



695 Moores Creek Lane | Charlottesville, Virginia 22902-9016

434.977.2970

434.293.8858

www.rivanna.org

RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
August 26, 2025

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, August 26, 2025, at 2:15 p.m. at the Rivanna Administration Building, (2nd Floor Conference Room), 695 Moores Creek Lane, Charlottesville, VA 22902.

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

Board Members Absent: None.

Rivanna Staff Present: Bill Mawyer, Dave Tungate, Lonnie Wood, Jennifer Whitaker, Daniel Campbell, Michelle Simpson, Austin Marrs, Scott Schiller, Vicki Fort, Annie West, David White, Bethany Houchens, Westley Kern, Jacob Woodson, Leah Beard.

Attorney(s) Present: Valerie Long

CALL TO ORDER

Mr. Gaffney convened the August 26, 2025, regular meeting of the Board of Directors of the Rivanna Water and Sewer Authority at 2:15 p.m.

AGENDA APPROVAL

There were no comments on or questions regarding the agenda.

Ms. Mallek moved that the Board of Directors approve the agenda as presented.

Mr. Pinkston seconded the motion, which carried unanimously (7-0).

MINUTES OF PREVIOUS BOARD MEETING ON JULY 22, 2025

There were no comments on or questions regarding the minutes for the meeting held on July 22, 2025.

Mr. Pinkston moved that the Board of Directors approve the minutes of the previous Board meeting on July 22, 2025. Mr. Sanders seconded the motion, which carried unanimously (7-0).

RECOGNITION

There was none.

EXECUTIVE DIRECTOR'S REPORT

Bill Mawyer, Executive Director, stated that he first wanted to take a moment to recognize and celebrate two of their employees, Bridgett Deakin and Cynthia Dunham, who had recently

33 obtained their Class 1 Water Operator License, the highest license level issued by the state. He
34 added that this achievement was particularly notable, as both employees were part of their
35 “Grow Our Own” program, in which they began as trainees and worked their way up to earning
36 their Class 1 licenses. He stated that they were proud to have such skilled and committed team
37 members.

38 Mr. Mawyer reported that related to their Strategic Plan Priority of Communication and
39 Collaboration, he recently had the opportunity to speak with City Council and provide an update
40 on the Central Water Line project. He stated that they expected to begin construction in October
41 or November, pending delivery of the pipe. A community information meeting was scheduled
42 for September 16, 2025, from 5:00 p.m. to 6:30 p.m. at the Carver Recreation Center.

43 Mr. Mawyer stated that as previously discussed, they were also moving forward with the
44 installation of an emergency siren at Sugar Hollow Reservoir. He stated that they had success-
45 fully tested the siren, which the siren could be heard at various tested locations, including the
46 Trout Unlimited fishing area. He stated that they would continue to test the siren along the road
47 on the second Wednesday of each month at 10:00 a.m. He stated that they were additionally
48 exploring opportunities to install emergency warning systems at the South Rivanna and Ragged
49 Mountain Reservoirs.

50 Mr. Mawyer continued to report that a community information meeting was scheduled for this
51 Thursday in this conference room regarding the Ragged Mountain Reservoir Pool Raise project,
52 which aimed to raise the water level by 12 feet and add 700 million gallons over the next few
53 years. He explained that as part of this year's work on the project, they would begin clearing trees
54 from the perimeter of the reservoir. He stated that they had issued a press release informing the
55 public that beginning on October 6, 2025, limited access would be available to certain portions
56 of the trails and reservoir while they had the trucks and barge used for tree clearing in operation.

57 Mr. Mawyer stated that they were pleased to collaborate with City Utilities and the Albemarle
58 County Service Authority (ACSA) in an emergency response coordination meeting, where they
59 discussed how they would work together in the event of an emergency, such as a hurricane, and
60 how they would communicate and coordinate. He stated that it was a beneficial meeting and
61 partnership.

62 Mr. Mawyer reported that RWSA had received a grant of \$57,400 from the Virginia Department
63 of Conservation Resources for the geotechnical engineering services required to assess drainage
64 improvements at the Ragged Mountain Dam, as part of the pool raise project. He stated that on a
65 more disappointing note, they had received notice from McGill Environmental that their
66 wastewater biosolid residuals disposal charge was increasing from about \$500,000 to \$850,000
67 per year, resulting in a new total cost of transportation and disposal of about \$1.25 million per
68 year. He stated that they had reviewed their limited alternatives and determined they would
69 continue to use McGill as their transportation and biosolids disposal vendor.

70 Mr. Mawyer stated that he would next review some of their Planning and Infrastructure updates.
71 He stated that with the South Rivanna River Crossing project, they had been drilling and blasting
72 to break up the rocks underground. He explained that blast mats were used to contain the blast

and prevent blasted rock from leaving the immediate area. He noted that this project was ongoing, with approximately one year before completion.

Mr. Mawyer stated that the contractor had successfully completed the first window of work on the pipeline project from Ragged Mountain Reservoir to Observatory WTP, which took place on Hereford Drive in June and July. He stated that they had been able to complete the work while the students were away, and the University had expressed their appreciation for sticking to the schedule. He stated that they were also working on pipeline installation between Fontaine Ave. and Hereford Drive, navigating through the woods. Mr. Mawyer stated that they had to do some blasting along this alignment, and the UVA Architect and her staff had walked with them to select the path for the pipe.

Mr. Mawyer stated that their water operators discovered a leak in the fluoride storage tank at the South Rivanna Water Treatment Plant. The leak was contained and the fluoride treatment process continued using other tanks on the site. He stated that the leak was from a newer tank installed during the plant renovation project in 2022, and they were pursuing a five-year warranty claim with the manufacturer. He stated that they appreciated the engineering group's involvement in this warranty matter.

Mr. Mawyer stated that lastly, today may be the last Board meeting held in this conference room. Moores Creek had become a construction zone, and they were planning to relocate the Board meetings to the Albemarle County Service Authority starting in September. He stated that they would confirm the new location with the Board when they sent out the agenda.

Mr. Gaffney stated that he drove to the location where the old compost building was, but he had not yet seen any new trailers.

Mr. Mawyer stated that they had not arrived yet.

Mr. Gaffney asked what all the pads along the road were.

Mr. Mawyer stated that they were currently building pads for the trailers and parking areas, as the existing parking spaces would be removed soon. He stated that this preparation would enable the trailers to be placed in the designated area. He stated that once the trailers arrived, which was expected to be at the end of this month, they would need to equip them with the necessary communication equipment and then move staff into the office trailers. He stated that their goal was to have this process completed by September or October. He stated that they planned to coordinate with Mr. Lunsford's group and use his conference room for the Board meetings.

Mr. Gaffney asked if there would be multiple trailers.

Mr. Mawyer replied yes; there would be segments connected. He stated that if one visited one of the car dealerships on Pantops Mountain, they would see the same trailer setup. He stated that they could have as many trailer segments as needed. He stated that the contractor was required to provide these trailers by the construction contract. He stated that when the renovation was complete, staff would move into the renovated Administration building and the contractor would remove the trailers, including the existing engineering trailers, at the end of the project.

111 Mr. Mawyer stated that the temporary staff office trailers would remain on site until the
112 construction was finished. He stated that the area currently being graded below the
113 Administration building would be a new parking lot. He stated that they would also have new
114 parking spaces around the perimeter drive. He stated that they were excited about this renovation
115 and addition to staff spaces. He stated that next month, Ms. Whitaker would provide a
116 presentation on the new education center included in the addition to the Administration building.

117 Mr. Pinkston asked Mr. Lunsford to clarify where his office was located.

118 Mr. Lunsford stated that it was in Pantops at 168 Spotnap Road.

119 Mr. Lunsford stated that they would coordinate with Mr. Mawyer when he sends out the
120 necessary information. He stated that it was likely that they would ask everyone to park in the
121 upper lot at the ACSA office building. He stated that the door located at the rear of the facility
122 remained locked.

123 ***ITEMS FROM THE PUBLIC***

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

125 There were none.

126 ***RESPONSES TO PUBLIC COMMENTS***

127 There were no comments from the public, therefore, there were no responses.

128 ***CONSENT AGENDA***

129 *Staff Report on Finance*

130 *Staff Report on Operations*

131 *Staff Report on CIP Projects*

132 *Staff Report on Administration and Communications*

133 *Staff Report on Wholesale Metering*

134 *Staff Report on Drought Monitoring*

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

137 ***OTHER BUSINESS***

138 *Presentation: Reservoir, Drought and Operational Strategies Update*
139 *Bethany Houchens, Water Resources Coordinator*

140 Bethany Houchens, Water Resources Coordinator, stated that she would be providing an update
141 on Reservoirs, Drought and Operational Strategies. She stated that the map provided depicted the
142 five surface water reservoirs, including the County reservoirs at Beaver Creek, which serves
143 Crozet, and Totier Creek, which serves Scottsville. She stated that in addition, they had three
144 urban reservoirs: South Rivanna, Ragged Mountain, and Sugar Hollow, as well as the North Fork
145 Rivanna River, which serves the urban community. The North Fork Water Treatment Plant is
146 slated for decommissioning in 2028, although they were still working on the exact date.

147 Ms. Houchens explained that the South Rivanna Reservoir was their largest watershed, covering
148 259 square miles, compared to the Ragged Mountain Reservoir, which was only two square
149 miles. She stated that the size of the watersheds for the reservoirs is important because they
150 influence water chemistry and are a factor in the water treatment plans. She stated that the
151 reservoir monitoring program is led by Mike Webb, RWSA Water Quality Specialist, who uses
152 an EXO Sonde to collect data on pH, dissolved oxygen, depth, suspended solids, and other
153 parameters from the reservoirs. She stated this data is then downloaded into an Excel spreadsheet
154 and compared to previous sampling events.

155 Ms. Houchens noted that the Secchi disk is a tool used to measure water clarity and turbidity.
156 She stated that there was an annual Secchi Disk drop event during which people across the
157 country test water with Secchi disks and compare results. She stated that their monitoring
158 program's goal was to collect data to better understand the biological and chemical processes in
159 the reservoirs, which inform treatment decisions made by their operators.

160 Ms. Houchens stated the program was established in 2014 and was reviewed annually to
161 determine if changes are needed. She stated that they sampled South Rivanna, Ragged Mountain,
162 and Beaver Creek reservoirs twice a month, and more frequently, if necessary, especially before
163 and after algae treatments to determine effectiveness. She stated that they sampled at Totier
164 Creek once a month. She stated that they no longer took samples from Sugar Hollow; instead,
165 they took samples from a second site at Ragged Mountain where the Sugar Hollow transfer out-
166 fall pipe is located.

167 Ms. Houchens explained that reservoir characteristics were a key focus area, particularly
168 stratification, which occurred when different layers of water formed based on density. She stated
169 that in the summer, cold water sinks to the bottom, trapping nutrients like phosphorus and
170 sediments. She stated that in the spring and fall, temperatures stabilized, leading to more
171 homogeneous water temperatures. She stated that the bottom water rose to the top, eventually
172 becoming homogenous.

173 Ms. Houchens stated that looking at the reservoir trends for this year, which were based on data
174 collected from August last year to July this year, they observed a downward trend in phosphorus
175 and nitrogen concentrations at Beaver Creek, which was a positive development as these
176 nutrients contributed to algal blooms. She stated that in contrast, South Fork Rivanna Reservoir
177 showed mixed results, with some decreases at certain times and higher concentrations in bottom
178 sediments at other times. She stated that these trends were what they focused on over long
179 periods of time, and while they could not determine the implications for this year, the data
180 collected over the course of future years could provide valuable insights.

181 Ms. Houchens continued to explain that at Ragged Mountain Reservoir, they saw lower numbers
182 in March and June, which were consistent with normal turnover and stratification patterns, and
183 they would continue to monitor these trends over the years. She stated that Aphanizomenon was
184 a common type of blue-green algae found in their reservoirs, particularly at Beaver Creek. She
185 stated that algae could cause filter clogging at the plants, affect taste and odor, and even produce
186 toxins, some of which had Environmental Protection Agency -set limits. She stated that addition-
187 ally, increased chemical use at the plants may be necessary to address these issues.

188 Ms. Houchens stated that in 2025, they treated Beaver Creek six times and Ragged Mountain
189 twice, which was slightly higher than last year. She stated that last year, they were in a drought,
190 resulting in reduced nutrient input from rainwater or external loading. She stated that this year,
191 with normal rainfall, they were seeing more nutrients entering the reservoirs. She stated that in
192 general, these numbers were within normal ranges compared to years without drought
193 conditions.

194 Ms. Houchens stated that when they treated algae at their reservoirs, they used a product called
195 SeClear, which was applied at two levels: a surface treatment and one at 15 feet down. She stated
196 that this was because algae could move in the water column and regulate their buoyancy. She
197 stated that the SeClear product, which was a copper sulfate-based product, bound with both algae
198 and phosphorus, mitigating future algae blooms and removing phosphorus from the water
199 column. She stated that this product was National Science Foundation (NSF) certified, meeting
200 all standards for drinking water quality.

201 Mr. Pinkston asked how this was applied in the reservoirs.

202 Ms. Houchens answered that they had a pontoon boat and a large 500-gallon tank. She stated that
203 the tank was attached to the boat and featured an apparatus with small extensions that were
204 connected to a hose. She stated that this apparatus was lowered to the 15-foot level and applied,
205 while the surface treatment was applied directly behind the pontoon using a grid system. She
206 stated that they moved across the reservoir in a back-and-forth pattern, considering the reservoir's
207 depths and the amount of product applied, which they calculated with the help of their consult-
208 ants. She stated that they regularly reviewed these numbers to ensure they were using the correct
209 amount.

210 Ms. Houchens continued that the Virginia Water Protection Permits governed their ability to
211 withdraw water from surface water sources, including their local reservoirs. She stated that they
212 had been working on these permits for several years. She stated that the Crozet Water Protection
213 Permit, issued in December of last year, authorized the withdrawal of water from Beaver Creek
214 Reservoir and established a Minimum Instream Flow (MIF) requirement, which meant they were
215 required to release a certain amount of water from the reservoir into Beaver Creek. She stated
216 that this MIF requirement did not take effect until all the necessary infrastructure, including the
217 new raw water intake and pump station, were completed in Crozet.

218 Mr. Gaffney asked if that included the new dam spillway.

219 Ms. Houchens confirmed that was correct. She stated that all the infrastructure associated with
220 that upgrade, including the intake, pump station, dam spillway, and all that work, would be part

221 of that consideration. She stated that once it was operational, the MIF would be in effect. She
222 stated that regarding the urban VWP, they had been operating on an extended permit since 2023
223 and were waiting on the updated draft from the Department of Environmental Quality. She stated
224 that the draft went up for public comment from June 19, 2025, and once DEQ reviewed those
225 comments, they would send it back to RWSA for official signature and implementation.

226 Ms. Houchens explained that the permit would authorize withdrawals from Sugar Hollow,
227 Ragged Mountain, and South Rivanna Reservoirs and authorize projects that had been discussed
228 in more detail by their Engineering Department. She stated that they worked closely with the
229 City and County on land management around the reservoirs, including recreational access, boat
230 docks, and enforcing regulations.

231 Ms. Houchens stated that they had 3 urban reservoirs owned by the City who also had a vested
232 interest in watershed protection around their drinking water supply. She stated that this included
233 addressing any safety issues that may arise, such as reservoir surveillance. She stated that their
234 Operations staff used their boat to conduct inspections around the reservoir twice a year looking
235 for issues like zoning violations of the Albemarle Water Protection Ordinance and unauthorized
236 withdrawals or illicit discharges.

237 Ms. Houchens noted that, for example, one of their Board members reported a container truck
238 removing water from the South Fork Rivanna Reservoir, which they investigated and addressed
239 with the company responsible. She stated that this was an example of the type of issues they
240 looked for in their surveillance, and they appreciated the public's help in bringing these matters
241 to the Authority's attention.

242 Ms. Houchens stated that they had source water protection initiatives in place, including
243 comprehensive plans for Beaver Creek, Totier Creek, and North Rivanna watersheds, which they
244 developed in 2021 with grant funding from the Virginia Department of Health. She stated that
245 they were currently working on creating a plan for the South Rivanna watershed for the
246 upcoming year. She stated that they collaborated with Rivanna River Fest, the Rivanna River
247 Forest Health and Resilience Partnership, and the Rivanna Conservation Alliance.

248 Ms. Houchens stated that the Rivanna Conservation Alliance was leading an initiative to plant
249 native canopy over the river, which would help improve river health and reduce invasive species.
250 She stated that they also worked with the Rivanna Conservation Alliance on their science
251 advisory committee. She provided images of the siren installed at Sugar Hollow, located on the
252 dam face, and the signs that would be placed at all reservoirs, including Sugar Hollow, Ragged
253 Mountain, and South Rivanna, to educate the public about the siren's purpose and its location.

254 Ms. Houchens reviewed the Drought Response and Contingency Plan. She stated that they had
255 completed an update to the plan this year because they were adding Crozet. She stated that this
256 plan was part of the VWP permit that was issued in December. She stated that they did not
257 foresee a time when they would declare a drought in the urban system without declaring it in
258 Crozet. She stated that therefore, they opted to have these two plans run concurrently with one
259 another. She stated that there were separate limits and triggers for Beaver Creek Reservoir
260 serving Crozet versus the urban reservoirs; however, they anticipated declaring a watch,
261 warning, or emergency status for both systems at the same time.

262 Ms. Houchens stated that the Crozet system relied on a usable storage level. She stated that they
263 would be in a “watch” status when they were at 60% usable storage, and they would go to a
264 “warning” status when they were at 50%. She stated that the South Fork Rivanna Reservoir has
265 two different models that they could rely on. She stated that it could either rely on water
266 elevation below the normal pool level or it could rely on % of available storage. She stated that
267 they found that at different points, these could be used in conjunction to better determine when
268 they were hitting certain drought stages.

269 Ms. Houchens stated that in terms of operational strategy, they have two different time periods:
270 May to November and November to May. She stated that their operational strategy was
271 specifically gauged towards when they had the connectivity between Ragged Mountain
272 Reservoir and South Rivanna Reservoir and that water line project was completed in 2030. She
273 stated that if South Rivanna was overflowing, they would fill Ragged Mountain Reservoir; they
274 could transfer up to three million gallons a day. She stated that once the pipeline was built, they
275 could transfer about 25 mgd from South Fork to Ragged.

276 Ms. Houchens stated that if they were not overflowing at South Rivanna, they would terminate
277 that transfer to Ragged and maximize the use of their Observatory Water Treatment Plant and the
278 water from Ragged Mountain reservoir. She stated that the November to May operational
279 strategy had different storage thresholds with a similar strategy. She stated that the South
280 Rivanna to Ragged Mountain pipeline was going to be huge in terms of improving their
281 flexibility when it came to their operational strategy.

282 Ms. Houchens stated they could move operations entirely from their South Rivanna Reservoir
283 and Treatment Plant to their Observatory Water Treatment Plants and Ragged Mountain
284 Reservoir supply after the pipeline was completed. She stated that they would be able to transfer
285 25 million gallons a day via their VWP permits, the SRR to RMR is expected to be completed by
286 2030.

287 She stated that in summary, they had a proactive monitoring program that informed their
288 decision-making for water treatment. She stated that they had an active source water protection
289 program that they were continuing to work on and improve, and they have strong partnerships
290 with the City and County on their watershed protection and land use around the reservoirs. Ms.
291 Houchens stated that they continued to update and be cognizant of the ever-changing climate in
292 our community. She stated that they put an emphasis on this every decade when they look at
293 their community water demand forecasts, with the next one scheduled in 2030. She stated that
294 she would have an updated reservoir pamphlet available on the website soon. She stated that the
295 pamphlet would provide a brief overview of each reservoir, including their watershed, surround-
296 ing land use, and other relevant information.

297 Ms. Mallek stated that the image of Beaver Creek reservoir that she presented showed a lot of
298 good forest cover all the way down to the edge. She stated that further out at Browns Gap,
299 however, they had issues with residents clear cutting or weed whacking all the way to the water's
300 edge. She stated that she assumed that there was a Rivanna policy in place that prohibited this.

301 Ms. Houchens stated that the County's Water Protection Ordinance required a 200-foot buffer
302 around drinking water reservoirs, and a 100-foot buffer for other areas. She stated that the

County enforced its ordinance as a zoning violation. She had discussed this with farmers further up Beaver Creek and Watts Branch regarding cattle exclusion opportunities. She stated that she was informed that the County may be revising some of these buffer ordinances. She stated that this could potentially alter the situation, but it may not be a beneficial development.

Ms. Mallek stated that she was most concerned about residential properties where people mowed their lawn all the way down to the dirt so they could continue to see the river. She stated that it was difficult to see from the road, but from a boat on the water one could see the issue clearly. She stated that she hoped they could find a way to prevent that in the future.

Ms. Houchens stated that during their reservoir inspections and surveillance, which they conduct twice a year, if they identify any issues, they report them immediately to the County. She stated that in such cases, the County would be responsible for implementing and enforcing the necessary measures. She stated that they obtain photographs to document any issues when possible.

OTHER ITEMS FROM BOARD/STAFF NOT ON THE AGENDA

There were none.

CLOSED MEETING

There was no reason for a closed meeting.

ADJOURNMENT

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

Respectfully submitted,



Mr. Samuel Sanders
Secretary-Treasurer

