

## Board of Directors Meeting

# July 22, 2025 2:15pm



#### **BOARD OF DIRECTORS**

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

DATE: JULY 22, 2025

LOCATION:Rivanna Administration Building (2<sup>nd</sup> Floor Conference Room),<br/>695 Moores Creek Lane, Charlottesville, VA 22902

TIME: 2:15 p.m.

#### AGENDA

- 1. CALL TO ORDER
- 2. AGENDA APPROVAL
- 3. MINUTES OF PREVIOUS BOARD MEETING ON JUNE 24, 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 Finance
- b. Staff Report on Operations
- c. Staff Report on CIP Projects
- d. Staff Report on Administration and Communications
- e. Staff Report on Wholesale Metering
- f. Staff Report on Drought Monitoring
- g. Approval of the Resolution of Official Intent to Reimburse Expenditures with Proceeds of a Borrowing CIP Funding

#### 9. OTHER BUSINESS

a. Presentation: UVA Rowing Program, Director of Rowing, Frank Biller

(Combined Session with the RSWA)

b. Presentation: Succession Management and Strategic Plan Update Betsy Nemeth, Director of Administration and Communications

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

#### 11. CLOSED MEETING

(Motion, second and roll call vote to enter into a joint closed session to discuss confidential information related to cybersecurity and the security of the authorities' physical premises as permitted by the public safety exemptions at Section 2.2-3711-A(19) of the Code of Virginia and confidential performance evaluations, goals and objectives of specific personnel as permitted by the personnel exemption at Section 2.2-3711-A(1) of the Code of Virginia).

<u>Motion\*</u>: I move that the Rivanna Water & Sewer Authority enter into a joint closed session with the Rivanna Solid Waste Authority to discuss confidential information related to cybersecurity and the security of the authorities' physical premises as permitted by the public safety exemptions at Section 2.2-3711-A(19) of the Code of Virginia, and confidential performance evaluations, goals and objectives of specific personnel as permitted by the personnel exemption at Section 2.2-3711-A(1) of the Code of Virginia.

(Motion, second and roll call vote to certify the closed session)

<u>Motion\*</u>: The Rivanna Water and Sewer Authority hereby certifies by recorded vote that, to the best of each member's knowledge, only public business matters lawfully exempted from the open meeting requirements of the Virginia Freedom of Information Act and identified in the motion authorizing the closed meeting were heard, discussed or considered in the closed meeting to which this certification resolution applies.

\* Closed meeting motion subject to change\*

(Complete and close the RWSA meeting, then complete and close the RSWA 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



#### RWSA BOARD OF DIRECTORS Minutes of Regular Meeting June 24, 2025

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was
held on Tuesday, June 24, 2025, at 2:15 p.m. at the Rivanna Administration Building, (2nd Floor
Conference Room), 695 Moores Creek Lane, Charlottesville, VA 22902.

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9 Board Members Present: Mike Gaffney, Sam Sanders, Jeff Richardson, Ann Mallek, Brian
10 Pinkston, Quin Lunsford, Lauren Hildebrand.

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12 Board Members Absent: None.

Rivanna Staff Present: Bill Mawyer, David Tungate, Lonnie Wood, Jennifer Whitaker, Daniel
Campbell, Michelle Simpson, Austin Marrs, Betsy Nemeth, Westley Kern, Leah Beard, Deborah
Anama, Jacob Woodson.

- 18 Attorney(s) Present: Valerie Long
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#### 20 *1. CALL TO ORDER*

Mr. Gaffney convened the June 24, 2025, regular meeting of the Board of Directors of the
 Rivanna Water and Sewer Authority at 2:15 p.m.

#### 25 2. AGENDA APPROVAL

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Ms. Mallek moved that the Board of Directors approve the agenda as presented. Mr. Pinkston seconded the motion, which carried unanimously (7-0).

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#### 3. MINUTES OF PREVIOUS BOARD MEETING ON MAY 27, 2025

Mr. Pinkston noted that these minutes incorrectly referred to "The Board of Supervisors" rather
than "The Board of Directors," so he would request that any references to "The Board of
Supervisors" be corrected to "The Board of Directors."

## Mr. Pinkston moved that the Board of Directors approve the minutes of the May 27, 2025 meeting as amended. Ms. Mallek seconded the motion, which carried unanimously (7-0).

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- 4. RECOGNITION
- a. Resolution of Appreciation for Gregory L. Marrs, Maintenance Manager
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- **Resolution of Appreciation for Gregory L. Marrs**
- WHEREAS Mr. Marrs has served in the Maintenance Department in various positions
   including Laborer, Utility Worker, Painter, Mechanic 3, Vehicle and Equipment Mechanic,

47 Mechanic 2, Mechanic 1, Maintenance Supervisor, Assistant Maintenance Manager, and 48 Maintenance Manager for the Rivanna Water and Sewer Authority for 42 years; and 49 50 WHEREAS over the same period of 42 years, Mr. Marrs' knowledge and understanding 51 of the Authority's Maintenance activities as well as his unwavering dedication and loyalty to the 52 Authority have positively impacted the Authority, its employees, and its customers; and 53 54 WHEREAS Mr. Marrs 'authentic commitment to the Authority's values of Integrity, 55 Teamwork, Respect and Quality has guided his leadership in building a professional, responsive 56 and dynamic Maintenance Department that has provided outstanding support for the Authority 57 as well as our community. 58 59 *NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority* 60 Board of Directors recognizes, thanks, and commends Mr. Marrs for his many years of distinguished service, efforts, and achievements, and presents this Resolution as a token of 61 62 esteem, with its best wishes in his retirement. 63 64 BE IT FURTHER RESOLVED that this Resolution be entered upon the permanent 65 Minutes of the Rivanna Water and Sewer Authority. 66 67 Michael Gaffney, Chairman Lauren Hildebrand 68 69 **Quin Lunsford** 70 Ann Mallek 71 Brian Pinkston 72 Jeff Richardson 73 Sam Sanders 74 75 Ms. Mallek moved that the Board of Directors adopt the Resolution of Appreciation for 76 Gregory L. Marrs, Maintenance Manager. Mr. Sanders seconded the motion, which 77 carried unanimously (7-0). 78 79 Mr. Mawyer stated that Greg had always done a great job and was a nice person to work with, 80 which greatly enhanced the overall process when colleagues could collaborate, communicate, 81 and resolve issues. He stated that Greg's 42 years of experience as a manager and employee had 82 been exemplary, covering nearly every service provided by the Authorities. He stated that they 83 truly appreciated his efforts and would miss him. 84 85 Mr. Marrs stated that he was ready and eager for his retirement. 86 87 5. EXECUTIVE DIRECTOR'S REPORT 88 89 Mr. Mawyer thanked everyone for coming today and helping them move forward as they had 90 transformational projects to consider for approval and planned to discuss many important things 91 happening for the Rivanna Water and Sewer Authority. He stated that with Mr. Marrs' 92 retirement, he also wanted to congratulate Mr. Steve Minnis, Sr., who was selected as the new

- 93 Maintenance Manager through a competitive process. He stated that Mr. Minnis most recently
- served as the Assistant Maintenance Manager during his 33 years of service at Rivanna. He
- 95 congratulated Mr. Minnis and looked forward to seeing more of his outstanding efforts.
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- 97 Mr. Mawyer stated that he also wanted to recognize Conrad Wilson for earning his Class 2
- 98 Wastewater Operator license, and Josh Bowen for becoming a Certified Public Infrastructure
- 99 Inspector by the American Public Works Association. He stated that additionally, he wanted to
- 100 congratulate Duane Houchens for completing his Associate's Degree in Applied Science from
- 101 Mountain Empire Community College. He also welcomed the summer interns, Hannah Young,
- 102 their IT/SCADA intern, and Sofia Beard, their lab intern.
- 103

104 Mr. Mawyer stated that June 30 was Drinking Water and Wastewater Professionals Appreciation

- 105 Day, which recognized the professionals who helped provide water and wastewater services to
- 106 the community 24/7. He stated that it was worth noting that June 1 through November 30 was
- 107 hurricane season for the East Coast, and recently, their staff conducted emergency response
- training and reviewed their emergency operations plan. He added that they were also
- 109 collaborating with Albemarle County Service Authority (ACSA) and the City on regional
- 110 emergency response training.
- 111

112 Mr. Mawyer stated that their lab assisted the City Utilities Department with testing stormwater

- samples, and they were glad to provide that analysis for Ms. Hildebrand's team. He stated that
- 114 infrastructure would be a significant topic for these meetings in the coming months, and it was
- thrilling to see the work actually get started. He stated that displayed on the slide was a photo of
- pipe installation on Hereford Drive and clearing on Reservoir Road for the water pump station site, which would be part of the pipeline from Ragged Mountain to Observatory WTP.
- 117
- 119 Mr. Mawyer stated that the pump station site was a one-acre parcel they had purchased from the
- 120 UVA Foundation a few years ago. He stated that they were trying to get as much work done as
- 121 possible over summer break, so they were focusing on Hereford Drive using trench boxes and a
- 122 process called honeycombing to break up the underground rock before excavating and installing
- 123 the 36-inch water pipe.
- 124

125 Mr. Mawyer stated that Sugar Hollow, where a bladder collapsed last year, was undergoing

- 126 remediation to the piping inside the control room. He stated that the bladder was expected to be
- reinflated and refilled with water this week and next, allowing for the refilling of Sugar Hollow
- 128 Reservoir. He stated that the new crest gate bladder, installed a couple of years ago, sat on top of
- 129 the concrete dam.
- 130
- Mr. Mawyer stated that the Virginia Water Protection Permit, applied for in 2021, had also been
  a topic of discussion, particularly regarding releases from Sugar Hollow Reservoir. He stated that
  the draft permit for the urban water system was open for public comment from May 20 through
- 134 June 19, and it pertained to the water supply for the City and most developed areas of the county.
- 135 He explained that the permit had expired in 2023, and they had to apply for a new one, which
- 136 they had been working on with the Virginia Department of Environmental Quality (DEQ) for
- 137 over four years. He stated that the permit was required by the Virginia DEQ, and it would
- 138 authorize them to complete the pipeline from Rivanna to Ragged Mountain.

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- 140 Mr. Mawyer stated that the permit also regulated the addition of 12 feet (700 MG) of water in the
- 141 Ragged Mountain Reservoir, as well as the closure of the pipe from the Sugar Hollow Reservoir
- 142 that currently supplied water to Ragged Mountain. He stated that the permit also regulated the
- 143 minimum in-stream flow releases from their dams and any impacts related to their work in
- 144 streams and wetlands. He explained that they had previously discussed a similar timeline, but
- 145 they received their first permit in 2008, after the drought and the community decided to build a 146 new dam.
- 147

148 Mr. Mawyer stated that the permit was for 15 years, so it expired in 2023, but the DEQ granted 149 them a continuance until their review for a new permit was completed. He stated they were poised to get the permit approved, which would continue to authorize them to build the Ragged 150 151 to Observatory Pipeline. He stated that the Ragged to Observatory Pipeline was already under 152 construction, and the new permit would authorize the Rivanna to Ragged Pipeline, which they

- 153 projected would be started in 2026 and extend until 2030.
- 154

155 Mr. Mawyer noted that concerns had been raised last week about the water releases from Sugar

156 Hollow and the potential impact on the environment, particularly from the Thomas Jefferson

157 Trout Unlimited organization. He stated that the new permit included provisions that addressed

158 these concerns. He stated that the permit was complex because it anticipated a connected water

159 supply reservoir system, which would be completed once the Rivanna to Ragged pipeline was built.

160 161

162 Mr. Mawyer stated that the permit included multiple sets of thresholds, depending on the stage of

- the project, including requirements for water releases from Sugar Hollow before and after the 163
- 164 dam was completed. He stated that once the dam was completed and Ragged Mountain
- 165 Reservoir was filled to the initial fill level (elev 671), which was their current status, they were

working under these specific criteria. He stated that essentially, their conditions were compared 166

167 to those at Ragged Mountain, and if the storage at Ragged was equal to 1.5 billion gallons, which 168 was their current normal level, and the natural inflow to Sugar Hollow was greater than 5 million

- 169 gallons per day (MGD), then RWSA must release from Sugar Hollow 100% of the natural
- 170 inflow, or 10 million gallons per day, whichever was less.

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172 Mr. Mawyer stated that these conditions had been generally consistent with releases from Sugar 173 Hollow since 2008. He stated that they also depended on the definition of natural inflow, which

174 was calculated based on the release rate from Sugar Hollow necessary to maintain a stable

reservoir elevation when the Ragged Mountain Reservoir pipeline was closed. He stated that this 175

permit sought to balance the need to store enough water to maintain a stable reservoir elevation 176

177 while also releasing as much as necessary into the environment downstream. He stated that the

- 178 balancing act was crucial in their work.
- 179

180 Mr. Mawyer stated that their goal was to avoid the situation that occurred from 1977 to 1979,

181 when the Sugar Hollow Reservoir was subject to a severe drought and the bottom of the reservoir

- 182 was dry. He stated that the caretaker had to open the metal crest gates on the dam to regulate
- 183 water pressure, which was a dangerous task during severe weather events. He stated that now,
- 184 they had an inflatable bladder that automatically adjusted to prevent excessive water pressure. He

- 185 stated that one significant change to their permits over the past 17 years was the Minor
- 186 Modification 4 in 2022, which revised their calculation of natural inflow to Sugar Hollow187 Reservoir.
- 187
- 189 Mr. Mawyer explained that they had discovered that their previous method, which relied on a
- 190 gauge in the Mechums River and extrapolation using a correlation and engineering formula, was
- 191 not very accurate. He stated that this led them to re-evaluate their equation and, in 2022, they
- revised it to better reflect the reservoir's inflow. He stated that the new equation was
- independently validated by DEQ, and they had since applied it to their 2008 and 2025 permits.
- 194
- 195 Mr. Mawyer stated that they always had tried to release sufficient water for the wildlife
- 196 downstream of the reservoir, up to about 290,000 gallons per day. He noted that in the earlier
- 197 permit from 2008, there was a 0.4 mgd release requirement or natural inflow for the period
- 198 before the completion of the Ragged Mountain Reservoir. He stated that this requirement was no
- 199 longer applicable when Ragged Mountain Reservoir was completed in 2015, but they continued
- 200 to release close to the same amount anyway. He stated that in fact, they maintained this release
- rate to this day.
- 202

203 Mr. Mawyer stated that there was no significant change in their 2025 permit application

- 204 compared to the 2008 permit, with the exception of a minor modification in 2022 to how they
- 205 calculated natural inflow. He stated that this topic was discussed last week, and they had 206 responded to several emails from the public attempting to clarify this issue. He stated that
- however, they had yet to receive any comments from the DEQ regarding the public comment
- 208 period, so they would have to wait and see what changes to the permit, if any, would be
- 209 requested by DEQ.
- 210
- 211 Mr. Pinkston asked if they anticipated approval and when it was expected to be completed.
- 212

Mr. Mawyer replied that they anticipated the permit would be approved. He stated that they were required to have a permit, so they hoped it would be soon after the public comments were received and reviewed.

- 215 216
- 217 Mr. Pinkston asked how long the permit would be valid for.
- 218219 Mr. Mawyer stated that it would be a 15-year permit, so it would expire in 2040.
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221 Ms. Mallek stated that while the information that had been reported and the math presented in

- 222 the application were accurate, there were aspects that had not been included. She stated that
- specifically, the intent in 2007-2008 was to never alter the river's flow, as stated by Brian
- Richter, who had worked on the project in 2008. She stated that he had since expressed that this should never have been changed
- 225 226
- 227 Ms. Mallek stated that several factors had contributed to the problems they were facing,
- including the prolonged heat, which could be devastating to the river's ecosystem. She stated that
- 229 without adequate measurement of inflow, the math used to determine the river's needs was
- inherently flawed. She agreed that the downstream Moormans gauge may be better than using

231 the Mechums gauge, but it was still far from the North Fork and South Fork confluence. 232 233 Ms. Mallek stated that even though there may not be visible water on the surface, there was still 234 water beneath the rocks flowing in. She stated that the community felt frustrated because they 235 were not allowed to participate in the same arena as the math, which was their primary concern. 236 She stated that she would like to bring to Mr. Mawyer's attention the difficulties they had 237 discussed in 2023, when they had made accommodations to the river. 238 239 Ms. Mallek stated that it appeared that they were now abandoning those changes, as indicated in 240 their application. She stated that specifically, they were no longer planning to implement the 241 2023 modifications, which had included removing water from the pipe to prevent similar issues. 242 She stated that she would appreciate an update on this matter, as it was still unclear. 243 244 Mr. Mawyer stated that he recalled they discussed only transferring water to Ragged when there 245 was 30 mgd going over the dam. He stated that this was still included in the first amendment of 246 the Ragged Mountain Dam project agreement. 247 248 Ms. Mallek stated that if it was ever spilling, they did not have an issue. She stated that when it 249 was not spilling that there was reason for concern. She stated that regularly people expressed 250 concern that the bladder swelled in the heat of hot days, raising the elevation of the dam and 251 shutting off the spillover. She stated that this then affected the conditions of the river 252 downstream, which was disturbing. She stated that the math may work in theory, but there was 253 no adequate measure of the fluctuating conditions in the river. She stated that she did not want 254 community members to be concerned about RWSA's efforts in managing their water resources, 255 and she wanted to make sure they were doing all they could to make sure it worked. 256 257 Mr. Mawyer stated that he would like to mention that there was a question from the community regarding the Central Water Line Project. He stated that there was a separate cost of \$793,000 258 259 which was solely attributed to City Utilities. He explained that the project was shared between 260 City Utilities and the Albemarle County Service Authority, with the City allocated 48% and the Service Authority allocated 52%. He stated that Ms. Hildebrand's group requested that they 261 262 replace a City water pipe while they had their trench open, and they agreed to do so. 263 264 Mr. Mawyer stated that this work for City Utilities was located on both Lewis Street and 265 Cleveland Avenue. He stated that as a result, they identified this work separately on the bid form, and the contractor bid on it, resulting in an approximate cost of \$793,000. He stated that this was 266 being reported as a sole City Utility charge, as the work was to solely serve the City Utility. 267 268 269 Mr. Pinkston asked if this was something Rivanna had done before. He stated that he understood 270 the logic behind doing it, but he wondered if there was precedent in terms of the process, as it 271 seemed to circumvent the City's Capital Improvement Plan. 272 273 Ms. Hildebrand answered that the project was already identified in the City Utility CIP, and 274 since the opportunity arose to get it done in conjunction with this other work by RWSA, it 275 allowed them to partner and complete these projects more cost efficiently. 276

- 277 Mr. Pinkston asked if this charge would apply to the City's CIP.
- 278

Ms. Hildebrand replied that yes, it would be incorporated into the City Utility debt service, andhad already been factored in.

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Mr. Mawyer noted that they had initially planned to implement a similar partnering approach with City Utilities on East High Street, but they found that there were too many underground utilities in the area. He stated that even now, they were discussing with a partnership with Ms. Hildebrand's group about the possibility of co-locating pipes at the eastern end of East High

Street, where they could install a City water pipe while they were installing an RWSA waterpipe.

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Mr. Mawyer stated that additionally, they were collaborating with the Service Authority on a section where they could install their water pipe simultaneously, and the Service Authority would cover 100% of the cost. He stated that this partnership aimed to be cost effective and also to minimize street disruptions by completing these projects jointly.

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#### 294 6. ITEMS FROM THE PUBLIC: MATTERS NOT LISTED FOR PUBLIC HEARING ON THE AGENDA

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297 Dede Smith stated that she had several questions, but she first wanted to note that it was amazing 298 to her that the Executive Director's comments always seemed to include that something had 299 come up, but there did not even seem to be any pretense about who they all served; it did not 300 appear to be the ratepayers anymore. She stated that she was very frustrated about this. She 301 stated that at the recent City Council meeting on water rates, Michael Payne, a Councilor,

302 expressed concern about the rate increase and asked about the future trend.

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Ms. Smith stated that not a single one of the three City representatives responded and instead sat
 in silence. She stated that brought up the issue during public comment, because it was
 concerning that they did not know the future of the rate increases. She added that the County
 ratepayer was in a much more difficult position due to the rapid rate hikes, and there was a clear

- 308 lack of advocacy for them on the Rivanna Board. She stated that this was evident today when
- 309 they gave a lot of time to assuage the concerns of residents from Western Albemarle, who were 310 not ratepayers.
- 310 311

Ms. Smith stated that in fact, the elected County representatives from that area had consistently represented the interests of the area, cutting off that pipe, which was the only clean raw water

sign represented the interests of the area, editing off that pipe, which was the only clean faw water 314 source in Albemarle County for over a hundred years. She stated that her question today was

regarding representation. She stated that specifically, she would like to know if RWSA had the

- authority to approve this budget, since the City had not reviewed it or approved it yet. She stated
- that City Council had voted on something in June 2022, but it was not this, and it was not phased
- 318 or as detailed.
- 319

320 Ms. Smith stated that her next question was about the replacement of the City water mains, for

- 321 which she appreciated the explanation; however, she had concerns about the connection to the
- 322 Central Water Line, which previously was stated as connecting to the City water lines in the

- 323 south. She asked how they would connect the City water main if the Central Water Line was 10
- 324 feet deep in the road and if they would need further construction to achieve that connection.
- 325

326 Ms. Smith stated that finally, she had a question regarding the presentation on the treatment

- 327 plants. She stated that it was shocking to see the image of clear water going over the South Fork
- 328 Dam, with incredibly silty water on the way to the James River and Chesapeake Bay. She stated
- 329 that she was extremely concerned about the buildup of silt in the South Fork River.
- 330

Ms. Smith stated that they were about to pump this silty water to Ragged Mountain, which did not currently have a silt problem. She noted that silt was a contributing factor to Richmond's recent water crisis, so it should be considered. She summarized that her questions were whether RWSA had the legal authority to vote on this contract when City Council had not approved it, whether there were depth issues with connecting the Central Water Line to City lines, and whether they were doing anything about the silt.

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#### 338 7. RESPONSES TO PUBLIC COMMENTS

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Mr. Mawyer stated that regarding costs, Rivanna was supported 100% by the City and ACSA,
and as a result, all of the RWSA costs are borne by the two parties. He stated that they presented
the RWSA budget including the CIP and the operating budget to the Board, advertised the
budgets for public review and the Board help a public hearing on the budgets before voting to
approve the budgets. He stated that the Board had the authority to approve their CIP contracts.

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346 Ms. Long stated that she would agree.

347

348 Mr. Mawyer explained that regarding the buildup of silt in the South Rivanna Reservoir, they

349 conducted a bathymetric survey every 10 years, using Lidar technology to measure the

topography of the reservoir's bottom. He stated that this data helped them calculate the volume of

351 water in the reservoir, which was part of their water supply and demand study completed each

decade. He stated that they worked with development and planning agencies in the City, County

- 353 and UVA to ensure they had enough water to meet future demands. He added that storms could 354 wash silt out of the reservoir, restoring capacity.
- 355

Mr. Mawyer stated that in their last bathymetric survey, they found more capacity than expected in the South Rivanna Reservoir. South Rivanna's capacity had decreased since its construction in 1966, and a study estimated that they would lose 15 million gallons of capacity annually due to siltation. He stated that they measured silt buildup every 10 years and kept track of it to

360 determine when action may be necessary if the reservoir became overly silted.

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Mr. Mawyer stated that regarding connections to the City water lines, they had at least five
 connections planned to distribute water throughout the City systems from the new Central Water
 Line.

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366 Mr. Gaffney asked if Mr. Mawyer could address Ms. Smith's concern about silty water being367 pumped over to Ragged Mountain Reservoir.

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369	Mr. Mawyer stated that in their operational strategy, once the pipeline was built from Rivanna to
370	Ragged, they would only pump water to Ragged when the water conditions supported it. He
371	stated that if the water was clear, they would pump the clean water to keep Ragged full. He
372	stated that they could pump up to 25 million gallons a day, allowing them to send a significant
373	amount of water to Ragged in a relatively short time; however, after storms, when the water
374	became silty in the South Rivanna Reservoir, they would not pump water to Ragged Mountain.
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377	8. CONSENT AGENDA
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379	a. Staff Report on Finance
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381	b. Staff Report on Operations
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383	c. Staff Report on CIP Projects
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385	d. Staff Report on Administration and Communications
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387	e. Staff Report on Wholesale Metering
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389	f. Staff Report on Drought Monitoring
390	j. Sulj Report on Drought Monitoring
<b>3</b> 91	g. Approval of Engineering Services Work Authorization – Central Water Line Project,
392	<i>Phase 1 Construction Administration Services – Michael Baker International</i>
393	Thuse T Construction Auministration services – Michael Daker International
393 394	Ma Mallak asked if there was a known reason for the recorded spike in urban westerwater during
	Ms. Mallek asked if there was a known reason for the recorded spike in urban wastewater during
395	March of this year.
396	
397	Mr. Mawyer stated that increased rainfall usually led to increased groundwater inflow and
398	infiltration into the wastewater system, resulting in the higher flow of wastewater.
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400	Mr. Pinkston stated that he had a question about Item G. He asked if these were Construction
401	Administration services required to do the work.
402	
403	Mr. Mawyer stated that that was correct.
404	
405	Mr. Pinkston asked if that was reflected in the budget.
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407	Mr. Mawyer replied yes. He stated that the \$79 million budget for the CWL project included the
408	total costs for Phase 1 and Phase 2, which included construction administration costs from their
409	consultants. He stated that these consultants reviewed submittals and assisted them with any
410	problems that arose. He stated that the consultant would attend monthly progress meetings and
411	conduct limited on-site inspections for approximately four years.
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413	Mr. Pinkston moved that the Board of Directors approve the Consent Agenda as presented.
414	Ms. Mallek seconded the motion, which carried unanimously (7-0).

#### 415

#### 416 9. OTHER BUSINESS

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Michelle Simpson, P.E., Senior Civil Engineer, stated that they had been working on this project
since about 2017, so she was glad they were getting ready to move forward with construction.
She stated she would begin with an overall project map of Phase 1 and Phase 2. She stated that
Phase 1 spanned approximately four miles of 30-inch and then 24-inch waterlines, extending to
the intersection of East Market and 10th Street Northeast. She stated that Phase 2 consisted of

Central Water Line Project, Phase One – Sagres Construction

Michelle Simpson, P.E., Senior Civil Engineer

a. Presentation and Consider Vote to Approve: Award of Construction Contract for the

- 427 approximately one mile of 24-inch waterline.
- 428

429 Ms. Simpson explained that they split the project into two phases, initially with an alignment in

- 430 East High Street, but they later determined that alignment was not feasible due to the co-location
- 431 with the City's 12-inch waterline, which left insufficient space for both of those pipes along with
- 432 existing utilities, so they were redesigning the pipe in Phase 2 which would run down Little
- 433 High, Meade, Fairway, and then through a City parcel along the river.
- 434

435 Ms. Simpson explained that the Central Water Line Phase 1 progress involved four miles of 24-

- 436 inch and 30-inch transmission waterlines, which would improve hydraulic efficiency in the urban
- 437 system and enabled the full utilization of the 10 MGD capacity upgrade at the Observatory
- 438 Water Treatment Plant. She stated that with the new, larger pipe, they could now produce water
- 439 at the Observatory WTP and better distribute it in the piping system.
- 440

441 Ms. Simpson stated that after advertising in November of last year and making adjustments

through the addenda to drawings and specifications, they received five bids on May 8, ranging

from approximately \$39.7 million to \$68.5 million. She stated that after following a thorough

444 review, they determined that the low bidder did not meet the experience requirements outlined in

- the specifications; therefore, they were recommending a construction award to Sagres
- 446 Construction of Alexandria, Virginia, for \$47.45 million.
- 447

Ms. Simpson stated that the cost allocation between the City and ACSA waterline work was
noted. She stated that the total Phase 1 budget was \$58 million, which included the engineering
services previously approved for \$1.3 million. She stated that this was solely for Phase 1

451 construction engineering budget, and the remaining \$21 million was allocated towards Phase 2

452 budget. She stated that the overall construction schedule was set to begin this October, with

- 453 completion expected by December 2029.
- 454

455 Ms. Simpson noted that for reference, the specification for Sagres' construction experience

- 456 required demonstrating three projects greater than 5,000 feet, where they installed 24-inch
- 457 ductile iron pipe (DIP) or larger in an urban setting within the last seven years. She stated that
- 458 Sagres was able to provide experience for three separate projects with the same crew, installing
- 459 significant pipe in the last seven years.
- 460

461 Mr. Lunsford asked how the \$58 million budget compared to the \$47.45 million contract with 462 Sagres. 463 464 Ms. Simpson stated that the \$58 million breakdown included easement costs, design costs, 465 construction, administrative, and inspection costs from the engineer, as well as other permitting, 466 legal, and administrative costs. She stated that the total of these expenses amounted to \$58 467 million, and this figure included a 10% construction contingency above the \$47.45 million award 468 amount. 469

# Mr. Richardson moved that the Board of Directors authorize the Executive Director to award a construction contract for IFB #413 (Central Water Line Phase 1) to Sagres Construction Corporation for \$47,450,000 and to approve any change orders to the construction contract necessary to ensure the completion of the work not to exceed 10% of the original construction contract amount. Ms. Hildebrand seconded the motion, which carried unanimously (7-0).

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Austin Marrs, P.E., Senior Civil Engineer, stated that the primary objective of this project was to
raise the normal pool of Ragged Mountain Reservoir by an additional 12 vertical feet, which
would add approximately 700 million gallons to Ragged Mountain Reservoir, bringing its total
capacity to 2.1 billion gallons. He stated that this would be achieved by clearing 12 vertical feet
of trees around the entirety of the reservoir.

486

Mr. Marrs explained that in addition to this main objective, there were several other scope items
included to facilitate the project, which included a blanket drain at the right abutment of the dam,
two concrete boat ramps, and modifications to the riser structure, floating trail bridges, and a full
containment boom. He stated that they were recommending the award of this project to
Faulconer Construction at a contract amount of \$11,018,050.

492

493 Mr. Marrs stated that he would provide a few notes regarding the clearing process. He stated that 494 as he mentioned earlier, it was 12 vertical feet around the entire perimeter of the reservoir, and 495 this was generally shown by the red lines on the attached map. He stated that the green lines on 496 the map represented the existing trails network around the reservoir, which were generally 497 outside of the area to be cleared; however, there were a few areas where the City was actively 498 relocating small spur trails around the reservoir. He stated that to minimize the impacts on these 499 trails, they would be utilizing barges to facilitate contractor access around the reservoir, then the 500 barge would bring logs back to the burn area or to the timber harvesting area, which they would 501 discuss further in the presentation.

- 502
- 503 Mr. Marrs stated that regarding the burning of trees, the contractor had elected to harvest select
- timber from around the reservoir, which would result in a \$100,000 credit on the contract. He
- 505 stated that they did have a time-of-year restriction on tree clearing (allowed November 15 –
- 506 March 31), which was due to the northern long-eared bat, an endangered species; they could not

b. Presentation and Consider Vote to Approve: Award of Construction Contract for the Ragged Mountain Reservoir, Raise Normal Pool Level Project – Faulconer Construction Austin Marrs, P.E., Senior Civil Engineer

- 507 disrupt their mating season and nesting season, so they had this restriction in place and the
- 508 contractor had a four and a half-month window to clear the trees.
- 509
- 510 Mr. Marrs stated that burn boxes were first utilized during the construction of the New Ragged
- 511 Mountain Dam between 2012 and 2014. He stated that these burn boxes were powered by a
- 512 small diesel engine, which burned about a gallon of fuel per hour. He stated that the engine
- 513 essentially functioned as a large fan, which forced air into the box and promoted a high-
- 514 temperature, low-smoke, low-emission burning process.
- 515
- 516 Mr. Marrs stated that any burning conducted would be done in accordance with County and State 517 requirements. He stated that at this point, since the contractor would be harvesting trees, they 518 expected that most of the burning would consist of small trees, scrub brush, and other materials 519 that could not be sold.
- 520
- 521 Mr. Marrs stated that some of the other improvements in the work included enhancements to the 522 riser tower and piping inside the air system. He stated that they would be installing an air release
- 523 valve at the top of the piping, as well as a blind flange to close off the existing 671-foot
- 524 elevation, allowing the water to rise an additional 12 feet. He stated that they would also be
- 525 extending the existing floating trail bridge and spill containment boom at the upper end of the
- reservoir near I-64 to accommodate the additional 12 feet.
- 527

528 Mr. Marrs stated that additionally, they were working with City Parks to perform grading for

- additional parking in the grassy area adjacent to the existing gravel parking lot along Reservoir
   Road. He stated that this would, in turn, provide a fill for the blanket drain that would be
- discussed in the next slide. He stated that the boat ramp work along the left abutment was the
- existing gravel boat ramp. He stated that they would be adding concrete to that, making it
- available for potential future public use to access the reservoir.
- 534
- 535 Mr. Marrs stated that on the right abutment, they would be constructing another concrete boat 536 ramp for their staff use, which would accommodate their sampling boat and operations and 537 maintenance activities. He stated that the blanket drain mentioned earlier involved installing an 538 expanded drainage system along the right abutment. He stated that they had had minor seepage 539 issues in the past, which was common with earthen dams. He stated that to address this, they 540 would be installing a gravel and sand blanket drain system with perforated pipe, to catch and
- 541 discharge water at the plunge pool at the base of the dam.
- 542
- 543 Mr. Marrs provided an overview of the budget and schedule for this project. He stated that the 544 current CIP budget was \$6 million, and the final engineer's estimate was \$7.223 million due to 545 the blanket drain being added. He stated that during the bidding process, they received one bid 546 from Faulconer Construction, which was originally \$12,329,000 and negotiated down to a final 547 amount of \$11,018,050. He stated that their total budget was \$13.2 million, and the construction 548 schedule would be September 2025 through December 2026.
- 549
- 550 Mr. Marrs noted that one additional point he would like to make is that this project was actually
- 551 funded from the overall South Rivanna to Ragged Mountain Pipeline budget; they were not
- 552 currently requesting additional funding. He stated that the remaining work on the pipeline would

553 be bid in the fall of this year. He stated that at that time, they would determine their position 554 within the overall \$123 million budget. 555 556 Mr. Richardson asked what made up the difference between the \$11 million awarded to 557 Faulconer and the total budget of \$13.2 million for this project. 558 559 Mr. Marrs stated that it was similar to their previous discussion with Central Water Line, where 560 they had to account for design, construction administration and inspection and other soft costs, 561 which increased the budget from \$11 million to \$13.2 million. He stated that as with Central 562 Water Line, there would also be a 10% project contingency to cover any unforeseen conditions 563 that may arise. 564 565 Ms. Mallek asked if Mr. Marrs could provide a more detailed explanation of the blanket drain for 566 civilians to understand. She stated that she was assuming it was a large, French drain-like 567 system, but she would like a more precise description. 568 569 Mr. Marrs stated that a cross-section of sand and gravel would allow water to percolate into a 570 perforated pipe, which was a pipe with holes that would collect the water instead of allowing 571 groundwater to sit on top of the earthen dam. He stated that by collecting the water, they could 572 redirect it to the plunge pool, rather than having it accumulate on the dam. 573 574 Ms. Mallek asked if this was part of the original plans for this dam. 575 576 Mr. Marrs stated that a small system was installed during the original dam construction. He 577 stated that they found it was not collecting all of the water, and with the anticipated 12 feet of 578 additional water, this blanket drain would proactively manage how the water drained. 579 580 Ms. Mallek asked if the tree roots in the immediate area were contributing to the seepage 581 channel. 582 583 Mr. Marrs stated that there were a number of subterranean factors contributing to where water 584 was able to migrate through the dam, but he was not sure if the tree roots were a primary issue. 585 He stated that however, there would be some clearing required to install the pipes. 586 587 Mr. Gaffney asked how long the bridge would be once the water level was raised 12 feet higher. 588 589 Mr. Marrs stated that he was unsure, but he could find out. (After the meeting, Mr. Marrs 590 responded that the floating trail bridge will get about 60' longer, 30' on each side of the 591 reservoir, as a result of the Pool Raise Project. The bridge will total approximately 290 LF in 592 length.) 593 594 Ms. Mallek asked if the 10% limit for change orders was cumulative, so the total amount 595 associated with change orders could not exceed 10%, rather than each change order being 10% at 596 maximum. 597 598 Mr. Mawyer confirmed that was correct; if the change order costs exceeded 10% of the original

599 600	construction contract award, they would need approval from the Board of Directors to proceed with any further change orders.
601	
602	Ms. Mallek moved that the Board of Directors authorize the Executive Director to award a
603	construction contract to Faulconer Construction Company, Inc., for a total amount of
604	\$11,018,050 (=\$12,329,000, minus \$1,310,950 in reductions) and any change orders to the
605	construction contract necessary for completion of the work not to exceed 10% of the
606	original construction contract award. Mr. Pinkston seconded the motion.
607	
608	
609	The motion carried unanimously (7-0).
610	
611	c. Presentation: Northern Area Utilities Master Plan
612	Jennifer Whitaker, P.E., Director of Engineering and Maintenance Division
613	
614	Jennifer Whitaker, P.E., Director of Engineering and Maintenance Division, stated that she
615	would discuss the Northern Area Utilities Master Plan. She stated that the urban service area was
616	the area of the City and County, as well as the university, to which the RWSA provided
617	wholesale water. She stated that this area served approximately 125,000 people. She stated that
618	on the map shown, they would see the area they served, labeled as water and served by three
619	water treatment plants. She stated that these plants included the North Rivanna Treatment Plant,
620	the South Rivanna Treatment Plant, and the Observatory Treatment Plant.
621	
622	Ms. Whitaker stated that on the wastewater side, the urban area was completely served by the
623	Moores Creek Wastewater Treatment Plant. She noted that the area drained from the south and
624	Crozet and came into the plant via the Moores Creek Pump Station, while the area drained from
625	the north and came into the plant via the Rivanna Pump Station. She stated that the maps were
626	slightly different shapes because the water and sewer service area was not entirely concurrent.
627	
628	Ms. Whitaker stated that the area they were discussing today was the Northern Service Area,
629	which included the most northern part of Albemarle County north of the South Fork Rivanna
630	River. She stated that on the water side, that includes the North Rivanna Water Treatment Plant,
631	the Airport Road Finished Water Pump Station, the North Rivanna Water Line, the Piney
632	Mountain Tank, and on the sewer side, the Powell Creek Interceptor. She stated that the smaller
633	lines shown on the map were the Albemarle County Service Authority waterlines, and there was
634	also an equally sized network of wastewater lines for that area.
635	
636	Ms. Whitaker stated that the Northern Area Utilities Master Plan was developed over several
637	decades, initially during a period of anticipated growth in the northern end of the County just
638	prior to the 2008 economic recession. She stated that after the recession, there was a slow build
639	back to those plans for development in the northern end of the County. She stated that as staff
640	became aware of this, they recognized the need to take a deeper dive into the service needs of
641	this area.
642	
643	Ms. Whitaker explained that the plan was meant to meet four goals. She stated that the first was
<i>с</i> <b>н н</b>	

644 to consider upcoming developments and the resulting utility demands, as well as how those

- 645 demands were changing. She stated that they also aimed to use their water and sewer models to
- 646 predict future infrastructure needs and understand the timing of capital improvement projects.
- 647 She stated that they had a clear idea of which projects might be needed, but they wanted to know
- 648 exactly when they needed to be built and when they would be online to serve their customers.
- 649 She stated that finally, they wanted to compare their current 2024 demands to what was included
- 650 in the 2019 Urban Finished Water Master Plan and understanding the changes that occurred over651 those five years.
- 651 652
- 653 Ms. Whitaker stated that while there was growth throughout the northern area, they focused on
- analyzing the impacts of several key developments, including the North Fork Research
- Discovery Park, Rivanna Station and Rivanna Futures land, and the North Pointe subdivision,which had undergone several large rezonings.
- 656 657
- Ms. Whitaker stated that on the slide was a map of the North Fork Research Park growth area.
- 659 She stated that they have been closely involved with UVA Foundation in understanding their
- 660 phasing plans and rezoning plans. She stated that they had a sewer meter monitoring flow
- 661 coming off the site, allowing them to gauge when development reaches certain growth
- thresholds. She stated that they continued to work with the Foundation as they grew and
- 663 marketed this area.
- 664
- 665 Ms. Whitaker stated that the next image was Rivanna Futures, which they had been discussing 666 with County staff about the potential commercial, office, and light industrial space surrounding 667 the existing Rivanna station and the National Ground Intelligence Center (NGIC). She stated 668 that they continued to monitor the anticipated growth in that space.
- 669
- 670 Ms. Whitaker stated that lastly, they had the North Pointe development, primarily residential
- 671 with a few supporting commercial endeavors. She noted that they had seen at least two zoning 672 changes since they began working on this master plan.
- 673
- 673 674 She stated that as a result of the rezonings throughout the area, they continued to evolve their 675 thinking on planning projects. She stated that the next table showed the expected demand
- difference in 2070 for the three primary growth areas. She stated that in 2019, when they worked
- to project what would happen in this area, they were looking at approximately 250,000 gallons
- 678 per day from these three developments, but they were now looking at approximately 200,000 gallon
- 679 gallons a day. She stated that they had seen a half-million-gallon increase in those three
- 680 developments alone.
- 681
- Ms. Whitaker explained that they then combined the projected demands from the specific
  development areas with those of the larger service area. She stated that as depicted on the table
  displayed, the combined demand in 2070 was a 50% increase, reaching approximately 1.36 mgd.
  She noted that when they looked at the 2030 time horizon, flows went from 0.55 mgd to 1.08
- mdg, a 100% increase in those five years, exceeding the expected 2030 time period.
- 687
- 688 Ms. Whitaker stated that they had been working on this since before the 2008 economic crash,
- 689 gaining a better understanding of what was to come and what it would take to serve this area.
- 690 She stated that as a result, they had a series of projects already in the pipeline, some of which

- 691 were under construction, some were now complete, while others are in the planning stages. She
- 692 stated that the Airport Road Water Line Phase 1 and Finished Water Pump Station were
- 693 completed, and the South Rivanna River Second Crossing was currently under construction. She
- 694 stated that this provided higher capacity and redundancy to the northern area.
- 695
- 696 Ms. Whitaker stated that once the River Crossing project was completed, they would start
- 697 working on implementation of the North Rivanna Water Treatment Plant decommissioning,
- 698 which was under design right now. She stated that they were currently working with the Virginia
- 699 Department of Transportation (VDOT) on the Airport Road Water Line Phase 2, along the
- 700 Berkmar Drive Extended alignment. She stated that this betterment project with VDOT would
- 701 extend the waterline to Airport Road.
- 702

703 Ms. Whitaker stated that additionally, they had the opportunity within the pump station to install 704 a third pump, and that originally, they thought that pump would be needed by 2035 or 2040, but 705 based on their current numbers, they were looking at 2028. She stated that a few other projects 706 that came out of this plan include the first one-million-gallon water storage tank to be located at 707 the Airport Road Pump Station. She stated that this would provide hydraulic support for the 708 entire northern end of the County, as well as areas closer to the South Rivanna Water Treatment 709 Plant.

710

711 Ms. Whitaker stated that as they moved further out in time, they would be looking at the North

712 Rivanna Water Line reinforcement, crossing of the North Rivanna River, surge mitigation for

713 high pressures in the northern end of the County, and eventually, waterline replacement and tank

714 number two at the Airport pump station. She stated that at that point, they would re-evaluate the

715 capital program. She stated that as a reminder, she included some images of the construction of

- 716 the new Airport Road Pump Station. She stated that it was completed in 2024 for approximately \$10 million.
- 717
- 718

719 Ms. Whitaker stated that they operated this pump station between three and four days a week while the North Rivanna Water Treatment Plant remained in service and could be turned on at 720 721 any time. She noted that the two key design features of this pump station were the extra spot for 722 a third pump and the oversized underground cans for the pumps, allowing for the installation of 723 larger pumps as needed. She stated that as previously discussed, the South Rivanna River 724 Crossing was currently under construction. She stated that on the diagram on the bottom right,

725 one could see the pipe will be installed approximately 40 feet under the river.

726

727 Ms. Whitaker stated that the northern area they were discussing today was at the far reaches of 728 the RWSA system. She explained that to serve this area, they needed to enhance the urban

729 system, which in turn supported the suction side of the Airport Road Pump Station. She stated

- 730 that the projects they previously discussed, including the Rivanna River Crossing, Ragged
- 731 Mountain to Observatory waterline, South Rivanna to Ragged Mountain waterline, and Central
- 732 Water Line, all contributed to augmenting and fortifying the urban service area, ultimately
- 733 benefiting the suction side of the Airport Road Pump Station.
- 734

735 Ms. Whitaker stated that on the sewer side, they had analyzed demand conditions, sewer meter 736 data, and factors such as inflow and infiltration (I&I), as well as storm recurrence intervals. She 737 stated that they had also projected sewer demands for 2030, 2045, and 2070. She stated that the 738 good news was that they did not believe they would need to upgrade the sewer system until at 739 least 2045. She stated that at that point, they would be approaching the demand condition, and 740 they would need to consider extensive rehabilitation, continued monitoring, and reducing I&I. 741 742 Ms. Whitaker stated that by 2070, they may need to upgrade the Powell Creek Interceptor, but 743 this was likely to occur between 2045 and 2070, depending on the pipeline's condition. She 744 stated that they may also need to perform intermediate rehabilitation work to maintain the 745 pipeline's lifespan. She stated that overall, they appeared to be in good shape until around 2070. 746 747 Ms. Whitaker stated that the next table had been updated with new numbers and timelines. She 748 stated that it served as a bar graph showing when they expected these various projects to begin 749 construction and completed. She stated that the final table was primarily intended for the staff's 750 reference, as it addressed common questions about capacity, current flows, peak flows, and 751 projected capacities. 752 753 Mr. Pinkston asked if they would have 40 years of water capacity by 2030. 754 755 Ms. Whitaker replied yes; the urban projects, river crossings, and additional pumping projects 756 were slated to be completed around 2030, and once those were all in place, they would have 757 great flexibility in dynamic conditions. 758 759 Ms. Mallek asked if there was already a North Fork Crossing. 760 Ms. Whitaker stated that they had the South Fork River Crossing, and nearby, the North Fork 761 762 River Crossing at Route 29. She stated they did have a pipeline that went under the bridge, 763 taking a sharp left turn near the ACSA pump station and then going under the river. She stated 764 that previously fortified that river crossing near the river access area at Camelot. She stated that 765 they intended to put a second crossing on the other side of the bridge in the case of a storm event. 766 767 d. Presentation: Water Treatment Facilities and Staffing Overview 768 Daniel Campbell, Director of Operations and Environmental Services Division 769 770 Daniel Campbell, Director of Operations and Environmental Services Division, stated that 771 today's presentation focused on the Water Department, covering treatment processes, staffing, 772 and the plants themselves. He stated that they began with a visual representation of the RWSA 773 water system in Albemarle County, which highlighted the three water systems they had in 774 Scottsville, Crozet, and the Urban system. He stated that they owned and operated five raw water 775 storage reservoirs, including three in the Urban system, Sugar Hollow, Ragged Mountain, and 776 South Rivanna, as well as one in Scottsville at Totier Creek and the Beaver Creek Reservoir in 777 Crozet. He noted that the transfer system coming from South Rivanna to Ragged would allow 778 them to move away from the current transfer from Sugar Hollow to Ragged Mountain. 779 780 Mr. Campbell stated that the South Rivanna Water Treatment Plant was a 12 MGD permitted 781 surface water treatment plant located at the end of Woodburn Road. He stated that most people 782 were familiar with this facility, as it was their largest water treatment plant. He stated that the

783 Observatory Water Treatment Plant, a 7.7 MGD conventional surface water treatment plant, was 784 situated on the University of Virginia campus at Observatory Hill.

785

786 Mr. Campbell stated that the North Rivanna Water Treatment Plant, a 2 MGD conventional 787 surface water treatment plant, was located in the northern system, which Ms. Whitaker had just 788 discussed. He stated that the Crozet Water Treatment Plant, a 1.6 MGD conventional surface 789 water treatment plant, served the Crozet community. He stated that they also had a small 790 groundwater system in North Garden, which was the Red Hill Water Treatment Plant, a 10,000-791 gallon hydropneumatic well system. He stated that lastly, they had their smallest conventional 792 surface water treatment plant in Scottsville, with a permitting capacity of 250,000 gallons per 793 dav.

794

795 Mr. Campbell stated that they examined the permitted capacities for the treatment plants,

796 resulting in an urban total of 21.7 MGD. He stated that however, they would focus next on the

797 average production from those plants. He stated that South Rivanna averaged 8.1 MGD in 2024,

798 while Observatory averaged 1.05 MGD, North Rivanna averaged 0.4 MGD, contributing to an

799 Urban total of 9.5 MGD. He stated that the smaller County facilities produced 640,000 gallons

800 per day in Crozet, 50,000 gallons per day in Scottsville, and 2,000 gallons per day in Red Hill,

- 801 totaling 10.2 MGD average production
- 802

803 Mr. Campbell stated that they produced drinking water every day, regardless of the weather 804 conditions. He stated that this picture shown of the left of the slide, taken on a day when the 805 water was clean, and the picture shown on the right, taken after rainfall, which had caused runoff 806 into the South Rivanna Reservoir. He stated that regardless of the weather and runoff, they must 807 produce the same quality finished drinking water; this was what made water treatment unique.

808

809 Mr. Campbell stated that the South Rivanna Pump Station conveyed water from the South

810 Rivanna Reservoir to the treatment plant. He stated that the picture on the left showed the inside

811 of the pump station, featuring four vertical turbine pumps controlled from the control room at the

812 treatment plant. He stated that several of these pumps ran on variable frequency drives (VFD), which allowed operators to control the pump's speed and water flow into the treatment plant.

813

814 815 Mr. Campbell stated that he would next discuss conventional surface water treatment. He

explained that when withdrawing water from a river, creek, or reservoir, the treatment criteria 816

817

differ. He stated that in the conventional setup, the coagulation process began first, when raw 818 water entered the plant. He stated that they would add their coagulant and pH adjustment to

819 initiate the coagulation process. He stated that then, the conventional surface water treatment

820 process involved flocculation, which was the slow mixing of water, coagulant, and pH

821 adjustment. He explained that the goal was to neutralize the surface charges, allowing dirt

- 822 particles to come together and form floc.
- 823

824 Mr. Campbell stated that the water then entered the sedimentation basins, which were larger and

825 had more detention time. He stated that this allowed the formed floce to settle to the bottom,

826 leaving a cleaner product on top that was ready for filtration, the final step of conventional

- 827 surface water treatment. He stated that displayed on the slide was a basic site overview of South
- 828 Rivanna, post upgrade. He stated that the foreground featured the equalization basin and the

- 829 clarifiers, where wastewater was processed.
- 830
- 831 Mr. Campbell stated that they also had the alum and fluoride building, a chemical storage
- 832 facility, and the sodium hypochlorite or chlorine feed building. He stated that the water
- administration building housed the management staff's offices. He stated that the liquid lime
- building was new with construction and housed the tanks. He stated that the main filtration plant
- 835 contained filters, operator control room, high service pumps, and other equipment. He stated that
- the filter press building processed the solids from the clarifiers using a filter press.
- 837

Mr. Campbell stated that they used typical water treatment additives, including aluminum sulfate as a coagulant. He noted that aluminum sulfate had a significant impact on pH levels, so they had to add coagulant to initiate the coagulation process. He stated that to bring the pH back up, they added liquid lime, as the water was acidic. He stated that this required setting the stage at the specific treatment pH that the plant operated at. He stated that they also used chlorine, sodium hypochlorite for disinfection, orthophosphate for corrosion control in the distribution system, and

- 844 hyrdofluorosilic acid (fluoride) for dental health in the water.
- 845

846 Mr. Campbell stated that provided on the slide was a visual representation, where the arrow

- 847 illustrated the direction of travel of the flocculated colloidal particles, dirt in the water, that they
- had taken through the flocculation process, where they had been coagulated and were now
- 849 entering the sedimentation basins where they would settle to the bottom. He stated that the next
- slide showed a water treatment jar test, which was a small-scale pilot test that could be used in
- the treatment plant to test out or mimic plant operating conditions on a smaller scale.
- 852
- Mr. Campbell stated that in these jars, they could set different pH levels and coagulant doses, and then mix them to simulate the conditions found in the basins. He stated that by doing so, they could optimize the treatment process and dial in the optimal pH and coagulant dose. He stated that this was a picture of the dual media filters at the Observatory Water Treatment Plant, which were five new filters with construction.
- 857 858

Mr. Campbell stated that prior to the upgrade, the old rapid sand filters had no anthracite cap. He stated that during the renovation project, the under drains were replaced, and new sand and anthracite media were installed. He stated that dual media filters allowed for faster filtration rates and longer filter runs, resulting in less processed wastewater. He stated that they were typically the gold standard that treatment plants strived to use.

864

865 Mr. Campbell stated that they also discussed the seasonal free chlorine residual strategy. He

- stated that they had a general administrative procedure that guided the Water Department
- 867 management staff on how much chlorine to add to the water. He explained that temperature 868 served as a catalyst for chemical reactions, including chlorination in the distribution system. He
- stated that they measured raw water temperature daily at every treatment plant and used this data,
- along with coliform sampling data, to make adjustments to the chlorine dose.
- 871
- 872 Mr. Campbell stated that typically, they increased the chlorine dose in the summertime, as
- 873 chemical reactions occurred faster in warmer water. He stated that in the winter months, when
- the water was cooler, the chlorine stayed in the water longer. He stated that they were able to

- reduce the dosage so that the taste of the water was not affected at the tap. He stated that it was
- about finding the right balance, not exceeding that amount. He stated that Giardia and
- 877 Cryptosporidium were two intestinal parasites that were often linked to waterborne illnesses, and
- they had previously discussed filtration and disinfection methods to address these concerns.
- 879
- 880 Mr. Campbell stated that the reason they discussed these two was that they recently mentioned
- filtration and chlorine disinfection. He stated that Giardia was inactivated by chlorine, but
- 882 Cryptosporidium was not. He stated that you could dose water containing Cryptosporidium with
- chlorine, and it did not inactivate it. He stated that, however, filtration did remove it. He stated
- that the point of these examples was that there was a multi-barrier approach to pathogen removal at the treatment plants, not just disinfection, but also filtration.
- 886

Mr. Campbell stated that next were a couple of pictures of some of the instrumentation at the
treatment plants. He stated that most of the plants were run with online instrumentation, such as
the filter turbidimeters shown on the slide, which measured effluent turbidity off the underside of
the filters. He stated that they also bench checked all these online instruments every day. He

- stated that the picture on the right showed a bench top turbidimeter, where the operator collected
- a sample to verify the accuracy of the online instruments.
- 893

Mr. Campbell stated that the next slide was related to residual disposal at South Rivanna. He stated that residuals processing could be a major bottleneck in the plant's operations. He stated that the filter press in the picture on the left could process residuals at about 20 to 30 gallons per minute, depending on the volume of sludge in the clarifier. He stated that during heavy rainfall events, the amount of residuals processing increased significantly. He stated that currently, when

- they experienced heavy rainfall, they needed to ensure that the levels in the clarifiers were low
- and coordinate with the Solid Waste Authority to arrange for hauling residuals to Moores Creek
- 901 compost yard.
- 902

903 Mr. Campbell stated that when the filter press was running, the solids were pressed and fell onto 904 the conveyor, then fell down through the floor into a roll-off box, which was transported to 905 Moores Creek by the Solid Waste Authority. He stated that the plan for the future is to optimize 906 this process and eliminate some of the choke points by connecting the South Rivanna plant site 907 to the ACSA sewer main by crossing Berkmar. He stated that this was a future project, and there 908 were several projected paths, but the picture shown illustrated the general concept. He stated that 909 it would tie the plant into the sewer system, allowing them to process residuals at over 100 910 gallons per minute.

- 911
- 912 Mr. Campbell stated that this project would greatly improve their situation, regardless of whether 913 storms occurred or not. He stated that they would not have to truck the solids and store them;
- 915 storms occurred of not. He stated that they would not have to truck the solids and store them 914 instead, they would be able to put them directly into the sewer force main and take them to
- 915 Moores Creek, which could process solids more efficiently than South Rivanna's belt press. He
- stated that this project was expected to be approximately 1,000 feet of four-inch force main and a
- 917 pump station, with a budget of around \$1 million. He stated that the completion date was
- 918 expected to be FY27 to FY29.
- 919
- 920 Mr. Campbell stated that the next slide showed the finished water pumps, or high service pumps,

- at South Rivanna. He stated that they were standing on top of the plant clear well, and these
- 922 pumps were picking up water from that clear well. He stated that they were putting it into a
- 923 finished water header, this pipe on the left, and that was going out to distribution. He stated that
- next was an image that showed two types of activated carbon they used in the treatment process.
- He stated that the first was powdered activated carbon (PAC), pictured on the left, a powder
- similar to baby powder, used at the head of the treatment plant for taste and odors, with the goal
- 927 of removing organics through enhanced coagulation.
- 928
- Mr. Campbell stated that when they added PAC, they could remove more organics, resulting in less loading on their granular activated carbon (GAC). He stated that on the right, they had granular activated carbon, found in the pressure vessels. He noted that this was a renewable treatment technology through thermal reactivation. He stated that when their GAC became
- exhausted, they would call their contractor to remove it, re-activate it, and bring it back on site.
- He stated that they would heat it to 1700-1800 degrees Fahrenheit, destroying the absorbed
- 935 organics, and then they would store it and bring it back.
- 936

937 Mr. Campbell stated that this was for organics removal post-filtration. He stated that the raw

938 water from the raw water pump stations came in, and they added the powdered activated carbon

before coagulation. He stated that next was a picture of the granular activated carbon contactors

at South Rivanna. These were four of the 12-40 pressure vessels, each holding 40,000 pounds of

- 941 GAC. He stated that from a department-wide standpoint, South Rivanna had eight 12-40
- 942 contactors, 320,000 pounds of carbon, and an 8 MGD capacity.
- 943

944 Mr. Campbell stated that Observatory had four of those contactors, with a total of 240,000 945 pounds of GAC and a 6 MGD capacity. He stated that Scottsville had full GAC capacity, 946 matching the plant's 0.25 MGD capacity, with two 6,000-pound contactors. He stated that North 947 Rivanna had one 40,000-pound contactor with a 1 MGD capacity. He stated that Crozet had two 948 10-20 pressure vessels, which were 20,000-pound vessels for 40,000 pounds of GAC in service. 949 He stated that however, an upcoming project would add two 1240 pressure vessels for an additional 80,000 pounds of GAC and 2 MGD capacity. He stated that Red Hill was also 950 951 scheduled for renovation projects that would include a 1,000-pound contactor, which would

- 952 enable the full 7,000 gallon per day capacity of the plant.
- 953

Mr. Campbell stated that the next slide showed an aerial view of the Observatory Water Treatment Plant after renovations. He stated that the new chemical building featured all new alum fluoride corrosion inhibitor, permanganate, lime feed systems for the plant. He stated that the pre-treatment building received raw water and initiated the treatment process before it entered the flocculators and sedimentation basins. He stated that the granular activated carbon building housed the four additional 12-40 pressure vessels.

960

961 Mr. Campbell stated that the sedimentation basins had been modified to include plate settlers,

962 increasing the clarification capacity. He stated that the main filtration building contained an

963 operator control room, filters, and finally, the waste basins. He stated that the testing

- 964 requirements for drinking water were extensive, with multiple agencies requiring monthly and
- 965 quarterly reports to the Virginia Department of Health (VDH) and the Virginia Department of
- 966 Environmental Quality (DEQ). He stated that they were required to report the volume of water

973 unregulated contaminants on the central data exchange (CDX). He stated that for FY26, the 974 water operating budget breakdown was split between the Operations and Maintenance (O&M) 975 and debt service. He stated that the urban system had a total of \$23.9 million; Crozet had a total 976 of \$4.9 million for operating costs and debt service; Scottsville had a total of \$1.2 million. 977 978 Mr. Campbell stated that the annual production in the urban system was 3.4 billion gallons, with 979 2 million gallons in Crozet and 17 million gallons in Scottsville. He stated that there was \$3.3 980 million for employee salaries, \$2.5 million for water treatment chemicals, and just under \$1 981 million for utility costs. He stated that when factoring in the annual production from each rate 982 center and the total costs, the production costs for all three systems came out to approximately 983 \$0.42 per 100 gallons. 984 985 Mr. Campbell stated that finally, he would review the staffing in the Water Department. He 986 stated that they had two Class I plants, South Rivanna and Observatory, which required a Class I 987 Operator on-site at all times. He stated that North Rivanna and Crozet, were Class II plants, 988 requiring a Class II operator. He stated that Scottsville was a Class III plant, requiring a Class III 989 Operator, and Red Hill was a Class IV plant. He stated that in total, they had 27 full-time 990 employees in the Water Department, with 22 of those being operators. He noted that they 991 currently had 16 Class I operators, six Class II operators, three relief operators, and four 992 management staff, including the water manager, assistant manager, and two supervisors. 993 994 Ms. Mallek asked if free chlorine residuals were chlorine byproducts that were measured at the 995 end or beginning of the process for water treatment. 996 997 Mr. Campbell answered that they looked across the entire distribution system to measure those 998 residuals. He stated that they looked at water coming into and leaving the system, as well as at 999 the coliform sample sites throughout the system. He clarified that yes, free chlorine was 1000 definitely linked to disinfection byproducts; the higher the amount of free chlorine, the higher the 1001 amount of organics in the finished water, the higher the amount of disinfection byproducts. 1002 1003 Ms. Mallek stated that she was thankful that GAC effectively filtered out those substances. 1004 1005 10. OTHER ITEMS FROM BOARD/STAFF NOT ON THE AGENDA 1006 1007 There were none. 1008 1009 **11. CLOSED MEETING** 1010 1011 There was no reason for a closed meeting.

pumped into treatment plants and distribution systems daily, as well as daily chemical doses,

requirements. He stated that in the distribution system, they conducted total coliform sample

results for water systems. He stated that additionally, they recorded disinfection byproducts and

filtered turbidities, water temperature, pH, chlorine, and disinfection calculations.

Mr. Campbell stated that they also maintained logs of daily treatment and met daily

1012

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- 12. ADJOURNMENT
- At 4:01 p.m., Mr. Pinkston moved that the Board of Directors adjourn the meeting. Ms. Mallek seconded the motion, which carried unanimously (7-0).



#### **MEMORANDUM**

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

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: EXECUTIVE DIRECTOR'S REPORT

**DATE:** JULY 22, 2025

STRATEGIC PLAN PRIORITY: EMPLOYEE DEVELOPMENT

#### **Succession Management**

After a competitive recruitment process, **Matt Walker** was selected as our new Assistant Maintenance Department Manager. Matt has been with RWSA since 2016 and in a Mechanic 2 position since 2018. He has a Class A Commercial Driver's License and has completed numerous courses at Valley VoTech, working toward certification as an Industrial Mechanic Journeyman. Matt is a graduate of Albemarle High School and prior to working at RWSA was the Chief Engineer for Courtyard Marriot, Charlottesville.

#### STRATEGIC PLAN PRIORITY: COMMUNICATION AND COLLABORATION

#### **Emergency Siren System for Sugar Hollow Reservoir**



We recently completed piping upgrades and installation of control system alarms for the rubber crest bladder which sits on top of the concrete dam at Sugar Hollow. The bladder has been fully inflated and the reservoir has fully refilled. We are now installing an emergency siren system in an effort to warn residents and visitors in the area if there is a concern with the bladder or dam. The initial siren system may serve as an interim system until a thorough evaluation and installation of additional siren equipment can be completed. We expect to have the initial siren system installed at the dam by the end of August. Signage will also be installed information will be distributed to residents.

#### VDH 2-Hour Reporting





Training was conducted with our engineering,

maintenance, water and wastewater management staff, along with City Utilities and ACSA managers, to address a new regulation requiring mandatory reporting of any critical equipment failure or malfunction or contaminant release to the Virginia Department of Health's Office of Drinking Water (VDH ODW). Beginning July 1, 2025, this notification to VDH needs to happen no more than 2 hours after the incident occurs. We have notification procedures in place to evaluate and address potential emergencies and required reporting.

#### South Rivanna WTP Tour

On July 10<sup>th</sup>, youth from Triple C Camp in Charlottesville participated in a tour of the South Rivanna WTP. Keith Covington, Water Department Supervisor, gave campers an overview of the plant operations and everything that goes into producing high quality drinking water. The group of teens were engaged and able to ask Keith questions to better understand the complex process.







On June 26<sup>th</sup>, our Safety Manager, George Cheape, attended the Virginia AWWA/VWEA Annual Joint Safety Committee Seminar: "Protecting our Water Workforce" in Newport News. This all-day event included sessions on chemical safety, electrical grounding, and VA811 updates.

The committee's goal is to bring together Virginia's water and wastewater professionals to develop and inform on safety issues that affect people who work in the water sector and the communities they serve. George is a new member of the Virginia AWWA/VWEA Annual Joint Safety Committee.



Safety Training at Newport News

#### STRATEGIC PLAN PRIORITY: ENVIRONMENTAL STEWARDSHIP

#### **PFAS Class Action Litigation Update**

We received our first payment from the PFAS Class Action Litigation. This chart shows the approximate settlement amounts expected over the next 10 years from 3M and Dupont. Our first payment received was from 3M for \$268,977.

Water Treatment Plant	3 M	Dupont
North Rivanna	\$715,000	\$68,000
South Rivanna	\$540,000	\$50,000
Observatory	\$261,000	\$25,000
Crozet	\$168,000	\$16,000
Scottsville	\$44,000	\$4,000
Red Hill	\$0	\$0
Total	\$1.72M	\$0.16 M

#### STRATEGIC PLAN PRIORITY: OPTIMIZATION AND RESILIENCY

#### **Drought Response and Contingency Plan**

Jennifer Whitaker, Engineering Division Director and Bethany Houchens, Water Resources Coordinator updated our "Drought Response and Contingency Plan" for the Urban water system and Crozet. The plan was submitted to VDEQ, and provides guidance to our Rivanna Region on water conservation measures when there are drought conditions.

#### First Aid, CPR, and AED Training



CPR, AED and First Aid training was provided for our staff. This half-day training followed the curriculum of the American Heart Association Heartsaver First Aid CPR AED Program with a 2-year certification. We were pleased to have 86 RWSA staff members participating in this on-site training and certification.

#### STRATEGIC PLAN PRIORITY: PLANNING AND INFRASTRUCTURE

#### **RWSA Laboratory**



The RWSA lab has moved to a leased space at 1216 Harris Street. Our lab will operate at this site temporarily until construction and renovations are completed in our Administration building by end of 2027.



#### Ragged Mtn Reservoir to Observatory WTP Pipe and Pump Station Project

Progress on the pipe installation continues in Hereford Drive near the Observatory WTP.



Partially Backfilled Pipe Trench



Contractor using hoe-ram to break solid rock. Blasting was not feasible in this area.



Contractor installing pipe. Several of the blue steel pieces are installed to create a "restrained joint".



Contractor finishing this section of pipe installation by securing v-bio polywrap, used for corrosion protection.



36" ductile iron pipe ready for installation



#### **MEMORANDUM**

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

### FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND INFORMATION TECHNOLOGY

**REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR** 

SUBJECT: MAY MONTHLY FINANCIAL SUMMARY – FY 2025

DATE: JULY 22, 2025

#### **Financial Snapshot**

The Authority's operating revenues for the first eleven months of this fiscal year are \$901,000 more than the prorated annual budget estimates, and operating expenses are \$1,045,000 over the prorated budget, resulting in an operating deficit of \$144,000. Urban Water flows and operating rate revenue through May are 1.4% over budget estimates. Urban Wastewater flows and operating rate revenue are 5.8% over budget.

Operating and debt service revenues combined total \$886,000 more than budget estimates, and total expenses are \$1,071,000 over budget, resulting in an overall deficit of \$184,000 through May. Revenues and expenses are summarized in the table below:

Actual Month-end Results:	Urban	Urban	Total Other	Total		
	Water	Wastewater	Rate Centers	Authority		
Operations						
Revenues	\$ 10,830,654	\$ 11,417,936	\$ 2,902,137	\$ 25,150,727		
Expenses	(11,494,984)	(10,820,019)	(2,979,704)	(25,294,707)		
Surplus (deficit)	\$ (664,330)	\$ 597,917	\$ (77,567)	\$ (143,980)		
Debt Service						
Revenues	\$ 12,399,277	\$ 10,266,273	\$ 2,750,185	\$ 25,415,735		
Expenses	(12,417,739)	(10,283,397)	(2,754,951)	(25,456,087)		
Surplus (deficit)	\$ (18,462)	\$ (17,124)	\$ (4,766)	\$ (40,352)		
Total						
Revenues	\$ 23,229,931	\$ 21,684,209	\$ 5,652,322	\$ 50,566,462		
Expenses	(23,912,723)	(21,103,416)	(5,734,655)	(50,750,794)		
Surplus (deficit)	\$ (682,792)	\$ 580,793	\$ (82,333)	\$ (184,332)		

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 at the beginning of the fiscal year for certain maintenance agreements and for employer contributions to employees' health savings accounts. The annual \$175,000 payment to UVA for the Observatory lease is made in August. Insurance premiums are paid at the beginning of each quarter.
- B. Personnel Costs (most departments pages 2-12) Urban Water and Urban Wastewater salaries are higher than budgeted due to various changes in operations. Urban Wastewater salaries are also higher due to "leave" payout upon wastewater manager's retirement. Urban Wastewater has incurred \$14,000 in unbudgeted costs for uniforms and leadership training.
- C. Professional Services (Urban Water, Crozet Water, Scottsville Wastewater, Administration/Communication pages 2, 3, 7, 8) Urban Water has incurred \$44,000 in unbudgeted legal fees and \$142,000 in unbudgeted engineering and technical services for sedimentation issues at Glenmore, UVA water quality and the Sugar Hollow raw water line break. Scottsville Wastewater has exceeded the annual budget for engineering and technical services by \$34,700 for a needs assessment and purchase of an influent gate. Crozet Water is \$23,000 over the annual budget for tank inspections and dam engineering services. The Administration department has incurred unbudgeted legal fees of \$19,000, unbudgeted compensation study costs of \$26,700, and excess costs for deputy director recruiting of \$11,000.
- D. Information Technology (Finance/IT page 9) The Finance/IT department has exceeded the annual budget in this category by \$105,600 due to unbudgeted software license renewals.
- E. Operations & Maintenance (Urban Water, Crozet Water, Urban Wastewater, Glenmore Wastewater pages 2, 3, 5, 6) Crozet Water is \$22,500 over the prorated budget in this category due two GAC exchanges. Urban Water is currently \$562,000 over the prorated budget due to some unbudgeted pipeline and appurtenances costs and other repair costs. Urban Wastewater is \$17,000 over the prorated budget on temporary flow metering services. Glenmore Wastewater incurred \$21,600 of unbudgeted equipment repair and replacement costs.
- F. Communication Data & Voice (Urban Water, Scottsville Water, Glenmore Wastewater, Finance/IT – pages 2, 4, 6, 9) – Telephone and data services were inadvertently underbudgeted.
- G. Other Services and Charges (Glenmore Wastewater page 6) Glenmore's utilities and lab analysis expenses are running higher than estimated.

<u>Consolidated</u> <u>Revenues and Expenses Summary</u>			Budget FY 2025	Y	Budget ear-to-Date	Ŷ	Actual ear-to-Date	I	Budget vs. Actual	Variance Percentage
Operating Budget vs. Actual										
	lotes									
Revenues		•		•	~	•		•		o ( oo)
Operations Rate Revenue		\$	25,533,965 120.000	\$	23,406,135 110.000	\$	24,132,214	\$	726,079	3.10%
Lease Revenue Admin., Finance/IT, Maint. & Engineering Revenu	10		120,000 905,200		829,767		131,964 860,381		21,964 30,614	19.97% 3.69%
Other Revenues			667,768		612,121		651,923		39,802	6.50%
Use of Reserves (Water Resources Fund)			-		-		-		-	0.0070
Interest Allocation			165,400		151,617		234,625		83,009	54.75%
Total Operating Revenues		\$	27,392,333	\$	25,109,639	\$	26,011,107	\$	901,469	3.59%
_										
Expenses		<u>~</u>	10 010 000	<u>~</u>	44 740 000	*	44 005	<b>~</b>		
	A, B	\$	12,816,065	\$	11,748,060	\$	11,905,558	\$	(157,498)	-1.34%
Professional Services Other Services & Charges	C G		492,650 4,371,588		451,596 4,007,289		766,095 3,935,678		(314,499) 71,611	-69.64% 1.79%
Communication	F		244,950		224,538		296,893		(72,356)	-32.22%
Information Technology	D		1,470,050		1,347,546		1,388,258		(40,712)	-3.02%
Supplies			51,200		46,933		47,338		(405)	-0.86%
	Α, Ε		6,698,884		6,140,644		6,696,256		(555,612)	-9.05%
Equipment Purchases			316,950		290,538		266,514		24,024	8.27%
Depreciation			930,000		852,500		852,500		-	0.00%
Total Operating Expenses		\$	27,392,337	\$	25,109,642	\$	26,155,090	\$	(1,045,447)	-4.16%
Operating Surplus/(Deficit)	:	\$	(4)	\$	(4)	\$	(143,982)			
Debt Service Budget vs. Actual										
Revenues										
Debt Service Rate Revenue		\$	25,612,554	\$	23,478,175	\$	23,478,180	\$	6	0.00%
Septage Receiving Support - County			109,440		100,320		109,440		9,120	9.09%
Buck Mountain Lease Revenue			10,000		9,167		14,144		4,978	54.30%
Trust Fund Interest			430,300		394,442		339,227		(55,214)	-14.00%
Reserve Fund Interest		¢	1,580,800	*	1,449,067 <b>25,431,170</b>	*	1,474,743	¢	25,677	1.77%
Total Debt Service Revenues		\$	27,743,094	\$	25,431,170	\$	25,415,735	\$	(15,435)	-0.06%
Debt Service Costs										
Total Principal & Interest		\$	16,164,506	\$	14,817,464	\$	17,552,576	\$	(2,735,112)	-18.46%
Reserve Additions-Interest			1,580,800		1,449,067		1,474,743		(25,677)	-1.77%
Debt Service Ratio Charge			725,000		664,583		664,583		-	0.00%
Reserve Additions-CIP Growth Total Debt Service Costs		\$	9,271,960 <b>27,742,266</b>	\$	8,499,297 <b>25,430,411</b>	\$	5,764,184 <b>25,456,087</b>	\$	2,735,112 (25,677)	32.18% - <b>0.10%</b>
Debt Service Surplus/(Deficit)		\$	828	\$	759		(40,352)	Ψ	(20,011)	-0.1070
			Summar	v						
Total Revenues		\$	55,135,427	\$	50,540,808	\$	51,426,842	\$	886,034	1.75%
Total Expenses		*	55,134,603	*	50,540,053	*	51,611,177		(1,071,124)	-2.12%
Surplus/(Deficit)		\$	824	Þ	755	\$	(184,335)			

F

<u>Urban Water Rate Center</u> Revenues and Expenses Summary			Budget FY 2025	Ŷ	Budget ′ear-to-Date	Y	Actual /ear-to-Date		Budget vs. Actual	Variance Percentage
Operating Budget vs. Actual	Notes									
Revenues	NOLES									
Operations Rate Revenue Lease Revenue		\$	11,425,341 90,000	\$	10,473,229 82,500	\$	10,617,085 100,948	\$	143,856 18,448	1.37% 22.36%
Grants Miscellaneous			-		-		8,528 2,735		8,528 2,735	
Use of Reserves (Water Resources Fund) Interest Allocation			- 71,500		- 65,542		101,358		- 35,817	54.65%
Total Operating Revenues		\$	11,586,841	\$	10,621,271	\$	10,830,654	\$	209,384	1.97%
Expenses	_	•	0.570.000	•	0 050 500	•	0 470 700	•	(447 440)	4.07%
Personnel Cost Professional Services	B C	\$	2,570,828 177,000	\$	2,356,592 162,250	\$	2,473,702 370,836	\$	(117,110) (208,586)	-4.97% 128.56%
Other Services & Charges	•		1,076,746		987,017		984,839		2,178	0.22%
Communications	F		89,700		82,225		106,264		(24,039)	-29.24%
Information Technology			109,400		100,283		78,973		21,311	21.25%
Supplies			7,900		7,242		9,719		(2,477)	-34.21%
Operations & Maintenance Equipment Purchases	Α, Ε		3,334,814 23,300		3,056,913 21,358		3,618,727 25,450		(561,814) (4,092)	-18.38% -19.16%
Depreciation			300.000		275,000		275,000		(4,002)	0.00%
Subtotal Before Allocations		\$	7,689,688	\$	7,048,881	\$	7,943,510	\$	(894,629)	-12.69%
Allocation of Support Departments			3,897,153		3,572,391		3,551,475		20,916	0.59%
Total Operating Expenses		\$	11,586,841	\$	10,621,271	\$	11,494,984	\$	(873,713)	-8.23%
Operating Surplus/(Deficit)		\$	0	\$	(0)	\$	(664,330)			
Debt Service Budget vs. Actual Revenues Debt Service Rate Revenue Trust Fund Interest Reserve Fund Interest		\$	12,593,874 185,000 744,800	\$	11,544,385 169,583 682,733	\$	11,544,390 146,139 694,604	\$	6 (23,444) 11,871	0.00% -13.82% 1.74%
Lease Revenue			10,000		9,167		14,144		4,978	54.30%
Total Debt Service Revenues		\$	13,533,674	\$	12,405,868	\$	12,399,277	\$	(6,590)	-0.05%
Debt Service Costs Total Principal & Interest		\$	7,078,274	¢	6,488,418	¢	7,511,350	¢	(1,022,932)	-15.77%
Reserve Additions-Interest		Ψ	744,800	Ψ	682,733	Ψ	694,604	Ψ	(11,871)	-1.74%
Debt Service Ratio Charge Est. New Debt Service - CIP Growth			400,000 5,310,600		366,667		366,667		-	0.00%
Total Debt Service Costs		\$	13,533,674	\$	4,868,050 12,405,868	\$	3,845,118 <b>12,417,739</b>	\$	1,022,932 (11,871)	<u>21.01%</u> -0.10%
Debt Service Surplus/(Deficit)		\$	-	-	-	-	(18,461)	•	(**;***)	
		Ra	te Center S	Sur	nmary					
Total Revenues		\$			23,027,139	\$	23,229,932	\$	202,793	0.88%
Total Expenses		Ψ	25,120,515	Ψ	23,027,139	Ψ	23,912,723	Ψ	(885,584)	-3.85%
Surplus/(Deficit)		\$	0	\$	(0)	\$	(682,791)			
Costs per 1000 Gallons Operating and DS		\$ \$	3.41 7.39			\$ \$	3.64 7.57			
Thousand Gallons Treated			3,397,700		3,114,558		3,157,028		42,470	1.36%
or Flow (MGD)			9.309				9.424			

			Budget FY 2025	Ye	Budget ear-to-Date		Actual ear-to-Date		Budget 5. Actual	Variance Percentage
Operating Budget vs. Actual										
Revenues	lotes									
Operations Rate Revenue		\$	1,420,644	\$	1,302,257	\$	1,302,257	\$	-	0.00%
Lease Revenues		Ŧ	30,000	Ŧ	27,500	Ŧ	31,016	Ŧ	3,516	12.79%
Interest Allocation			8,900		8,158		12,670		4,511	55.30%
Total Operating Revenues	_	\$	1,459,544	\$	1,337,915	\$	1,345,943	\$	8,028	0.60%
Expenses										
Personnel Cost	в	\$	365,428	\$	334,975	\$	346,921	\$	(11,946)	-3.57%
Professional Services	č	Ψ	22,900	Ψ	20,992	Ψ	46,134	Ψ	(25,142)	-119.77%
Other Services & Charges			163,107		149,515		135,840		13,675	9.15%
Communications			19,000		17,417		15,989		1,428	8.20%
Information Technology			35,000		32,083		8,982		23,101	72.00%
Supplies			1,600		1,467		2,595		(1,128)	-76.93%
Operations & Maintenance	Е		426,600		391,050		413,626		(22,576)	-5.77%
Equipment Purchases			3,300		3,025		3,351		(326)	-10.76%
Depreciation			60,000		55,000		55,000		-	0.00%
Subtotal Before Allocations	-	\$	1,096,935	\$	1,005,523	\$	1,028,437	\$	(22,914)	-2.28%
Allocation of Support Departments			362,608		332,390		331,423		968	0.29%
Total Operating Expenses	_	\$	1,459,543	\$	1,337,914	\$	1,359,859	\$	(21,946)	-1.64%
Operating Surplus/(Deficit)	_	\$	1	\$	2	\$	(13,916)			
Debt Service Budget vs. Actual Revenues Debt Service Rate Revenue Trust Fund Interest Reserve Fund Interest		\$	2,590,368 32,400 93,800	\$	2,374,504 29,700 85,983	\$	2,374,504 25,544 87,010	\$	- (4,156) 1,027	0.00% -13.99% 1.19%
Total Debt Service Revenues	-	\$	2,716,568	\$	2,490,187	\$	2,487,058	\$	(3,130)	-0.13%
Total Debit Service Revenues	-	Ψ	2,710,000	Ψ	2,430,107	Ψ	2,407,000	Ψ	(0,100)	-0.1070
Debt Service Costs										
Total Principal & Interest		\$	1,131,172	\$	1,036,908	\$	1,036,908	\$	-	0.00%
Reserve Additions-Interest			93,800		85,983		87,010		(1,027)	-1.19%
Estimated New Principal & Interest			1,491,600		1,367,300		1,367,300		-	0.00%
Total Debt Service Costs		\$	2,716,572	\$	2,490,191	\$	2,491,218	\$	(1,027)	-0.04%
Debt Service Surplus/(Deficit)	=	\$	(4)	\$	(4)	\$	(4,160)	:		
	Da	4.	Conton Cu							
	Ra	ite	Center Su	mn	lary					
Total Devenues		¢	4 470 440	¢	2 000 402	¢	2 022 004	¢	4 000	0.420/
Total Revenues		\$	4,176,112	Ф	3,828,103	Ф	3,833,001	Ф	4,898	0.13%
Total Expenses	-		4,176,115		3,828,105		3,851,077		(22,972)	-0.60%
Surplus/(Deficit)	=	\$	(3)	\$	(2)	\$	(18,076)	:		
Costs per 1000 Gallons		\$	7.20			\$	6.30			
Operating and DS		ъ \$	20.60			ъ \$	17.83			
		Ψ	20.00			Ψ	17.03			
Thousand Gallons Treated			202,697		185,806		215,981		30,175	16.24%
Flow (MGD)			0.555				0.645			
# Rivanna Water & Sewer Authority Monthly Financial Statements - May 2025

		<b></b>								
Scottsville Water Rate Center			Budget	V.	Budget		Actual		Budget	Variance
Revenues and Expenses Summary			FY 2025	Ye	ar-to-Date	Ye	ar-to-Date	V	rs. Actual	Percentage
Operating Budget vs. Actual										
	Notes									
Revenues										
Operations Rate Revenue		\$	741,984	\$	680,152	\$	680,152	\$	-	0.00%
Interest Allocation		-	4,600	<u>^</u>	4,217	<u>*</u>	6,570	<u>_</u>	2,353	55.80%
Total Operating Revenues		\$	746,584	\$	684,369	\$	686,722	\$	2,353	0.34%
Expenses										
Personnel Cost		\$	239,452	\$	219,498	\$	216,518	\$	2,980	1.36%
Professional Services			5,000		4,583		13,270		(8,687)	-189.53%
Other Services & Charges			68,490		62,783		51,156		11,626	18.52%
Communications	F		7,000		6,417		23,489		(17,072)	-266.06%
Information Technology			13,400		12,283		18,964		(6,681)	-54.39%
Supplies			200		183		2,494		(2,310)	-1260.10%
Operations & Maintenance			154,600		141,717		121,036		20,681	14.59%
Equipment Purchases			2,200		2,017		3,046		(1,030)	-51.05%
Depreciation			40,000	<b>^</b>	36,667	<b>^</b>	36,667	<b>~</b>	0	0.00%
Subtotal Before Allocations Allocation of Support Departments		\$	530,342	\$	486,147	\$	486,640	\$	(493)	-0.10%
		*	216,247 746,589	\$	198,226 684,374	\$	197,639 684,279	\$	587 <b>95</b>	0.30%
Total Operating Expenses Operating Surplus/(Deficit)		\$ \$	(5)		(5)	ֆ \$	2,443	Þ	95	0.01%
Operating Surplus/(Dench)		φ	(3)	φ	(3)	φ	2,443	-		
Revenues Debt Service Rate Revenue Trust Fund Interest Reserve Fund Interest		\$	190,416 4,000 7,000	\$	174,548 3,667 6,417	\$	174,548 3,121 7,374	\$	- (546) 957	0.00% -14.89% 14.92%
Total Debt Service Revenues		\$	201,416	\$	184,631	\$	185,043	\$	957 411	0.22%
Total Debt Service Revenues		Ψ	201,410	Ψ	104,001	Ψ	100,040	Ψ	411	0.22 /0
Debt Service Costs										
Total Principal & Interest		\$	148,815	\$	136,414	\$	136,414	\$	-	0.00%
Reserve Additions-Interest		•	7,000	·	6,417	·	7,374		(957)	-14.92%
Estimated New Principal & Interest			45,600		41,800		41,800		-	0.00%
Total Debt Service Costs		\$	201,415	\$	184,630	\$	185,587	\$	(957)	-0.52%
Debt Service Surplus/(Deficit)		\$	1	\$	1	\$	(545)	-		
		_						_		
	R	Rate	Center Su	ımn	nary					
Total Revenues		\$	948.000	¢	869.000	\$	871,764	¢	2,764	0.32%
Total Expenses		Ψ	948,000	Ψ	869,000	Ψ	869,866	Ψ	(862)	-0.10%
i otal Expenses			340,004		009,004		009,000	-	(002)	-0.1070
Surplus/(Deficit)		\$	(4)	\$	(4)	\$	1,898	-		
Conta non 1000 Octions		<u>ب</u>	40.00			¢	44.00			
Costs per 1000 Gallons		\$	43.33			\$	41.92			
Operating and DS		\$	55.02			\$	53.29			
Thousand Gallons Treated			17,230		15,794		16,322		528	3.34%
or			17,200		10,704		10,022		520	0.0470
Flow (MGD)			0.047				0.049			

#### Rivanna Water & Sewer Authority Monthly Financial Statements - May 2025

<u>Urban Wastewater Rate Center</u> Revenues and Expenses Summary			Budget FY 2025	Ŷ	Budget ear-to-Date	Ŷ	Actual ear-to-Date		Budget vs. Actual	Variance Percentage
Operating Budget vs. Actual	│ • Notes									
Revenues										
Operations Rate Revenue		\$	11,007,464	\$	10,090,175	\$	10,672,399	\$	582,223	5.77%
Stone Robinson WWTP			17,768		16,287		13,020		(3,267)	-20.06%
Septage Acceptance			600,000		550,000		518,835		(31,165)	-5.67%
Nutrient Credits Miscellaneous Revenue			50,000		45,833		108,805		62,971	137.39%
Interest Allocation			74,000		67,833		- 104,878		37.044	54.61%
Total Operating Revenues		\$	11,749,232	\$	10,770,129	\$	11,417,936	\$	647,806	6.01%
			, , , ,		-, -, -		, ,		,	
Expenses Personnel Cost	A D	¢	1 615 045	¢	1 400 700	¢	1 506 000	¢	(45,000)	2.06%
Professional Services	Α, Β	\$	1,615,345 35,000	\$	1,480,733 32,083	\$	1,526,029 30,298	Ф	(45,296) 1,785	-3.06% 5.56%
Other Services & Charges			2,721,750		2,494,938		2,477,196		17,742	0.71%
Communications			14,800		13,567		13,604		(37)	-0.28%
Information Technology			95,500		87,542		92,908		(5,366)	-6.13%
Supplies			2,600		2,383		1,915		468	19.65%
Operations & Maintenance	Е		2,190,500		2,007,958		2,024,829		(16,870)	-0.84%
Equipment Purchases			73,500		67,375		67,458		(83)	-0.12%
Depreciation			470,000		430,833		430,833		(0)	0.00%
Subtotal Before Allocations		\$	7,218,995	\$	6,617,412	\$	6,665,070	\$	(47,657)	-0.72%
Allocation of Support Departments		_	4,530,238		4,152,718		4,154,949		(2,231)	-0.05%
Total Operating Expenses Operating Surplus/(Deficit)		\$ \$	<u>11,749,233</u> (1)	\$ \$	<u>10,770,131</u> (1)	\$ \$	10,820,019 597,917	\$	(49,888)	-0.46%
Revenues Debt Service Rate Revenue Septage Receiving Support - County Trust Fund Interest Reserve Fund Interest Total Debt Service Revenues		\$	10,156,560 109,440 208,200 731,800 <b>11,206,000</b>	\$	9,310,180 100,320 190,850 670,817	\$	9,310,180 109,440 163,847 682,806		9,120 (27,003) 11,989	0.00% 9.09% -14.15% 1.79%
			, ,	\$	10,272,167	φ	10,266,273	\$	(5,894)	-0.06%
Debt Service Costs				Þ	10,272,167	φ	10,266,273	\$	(5,894)	
				•						-0.06%
Total Principal & Interest		\$	7,780,072	•	7,131,733		8,843,913		(1,712,180)	<b>-0.06%</b> -24.01%
Reserve Additions-Interest		\$	731,800	•	7,131,733 670,817		8,843,913 682,806			<b>-0.06%</b> -24.01% -1.79%
Reserve Additions-Interest Debt Service Ratio Charge		\$	731,800 325,000	•	7,131,733 670,817 297,917		8,843,913 682,806 297,917		(1,712,180) (11,989) -	-0.06% -24.01% -1.79% 0.00%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth			731,800 325,000 2,368,300	\$	7,131,733 670,817 297,917 2,170,942	\$	8,843,913 682,806 297,917 458,761	\$	(1,712,180) (11,989) - 1,712,180	-0.06% -24.01% -1.79% 0.00% 78.87%
Reserve Additions-Interest Debt Service Ratio Charge		\$ \$	731,800 325,000	•	7,131,733 670,817 297,917		8,843,913 682,806 297,917	\$	(1,712,180) (11,989) -	-0.06% -24.01% -1.79% 0.00%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth <i>Total Debt Service Costs</i>		\$	731,800 325,000 2,368,300 <b>11,205,172</b>	\$ \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b>	\$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b>	\$	(1,712,180) (11,989) - 1,712,180	-0.06% -24.01% -1.79% 0.00% 78.87%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth <i>Total Debt Service Costs</i>		\$	731,800 325,000 2,368,300 <b>11,205,172</b>	\$ \$ \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> <b>759</b>	\$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b>	\$	(1,712,180) (11,989) - 1,712,180	-0.06% -24.01% -1.79% 0.00% 78.87%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth Total Debt Service Costs Debt Service Surplus/(Deficit)		\$ \$ Rat	731,800 325,000 2,368,300 11,205,172 828 te Center S	\$ \$ \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> 759 mary	\$ \$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b> (17,124)	\$	(1,712,180) (11,989) 1,712,180 (11,989)	-0.06% -24.01% -1.79% 0.00% 78.87% -0.12%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth Total Debt Service Costs Debt Service Surplus/(Deficit)		\$	731,800 325,000 2,368,300 11,205,172 828 te Center S 22,955,232	\$ \$ \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> <b>759</b> <b>mary</b> 21,042,296	\$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b> (17,124) 21,684,209	\$	(1,712,180) (11,989) - 1,712,180 (11,989) 641,913	-0.06% -24.01% -1.79% 0.00% 78.87% -0.12% 3.05%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth Total Debt Service Costs Debt Service Surplus/(Deficit)	_	\$ \$ Rat	731,800 325,000 2,368,300 11,205,172 828 te Center S	\$ \$ \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> 759 mary	\$ \$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b> (17,124)	\$	(1,712,180) (11,989) 1,712,180 (11,989)	-0.06% -24.01% -1.79% 0.00% 78.87% -0.12%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth Total Debt Service Costs Debt Service Surplus/(Deficit)		\$ \$ Rat	731,800 325,000 2,368,300 11,205,172 828 te Center S 22,955,232	\$ \$ \$ um \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> <b>759</b> <b>mary</b> 21,042,296	\$ \$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b> (17,124) 21,684,209	\$	(1,712,180) (11,989) - 1,712,180 (11,989) 641,913	-0.06% -24.01% -1.79% 0.00% 78.87% -0.12% 3.05%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth Total Debt Service Costs Debt Service Surplus/(Deficit) Total Revenues Total Expenses Surplus/(Deficit)	_	\$ 8 8 \$	731,800 325,000 2,368,300 11,205,172 828 te Center S 22,955,232 22,955,232 22,954,405 827	\$ \$ \$ um \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> <b>759</b> <b>mary</b> 21,042,296 21,041,538	\$ \$ \$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b> (17,124) 21,684,209 21,103,416 <b>580,793</b>	\$	(1,712,180) (11,989) - 1,712,180 (11,989) 641,913	-0.06% -24.01% -1.79% 0.00% 78.87% -0.12% 3.05%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth Total Debt Service Costs Debt Service Surplus/(Deficit)		\$ \$ Rat	731,800 325,000 2,368,300 11,205,172 828 te Center S 22,955,232 22,954,405	\$ \$ \$ um \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> <b>759</b> <b>mary</b> 21,042,296 21,041,538	\$ \$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b> (17,124) 21,684,209 21,103,416	\$	(1,712,180) (11,989) - 1,712,180 (11,989) 641,913	-0.06% -24.01% -1.79% 0.00% 78.87% -0.12% 3.05%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth Total Debt Service Costs Debt Service Surplus/(Deficit) Total Revenues Total Expenses Surplus/(Deficit) Costs per 1000 Gallons		\$ <b>Rat</b> \$ \$	731,800 325,000 2,368,300 11,205,172 828 te Center S 22,955,232 22,954,405 827 3.47	\$ \$ \$ um \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> <b>759</b> <b>mary</b> 21,042,296 21,041,538	\$ \$ \$ \$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b> (17,124) 21,684,209 21,103,416 <b>580,793</b> 3.29	\$	(1,712,180) (11,989) - 1,712,180 (11,989) 641,913	-0.06% -24.01% -1.79% 0.00% 78.87% -0.12% 3.05%
Reserve Additions-Interest Debt Service Ratio Charge Est. New Debt Service - CIP Growth Total Debt Service Costs Debt Service Surplus/(Deficit) Total Revenues Total Expenses Surplus/(Deficit) Costs per 1000 Gallons Operating and DS		\$ <b>Rat</b> \$ \$	731,800 325,000 2,368,300 11,205,172 828 te Center S 22,955,232 22,954,405 827 3.47 6.77	\$ \$ \$ um \$	7,131,733 670,817 297,917 2,170,942 <b>10,271,408</b> <b>759</b> <b>mary</b> 21,042,296 21,041,538 <b>758</b>	\$ \$ \$ \$ \$	8,843,913 682,806 297,917 458,761 <b>10,283,397</b> (17,124) 21,684,209 21,103,416 <b>580,793</b> 3.29 6.42	\$	(1,712,180) (11,989) - 1,712,180 (11,989) 641,913 (61,878)	-0.06% -24.01% -1.79% 0.00% 78.87% -0.12%

or Flow (MGD)

<u>Glenmore Wastewater Rate Center</u> Revenues and Expenses Summary			Budget FY 2025	Y	Budget ear-to-Date	Y	Actual ear-to-Date		Budget s. Actual	Variance Percentage
Operating Budget vs. Actual										
_	Notes									
Revenues										
Operations Rate Revenue		\$	533,112	\$	488,686	\$	488,686	\$	-	0.00%
Interest Allocation			3,700		3,392		5,162		1,770	52.19%
Total Operating Revenues		\$	536,812	\$	492,078	\$	493,848	\$	1,770	0.36%
Expenses										
Personnel Cost		\$	133,566	\$	122,435	\$	127,655	\$	(5,220)	-4.26%
Professional Services		•	10,000	+	9,167	Ŧ	702	Ŧ	8,465	92.35%
Other Services & Charges	G		41,840		38,353		48,936		(10,582)	-27.59%
Communications	F		3,700		3,392		20,501		(17,109)	-504.45%
Information Technology			14,350		13,154		1,021		12,134	92.24%
Supplies			-		-,		-,		-	
Operations & Maintenance	Е		130,600		119,717		152,170		(32,453)	-27.11%
Equipment Purchases	_		3,500		3,208		3,208		(02,100)	0.00%
Depreciation			40,000		36.667		36,667		0	0.00%
Subtotal Before Allocations		\$	377,556	\$		\$	390.859	\$	(44,766)	-12.93%
Allocation of Support Departments		Ŧ	159,262	Ŧ	145,990	Ŧ	143,629	Ŧ	2,361	1.62%
Total Operating Expenses		\$	536,818	\$	492,083	\$	534,487	\$	(42,405)	-8.62%
Operating Surplus/(Deficit)		\$	(6)		(5)	•	(40,640)	¥	(12,100)	0.0270
<b>Revenues</b> Debt Service Rate Revenue Trust Fund Interest Reserve Fund Interest		\$	48,780 500 -		44,715 458 -		44,715 407 -		(51)	0.00% -11.19%
Total Debt Service Revenues		\$	49,280	\$	45,173	\$	45,122	\$	(51)	-0.11%
Daht Samilas Costs										
Debt Service Costs		•		•		•		•		0.000/
Total Principal & Interest		\$	18,720	\$	17,160	\$	17,160	\$	-	0.00%
Estimated New Principal & Interest			30,560		28,013		28,013		-	0.00%
Reserve Additions-Interest		_	-		-	-	-	<u> </u>	-	0.000/
Total Debt Service Costs		<u>\$</u> \$	49,280	\$ \$	45,173	\$ \$	45,173	\$	-	0.00%
Debt Service Surplus/(Deficit)		Þ	-	φ	-	Þ	(51)	:		
	-	) at a	Conton Cu							
	ſ	kate	Center Su	Imn	lary					
Total Revenues		\$	586,092	¢	537,251	\$	538,970	¢	1,719	0.32%
Total Expenses		Ψ	586,098	Ψ		Ψ	579,661	Ψ	,	-7.89%
			560,096		537,256		579,001		(42,405)	-7.0970
Surplus/(Deficit)		\$	(6)	\$	(5)	\$	(40,691)			
Costs per 1000 Gallons		\$	12.97			\$	12.41			
Operating and DS		\$	14.16			\$	13.46			
Thousand Gallons Treated			41,401		37,951		43,064		5,113	13.47%

T

0.113

0.129

#### Rivanna Water & Sewer Authority Monthly Financial Statements - May 2025

or Flow (MGD)

<u>Scottsville Wastewater Rate Center</u> Revenues and Expenses Summary			Budget FY 2025	Ye	Budget ear-to-Date	Y	Actual ear-to-Date		Budget vs. Actual	Variance Percentage
Operating Budget vs. Actual										
Revenues	Notes									
Operations Rate Revenue Interest Allocation		\$	405,420 2,700	\$	371,635 2,475	\$	371,635 3,989	\$	- 1,514	0.00% 61.16%
Total Operating Revenues		\$	408,120	\$	374,110	\$	375,624	\$	1,514	0.40%
Expenses										
Personnel Cost		\$	133.636	\$	122,499	\$	127,655	\$	(5,156)	-4.21%
Professional Services	с	+	5,000	+	4,583	+	39,923	Ŧ	(35,339)	-771.04%
Other Services & Charges			33,400		30,617		29,508		1,109	3.62%
Communications			3,650		3,346		6,607		(3,261)	-97.46%
Information Technology Supplies			15,150		13,888		1,294		12,593	90.68%
Operations & Maintenance			44,500		40,792		40,043		748	1.83%
Equipment Purchases			3,500		3,208		3,208		(0)	0.00%
Depreciation			20,000		18,333		18,333		(0)	0.00%
Subtotal Before Allocations		\$	258,836	\$	237.266	\$	266,572	¢	(29,306)	-12.35%
Allocation of Support Departments		φ	149.278	φ	136,838	φ	134,507	φ	2.332	1.70%
		¢	- ) -	\$	,	\$	401,079	\$	,	-7.21%
Total Operating Expenses Operating Surplus/(Deficit)		<u>\$</u> \$	<u>408,114</u> 6	<del>ې</del> \$	374,104	<del>ې</del> \$	(25,455)	Þ	(26,974)	-7.21%
Revenues Debt Service Rate Revenue Trust Fund Interest Reserve Fund Interest		\$	32,556 200 3,400	\$	29,843 183 3,117	\$	29,843 170 2,949	\$	- (14) (167)	0.00% -7.46% -5.37%
Total Debt Service Revenues		\$	36,156	\$	33,143	\$	32,962	\$	(181)	-0.55%
Debt Service Costs Total Principal & Interest		\$	7,453	\$	6,832	\$	6,832	\$		0.00%
Reserve Additions-Interest		Ŧ	3,400	Ŧ	3,117	Ŧ	2,949	Ŧ	167	5.37%
Estimated New Principal & Interest			25,300		23.192		23.192		-	0.00%
Total Debt Service Costs		\$	36,153	\$	33,140	\$	32,973	\$	167	0.50%
Debt Service Surplus/(Deficit)		\$	3	\$	3	\$	(11)	•		
		Rate	e Center S	umr	nary					
Total Revenues Total Expenses		\$	444,276 444,267	\$	407,253 407,244	\$	408,586 434,052	\$	1,333 (26,807)	0.33% -6.58%
Surplus/(Deficit)		\$	9	\$	9	\$	(25,466)			
Costs per 1000 Gallons		\$	17.26			\$	21.11			
Operating and DS		\$	18.79			\$	22.84			
Thousand Gallons Treated			23,643		21,673		19,002		(2,671)	-12.32%

0.065

0.057

#### Administration and Communication

Administration and Co	ommunication			Budget FY 2025	Ye	Budget ear-to-Date	Actual ear-to-Date	Budget s. Actual	Variance Percentage
Operating Budge	t vs. Actual		<u>,                                     </u>						
Revenues		Notes							
Payment for Services SWA Miscellaneous Revenue			\$	364,200	\$	333,850	\$ 333,850 6,034	\$ - 6,034	0.00%
	Total Operating Revenues		\$	364,200	\$	333,850	\$ 339,884	\$ 6,034	1.81%
Expenses									
Personnel Cost		А, В	\$	1,348,563	\$	1,236,183	\$ 1,318,246	\$ (82,063)	-6.64%
Professional Services		С		153,250		140,479	206,735	(66,256)	-47.16%
Other Services & Charges				161,100		147,675	117,947	29,728	20.13%
Communications				9,700		8,892	5,300	3,591	40.39%
Information Technology				5,000		4,583	5,192	(609)	-13.29%
Supplies				14,000		12,833	14,639	(1,805)	-14.07%
<b>Operations &amp; Maintenance</b>				57,250		52,479	55,001	(2,522)	-4.81%
Equipment Purchases Depreciation				9,000		8,250 -	8,250 -	-	0.00%
	Total Operating Expenses		\$	1,757,863	\$	1,611,375	\$ 1,731,311	\$ (119,936)	-7.44%

	Depa	rtm	ent Summa	ary	,			
Net Costs Allocable to Rate Centers		\$	(1,393,663)	\$	(1,277,525)	\$ (1,391,427)	\$ 113,902	-8.92
Allocations to the Rate Centers								
Urban Water	44.00%	\$	613,212	\$	562,111	\$ 612,228	\$ (50,117)	
Crozet Water	4.00%	\$	55,747		51,101	55,657	(4,556)	
Scottsville Water	2.00%	\$	27,873		25,550	27,829	(2,278)	
Urban Wastewater	48.00%	\$	668,958		613,212	667,885	(54,673)	
Glenmore Wastewater	1.00%	\$	13,937		12,775	13,914	(1,139)	
Scottsville Wastewater	1.00%	\$	13,937		12,775	13,914	(1,139)	
	100.00%	\$	1,393,663	\$	1,277,525	\$ 1,391,427	\$ (113,902)	

#### Finance and Information Technology

Finance and Informati	<u>on Technology</u>			Budget FY 2025	Ye	Budget ear-to-Date	Actual ear-to-Date	Budget s. Actual	Variance Percentage
Operating Budge	t vs. Actual		<u>[</u>						
Revenues		Notes							
Payment for Services SWA Miscellaneous Revenue			\$	541,000 -	\$	495,917 -	\$ 495,917 2,547	\$ 0 2,547	0.00%
	Total Operating Revenues		\$	541,000	\$	495,917	\$ 498,464	\$ 2,547	0.51%
Expenses									
Personnel Cost		А, В	\$	2,083,478	\$	1,909,855	\$ 1,969,389	\$ (59,534)	-3.12%
Professional Services				42,000		38,500	46,049	(7,549)	-19.61%
Other Services & Charges				46,000		42,167	45,175	(3,009)	-7.14%
Communication		F		65,000		59,583	69,877	(10,293)	-17.28%
Information Technology		D		962,850		882,613	1,068,485	(185,873)	-21.06%
Supplies				14,500		13,292	7,776	5,516	41.50%
<b>Operations &amp; Maintenance</b>				5,000		4,583	6,317	(1,734)	-37.83%
Equipment Purchases Depreciation				7,500		6,875 -	6,875 -	-	0.00%
·	Total Operating Expenses		\$	3,226,328	\$	2,957,467	\$ 3,219,943	\$ (262,475)	-8.88%

	Depa	rtm	ent Summa	ary	,			
Net Costs Allocable to Rate Centers		\$	(2,685,328)	\$	(2,461,551)	\$ (2,721,479)	\$ 259,928	-10.56
Allocations to the Rate Centers								
Urban Water	44.00%	\$	1,181,544	\$	1,083,082	\$ 1,197,451	\$ (114,368)	
Crozet Water	4.00%	\$	107,413		98,462	108,859	(10,397)	
Scottsville Water	2.00%	\$	53,707		49,231	54,430	(5,199)	
Urban Wastewater	48.00%	\$	1,288,957		1,181,544	1,306,310	(124,766)	
Glenmore Wastewater	1.00%	\$	26,853		24,616	27,215	(2,599)	
Scottsville Wastewater	1.00%	\$	26,853		24,616	27,215	(2,599)	
	100.00%	\$	2,685,328	\$	2,461,551	\$ 2,721,479	\$ (259,928)	

#### Rivanna Water & Sewer Authority Monthly Financial Statements - May 2025

#### Maintenance

<u>Maintenance</u>			Budget FY 2025	Budget Year-to-Date	Actual Year-to-Date	Budget s. Actual	Variance Percentage
Operating Budge	et vs. Actual	Notes					
Revenues							
Payment for Services SWA	A		\$ -	\$ -	\$ -	\$ -	
Miscellaneous Revenue			-	-	6,858	6,858	
	Total Operating Revenues		\$ -	\$ -	\$ 6,858	\$ 6,858	
Expenses							
Personnel Cost		в	\$ 1,645,860	\$ 1,508,705	\$ 1,549,429	\$ (40,723)	-2.70%
Professional Services			10,000	9,167	-	9,167	100.00%
Other Services & Charges			29,140	26,712	28,200	(1,488)	-5.57%
Communications			16,200	14,850	18,809	(3,959)	-26.66%
Information Technology			7,500	6,875	3,400	3,475	50.54%
Supplies			3,500	3,208	-	3,208	100.00%
Operations & Maintenance			138,800	127,233	109,336	17,897	14.07%
Equipment Purchases			145,750	133,604	122,137	11,467	8.58%
Depreciation			-	-	-	-	
	Total Operating Expenses		\$ 1,996,750	\$ 1,830,355	\$ 1,831,310	\$ (956)	-0.05%

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et Costs Allocable to Rate Centers		\$ (1,996,750)	\$ (1,830,355)	\$ (1,824,452)	\$ 7,814
Allocations to the Rate Centers					
Urban Water	30.00%	\$ 599,025	\$ 549,106	\$ 547,336	\$ 1,771
Crozet Water	3.50%	69,886	64,062	63,856	207
Scottsville Water	3.50%	69,886	64,062	63,856	207
Urban Wastewater	56.50%	1,128,164	1,034,150	1,030,816	3,335
Glenmore Wastewater	3.50%	69,886	64,062	63,856	207
Scottsville Wastewater	3.00%	59,903	54,911	54,734	177
	100.00%	\$ 1,996,750	\$ 1,830,355	\$ 1,824,452	\$ 5,902

#### Rivanna Water & Sewer Authority Monthly Financial Statements - May 2025

Urban Wastewater

Glenmore Wastewater

Scottsville Wastewater

#### Laboratory

Laboratory			Budget FY 2025		Budget ar-to-Date	Actual ar-to-Date	Budget s. Actual	Variance Percentage
Operating Budget vs. Actual	L							
	Notes							
Revenues								
N/A								
Expenses								
Personnel Cost Professional Services		\$	463,225	\$	424,623 -	\$ 423,620	\$ 1,003 -	0.24%
Other Services & Charges			9,550		8,754	6,638	2,116	24.17%
Communications			1,050		963	2,940	(1,978)	-205.49%
Information Technology			-		-	5,629	(5,629)	
Supplies			1,300		1,192	2,313	(1,121)	-94.08%
Operations & Maintenance Equipment Purchases			133,600 23,900		122,467 21,908	101,148 3,823	21,319 18,085	17.41% 82.55%
Depreciation			23,900		21,900	3,023	10,000	62.55%
Total Operating Expenses		\$	632,625	\$	579,907	\$ 546,112	\$ 33,795	5.83%
	Depar	rtme	ent Summ	ary	,			
Net Costs Allocable to Rate Centers		\$	(632,625)	\$	(579,907)	\$ (546,112)	\$ (33,795)	5.83%
<u>Allocations to the Rate Centers</u> Urban Water Crozet Water Scottsville Water	44.00% 4.00% 2.00%	\$	278,355 25,305 12,653	\$	255,159 23,196 11,598	\$ 240,289 21,844 10,922	\$ 14,870 1,352 676	

297,334

9,489

9,489

632,625 \$

272,556

8,699

8,699

\$

579,907

256,672

8,192

8,192

\$

546,112

15,884

507

507

33,795

47.00%

1.50%

1.50%

100.00% \$

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#### Fnaineerina

<u>Engineering</u>			Budget FY 2025		Budget Year-to-Date		Actual Year-to-Date		Budget s. Actual	Variance Percentage
Operating Budget vs. Actual	]									
	Notes									
Revenues		•		•		•				
Payment for Services SWA		\$ \$	-	\$ \$	-	\$ \$	15,175		15,175	
Total Operating Revenues		\$	-	\$	-	\$	15,175	\$	15,175	
Expenses										
Personnel Cost		\$	2,216,684	\$	2,031,960	\$	1,826,393	\$	205,567	10.12%
Professional Services			32,500		29,792		12,149		17,643	59.22%
Other Services & Charges			20,465		18,760		10,242		8,517	45.40%
Communications			15,150		13,888		13,513		374	2.69%
Information Technology			211,900		194,242		103,410		90,832	46.76%
Supplies			5,600		5,133		5,888		(755)	-14.70%
Operations & Maintenance			82,620		75,735		54,023		21,712	28.67%
Equipment Purchases			21,500		19,708		19,708		0	0.00%
Depreciation			-		-		-		-	
Total Operating Expenses		\$	2,606,419	\$	2,389,217	\$	2,045,327	\$	343,890	14.39%
		Dep	partment S	um	mary					
Net Costs Allocable to Rate Centers		\$	(2,606,419)	\$	(2,389,217)	\$	(2,030,152)	\$	(328,715)	13.76%
Allocations to the Rate Centers										
Urban Water	47.00%	\$	1,225,017	\$	1,122,932	\$	954.172	\$	168.761	
Crozet Water	4.00%	Ŧ	104,257	Ŧ	95,569	Ŧ	81,206	Ŧ	14,363	
Scottsville Water	2.00%		52,128		47,784		40,603		7,181	
Urban Wastewater	44.00%		1,146,824		1,051,256		893,267		157,989	
Glenmore Wastewater	1.50%		39,096		35,838		30,452		5,386	
Scottsville Wastewater	1.50%		39,096		35,838		30,452		5,386	
						\$	2,030,152			

#### Rivanna Water and Sewer Authority Flow Graphs







#### 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 JUNE 2025
- DATE: JULY 22, 2025

#### WATER OPERATIONS:

The average and maximum daily water volumes produced in June 2025 were as follows:

Water Treatment Plant	Average Daily Production (MGD)	Maximum Daily Production in the Month (MGD)
South Rivanna	8.64	10.43 (6/25/2025)
Observatory	1.21	2.13 (6/25/2025)
North Rivanna	<u>0.12</u>	0.41 (6/12/2025)
Urban Total	9.97	12.96 (6/25/2025)
Crozet	0.64	1.05 (6/23/2025)
Scottsville	0.05	0.076 (6/5/2025)
Red Hill	0.0023	0.01 (6/3/2025)
RWSA Total	10.66	-

• All RWSA water treatment facilities were in regulatory compliance during the month of June.

Status of Reservoirs (as of July 16, 2025):

- ▶ Urban Reservoirs are 100% of Total Useable Capacity
  - South Rivanna Reservoir is 100% full
  - Ragged Mountain Reservoir is 100% full
  - Sugar Hollow Reservoir is 100% full (water level lowered to complete bladder piping improvements)
  - ➢ 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 June 2025. Performance of the WRRFs in June was as follows compared to the respective VDEQ permit limits:

WRRF	Average Daily Effluent	Average (pp)		Average Suspende (pp	d Solids	Average A (pp)	
	Flow (MGD)	RESULT	LIMIT	RESULT	LIMIT	RESULT	LIMIT
Moores Creek	9.46	<ql< th=""><th>9</th><th><ql< th=""><th>22</th><th><ql< th=""><th>2.2</th></ql<></th></ql<></th></ql<>	9	<ql< th=""><th>22</th><th><ql< th=""><th>2.2</th></ql<></th></ql<>	22	<ql< th=""><th>2.2</th></ql<>	2.2
Glenmore	0.145	<ql< th=""><th>15</th><th>4.6</th><th>30</th><th>NR</th><th>NL</th></ql<>	15	4.6	30	NR	NL
Scottsville	0.068	<ql< th=""><th>25</th><th>2.8</th><th>30</th><th>NR</th><th>NL</th></ql<>	25	2.8	30	NR	NL
Stone Robinson	0.0005	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 June 2025.

State Annual 2 (lb./yr.) P		Average Monthly Allocation (lb./mo.) *	Moores Creek Discharge June (lb./mo.)	Performance as % of monthly average Allocation*	Year to Date Performance as % of annual allocation
Nitrogen	282,994	23,583	5,594	24%	20%
Phosphorous	18,525	1,636	170	10%	8%

\*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







#### 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: CIP PROJECTS REPORT

DATE: JULY 22, 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: <u>https://www.rivanna.org/wp-content/uploads/2024/06/2025-2029-CIP-Final-Draft.pdf</u>

	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 2026
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	April 2026	April 2028
8	MC Administration Building Renovation and Addition	August 2025	December 2027
9	SRWTP – PAC Upgrades	November 2025	June 2027
10	RMR Pool Raise	September 2025	December 2026
11	Crozet WTP GAC Expansion – Phase I	January 2026	March 2028
12	Central Water Line, Phase 2	March 2026	May 2028
13	MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades	March 2026	October 2027
14	SRR to RMR Pipeline, Intake, and Facilities	February 2026	December 2030
15	Beaver Creek Dam, Pump Station, and Piping	May 2026	January 2030
16	Upper Schenks Branch Interceptor, Phase II	2026	2027

# <u>Summary</u>

17	SRWTP Permanganate Improvements	June 2026	August 2027
18	Glenmore WRRF Phase 1	June 2026	January 2028
19	Dam Concrete and Steel Repairs	January 2026	December 2026
20	SVWRRF Generator	January 2026	June 2027
21	SVWRRF Plant and Piping Upgrades	January 2026	December 2026

#### 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

#### Design and Bidding

- 11. Crozet WTP GAC Expansion Phase I
- 12. Central Water Line, Phase 2
- 13. MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades
- 14. SFRR to RMR Pipeline, Intake, and Facilities
- 15. Beaver Creek Dam, Pump Station, and Piping
- 16. Upper Schenks Branch Interceptor, Phase II
- 17. SRWTP Permanganate Improvements
- 18. Glenmore WRRF Upgrade Phase 1
- 19. Dam Concrete and Steel Repairs
- 20. SVWRRF Generator
- 21. SVWRRF Plant and Piping Upgrades

#### Planning and Studies

- 22. MCAWRRF Biogas Upgrades
- 23. Flood Protection Resiliency Study
- Other Significant Projects
- 24. Urgent and Emergency Repairs
- 25. Security Enhancements

# **Under Construction**

#### 1. <u>Central Water Line, Phase 1</u>

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	Sagres Construction Corporation (Alexandria)
Construction Start:	October 2025
Percent Complete:	1%
Base Construction Contract +	
Change Order to Date = Current Value:	\$47,450,000
Completion:	December 2029
Budget:	\$58 M
Percent Complete: Base Construction Contract + Change Order to Date = Current Value: Completion:	1% \$47,450,000 December 2029

Current Status: Material data sheets are being submitted for approval to begin deliveries.

#### 2. Red Hill Water Treatment Plant Upgrades

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Anderson Construction (Lynchburg)
Construction Start:	January 2025
Percent Complete:	10%
Base Construction Contract +	
Change Order to Date = Current Value:	\$2,067,000 - \$324,625 = \$1,742,375
Completion:	June 2026
Budget:	\$2.05 M

<u>Current Status:</u> Work on the existing pressure tank is complete, and the existing tank is being placed back online. The site plan has been approved, and we are waiting for the building permit to be approved. Construction of the building expansion will begin shortly after the building permit is approved.

#### 3. South Fork Rivanna River Crossing

Design Engineer:	Michael Baker International (Baker)
Construction Contractor:	Faulconer (Charlottesville)
Construction Start:	December 2024
Percent Complete:	18%
Base Construction Contract +	
Change Order to Date = Current Value:	\$4,916,940
Completion:	January 2027
Budget:	\$6.25 M

<u>Current Status</u>: Horizontal Directional Drilling subcontractor has completed the pilot hole for the 1,200 LF directional drill and is now back-reaming to enlarge the opening for the water line. A portion of Old Rio Mills Road will be closed for several months as construction of the new 24" water line begins. Contractor is planning to blast along Old Rio Mills Rd. Review of the blasting plan and acquisition of necessary permits is in progress.

#### 4. <u>Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Pump</u> <u>Station</u>

Design Engineer:	Kimley-Horn
Construction Contractor:	Thalle Construction (North Carolina)
Construction Start:	February 2025
Percent Complete:	8%
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

<u>Current Status</u>: Pipe installation in Hereford Drive near the OBWTP continues during UVA's summer break to minimize impacts on students, faculty, and staff.

#### 5. MCAWRRF Building Upfits and Gravity Thickener Improvements

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	English (Lynchburg, VA)
Construction Start:	May 2025
Percent Complete:	7%
Base Construction Contract+	
Change Order to Date = Current Value:	\$9,821,000 - \$189,500 = \$9,631,500
Completion:	May 2027
Budget:	\$11.8 M

<u>Current Status:</u> The contractor has mobilized equipment and an office trailer to the site and is ordering materials as shop drawings are approved and building permits are issued.

#### 6. MCAWRRF Structural and Concrete Rehabilitation

Design Engineer:	Hazen and Sawyer (Hazen)
Construction Contractor:	WM Schlosser (Hyattsville, MD)
Construction Start:	May 2025
Percent Complete:	5%
Base Construction Contract+	
Change Order to Date = Current Value:	\$13,866,000 - \$898,500 = \$12,967,500
Completion:	May 2027
Budget:	\$15.5 M

<u>Current Status:</u> The contractor has mobilized equipment and an office trailer to the site. Sandblasting and priming of the compost metal structure is underway.

#### 7. Crozet Pump Stations Rehabilitation

Design Engineer: Construction Contractor: Construction Start: Percent Complete: Base Construction Contract+ Wiley | Wilson Waco, Inc. (Sandston, VA) August 2025 5%

Change Order to Date = Current Value:	\$9,583,350
Completion:	April 2028
Budget:	\$12.35 M

<u>Current Status</u>: Equipment submittals are being processed and materials are being ordered. We anticipate lengthy material delivery times.

#### 8. Moores Creek Administration Building Renovation and Addition

Design Engineer:	SEH
Construction Contractor	Martin Horn (Charlottesville)
Construction Start:	August 2025
Percent Complete:	3%
Base Construction Contract+	
Change Order to Date = Current Value	\$22,094,000
Completion:	December 2027
Budget:	\$27.6 M
Construction Start: Percent Complete: Base Construction Contract+ Change Order to Date = Current Value Completion:	August 2025 3% \$22,094,000 December 2027

<u>Current Status</u>: A Notice to Proceed was issued on June 26<sup>th</sup>. Contractor is acquiring an E&S permit and ordering materials as shop drawings are approved. Coordination efforts associated with temporary staff locations and interim network connectivity have begun with mobilization to the site expected to occur in August.

#### 9. <u>SRWTP – PAC Upgrades</u>

Design Engineer:	SEH
Construction Contractor	Waco, Inc (Sandston, VA)
Construction Start:	November 2025
Percent Complete:	0%
Base Construction Contract+	
Change Order to Date = Current Value	\$1,497,000
Completion:	June 2027
Budget:	\$1.82 M

Current Status: Contract documents have been signed and the NTP will be issued this month.

#### 10. RMR Pool Raise

Design Engineer:	Schnabel Engineering
Construction Contractor:	Faulconer Construction (Charlottesville, VA)
Construction Start:	September 2025
Percent Complete:	0%
Base Construction Contract+	
Change Order to Date = Current Value	12,329,000 - 1,310,950 = 11,018,050
Completion:	December 2026
Budget:	\$13.2 M

<u>Current Status:</u> The parties are executing the Contract Documents. An informational meeting for key neighborhood stakeholders and the public will be held in August.

# **Design and Bidding**

#### 11. Central Water Line, Phase 2

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2024
Project Status:	30% Design
Construction Start:	March 2026
Completion:	May 2028
Budget:	\$21 M

<u>Current Status</u>: Survey work is complete, and piping design for the E. High Street area is underway. An additional private easement will be required as well as new easements on two City parcels.

#### 12. Crozet GAC Expansion – Phase I

Design Engineer:	SEH
Project Start:	July 2023
Project Status:	Bidding
Construction Start:	January 2026
Completion:	March 2028
Budget:	\$10 M

<u>Current Status:</u> Construction bids will be received on August 5<sup>th</sup>. A Pre-bid Meeting was held on July 9<sup>th</sup> for prospective bidders. \$7.24 M in grant funds from VDH will be used for this project.

#### 13. 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:	March 2026
Completion:	October 2027
Budget:	\$9.7 M

<u>Current Status</u>: Final design is proceeding on the project, including incorporation of minor improvements to the south side septage receiving facility equipment.

#### 14. SFRR to RMR Pipeline, Intake, and Facilities

Design Engineer:	Kimley Horn/SEH
Project Start:	July 2023
Project Status:	90% Design
Construction Start:	February 2026
Completion:	December 2030
Budget:	\$117 M

<u>Current Status</u>: The Value Engineering Report was submitted to RWSA, and staff are working with the Design Engineer to finalize key decisions as the design progresses towards the bid-ready level.

#### 15. Beaver Creek Dam, Pump Station and Piping Improvements

Design Engineer:	Schnabel Engineering (Dam)
Design Engineer:	Hazen & Sawyer (Pump Station)
Project Start:	February 2018
Project Status:	75% Design
Construction Start:	May 2026
Completion:	January 2030
Budget:	\$62 M

<u>Current Status</u>: Hazen is proceeding with design of the pump station. Final design by Schnabel for the dam spillway upgrades, temporary detour, and spillway bridge is ongoing and accounting for some modifications to the primary spillway and the spillway bridge based on current regulations and comments from VDOT. Discussions with the County have been initiated for acquisition or lease of property for the Pump Station. A significant (\$20 M) construction grant from the NRCS is anticipated. A Value Engineering workshop was held in May 2025 on the raw water pump station and intake structure and results from this workshop are being evaluated to determine what will be included in the design process.

#### 16. Upper Schenks Branch Interceptor, Phase II

Design Engineer:	CHA Consulting
Project Start:	July 2021
Project Status:	Design
Construction Start:	2026
Completion:	2027
Budget:	\$6.4 M for RWSA section; \$11 – 15 M including
	City section

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

#### 17. SRWTP Permanganate Improvements

Design Engineer:	SEH
Project Start:	January 2025
Project Status:	90% Design
Construction Start:	June 2026
Completion:	August 2027
Budget:	\$400,000

<u>Current Status</u>: This project will replace chemical feed equipment at the end of its useful life and increase chemical containment capacity. Design will be completed by the end of this month.

#### 18. <u>Glenmore WRRF Upgrade Phase 1</u>

Design Engineer: Project Start: Project Status: Construction Start: Completion: Budget: SEH March 2025 Preliminary Engineering June 2026 January 2028 \$1.65 M

<u>Current Status</u>: This project will replace wastewater treatment equipment at the end of its useful life and reduce the noise generated from the aeration system blowers.

#### 19. Dam Concrete and Steel Repairs

Design Engineer:	GAI Consultants
Project Start:	January 2025
Project Status:	10% Design
Construction Start:	January 2026
Completion:	December 2026
Budget:	\$1.28 M

<u>Current Status</u>: Structural assessments of the Sugar Hollow, South Rivanna, Lickinghole Creek, and Totier Creek dams were conducted by GAI in March 2025. Draft condition assessment reports are under review by staff.

#### 20. SVWRRF Generator

Wiley Wilson
October 2022
20% Design
January 2026
June 2027
\$0.9 M

<u>Current Status</u>: The Design Engineer has received the Geotechnical Report and is working on the revised design documents. Updated plans and specifications are anticipated in July.

#### 21. SVWRRF Plant and Piping Upgrades

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	July 2025
Project Status:	Work Authorization Development
Construction Start:	January 2026
Completion:	December 2026
Budget:	\$588,000

<u>Current Status</u>: This project will include influent pump station and headworks upgrades, aeration piping rehabilitation, a new storage and chemical feed building, and flood resiliency improvements. The design Work Authorization is being finalized, and a kickoff meeting will be completed in July 2025.

#### **Planning and Studies**

#### 22. MCAWRRF Biogas Upgrades

Design Engineer: Project Start: Project Status: Completion: Budget: SEH October 2021 Preliminary Engineering/Study (99%) December 2024 \$6.2 M

Current Status: RWSA and City staff continue to discuss all available options to reuse biogas.

#### 23. Flood Protection Resiliency Study

Design Engineer:	Hazen
Project Start:	August 2024
Project Status:	Preliminary Engineering/Study
Completion:	Dec 2025
Budget:	\$278,500

<u>Current Status</u>: 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.

## **Other Significant Projects**

#### 24. 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
2024-09	Stillhouse Waterline Erosion @ Ivy Creek	\$200,000
2025-03	Rivanna Interceptor Stream Crossing Repairs	TBD

• <u>RWSA Finished Water ARV Repairs:</u> 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.

- <u>Stillhouse Waterline Erosion at Ivy Creek:</u> In November 2024, it was discovered that the banks of Ivy Creek had experienced significant erosion during some of the heavy rainstorms earlier in the Fall, and that the erosion was now intruding on RWSA's 12" Stillhouse Waterline. The area was temporarily armored with sandbags in December, to protect the waterline from further erosion in the interim. Staff are working with the USACOE to permit a permanent bank stabilization project, which will include placement of large rip-rap along the streambank. Given continued region-wide disaster relief efforts associated with Hurricane Helene, it is anticipated that permits may not be received until Spring 2025. RWSA intends to utilize its On-Call Maintenance Contractor, Faulconer Construction Company, for completion of this work and is seeking funding/reimbursement opportunities through FEMA. USACOE permitted the project on May 7<sup>th</sup>, with a time of year restriction that will not allow the work to start until August.
- <u>Rivanna Interceptor Stream Crossing Repairs</u>: 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.

#### 25. Security Enhancements

Design Engineer:	Hazen & Sawyer
Construction Contractor:	Security 101 (Richmond, VA)
Construction Start:	March 2020
Percent Complete:	90% (WA9), 50% (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> WA9 will include installation of card access on all exterior doors at the South Rivanna WTP and has been amended to include interior doors at the new IT data center. 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. As these discussions are ongoing, staff have submitted appropriate permitting documents to Albemarle County.



#### MEMORANDUM

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

FROM: BETSY NEMETH, DIRECTOR OF ADMINISTRATION AND COMMUNICATIONS

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

SUBJECT: ADMINISTRATION AND COMMUNICATIONS REPORT

DATE: JULY 22, 2025

#### Human Resources

Fiscal year 2025 turnover was 10.1% through June 30, 2025 for the fiscal year beginning on July 1, 2024, which includes two retirements.

Our Personal Management Plan was updated with two changes:

- Section D Compensation Plan & Administration Other Forms of Compensation, On-call Compensation Defines the minimum amount of time to be compensated for phone calls taken during on-call status as 15 minutes.
- Section G Disciplinary Policy Unsatisfactory Work Performance or Misconduct The Human Resources Department determines the need for, and type of disciplinary action based on the circumstances involved. This change will allow for more consistency in disciplinary action practices.

#### **Safety**

Our Safety Manager attended the annual joint Virginia Section American Water Works Association and Virginia Water Environment Association Seminar in Virginia Beach. He is a member of the joint Safety Committee to assist with safety awareness and education at a state level and to network throughout the state.

Our Maintenance team is beginning their OSHA 30 training and are continuing their UTV Safety training. 96 members of our teams have completed their CPS/AED and First Aid training.

#### **Community Outreach**

Our Outreach & Communication Coordinator attended the Community Environmental Education Workshop presented by the Institute for Humane Education in Charlottesville. This workshop discussed how to connect with local teachers and schools and how to design outreach programs.

In June 2025, participants in the University of Virginia's Starr Hill Pathways program came out to tour the South Rivanna Water Treatment Plant. This program works with middle and high school kids to investigate potential career options for the future. We host them each summer and were happy to have them back!



#### MEMORANDUM

# TO:RIVANNA WATER & SEWER AUTHORITY<br/>BOARD OF DIRECTORSFROM:JENNIFER WHITAKER, DIRECTOR OF ENGINEERING &<br/>MAINTENANCEREVIEWED BY:DAVE TUNGATE, DEPUTY EXECUTIVE DIRECTOR<br/>BILL MAWYER, EXECUTIVE DIRECTORSUBJECT:WHOLESALE METERING REPORT FOR JUNE 2025DATE:JULY 22, 2025

The monthly and average daily Urban water system usages by the City and the ACSA for June 2025 were as follows:

	Month	Daily Average	
City Usage (gal)	142,673,977	4,755,799	47.8%
ACSA Usage (gal)	155,841,521	5,194,717	52.2%
Total (gal)	298,515,498	9,950,517	

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 party dating back to the beginning of FY 21, the trailing twelve-month average (extended back to July 2024), 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: Staff detected an issue with Meter Site 14 – Old Lynchburg Road, at the end of June and are working to repair the device. A 3- month average was used for the data from the previous months.





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





TO:RIVANNA WATER & SEWER AUTHORITY<br/>BOARD OF DIRECTORSFROM:BETHANY HOUCHENS, WATER RESOURCES COORDINATORREVIEWED:DAVE TUNGATE, DEPUTY EXECUTIVE DIRECTOR<br/>BILL MAWYER, EXECUTIVE DIRECTORSUBJECT:DROUGHT MONITORING REPORTDATE:JULY 22, 2025

#### State and Federal Drought Monitoring as of July 15, 2025:

• U.S. Drought Monitoring Report: Indicates the City of Charlottesville and Albemarle County are not in drought conditions.



• VDEQ Drought Status Report: Our region is listed as being in a "Normal" level for groundwater, streamflow, reservoir levels, and precipitation.

Drought Indicators and key to Drought Map:



#### **Precipitation & Stream Flows**

	Charlottesville Precipitation				
Year	Month	Observed	Normal (in.)	Departure	Comparison to $N_{\rm comparison} 1 \left( 0 \right)$
		(in.)		(in.)	Normal (%)
2021	Jan - Dec	33.82	41.61	-7.79	-19
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-June	19.59	20.42	-0.83	-4

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

USGS Stream Gaging Station Near the Urban Area (July 9-July 15)				
Gage Name	Rolling 7-day Avg. Stream Flow		Median Daily Streamflow	
	cfs	mgd	cfs	mgd
Mechums River	267.4	172.8	39	25.2
Moormans River	48.7	31.5	18	11.6
NF Rivanna River	123.9	80	31	20
SF Rivanna River	337.9	218.4	81	52.4

Median daily flow: July 15<sup>th</sup> for the period of record (approx. 30 - 80 years)

#### Status of Reservoirs as of July 15, 2025

- ▶ Urban Reservoirs are 100% 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



#### MEMORANDUM

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

#### FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND INFORMATION TECHNOLOGY

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

SUBJECT: REIMBURSEMENT RESOLUTION – CIP FUNDING

#### DATE: JULY 22, 2025

Adoption of the Capital Improvement Plan (CIP) at the regular May meeting allows the Authority to move forward into a period of significant financing activity to fund many of the construction projects identified in the plan. We are currently using proceeds from two previous bond issues, the Series 2021 Bond and the Series 2024 Bond. We do not anticipate having to issue a new bond for the next 12 months. However, as detailed in the approved CIP document, additional debt funding not covered in the current bonds for several projects is required over the next five years.

The attached Resolution of Official Intent (reimbursement resolution) and Exhibit A provide an estimate that as much as \$382.8 million in new debt funding may be needed to finance project costs, which will be implemented in multiple bond issuances over several years as needed. After adding issuance cost requirements, a total of up to \$395 million is the estimated debt financing need. As projects begin, we typically use 100% cash from the capital funds to pay project costs. Occasionally, we use temporary financing before bond sales to fund the projects. Then, after permanent financing is in place, bond proceeds are used to partially <u>pay back</u> cash to the capital fund (or pay off temporary financing) - in essence pay "ourselves" back. This capability to pay ourselves back as each debt issuance takes place is very important to provide financial flexibility and continuity as projects are implemented while also complying with debt covenants and regulations (e.g. arbitrage requirements).

To establish this ability for reimbursement with tax exempt borrowings proceeds, the Authority needs to have a "Reimbursement Resolution" in place each year after the new CIP is adopted. The attached resolution does this and <u>does not</u> specifically authorize the issuance of debt. This resolution does not fix the exact amount of the future debt we will issue, although it is important that we not issue debt in amounts larger than the amount stated in this resolution. The attached resolution states the official intention of the Board to fund projects with debt, and additionally states that some proceeds of this debt, when issued for the purposes of funding projects in the CIP, will be used to pay for costs incurred <u>prior to</u> the date of the debt being issued.

The Authority has routinely adopted similar reimbursement resolutions annually in the past following the last several updates of the CIP that were approved by the Board. The reimbursement resolution included with the Board agenda item is required for tax-exempt bond issues.

#### **Board Action Requested:**

Approve the attached *Resolution of Official Intent to Reimburse Expenditures with Proceeds of a Borrowing*.

Attachment

#### **RESOLUTION OF OFFICIAL INTENT TO REIMBURSE EXPENDITURES WITH PROCEEDS OF A BORROWING**

WHEREAS, Rivanna Water and Sewer Authority (the "Borrower") intends to acquire, construct and equip improvements to its water and sewer system, including without limitation the capital improvement projects described in <u>Exhibit A</u> attached hereto (collectively, the "Project"); and

WHEREAS, plans for the Project have advanced and the Borrower expects to advance its own funds to pay expenditures related to the Project (the "Expenditures") prior to incurring indebtedness and to receive reimbursement for all or a portion of such Expenditures from proceeds of tax-exempt bonds or taxable debt, or both;

#### BE IT RESOLVED BY THE RIVANNA WATER AND SEWER AUTHORITY:

1. The Borrower intends to utilize the proceeds of tax-exempt bonds (the "Bonds") or to incur other debt, in an amount not currently expected to exceed \$395,000,000 to pay all or a portion of the costs of the Project.

2. The Borrower intends that the proceeds of the Bonds be used to reimburse the Borrower for Expenditures with respect to the Project made on or after the date that is no more than 60 days prior to the date hereof. The Borrower reasonably expects on the date hereof that it will reimburse the Expenditures with the proceeds of the Bonds or other debt.

3. Each Expenditure was or will be, unless otherwise approved by bond counsel, either (a) of a type properly chargeable to a capital account under general federal income tax principles (determined in each case as of the date of the Expenditure), (b) a cost of issuance with respect to the Bonds, (c) a nonrecurring item that is not customarily payable from current revenues, or (d) a grant to a party that is not related to or an agent of the Borrower so long as such grant does not impose any obligation or condition (directly or indirectly) to repay any amount to or for the benefit of the Borrower.

4. The Borrower intends to make a reimbursement allocation, which is a written allocation by the Borrower that evidences the Borrower's use of proceeds of the Bonds to reimburse an Expenditure, no later than 18 months after the later of the date on which the Expenditure is paid or the Project is placed in service or abandoned, but in no event more than three years after the date on which the Expenditure is paid. The Borrower recognizes that exceptions are available for certain "preliminary expenditures," costs of issuance, certain <u>de minimis</u> amounts, expenditures by "small issuers" (based on the year of issuance and not the year of expenditure) and expenditures for construction of at least five years.

5. The Borrower intends that the adoption of this resolution confirms the "official intent" within the meaning of Treasury Regulations Section 1.150-2 promulgated under the Internal Revenue Code of 1986, as amended.

6. This resolution shall take effect immediately upon its passage.

July 22, 2025

Summary of the Capital Improvement Plan and financing plan as adopted on May 27, 2025:

	2026 - 2030 Adopted <u>CIP</u>	2025 - 2029 Adopted <u>CIP</u>	<u>Change \$</u>
Project Cost			
Urban Water Projects Urban Wastewater Projects Non-Urban Projects & Shared Total Project Cost Estimates	<pre>\$ 313,243,800 129,409,000 107,625,481 \$ 550,278,281</pre>	\$ 223,391,000 76,585,000 71,024,400 <b>\$ 371,000,400</b>	\$ 89,852,800 52,824,000 36,601,081 <b>\$179,277,881</b>
Funding in place			
Work-in-Progress (paid for) Debt Proceeds Available Cash-Capital Available	\$ 20,750,592 93,239,000 <u>1,000,000</u> \$ 114,989,592	\$ 14,362,040 9,353,800 <u>1,300,000</u> \$ 25,015,840	6,388,552 83,885,200 (300,000) \$ 89,973,752
Financing Needs	\$ 114,365,332	\$ 25,015,840	ع روب وروب و م
Possible Future Reserves Grants New Debt	\$ 11,800,000 40,676,000 382,812,689 \$ 435,288,689	<pre>\$ 12,800,000 24,917,500 308,267,060 \$ 345,984,560</pre>	(1,000,000) 15,758,500 74,545,629 \$ 89,304,129
Total Funding	<u>\$    550,278,281</u>	\$ 371,000,400	\$179,277,881
Percentage of funding in place Ratio of debt to expense Ratio of grant to expense Ratio of cash to expense	20.9% 90.3% 7.4% 2.3%	6.7% 89.5% 6.7% 3.8%	

The undersigned Secretary of the Rivanna Water and Sewer Authority hereby certifies that the foregoing is a true and correct copy of the resolutions adopted by the Board of Directors of the Authority at the regular meeting of the Board of Directors held on **July 22, 2025**.

Name: Samuel Sanders

Title: Secretary, Rivanna Water and Sewer Authority



#### MEMORANDUM

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

#### FROM: BETHANY HOUCHENS, WATER RESOURCES COORDINATOR

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

SUBJECT: APPROVAL OF WAIVER EXTENSION FOR UNIVERSITY OF VIRGINIA ROWING PROGRAMS AND RIVANNA ROWING CLUB

DATE: JULY 22, 2025

In January 2025, the Board granted the University of Virginia rowing programs and the Rivanna Rowing Club a one-year waiver extension to use gasoline-powered safety and launch motors on our S. Rivanna Reservoir until January 27, 2026. The Board noted during its discussion of the request that this waiver has been in place for more than 26 years and was hopeful that the boat motor program can make immediate progress towards transitioning to a fully electric fleet. The Board requested UVA to provide an update regarding the program's progress towards fully utilizing electric motors in six months at the July 22, 2025, Board of Directors meeting.

Mr. Frank Biller, Head Coach and Director of Rowing for the Virginia Rowing Association, has submitted the attached request to extend the waiver until June 2026. His progress report indicates UVA Rowing has purchased one electric motor and decided to purchase three additional electric motors.

#### **Board Action Requested:**

Consider approval to authorize the Executive Director to extend UVA's waiver to allow the use of gasoline-powered safety and coaching launches by the UVA Women's and Men's rowing programs, and the Rivanna Rowing Club until June 2026.

Attachment: Virginia Rowing letter dated July 15, 2025



VIRGINIA ROWING ASSOCIATION 276 Woodlands Road Charlottesville, VA 22901

Rivanna Water and Sewer Authority Attn: Bethany Houchens, Water Resources Manager 695 Moore's Creek Lane Charlottesville, VA 22902

Via Email

Charlottesville, July 15, 2025

## **Project Update "Electrification Rowing Operations"**

Dear Bethany,

As discussed and mandated at the January 2025 RWSA Board Meeting, I wanted to provide a quick update on the status of the projects:

The University of Virginia Women's Rowing team (UVA), The Virginia Rowing Association (men's club team), the Rivanna Rowing Club as well as the Albemarle High School rowing team have decided to move forward with the complete electrification of all coaching and safety launches, as mandated by the RWSA.

As the Director of Rowing I can inform you on the status quo but I can only represent these programs in a limited capacity since I do not have decision authority over them, except The Virginia Rowing Association.

In spring 2025 the men's club team tested and purchased one set complete set up from ELCO (incl. state of the art solid state batteries) for \$25,000. We have been very pleased with the usage and testing so far and decided to purchase an additional three set-ups to equip our safety and coaching launches.

The UVA women's team has decided to also purchase an additional two set-ups for their fleet (they are already using three PureWater set-ups; unfortunately, that company's future is still undecided).

The Rivanna Rowing Club and Albemarle High School have also indicated that they will follow our lead by obtaining an additional two set-ups for their use.

In Summary:

VRA Men's Club Team, total of FOUR set-ups for \$100,000 UVA Women's Team, total of TWO set-ups for \$50,000 RRC and AHS, total of TWO set-ups for \$50,000

Total investment for all rowing teams: \$200,000

I would like to point out that for our sport, that is a significant amount of money since we are already forced to spend most of our resources on expensive and safe equipment. These are expenses that will significantly impact our operation and resources.

Between the fundraising challenge and potential supply chain problems, it is possible that we will not complete the project in its entirety before June 2026.

Our hope would be to obtain a gasoline engine waiver extension until June 2026 to provide us with operational flexibility in case of fundraising issues or supply chain problems.

*Furthermore, we would like to maintain ONE gasoline engine in operation beyond June 2026 for emergency usage.* This would not mean regular usage in practice but for the unexpected inoperability of one or more of the electric set-ups, for emergency towing, for usage for First Responders (Rescue, Law Enforcement etc.), as well as for safety duty during power outages (which still occur frequently) when the electric set-ups cannot be charged.

We are further moving along with a solar-powered solution for the Boathouse and facility, however, at this juncture it is not certain that we would have a direct connection from the solar panels to the dock.

Respectfully,

Virginia Rowing Association

F. Riller

**Frank G. Biller** Director of Rowing Head Coach

# **Strategic Plan Update**

Sugar Hollow Dam & Reservoir

ZIVANNA

AUTHORITIES

Presented to the RSWA and RWSA Boards of Directors

By Betsy Nemeth, Director of Administration & Communications

July 22, 2025
### VISION

To serve the community as a recognized leader in environmental stewardship by providing exceptional water and solid waste services

### MISSION

Our knowledgeable and professional team serves the Charlottesville, Albemarle, and UVA community by providing high-quality water and wastewater treatment, refuse, and recycling services in a financially responsible and sustainable manner

VALUES The Rivanna Water and Sewer Authority and Rivanna Solid Waste Authority are committed to the following values: Integrity Teamwork Respect Quality

## VALUES

- Integrity We are open and transparent, lead by example, and are committed to ethical behavior.
- Teamwork We work collaboratively to help each other succeed and serve the community.
- Respect We treat our fellow employees, customers, business partners, and stakeholders with dignity and respect by embracing their diverse backgrounds and experiences.
- Quality We deliver exceptional services and products, serve our community responsibly, and safeguard natural resources.



# Optimization & Resiliency

Advancing efficient operational processes

#### <u>Total Kjeldahl Nitrogen</u> (TKN)Testing Method

- Reduction in labor time from 12 hours to 3 hours resulting in a savings of \$330 per test.
- Reduction in hazardous waste generation from 2 liters to 25 milliliters.
- Higher capacity can test up to 25 samples at once instead of 14 samples.
- Decrease in cost of supplies from \$200 per test to \$125 per test.
- Average annual cost saving of approximately \$10,000.

Debra Hoyt, Chemist

### Environmental Stewardship

Promote best practices in Sustainability Solar Cells at Rivanna Facilities

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Moores Creek Administration Building

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Fee a de la company

Ragged Mountain Raw Water Pump Station



### <u>Communication &</u> <u>Collaboration</u>

Proactive Communication & Community Involvement

- Riverfest
- Fix A Leak
- Imagine A Day Without WaterTours
  - Blue Ridge School
  - Greer Elementary
  - Peabody School
  - Woodbrook Elementary
  - Mountain View Elementary
  - UVA Starr Hill Pathways Program
  - UVA Public Health
- Social Media Facebook, Instagram
- Press Releases
- Websites
  - Rivanna.org
  - Rivannasolidwaste.org
  - Rivannawater.org



### Planning & Infrastructure

Addressing the evolving drinking water needs of our community

#### Ongoing Community Water Supply Projects

- Ragged Mountain to the Observatory WTP Raw Water Line and Pump Station
- South Fork Rivanna River Crossing
- Ragged Mountain Reservoir Pool Raise
- Central Water Line
- South Rivanna Reservoir to Ragged Mountain Reservoir Pipeline, Intake, and Facilities

**Kimley** »Horn



PUMP ROOM 3D VIEW



RIVANNA WATER AND SEWER AUTHO 695 MOORES CREEK LANE CHARLOTTESVILLE, VIRGINIA 22902 (434) 977-2970



RAGGED MOUNTAIN RAW WATER PUMP STATION

PM04

#### Workforce Development

Develop a professional, highly-skilled, engaged, and diverse team

**Succession Planning** 

### Objective

Continue organizational growth and development of the Authorities by

Recognizing, developing and retaining leadership talent and

#### Strategically planning for our future

#### **Succession Planning Information from 2023**

Presentation from Bill Mawyer to both Boards



#### **Recent Success Stories**





### RSWA Career Ladder



David Rhoades, Solid Waste Manager

#### **RIVANNA WATER & SEWER AUTHORITY** Organizational Chart

FY 2025 – 2026 Adopted Budget



#### **RWSA Career Ladders – Administrative Departments**









**RWSA Finance Team** 



#### **RWSA Career Ladders – Operations Departments**



#### **RWSA Career Ladders – Engineering & Maintenance Departments**





Dyon Vega & Austin Marrs, Engineering

RWSA Maintenance Team



### What's Next?

- Review of staffing needs and succession planning for FY 2027 through FY 2031.
- "Communicate with Impact" training for new Managers.
- Individual leadership coaching for newly promoted Managers.

# **Questions?**