



**RWSA BOARD OF DIRECTORS**  
**Minutes of Regular Meeting**  
**July 28, 2026**

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on July 28, 2026, at 2:33 p.m. at the Albemarle County Service Authority conference room, 168 Spotnap Road, Charlottesville, VA 22911.

**Board Members Present:** Jeff Richardson, Sam Sanders, Lauren Hildebrand, Ann Mallek, Lloyd Snook, and Quin Lunsford (participated remotely).

**Board Members Absent:** Mike Gaffney.

**Rivanna Staff Present:** Bill Mawyer, Dave Tungate, Lonnie Wood, Leah Beard, Daniel Campbell, Westley Kern, Jacob Woodson, Victoria Fort, Jon Williams, Austin Marrs, Deborah Anama, Brian Ayala, Megan Shumate, Rheanna Daily, Marci Thomas, David White, Katie McIlwee, Bethany Houchens, Tom Corrice.

**Attorney(s) Present** Valerie Long

***1. CALL TO ORDER***

Mr. Sanders convened the July 28, 2026 regular meeting of the Board of Directors of the Rivanna Water and Sewer Authority at 2:33 p.m.

***2. AGENDA APPROVAL***

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

**Ms. Mallek moved that the Board of Directors approve the agenda. Mr. Snook seconded the motion, which carried unanimously (5-0). (Mr. Gaffney was absent, Mr. Lunsford was not yet approved to participate remotely)**

Remote participation request from Mr. Lunsford.

Mr. Sanders asked Mr. Lunsford to state his location and reason for his remote participation in today's meeting.

Mr. Lunsford stated he was in Nags Head, North Carolina, for a personal family matter.

**Mr. Snook moved that the Board of Directors allow Mr. Lunsford to participate remotely in the meeting. Ms. Mallek seconded the motion, which carried unanimously (6-0). (Mr. Gaffney was absent)**

31 **3. MINUTES OF PREVIOUS BOARD MEETING ON JUNE 23, 2026**

32 Ms. Long noted there were some technical corrections to the minutes of the previous Board  
33 meeting that had been shared by Mr. Snook, which she could read out if necessary.

34 **Ms. Mallek moved that the Board of Directors approve the minutes of the previous Board**  
35 **Meeting on June 23, 2026, as amended. Mr. Snook seconded the motion, which carried**  
36 **unanimously (6-0). (Mr. Gaffney was absent)**

37 **4. RECOGNITION**

38 *a. Resolution of Appreciation for Ms. Lauren Hildebrand*

39 Mr. Richardson read the Resolution of Appreciation for Ms. Lauren Hildebrand into the record.

40 ***Resolution of Appreciation for Ms. Lauren Hildebrand***

41 ***WHEREAS***, Ms. Hildebrand has served as a member of the Rivanna Water & Sewer  
42 *Authority Board of Directors since June 2017 and;*

43 ***WHEREAS***, over that same period Ms. Hildebrand has demonstrated leadership in water  
44 *and sewer systems and has been a valuable member of the Board of Directors and a resource to*  
45 *the Authority; and*

46 ***WHEREAS***, Ms. Hildebrand's understanding of the operations of the Water & Sewer  
47 *Authority has supported a strategic decision-making process that provided benefits to the*  
48 *customers served by the City of Charlottesville and the community as a whole. Through the*  
49 *leadership and skillful support of Ms. Hildebrand, major regional initiatives, Agreements and*  
50 *projects were completed for the Authorities during her tenure including:*

- 51 • *The "Observatory Water Treatment Plant, Raw Water Pumping and Piping Upgrade*  
52 *Cost and Capacity Allocation Agreement" of 2020 to renovate and expand the water*  
53 *production capacity of the Observatory Water Treatment Plant from 7.7 to 10 mgd, as*  
54 *well as to replace and upgrade the raw water pump stations and pipelines between the*  
55 *Ragged Mountain Reservoir and the Observatory Water Treatment Plant*
- 56 • *The "Northern Area Drinking Water Projects Agreement" of 2022 to allocate costs for*  
57 *construction of capacity and non-capacity drinking water infrastructure projects located*  
58 *north of the South Fork Rivanna River*
- 59 • *The "First Amendment to the Ragged Mountain Dam Project Agreement" of 2023 to*  
60 *increase the community's water supply by adding 700 million gallons to the Ragged*  
61 *Mountain Reservoir*
- 62 • *Major renovations of the South Rivanna, Observatory, Crozet and Red Hill Water*  
63 *Treatment Plants*

- *Construction of the Central Water Line, a major drinking water pipeline to serve the Urban Area*

- *A Strategic Plan for the Authority*

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

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

*Michael Gaffney, Chairman  
Quin Lunsford  
Ann Mallek  
Jeff Richardson  
Samuel Sanders, Jr.  
Lloyd Snook*

Bill Mawyer, Executive Director, stated it had been a pleasure to have Ms. Hildebrand on the Board for nine years. He stated they had worked together, and she and Mr. O'Connell and now Mr. Lunsford had done a lot of good things for the community, and she had been a big part in moving the water supply plan projects forward. He gave Ms. Hildebrand a flower arrangement and stated he hoped she would enjoy her retirement and come back and visit them.

Ms. Hildebrand stated that when she came to Charlottesville 19 years ago, they had some major maintenance issues with all three organizations: the City Utilities, the Service Authority, and Rivanna. She stated she thought they had overcome that. Now, they were on a cadence where they were handling things. For example, City Utilities had rehabbed and replaced almost 45% of their sewer lines, which was a big accomplishment. She stated she was very fortunate to have worked, not only in this job but in her previous job, with some great utility professionals, and it made her love the utility world that she worked in. She stated for that, she was very, very grateful.

## ***5. EXECUTIVE DIRECTOR'S REPORT***

Bill Mawyer, Executive Director, introduced new staff members: Brian Ayala, who was the new Director of Information and Operational Technology, from Bakersfield, California with a BA in Communications from California State University and had worked in the oil industry. Mr. Ayala stated he was happy to join Rivanna Authorities and to help protect the work of RWSA, the environment and the community.

Mr. Mawyer introduced Megan Shumate, the new Human Resources Manager, who came to them from Pennsylvania with a BS in General Psychology from the University of Pennsylvania; and Rheanna Daily, the new Grants Program Coordinator, who was coming to them from Alaska with a BA in Human Development from the New York State University at Oswego.

102 Ms. Daily stated she worked with the Kenaitze Indian Tribe, a Native American sovereign  
103 nation, and with their elder's program, doing a lot of grant work and advocacy for that  
104 community, and really found a passion in both areas.

105 Mr. Mawyer also introduced Marci Thomas, the new Engineering Construction Inspector, who  
106 had a BS in Business from the State University of New York and many years of construction  
107 experience.

108 Mr. Mawyer reported that their organization recently held an emergency response training  
109 session with all their management team to review their Rivanna Emergency Operations Plan and  
110 their Continuity of Operations Plan. He stated that in a 24/7/365 environment in which they  
111 worked, they had to plan and train for emergencies. He explained that they had designated the  
112 South Rivanna Water Treatment Plant as their backup headquarters. They had IT and other  
113 facilities there in case they needed to relocate headquarters from Moores Creek to South Rivanna  
114 Water Treatment Plant, with the Observatory Treatment Plant as the next backup.

115 Mr. Mawyer stated they had completed several community education events recently. Mr.  
116 Tungate gave a presentation to the Pantops Community Advisory Committee about some of their  
117 projects. They were also pleased to give a facility tour to their new Water and Sewer Board  
118 member, Jason McIlwee. He congratulated Mr. McIlwee on his appointment as Director of  
119 Utilities for the City, and noted that they looked forward to having Jason on the Board.

120 Mr. Mawyer stated that they added information on their webpage to explain how wholesale  
121 water and sewer charges were developed each year. The information reviewed their Capital  
122 Improvement Program costs as a significant driver of their charge increases.

123 Mr. Mawyer stated that he was pleased to report that two of their employees, Kenny Lawhorne  
124 and Rich McElfresh, were recently certified as state vehicle safety inspectors. They could now  
125 inspect vehicles for the Rivanna organization, an optimization from which they would benefit  
126 from thru reduced operational costs.

127 Mr. Mawyer reported that much construction was still ongoing, full speed ahead. He shared  
128 photos of the Administration Building and the addition. They were getting the fiberboard on the  
129 outside of the addition, and they poured concrete this week on the first floor of the existing  
130 building.

131 Mr. Mawyer reported that the Central Water Line was making progress. Water line installation  
132 had turned the corner from Jefferson Park Avenue onto Cleveland Ave headed toward Cherry  
133 Avenue. He stated that the new pump station on Reservoir Road was going up and the water  
134 lines were being installed on Woodburn Road to bring water from the Rivanna Reservoir to  
135 Ragged Mountain Reservoir. They had about 15 miles of pipeline under construction, with about  
136 3 miles completed so far.

137 Mr. Mawyer provided photos of the renovated maintenance building. There used to be an open  
138 bay where they parked the vehicles, and now they were enclosing the space to create offices. He  
139 gave an update on drought monitoring, which continued to be a topic across the state. He stated  
140 that the state reported yesterday that stream flows had improved in their area, along with the

141 reservoir levels remaining normal. Precipitation and groundwater levels continued to be in a  
142 warning status; unchanged for the last month.

143 Mr. Mawyer further reported that South Rivanna Reservoir stopped spilling on July 4, 2026; this  
144 was the reservoir they primarily watched for water supply conditions. The drought watch was  
145 declared on July 14, 2026. South Rivanna was currently at minus 0.96 feet, which was their first  
146 trigger to go into drought watch. The urban reservoirs collectively were about 90% full, so they  
147 were in good shape.

148 Mr. Mawyer stated the Oasis hydraulic model indicated they had met the first two drought stage  
149 triggers: the first one was being below 80% full over 12 weeks; the second trigger was that they  
150 had a greater than 10% chance of being below 70 % full over the next 10 weeks, which indicated  
151 they were continuing into the drought stages. He stated that he had been meeting with the  
152 Rivanna Regional Drought Committee every week to talk about the factors.

153 Mr. Mawyer stated that the South Rivanna Reservoir level was dropping about half an inch a  
154 day, and they projected in the next 20 to 30 days, they could go into the drought warning stage,  
155 which was level two, if they did not have significant rain. He stated that was their best guess  
156 projection, which would be affected by temperatures and rainfall. He noted that with a half an  
157 inch a day drop, they would drop a foot in about 24 days. He provided a graph showing the water  
158 production for the urban area at their water treatment plants which correlated to demand.

159 Mr. Mawyer stated that on July 2, the urban demand was 12.4 million gallons per day (MGD).  
160 As of yesterday, which was about 2 weeks after the watch was declared, it was 9 MGD. Their  
161 consultants predicted they would see a minor 1% reduction in demand with the “drought watch”  
162 declaration. Another reason for the reduction in demand was that the weather had not been as hot  
163 as it was in the July 4 time frame. He stated that while demand was receding, it was part of their  
164 water supply strategy to hold water in the Sugar Hollow Reservoir as long as possible.

165 Mr. Mawyer stated that they collected similar data for Crozet, which had demand of 1.1 MGD on  
166 July 2. He stated now demand was down to about 0.7 MGD. He stated for Scottsville, data  
167 showed the demand was constant at 0.07 MGD. He stated this was just some data that they were  
168 watching to see if drought restrictions were reducing demand.

169 Ms. Mallek stated as she remembered, the Crozet demand was like 800,000 gallons per day. She  
170 noted there was a significant jump up by 50% when they began that first measurement there.

171 Mr. Mawyer explained that many times when voluntary water conservation measures are  
172 declared, water demand would increase as residents completed water-intensive chores like  
173 watering plants or washing cars before any mandatory restrictions went in place.

174 Ms. Mallek asked if they were surprised by that spike in demand.

175 Mr. Mawyer replied no. He stated that the good news was that demand seemed to be declining,  
176 so if it continued to decline or at least stabilize at a lower level, that would be a good result. They  
177 were doing everything they could to maximize use of Ragged Mountain Reservoir water through  
178 the Observatory Treatment Plant and minimize use of South Rivanna Reservoir water and the  
179 South Rivanna Water Treatment Plant. They had to use six to eight MGD from South Rivanna

and usually around four MGD from the Observatory each day because that was all they could distribute out of Observatory until the Central Water Line was completed. When the pipe was completed, they would be able to produce enough water from the Observatory WTP to supply the entire urban system under normal demand conditions.

Mr. Mawyer stated that he wanted to clarify a consent agenda item regarding the request for authorization to declare a “drought warning” or a “drought emergency” after consulting the Board Chair. He explained that if the reservoir level reached two feet below the top of the South Rivanna Reservoir dam before they had another meeting, the agenda item would authorize the Chair and himself to issue an increased drought declaration. He stated that this was clarified in the bottom paragraph of the Board Action Request. This request was not a declaration for today, but it gave them authorization if conditions worsened to the point they needed to make a declaration before they had another board meeting.

Ms. Mallek stated in the packet, there was a picture of the blanket drain. She asked if it was completed.

Mr. Mawyer answered that it was not complete; they were still working on it.

Ms. Mallek asked if they anticipated to get it finished before the big rains began.

Mr. Mawyer stated that he hoped so, but they had a few more months to go.

## **6. ITEMS FROM THE PUBLIC**

### *Matters Not Listed for Public Hearing on the Agenda*

Dede Smith thanked the Board for Rivanna's sensitivity to the grave sites at Mount Salem Church. She stated she would like to transmit a story of someone who hoped to come to the Board meeting last month but could not make it. She stated he had an ancestor buried at Mount Salem, and he was a trustee at Piedmont Baptist. She stated he told her that back in the earliest days of the Church, the founders and the people who were members back in the 19th century wanted to be buried way up front at the church as sort of a status thing. She stated that she wanted to emphasize to the Board that those oldest burials were likely to be the ones with the field stones or were unmarked altogether.

Ms. Smith stated her question went to the bond issue on the agenda today. She stated just to preface with a little history, back in the early 2000s, Rivanna used the City-owned South Fork Rivanna Reservoir Dam or something like that as collateral for a bond. She stated that the Citizens First group flagged that and notified Rivanna that it was not allowed, but Rivanna did not really respond to it. Due to this, the group sued Rivanna and won because they could not do that.

Ms. Smith stated that with that background, she now asked what they were using as collateral for these bonds. She asked for assurance that they were no longer using collateral, or they were using collateral that was of property wholly owned by the Rivanna Authority and not using collateral that was solely owned by either the City or the County or some other entity. She stated

217 she did note that they would have bond counsel at that presentation, so hopefully that could be  
218 answered.

219 **7. RESPONSES TO PUBLIC COMMENTS**

220 Mr. Sanders stated that he would expect Ms. Smith's question to be answered during the  
221 upcoming presentation rather than in Responses to Public Comments.

222 **8. CONSENT AGENDA**

223 a. *Staff Report on Administration and Communications*

224 b. *Staff Report on CIP Projects*

225 c. *Staff Report on Finance*

226 d. *Staff Report on Information Technology*

227 e. *Staff Report on Maintenance*

228 f. *Staff Report on Operations*

229 g. *Staff Report on Drought Monitoring*

230 h. *Staff Report on Wholesale Metering*

231 i. *Approval to Award Term Contract for Compensation Consulting Services (RFP #26-06) -*  
232 *PRM Consulting Group*

233 j. *Approval to Award Term Contract for Support Services for Information Technology,*  
234 *SCADA, and Industrial Control Systems (RFP #26-07) - E-Merge Systems, LLC, Inframark,*  
235 *Magna5, MC Dean, RSM, Short Elliott Hendrickson, Inc., BizTech Fusion, LLC, Endurance*  
236 *IT Services, EWINNS IT Consulting*

237 k. *Approval to Award Term Contract for Pump and Haul Services for Water and*  
238 *Wastewater Treatment Facility Sludge (IFB #442) - Absolute Plumbing and Drain Cleaning*  
239 *Services, Inc.*

240 l. *Approval of Construction Change Order– Stone Robinson Tank Repair and*  
241 *Rehabilitation Project – (RFQ # 1135) - Waco, Inc.*

242 m. *Request for Authorization to Declare a Drought Warning or Emergency*

243 **Ms. Mallek moved that the Board of Directors approve the consent agenda as amended.**

244 **Ms. Hildebrand seconded the motion, which carried unanimously (6-0). (Mr. Gaffney was**  
245 **absent)**

246 **9. OTHER BUSINESS**

247 *a. Bond Proposal - Series 2026 Bond for Construction Funding and Refunding of the 2015B*  
248 *Series Bond*

249 Lonnie Wood, Director of Finance, stated that they had quite a few capital projects in progress,  
250 and many were getting ready to start up, as listed in the consent agenda. Today they were going  
251 to talk about how to fund some of these projects. He stated in May, the Board adopted a five-year  
252 CIP totaling about \$604.2 million. He stated he would go over some of the bond estimates in the  
253 proposed 2026 financing, which was going to fund part of the new CIP. Then, Ted Cole,  
254 Financial Advisor with Davenport Financial, would go through the bond issuance process. He  
255 stated that finally, Chris Kulp, Bond Counsel with Hunton Andrews Kurth, would go over the  
256 legal documents. He noted they needed to have those documents approved before they could  
257 move forward with the bond issue, and Chris could address Ms. Smith's question. He clarified  
258 that their revenue bonds were pledged purely with their ability to pay for them with revenue, also  
259 known as a revenue pledge, which was why they were called revenue bonds. They did not use  
260 property to collateralize them.

261 Mr. Wood stated all the projects identified as part of the 2026 bond issue were shown in the new  
262 money portion of the bond issue. CIP project budgets made up the total five-year amounts they  
263 were targeting to fund through the 2026 bond issue. He noted that sometimes these projects last  
264 well over two, three, four years, and they wanted to fit the bond issue drawdown into two-year  
265 windows to meet IRS requirements, and some projects had other funding sources such as grants.

266 Mr. Wood stated they determined these to be their estimates for this bond issue. Some of the  
267 projects were currently being funded with the 2024 bond issue, which they closed in August  
268 2024 for \$90 million. That bond was just about expended, which was the reason they needed a  
269 new funding source going forward. The total for the new bond issue was going to be \$212.4  
270 million. In the approved CIP in May, the largest funding source identified was "new debt",  
271 which was \$454.5 million, and this \$212 million was part of that "new debt".

272 Mr. Wood provided a summary of the bond issue they had estimated as of last week. The first  
273 column was the new money; the funding needed for the capital projects. Every time they did a  
274 bond issue, they looked for opportunities to refinance or "refund" an older existing bond. Their  
275 2015 Bond was originally issued at a par amount of \$44.5 million and there was roughly \$28.5  
276 million of remaining balance. As of right now, the current interest rates supported a refunding,  
277 but that could change by the time they issued the bonds.

278 Mr. Wood stated that both of those portions of the bond, when added together, resulted in a not-  
279 to-exceed par amount of \$260 million. This was made up of the \$212.4 million, which was what  
280 they needed in a construction fund ready to draw from after this transaction closed, \$29 million  
281 to a reserve account for the refunding, financing the cost of issuance for \$700,000, and  
282 underwriting costs for \$1.3 million. There was also a contingency in there for a discount.

283 Mr. Wood explained that what they did not know is what the interest rate was going to be by the  
284 time they sold the bonds, and the contingency gave them flexibility in dealing with those changes  
285 in the interest rate. He explained that when they offered a bond for sale, it had a par dollar

286 amount, and it had stated interest rates. If the market interest rate at that time tended to go over  
287 what they were offering, they had to pay a discount to get the same amount of funds needed as  
288 just previously described. Then, in the reverse direction, if the interest rates went down, they  
289 received a premium.

290 Mr. Wood stated that basically this gave them flexibility between now and late August when  
291 they sold the bonds to deal with those fluctuations in the rate. He added that tomorrow the  
292 Federal Reserve was going to have a meeting and probably would do something with the rates.  
293 The upper portion of the next slide gave them a snapshot of what happened with the 2015  
294 refunding. He explained that there were 20 years left on that bond. Their average debt service  
295 right now was \$1.913 million annually. After the refunding, they estimated it to be \$1.8 million  
296 annually. This was calculated using last week's estimated rates, and the rates since then had gone  
297 up a little bit.

298 Mr. Wood stated there was a cash flow savings of \$111,000 a year over the remaining life of the  
299 bond, that was \$2.23 million savings over the 20-year remaining period, which was pretty good  
300 savings over the life of the bonds, which equaled a net present value of 5%. Their target in the  
301 financial policies was 3%, so this was well above their target, which meant it was a good  
302 candidate for refunding. The numbers in the second half of that were the estimates on the new  
303 money portion, and the annual debt service payment was estimated to be \$12.5 million per year  
304 for this bond issue.

305 Mr. Wood stated in their 2027 budget, they programmed \$36.9 million in debt charges. When  
306 they netted out their current actual debt service for existing bonds, that was \$21.162 million,  
307 there was a net available of \$15.8 million to fund new debt, which meant their current budget  
308 was more than enough to fund the new debt service related to the 2026 bond. Any funds left over  
309 were deposited into reserves and the Authority uses that as the pay-go-cash contribution to the  
310 CIP funds.

311 Ted Cole, Financial Advisor, Davenport Public Finance, stated that they were issuing the bonds  
312 through what they called a competitive bond offering. They had not picked the date yet, but it  
313 was going to be later in August. They were going to get their ratings back by the first week of  
314 August, and he would touch on that here in a moment. They were finishing up the documents  
315 that were needed to be published on certain bond platforms within the market. Then, they would  
316 probably look at the week of August 24 to see what kind of volume and economic releases were  
317 scheduled because those releases had a tendency to move the market.

318 Mr. Cole explained there was a lot of volatility in rates, and every economic release seemed to be  
319 taking on a greater level of importance. Therefore, they wanted to make sure when they picked  
320 the date that was as strategic as possible. He would expect these bonds to be offered for sale  
321 during the week of August 24. When they sold those bonds competitively, they were estimating  
322 about \$230 million of bonds; this was for the new money and the refunding.

323 Mr. Cole stated the refunding could be removed if necessary. If interest rates rose and the  
324 savings were insufficient, the refunding would be dropped. He explained that the bonds would be  
325 sold to underwriters that submit purchase bids. For example, if underwriters submitted bids at

326 11:00 a.m. on a Tuesday, the bonds would be awarded to the bidder with the lowest all-in interest  
327 rate. The underwriters would then sell the bonds to individuals and other investors.

328 Mr. Cole clarified they were not selling these bonds directly to a bunch of individual  
329 bondholders; they were selling them to an underwriting firm who in turn then would sell those  
330 bonds to lots of individual accounts, whether they were people or institutions. This was the  
331 nature of a competitive sale, so they would pick a date, they would pick a time, bids would be  
332 received. There was a platform where this process took place that was very transparent, and the  
333 bonds would be awarded to the lowest bidder.

334 Mr. Cole stated that about three weeks later, they would close the sale, and that was when the  
335 money would be available to Rivanna. He continued that they had engaged with both Moody's  
336 and S&P that had rated Rivanna historically. They had calls with both of them on July 6, and had  
337 follow-up phone calls with S&P a week or so later. He stated they would expect to have the  
338 ratings in hand by the first week of August, which was on schedule for them as early as maybe  
339 later this week. They were taking a pretty deep dive into their credit history because it was a  
340 large bond issuance, \$200 million, for a significant CIP.

341 Mr. Cole stated staff had been very responsive in their follow-up questions. They were putting  
342 their best foot forward, and they were trying to make sure they had everything they needed when  
343 they went into that credit committee, and it should all be wrapped up the first week of August.  
344 He stated the documents were in pretty good form now, although there may be some final  
345 tweaks, to which Mr. Kulp could speak. All of this process would come together in mid-August.  
346 They put everything out there for a sale date, likely the week of August 24, at which point their  
347 interest rates were locked in. About three weeks later, the money would be available for projects.

348 Mr. Richardson noted the Authority's rating with Moody's was AA2, but the S&P rating was  
349 AA-plus. He asked if those were different ratings or just different nomenclatures.

350 Mr. Cole stated they had different nomenclatures. Within the AA category, Moody's and S&P  
351 had different names for the levels. He stated that S&P had Rivanna one notch higher than  
352 Moody's.

353 Mr. Richardson asked if that was unusual.

354 Mr. Cole replied no; it happened commonly. He stated they were often on par with one another,  
355 but they went to great lengths to say that was not by design, that was just how it happened. He  
356 stated one notch apart was normal, but when they were getting more than two notches apart,  
357 there was something odd. He stated that in their current case, with Moody's, Rivanna was two  
358 notches away from AAA, and with S&P, Rivanna was one notch away.

359 Mr. Cole stated they were taking a hard look at that sort of managing expectations and were  
360 cautiously optimistic that they would maintain those ratings. He stated he did not think there was  
361 any real expectation of seeing an improvement. He stated and they were making sure that if there  
362 were any credit concerns for Rivanna, they were doing their best to head those off before they  
363 went to the credit committee.

364 Mr. Richardson asked if Mr. Cole had any feedback on the City's and County's AAA ratings and  
365 how that impacted the review of the Authority.

366 Mr. Cole replied absolutely. He stated that in that credit presentation they did spend a fair  
367 amount of time talking about the Rivanna service area because it was an important part of the  
368 Rivanna credit. He stated they spent a lot of time talking about the City and the County, and  
369 absolutely the fact that both were AAA rated. He could not set up that part of the rating agency  
370 analysis any better, as it was a very strong area in terms of credit and economic development and  
371 growth.

372 Mr. Cole stated that they spent a great deal of time on that topic. The other big part of the rating  
373 agency's review was the organization's member use agreement, bond indenture, and their  
374 financial performance historically and projected. A great deal of time was spent talking about  
375 showing how they expected the Rivanna system to perform financially going forward: revenues,  
376 expenses, the ability to cover this new debt, and the ability to fund this multi-year CIP. He  
377 reiterated that the agencies did drill down on that and they looked at elements of the City and the  
378 Albemarle County Service Authority credit because those were their customers.

379 Mr. Richardson asked if Davenport had considered the University of Virginia as an employer of  
380 34,000 employees in one of only five universities in the United States public that were triple-  
381 AAA-rated.

382 Mr. Cole confirmed they absolutely highlighted all the things going on with the University and  
383 with the hospital. They were big drivers of growth and big users of water and sewer systems.  
384 They were what the rating agencies referred to as an institutional presence, which was a good  
385 thing, and the University was a strong institutional presence.

386 Mr. Cole stated it was not an institutional presence like a large paper mill or some other entity  
387 that might have a lot of tax base and might use a lot of water and sewer but was vulnerable to  
388 economic trends and others. In contrast, a university and hospital were two great entities to have  
389 to anchor the system revenues, the usage of the system, but also the community, because so  
390 much of what went on in this area was linked to both of those entities, and growth was a big part  
391 of that.

392 Mr. Richardson noted that it was reported last week that the university announced that they had  
393 just gone through a new rating and they retained their triple AAA rating.

394 Mr. Cole stated that it was great news, and all those things lined up very well. He stated he  
395 believed it absolutely would going forward be an important part of why Rivanna was so highly  
396 rated. There was room to go up for Rivanna, but those were really solid ratings where they were  
397 currently.

398 Chris Kulp, Bond Counsel, iwth Hutton Andrews Kurth, stated that he served as Rivanna's bond  
399 counsel and provided specialized legal counsel to help the Authority staff and their general  
400 counsel navigate through the securities law, federal tax law, and state law issues of bringing in  
401 bonds to the market and being able to give the winning bidder of the bonds an opinion that the  
402 Authority had followed all the necessary steps and that the interest on the bonds was tax-exempt.

Mr. Kulp stated that for the Board's consideration today was a resolution that did several things. He explained that it approved within parameters the bond issue and delegated to Authority officers to execute on the financing within those parameters. In Section 1, they had a not-to-exceed parameter for principal amounts, the true interest cost, final maturity, and the optional redemption premium. They also had the parameter as it related to the refunding of at least a 3% net present value savings, which was consistent with the Authority's policy.

Mr. Kulp stated if the market was such that it could not be achieved on the day of pricing, then the refunding would drop out. It could come back later, but they just would not do the refunding at that particular juncture. The resolution also approved the financing documents that were necessary to take this to a public bond offering. This included the preliminary official statement that was telling the story of Rivanna to the potential investors, had information about the Authority, as well as its two major customers, the Service Authority and the City Utilities, and the area to tell the story about the customer base and what was going on economically and financially within the Rivanna service region.

Mr. Kulp stated that the resolution also approved as to form the Thirty-Fourth Supplemental Trust Agreement. He explained they had been doing this now for a long time under a master trust agreement from 1979. Each time they issued bonds, they did a supplement to provide the specifics of that bond issue and the details as it relates to the arrangement with the Authority and its bond trustee. To confirm Mr. Wood's earlier point, the Trust Agreement pledged as collateral for the bond issue the revenues that the Authority received under the service agreement from the Service Authority and the City, and there was no other collateral. He clarified there was no real estate that was pledged to repayment of the bonds.

Mr. Kulp continued to state that the resolution also approved as to form the notice of sale that told the bond investors or the potential investors the terms of their bids. The continued disclosure agreement, which was in a public bond offering, was a means by which future investors get assurances from the Authority to continue to update applicable information, disclosures about the Authority on an annual basis, and then to provide certain special event notices if they were applicable. He stated the resolution delegated Authority officers to execute on all of this and finalize the deal once they got to market.

**Ms. Mallek moved that the Board of Directors authorize the sale and award a series of 2026 revenue bonds in the amount not to exceed \$260 million to fund the capital improvements within the adopted Fiscal Year 2027-2031 Capital Improvement Program. The Resolution, by its terms, will also approve the forms of (a) the Thirty-Fourth Supplemental Agreement of Trust between the Rivanna Water and Sewer Authority and the Bank of New York Mellon Trust Company, N. A. and the preliminary and (b) the Preliminary Official Statement. Mr. Richardson seconded the motion, which carried unanimously (6-0) by roll call vote. (Mr. Gaffney was absent)**

*b. Dam Safety Program Overview*

Victoria Fort, P.E. and Senior Civil Engineer, gave an overview of their Dam Safety Program. She stated that first, she would explain why dam safety was so important. According to statistics around the beginning of the year, there were about over 92,000 dams in the United States with an

444 average age of over 60 years. In Albemarle County alone, there were 243 dams, according to the  
445 state's records. While they did serve as a valuable community resource, they also came with  
446 inherent hazards. Their failure could have catastrophic consequences, including loss of life and  
447 significant economic damage.

448 Ms. Fort stated that without proper maintenance, routine inspection, necessary upgrades, and  
449 coordinated emergency planning, the risks associated with dams are even greater. In Virginia, the  
450 Virginia Department of Conservation and Recreation (DCR) is the regulatory authority that  
451 ensured that Virginia's dams had proper and safe design, construction, operation, and  
452 maintenance to protect public safety. In Virginia, all dams are subject to the Virginia DCR dam  
453 safety regulations except dams under a certain size, that's height or the impounded water  
454 volume.

455 Ms. Fort stated any dams owned or operated by the federal government, for example, Federal  
456 Energy Regulatory Commission (FERC) dams, are exempt from state dam safety regulations.  
457 Any dams operated for mining or agricultural canal purposes might fall under other authorities as  
458 well. She stated that Rivanna's dam safety program was fairly broad. There was a group of staff  
459 that met about once a month, and they go over all the components of the program. On the left  
460 side of the slide, she had outlined some costs, which included the operations, dam engineering  
461 services or consultants, monthly mowing and brush removal at their dam sites, and  
462 miscellaneous repairs.

463 Ms. Fort stated that in total, it came to about \$193,000 in their current fiscal year O&M budget.  
464 Their currently recently approved CIP included about \$55 million for dam-specific projects. This  
465 included the Ragged Mountain Dam Pool Raise, the design of the North Rivanna Dam removal,  
466 dam concrete and steel repairs, which is a maintenance project, and dam public safety  
467 improvements, which include sirens, signage, buoys and booms, and the Beaver Creek Dam  
468 spillway upgrades.

469 Ms. Fort stated other components of the program include regular operations and monitoring by  
470 their Operations staff, permitting and regulatory compliance through Virginia DCR, maintenance  
471 and vegetation control, Emergency Action Plan updates, training, and exercises, regular  
472 inspections and surveys of all of their dam facilities, repairs and upgrades, studies, and then  
473 public safety and outreach components. She stated that Rivanna currently operates 10 dam  
474 facilities, seven of which are regulated by the state.

475 Ms. Fort stated four were high hazard, which included the South Rivanna Dam, Ragged  
476 Mountain, Sugar Hollow, and Beaver Creek Dam. Their three low hazard dams were Totier  
477 Creek, Lickinghole Creek, and Buck Mountain Property Dam. There were also three small dams  
478 which fell below those regulatory cutoffs for size, which included the North Rivanna low head  
479 dam at the North Rivanna Water Treatment Plant, Mechums River low head dam, and the Ivy  
480 Solid Waste & Recycling Center pond dam.

481 Ms. Fort explained that South Fork Dam is a high hazard dam built in 1965, and in the 1980s, a  
482 small hydropower facility was added, which has recently been decommissioned. It was a  
483 concrete gravity dam, 700 feet long and 54 feet tall. She stated Ragged Mountain Dam was their  
484 newest dam, built between 2012 and 2014 to replace historical dams built in 1885 and 1908 at

485 the same location. It was an earth-filled dam and their tallest dam at 125 feet tall and 785 feet  
486 long. This dam was constructed to impound an additional 12 feet of water or 700 million gallons,  
487 and the project to raise that pool level was currently underway and was expected to finish around  
488 the end of the year.

489 Ms. Fort stated that Sugar Hollow Dam was located up in White Hall. It was built in 1948 to  
490 replace a smaller low-head facility built in the 1920s. It was upgraded in 1998 following severe  
491 storms that damaged the crest gates and other components of the facility. It is a concrete gravity  
492 dam with a rubber crest gate or "bladder" across the top, which was installed in 2000 with other  
493 upgrades in the late 1990s, and it was recently replaced as it reached the end of its service life in  
494 2021. This dam was 480 feet long, 96 feet tall, and in 2024, a bladder malfunction prompted  
495 some piping, SCADA alarm, and camera improvements.

496 Ms. Fort stated that lastly, they were working on developing a siren system. Development was  
497 underway, as they were working through some property rights and hoped to have it in place by  
498 end of the year if not early next year. She stated Beaver Creek Dam was the last of the high-  
499 hazard dams. It was built in the 1960s in coordination with the Soil Conservation District as a  
500 flood control facility as well as a water supply dam. It was an earth-filled dam, was 530 feet long  
501 and 60 feet tall. It also served as an Albemarle County Park, so there was a park adjacent with a  
502 boat ramp and other facilities.

503 Ms. Fort stated that there was a state road that ran across the crest of the dam, Browns Gap  
504 Turnpike. She stated spillway upgrades that were currently under design, which would put a  
505 spillway through the embankment of the dam, would involve a bridge over the new spillway to  
506 continue that road over the dam. Design work was being done with 100% funding from the  
507 Natural Resources Conservation Service (NRCS). They were hoping to get construction funding  
508 once that design work was complete.

509 Ms. Fort stated that two of their low-hazard dams included Totier Creek Dam and Lickinghole  
510 Creek. Shet stated that Totier Creek, which was down in Scottsville, was also a County park. It  
511 was a low-hazard dam, and it was an earth fill dam with a rock cut spillway. It was 277 feet long  
512 and 35 feet tall. She stated that Lickinghole Creek Dam was a low-hazard dam as well, built in  
513 the 1990s as a sediment basin. It did not serve the function of storing water supply, but it did  
514 hold sediment that would otherwise go into the South Fork basin. It was a concrete gravity dam,  
515 458 feet long and 32 feet tall.

516 Mr. Snook asked if it was dredged from time to time.

517 Ms. Fort stated there were plans to dredge it when it reached a certain threshold of sediment, and  
518 they did that bathymetric survey every 10 years.

519 Ms. Mallek asked when the next survey would take place.

520 Mr. Mawyer stated that the next survey would be in 2028, and they would give the report in  
521 2030.

522 Ms. Fort stated that the next and last of their low-hazard dams was the Buck Mountain Property  
523 Dam. It was a small pond dam that was built as a private pond dam and then acquired in the

524 1980s as part of the larger Buck Mountain property. She stated the dam was not owned for water  
525 supply; it was owned because it was part of that Buck Mountain property. Rivanna retained  
526 ownership of it, and it was an earth-filled dam, 190 feet long and 33 and a half feet tall.

527 Ms. Fort stated that the primary spillway had reached the end of its useful life, so they inspected  
528 it on a regular basis, and they understood it would require repair or removal to address these  
529 known deficiencies. She stated that next, she would discuss three unpermitted dams. These were  
530 unpermitted again because they either fell below a certain height or the impoundment was below  
531 the state's threshold for regulation. On the top left was the North Rivanna low-head dam that was  
532 located adjacent to the North Rivanna Water Treatment Plant, and it was slated for removal once  
533 that plant was decommissioned in a few years.

534 Ms. Fort stated on the top right was the Ivy Solid Waste & Recycling Center Pond dam. She  
535 stated it used to be a low-hazard facility, and then they cut off the top of the dam and lowered the  
536 emergency spillway to decrease the amount of impoundment that could be held in that facility,  
537 and that brought it below the state's regulations. They also recently put a dry hydrant out of that  
538 facility in conjunction with the Solid Waste Authority so it could be used for fire suppression for  
539 facilities on site there.

540 Ms. Mallek asked if there was a recent change in the rules about forbidding lowering the heights  
541 of things to avoid regulation. She stated as private owners of a dam, she was told that was not  
542 allowed.

543 Ms. Fort stated she was not aware of that, as long as it was done with proper design, but she  
544 would defer to the state on that if she was told otherwise. She stated that the Mechums River  
545 low-head dam was built in the 1950s and had been out of service for several decades at this  
546 point. She stated that dam emergencies, as she mentioned earlier, could have extremely high  
547 impact on a community, and though they were low probability events, it was important to plan  
548 for those.

549 Ms. Fort stated that they were designed with a high level of conservatism to minimize the  
550 potential for failure or emergencies. The most common cause of dam emergency failure was  
551 rainfall in excess of the dam's design, basically overtopping. Other potential causes of failure  
552 included material failure, vandalism, terrorism, and accidents. She clarified that hazard potential  
553 meant the severity of consequences if the dam were to fail or if they mis-operated and released  
554 water, and it was not a reflection of a dam's condition.

555 Ms. Fort stated that a high hazard potential dam meant that failure would cause probable loss of  
556 life or serious economic damage. She stated significant hazard meant likely loss of life and  
557 appreciable economic damage; low hazard meant no expected loss of life, no significant  
558 economic damage. Hazard potential classification dictated the design criteria for withstanding  
559 storms, so it got larger and more severe with the higher potential consequences.

560 Ms. Fort stated that the Board may have heard the term probable maximum precipitation (PMP),  
561 which was basically the theoretical largest storm they could ever imagine in a particular  
562 watershed. She stated every watershed had a different probable maximum precipitation, and also  
563 they could have different durations, so a 12-hour PMP was going to be different from a 72-hour

564 PMP. She stated in Virginia, dams with a high hazard potential were required to be designed  
565 with a minimum of 90% of probable maximum flood capacity. She stated that was the flood that  
566 resulted from that amount of precipitation without failing or overtopping. Rivanna held that their  
567 dams would pass 100% of the PMP.

568 Ms. Fort provided a chart for a 24-hour storm event for the Sugar Hollow watershed. She stated  
569 that a two-year storm, a storm they would expect to occur once every two years, was just under  
570 four inches of rain in that 24-hour period. With a 100-hundred-year storm, it was more like nine  
571 inches of rain in 24 hours. Their PMP rainfall was 34 inches of rain in that watershed in 24  
572 hours, which was a massive, massive storm that they had to plan for to meet state dam safety  
573 regulations.

574 Ms. Fort noted that Hurricane Camille in 1969 saw over 27 inches of rain overnight, which was  
575 81% of the PMP in that area. She stated then Madison County in 1995, that same storm that led  
576 to damage to the Sugar Hollow Dam, was 25 to 30 inches of rain in 16 hours, so about 86% of  
577 the PMP.

578 Mr. Snook asked if there was any significance to the 100-year storm designation anymore.

579 Ms. Fort stated she would leave that to regulatory authorities. She stated that it was typically  
580 what was used for construction regulations and setbacks, as well as economic analysis.

581 Mr. Snook stated he remembered in 1969 and 1972, they had 500-year storms within three years  
582 of each other.

583 Ms. Mallek stated that it was a math formula, but she thought it was about probability.

584 Ms. Fort stated it was probabilistic, but then there was also storm modeling that went into it. She  
585 stated that this data was from NOAA Atlas 14.

586 Mr. Snook noted they did not have 500 years of data.

587 Ms. Fort stated that they maintained dam Emergency Action Plans (EAP) for their four high-  
588 hazard dams. They also maintained a simplified document called an emergency preparedness  
589 plan for their low-hazard dams, and that was required by the state. These contained a set of pre-  
590 planned actions to minimize or alleviate emergency conditions at the dam. These contained  
591 procedures and information on how to issue early warning notifications to enable them to  
592 minimize the loss of life and any property damage that could occur during an emergency event.

593 Ms. Fort stated it laid out how to coordinate among the Virginia Department of Emergency  
594 Management, local emergency services, police, Fire and Rescue, Virginia Department of  
595 Transportation media, local government, important property owners, other stakeholders. She  
596 stated they maintained these four high-hazard dams. She stated these plans were currently under  
597 update, and showed the cover of the with the Ragged Mountain Dam Temporary Construction  
598 EAP. This change was to conform with other state-regulated dams. She stated the previous  
599 format was more in line with FERC dams, and as they had decommissioned the South Rivanna  
600 hydropower facility, they were no longer subject to FERC regulations.

601 Ms. Fort explained that general responsibilities under the EAPs for Rivanna included verifying  
602 and assessing emergency conditions at the dam, notifying participating emergency management  
603 agencies, taking corrective actions at the facility when possible, issuing condition status reports,  
604 and then declaring a termination of the emergency at the facility. She stated outside agencies  
605 included emergency services, but also local governments and potentially state governments,  
606 would receive these condition status reports from Rivanna, notify the public, and assist with  
607 coordinating and conducting evacuations and other mutual aid type services, if needed.

608 Ms. Fort provided an example of a notification chart included in their EAPs. The way that they  
609 classified emergencies was that they fell under three conditions: Stage I, Stage II, and Stage III.  
610 She stated that Stage I meant there was some kind of emergency, usually it was rainfall, that was  
611 not expected to lead to failure, but it did warrant additional monitoring and sometimes outside  
612 notifications. Stage II was a potential failure situation developing. An example of that might  
613 have been new seepage identified at one of the earthen dams that seemed to be progressing.  
614 Stage III would be where failure of a dam was imminent or had just occurred and would have  
615 required likely downstream evacuation.

616 Ms. Fort stated they had different call-down notification lists for each of those scenarios and  
617 specific written prompts for each of those as well written into the EAPs. She provided an  
618 example of their dam breach inundation maps. These maps showed them where the high-hazard  
619 dam would flood under different conditions. Usually, they included a sunny day failure when  
620 there had not been rain and a PMF breach when there had been a 30-inch rain event.

621 Ms. Fort stated this would show them which areas were expected to be inundated and what  
622 structures would be affected. In yellow and blue, they could see the areas that would be flooded.  
623 She stated in red, they could see the structures that would be affected. Then, the green call-outs  
624 were included in the maps at critical intersections or road crossings or just critical locations. It  
625 told them when the flood wave would be expected to arrive, when they would expect a peak  
626 flood, how high the water level would be over the roadway. This would assist emergency  
627 services with knowing how to help various communities and what roads might be closed.

628 Ms. Mallek asked if this map was for the new spillway.

629 Ms. Fort answered that these were the maps that accompanied the 2014 construction of the new  
630 Ragged Mountain Dam, and they were working on new maps for the pool raise level.

631 Ms. Fort continued that some projects that they had underway included recent modifications to  
632 air piping that were related to the bladder failure up at Sugar Hollow a couple of years back; that  
633 was completed last summer. She stated the Ragged Mountain Pool Raise project was underway  
634 and was expected to be completed by the end of the year. She stated they also had a new raw  
635 water intake under construction at the South Rivanna Dam, which was in the beginning phases of  
636 construction. In planning and design, they had public safety improvements at South Rivanna,  
637 Sugar Hollow, and Ragged Mountain. Those included audible warning siren systems  
638 downstream of those facilities. They were also working through the design of the Beaver Creek  
639 Dam spillway upgrades, as she had mentioned earlier. She stated they had their dam concrete and  
640 steel repairs project, which was basically repairs to surface concrete where items had worn down,  
641 keeping the dams in good service for the foreseeable future. She stated that lastly was the North

642 Rivanna Dam removal, which would occur immediately following the decommissioning of that  
643 plant in a few years.

644 Ms. Fort stated that they did a lot of work around the clock, all year long to keep these dams in  
645 shape. That included debris removal, seasonal clearing, instrumentation, maintenance,  
646 calibration, implementing public safety plans, replacing signage where needed, and emergency  
647 planning. She noted they were planning an EAP tabletop exercise later that year for Ragged  
648 Mountain and South Fork, which they were looking forward to.

649 Ms. Mallek asked about the impact of having South Fork Dam's outward side dry because  
650 osmosis was going to pull water through the concrete instead of having it drop over the top.

651 Ms. Fort stated the bigger concern would be with their earthen facilities if they had a rapid  
652 drawdown on the upstream side. With the reservoir level dropping during drought conditions,  
653 she did not know that there was necessarily an immediate dam safety concern. There was always  
654 seepage through these facilities. She did not know that it would change significantly, but it  
655 would have a higher evaporation rate with the lower pool level, smaller surface area.

656 Ms. Mallek stated that they used to see the water level go down, but now she was seeing dry  
657 clay.

658 Ms. Fort stated it still made its way through, and they were also subject to minimum stream flow  
659 requirements, which were met through gates at that facility.

660 Ms. Mallek stated when Ms. Fort was talking about the hazard levels, the topography  
661 downstream of the location had a lot to do, and there was some amount of mapping. She stated if  
662 it was high stone, then it might send the water further, but it had a different expectation than if it  
663 were low and flat or like Moores Creek, if they had a whole lot of houses right down there at  
664 Avon Street before the spillway was improved.

665 Ms. Fort replied yes; topography played a huge role in that, as did the overland conditions in  
666 their watershed. She stated if it was a highly developed watershed, they were going to see a peak  
667 on the upstream side sooner than she would in a forested or grassy watershed. The topography of  
668 the stream downstream was obviously going to contribute to how quickly the water could get out  
669 rather than going up.

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

671 There were none.

672 ***11. CLOSED MEETING - PERSONNEL***

673 (Motion, second and roll call vote to enter into a combined session to discuss confidential  
674 information related to confidential performance evaluations, goals and objectives of specific  
675 personnel as permitted by the personnel exemption at Section 2.2-3711A(1) of the Code of  
676 Virginia)

677 **Mr. Snook moved that the Board of Directors enter into a combined closed session with the**  
678 **Rivanna Solid Waste Authority to discuss confidential information related to confidential**  
679 **performance evaluations, goals, and objectives of specific personnel as permitted by the**  
680 **personnel exemption at Section 2.2-3711A(1) of the Code of Virginia. Ms. Mallek seconded**  
681 **the motion, which carried unanimously (6-0) by roll call vote. (Mr. Gaffney was absent)**

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

683 **Mr. Snook moved that the Board of Directors hereby certifies by recorded vote that, to the**  
684 **best of each member's knowledge, only public business matters lawfully exempted from the**  
685 **open meeting requirements of the Virginia Freedom of Information Act and identified in**  
686 **the motion authorizing the closed meeting were heard, discussed or considered in the closed**  
687 **meeting to which this certification resolution applies. Ms. Mallek seconded the motion,**  
688 **which carried unanimously (6-0) by roll call vote. (Mr. Gaffney was absent)**

689 Mr. Richardson thanked Mr. Mawyer for his past performance and leadership for the last 10  
690 years.

691 **Mr. Sanders moved that the Board of Directors approve a 3% merit adjustment for the**  
692 **Executive Director, consistent with the department's merit policy. Ms. Mallek seconded the**  
693 **motion, which carried unanimously (6-0) by roll call vote. (Mr. Gaffney was absent)**

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

695 ***12. ADJOURNMENT***

696 The meeting adjourned at 4:36 p.m.

697 Respectfully submitted,

698  
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700  
701  
702



**Mr. Jeff Richardson**  
**Secretary - Treasurer**

