



**RWSA BOARD OF DIRECTORS**  
**Minutes of Regular Meeting**  
**October 27, 2020**

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, October 27, 2020 at 2:00 p.m. via Zoom.

**Board Members Present:** Mike Gaffney, Dr. Liz Palmer, Jeff Richardson, Gary O’Connell, Lauren Hildebrand, and John Blair.

**Board Members Absent:** Lloyd Snook.

**Rivanna Staff Present:** Bill Mawyer, Katie McIlwee, Lonnie Wood, Jennifer Whitaker, Scott Schiller, Katie McIlwee, and John Hull.

**Attorney(s) Present:** Kurt Krueger.

**1. CALL TO ORDER**

Mr. Gaffney called the October 27, 2020 regular meeting of the Rivanna Water and Sewer Authority to order at 2:00 p.m.

**2. STATEMENT FROM THE CHAIR**

Mr. Gaffney read the following statement aloud:

“Notwithstanding any provision in our Bylaws to the contrary, as permitted under the City of Charlottesville’s Continuity of Government Ordinance adopted on March 25, 2020, Albemarle County’s Continuity of Government Ordinance adopted on April 15<sup>th</sup>, 2020, and revised effective October 1, 2020 and Chapter 1283 of the 2020 Acts of the Virginia Assembly effective April 24, 2020, we are holding this meeting by real time electronic means with no board member physically present at a single, central location.

All board members are participating electronically. This meeting is being held pursuant to the second resolution of the City’s Continuity of Government Ordinance and Section 6 of the County’s revised Continuity of Government Ordinance. All board members will identify themselves and state their physical location by electronic means during the roll call which we will hold next. I note for the record that the public has real time audio-visual access to this meeting over Zoom as provided in the lawfully posted meeting notice and real time audio access over telephone, which is also contained in the notice. The public is always invited to send questions, comments, and suggestions to the Board through Bill Mawyer, the Authority’s Executive Director, at any time.”

Mr. Gaffney called the roll.

Ms. Lauren Hildebrand said she was located at 305 4<sup>th</sup> Street Northwest in Charlottesville.

Mr. John Blair said he was located at 605 East Main Street in Charlottesville.

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Mr. Mawyer noted that Mr. Snook was absent.

Dr. Elizabeth Palmer said she was located at 2958 Mechum Banks Drive in Albemarle County.

Mr. Jeff Richardson said he was located at 401 McIntire Road (Albemarle County Office Building) in Charlottesville.

Mr. Gary O’Connell said he was located at the ACSA offices at 168 Spotnap Road.

Mr. Mike Gaffney said he was located at 3180 Dundee Road in Earlysville. He noted that Dr. Tarron Richardson and Mr. Lloyd Snook had not joined the meeting.

Mr. Gaffney said the following Authority staff members were joining the meeting: Bill Mawyer (Executive Director), Lonnie Wood (Director of Finance and Administration), Jennifer Whitaker (Director of Engineering and Maintenance), Dave Tungate (Director of Operations), Scott Schiller, Katie McIlwee (Communications Manager and Executive Coordinator), and John Hull (Software Analyst).

Mr. Gaffney said they were also joined electronically by Mr. Kurt Krueger (Counsel to the Authority).

### **3. MINUTES OF PREVIOUS BOARD MEETINGS**

#### *a. Minutes of Regular Board Meeting on September 22, 2020*

**Dr. Palmer moved that the board approve the minutes of the previous board meeting. The motion was seconded by Ms. Hildebrand and passed unanimously (5-0). (Mr. Snook was absent. Mr. Blair abstained, as he did not attend the September 22, 2020 meeting.)**

### **4. RECOGNITIONS**

There were no recognitions.

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

Mr. Mawyer said he wanted to recognize one of his staff, Mr. Tom Corrice, who is a Wastewater Operator who recently earned his Class II Wastewater Operator’s license. He said Mr. Corrice joined RWSA three years earlier as an unlicensed operator and each year, he has gained a license. He said he gained license levels IV, III, and now II in those three years. He said RWSA is proud of Mr. Carese in his efforts to gain these licenses. He said Mr. Carese not only holds a bachelor’s degree, but a master’s in education as well. He said Mr. Carese brings a lot to the table in RWSA’s operations, which is appreciated.

Mr. Mawyer said regarding RWSA’s strategic plan goal of communication and collaboration, they actually did provide two in-person tours of the Observatory Water Treatment Plant for students from UVA. He said they took all the proper precautions.

Mr. Mawyer said several RWSA members virtually attended the Crozet Community Advisory Committee meeting a few weeks earlier and gave an annual report on the projects that are

93 underway in the Crozet area such as the water treatment plant upgrade, the wastewater flow  
94 equalization tank project (which is currently starting), and the Beaver Creek Dam pump station  
95 and piping project. He said additionally, he always uses this as an opportunity to talk about the  
96 South Rivanna to Ragged pipeline project, as this seems to be a frequent topic of the media, and  
97 so he wants to keep the community informed.  
98

99 Mr. Mawyer said on the subject of the Rivanna-to-Ragged pipeline, RWSA did reach agreement  
100 with one of the commercial property owners near Route 250 on an easement for the pipeline. He  
101 said they have not yet signed the papers, but do have an agreement, in principle, with them. He  
102 said RWSA expects the County School Board to consider granting easements for the pipeline  
103 behind Greer Elementary School in November.  
104

105 Mr. Mawyer said RWSA has reduced the pending list to three private property owners, with two  
106 being located near the South Rivanna Water Treatment Plant. He said those are properties that  
107 were previously purchased by VDOT for the Western Bypass, and then VDOT sold them back to  
108 the original owners, who are now selling them to a different owner. He explained it is sometimes  
109 difficult to determine who owns the property, but RWSA is dealing with those two property  
110 owners as well as the future property owner.  
111

112 Mr. Mawyer said there is one property near Albemarle High School while indicating to a green  
113 section on the presented map. He said this property is Sugar Day Farm and that RWSA is  
114 working with those owners in granting the easement.  
115

116 Mr. Mawyer said RWSA is also talking with UVA Foundation, who owns the blue sections on  
117 the map near St. Anne's Belfield, as well as properties further to the south, past the Birdwood  
118 section. He said RWSA is coordinating with the Foundation on easements and the details for  
119 those properties, and thus are continuing to make progress.  
120

121 Mr. Mawyer said there is a construction project beginning at Sugar Hollow to replace the rubber  
122 gate or bladder that sits atop the concrete dam. He said he believed the contractors moved a crane  
123 there, and over the next 8-10 months, they will be replacing the rubber bladder that inflates and  
124 controls the normal water level in the reservoir. He said when there is a large storm and a lot of  
125 inflow to the reservoir, the bladder will deflate to allow water to pass in a controlled manner  
126 across the bladder and the top of the dam. He said this equipment reached its service life, and so  
127 a contractor is underway with this bladder replacement project.  
128

129 Mr. Mawyer said RWSA put together a webpage to give the public information and will soon be  
130 issuing a press release to let people know what is going on there and to ask them to stay away  
131 from the construction area.  
132

133 Mr. Mawyer said RWSA received a nice letter from the Jack Jouett Magisterial District  
134 representatives (Supervisor Diantha McKeel, Ms. Kate Acuff from the School Board, and  
135 Planning Commissioner Julian Bivins) thanking them for removing the sanitary sewer overflow  
136 basins that were located on Lambs Lane. He said the representatives appreciated the  
137 improvements to the viewscape achieved by this project. He said Mr. Schiller would be showing

138 the board some before and after pictures later in his presentation. He said the letter was nice and  
139 appreciated, and that this was a small but positive project for RWSA and the neighborhood.

140  
141 Mr. Mawyer said RWSA will also be working on the gates at South Rivanna that presented a  
142 struggle a few years earlier, and will have a contractor inside the dam working on those gates. He  
143 said this will hopefully happen in December, if the materials arrive in time.

144  
145 Mr. Mawyer said he had another success story to share. He said in August, RWSA started a  
146 project to clean out the sediment ponds in Moores Creek that hold excess wastewater during  
147 large storms. He said when the wastewater sits in those ponds, sediment will settle out, and that  
148 this sediment has been building up in the ponds for decades. He said in August, the board asked  
149 if there would be odors from the sediment removal, as water had to be taken off the top and  
150 sludge had to be dug, pressed, and hauled away. He said he is glad to say that the project is now  
151 substantially complete, with no odor complaints from the neighborhood.

152  
153 Mr. Mawyer said he looked forward to next month's meeting and that there would be a short  
154 turnaround in that it will be held on the third Tuesday of November, November 17, in order to  
155 stay away from Thanksgiving week. He said both boards (RSWA and RWSA) will attend that  
156 meeting, and RWSA will be giving a presentation on their safety program and optimization of  
157 legal support services.

158  
159 Mr. Mawyer concluded his report and offered to answer questions.

160  
161 Mr. Gaffney said with the Sugar Hollow Dam and the storm coming from the remains of  
162 Hurricane Zeta (whenever it should arrive), plus the rains coming from the southwest, he had  
163 heard talk of 4 or more inches of rain. He asked if this was enough to normally cause the bladder  
164 to go down.

165  
166 Mr. Mawyer replied that if it does rain and the water builds up in the reservoir (which it will),  
167 then the bladder will deflate in a controlled manner to let that water pass over the dam spillway  
168 so that it does not hold it all back and then cause a huge overflow of the dam.

169  
170 Mr. Mawyer said this is a similar concept to what RWSA plans to do at Beaver Creek in that this  
171 spillway does not meet the regulation size of how much water it can pass. He said they are  
172 having to rebuild the spillway and have a larger one so that they can safely control and pass the  
173 amount of rainwater they need to, which will be close to 30 inches per day into the reservoir at  
174 Beaver Creek, but with a larger spillway in order to control that overflow.

175  
176 Dr. Palmer said on the same subject, the Board of Supervisors received an email that said that the  
177 fire road at the Sugar Hollow Reservoir would probably be cut off down to the parking lot below  
178 at some points due to the construction. She asked Mr. Mawyer if he could speak more about this  
179 and if there will be some parking control or police there during those periods of time to try to  
180 keep people from parking in people's driveways and the like, which is what happened last time.

181  
182 Mr. Mawyer asked Ms. Whitaker if she knew anything more about RWSA cutting off the road  
183 there.

184  
185 Ms. Whitaker replied that the intent is not to cut off traffic, nor the road. She said they have to  
186 bring in some fairly large equipment, which will have to be driven in and will be on lowboys.  
187 She said this equipment moves relatively slowly and has to navigate the bridges and topography.  
188 She said there will be times where people will be flagged around. She said at the dam itself,  
189 where the equipment will be brought in, there will be times where they will have to pull  
190 equipment in and do a 27-point turn in order to make into the driveways and spaces where they  
191 need to store the equipment.

192  
193 Ms. Whitaker said they do not intend to close the Sugar Hollow road at any point other than for  
194 the short, temporary inconveniences of being able to get equipment in and out. She said she did  
195 not think this would be very long at all, and that most of this would be a rolling effort. She said  
196 they did want to make people aware that because of the construction, there will be equipment  
197 moving around in the area.

198  
199 Mr. Mawyer added that they will lower the reservoir water level on purpose from time to time  
200 when the work is being done, which is part of the reason for the media release. He said they do  
201 not want anyone to think there is a hole in the reservoir or a problem with it. He said there will  
202 likely be a barge and crane working out in the reservoir.

203  
204 **6. ITEMS FROM THE PUBLIC**

205 Mr. Gaffney opened the meeting to the public.

206  
207 Mr. Matthew Lucas said he lives at 1966 Buck Mountain Road with his wife and kids and  
208 purchased their home about 18 years ago from the estate of John Via. He said he was there to  
209 talk about Lot 13, which RWSA owns as part of the Buck Mountain Reservoir. He said Lot 13 is  
210 about 60 acres and originally formed the 100-acre farm.

211  
212 Mr. Lucas said RWSA condemned Lot 13 involuntarily. He said his farm is a beautiful farming  
213 property of which they put a large portion into conservation via the County's ACE program. He  
214 said this is a selective program that only takes lots that are important to the County, and his lot  
215 sits on about a quarter mile of road frontage enjoyed by everyone.

216  
217 Mr. Lucas said the second reason the lot was involuntarily condemned was because there was an  
218 1820s farmhouse on the property. He said he put his life savings and work into restoring it, and  
219 one should never develop the area because it would harm the character of the house and its  
220 history. He said the community loves the house, and the house is a defining feature of Free  
221 Union.

222  
223 Mr. Lucas said the third reason was from a functional perspective. He said the property line  
224 between his house and Lot 13 zigzags like a heartbeat because it follows the contours of the  
225 ground, which makes sense if you're taking it for the purpose of building a reservoir. He said this  
226 spot would make sense for farm operations or subdividing, and there is no clean boundary or  
227 setback from his barn and outbuilding. He said in fact, it backs directly up to his house.

228

229 Mr. Lucas said he knows that RWSA is looking into selling or leasing some properties. He said  
230 every one of those properties is different, and so he would not speak to them, but only to Lot 13.  
231 He said he thinks Lot 13 should be reconnected with his property to form the original farmhouse,  
232 and that Lot 13 should never be developed by him, RWSA, or anyone else. He said he tried to  
233 buy it back about 15 years earlier and RWSA had no interest in that. He said his proposal then,  
234 as it stands now, would be to put Lot 13 in a conservation easement with Albemarle County's  
235 ACE program and sell it back to him. He said he would do all the legwork.

236  
237 Mr. Lucas said if RWSA will not sell the property to him, they could lease it to him. He said he  
238 approached them 15 years earlier about that and they were not taking leases at that time. He said  
239 he would take great care of the property, and his mother does invasive species removal in her  
240 club. He said his son planted about 100 trees on his property and would love to do that. He said  
241 he would take the trash out. He said it would still be able to be used for hunting, horseback, and  
242 walking.

243  
244 Mr. Lucas asked that RWSA consider longer-term leases so that the lessee can think about  
245 investing in the longer term to make improvements to the property.

246  
247 Mr. Lucas said his greatest concern was that RWSA will sell the lot to a developer or have the lot  
248 studied for windmills, parks, or hunting. He begged them before doing this to make a boundary  
249 line adjustment, as he needs a buffer and a clean boundary for a fence. He said otherwise, there  
250 will be hunters and passersby in his backyard, which is much too close and would be totally  
251 unfair to him. He said a property line adjustment is easy, and no blocks are created, nor any  
252 political implications. He said it is fair and reasonable, and that they can connect with the  
253 conservation easement or a historic easement on the house. He said if they can do the zoning, he  
254 will do all the legwork.

255  
256 Mr. Lucas said there is a copy of a presentation with pictures if the board is interested in learning  
257 more about this, and that Ms. Andrea Terry can forward this along to them.

258  
259 Mr. Gaffney closed Items from the Public.

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261 **7. RESPONSES TO PUBLIC COMMENT**

262 Mr. Mawyer said the board may recall that RWSA made a presentation to them several months  
263 earlier about what to do with the Buck Mountain property and a proposed master plan. He said  
264 they came away from that with a plan to create a property management plan and that RWSA is in  
265 the process of doing this. He said they are interviewing consultants that week to make a selection  
266 to get a term contract with a consultant who can help them put together a property management  
267 plan.

268  
269 Mr. Mawyer said one aspect RWSA informed the board of before was that there were some  
270 parcels that had division rights. He said they will find out how this would or would not work. He  
271 said at this point, they plan to come back to the board around February with a property  
272 management plan and an outline of more details based on the master plan provided to the board a  
273 few months back. He said this plan will include whether or not they sell any properties, which  
274 properties these would be, and how property lines might be set up.

275  
276 Mr. Mawyer said RWSA would be glad to coordinate with Mr. Lucas, share his thoughts with  
277 the board, and give him fair consideration as they move forward with the property management  
278 plan.

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280 **8. CONSENT AGENDA**

281 *a. Staff Report on Finance*

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283 *b. Staff Report on Operations*

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285 *c. Staff Report on Ongoing Projects*

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287 *d. Staff Report on Wholesale Metering*

288  
289 **Dr. Palmer moved that the board approve the Consent Agenda. The motion was seconded**  
290 **by Mr. O'Connell and passed unanimously (6-0). (Mr. Snook was absent.)**

291  
292 **9. OTHER BUSINESS**

293 *a. Presentation: Disposition of FY 2020 Rate Center Results*

294 Mr. Lonnie Wood, Director of Finance/Administration, said the board may recall that in July,  
295 there was a presentation made to the board on RWSA's reserves, how they are related to the  
296 bond ratings and criteria and, overall, how they relate to the financial policies that the board has  
297 adopted and updated in the last several years. He said this agenda item deals with one of those  
298 financial policies which is that, at the end of the fiscal year after the audit is performed, RWSA  
299 looks at its operating cash balance and compares it to their target, which is 60 days' worth of  
300 operating cash on hand, which is compared to where the June 30 balance ended up after the  
301 audit.

302  
303 Mr. Wood said in 2020, they had a small deficit of about \$95,000 overall. He said the operating  
304 account has all the financial transactions from each of the six rate centers funneled through it all  
305 year long. He said the operating account can actually accumulate some surpluses in one rate  
306 center and deficits in another. He said the slide on the screen showed the two rate centers that did  
307 end the year in a deficit, with the remaining four rate centers ending in a surplus.

308  
309 Mr. Wood said they then reconcile the reserves and the operating account to bring the operating  
310 account back to full. He said the Urban Water reserve account and the Glenmore Wastewater  
311 reserve account will fund the operating account with this board action, and the remaining four  
312 rate centers will actually see their reserves increased from the operating account, which will  
313 bring the operating account back to its 60-day target.

314  
315 Mr. Wood said the third page of the memo showed the adjusted ending balance of the reserve  
316 balance, and there are ample reserves to fund this transfer to the operating account.

317

318 Mr. Wood said RWSA has done this for about 15 years, and this is part of their financial policy.  
319 He said it has been a good policy to keep the various rate centers separated out, as they should  
320 be. He asked if there were questions.

321

322 Mr. O'Connell said on the third page, it shows total reserves. He asked if this includes the 60-day  
323 target working cash balance.

324

325 Mr. Wood replied that it does not. He said this was simply showing the reserve balance, with the  
326 operating cash being about \$6 million. He said one would add the \$6 million to the \$32.5 to get  
327 the total cash balance.

328

329 Mr. Wood said in July, there was discussion about how they do have a significant amount of  
330 cash reserves and operating cash on hand because some of the other metrics they use, in relation  
331 to their bond rating, are somewhat weak. He said they have weak debt service ratio, which is the  
332 amount of excess revenue they have and overall, they have a large amount of debt they are  
333 holding for the size of the authority that they are. He said one of the things to mitigate that is to  
334 have a strengthened position in their cash balances.

335

336 Mr. Gaffney asked if a board member would make a motion to approve the transfer funds.

337

338 **Mr. O'Connell moved that the board approve the transfers to the respective reserves, as**  
339 **outlined in the report the board received. The motion was seconded by Dr. Palmer and**  
340 **passed unanimously (6-0).**

341 *b. Capital Projects Update*

342 Mr. Scott Schiller, Engineering Manager, said he would provide a construction update on the  
343 major capital projects and talk about some design projects that are getting started and being  
344 moved towards construction.

345

346 Mr. Schiller said he would start with the recently completed projects. He said the first was the  
347 Albemarle-Berkley Pump Station Basin Demo project, which were some basins that were part of  
348 an old treatment plant that were on that site. He said as the pump station came online, those  
349 basins were only really used for overflow purposes. He said once an emergency power generator  
350 was put on the site, there was no need for these basins.

351

352 Mr. Schiller said the picture on the upper left side of the screen showed the basins. He said the  
353 picture on the lower left showed the demolition of the concrete, and the middle picture showed  
354 where everything had been backfilled. He said there is now greenspace just behind the pump  
355 station.

356



357 Mr. Schiller said RWSA is also in the process of analyzing that pump station, since it was  
358 created in 1975. He said they thought it was a good idea to add some bypass connections as well  
359 so that if there is a problem with the pump station, they can bring in a portable pump and  
360 maintain service.

361  
362 Mr. Schiller said the work was completed in September for a value of \$200,000.

363  
364 Mr. Schiller said the next project was Phase 2 of the Valve Repair-Replacement project, which  
365 continues the replacement of some malfunctioning valves in the finished water system. He said  
366 RWSA installed 12 new valves, and there was an insertion valve that was added, making the  
367 total 13, as well as a new air release valve.

368  
369 Mr. Schiller said a good majority of these valves were located in roads, in VDOT's rights-of-  
370 way, and so a good amount of work was done at night. He said the lower left picture on the  
371 screen was an example of what they were dealing with. He said the first night they would go out,  
372 break the asphalt, dig down on the pipe, and then actually do the repair work the following night.

373  
374 Mr. Schiller said there was a lot of coordination with the City and the ACSA in this process, and  
375 so RWSA was thankful for their help through it all. He said the top three pictures on the screen  
376 were all related to one particular replacement where the South Rivanna Waterline and the Urban  
377 Waterline come together. He said it is just downstream of the water treatment plant, and they  
378 needed to maintain some water flow through the system during the valve replacement project.

379  
380 Mr. Schiller said the picture in the upper left portion of the screen was of a large line stop that  
381 was placed on either side of the arrangement, and there was a bypass pipe built into that as well  
382 so it could maintain some flow through the area even while the section was under construction.  
383 He said the middle picture was of the workers removing the old T pipe fitting and a couple  
384 valves, and the righthand picture was of them bringing in a new piping assembly. He said it was  
385 a major effort, with a lot of work going into this project over the past couple years. He said  
386 RWSA is thankful to have it off the books. He said it finished up in August for a value of around  
387 \$1 million.

388  
389 Mr. Schiller said the next project is in Scottsville, where RWSA installed a new finished water  
390 flow meter. He said previously, finished water values were determined by calculations using  
391 pump runtime as well as clear well volume, which can fluctuate depending on the pressure in the  
392 system, and so they wanted a more exact method of measuring flows. He said they proceeded  
393 with installing a new finished flow meter as well as some new discharge piping and valves.

394  
395 Mr. Schiller said the picture on the left side of the screen showed the original arrangement of the  
396 discharge piping. He said on the right was the image that showed the revised piping arrangement.

397 He said it was an interesting way of putting in the piping because they had to get the proper  
398 lengths on either side of the flow meter to get the right value, and so they had to go up and  
399 around to get it in, but they did a good job doing so. He said this was done by Anderson  
400 Construction and finished in February at a value of around \$145,000.

401

402 Mr. Schiller said he would move onto some projects that are currently under construction. He  
403 said the Crozet Water Treatment Plant Expansion is an expansion of the plant from 1 million  
404 gallons per day (mgd) to 2 mgd by modernizing the existing plant processes and systems. He  
405 said an example of this was shown in the picture on the lower left portion of the screen, which  
406 was the addition of plate settlers into the sedimentation basins. He said the picture on the right  
407 showed the original chemical building, and the picture on the left showed how it was expanded  
408 for more chemical storage, which is now liquid lime storage.

409

410 Mr. Schiller said they also built a backwash storage tank in the place of one of the lagoons,  
411 which was shown in the lower-right image. He said this will allow them to take backwash water  
412 or water drawn from basins and discharge it into the local sewer system, as opposed to having to  
413 wait for solids to settle, then decant the water and discharge it into Beaver Creek. He said they  
414 would have someone come in and pump out the solids to do that, and so this new way is a much  
415 more efficient way of handling backwash water.

416

417 Mr. Schiller said they also rebuilt the filters and put in a blower for an air wash. He said there  
418 was a fair portion of work done at this site, which started back in December of 2018. He said this  
419 was done by Orders Construction and that completion is expected in March of 2021 at a budget  
420 of \$8.5 million.

421

422 Mr. Schiller said the next project is the Observatory and South Rivanna Water Treatment Plants  
423 Rehabilitation and Expansion Project. He said this project looks to increase the capacity at  
424 Observatory to 10 mgd and the reliability of South Rivanna to meet their capacity of 12 mgd for  
425 an extended period of time.

426

427 Mr. Schiller said at Observatory, the work has included installation of plate settlers in the  
428 sedimentation basins similar to what is being done at Crozet, but on a larger scale. He said they  
429 will be building a new chemical building at Observatory to house all the chemicals onsite. He  
430 said they will also add four GAC vessels, which is a major component of the project.

431

432 Mr. Schiller said at South Rivanna, they will build a new alum and fluoride building, and add  
433 two filters as well as a number of other improvements. He said the top-right photo on the screen  
434 was a picture of the excavation work for the two new filters in order to get the foundation in for  
435 the filters. He said there was some pipe replacement work that had to be done as well. He said  
436 the photo on the left showed pipe relocation for what will be the alum and fluoride building. He

437 said the lower-left picture was a maze of conduit going in for an electrical building. He said the  
438 lower-right picture was a new building going up around the liquid lime storage tanks to better  
439 protect them during freezing temperatures in the winter.

440  
441 Mr. Schiller said English Construction is the contractor for this work. He said RWSA gave them  
442 notice to proceed back in May and expect completion in March of 2023, with a total project  
443 budget of \$43 million.

444  
445 Mr. Schiller said next was the South Rivanna Dam Gate Repairs project that Mr. Mawyer had  
446 mentioned. He said they had some leakage through the 36-inch mud gates on both the north and  
447 south abutments. He said Bander Smith (RWSA's on-call maintenance contractor) went there  
448 and inspected the gates.

449  
450 Mr. Schiller said the picture on the upper-left portion of the screen showed a view of the top of  
451 the chamber, which is the actuator for the gate. He said down inside are two chambers – one  
452 where one can isolate the sluice gate chamber with a bulkhead fitting.

453  
454 Mr. Schiller said the picture on the right showed a diver going down to get a view of the gates  
455 and to inspect the stems and stem guides. He said what they found was that there were some  
456 missing stem guides and some other issues that needed to be resolved. He said there were some  
457 issues with some of the actuators as well. He said it is a fairly deep chamber and if some of the  
458 stem guides are missing and one tries to close the gate, they will get a bit of a bow in that stem,  
459 which makes it difficult to put the force needed on the gate to seal it correctly. He said RWSA is  
460 hopeful that replacing some of the stem guides and working on the actuator will resolve the  
461 issue.

462  
463 Mr. Schiller said as Mr. Mawyer alluded to, there has been an issue with getting the materials  
464 delivered, but it looked as though they should arrive in mid-December. He said the contractor is  
465 ready to install them as soon as they are in. He said assuming no issues, this work should  
466 complete in December. He said the overall budget is \$900,000.

467  
468 Mr. Schiller said the next project is Sugar Hollow Rubber Crest Gate Replacement, which is the  
469 rubber bladder or gate that Mr. Mawyer mentioned. He said this will help control the level of the  
470 reservoir by inflating and deflating to max the elevation and to slowly release water. He said it is  
471 at the end of its useful life, and so they will be replacing the rubber gate as well as some of the  
472 mechanical and electrical equipment. He said there is a blower that helps maintain the air  
473 pressure as well as a programmable logistics controller (PLC) and some other control panels.

474  
475 Mr. Schiller said Allegheny Construction was low bidder for this work and, as mentioned, are  
476 starting to mobilize some of their equipment to the site. He said RWSA gave them a notice to

477 proceed at the beginning of October and are looking for a completion in Fall 2021 at a budget of  
478 \$2 million.

479  
480 Mr. Schiller said next was the Crozet Flow Equalization Tank and Pumping Station Upgrade. He  
481 said RWSA performed a comprehensive sanitary sewer analysis, which determined that it was  
482 more efficient and cost-effective to store wet weather flow out in Crozet than to try to pump it  
483 through pump stations all the way to Moores Creek. He said they wound up with a 1 mgd  
484 capacity storage tank, as well as some improvements to the existing pump station to get the  
485 wastewater in and out of the tank.

486  
487 Mr. Schiller said Anderson Construction was awarded the project and were given notice to  
488 proceed on October 9. He said they have begun mobilizing and doing some clearing on the site,  
489 so the work is underway. He said RWSA is looking for this to hopefully complete in November  
490 of 2022, with a total project budget of \$5.4 million.

491  
492 Mr. Schiller said also as mentioned is the holding pond cleanout work at Moores Creek. He said  
493 the basins pictured on the screen were used to store excess flows during storms as they came into  
494 the plant. He said the solids settle and take up some of the capacity of the ponds. He said the  
495 intent is to remove those solids to regain that capacity.

496  
497 Mr. Schiller said the upper-left picture on the screen showed the draining of the water down. He  
498 said the contractor (Merrill Brothers) would then liquify the solids and pump it into a series of  
499 belt filter presses to remove the water, then remove the solids offsite. He said there was also a  
500 fair amount of grit there, which was able to be removed. He said there was a skid steer and a  
501 long-neck excavator there to scoop it out.

502  
503 Mr. Schiller said this went well and, as Mr. Mawyer mentioned, there were no reports of odors.  
504 He said the work completed last week, which was ahead of schedule. He said the overall budget  
505 for this was \$975,000.

506  
507 Mr. Schiller said in Scottsville, there is a project to install a ultraviolet light (UV) disinfection  
508 system to meet the Long Term 2 Enhanced Surface Water Treatment Rule. He said the intent is  
509 to remove additional E. coli and Cryptosporidium from the water. He said a UV unit is used to  
510 do this.

511  
512 Mr. Schiller said the picture on the lower left side of the screen showed the GAC building at  
513 Scottsville, and the middle picture showed the existing GAC effluent line. He said RWSA will  
514 be modifying that piping (as shown in the righthand picture) to insert a UV system as well as a  
515 bypass pipe. He said there are also chemical feed lines that have to be relocated. He said it is a

516 fair amount of piping in somewhat of an odd arrangement, but this was the best way to fit  
517 everything in and still have access to the UV unit for maintenance purposes.

518  
519 Mr. Schiller said the work was awarded to Littleton Construction, which was given notice to  
520 proceed in September. He said completion is expected in June of 2021, with a total budget of  
521 \$190,000.

522  
523 Mr. Schiller said he would talk about some projects that are beginning design, or are currently in  
524 design and will move into construction in the near future. He said the first is the Moores Creek  
525 Lighting Improvements. He said as the board could see from the night image on the right side of  
526 the screen, the facility is well lit. He said unfortunately, it is also well lit by some stadium-type  
527 lighting, which is not in accordance with County regulations and needs to be modified.

528  
529 Mr. Schiller said a fair number of lights on the plant need to be replaced with what are  
530 considered full cutoff light fixtures. He said some of the stadium lights radiate outside of the  
531 intended areas, whereas the full cutoff fixture focuses the light only on the spot it is intended for.

532  
533 Mr. Schiller said RWSA developed an engineering report as well as a minor site plan amendment  
534 and submitted those to the County. He said they are nearing approval on this design.

535  
536 Mr. Schiller said the intent is to have some of the fixtures replaced by RWSA's maintenance  
537 department – at least the ones that are accessible and can be readily addressed. He said they will  
538 also be bidding out some of the replacement work. He said expected completion is February  
539 2022, with a budget of \$1.9 million.

540  
541 Mr. Schiller said also at Moores Creek is the 5kv Electrical System Upgrade. He said RWSA is  
542 currently undergoing a facility master plan with Hazen Engineers for this facility, and one of the  
543 things that came up is that the 5kv electrical system is past its serviceable life. He said it is the  
544 lifeblood to quite a number of the facilities, as it is the electrical supply for them. He said RWSA  
545 has been working with Hazen to develop a scope of work for this project. He said Hazen has  
546 started design and basically, they will be running new 5kv wiring and conduit, adding a new  
547 switchgear building, replacing some of the motor control centers (MCCs), and adding and  
548 replacing transformers, making for a major electrical project with a great deal of work to be done  
549 on the design side.

550  
551 Mr. Schiller said the project is expected to complete by 2024, with a budget of \$4.6 million.

552  
553 Mr. Schiller said next is the Airport Road Pump Station and Piping project. He said this is in the  
554 Forest Lakes/Hollymead area at the Route 29/Airport Road intersection. He said the intent is to  
555 more reliably connect the urban pressure zone with the Piney Mountain pressure zone. He said in

556 the past when either the North Rivanna treatment plant has been down, or they have had issues  
557 otherwise, they bring out a portable pump to the Kohls shopping center, which takes a good deal  
558 of effort to get there, and its operation is not as reliable as they would like it to be. He said this  
559 would essentially be a permanent fixture of that pump station.

560  
561 Mr. Schiller said it is also intended to work with the Airport Road pressure zone in the future as  
562 well, and so there are multiple purposes for this site.

563  
564 Mr. Schiller said design is underway and is at about 30-40%. He said they are looking for the  
565 construction to be completed in 2022 for a budget of \$7.6 million. He said they are working  
566 through some renderings of the pump station and some County approval procedures.

567  
568 Mr. Schiller said next was the South Rivanna River Crossing and a short section of the North  
569 Rivanna Transmission Main. He said the intent of the project is for reliability by having a second  
570 crossing under the South Rivanna River. He said the crossing to the east of Route 29 is the  
571 existing one, which is the main and only feed to the northern portion of the urban zone, just north  
572 of the river. He said they want to make sure they have a second crossing (shown as the red line  
573 on the map) at the river to more reliably feed the northern zone.

574  
575 Mr. Schiller said design is kicking off for the project, and that it will be an interesting project to  
576 get under the river. He said they are looking at different options to possibly open cut or to bore  
577 and go underneath the river. He said they look for this to be completed in 2024, with a budget of  
578 \$3.65 million.

579  
580 Mr. Schiller said next was the Central Water Line, which is part of the current Finished Water  
581 Master Plan that is being worked through. He said the Central Water Line is a major component  
582 of that particular analysis. He said the general intent of the project is to approve water flow,  
583 pressure, and redundancy in the Urban System. He said there are three legs of transmission  
584 mains that come down into the City, and RWSA is looking to essentially hydraulically  
585 interconnect those so they can more efficiently move water from one side of the system to the  
586 other.

587  
588 Mr. Schiller said the Finished Water Master Plan is working through the general alignment for  
589 the Central Water Line and how it can interact with some existing City CIP projects. He said  
590 RWSA would love to have an “as the crow flies” alignment, but this is not the way it works in  
591 reality, so they are working through all of this with the City to make sure that this is timed  
592 appropriately with City projects. He said the completion schedule is very approximate, and as  
593 they work through this with the City, they will fine-tune the schedule to make sure it meets all  
594 their needs. He said the overall budget for the project is \$13 million.

595

596 Mr. Schiller said finally, there is the Beaver Creek Dam Pump Station and Piping Modifications  
597 project. He said the purpose of the project is to upgrade the spillway to meet the DCR dam safety  
598 standards and regulations. He said the middle picture on the slide showed the labyrinth spillway  
599 RWSA is proposing and that in order to do this, they unfortunately have to relocate the existing  
600 raw water pump station. He said they have been working through some environmental  
601 investigations as well as some site review work associated with the site selection process for the  
602 raw water pump station. He said much of this work is required for the joint permit application  
603 with DEQ for the project.

604

605 Mr. Schiller said RWSA is also working with the federal Natural Resources Conservation  
606 Service (NRCS) on a two-year planning study associated with the entire project, with the intent  
607 to get everything set up and then progress into design in 2022. He said it is a long process for  
608 many people involved, and the planning study is being funded by NRCS. He said as they get  
609 through the planning study, RWSA will have an opportunity to go after additional funding from  
610 NRCS for the rest of the project as well. He said they are looking for overall completion of this  
611 project in 2026, with an overall project budget of \$27 million.

612

613 Mr. Schiller concluded his presentation and asked if there were any questions.

614

615 Mr. O'Connell said this was a great presentation.

616

617 Dr. Palmer said Mr. Schiller answered many of her questions. She said when she was reading the  
618 packet, she jotted down many questions, and Mr. Schiller answered them. She said she did still  
619 have one question, however. She asked if RWSA is still talking with the people who live  
620 adjacent to the pump station at Beaver Creek. She recalled that a young lady came to speak to the  
621 RWSA board at their meeting a month or two ago.

622

623 Mr. Schiller said this was the Clark family.

624

625 Dr. Palmer said yes. She asked if RWSA was still working with them, or if they have not come  
626 up with anything yet because there has not been enough time to do so.

627

628 Mr. Schiller replied that they have expanded some of the site selection reviews and  
629 environmental investigation to look at all of the sites. He said they added Sites 1 and 2 back into  
630 the evaluation after listening to some of the comments and reanalyzing the sites in general. He  
631 said they have also been talking to VDOT about some of the concerns they had with Sites 1 and  
632 2 and access to them and are working through some of that information as well. He said they are  
633 working towards answers for the Clarks and as they get through the process, they will reach back  
634 out to the family and update them on all the information.

635

636 Mr. O'Connell asked if there were five options for this.

637  
638 Mr. Schiller replied that it includes Sites 1, 2, 3, 4a, and 4b. He said there was another option that  
639 was beneath the reservoir that they decided to take off the list because RWSA did not think was a  
640 viable option. He said these are all options on the south portion of the reservoir.

641  
642 Mr. Gaffney asked if regarding the Airport Road property where the pump station will go, there  
643 are still plans to have the tank there at some point.

644  
645 Mr. Schiller replied yes. He said currently, they are focused on the pump station site and getting  
646 that through County review, but they did identify future tank locations on that site plan as well.  
647 He said there may be two ground storage tanks they are planning for on that site, and depending  
648 on where the pump station is located, they are making sure they do have the ability to locate  
649 tanks on that site.

650  
651 Mr. Gaffney requested that when the lighting renovations at Moores Creek are complete, another  
652 drone photo is taken to show the before and after.

653  
654 Mr. Schiller agreed. He said one thing that has been interesting with this project is not only  
655 modifying the lighting to meet the County's requirements, but making sure they take care of  
656 lighting on the stie as needed for safety purposes. He said some of the lighting they have is not  
657 well-purposed, and so they are going to focus on bringing the lighting where it is needed and  
658 have appropriate lighting for walkways for operators. He said they took the opportunity to make  
659 it an overall improvement project instead of solely working to meet the County's requirements.

660  
661 Dr. Palmer said this was wonderful. She said in a meeting she attended earlier, one of the  
662 discussions was about how to work environmental issues and improvements into everything the  
663 County does. She said she appreciates Mr. Gaffney's comment about taking the drone pictures  
664 because this something the RWSA should be informing the public about. She said it will be a  
665 dramatic improvement for environmental reasons as well as a visual improvement.

666  
667 Mr. Schiller agreed.

668  
669 ***10. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA***

670 There were none.

671 ***11. CLOSED MEETING***

672 There was no closed meeting.

673

674 ***12. ADJOURNMENT***

675 **At 2:49 p.m., Mr. O'Connell moved to adjourn the meeting of the Rivanna Water and**



676 **Sewer Authority. The motion was seconded by Dr. Palmer and passed unanimously (6-0).**  
677 **(Mr. Snook was absent.)**

678

679

680 Respectfully submitted,

681

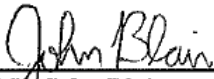
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\_\_\_\_\_  
Mr. John Blair  
Secretary - Treasurer