components, security gate and fencing modifications, an improved lock and key program, facility signage, additional security cameras, intrusion detection systems (IDS), additional security lighting, mass emergency notification systems, and emergency call stations/panic buttons. In addition, upgrades will be made to the entrance of MCAWRRF, to better secure the facility and vet individuals as they enter. In order to implement an access control system at Authority-owned facilities, staff has procured an Implementer that will finalize system design/requirements, procure all necessary equipment, and install the chosen system. Implementation of the access control system has been completed at the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF), Crozet Water Treatment Plant (CZWTP), Scottsville Water Treatment Plant (SVWTP), South Rivanna Water Treatment Plant (SRWTP), Red Hill Water Treatment Plant (RHWTP), Glenmore Water Resource Recovery Facility (GWRRF), Scottsville Water Resource Recovery Facility (SVWRRF) and all RWSA pump stations and dams. Implementation work is ongoing at the Observatory Water Treatment Plant (OBWTP).

77. IT Infrastructure: There are several ongoing projects that will fall into this project category. The Authority has completed implementation of creating a Disaster Recovery (DR) site at South Rivanna for the SCADA infrastructure. This includes the hardware, software, data line redundancy configurations and the appropriate 3rd party providers of cloud storage and back-up/retention services. It also includes the installation of proper uninterruptible power supplies (UPS). The South Rivanna DR site will take on all SCADA services should something happen to the Moores Creek AWRRF Date Center. We have also completed the migration of administrative servers from Moores Creek to our Private Cloud – Iron Mountain. This provides 99% administrative server uptime for both authorities. The Private Cloud provides increased Cybersecurity resilience, backup/retention services for our accounting system and file server functions. There are several PLCs in the various plants that have reached end of life and will fall under this project for replacement with dual-redundant which will involve significant coordination for the major high-priority primary PLCs.

78. IT Equipment Secure Cabinets: As part of our overall Cyber Security initiatives, specifically physical security, we are in the process of making sure all of our facilities have a locked network cabinet/rack or a locked closet for all IT networking equipment. This also includes all of our remote Tanks, and Pump Stations. Over 95% of the plants are complete. The remote Tanks and Pump Stations will be completed as a part of the project in development to raise the IT/OT equipment out of the vaults. For any new or current capital improvement projects, at all locations, we are securing the network cabinets and when appropriate, separating the network equipment in an environmentally controlled closet.

79. Asset Management: Asset management is the practice of managing infrastructure to minimize the total cost of owning and operating assets while providing desired levels of service. By doing so, asset management ensures planned maintenance activities occur and that capital assets are replaced, repaired, or upgraded at the right time, while guaranteeing the necessary resources are available to perform these activities. When the project began, RWSA had some components of an asset management program in place (i.e. GIS and a work order system), but through the Strategic Planning process identified the need to further develop the program. To fully realize the program, a consultant was procured to assist with a four-phase implementation process. Phase one included facilitation and development of an asset management strategic plan; phase two included development and management of a pilot study where the results of the strategic plan were applied to a specific facility; phase three included procurement and implementation of software (Cityworks) to facilitate the overall program; and phase 4 includes assistance through full implementation of the complete asset management program. The final step, procuring a decision support software (DSS) in order to analyze and strategically plan the best and most fiscally responsible way to approach asset management, is complete and implementation is underway. Completion of the entire Asset Management project is expected by March 2026.

80. ACM Remediation: Based on the age of many RWSA facilities, the potential for the presence of Asbestos-Containing Materials (ACM) in various buildings has been assumed. A 2005 Workplace Assessment that evaluated the presence of ACM at the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF) was performed and then many facilities had individual assessments prior to construction projects where the ACM needed to be disposed of properly before refurbishment of the existing building or as a part of a larger demolition process. In order to confirm the presence of any ACM at all remaining RWSA facilities, an asbestos survey was completed in 2022. Based on this report, additional abatement procedures were identified for seven buildings at the MCAWRRF that had not been remediated previously and the filter building at the Scottsville Water Treatment Plant. This project includes proper removal and disposal of these ACM and refurbishment of the associated building components required as a result. Removed from the 5-year CIP.

All Systems

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
76	20.46	Security Enhancements	$2,980,000		$2,980,000						$2,980,000	$237,994
77	20.47	IT Infrastructure	$428,095	$171,905	$428,095	$171,905					$600,000	
78	25.08	IT Equipment- Secure Cabinets	$240,000		$144,000	$96,000					$240,000	
79	20.45	Asset Management	$827,510		$827,510						$827,510	$133,980
80	23.27	ACM Remediation	$600,000	($600,000)								
		TOTAL	$5,075,605	($428,095)	$4,379,605	$267,905	$0	$0	$0	$0	$4,647,510	$371,974

APPENDICES

CIP Financial Summary

Water System Summary

Wastewater System Summary

All Systems Summary

CIP Financial Summary

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
1	20.03	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line	$40,760,000		$12,850,000	$7,910,000	$7,905,000	$7,905,000	$4,190,000		$40,760,000	$3,958,739
2	20.04	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station	$20,730,000	$625,000	$8,630,000	$4,235,000	$4,235,000	$4,255,000			$21,355,000	$1,524,789
3	20.48 20.49 23.01 22.01 26.2	South Fork Rivanna Reservoir to Ragged Mountain Pipeline, Intake & Facilities (and Permanganate)	$111,933,000	$7,567,000	$21,495,000	$24,650,000	$19,730,000	$17,875,000	$17,875,000	$17,875,000	$119,500,000	$3,689,362
4	23.02	South Fork Rivanna Reservoir Aeration & Ragged Mountain Reservoir HLOS Systems	$9,270,000	($9,270,000)								
5	25.05	Observatory Water Treatment Plants - Hypo Tank Replacements	$371,000	$42,000	$167,000	$246,000					$413,000	$8,180
6	24.01	South Rivanna Water Treatment Plant - PAC Upgrades	$1,258,000	$562,000	$1,258,000	$562,000					$1,820,000	$85,397
7	22.08	South Rivanna Water Treatment Plant - Main Plant Generator Replacement	$480,000	$366,000				$71,000	$450,000	$325,000	$846,000	
8	22.05	South Rivanna Water Treatment Plant Improvements - (Plate Settlers, Floc - PAC removed)	$552,000	$450,000					$512,000	$490,000	$1,002,000	
9	26.14	South Rivanna Water Treatment Plant - Floc Basin Improvements	$2,400,000	$500,000	$180,000	$1,555,000	$1,165,000				$2,900,000	
10	26.05	South Rivanna Water Treatment Plant - 16 mgd Upgrade		$970,000				$400,000	$500,000	$70,000	$970,000	

CIP Financial Summary
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
11	23.11	South Rivanna Water Treament Plant - Sanitary Sewer Connection	$924,000	$181,000		$120,000	$555,000	$430,000			$1,105,000	
12	20.18	North Rivanna Water Treatment Plant - Decommissioning	$3,512,000	$78,000	$680,000				$2,525,000	$385,000	$3,590,000	
13	25.01	Dam Concrete and Steel Repairs	$1,453,000	$1,367,000	$943,000	$1,877,000					$2,820,000	$51,307
14	23.04 23.09	Urban WTPs - GAC Building Dehumidification	$3,300,000	$660,000			$310,000	$1,670,000	$1,980,000		$3,960,000	
15	27.04	South Rivanna Water Treatment Plant - Dedicated Backwash Line		$3,290,000		$440,000	$2,170,000	$680,000			$3,290,000	
16	27.02	Dam Public Safety Enhancements		$3,850,000		$1,386,000	$2,464,000				$3,850,000	
17	27.15	Vertical Asset Renewal - Urban Water		$740,000		$148,000	$148,000	$148,000	$148,000	$148,000	$740,000	
18	23.05	Observatory Water Treatment Plant - Backwash Basin Sludge Removal and Inspection	$698,400	($698,400)								
19	20.62	Valve Repair - Replacement (Phase 3)		$600,000						$600,000	$600,000	
20	20.50	Avon, Pantops and Observatory Tank Painting	$6,120,000	($1,605,000)		$200,000	$1,800,000	$1,565,000	$950,000		$4,515,000	

CIP Financial Summary
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
21	20.52	Stillhouse, Lewis Mtn and Woodburn Rd Tank Painting	$264,000	($184,000)						$80,000	$80,000	
22	26.06 24.05	Airport Road Tank No. 1 and Pump Improvements	$5,834,400	$1,415,600		$533,000	$3,086,000	$3,631,000			$7,250,000	
23	20.10	Central Water Line	$79,000,000		$24,490,000	$18,800,000	$24,710,000	$11,000,000			$79,000,000	$3,202,528
24	20.12	South Fork Rivanna River Crossing	$6,250,000	$300,000	$6,250,000	$300,000					$6,550,000	$1,437,369
25	20.58	Second North Rivanna River Crossing and NR Water Main Replacement	$3,520,800	$12,824,200		$500,000	$875,000	$4,860,000	$7,765,000	$2,345,000	$16,345,000	
26	24.09	Berkmar Drive Ext. Waterline - Phase 2	$1,756,000		$220,000		$321,000	$605,000	$610,000		$1,756,000	$28,530
27	24.12	Urban Storage Evaluation and Tank(s) Addition	$4,680,000	$820,000	$72,000	$311,000	$477,000	$650,000	$3,990,000		$5,500,000	
28	24.13	SCADA Panel Relocations	$247,200	$697,800				$91,500	$177,500	$676,000	$945,000	
29	26.11	Finished Water Master Plan Update 2030	$290,000	$101,000				$15,000	$292,000	$84,000	$391,000	
30	26.17	Urban Area Water Demand and Safe Yield Analysis 2030	$240,000	$15,000				$255,000			$255,000	

CIP Financial Summary
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
31	23.06	Emmet Street Betterment	$7,400,000		$4,515,000	$185,000	$2,245,000	$455,000	$0	$0	$7,400,000	$1,228,856
32	27.21	Northern Area Pressure Zone Improvements (AR Zone and PMT)		$8,000,000		$481,549	$3,301,822	$2,316,629	$1,000,000	$900,000	$8,000,000	
33	21.01	Buck's Elbow Tank and Waterball Painting	$1,993,000	($118,000)	$85,000	$52,000	$1,238,000	$500,000			$1,875,000	
34	26.09	Crozet Drinking Water Infrastructure Plan Update 2025	$450,000	$10,000	$235,000	$225,000					$460,000	
35	20.19	Beaver Creek Dam Alteration	$28,160,000	$5,325,000	$5,995,000		$1,370,000	$14,810,000	$11,310,000		$33,485,000	$1,936,877
36	20.20 21.15	Beaver Creek New Raw Water Pump Station & Intake	$33,020,000	$6,050,000	$6,150,000	$13,020,000	$13,960,000	$5,940,000			$39,070,000	$1,866,280
37	23.14	Crozet Water Treatment Plant - Full GAC Treatment	$10,120,000	$2,045,000	$6,345,000	$2,520,000	$3,300,000				$12,165,000	$411,261
38	26.01	Crozet Water Treatment Plant - Disinfection Upgrades	$840,000	$160,000	$600,000	$400,000					$1,000,000	
39	23.30	Crozet Finished Water Grayrock Pump Station	$2,658,000	$427,000			$260,000	$890,000	$1,545,000	$390,000	$3,085,000	
40	23.13	Crozet AC Pipe Replacement	$3,756,000	$3,964,000			$735,000	$635,000	$3,730,000	$2,620,000	$7,720,000	

CIP Financial Summary
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
41	23.10	Crozet WTP - GAC Building Dehumidification	$822,000	$173,000			$80,000	$733,000	$182,000		$995,000	
42	20.55	Crozet Ground Tank Painting	$582,000	($582,000)								
43	27.16	Vertical Asset Renewal - Crozet Water		$190,000		$38,000	$38,000	$38,000	$38,000	$38,000	$190,000	
44	23.16	Scottsville AC Pipe Replacement	$390,000	$75,000			$65,000	$400,000			$465,000	
45	22.07 23.17	Red Hill Water Treatment Plant - Upgrades & GAC Addition	$2,050,000	$100,000	$2,050,000	$100,000					$2,150,000	$172,242
46	22.06	Scottsville Water Treatment Plant - Upgrade	$6,000,000	($1,085,000)			$514,000	$655,000	$454,000	$3,292,000	$4,915,000	
47	23.18	Scottsville Water Treatment Plant - GAC Building Dehumidification	$822,000	$173,000			$80,000	$733,000	$182,000		$995,000	
48	27.17	Vertical Asset Renewal - Scottsville Water		$270,000		$54,000	$54,000	$54,000	$54,000	$54,000	$270,000	
49	20.31	Albemarle Berkley Pump Station Upgrade	$1,086,000	$244,000		$140,000	$605,000	$575,000	$10,000		$1,330,000	
50	21.07	Interceptor Sewer and Manhole Repair (Phase 2)	$1,492,000	$793,000	$1,090,000	$1,195,000					$2,285,000	$346,914

CIP Financial Summary
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
51	24.02	Interceptor Sewer and Manhole Repair (Phase 3)	$3,450,000	$1,000,000			$530,000	$1,310,000	$1,305,000	$1,305,000	$4,450,000	
52	20.30	Crozet Pump Station 1, 2, 3 Rehabilitation	$12,350,000	$280,000	$10,180,000	$2,450,000					$12,630,000	$852,051
53	26.07	Comprehensive Sewer Model and Study Update 2030	$564,000	$56,000				$242,000	$340,000	$38,000	$620,000	
54	20.25	Upper Schenks Branch Interceptor	$6,375,000	$735,000	$4,725,000		$1,910,000	$475,000			$7,110,000	$50,787
55	25.10a	Rivanna Pump Station Rehabilitation	$22,000,000	($7,700,000)	$22,000,000	($7,700,000)					$14,300,000	$10,832,634
56	20.29	Maury Hill Branch Sewer Replacement	$4,290,000	($4,290,000)								
57	27.10	Powell Creek Interceptor Upgrade (PC4-PC5)(Planning PC1-PC5)		$16,400,000		$1,600,000	$1,700,000	$5,800,000	$7,300,000		$16,400,000	
58	20.68	Moores Creek AWRRF Building Upfits and Gravity Thickener Improvements	$11,800,000		$11,800,000						$11,800,000	$721,481
59	22.10	Moores Creek AWRRF Yard Piping Upgrades		$529,000				$116,000	$39,000	$374,000	$529,000	
60	22.12	Moores Creek AWRRF Structural and Concrete Rehabilitation	$15,500,000		$15,500,000						$15,500,000	$1,047,305

CIP Financial Summary
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
61	24.08	Moores Creek AWRRF MCPS Slide Gates, Valves, Bypass and Septage Receiving Upgrades	$9,711,000	$505,000	$6,351,000	$1,158,000	$2,707,000				$10,216,000	$155,349
62	26.02	Moores Creek AWRRF Primary Clarifier Mechanical Upgrade		$175,000						$175,000	$175,000	
63	25.07	Moores Creek AWRRF Blower Building Ventilation Improvements	$704,000	$428,000	$704,000		$428,000				$1,132,000	
64	20.34	Moores Creek AWRRF Engineering and Administration Building	$27,600,000		$18,500,000	$7,850,000	$1,250,000				$27,600,000	$1,597,716
65	24.06	Moores Creek AWRRF Flood Resilience Enhancements	$1,954,000	($1,454,000)	$970,000	($470,000)					$500,000	
66	20.67	Moores Creek AWRRF Biogas Upgrades	$6,287,000	($6,287,000)	$3,365,000	($3,365,000)						$70,778
67	27.07	Moores Creek AWRRF UV System Upgrade		$1,975,000		$477,000	$962,000	$536,000			$1,975,000	
68	24.14 26.04 23.26	Glenmore WRRF Upgrade	$6,231,000	$3,702,000	$1,779,000		$634,000	$741,000	$1,309,000	$5,470,000	$9,933,000	$58,992
69	26.19	Stone Robinson ES Plant Upgrade	$486,000	$274,000	$486,000	$274,000					$760,000	
70	21.12	Scottsville WRRF Whole Plant Generator and ATS	$520,000	$843,000	$520,000	$248,000	$595,000				$1,363,000	$79,110

CIP Financial Summary
(Continued)

			Five-Year Capital Program			Projected Future Expenses by Year						
Line No.	**Proj. No.**	**Project Description**	**Current CIP Adopted 5/2025**	**Proposed Changes**	**Current Capital Budget**	**FY 2027**	**FY 2028**	**FY 2029**	**FY 2030**	**FY 2031**	**Recommended CIP**	**Work-in-Progress (Prev. Expenses 6/30/2025)**
71	23.24	Scottsville WRRF Lagoon Outfall Rehabilitation	$366,000	$99,000			$56,000	$409,000			$465,000	
72	23.25	Scottsville WRRF Polymer Feed Addition	$336,000	$104,000			$42,000	$90,000	$308,000		$440,000	
73	26.03	Scottsville WRRF Permit Modification Upgrade	$588,000	$239,000	$582,000	$245,000					$827,000	
74	26.15	Scottsville WRRF Improvements - Phase 1		$109,000						$109,000	$109,000	
75	27.19	Scottsville WRRF Vertical Asset Renewal		$725,000		$145,000	$145,000	$145,000	$145,000	$145,000	$725,000	
76	20.46	Security Enhancements	$2,980,000		$2,980,000						$2,980,000	$237,994
77	20.47	IT Infrastructure	$428,095	$171,905	$428,095	$171,905					$600,000	
78	25.08	IT Equipment- Secure Cabinets	$240,000		$144,000	$96,000					$240,000	
79	20.45	Asset Management	$827,510		$827,510						$827,510	$133,980
80	23.27	ACM Remediation	$600,000	($600,000)								
		TOTAL	$543,672,405	$60,497,105	$206,141,605	$85,363,454	$108,755,822	$94,705,129	$71,215,500	$37,988,000	$604,169,510	$35,786,808

Water System Summary

Urban Water System	Summary: Current CIP	Summary: Changes	Current Capital Budget	Projected Future Expenses by Year: FY27	FY28	FY29	FY30	FY31	Recommended CIP	Work-in -Progress
PROJECT COSTS										
Community Water Supply Plan	$ 182,230,000	$ (1,078,000)	$ 42,975,000	$ 36,795,000	$ 31,870,000	$ 30,035,000	$ 22,065,000	$ 17,875,000	$ 181,615,000	$ 9,172,890
Urban Water Treatement and Reservoir	15,411,400	12,357,600	3,228,000	6,334,000	6,812,000	3,399,000	6,115,000	1,418,000	27,306,000	144,884
Finished Water Storage/Distribution - Urban System	115,602,400	22,984,600	35,547,000	21,310,549	36,815,822	25,444,129	14,784,500	4,685,000	138,587,000	5,897,283
Total Projects Urban Water Systems	**$ 313,243,800**	**$ 34,264,200**	**$ 81,750,000**	**$ 64,439,549**	**$ 75,497,822**	**$ 58,878,129**	**$ 42,964,500**	**$ 23,978,000**	**$ 347,508,000**	**$ 15,215,057**
FUNDING SOURCES URBAN SYSTEM - TO DATE										
Work-in-Progress			$ 15,215,000	$ -	$ -	$ -	$ -	$ -	$ 15,215,000	
Debt Proceeds - 2024 Bond			29,826,400	-	-	-	-	-	29,826,400	
Capital Funds Available			-	-	-	-	-	-	-	
SUBTOTAL			45,041,400	-	-	-	-	-	45,041,400	
FUNDING SOURCES URBAN SYSTEM - NEEDS										
Future Cash reserve transfer to Capital Fund				$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 500,000	$ 500,000	$ 4,000,000	
Grants				2,000,000	1,500,000	-	-		3,500,000	
New Debt Needed			36,708,600	61,439,549	72,997,822	57,878,129	42,464,500	23,478,000	294,966,600	
SUBTOTAL			36,708,600	64,439,549	75,497,822	58,878,129	42,964,500	23,978,000	302,466,600	
TOTAL URBAN WATER FUNDING			**$ 81,750,000**	**$ 64,439,549**	**$ 75,497,822**	**$ 58,878,129**	**$ 42,964,500**	**$ 23,978,000**	**$ 347,508,000**	
									$347,508,000	
Estimated Bond Issues					$171,145,971		$123,820,629		$294,966,600	

Non-Urban Water System	Summary: Current CIP	Summary: Proposed Changes	Current Capital Budget	Projected Future Expenses by Year: FY27	FY28	FY29	FY30	FY31	Recommended CIP	Work-in -Progress
PROJECT COSTS										
Crozet Water System	$ 82,401,000	$ 17,644,000	$ 19,410,000	$ 16,255,000	$ 20,981,000	$ 23,546,000	$ 16,805,000	$ 3,048,000	$ 100,045,000	$ 4,214,419
Scottsville Water System	9,262,000	(467,000)	2,050,000	154,000	713,000	1,842,000	690,000	3,346,000	8,795,000	172,242
Total Rural Water Systems	**$ 91,663,000**	**$ 17,177,000**	**$ 21,460,000**	**$ 16,409,000**	**$ 21,694,000**	**$ 25,388,000**	**$ 17,495,000**	**$ 6,394,000**	**$ 108,840,000**	**$ 4,386,661**
Non-URBAN FUNDING SOURCES										
Work in Progress			$ 4,386,600	$ -	$ -	$ -	$ -	$ -	$ 4,386,600	
Grants			$ 500,000	7,064,670	9,105,754	8,149,444	2,946,132		27,766,000	
Capital Funds Available			-						-	
Debt Proceeds - 2018 & 2021Bond			-	-	-	-	-	-	-	
Future Cash reserve transfer to Capital Fund			-	450,000	250,000	200,000	-	-	900,000	
New Debt Needed			16,573,400	8,894,330	12,338,246	17,038,556	14,548,868	6,394,000	75,787,400	
TOTAL NON-URBAN WATER FUNDING			**$ 21,460,000**	**$ 16,409,000**	**$ 21,694,000**	**$ 25,388,000**	**$ 17,495,000**	**$ 6,394,000**	**$ 108,840,000**	
Estimated Bond Issues				$ 37,806,000			37,981,400		$ 75,787,400	

Wastewater System Summary

	Summary			Projected Future Expenses by Year						
Urban Wastewater System	**Current CIP**	**Changes**	**Current Capital Budget**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**Recommended CIP**	**Work-in - Progress**
PROJECT COSTS										
Wastewater Interceptor/Pumping Stations	$ 51,607,000	$ 7,518,000	$ 37,995,000	$ (2,315,000)	$ 4,745,000	$ 8,402,000	$ 8,955,000	$ 1,343,000	$ 59,125,000	$ 12,082,387
Moores Creek WWTP	77,802,000	(4,129,000)	57,190,000	5,650,000	5,347,000	652,000	39,000	549,000	69,427,000	3,592,629
Total Urban Wastewater Systems	**$ 129,409,000**	**$ 3,389,000**	**$95,185,000**	**$3,335,000**	**$10,092,000**	**$9,054,000**	**$8,994,000**	**$1,892,000**	**$128,552,000**	**$15,675,016**
FUNDING SOURCES URBAN SYSTEM - IN PLACEA										
Work-in-Progress			$ 15,675,000	$ -	$ -	$ -	$ -	$ -	$ 15,675,000	
Debt Proceeds - 2018 & 2021Bond			39,813,000	-		-	-		39,813,000	
Capital Funds Available			1,000,000	-	-	-	-	-	1,000,000	
SUBTOTAL			56,488,000	-	-	-	-	-	56,488,000	
FUNDING SOURCES URBAN SYSTEM - NEEDS										
Future Cash Reserves			$ -	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 5,000,000	
Insurance Proceeds			-	-					-	
New Debt Needed			38,697,000	2,335,000	9,092,000	8,054,000	7,994,000	892,000	67,064,000	
SUBTOTAL			38,697,000	3,335,000	10,092,000	9,054,000	8,994,000	1,892,000	72,064,000	
TOTAL URBAN WASTEWATER FUNDING			**$ 95,185,000**	**$ 3,335,000**	**$ 10,092,000**	**$ 9,054,000**	**$ 8,994,000**	**$ 1,892,000**	**$ 128,552,000**	
Estimated Bond Issues					$ 50,124,000		$ 16,940,000		$ 67,064,000	

	Summary			Projected Future Expenses by Year						
Non-Urban Wastewater System	**Current CIP**	**Proposed Changes**	**Current Capital Budget**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**Recommended CIP**	**Work-in - Progress**
PROJECT COSTS										
Glenmore WWTP	$ 6,717,000	$ 3,976,000	$ 2,265,000	$ 274,000	$ 634,000	$ 741,000	$ 1,309,000	$ 5,470,000	$ 10,693,000	$ 58,992
Scottsville WWTP	1,810,000	2,119,000	1,102,000	638,000	838,000	644,000	453,000	254,000	3,929,000	79,110
Total Rural Wastewater Systems	**$8,527,000**	**$6,095,000**	**$ 3,367,000**	**$ 912,000**	**$ 1,472,000**	**$ 1,385,000**	**$ 1,762,000**	**$ 5,724,000**	**$ 14,622,000**	**$ 138,102**
FUNDING SOURCES RURAL SYSTEM - NEEDS										
Work in Progress			$ 138,102	$ -	$ -	$ -	$ -	$ -	$ 138,102	
Debt Proceeds - 2018 & 2021Bond			$ -	$ -					-	
Future Cash Reserve			-	-	-	-			-	
New Debt Needed			3,228,898	912,000	1,472,000	1,385,000	1,762,000	5,724,000	14,483,898	
TOTAL RURAL WASTEWATER FUNDING			**$ 3,367,000**	**$ 912,000**	**$ 1,472,000**	**$ 1,385,000**	**$ 1,762,000**	**$ 5,724,000**	**$ 14,622,000**	
Estimated Bond Issues					$ 6,997,898		$ 7,486,000		$ 14,483,898	

All Systems Summary

	Summary			Projected Future Expenses by Year							
Shared Projects - All Rate Centers	**Current CIP**	**Changes**	**Current Capital Budget**	**FY27**	**FY28**	**FY29**	**FY30**	**FY31**	**Recommended CIP**	**Work-in - Progress**	
PROJECT COSTS											
Authority Wide Projects	$ 7,435,481	$ 428,095	$ 4,379,600	$ 267,900	$ -	$ -	$ -	$ -	$ 4,647,500	$ 371,974	$ (2,787,981)
Total Projects Urban Water Systems	**$ 7,435,481**	**$ 428,095**	**$ 4,379,600**	**$ 267,900**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 4,647,500**	**$ 371,974**	
FUNDING SOURCES											
Work in Progress			$ 430,990						$ 430,990	$2,044,400	
Possible Future Reserves			$ 2,000,000						$ 2,000,000		
New Debt Needed			$ 1,948,610	$ 267,900	$ -	$ -	$ -	$ -	$ 2,216,510		
									-		
TOTAL URBAN WATER FUNDING			$ 4,379,600	$ 267,900	$ -	$ -	$ -	$ -	$ 4,647,500		
Estimated Bond Issues					$2,216,510						

Summary Information

	2027 - 2031 Proposed CIP	2026 - 2030 Adopted CIP	Change $
Project Cost			
Urban Water Projects	$ 347,508,000	$ 313,243,800	$ 34,264,200
Urban Wastewater Projects	128,552,000	129,409,000	(857,000)
Non-Urban Projects & Shared	128,109,500	107,625,481	20,484,019
Total Project Cost Estimates	**$ 604,169,500**	**$ 550,278,281**	**$ 53,891,219**
Funding in place			
Work-in-Progress (paid for)	$ 35,845,691	$ 20,750,592	15,095,099
Debt Proceeds Available	69,639,400	93,239,000	(23,599,600)
Cash-Capital Available	1,000,000	1,000,000	-
	$ 106,485,091	$ 114,989,592	$ (8,504,501)
Financing Needs			
Possible Future Reserves	$ 11,900,000	$ 11,800,000	100,000
Grants	31,266,000	40,676,000	(9,410,000)
New Debt	454,518,409	382,812,689	71,705,720
	$ 497,684,409	$ 435,288,689	$ 62,395,720
Total Funding	**$ 604,169,500**	**$ 550,278,281**	**$ 53,891,219**

Percentage of funding in place	17.6%	20.9%
Ratio of debt to expense	86.8%	86.5%
Ratio of grant to expense	5.2%	7.4%
Ratio of cash to expense	2.1%	2.3%
Percentage of WIP (paid for)	5.9%	3.8%

Rivanna Water and Sewer Authority
CIP 2027-2031

Summary Information

Detail by Major Systems	Total CIP	Urban Water Projects	Urban Wastewater Projects	Shared Projects	Water Non-Urban Projects	Wastewater Non-Urban Projects
Project Cost						
Urban Water Projects	$ 347,508,000	$ 347,508,000	$ -	$ -	$ -	$ -
Urban Wastewater Projects	128,552,000	-	128,552,000	-	-	-
Non-Urban Projects & Shared	128,109,500	-	-	4,647,500	108,840,000	14,622,000
Total Project Cost Estimates	**$ 604,169,500**	**$ 347,508,000**	**$ 128,552,000**	**$ 4,647,500**	**$ 108,840,000**	**$ 14,622,000**
Funding in place						
Work-in-Progress (paid for)	$ 35,845,691	$ 15,215,000	$ 15,675,000	$ 430,990	$ 4,386,600	$ 138,101
Debt Proceeds available	69,639,400	29,826,400	39,813,000	-	-	-
Cash-Capital Available	1,000,000	-	1,000,000	-	-	-
Subtotal	$ 106,485,091	$ 45,041,400	$ 56,488,000	$ 430,990	$ 4,386,600	$ 138,101
Financing Needs						
Possible Future Reserves	$ 11,900,000	4,000,000	5,000,000	2,000,000	900,000	-
Grants	31,266,000	3,500,000	-	-	27,766,000	
New Debt	454,518,409	294,966,600	67,064,000	2,216,510	75,787,400	14,483,899
Subtotal	$ 497,684,409	$ 302,466,600	$ 72,064,000	$ 4,216,510	$ 104,453,400	$ 14,483,899
Total Funding	**$ 604,169,500**	**$ 347,508,000**	**$ 128,552,000**	**$ 4,647,500**	**$ 108,840,000**	**$ 14,622,000**
	$ -	$ -	$ -	$ -	$ -	$ -
Percentage of funding in place	17.6%	13.0%	43.9%	9.3%	4.0%	0.9%
Ratio of debt to expense	86.8%	93.5%	83.1%	47.7%	69.6%	99.1%
Ratio of cash to expense	2.1%	1.2%	4.7%	43.0%	0.8%	0.0%
Ratio of grant to expense	5.2%	1.0%	0.0%	0.0%	25.5%	0.0%
Percentage WIP (paid for)	6%	4%	12%	9%	4%	1%

Summary Information

	Urban Water	Urban Wastewater	Non-Urban	Shared	Total	Current Adopted
Adopted CIP 2026 - 2030	$ 313,243,800	$ 129,409,000	$ 100,190,000	$ 7,435,481	$ 550,278,281	
Completed or closed projects	13,250,000	363,400	-	114,909	13,728,309	
Adopted - Adusted	299,993,800	129,045,600	100,190,000	7,320,572	536,549,972	
Changes:						
Rollover for FY 2031	15,800,000	5,962,000	10,662,000	542,000	32,966,000	
Adjustments on existing projects or new projects	31,714,200	(6,455,600)	12,610,000	(3,215,072)	34,653,528	
Total Changes	**47,514,200**	**(493,600)**	**23,272,000**	**(2,673,072)**	**67,619,528**	
Total Proposed CIP 2027 - 2031	$ 347,508,000	$ 128,552,000	$ 123,462,000	$ 4,647,500	$ 604,169,500	550,278,281
Years 6 - 10 (FY 2032-36)					$ 291,770,200	96,121,000
Years 11 - 15 (FY 2037-41)					$ 299,257,600	185,060,000
			TOTAL 15 YEAR CIP		**$1,195,197,300**	**$ 831,459,281**

Summary Information

Draft 5 for CIP v7

		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
City of Charlottesville Charges													
Urban Water													
Operating Rate	Per 1000 gal.	$ 3.363	$ 3.642	$ 4.019	$ 4.421	$ 4.863	$ 5.349	$ 5.884					
	% Change	11.2%	11.2%	10.35%	10.0%	10.0%	10.0%	10.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge	Per month	376,226	463,676	553,528	627,787	705,127	764,704	835,506					
		23.1%	23.1%	19.4%	13.4%	12.3%	8.4%	9.3%					
Revenue Requirements:													
Operating Rate Revenue	Annual	$ 5,598,400	$ 5,940,600	$ 6,554,100	$ 7,209,510	$ 7,930,461	$ 8,723,507	$ 9,595,858					
Debt Service Revenues	Annual	4,514,700	5,564,100	6,642,336	7,533,441	8,461,522	9,176,450	10,026,076					
Total		**$ 10,113,100**	**$ 11,504,700**	**$ 13,196,436**	**$ 14,742,951**	**$ 16,391,983**	**$ 17,899,957**	**$ 19,621,934**					
	$ Change		**$ 1,391,600**	**$ 1,691,736**	**$ 1,546,515**	**$ 1,649,032**	**$ 1,507,974**	**$ 1,721,977**					
	% Change		**13.8%**	**14.7%**	**11.7%**	**11.2%**	**9.2%**	**9.6%**					
Urban Wastewater													
Operating Rate	Per 1000 gal.	3.247	3.719	4.012	4.413	4.855	5.340	5.874					
	% Change	9.7%	9.7%	7.88%	10.0%	10.0%	10.0%	10.0%					
Debt Service Charge	Per month	$ 424,222	$ 466,000	509,019	530,533	555,543	571,641	538,794					
		2.7%	2.7%	9.2%	4.2%	4.7%	2.9%	-5.7%					
Revenue Requirements:													
Operating Rate Revenue	Annual	$ 5,173,500	$ 5,801,000	$ 6,256,800	$ 6,882,480	$ 7,570,728	$ 8,327,801	$ 9,160,581					
Debt Service Revenues	Annual	5,090,800	5,592,100	6,108,228	6,366,394	6,666,513	6,859,688	6,465,524					
Total		**$ 10,264,300**	**$ 11,393,100**	**$ 12,365,028**	**$ 13,248,874**	**$ 14,237,241**	**$ 15,187,489**	**$ 15,626,105**					
	$ Change		**$ 1,128,800**	**$ 971,928**	**$ 883,846**	**$ 988,367**	**$ 950,248**	**$ 438,616**					
	% Change		**11.0%**	**8.5%**	**7.1%**	**7.5%**	**6.7%**	**2.9%**					
Total all Rate Centers													
Operating Rate Revenue		**$ 10,771,900**	**$ 11,741,600**	**$ 12,810,900**	**$ 14,091,990**	**$ 15,501,189**	**$ 17,051,308**	**$ 18,756,439**	**$ 19,881,825**	**$ 21,074,735**	**$ 22,339,219**	**$ 23,679,572**	**$ 25,100,346**
Debt Service Revenues		**9,605,500**	**11,156,200**	**12,750,564**	**13,899,835**	**15,128,035**	**16,036,138**	**16,491,600**	**16,491,600**	**16,491,600**	**16,491,600**	**16,491,600**	**16,491,600**
Total City All Revenues		**$ 20,377,400**	**$ 22,897,800**	**$ 25,561,464**	**$ 27,991,825**	**$ 30,629,224**	**$ 33,087,446**	**$ 35,248,039**	**$ 36,373,425**	**$ 37,566,335**	**$ 38,830,819**	**$ 40,171,172**	**$ 41,591,946**
	$ Change		**$ 2,520,400**	**$ 2,663,664**	**$ 2,430,361**	**$ 2,637,399**	**$ 2,458,222**	**$ 2,160,593**	**$ 1,125,386**	**$ 1,192,910**	**$ 1,264,484**	**$ 1,340,353**	**$ 1,420,774**
	% Change		**12.4%**	**11.6%**	**9.5%**	**9.4%**	**8.0%**	**6.5%**					
									706,041	**1,180,837**	**1,216,123**	**1,254,322**	**1,486,136**
10-Year CIP Debt Service					**183,594**	**827,724**	**1,934,323**	**3,319,634**	**4,025,675**	**5,206,512**	**6,422,635**	**7,676,957**	**9,163,093**
Total Estimated Charge		**$ 20,377,400**	**$ 22,897,800**	**$ 25,561,464**	**$ 28,175,419**	**$ 31,456,948**	**$ 35,021,769**	**$ 38,567,673**	**$ 40,399,100**	**$ 42,772,847**	**$ 45,253,454**	**$ 47,848,129**	**$ 50,755,039**
% Change			**12.4%**	**11.6%**	**10.2%**	**11.6%**	**11.3%**	**10.1%**	**4.7%**	**5.9%**	**5.8%**	**5.7%**	**6.1%**
				$ 2,663,664	***$ 2,613,955***	***$ 3,281,529***	***$ 3,564,821***	***$ 3,545,904***	***$ 1,831,428***	***$ 2,373,746***	***$ 2,480,607***	***$ 2,594,675***	***$ 2,906,911***
Additional Annual Revenues				***11.6%***	***10.2%***	***11.6%***	***11.3%***	***10.1%***	***4.7%***	***5.9%***	***5.8%***	***5.7%***	***6.1%***

Summary Information

		FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
ACSA Charges													
Urban Water													
Operating Rate	Per 1000 gal.	3.363	3.642	4.019	4.421	4.863	5.349	5.884					
	% Change	11.2%	11.2%	10.4%	10.0%	10.0%	10.0%	10.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge	Per month	$ 673,264	$ 847,462	1,046,862	1,224,551	1,402,528	1,549,094	1,715,331					
		22.6%	22.6%	23.5%	17.0%	14.5%	10.5%	10.7%					
Revenue Requirements:													
Operating Rate Revenue	Annual	$ 5,826,900	$ 6,435,700	$ 7,100,300	$ 7,810,330	$ 8,591,363	$ 9,450,499	$ 10,395,549					
Debt Service Revenues	Annual	8,079,200	10,169,500	12,562,344	14,694,606	16,830,340	18,589,133	20,583,974					
Total		**$ 13,906,100**	**$ 16,605,200**	**$ 19,662,644**	**$ 22,504,936**	**$ 25,421,703**	**$ 28,039,632**	**$ 30,979,523**					
	$ Change		**$ 2,699,100**	**$ 3,057,444**	**$ 2,842,292**	**$ 2,916,767**	**$ 2,617,929**	**$ 2,939,891**					
	% Change		**$ 0**	**18.4%**	**14.5%**	**13.0%**	**10.3%**	**10.5%**					
Urban Wastewater													
Operating Rate	Per 1000 gal.	3.247	3.719	4.012	4.413	4.855	5.340	5.874					
	% Change	9.7%	9.7%	7.9%	10.0%	10.0%	10.0%	10.0%					
Debt Service Charge	Per month	$ 422,158	$ 529,679	594,370	639,575	686,999	734,424	781,848					
		0.0%	0.0%	12.2%	7.6%	7.4%	6.9%	6.5%					
Revenue Requirements:													
Operating Rate Revenue	Annual	$ 5,834,000	$ 6,809,900	$ 7,344,900	$ 8,079,390	$ 8,887,329	$ 9,776,062	$ 10,753,668					
Debt Service Revenues	Annual	5,065,900	6,356,100	7,132,440	7,674,901	8,243,993	8,813,085	9,382,177					
Total		$ 10,899,900	$ 13,166,000	$ 14,477,340	$ 15,754,291	$ 17,131,322	$ 18,589,147	$ 20,135,845					
	$ Change		**$ 2,266,100**	**$ 1,311,340**	**$ 1,276,951**	**$ 1,377,031**	**$ 1,457,825**	**$ 1,546,698**					
	% Change		**20.8%**	**10.0%**	**8.8%**	**8.7%**	**8.5%**	**8.3%**					
Non-Urban Rate Centers													
Operating Rate Revenue	Annual	$ 3,101,200	$ 3,578,700	4,125,900	4,538,490	4,992,339	5,491,573	6,040,730					
Debt Service Revenues	Annual	2,862,100	3,608,500	4,538,000	5,451,758	6,365,516	7,279,274	8,193,032					
Total		**$ 5,963,300**	**$ 7,187,200**	**$ 8,663,900**	**$ 9,990,248**	**$ 11,357,855**	**$ 12,770,847**	**$ 14,233,762**					
			$ 1,223,900	**$ 1,476,700**	**$ 1,326,348**	**$ 1,367,607**	**$ 1,412,992**	**$ 1,462,915**					
			20.5%	**20.5%**	**15.3%**	**13.7%**	**12.4%**	**11.5%**					
Total all Rate Centers													
Operating Rate Revenue		**$ 14,762,100**	**$ 16,824,300**	**$ 18,571,100**	**$ 20,428,210**	**$ 22,471,031**	**$ 24,718,134**	**$ 27,189,948**	**$ 28,821,344**	**$ 30,550,625**	**$ 32,383,663**	**$ 34,326,682**	**$ 36,386,283**
Debt Service Revenues		**16,007,200**	**20,134,100**	**24,232,784**	**27,821,265**	**31,439,849**	**34,681,492**	**38,159,183**	**38,159,183**	**38,159,183**	**38,159,183**	**38,159,183**	**38,159,183**
Total ACSA All Revenues		**$ 30,769,300**	**$ 36,958,400**	**$ 42,803,884**	**$ 48,249,475**	**$ 53,910,880**	**$ 59,399,626**	**$ 65,349,131**	**$ 66,980,527**	**$ 68,709,808**	**$ 70,542,846**	**$ 72,485,865**	**$ 74,545,466**
	$ Change		**$ 6,189,100**	**$ 5,845,484**	**$ 5,445,591**	**$ 5,661,405**	**$ 5,488,746**	**$ 5,949,504**	**$ 1,631,397**	**$ 1,729,281**	**$ 1,833,038**	**$ 1,943,020**	**$ 2,059,601**
	% Change		**20.1%**	**15.8%**	**12.7%**	**11.7%**	**10.2%**	**10.0%**					
10-Year CIP Debt Service					**393,126**	**1,580,552**	**3,540,703**	**5,982,506**	**7,866,873**	**10,038,568**	**11,903,377**	**13,601,652**	**15,448,081**
Total Estimated Charge		**$ 30,769,300**	**$ 36,958,400**	**$ 42,803,884**	**$ 48,642,601**	**$ 55,491,432**	**$ 62,940,329**	**$ 71,331,637**	**$ 74,847,401**	**$ 78,748,376**	**$ 82,446,223**	**$ 86,087,517**	**$ 89,993,547**
% Change			**$ 0**	**15.8%**	**13.6%**	**14.1%**	**13.4%**	**13.3%**	**4.9%**	**5.2%**	**4.7%**	**4.4%**	**4.5%**
	Additional Annual Revenues			***$ 5,845,484***	***$ 5,838,717***	***$ 6,848,831***	***$ 7,448,897***	***$ 8,391,307***	***$ 3,515,764***	***$ 3,900,975***	***$ 3,697,847***	***$ 3,641,294***	***$ 3,906,031***
				15.8%	***13.6%***	***14.1%***	***13.4%***	***13.3%***	***4.9%***	***5.2%***	***4.7%***	***4.4%***	***4.5%***

Summary Information

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	FY 2035	FY 2036
RWSA												
Operations Revenues												
Urban Water	$ 11,425,300	$ 12,376,300	$ 13,654,400	$ 15,019,840	$ 16,521,824	$ 18,174,006	$ 19,991,407					
Urban Wastewater	11,007,500	12,610,900	13,601,700	14,961,870	16,458,057	18,103,863	19,914,249					
Other Rate Centers	3,101,200	3,578,700	4,125,900	4,538,490	4,992,339	5,491,573	6,040,730					
Total	$ 25,534,000	$ 28,565,900	$ 31,382,000	$ 34,520,200	$ 37,972,220	$ 41,769,442	$ 45,946,386					
Change $		3,031,900	2,816,100	3,138,200	3,452,020	3,797,222	4,176,944					
Change %		11.9%	9.9%	10.0%	10.0%	10.0%	10.0%					
Debt Service Charge Revenues												
Urban Water	12,593,900	15,733,600	19,204,680	22,228,047	25,291,862	27,765,583	30,610,050					
Urban Wastewater	10,156,700	11,948,200	13,240,668	14,041,295	14,910,506	15,672,773	15,847,701					
Other Rate Centers	2,862,100	3,608,500	4,538,000	5,451,758	6,365,516	7,279,274	8,193,032					
	$ 25,612,700	$ 31,290,300	$ 36,983,348	$ 41,721,100	$ 46,567,884	$ 50,717,630	$ 54,650,783					
Change $		5,677,600	5,693,048	4,737,752	4,846,784	4,149,746	3,933,153					
Change %		22.2%	18.2%	12.8%	11.6%	8.9%	7.8%					
Total RWSA Customer Revenues	**$ 51,146,700**	**$ 59,856,200**	**$ 68,365,348**	**$ 76,241,300**	**$ 84,540,104**	**$ 92,487,072**	**$ 100,597,169**					
Change $		**$ 8,709,500**	**$ 8,509,148**	**$ 7,875,952**	**$ 8,298,804**	**$ 7,946,968**	**$ 8,110,097**					
Change %		**17.0%**	**14.2%**	**11.5%**	**10.9%**	**9.4%**	**8.8%**					
Additional for 10-Year CIP				**576,720**	**2,408,276**	**5,475,026**	**9,302,140**					
Total Estimated Charge	**$ 51,146,700**	**$ 59,856,200**	**$ 68,365,348**	**$ 76,818,020**	**$ 86,948,380**	**$ 97,962,098**	**$ 109,899,309**	**$ 115,246,501**	**$ 121,521,222**	**$ 127,699,677**	**$ 133,935,645**	**$ 140,748,586**
% Change		**17.0%**	**14.2%**	**12.4%**	**13.2%**	**12.7%**	**12.2%**	**4.9%**	**5.4%**	**5.1%**	**4.9%**	**5.1%**
			$ 68,365,348	***$ 76,818,020***	***$ 86,948,380***	***$ 97,962,098***	***$ 109,899,309***	***$ 115,246,501***	***$ 121,521,222***	***$ 127,699,677***	***$ 133,935,645***	***$ 140,748,586***
Additional Annual Revenues			***$ 8,509,148***	***$ 8,452,672***	***$ 10,130,360***	***$ 11,013,718***	***$ 11,937,211***	***$ 5,347,192***	***$ 6,274,721***	***$ 6,178,454***	***$ 6,235,969***	***$ 6,812,941***
			14.2%	***12.4%***	***13.2%***	***12.7%***	***12.2%***	***4.9%***	***5.4%***	***5.1%***	***4.9%***	***5.1%***

Summary Information

Five Year Summary of Revenue needed		FY 2026		New rate revenue needed 5-Year Revenue Growth		FY 2031	Change %	Annual Increase 5-year Average	
City - Charges From RWSA									
Urban Water									
Operating Rate Charges		$ 5,940,600		$ 3,655,258		$ 9,595,858	61.5%		
Debt Service Charges		5,564,100		4,461,976		10,026,076	80.2%		
		$ 11,504,700		$ 8,117,234		$ 19,621,934	70.6%		
Urban Wastewater									
Operating Rate Charges		$ 5,801,000		$ 3,359,581		$ 9,160,581	57.9%		
Debt Service Charges	*	5,592,100		873,424		6,465,524	15.6%		
		$ 11,393,100		$ 4,233,005		$ 15,626,105	37.2%		
Year 5-10 CIP									
Debt Service Charges		$ -		$ 3,319,634		$ 3,319,634			
Total City Charges		**$ 22,897,800**		**$ 15,669,873**		**$ 38,567,673**	**68.4%**	13.7%	$ 3,133,975
ACSA - Charges From RWSA									
Urban Water									
Operating Rate Charges		$ 6,435,700		$ 3,959,849		$ 10,395,549	61.5%		
Debt Service Charges		10,169,500		10,414,474		20,583,974	102.4%		
		$ 16,605,200		$ 14,374,323		$ 30,979,523	86.6%		
Urban Wastewater									
Operating Rate Charges		$ 6,809,900		$ 3,943,768		$ 10,753,668	57.9%		
Debt Service Charges	*	6,356,100		3,026,077		9,382,177	47.6%		
		$ 13,166,000		$ 6,969,845		$ 20,135,845	52.9%		
Other Rate Centers									
Operating Rate Charges		$ 3,578,700		$ 2,462,030		$ 6,040,730	68.8%		
Debt Service Charges		3,608,500		4,584,532		8,193,032	127.0%		
		$ 7,187,200		$ 7,046,562		$ 14,233,762	98.0%		
Year 5-10 CIP									
Debt Service Charges		$ -		$ 5,982,506		$ 5,982,506			
Total ACSA Charges		**$ 36,958,400**		**$ 34,373,237**		**$ 71,331,637**	**93.0%**	18.6%	$ 6,874,647
RWSA Customer Revenue Charges									
Operating Rate Revenues									
Urban Water		$ 12,376,300		$ 7,615,107		$ 19,991,407	61.5%		
Urban Wastewater		12,610,900		7,303,349		19,914,249	57.9%		
Other Rate Centers		3,578,700		2,462,030		6,040,730	68.8%		
		$ 28,565,900		$ 17,380,486		$ 45,946,386	60.8%		
Debt Service Rate Revenues									
Urban Water		$ 15,733,600		$ 14,876,450		$ 30,610,050	94.6%		
Urban Wastewater		11,948,200		3,899,501		15,847,701	32.6%		
Other Rate Centers		3,608,500		4,584,532		8,193,032	127.0%		
		$ 31,290,300		$ 23,360,483		$ 54,650,783	74.7%		
Year 5-10 CIP									
Debt Service Charges		$ -		$ 9,302,140		$ 9,302,140			
Total RWSA Customer Revenues		**$ 59,856,200**		**$ 50,043,109**		**$109,899,309**	**83.6%**	16.7%	$ 10,008,622

Introduction of the Proposed Capital Improvement Program

FY 2027-2031

For the Board of Directors

February 24, 2026

By Jennifer A. Whitaker, P.E.
Director of Engineering and Maintenance



Ragged Mountain Reservoir

Strategic Plan Goal
2023 – 2028



Planning and Infrastructure

- To address evolving needs by planning, delivering, and maintaining dependable infrastructure and facilities in a financially responsible manner

Capital Assets: Facilities and Equipment

5 Water Supply Reservoirs	3.3 billion gallons
◦ Buck Mtn Property	1314 acres
9 Dams	
6 Water Treatment Plants	
◦ 3 Urban	24 MGD
◦ 3 Non-Urban	2.25 MGD
4 Wastewater Treatment Plants	
◦ 1 Urban	15 MGD
◦ 3 Non-Urban	0.588 MGD
9 Wastewater Pump Stations	
13 Water Pump Stations	
◦ 8 Raw Water	
◦ 5 Finished Water	
Water Distribution Pipe	72 miles
Water Distribution Valves	961
Wastewater Collection Pipe	42 miles
Wastewater Collection Manholes	714
Stormwater Impoundment	Lickinghole Creek Basin


MCAWRRF

Priorities of the FY 27 – 31 CIP

- ***Complete community's Water Supply Plan to increase capacity and reliability by 2030.***
- ***Advance water and wastewater infrastructure projects to support growth.***
- ***Maintain best management practices for water and wastewater conveyance and treatment facilities.***
- ***Serve the public, staff, and environment in a safe and financially responsible manner.***

Proposed FY 27 – 31 Capital Improvement Program

74 Projects: $604 M

67 Construction, 4 Studies, 3 I.T. /Asset

Urban Water	Urban Wastewater	Non-Urban Projects & Shared	Total
$348 M	$129 M	$127 M	$604 M

Funding

Already Paid For	Existing Debt Proceeds	Cash Reserves	Grants	New Debt	Total
$36 M	$70 M	$13 M	$31 M	$454 M	$604 M

FY 27 – 31 Charge Increases (%)

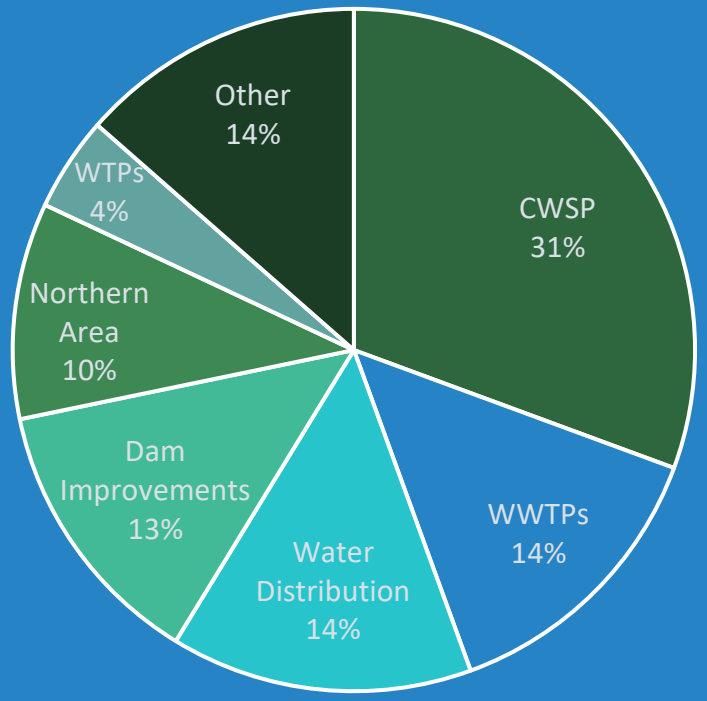
	FY 27	FY 28	FY 29	FY 30	FY 31
City Utilities	11.6	10.2	11.6	11.3	10.1
ACSA	15.8	13.6	14.1	13.4	13.3
RWSA Overall	14.2	12.4	13.2	12.7	12.2

Charges include:

1. Albemarle County grants: $0.75 M
2. City Utilities & ACSA Reimbursement on Central Water Line: $2.01 M
3. VDH BIL grant for Crozet GAC Filters: $7.24 M
4. NRCS grant for BCR Planning & Design: $1.7 M
5. NRCS grant for BCR Construction: $21 M
6. FEMA grant for Flood Protection Study: $0.19 M

FY 27-31 CIP At a Glance

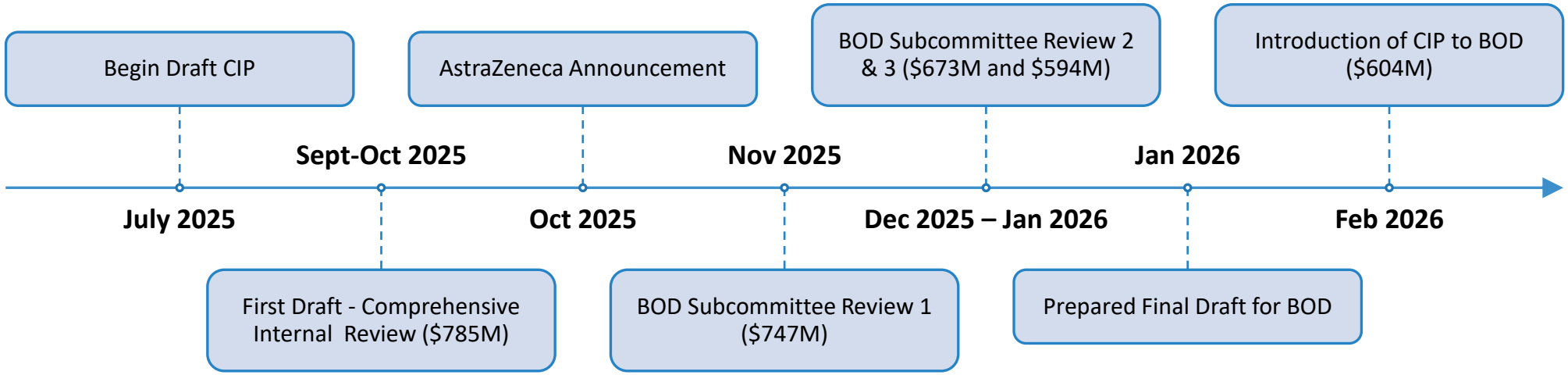
CIP Priorities



1. *Community Water Supply Projects* *$185 M*
2. *Water Distribution Projects* *$86.4 M*
   - Central Water Line $79 M
   - Emmet St. Betterment $7.4 M
3. *WWTP Repairs and Improvements* *$83.5 M*
   - Moores Creek $69 M
   - Glenmore $11 M
   - Scottsville $3 M
   - Flood Resiliency $0.5 M
4. *Dam Repairs and Improvements* *$78.6 M*
   - Beaver Creek Reservoir $72 M
   - Public Safety Systems $3.8M
   - Concrete & Steel Repairs $2.8 M
5. *Northern Area Projects* *$61.9 M*
   - Airport Rd. Tank & PS Imp. $7.3 M
   - South Fork River Crossing $6.6 M
   - N. Rivanna Crossing & WL $16.4 M
   - Powell Creek Int. $16.4 M
   - Northern Area PZ Imp. $8 M
   - Other $7.2 M
6. *WTP Repairs and improvements* *$27 M*
   - Crozet $13 M
   - South Rivanna $9 M
   - Scottsville $5M

CIP Development Process

- Initial FY 27 -31 CIP preparation began in July 2025 as a comprehensive plan to:
  - maintain our extensive water and wastewater infrastructure
  - complete construction of our Water Supply projects, with most underway
  - provide treatment, storage, distribution, and collection capacity for new development, based on the best information available
  - scopes of Work and Budgets were conservative and anticipated typical cost escalations over the 5-year period.
- Proposed CIP continues to support our goals with a reduced number of project and budgets by:
  - deferral of maintenance, operating, and flood protection projects
  - less conservative scopes of work and budgets for capacity projects. The CIP may need to be amended as better demand and schedule information is provided and studies are completed.



New Projects (9) in FY 27 – 31 CIP

•SRWTP – Dedicated Backwash Line	$3.29 M	Betterment Opportunity
•Dam Safety Enhancements	$3.85 M	Public Safety
•Vertical Asset Renewal – Urban Water	$0.74 M	Infrastructure Reliability
•Northern Area Pressure Zone Improvements	$8.0 M	100% ACSA; Growth
•Vertical Asset Renewal – Crozet Water	$0.19 M	100% ACSA; Infrastr. Reliability
•Vertical Asset Renewal – Scottsville Water	$0.27 M	100% ACSA; Infrastr. Reliability
•Powell Creek Int. Upgrade (PC1-3)	$1.95 M	100% ACSA; Growth
•MCAWRRF UV Upgrade	$0.59 M	Infrastructure Reliability
•Vertical Asset Renewal – Scottsville WW	$0.73 M	100% ACSA; Infrastr. Reliability

Proposed FY 27 – 31 Capital Improvement Program

Summary	Cost
FY 26-30 Capital Improvement Plan	$550,278,280
Mid-year Additions -- FY 26-30 Amendments	$13,103,000
Completed Projects	($6,605,875)
(FY 26-30) Anticipated FY 31 Project Funding	$36,236,800
New Projects (9) + New Funding	$37,755,000
Inflation and Scope Changes	($26,597,695)
Total	**$604,169,150**

15 Year CIP Planning

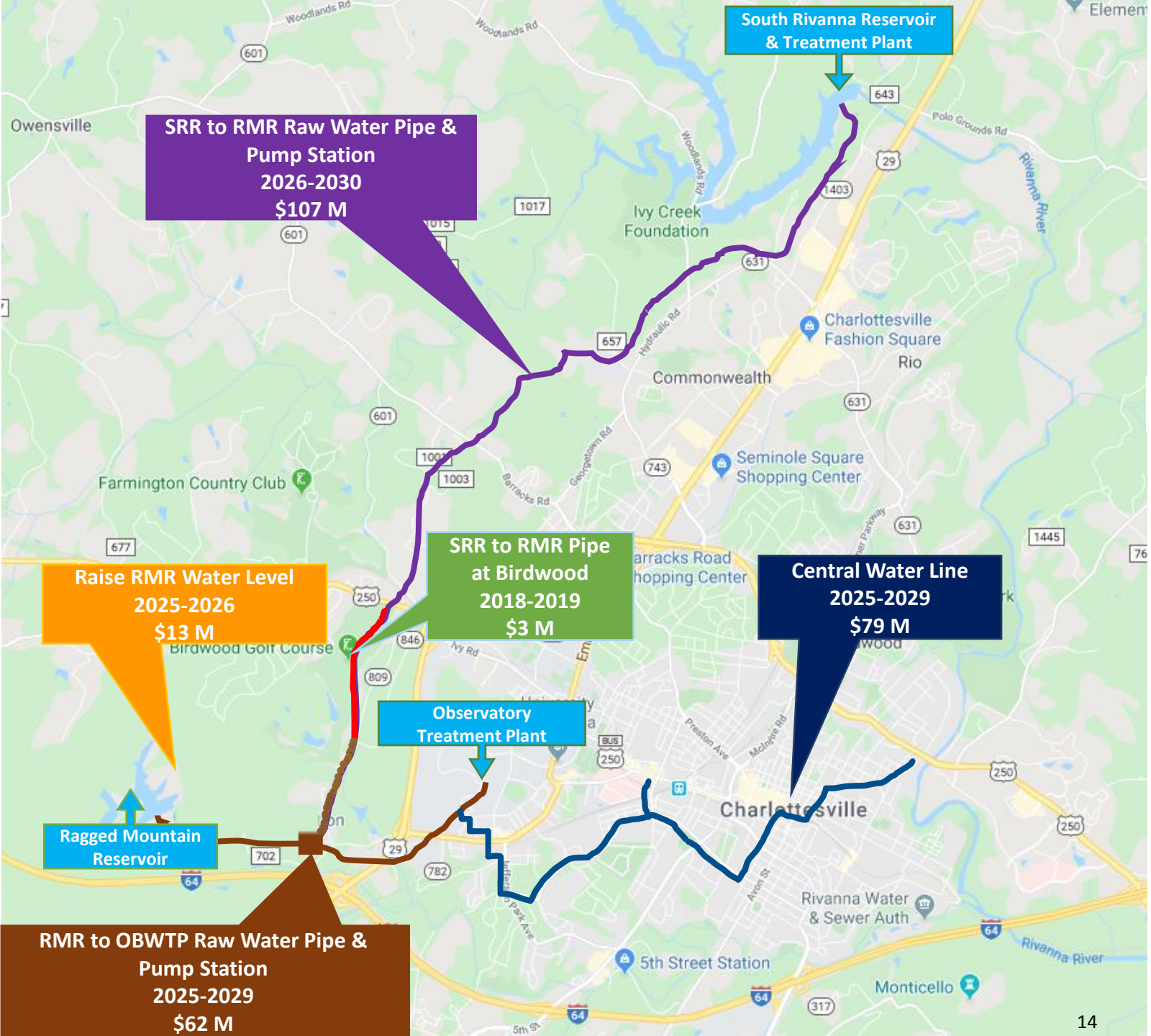
• FY 27-31	$604 M
• FY 33-36	$292 M
• FY 36-40	$300 M
	$1,196 M

How Our CIP Compares

Agency	5-Year Capital Improvement Program (M)
Loudoun Water	$ 1,258
Chesterfield Co. DPU	$ 1,000
Fairfax Water	$ 830
Henrico DPU	$ 807
Rivanna Water & Sewer Authority	$ 604
Western VA Water Authority	$ 197
Newport News Waterworks (water only)	$ 183
Rapidan Service Authority	$ 110
Augusta Water	$ 50
Louisa Co. Service Authority	$ 7



Key Projects

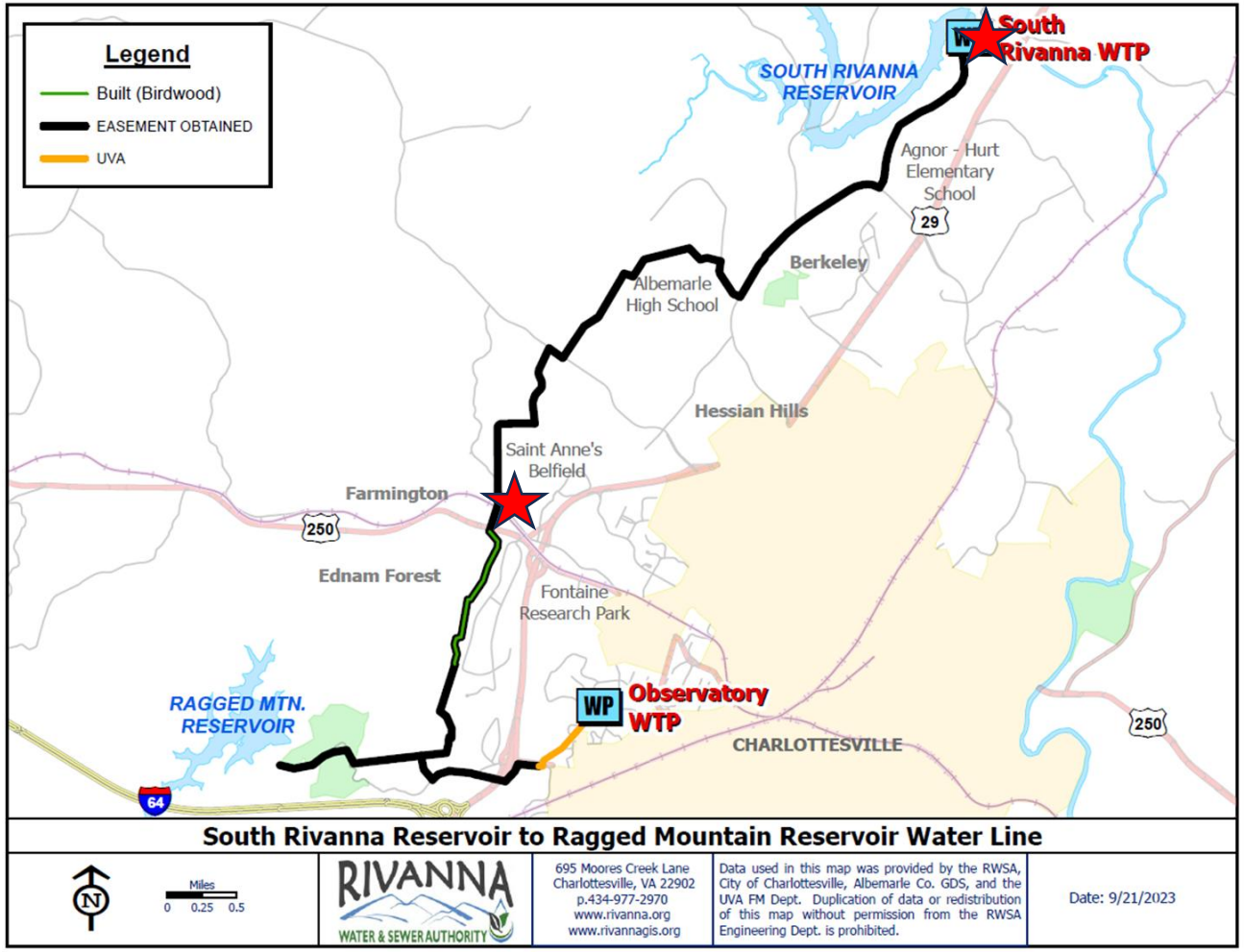


Water Supply Projects

(January 7, 2026)

	Total Project Cost
1. RMR to OBWTP Raw Water Pipe & Pump Station 2025-2029: *Awarded Oct 2024* *Pipe: 80% ACSA / 20% City* *PS: 72% ACSA / 28% City*	$62 M
2. Central Water Pipe 2025-2029: *Phase 1: Awarded June 2025: $58 M* *Phase 2: Award 2026: $21 M* *52% ACSA / 48% City*	$79 M
3. Raise RMR Water Level 2025-2026: *Awarded June 2025* *80% ACSA / 20% City*	$13 M
4. SRR to RMR Raw Water Pipe 2026-2030: *Awarded Dec 2025* *80% ACSA / 20% City* *(incl Birdwood WL: 2019; $3 M; 1 mile)*	$110 M
ACSA $187 M City Utilities $77 M	$264 M

SRR to RMR Pipeline, Pump Station and Intake

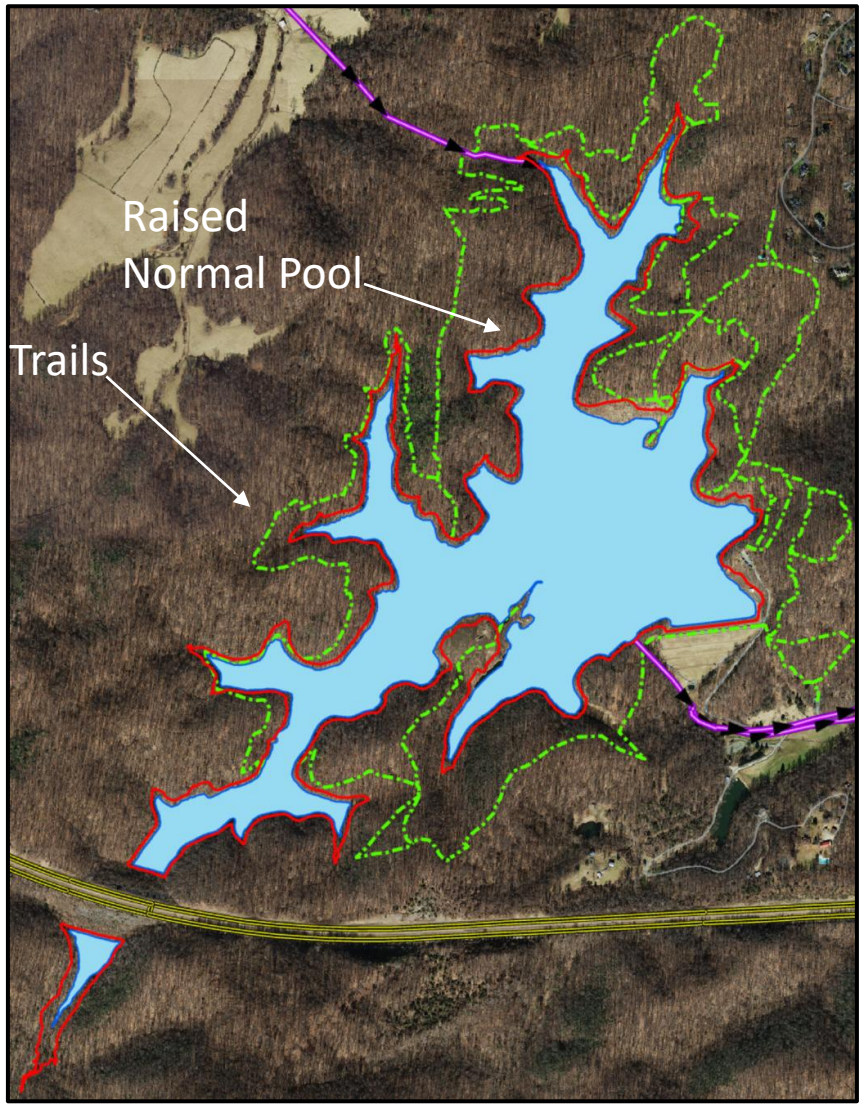


- 6.5 miles of 36” raw water pipeline from SRR to Birdwood
- 41 mgd raw water pump station and intake on SRR
- New sodium permanganate building
- Garney Construction
- Construction: April 2026 – Dec 2030
- Budget $110 M



SRR Pump Station Rendering

Ragged Mountain Reservoir Pool Raise



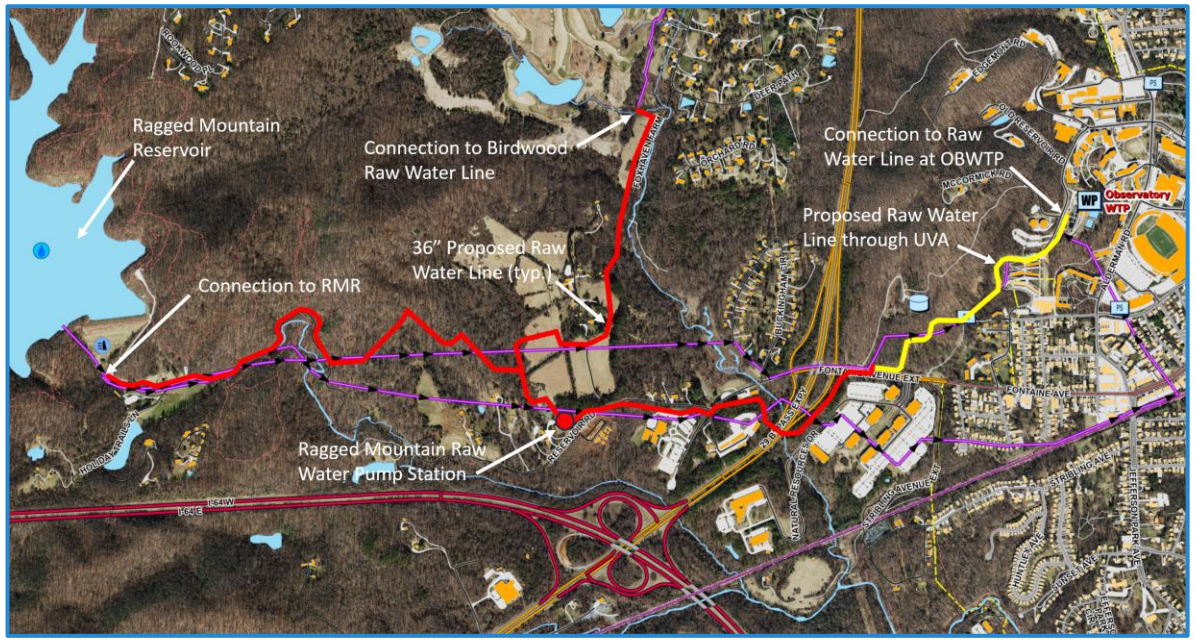
- Raises normal pool 12’, from Elevation 671 to 683
- Clearing around the reservoir, minor modifications to intake tower, and installation of a blanket drain in the dam
- Clearing began in November 2025
- Faulconer Construction
- Construction: September 2025 – December 2026
- Budget $13.2 M



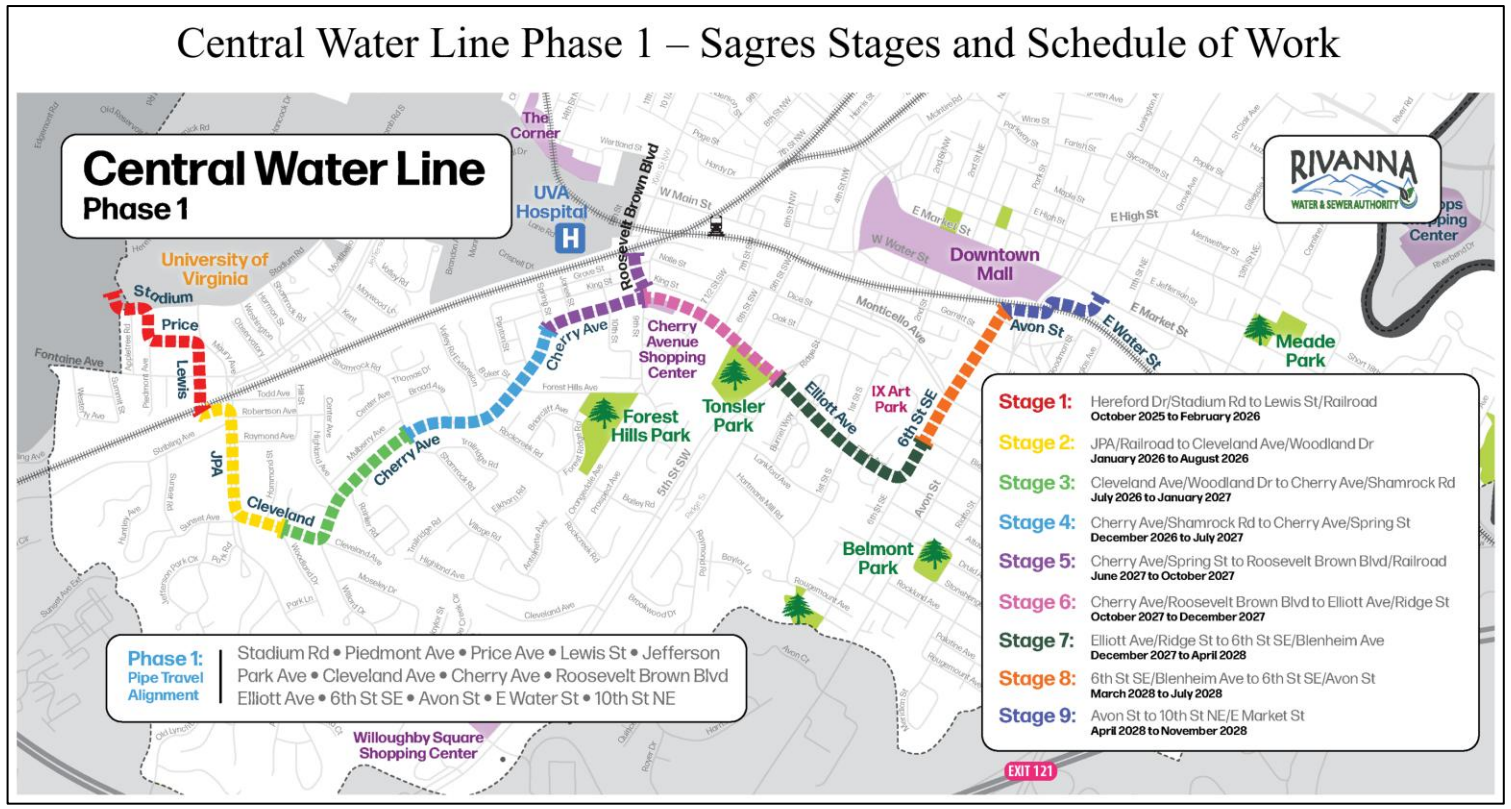
Ragged Mtn Reservoir to OBWTP – Water Line and Pump Station


Pipe Installation

- Replaces outdated infrastructure – 40- and 70-year-old pump stations (2) and 70–110-year-old water lines and increases raw water conveyance capacity to OBWTP
- 4 miles of 36” pipe
- 10 mgd raw water pump station on Reservoir Rd
- Thalle Construction
- Construction: February 2025 – June 2029
- Budget $61.5 M



Central Water Line



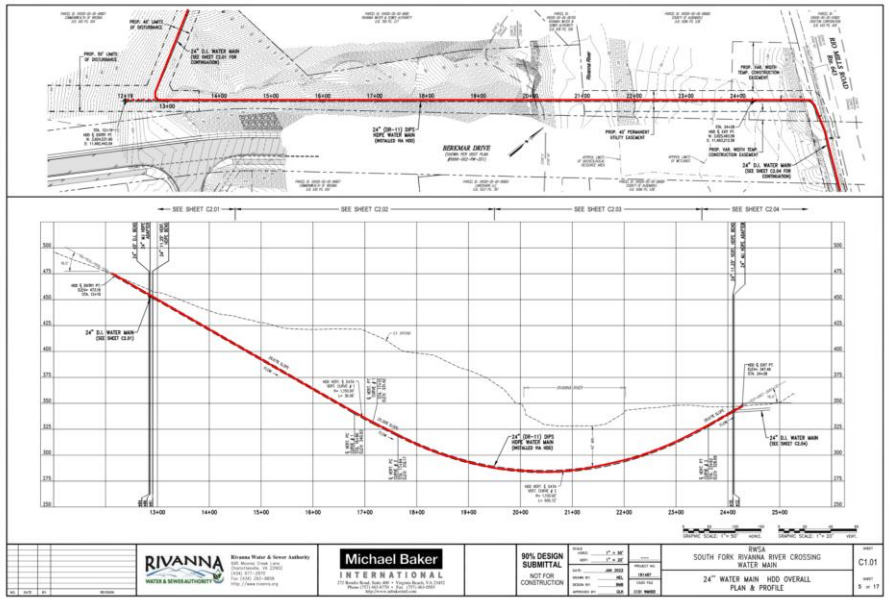
- 5 miles of 24 & 30” pipe; 2 crossings under railroad
- Phase 1 work began in October 2025
- Sagres Construction
- Construction: October 2025 – Dec 2029
- Phase 2: 2026 – 2029
- Budget $79 M

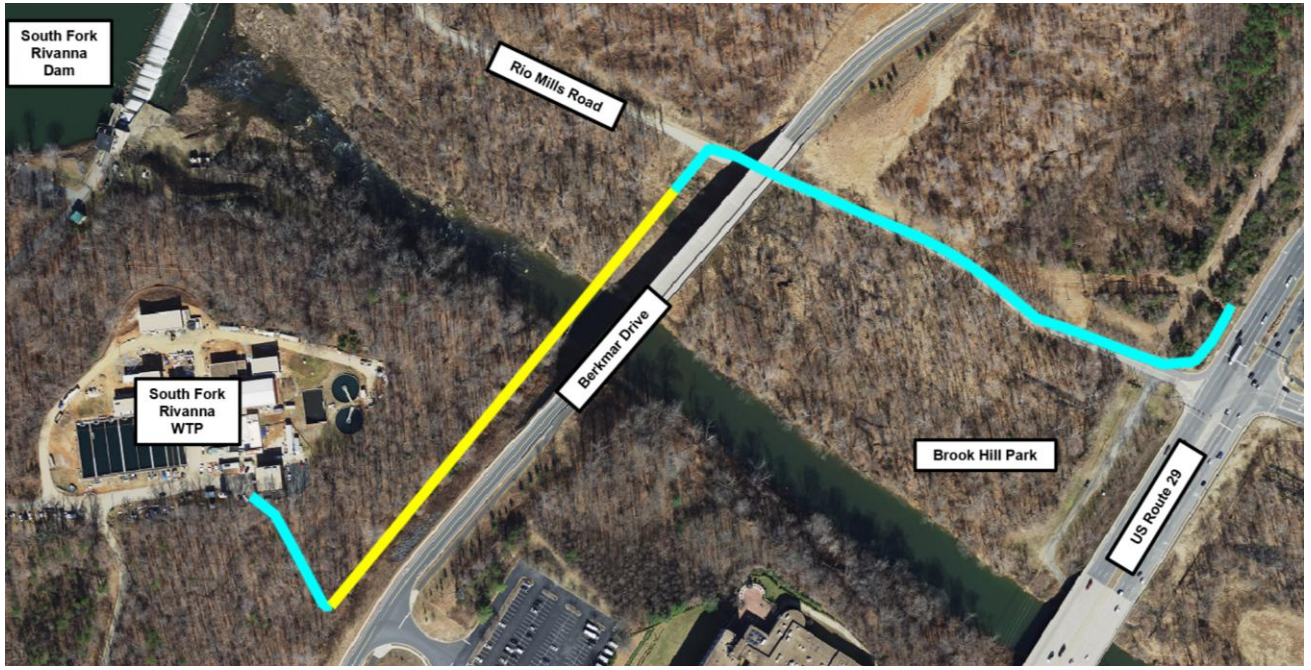


South Rivanna River Crossing

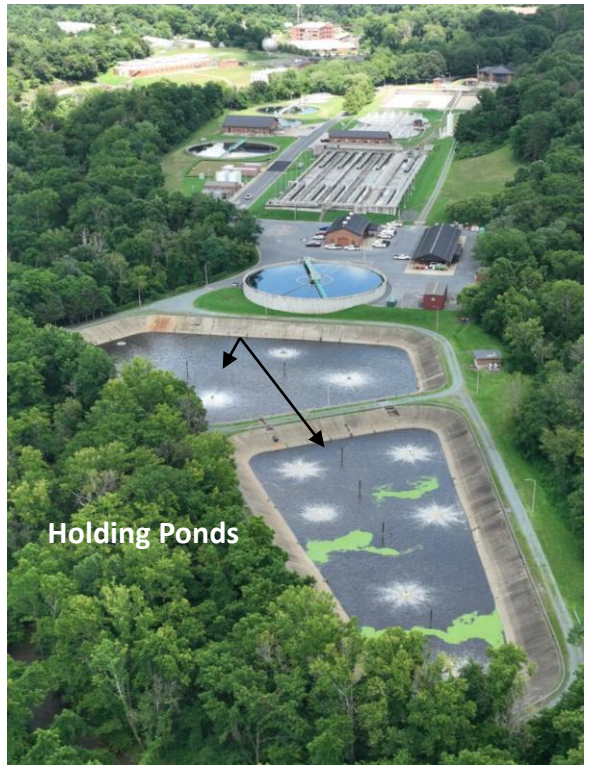
- Second pipe to be installed beneath the river to improve reliability and resiliency in the northern area of the Urban Water System
- Completion: 2025-2026
- Budget: $6.5M







MC Structural and Concrete Rehabilitation



- Repairs throughout plant including holding ponds, equalization basins, primary clarifiers, digesters, and equipment shed roof
- Improves pump removal process from Aeration Basins
- Construction: May 2025 – May 2027
- Budget $13 M









MC Administration Building Renovation & Addition



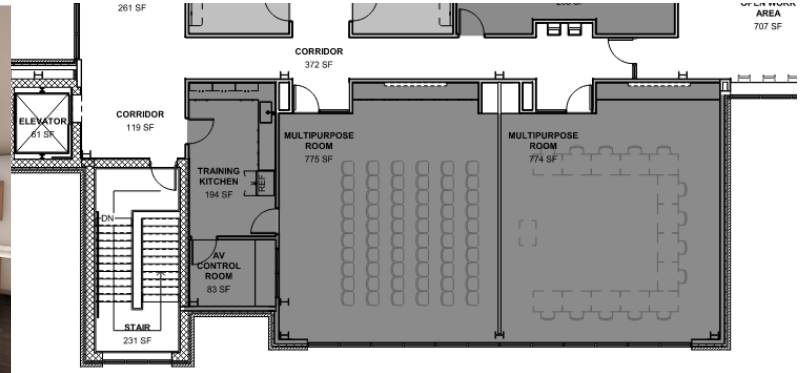
EAST ELEVATION - MAIN ENTRY



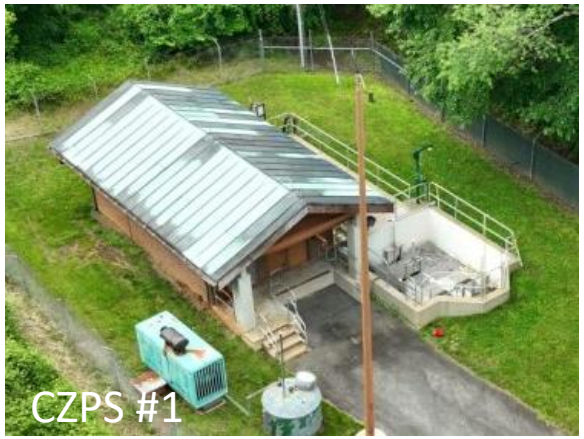
NORTH ELEVATION

- Original building constructed in 1980's
- Renovate interior and expand to includes new Board room, education center, & offices
- Construction: June 2025 - December 2027
- Budget $27.6 M





Crozet Pump Stations Rehabilitation

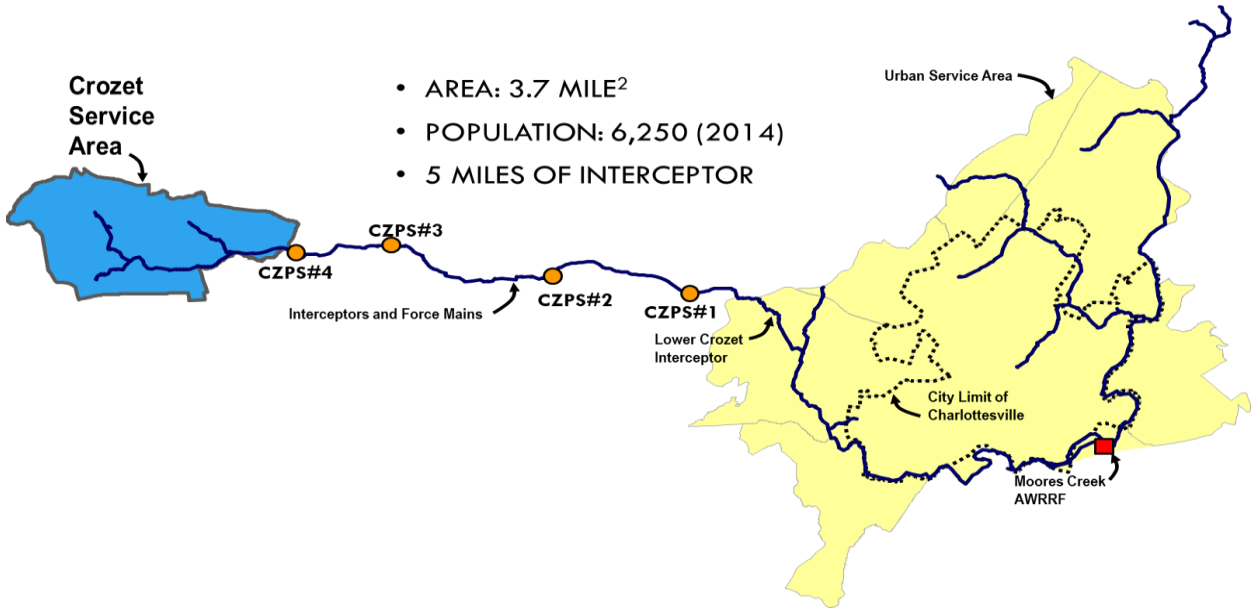










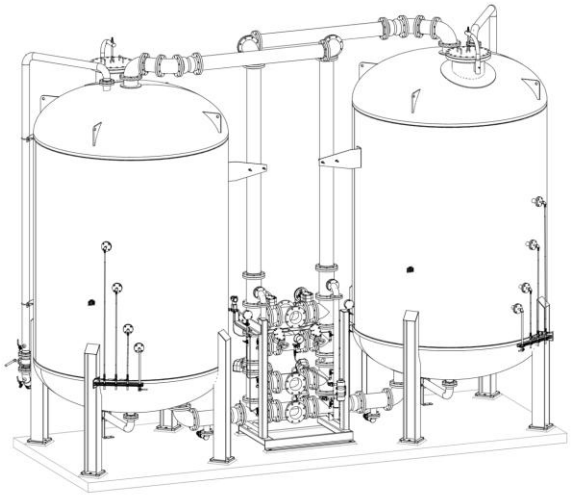


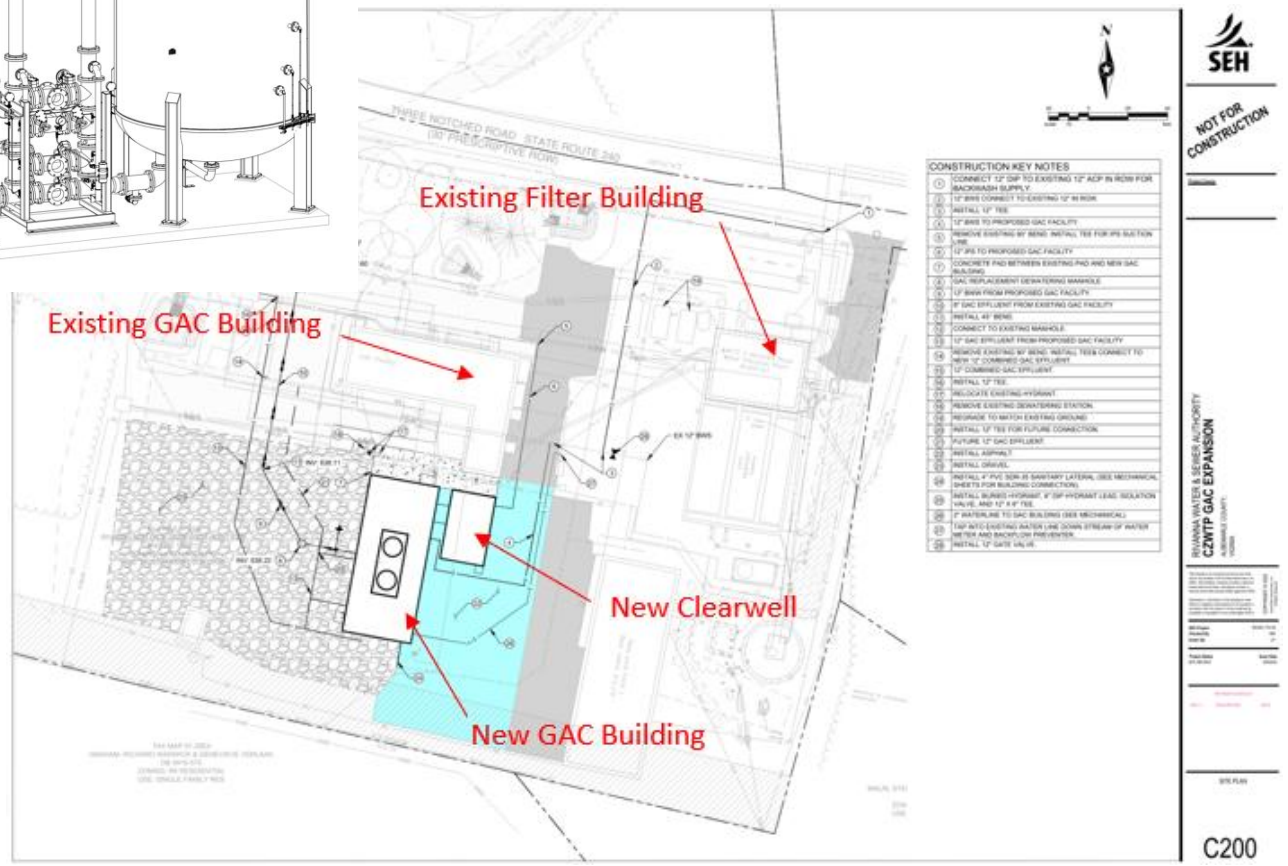
- Repair 4 wastewater pump stations constructed in 1980's
- Replace pumps, valves, roofs, motor control centers, generators, automatic transfer switches, PLCs and other architectural improvements
- Construction: April 2026 – April 2028
- Budget $12.5 M

Granular Activated Carbon Expansion - Crozet WTP



GAC Vessels at Crozet WTP



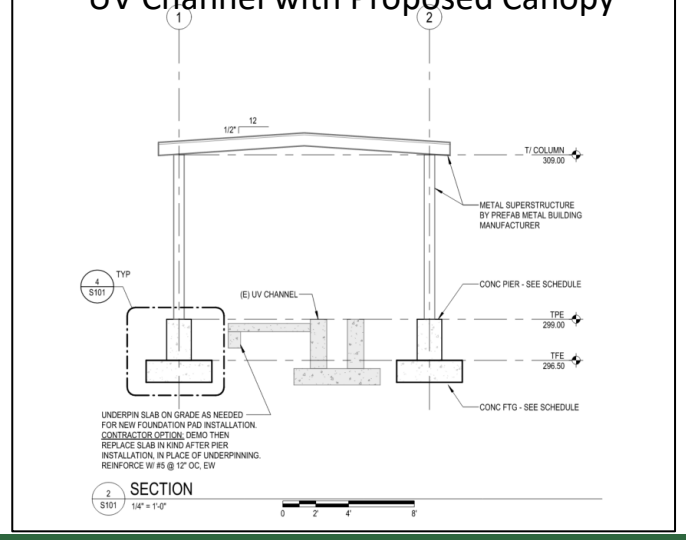


- Additional building and 2 GAC vessels to increase GAC treatment capacity from 1 to 2 MGD
- Construction: March 2026 – May 2028
- Received $7.24 M grant funds from VDH
- Budget $12 M

Glenmore WWTP Upgrade – Phase 1



UV Channel with Proposed Canopy





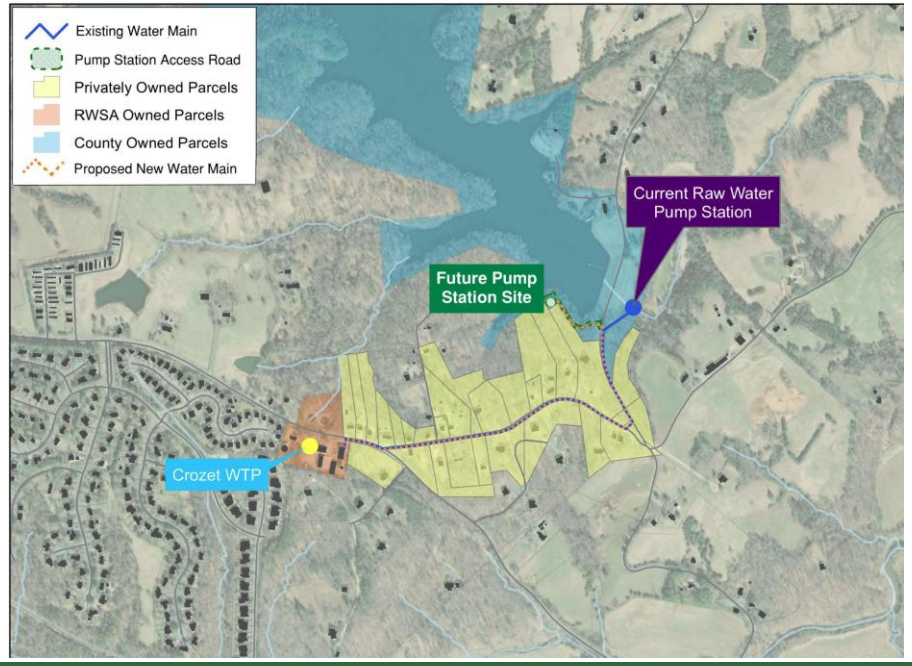
- Replace equipment at end of service life
- Address noise issues with existing blowers
- Construction: June 2026 – January 2028
- Budget $1.8 M

Beaver Creek Dam, Pump Station & Piping Modifications

- Replace the spillway to meet DCR dam safety standards
- Replace the raw water pump station, intake, and pipe to the Crozet WTP
- Construction: July 2026 – December 2030
- Current federal NRCS grant funding $1.74 M
- Anticipating additional NRCS grant of $21 M
- Budget $72 M











Northern Area Water Improvement Projects

2025 – 2030
$46 M



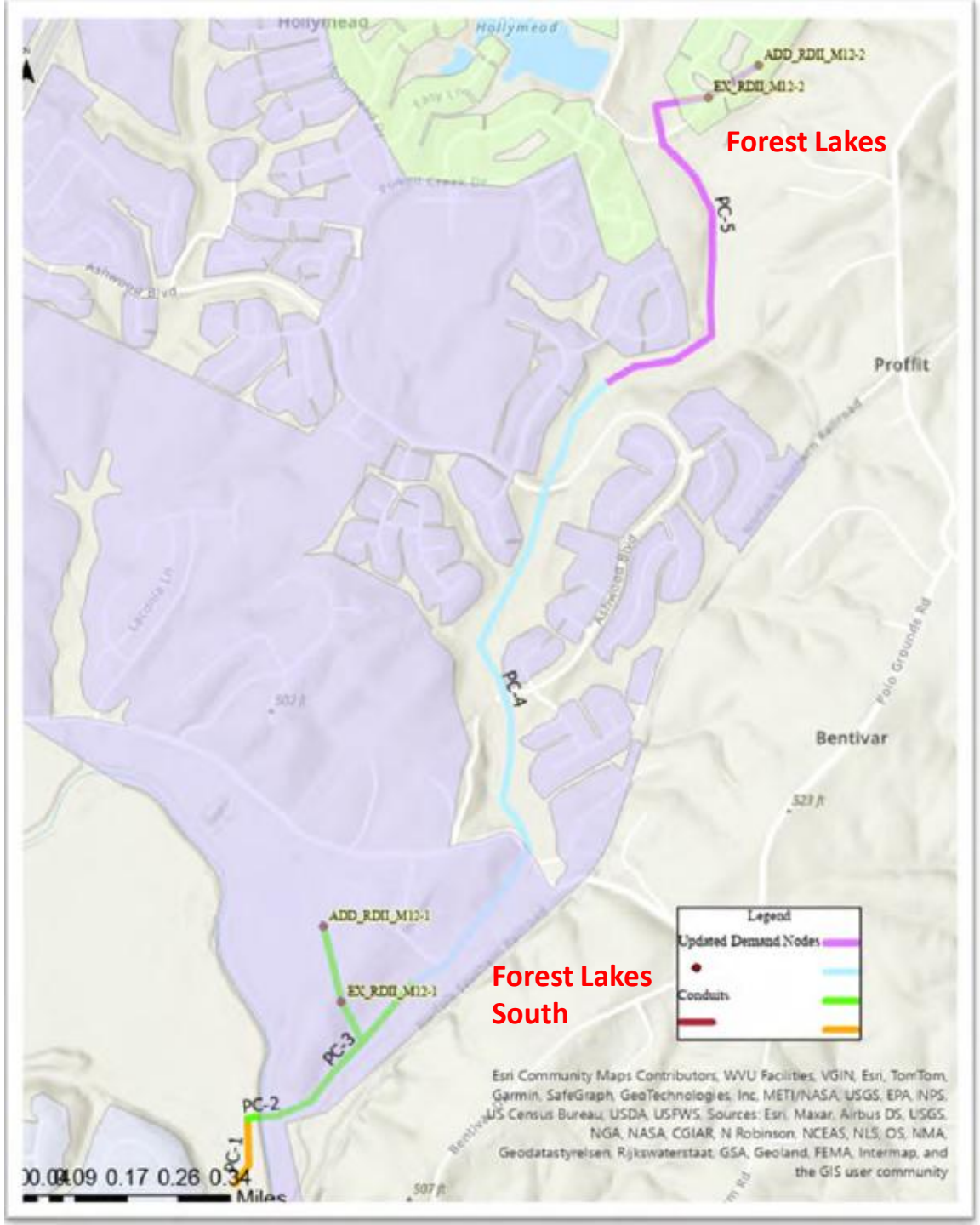




Northern Area Utilities

Sanitary Sewer Improvement Projects, PC 1 – 3

2025 - 2030
$16.4 M



Summary

Proposed FY 27 – 31 Capital Improvement Program

74 Projects $604 M

67 Construction, 4 Studies, 3 I.T. /Asset

Urban Water	Urban Wastewater	Non-Urban Projects & Shared	Total
$348 M	$129 M	$127 M	$604 M

Funding

Already Paid For	Existing Debt Proceeds	Cash Reserves	Grants	New Debt	Total
$36 M	$70 M	$13 M	$31 M	$454 M	$604 M

Questions ?



<u>Action Requested by the Board</u>:

Presentation of the FY 27 – 31 CIP is provided for review by the Board. Adoption of the CIP will be considered at the Board's regular meeting on May 26, 2026.

Ragged Mountain Reservoir

Capital Project Financial Update

Lonnie Wood, Director of Finance

Ted Cole, Senior Vice President, Davenport & Co.



Agenda

- CIP Overview – Bond Financing
- Credit Rating Overview
- Financial and Debt Profile
- Potential Refunding – 2015B Revenue Bond

	2027 - 2031 Proposed CIP	2026 - 2030 Adopted CIP	Change $
Project Cost			
Urban Water Projects	$ 347,508,000	$ 313,243,800	$ 34,264,200
Urban Wastewater Projects	128,552,000	129,409,000	(857,000)
Non-Urban Projects & Shared	128,109,500	107,625,481	20,484,019
Total Project Cost Estimates	**$ 604,169,500**	**$ 550,278,281**	**$ 53,891,219**
Funding in place			
Work-in-Progress (paid for)	$ 35,845,691	$ 20,750,592	15,095,099
Debt Proceeds Available	69,639,400	93,239,000	(23,599,600)
Cash-Capital Available	1,000,000	1,000,000	-
	$ 106,485,091	$ 114,989,592	$ (8,504,501)
Financing Needs			
Possible Future Reserves	$ 11,900,000	$ 11,800,000	100,000
Grants	31,266,000	40,676,000	(9,410,000)
New Debt	454,518,409	382,812,689	71,705,720
	$ 497,684,409	$ 435,288,689	$ 62,395,720
Total Funding	**$ 604,169,500**	**$ 550,278,281**	**$ 53,891,219**

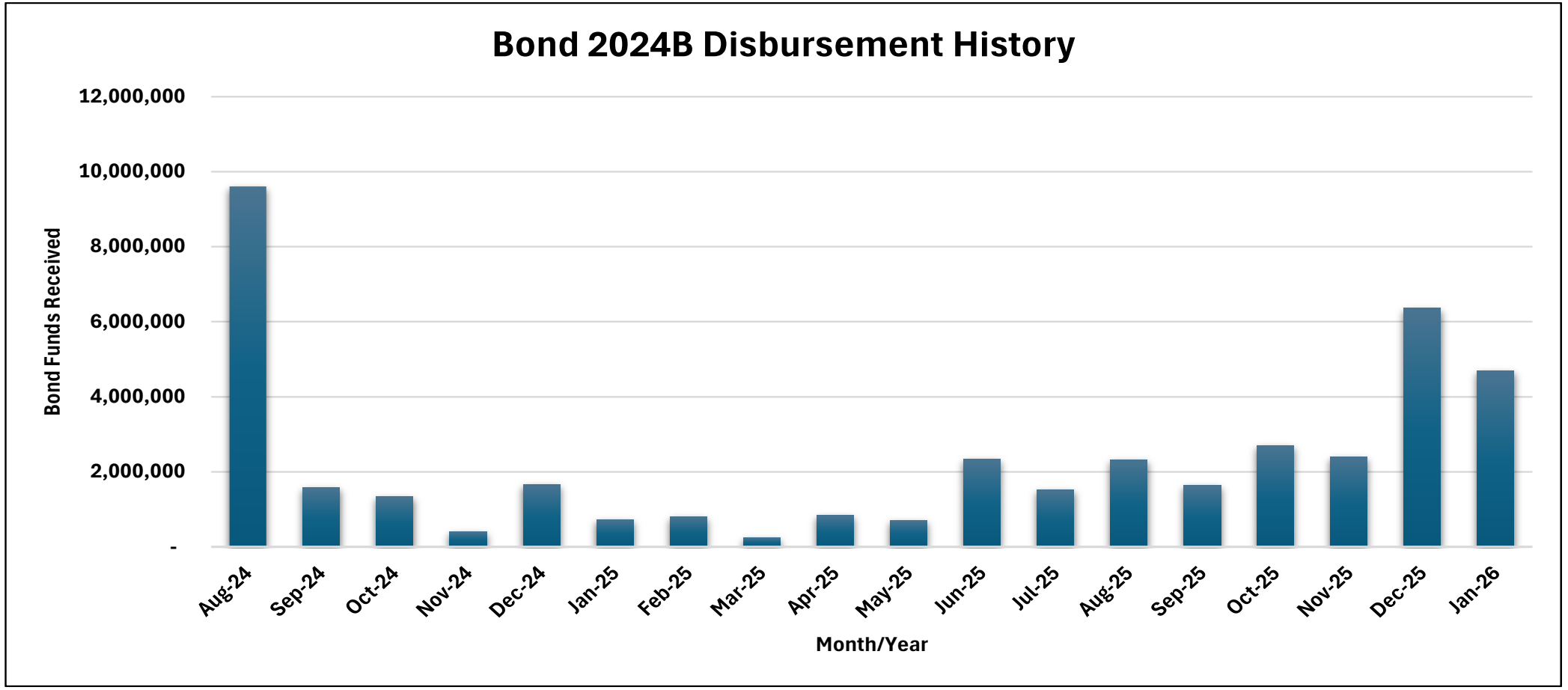
Current Debt Profile at June 2025

Publicly Issued Debt	$	18,445,000
Direct Bank Loans		6,553,000
Revolving Loan Fund Debt		36,752,200
Va Resources Auth. Pooled Debt		202,495,000
	$	264,245,200

Annual Debt Payment (Debt Service)

Principal	$	11,423,100
Interest		9,822,500
	$	21,245,600

Current Construction Proceeds Available



Total:	**$ 92,993,262.24**
Disbursements to Date:	**$ 41,882,782.11**
Remaining Balance:	**$ 51,110,480.13**

Discussion Materials

Rivanna Water & Sewer Authority

February 24, 2026

DAVENPORT PUBLIC FINANCE 1863

Member NYSE | FINRA | SIPC

Credit Rating Overview

Credit Rating Overview

Current Bond Ratings

- The Authority is currently rated:
  - Aa2 by Moody's
    - Most Recent Rating Change: Upgraded to Aa2 (10/4/2012)
    - Last Rating Report: 10/4/2012
    - Last Annual Comment: 6/21/2021
  - AA+ by Standard and Poor's
    - Most Recent Rating Change: Upgraded to AA+ (3/9/2011)
    - Last Rating Report: 4/8/2019
    - Last Review: 4/7/2025

- The Authority regularly updates the Rating Agencies on a wide variety of topics relevant to financial performance and prospects. This takes place at the time of each new debt issuance or roughly every other year under each rating agency's surveillance program. The goal being to maintain or enhance the Authority's bond rating.
  - This rating process may result in the affirmation of the Authority's existing ratings, an upgrade, or a downgrade.

- The Authority's credit rating is a key driver of the interest rates on new bond issuances.

Rating Scale

Moody's Investor's Service	Standard & Poor's (S&P)	Fitch Ratings
Aaa	AAA	AAA
Aa1	**AA+**	AA+
Aa2	AA	AA
Aa3	AA-	AA-
A1	A+	A+
A2	A	A
A3	A-	A-
Baa1	BBB+	BBB+
Baa2	BBB	BBB
Baa3	BBB-	BBB-
Non-Investment Grade		

Authority's Current Ratings

Source: Moody's, S&P.

Water and Sewer Utilities Credit Overview

Key Credit Factors

Moody's Rating Agency Methodology

Category	Rating %	Short Term Control	Long Term Control
System Characteristics	**30%**		
Asset Condition (Remaining Useful Life)	10.0%		✓
Service Area Wealth (Median Family Income)	12.5%		✓
System Size (O&M)	7.5%		✓
Financial Strength	**40%**		
Annual Debt Service Coverage	15%	✓	✓
Days Cash on Hand	15%	✓	✓
Debt to Operating Revenues	10%	✓	✓
Management	**20%**		
Rate Management	10%	✓	✓
Regulatory Compliance and Capital Planning	10%	✓	✓
Debt Legal Provisions	**10%**		
Rate Covenant	5%		✓
Debt Service Reserve Requirement	5%	✓	✓

- Moody's considers additional factors for utilities that are wholesalers to municipal government customers, including:
  - Operating stability that may be exhibited by a wholesaler but not captured by its size or service area wealth; and
  - The credit quality of large customers and the nature of the customers' pledge to the utility.

Key Credit Factors

- Economy and customer base
  - Diverse customer base protects against loss of large customers.
  - Wealth and income levels provide insight into the economic resources of the service area.
  - Larger systems can achieve economies of scale.
- Debt Service Coverage
  - Net Revenues available to pay Debt Service needs to be greater than Debt Service by a minimum amount.
    - Legal Requirement: 1.00x (i.e., for every $1.00 revenue bond debt service, there needs to be $1.00 of Net Revenues).
    - Policy Target: 1.50x.
- System Reserves
  - Cumulative Funds available after Operations and Debt Service needs to be established at a minimum acceptable level.
  - Often referred to as "liquidity" and measured as a percentage of Operations & Maintenance, or Days Cash on Hand.
- Management
  - Established track record of financial management, asset management and regulatory compliance.
  - Ability and Willingness to raise rates.
  - Financial Policy Guidelines.
- *Note: S&P maintains a separate Wholesale Utility methodology focusing on the Diversity and Credit Quality of Members, Operational Characteristics, Financial Strength, and Legal Provisions, which is more qualitative in nature.*

Source: Moody's Investors Service

Moody's Utility Detailed Scorecard

FY 2025 Data

RIVANNA WATER & SEWER AUTHORITY

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Rivanna Water & Sewer Authority Estimated Moody's Scorecard FY 2025	**Inputs**	**Weight**	**Rating Category**	**Estimated Score**	**Weighted Score**	**Very Strong (Aaa)**		**Strong (Aa)**		**Moderate (A)**		**Weak (Baa)**		**Poor (Ba)**	
							0.50	**1.49**	**1.50**	**2.49**	**2.50**	**3.49**	**3.50**	**4.49**	**4.50**	**5.49**
1	**System Characteristics (30%)**															
2	Asset Condition (Remaining Useful Life in Years)	35.5	10.0%	Aa	2.28	0.23	> 75 Yrs.		75 Yrs. >	> 25 Yrs.	25 Yrs. >	> 12 Yrs.	12 Yrs. >	> 9 Yrs.	9 Yrs. >	> 6 Yrs.
3	System Size (O&M in 000s)	26,879	7.5%	A	2.65	0.20	> $65 M		$65 M >	> $30 M	$30 M >	> $10 M	$10 M >	> $3 M	$3 M >	> $1 M
4	Service Area Wealth MFI (US Median)	136.2%	12.5%	Aa	1.73	0.22	> 150%		150% >	> 90%	90% >	> 75%	75% >	> 50%	50% >	> 40%
5	**Financial Strength (40%)**															
6	Annual Debt Service Coverage	1.66x	15.0%	A	2.59	0.39	> 2.00x		2.00x >	> 1.70x	1.70x >	> 1.25x	1.25x >	> 1.00x	1.00x >	> 0.70x
7	Days Cash on Hand	602	15.0%	Aaa	0.79	0.12	> 250 Days		250 Days >	> 150 Days	150 Days >	> 35 Days	35 Days >	> 15 Days	15 Days >	> 7 Days
8	Debt to Operating Revenues	5.06x	10.0%	A	2.85	0.28	< 2.00x		2.00x <	< 4.00x	4.00x <	< 7.00x	7.00x <	< 8.00x	8.00x <	< 9.00x
9	**Management (20%)**															
10	Rate Management	Aa	10.0%	Aa	2.00	0.20	Excellent rate-setting record; no material political, practical or regulatory limit to rate increases		Strong rate-setting record; little political, practical, or regulatory limits to rate increases		Average rate-setting record; some political, practical, or regulatory limits to rate increases		Adequate rate-setting record; political, practical, or regulatory impediments place material limits on rate increases		Below average rate-setting record; political, practical, or regulatory impediments place substantial limits on rate increases	
11	Regulatory Compliance and Capital Planning	A	10.0%	A	3.00	0.30	Fully compliant OR proactively addressing compliance issues; maintains sophisticated and manageable CIP that addresses > 10 years		Actively addressing minor compliance issues; Maintains comprehensive and manageable 10-year CIP		Moderate violations with adopted plan to address issues; Maintains manageable 5-year CIP		Significant compliance violations with limited solutions adopted; Maintains single year CIP		Not fully addressing compliance issues; Limited or weak capital planning	
12	**Legal Provisions (10%)**															
13	Rate Covenant	1.00x	5.0%	Ba and Below	4.50	0.23	> 1.30x		1.30x >	> 1.20x	1.20x >	> 1.10x	1.10x >	> 1.00x	< 1.00x	
14	Debt Service Reserve Requirement	A	5.0%	A	3.00	0.15	DSRF funded at MADS		DSRF funded at lesser of standard 3-prong test		DSRF funded at less than 3-prong test OR springing DSRF		NO explicit DSRF; OR funded with speculative grade surety			

Estimated Score	**2.32**
Scorecard-Indicated Rating	**Aa3**

Rating Scale			
Aaa	0.50 - 1.50	Baa2	3.83 - 4.17
Aa1	1.50 - 1.83	Baa3	4.17 - 4.50
Aa2	1.83 - 2.17	Ba1	4.50 - 4.83
Aa3	2.17 - 2.50	Ba2	4.83 - 5.17
A1	2.50 - 2.83	Ba3	5.17 - 5.50
A2	2.83 - 3.17	B1	5.50 - 5.83
A3	3.17 - 3.50	B2	5.83 - 6.17
Baa1	3.50 - 3.83	B3 and Below	6.17 - 6.50

Sources: Scorecard provided by Moody's, FY 2025 Audit.

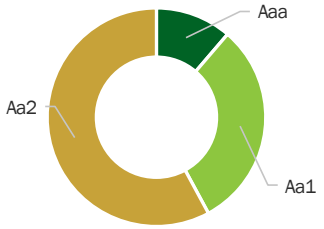
Peer Group Introduction

- In order to provide perspective on the Authority's historical and projected performance in relation to the Key Credit Ratios previously discussed, Davenport has developed various Peer Groups for comparative purposes.

Moody's Rated Water & Sewer Authorities/Enterprises

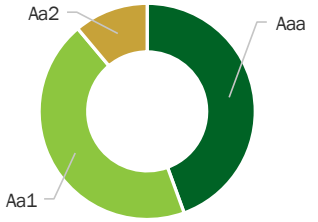
National Moody's Rated Combined Water & Sewer Systems

	Number of Credits	Percentage of Credits
Aaa	15	11.3%
Aa1	41	30.8%
Aa2	77	57.9%
Total	133	100.0%



Virginia Moody's Rated Combined Water & Sewer Systems

	Number of Credits	Percentage of Credits
Aaa	4	44.4%
Aa1	4	44.4%
Aa2	1	11.1%
Total	9	100.0%



VA 'Aaa': *Chesterfield County Water & Sewer, Henrico County Water & Sewer, Loudoun Water, Prince William County Service Authority*

VA 'Aa1': *Chesapeake Water & Sewer, James City Service Authority, Spotsylvania County Water & Sewer, Virginia Beach Water & Sewer*

VA 'Aa2': *Rivanna Water & Sewer Authority*

Note: The data shown in the peer comparatives is from Moody's Municipal Financial Ratio Analysis database. The figures shown are derived from the most recent financial statement available (FY 2024 figures in most cases).

Peer Group

	National Water and Sewer Authority/Enterprise Medians:
1	Moody's 'Aaa' Rated
2	Moody's 'Aa1' Rated
3	Moody's 'Aa2' Rated
4	
5	**Select Virginia Water Only or Sewer Only Authorities/Enterprises:**
6	Fairfax Water (Aaa / AAA / AAA)
7	Fairfax Sewer (Aaa / AAA / AAA)
8	Hampton Roads Sanitation District (Aa1 / AA+ / AA+)
9	Newport News Water (Aa1 / AAA / NR)
10	Norfolk Water (Aa2 / AA+ / AA+)
11	Upper Occoquan Service Authority ("UOSA") (Aa1 / AAA / AAA)
12	
13	**Moody's 'Aa' or Higher Rated Virginia Water and Sewer Authorities/Enterprises:**
14	City of Chesapeake Water and Sewer Enterprise
15	Chesterfield County Water and Sewer Enterprise
16	Henrico County Water and Sewer Enterprise
17	James City Service Authority ("JCSA")
18	Loudoun Water
19	Prince William County Service Authority ("PWCSA")
20	Spotsylvania County Water and Sewer Enterprise
21	City of Virginia Beach Water and Sewer Enterprise

Select Virginia Water Only & Sewer Only Peer Comparison

Moody's MFRA FY 2024 Data & Most Recent Rating Report

	A		B	C	D	E	F	G	H	I	J	K	L
					Peer Group - Select Virginia Water Only or Sewer Only Entities						Ranges for Categories		
	Quantitative Factors	% of Total	Rivanna WSA FY 2025 Current	Peer Group Median	Fairfax Water	Newport News Water	Norfolk Water	Fairfax Sewer	HRSD	UOSA	Aaa	Aa	A and Below
			(Aa2)		(Aaa)	(Aa1)	(Aa1)	(Aaa)	(Aa1)	(Aa1)			
1	**System Characteristics**												
2	Asset Condition (Remaining Useful Life)	10%	36 yrs	32 yrs	30 yrs	34 yrs	38 yrs	27 yrs	44 yrs	12 yrs	> 75 Yrs.	25 Yrs. - 75 Yrs.	<25 Yrs.
3	System Size (O&M in 000s)	7.5%	26,879	91,599	121,243	61,954	49,284	135,584	227,441	39,085	> $65 M	$30 M - $65 M	< $30 M
4	Service Area Wealth MFI (US Median)	12.5%	136%	149%	186%	84%	84%	186%	112%	186%	> 150%	90% - 150%	< 90%
5	**Financial Strength**												
6	Annual Debt Service Coverage	15%	1.66x	2.80x	2.90x	3.10x	2.30x	2.90x	2.70x	1.30x	> 2.00x	1.70x - 2.00x	< 1.70x
7	Days Cash on Hand	15%	602	423	277	652	679	498	348	71	> 250 days	150 days - 250 days	< 150 days
8	Debt to Operating Revenues	10%	5.06x	2.54x	1.89x	1.07x	2.26x	2.83x	3.11x	10.26x	< 2.00x	2.00x - 4.00x	> 4.00x
9	**Management**												
10	Rate Management	10%	Aa	Aaa	Aaa	Aa	Aa	Aaa	Aaa	Aaa	Aaa	Aa	A and Below
11	Regulatory Compliance & Capital Planning	10%	A	Aaa	Aaa	Aa	Aa	Aaa	Aa	Aaa	Aaa	Aa	A and Below
12	**Legal Provisions**												
13	Rate Covenant	5%	1.00x	1.15x	1.10x	1.20x	1.10x	1.25x	1.20x	1.00x	> 1.30x	1.30x - 1.20x	< 1.20x
14	Debt Service Reserve Requirment	5%	A	Baa and Below	Baa and Below	Baa and Below	Baa and Below	Baa and Below	A	Aa	Aaa	Aa	A and Below
15													
16	**Unadjusted Score**		2.32	1.72	1.46	1.78	1.96	1.37	1.66	2.13	0.5 - 1.5	1.5 - 2.5	2.5 - 3.5
17	**Unadjusted Rating Outcome**		Aa3	Aa1	Aaa	Aa1	Aa2	Aaa	Aa1	Aa2	Aaa	Aa	A
18	**Assigned Rating**		Aa2		Aaa	Aa1	Aa1	Aaa	Aa1	Aa1			

Aaa Range	< 1.50
Aa1 Range	1.50-1.83
Aa2 Range	1.83-2.17
Aa3 Range	2.17-2.50
A1 Range	2.50-2.83

Note: System Characteristics and Financial Strengths sourced from Moody's MFRA. Management and Legal Provisions sourced from most recent rating reports for each entity.

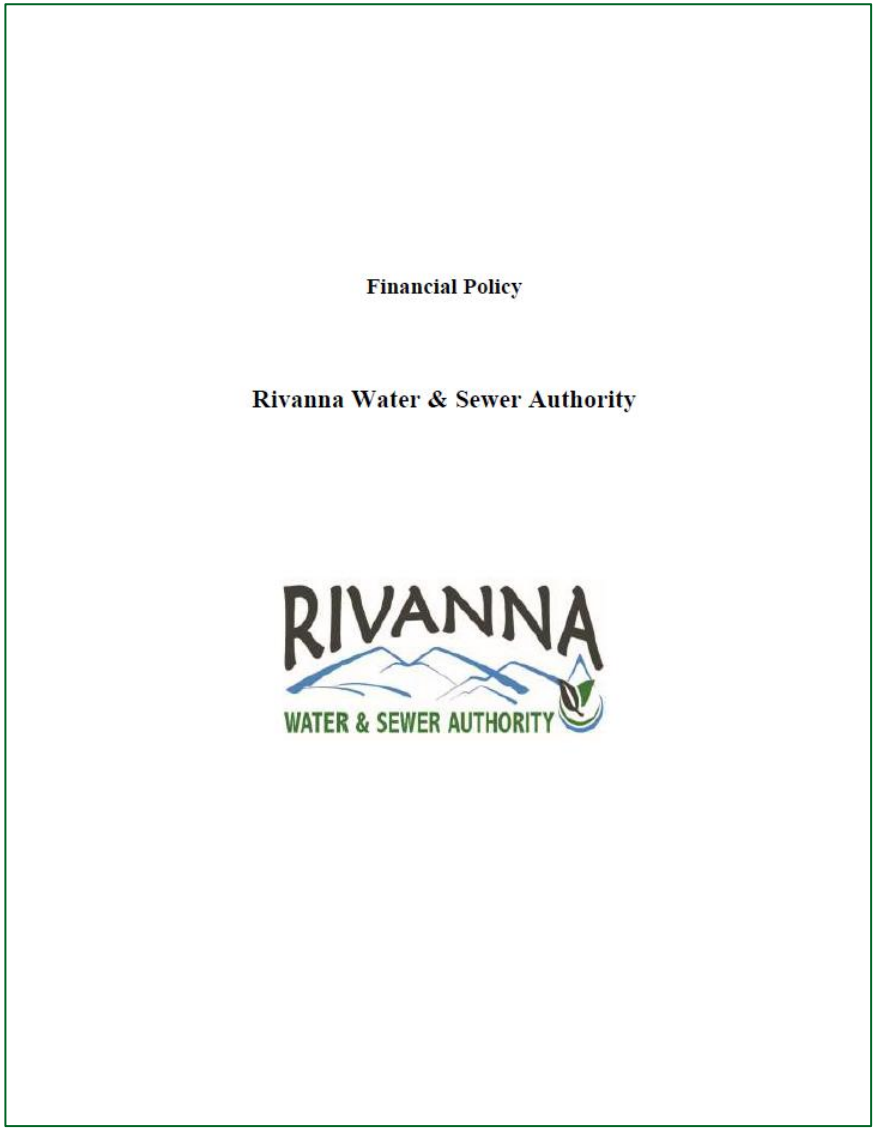
Financial Profile Update

Rivanna Water & Sewer Authority Financial Policies

Key Ratios

- **System Reserves** – Cumulative Funds available after Operations and Debt Service needs to be established at a minimum acceptable level.
  - Often referred to as "liquidity" and measured as a percentage of Operations & Maintenance, or Days Cash on Hand.
  - Adopted Policy: "It is recommended that the Authority target a combined total of all Tier 2 and Tier 3 operating account and reserve funds equal to 150% of the Authority's Operating and Maintenance budget (not including annual Debt Service budgets) or the equivalent of 548 days operating cash on hand."

- **Debt Service Coverage** – Ratio of Net Operating Revenues available to pay Debt Service needs to meet minimum targets.
  - Net Operating Revenues [Operating and Non-Operating Revenues minus Operating Expenditures (excluding Depreciation)] divided by Debt Service.
  - Parity Requirement 1.00x – For every $1.00 of Parity Debt Service, the Authority must have $1.00 of Net Revenues available to pay.
  - Adopted Policy: "The Authority will set rates and charges so as to target a minimum debt service coverage on all parity indebtedness of 1.50 times."


Financial Policy

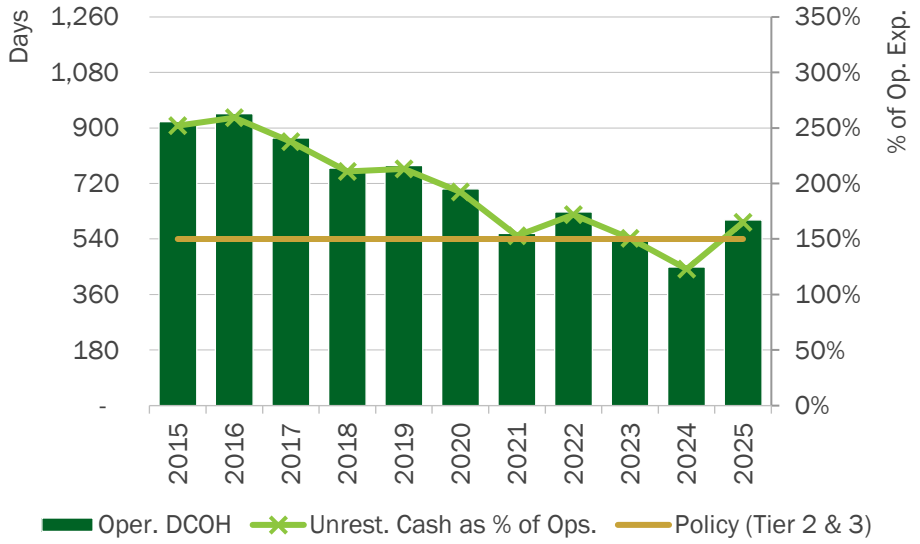
Rivanna Water & Sewer Authority

RIVANNA
WATER & SEWER AUTHORITY

Source: Rivanna Water & Sewer Authority Financial Policy, Revised and Updated August 25, 2020.

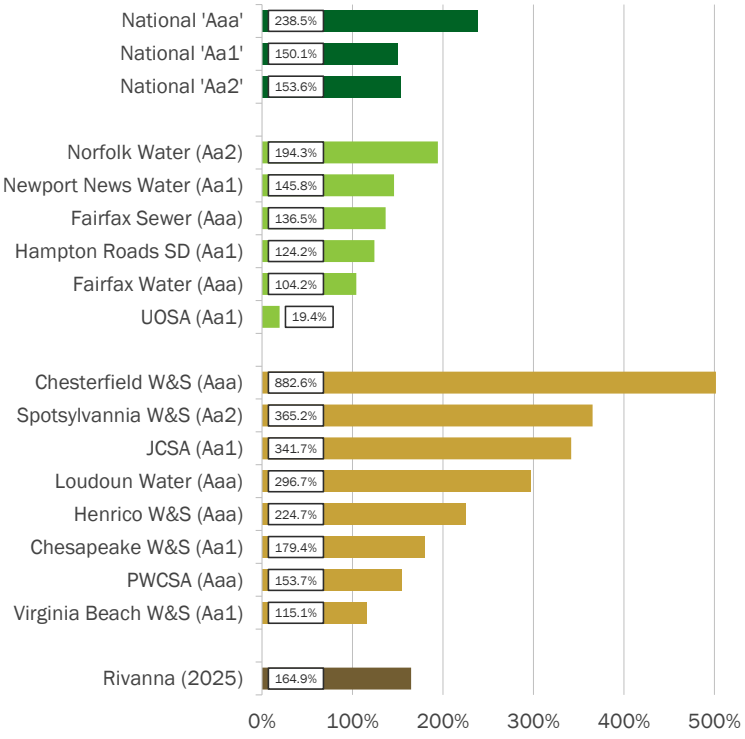
Liquidity

Liquidity



- Cumulative Funds available after Operations and Debt Service needs.
- Days Cash on Hand (DCOH) = Unrestricted Cash ÷ (Operating Expenditures ÷ 365)
- Unrestricted Cash as % of O&M = Unrestricted Cash ÷ Operating Expenditures
- Standard and Poor's criteria for Water and Sewer Credit defines categories of Days Cash on Hand as:
  - <30 days: Low
  - 30 - 60 days: Adequate
  - 60 - 120 days: Good
  - > 120 days: Strong

Peer Comparative: Unrestricted Cash as a % of O&M

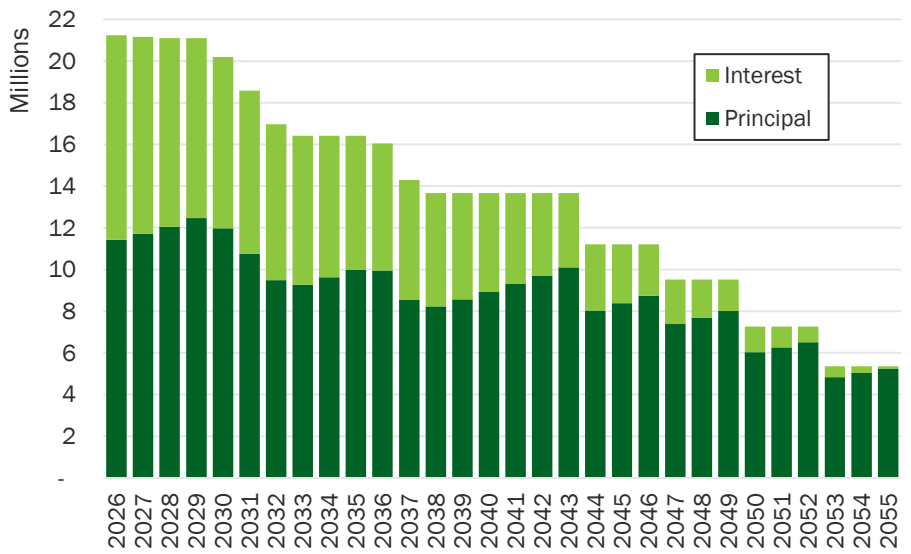


- The Authority has adopted a Liquidity policy stating:
  - *It is recommended that the Authority target a combined total of all Tier 2 and Tier 3 operating account and reserve funds equal to 150% of the Authority's Operating and Maintenance budget or the equivalent of 548 days operating cash on hand.*

Source: Authority Audits, Moody's MFRA.

Existing Debt Profile

Existing Debt Service



Par Outstanding – Estimated as of 6/30/2025

Type	Par Amount
Publicly Issued Bonds	$ 18,445,000
Direct Bank Loans	6,553,000
Revolving Loans	36,752,171
VRA	202,495,000
Total Debt Outstanding	**$ 264,245,171**

Existing Debt Service

FY	Principal	Interest	Total
Total	$ 264,245,171	$ 137,758,925	$ 402,004,096
2026	11,423,103	9,822,532	21,245,635
2027	11,721,426	9,441,038	21,162,464
2028	12,058,053	9,041,226	21,099,279
2029	12,473,738	8,621,709	21,095,447
2030	11,982,578	8,217,625	20,200,202
2031	10,754,260	7,832,856	18,587,116
2032	9,493,852	7,475,968	16,969,820
2033	9,280,909	7,130,578	16,411,487
2034	9,626,744	6,789,690	16,416,434
2035	9,984,025	6,438,992	16,423,016
2036	9,947,483	6,092,915	16,040,398
2037	8,529,000	5,760,770	14,289,770
2038	8,230,000	5,436,550	13,666,550
2039	8,570,000	5,098,423	13,668,423
2040	8,920,000	4,742,026	13,662,026
2041	9,305,000	4,365,567	13,670,567
2042	9,695,000	3,971,144	13,666,144
2043	10,110,000	3,559,929	13,669,929
2044	8,030,000	3,182,181	11,212,181
2045	8,375,000	2,836,903	11,211,903
2046	8,735,000	2,475,384	11,210,384
2047	7,380,000	2,139,613	9,519,613
2048	7,690,000	1,830,844	9,520,844
2049	8,010,000	1,510,156	9,520,156
2050	6,030,000	1,232,081	7,262,081
2051	6,265,000	997,475	7,262,475
2052	6,510,000	753,525	7,263,525
2053	4,830,000	528,638	5,358,638
2054	5,035,000	323,322	5,358,322
2055	5,250,000	109,266	5,359,266

Note: Totals may not foot due to rounding.

Source: FY 2025 ACFR, Final Numbers, Documents.

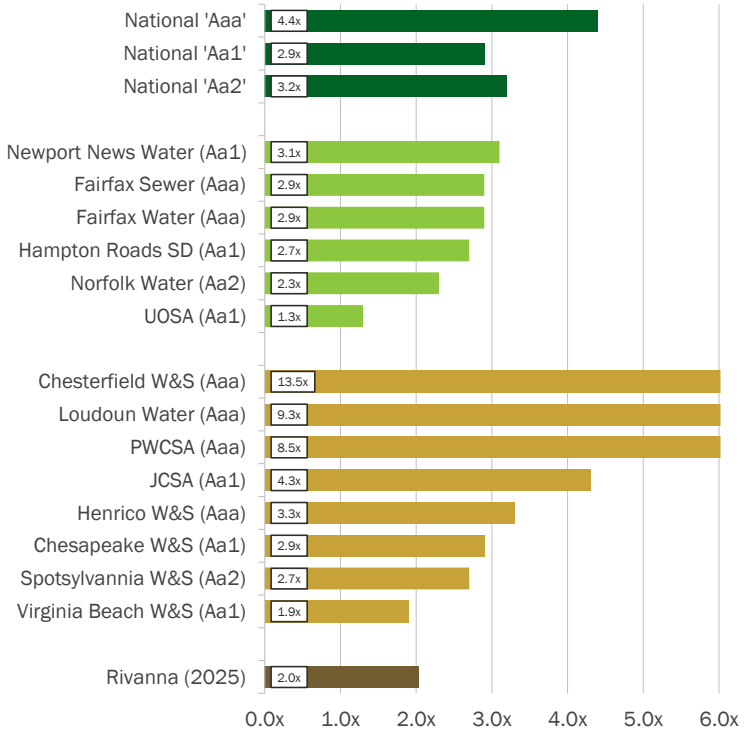
Debt Service Coverage Ratio ("DSCR")

Debt Service Coverage Ratio



- Measure of ability to meet operating and debt service obligations.
- DSCR = Net Revenue Available for Debt service ÷ Annual Debt Service
- Standard and Poor's criteria for Water and Sewer Credit defines categories of Debt Service Coverage Ratio as:
  - <1.0x: Insufficient
  - 1.0x-1.25x: Adequate
  - 1.26x-1.50x: Good
  - >1.50x: Strong

Peer Comparative: Debt Service Coverage Ratio



- The Authority has adopted a Debt Service Coverage Ratio Policy, stating:
  - *The Authority will set rates and charges so as to target a minimum debt service coverage on all parity indebtedness of 1.50 times.*

Source: Authority Audits, Moody's MFRA.

Financing Options

Potential Financing Options

Issuance Approach	Overview	Potential Advantages	Potential Disadvantages
Direct Bank Loan 	Direct Loan through and held by one or more Financial Institutions.	– Streamlined financing process. – Flexible prepayment terms. – Interest rate established at beginning of financing process. – Timing can be tailored to locality's schedule.	– Limitations on borrowing amount, term (typically 15-20 years maximum), & structure (interest only). – Typically higher interest rates, subject to market conditions.
Public Issuance 	Issuance of Securities through a Broker Dealer.	– Longer term amortization (30 years). – Typically lower interest rates, subject to market conditions. – Flexibility to structure. – No additional state / federal due diligence or credit requirements.	– Higher cost of issuance. – Ratings generally required. – More stringent financing requirements / documentation. – Interest rate established late in the financing process.
Virginia Resources Authority (VRA) Pooled Financing Program VRA	Direct Loan through and held by VRA.	– Longer term amortization (30 years). – Typically lower interest rates, subject to market conditions. – Flexibility to structure.	– Higher cost of issuance. – Set prepayment terms (10-year non-callable). – More in depth due diligence process and may require credit enhancements (e.g., Support Agreements, DSRFs). – Interest rate established late in the financing process and includes incremental annual fees. – Only 3 issuances per year (spring, summer, fall).
Commonwealth / Federal Programs (e.g. USDA, SRF, WIFIA) 	Direct Loan through and held by a Commonwealth or Federal Agency / Department.	– Potential for longer term amortization (30-40 years) and/or alternative structuring, depending upon program. – Low / subsidized interest rates may be available. – Maximum Interest rate established upon approval and can be reduced at project completion under certain programs. – Potential grant funding / principal forgiveness.	– Application process with limited funds available. – Minimum eligibility qualifications may apply. – Limited structuring flexibility, depending upon program. – Detailed application requirements can result in longer process. – May require a construction loan or Interim Financing. – May require a Debt Service Reserve Fund.

Potential Financing Options | Key Differences

	A Key Differences	B Direct Bank Loan	C Authority Public Issuance	D VRA Pool Program
1				
2	**Length of Issuance Process**	45 - 60 Days	75 - 90 Days	90 - 120 Days
3				
4	**Maximum Term**	Typically Up to 20 Years	Up to 30 Years	Up to 30 Years
5				
6	**Interest Rate Lock**	Typically 30 - 45 Days Prior to Closing	Typically 14 - 21 Days Prior to Closing	Typically 14 - 21 Days Prior to Closing
7				
8	**Rating Required**	No	Yes	At VRA Level
9				
10	**Offering Document Prepared**	No	Yes	At VRA Level
11				
12	**Continuing Disclosure**	Typically required to post audits and budgets to Authority website	Required to post audits and budgets as well as any other material events (including issuance of debt) to the Municipal Securities Rulemaking Board's EMMA website	Required to deliver audits to VRA. May be subject to additional requirements based on debt levels within the program
13				
14	**Professionals Involved:**			
15	Financial Advisor	☑	☑	☑
16	Bond Counsel	☑	☑	☑
17	Bank Counsel	☑		☑
18	Trustee		☑	☑
19	Bond Ratings		☑	At VRA Level
20	Printer		☑	At VRA Level
21	Underwriter/Underwriter's Counsel		☑	At VRA Level

Note: Commonwealth and Federal Funding programs are subject to application and award criteria. Varies by program.

Potential Refunding Opportunity

Tax-Exempt Refunding of the Series 2015D VRA Bonds

Current Market Public Issuance as of 2/9/2026 | All Callable Maturities

	Summary of Refunding Results	
1		
2	**Bonds Refunded**	
3	Par Refunded	$ 28,445,000
4	Coupon(s)	3.00% - 5.00%
5	Call Date	11/1/2025
6	Call Price	100.0%
7	Maturities Refunded	11/1/26 - 11/1/45
8		
9	**Refunding Bonds**	
10	Final Maturity	11/1/2045
11	True Interest Cost (TIC)	3.460%
12	All-In TIC	3.648%
13	Assumed Call Date	11/1/2036
14		
15	**Savings**	
16	**Gross Savings**	**$ 2,598,018**
17	**Net PV Savings**	**$ 1,880,604**
18	**Net PV Savings %**	**6.61%**
19	Average Annual Savings	$ 129,901
20		
21	**Key Escrow Statistics**	
22	Escrow Maturity Date	6/16/2026
23	Average Coupon of Escrowed Bonds	4.425%
24	Earnings Rate on Escrowed Bonds	3.796%

Breakeven Bank Interest Rate*: 3.55%

A 10 bps (0.10%) increase or decrease in interest rates results in an approximately $260,000 change in Gross Savings.

Annual Savings

Fiscal Year	Net Prior Bond Debt Service[1]	Net Refunding Bond Debt Service	Annual Savings
2027	$ 3,276,266	$ 3,149,195	$ 127,071
2028	3,276,038	3,144,250	131,788
2029	3,271,541	3,141,250	130,291
2030	2,383,044	2,250,875	132,169
2031	2,052,263	1,922,375	129,888
2032	1,969,038	1,841,375	127,663
2033	1,967,472	1,839,875	127,597
2034	1,972,203	1,840,750	131,453
2035	1,973,369	1,843,750	129,619
2036	1,731,913	1,600,000	131,913
2037	1,690,050	1,560,750	129,300
2038	1,692,481	1,564,875	127,606
2039	1,692,834	1,561,375	131,459
2040	1,691,259	1,560,250	131,009
2041	1,691,775	1,561,250	130,525
2042	1,693,572	1,564,125	129,447
2043	1,691,450	1,563,750	127,700
2044	1,691,044	1,560,125	130,919
2045	1,692,147	1,560,600	131,547
2046	1,689,656	1,560,600	129,056
Total	40,789,413	38,191,395	2,598,018

(1) Includes VRA Annual Admin Fee of 12.5 bps.

Notes:

- Savings are net of estimated Local Costs of Issuance of $400,000 and Underwriter's Discount of $131,225. Preliminary and subject to change.
- Interest rates as of 2/9/2026. Preliminary and subject to change.
- Assumes a closing date of 5/12/2026; however, the schedule for a Public Issuance is flexible and can be tailored to the Authority's preferences.
- The breakeven bank interest rate is calculated to achieve the same total gross savings assuming a bank loan with the same payment structure, Costs of Issuance of $225,000, and no Underwriter's Discount.

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