



RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
February 23, 2021

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, February 23, 2021 at 2:15 p.m. via Zoom.

Board Members Present: Mike Gaffney, Chip Boyles, Lloyd Snook, Dr. Liz Palmer, Jeff Richardson, Lauren Hildebrand, Gary O’Connell.

Board Members Absent: none.

Rivanna Staff Present: Bill Mawyer, Katie McIlwee, Lonnie Wood, Jennifer Whitaker, David Tungate, John Hull.

Attorney(s) Present: Carrie Stanton.

1. CALL TO ORDER

Mr. Gaffney called the February 23, 2021 regular meeting of the Rivanna Water and Sewer Authority to order at 2:16 p.m.

2. STATEMENT FROM THE CHAIR

Mr. Gaffney read the following statement aloud:

“This is Mike Gaffney, Chair of the Rivanna Water and Sewer Authority.

“I would like to call the February 23, 2021 meeting of the Board of Directors to order.

“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 15th, 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.

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Mr. Chip Boyles (City Manager) stated he was located at Charlottesville City Hall in Charlottesville, VA.

Ms. Lauren Hildebrand stated she was located at 305 4th Street Northwest in Charlottesville, VA.

Mr. O’Connell stated he was located at 168 Spotnap Road (ACSA Headquarters).

Dr. Lizbeth Palmer stated she was located at her home address of 2958 Mechum Banks Drive in Charlottesville, VA.

Mr. Jeff Richardson stated he was located at the County Administration Building at McIntire Road in Charlottesville, VA.

Mr. Lloyd Snook stated he was located at 408 East Market Street in Charlottesville, VA.

Mr. Mike Gaffney stated he was located at 3180 Dundee Road in Earlysville, VA.

Mr. Gaffney stated the following Authority staff members were joining the meeting electronically: Bill Mawyer, Lonnie Wood, Jennifer Whitaker, David Tungate, John Hull, and Katie McIlwee.

Mr. Gaffney stated they were also joined electronically by Ms. Carrie Stanton, Counsel to the Authority.

Mr. Mawyer and Mr. Gaffney welcomed Ms. Stanton and Mr. Boyles to their first RWSA Board meeting.

3. MINUTES OF PREVIOUS BOARD MEETINGS

a. Minutes of Regular Board Meeting on January 26, 2021

Dr. Palmer moved that the board approve the minutes of the previous board meeting. The motion was seconded by Mr. O’Connell and passed unanimously (6-0). (Mr. Boyles abstained.)

4. RECOGNITIONS

There were no formal recognitions made.

5. EXECUTIVE DIRECTOR’S REPORT

Mr. Mawyer stated he wanted to recognize three Authority employees who have improved their professional qualifications by passing licensing exams given through the state. He stated Mr. Matthew Mitchell is now a Class I Water Operator, as well as Mr. Ron Dudash. He stated Mr. Robbie McMullen is a Class IV Wastewater Operator. He stated all three gentlemen passed their exams, and he would mention that Mr. Mitchell and Mr. Dudash are what he calls “homegrown” Class I Operators, and Class I is the highest level in the state’s hierarchy of water operators. He stated one starts at trainee, then moves up from Class IV to Class I.

92 Mr. Mawyer stated Mr. Mitchell came to the Authority a year and a half ago with no water
93 operator license, and he has taken the initiative to take online courses and other training. He
94 stated Mr. Mitchell has passed all the exams up to Class I. He stated Mr. Dudash came to the
95 Authority with a Class III and in two years, he has taken the initiative to work hard and get his
96 Class I Water Operator license, which is very valuable to the Authority and throughout the state.
97 He stated the Authority appreciates these men, along with Mr. McMullen for putting forth the
98 effort to get their licenses, which helps these water and wastewater operators and helps the
99 Authority.

100
101 Mr. Mawyer stated the Authority gives their operators a 5% salary increase with each license that
102 they pass, so they share the appreciation with them.

103
104 Mr. Mawyer stated regarding COVID vaccinations, the Authority has been coordinating with
105 Blue Ridge Health District and the Vaccine Administration Management System to get vaccines.
106 He stated about 70% of the Authority's staff indicated that they wished to get the vaccine and to
107 date, about 40% of their staff have received the first shot, with a small group having received the
108 second shot. He stated progress is being made on that.

109
110 Mr. Mawyer stated regarding the strategic plan goal for infrastructure and master planning, work
111 continues on the Rivanna to Ragged Mountain Reservoir waterline. He stated for the 9.5 miles of
112 alignment on which that they need easements and agreements, they have obtained a significant
113 amount of it.

114
115 Mr. Mawyer stated the map on the screen was updated and had been shown in the past. He stated
116 the black lines on the map had been obtained, either with an easement or an agreement. He stated
117 only the colored lines were yet pending.

118
119 Mr. Mawyer stated much of what was left was in blue, which is the UVA Foundation. He stated
120 the Authority is getting focused with the foundation on those properties. He stated they expect
121 and hope to meet with the Albemarle County School Board in March to obtain the easement that
122 goes behind Greer Elementary School in the Lambs Road area, which was shown on the map in
123 the purple line. He stated the Authority is making progress on obtaining the easements and rights
124 to get the pipe installed.

125
126 Mr. Mawyer stated the Authority has coordinated with UVA on their new Contemplative
127 Commons Building, which will be built in the dell area of UVA near Emmett Street. He stated
128 we have a waterline that runs adjacent to UVA's site, and the Authority is coordinating with
129 them, as this might be a good time to upgrade that water pipe before the building is constructed.

130
131 Mr. Mawyer stated he was a party to a presentation that Sunday with other speakers for the
132 League of Women Voters and talked about the water supply system.

133
134 Mr. Mawyer stated some Authority staff, including Ms. Andrea Bowles and Ms. Jennifer
135 Whitaker, will participate in a webinar series with the County about stream health. He stated they
136 are trying to stay active in the neighborhood and communicate on those topics.

137

138 Dr. Palmer commented that she saw the count of participants at the League meeting at which Mr.
139 Mawyer spoke, and it was actually 58, with eight of those being speakers. She stated she thought
140 she would mention that this was a good turnout for Mr. Mawyer's time spent on a Sunday talking
141 to the public.

142

143 **6. ITEMS FROM THE PUBLIC**

144 Mr. Gaffney opened the meeting to the public. He asked Mr. Hull if there were any members of
145 the public present who wished to speak.

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147 Mr. Hull replied that no one had indicated their wish to participate.

148

149 Mr. Gaffney closed Items From the Public.

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151 **7. RESPONSES TO PUBLIC COMMENT**

152 As there were no items from the public, there were no responses.

153

154 **8. CONSENT AGENDA**

155 *a. Staff Report on Finance*

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157 *b. Staff Report on Operations*

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159 *c. Staff Report on Ongoing Projects*

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161 *d. Staff Report on Wholesale Metering*

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163 *e. Award of Engineering Services Term Contracts for Water and Sewer Consulting Services:*
164 *Kimley Horn; Wiley/Wilson; Whitman Requardt & Associates*

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166 **Dr. Palmer moved that the board approve the Consent Agenda. The motion was seconded**
167 **by Mr. O'Connell and passed unanimously (7-0).**

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169 **9. OTHER BUSINESS**

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171 *a. Presentation: Introduction of the FY 2022-2026 Capital Improvement Plan*

172 *Executive Director, Bill Mawyer*

173 Mr. Mawyer stated it was his pleasure to present the proposed Capital Improvement Plan for FY
174 22-26, which starts on July 1.

175

176 Mr. Mawyer stated the Authority begins planning for most, if not all, of their projects with the
177 strategic plan guidance. He stated infrastructure and master planning is one of their six strategic
178 plan goals to plan, deliver, and maintain dependable infrastructure in a financially responsible
179 way.

180

181 Mr. Mawyer stated they have seen challenges in the country, notably in Texas where they have
182 had misfortune and possibly did not have the infrastructure planning, delivery, or maintenance
183 that they needed for abnormal weather conditions. He stated he was sure the board had read
184 about it and had seen it in the news, but the drinking water system for half the state has been
185 affected in Texas, and they have a boil water notice. He stated the electric system froze, and 4.5
186 million customers are out of power in Texas, with people waiting in line for water and other
187 utilities.

188
189 Mr. Mawyer stated it is unfortunate for those in Texas, but in some ways, this is exactly what the
190 Authority does not want to happen in our community. He stated this is why the Authority puts
191 together and tries to execute its CIP which, for the next five years, includes 54 projects totaling
192 \$169.7 million. He stated the majority of those funds are allocated to the urban water system
193 (\$96 million); \$40 million for the wastewater system; \$29 million for the non-urban systems in
194 Crozet, Scottsville, and Glenmore; and \$5 million in shared projects, which are generally
195 technology projects that serve both the water and sewer systems. He stated technology may be
196 for asset management and security, both software and hardware.

197
198 Mr. Mawyer stated this is a five-year CIP that is \$37 million greater than the CIP from the last
199 five years (FY 21-25). He stated generally, that \$37 million is because \$31 million will come
200 into the five-year window as a part of FY 26, so that has been planned for many years. He stated
201 they are increasing the budget by \$11 million for some existing projects. He stated they have
202 added six new projects for a total of \$9 million in the five-year CIP, but they completed \$14
203 million in the last year. He stated this nets to the \$37 million, which he would provide more
204 details on if there were questions.

205
206 Mr. Mawyer stated they also plan to use cash reserves of \$14.4 million to supplement the
207 expenses. He stated they have planned new debt of about \$129 million over the next five years.

208
209 Mr. Mawyer stated the chart on the screen provided a graphical indication of how the proposed
210 FY 22-26 CIP compares to Rivanna's 20-year history. He stated they were above the line, but he
211 would say that they have some offset of the 2020 CIP when they were below average, and they
212 are rebounding to deal with deferred maintenance and replacement that needs to be completed in
213 the system.

214
215 Mr. Mawyer stated they look further out than five years, and also look for the second five years
216 (FY 27-31), where they project about \$100 million in expenses. He stated further, in the third
217 five years (FY 32-36), they project almost \$53 million in expenses. He noted that as they get
218 closer to these timeframes, it is likely that these budgets will increase. He stated their crystal ball
219 tells them that this much in project costs are on the horizon, totaling over \$300 million for the
220 next 15 years.

221
222 Mr. Mawyer stated the difference between this year's five-year CIP and last year's is that there
223 were 16 projects that transitioned into the FY 22-26 CIP in FY 26, which totaled \$31 million. He
224 stated six projects were added to the CIP for \$9 million, and they increased budgets for existing
225 projects (about \$11 million).

226
227 Mr. Mawyer noted that budgets increased for a few of the projects, and this is typically because
228 the scope increased. He stated for example, the Ragged to Observatory Water Treatment Plant
229 Pipe and Pump Station project had planned to be brought up Route 29 through Fontaine Avenue,
230 and they have determined that they will have to go around the Fontaine Research Park and bore
231 underneath Route 29 to get the pipe over to Observatory Treatment Plant, which was about a
232 1,500-foot extension. He stated this is an example of how a scope change can increase the
233 budget. He stated the projects on the screen were typical projects, and they do not add up to the
234 \$11 million as there is a number of projects that experienced minor budget increases.

235
236 Mr. Mawyer stated as he mentioned, there were nine projects that were completed for \$14
237 million. He stated collectively, this is about a \$37 million increase to the five-year CIP, with the
238 majority of it planned in FY 26.

239
240 Mr. Mawyer stated the major programs and projects that they support include renovations and
241 upgrades to the water treatment plants of over \$43 million, which are currently underway. He
242 stated there are regulatory issues at the Crozet Wastewater Flow Equalization Tank to minimize
243 any wastewater overflows, as wastewater is conveyed from Crozet back to Moores Creek. He
244 stated there are lighting improvements at the Moores Creek facility to comply with County
245 ordinances. He stated the Beaver Creek Dam Pump Station and Piping is a regulatory
246 requirement to be able to pass more water through the spillway and improve the water control for
247 that reservoir.

248
249 Mr. Mawyer stated in terms of redundancy and resiliency, the Authority will build the Airport
250 Road Pump Station and piping to be able to more dependably get water to the northern part of
251 the County.

252
253 Mr. Mawyer mentioned a central waterline that goes through the City to strength the water
254 infrastructure in the City and better connect the Observatory Treatment Plant to the Pantops
255 water tank. He also mentioned that there is another water line crossing of the South Rivanna
256 River.

257
258 Mr. Mawyer noted that he has the South Rivanna to Ragged Mountain Pipeline in two places on
259 the chart on the screen, which was about \$80 million in total. He stated he split it because it is a
260 substantial redundancy and resiliency project and has a growth component as well. He stated that

261 out of the \$80 million, he allocated \$40 million to each of those two purposes so that there is no
262 confusion about that.

263

264 Mr. Mawyer stated there are a number of projects for operation and maintenance at Moores
265 Creek as they try to keep the plant running dependably and make security enhancements
266 throughout the facilities. He stated they potentially have growth issues with the Schenks Branch
267 interceptor pipe that needs to be upgraded, as well as potential future growth in the Moores
268 Creek administrative building.

269

270 Mr. Mawyer stated there is a lot of master planning being done with urban water planning and
271 planning for the wastewater facilities. He stated asset management is key to help them keep
272 control of their many assets, when they need maintenance, and when they need to be replaced,
273 along with their information technology systems.

274

275 Mr. Mawyer stated the biggest part of the CIP is driven by the Community Water Supply
276 projects that were decided upon almost ten years ago, when the community had a drought in the
277 early 2000s and decided it had to increase its water supply. He stated as he has talked about
278 recently, the South Rivanna Water Treatment Plant is currently under renovation. He stated the
279 Observatory Water Treatment Plant renovation started last week and will continue for two years.
280 He stated the cost was \$43 million for those two renovations.

281

282 Mr. Mawyer stated thirdly, there is the Ragged to Observatory pipeline where they will replace
283 the raw waterlines that take water from Ragged Mountain Reservoir to the Observatory
284 Treatment Plant. He stated in addition, they will build the pump station that is in the middle of
285 that line, which is a dual purpose pump station. He stated it will take water from Ragged and
286 pump it to Observatory. He stated additionally, it will take water from Ragged Mountain and
287 pump it back to the South Rivanna Treatment Plant after they get the South Rivanna to Ragged
288 raw waterline completed.

289

290 Mr. Mawyer stated the South Rivanna to Ragged raw waterline is the major project in this plan
291 (shown as Project #5 on the screen). He stated the capstone project is to raise the water level in
292 the Ragged Mountain Reservoir by 12 feet and add 700 million gallons of water to the reservoir.

293

294 Mr. Mawyer stated the Central Waterline project includes a pipe that will be located through the
295 center of the City, more or less. He stated the Authority is meeting with Ms. Hildebrand and Mr.
296 O'Connell about where that pipe might be located.

297

298 Mr. Mawyer stated that collectively, these projects will be \$161 million. He stated they will
299 result in a 100-year water supply that the community can depend on.

300

301 Mr. Mawyer stated he mentioned that Project #5 was the major project in the Community Water
302 projects. He stated he had a drone video to show the board the aerial view of the alignment. He
303 played the video for the board.

304
305 Mr. Mawyer stated he hoped the video gave the board a good overview of where the Rivanna to
306 Ragged Pipeline will be built, the alignment, and the properties and roads and how this will work
307 out in reality.

308
309 Mr. Mawyer stated there are six new projects in the FY 22-26 budget. He stated Project #1 on the
310 screen was the most significant, which is that they are proposing to build a section of the
311 Rivanna to Ragged waterline between the Birdwood Golf Course (where they already have a
312 pipe) and to go over along the Weeden and JPA Tower's property line to Old Garth. He stated
313 there are plans for private development in that area, and the Authority wants to get its pipe in
314 place before the private development begins. He stated this is proposed for FY 22-24.

315
316 Mr. Mawyer stated plate settlers are used in the settling process at the water treatment plants and
317 are proposed for the South Rivanna Water Treatment Plant. He stated the Authority has had such
318 good success with these plate settlers that were installed in 2020 at the Crozet Water Treatment
319 Plant that they feel they need to optimize their settlement treatment process and add them at
320 South Rivanna. He stated this is not proposed until 2026-2028.

321
322 Mr. Mawyer stated Scottsville Water Treatment Plant is an older facility, built in 1964. He stated
323 the Authority sees close to \$11 million in renovations that are needed at that facility. He stated
324 these would be completed between FY 26 and FY 29.

325
326 Mr. Mawyer stated at Red Hill Water Treatment Plant, a small project is proposed to add space
327 in the building for additional chemical treatment and lab equipment in that facility. He stated
328 they have added pH adjustment and fluoride as additional chemical treatments for the water.

329
330 Mr. Mawyer stated this is the only well system they have, where they bring water out of the
331 ground and treat it to the same level that they treat all of their other water from the treatment
332 plants. He stated the Red Hill water is treated to the same level of quality, with the exception that
333 they do not have GAC filtration at Red Hill. He stated otherwise, they felt it was important that
334 the water in the Red Hill system comply with the same standards as all the rest of their water
335 treatment plants.

336
337 Mr. Mawyer mentioned Project #5 on the screen. He stated the board may recall that the Moores
338 Creek equalization basins were recently drained, and the basins were cleaned out of sludge that
339 had been there for decades. He stated now that they are cleaned, the Authority found concrete

340 repairs that they would like to get started on to correct those concrete spalls before a sludge
341 accumulates in those basins again.

342

343 Mr. Mawyer stated lastly, there are some digestors that digest the solid product from the
344 wastewater treatment process and kill the pathogens. He stated there have been leaks of methane
345 gas, and the Authority is looking at making significant repairs to those facilities.

346

347 Mr. Mawyer stated that in the current five years, there is \$8.9 million included for these new
348 projects, and the projects would add up to \$25 million in the ten-year CIP window.

349

350 Mr. Mawyer stated the slide on the screen showed one of the new projects that he talked about,
351 which is connected to the north end of the Birdwood pipe that has already been installed. He
352 stated they would bore underneath Route 250, as was indicated on the screen. He stated they
353 would then excavate along the property line between the Weeden Center and what used to be the
354 Piedmont Tractor facility, going to the north. He stated they would bore under the railroad tracks
355 and Old Garth Road, over to the UVA Foundation property to the north.

356

357 Mr. Mawyer stated this is about 1,200 feet, and a budget of about \$2 million. He stated RWSA
358 would like to get started on that right away so that they get ahead of any development that the
359 other two private owners have on both sides of the property.

360

361 Mr. Mawyer stated there is an ongoing project at Sugar Hollow to replace the rubber gate that
362 sits on top of the dam. He stated this is currently under construction.

363

364 Mr. Mawyer stated the Crozet Flow Equalization Tank is under construction. He stated the tank
365 stores wastewater during rain events that could potentially overflow the system. He stated they
366 take the wastewater out and store it in what is going to be a concrete tank, as shown on the slide,
367 which is about 40 feet tall and 65 feet in diameter. He stated this is located in the "V" between
368 Route 250 and Route 240. He stated it serves the Crozet community, as all of the Crozet
369 wastewater is piped back to Moores Creek for treatment. He stated Crozet is a part of the urban
370 wastewater system.

371

372 Mr. Mawyer stated he mentioned the Moores Creek lighting project, and he presented a drone
373 photo of what Moores Creek looks like at night. He stated when they finish this project, they will
374 get a photo of the "after" lighting improvements to hopefully see the difference. He stated one
375 piece of good news is that while they thought the project could cost close to \$2 million, they now
376 feel it will be below \$1 million.

377

378 Mr. Mawyer stated at Airport Road, they acquired property a couple years ago, and they will
379 build a finished water pumping station that will supply water to the northern end of the County.

380 He stated it eliminates the need for a temporary pump that they would have to put at Kohl's
381 every time there is a problem with the water system in the area.

382

383 Mr. Mawyer stated Beaver Creek has a major project of about \$27 million to make
384 improvements to the spillway and the raw water pump station. He stated what was shown on the
385 slide was the proposed labyrinth spillway through the dam, with a bridge on Browns Gap
386 Turnpike. He stated the concrete structure, similar to what was shown in the picture, would be
387 built through the dam, with a bridge going across Browns Gap Turnpike. He stated RWSA is
388 working closely with the federal government in the hopes that they will provide up to 65% of the
389 funding for this project.

390

391 Mr. Mawyer stated they have to move the existing raw water pump station. He stated the map on
392 the slide showed six sites that RWSA is reviewing for a location for the new pump station. He
393 stated Site 3 is the one they have the most interest in, but that is the one that they have received a
394 lot of feedback from the neighbors on, as the neighbors prefer they not go there. He stated they
395 are still evaluating those alternatives.

396

397 Mr. Mawyer presented two graphs on a slide. He stated the graph to the right, which he believed
398 the board had seen before, showed that around 2030, the RWSA's debt service decreases and
399 provides some capacity for them to add the \$129 million in additional debt.

400

401 Mr. Mawyer stated in summary, there are 54 projects at about \$169.7 million. He stated they are
402 using some cash reserves and would need to acquire new debt of \$129 million. He stated for the
403 most interest for the City and ACSA, the numbers on the screen included the charge increases
404 from Rivanna that they project. He stated as a reminder, in FY 21, they had zero charge increases
405 for both the City and the ACSA. He stated they have a bit larger than normal in FY 22, then get
406 back to more level rates that one would expect (with the City in the 7% range, and ACSA in the
407 8% range).

408

409 Mr. Mawyer stated RWSA met with Mr. O'Connell, Ms. Hildebrand, and their staff to review
410 the draft CIP in December 2020.

411

412 Mr. Mawyer concluded his presentation and offered to answer any questions. He asked Ms.
413 McIlwee to pull up the slide for the Red Hill station. He stated he mentioned that Red Hill is a
414 project that RWSA wants to start on right away. He presented a picture of the Red Hill Water
415 Treatment Plant, as it is called now. He stated it used to be called a pump station, but it does take
416 water out of the ground, and treat it to drinking water standards before pumping it to customers.

417

418 Mr. Mawyer stated the picture on the slide showed all the equipment they have in a small
419 building. He stated this is a new project proposed, which is to put an addition on the building to

420 provide more space for treatment equipment. He stated much of the equipment is remote-
421 controlled, but an operator has to visit this facility every day, seven days a week, to make sure
422 the chemicals are being injected properly and that the equipment is calibrated. He asked the
423 board if there were any questions.

424

425 Dr. Palmer stated she had other questions, but one specifically about Red Hill. She asked when
426 they started adding fluoride, adding that she assumed they have always added a little chlorine.
427 She asked Mr. Mawyer to talk about the history of that.

428

429 Mr. Mawyer replied that it was operated by the ACSA from the beginning until about two years
430 ago. He stated in talking with Mr. O'Connell, the discussion was that water treatment is RWSA's
431 specialty, and so they should be the water treatment operators for this facility. He stated
432 particularly, there was discussion of adding a chemical for pH adjustment, which is the acidity of
433 the water, and that further, this water should be fluoridated just like the water from all of the
434 other treatment plants, along with chlorine as disinfectant.

435

436 Mr. Mawyer stated some of the board members may know that this was the result of a leaking
437 underground storage tank in the area that apparently caused concern or pollution of a number of
438 private wells on Red Hill Road and over to Red Hill Elementary School. He stated this facility
439 was built, and although RWSA owned it, ACSA operated it for a number of years, ironically. He
440 stated RWSA took it over about two years ago. He stated they wanted to provide the same level
441 of water treatment in the pH adjustment and fluoridation as they provide for all of the water they
442 produce at the other treatment plants.

443

444 Dr. Palmer stated when they first took this up, she recalled that it was 11 homes. She asked if it
445 is still the same number of homes, plus the school.

446

447 Mr. Mawyer replied yes.

448

449 Mr. O'Connell stated that when they did the switchover, they sent letters to and had
450 conversations with almost every customer, including the schools, about the change and what it
451 would mean to the water quality. He stated they sent notices to people and tried to do their best
452 to make sure that they knew about the changeover and what it would mean. He stated they have
453 better water quality in the area because of this change.

454

455 Dr. Palmer stated she had questions on other things, and she did not know if she should jump in.

456

457 Mr. Gaffney asked her to go ahead.

458

459 Dr. Palmer stated that on the South Fork to Ragged Mountain Reservoir line, she thinks it is
460 wonderful that a portion of the cost of this was put into resiliency and redundancy and another
461 portion of it into growth. She asked Mr. Mawyer if he could talk about how he portioned those,
462 or if there was something specific behind that.

463
464 Mr. Mawyer replied that there was no calculation. He stated he split it half and half, with \$40
465 million going to each of those two categories.

466
467 Dr. Palmer stated she knew the sedimentation basin that was required with that line was a big
468 portion of the cost of that, and that the Authority knows much more now about operations and
469 has other thoughts on how to operate the system. She asked Mr. Mawyer for an update on that.

470
471 Mr. Mawyer replied that a significant cost (around \$15 million of the \$80 million) was originally
472 envisioned for a pretreatment facility to take sediment and nutrients out of the raw water before
473 they pump it from Rivanna Reservoir to Ragged Mountain Reservoir. He stated somewhat
474 spurred by the strategic goal of optimization, RWSA is taking another look at how they can use
475 operational optimization to minimize, if not even avoid, this pretreatment facility. He stated they
476 are doing a study.

477
478 Mr. Mawyer stated RWSA has to produce drinking water every day, and so after a rain, if the
479 water in the Rivanna Reservoir is muddy, they have to treat it to drinking water standards or
480 above. He stated they do not have to do this to pump water from the Rivanna Reservoir to
481 Ragged Mountain. He stated they can discern days when the water quality is much higher
482 naturally, and the water coming into the Rivanna Reservoir is clear and clean. He stated those are
483 the days that they should pump to Ragged, not when the water is full of sediment.

484
485 Mr. Mawyer stated this pretreatment study is taking a look at the water quality that is in the
486 reservoir, and how many days they would have high-quality, sediment-free, nutrient-minimal
487 water that they can pump to Ragged and either have minimum pretreatment or, possibly, no
488 pretreatment. He stated they will see if this holds true. He stated if they can strategically operate
489 the system and pump to Ragged when the water is clear and clean, they then minimize any
490 treatment process and the cost of the system.

491
492 Mr. Mawyer stated a consultant is doing the study now, and they will finish in about a year, with
493 some data on how many days per year there would be water that they recommend be pumped to
494 Ragged Mountain and what the necessary treatment level would be. He stated they are trying to
495 have minimal treatment, as needed, in combination with technology and operational
496 optimization.

497

498 Dr. Palmer noted that after the new project of the 1,200 feet from the Birdwood Golf Course
499 over to Old Garth, they will have about 1.5 miles of that 9-mile pipeline put in, which she thinks
500 is wonderful. She stated it will be interesting, going forward, to see what other construction
501 projects end up making it better for them to do this earlier than that timeframe that is on the CIP
502 now.

503

504 Mr. Gaffney stated on the North Rivanna Water Treatment Plant Upgrade, he knew there was a
505 question about, given the future regulatory issues, whether or not to continue with that. He asked
506 Mr. Mawyer if he knew when that decision would be made, and if they need to build the Airport
507 Road storage tank before that.

508

509 Mr. Mawyer replied that they were meeting with Mr. O'Connell and Ms. Hildebrand that Friday
510 to review an early draft of the study that was done about the North Rivanna Water Treatment
511 Plant and the options to bring it up to standards and regulations. He stated Mr. Gaffney may
512 recall that when they had the flood in 2018, which flooded the lagoons, the VA Department of
513 Environmental Quality told RWSA they needed to build new lagoons in different locations.

514

515 Mr. Mawyer stated RWSA has had a consultant evaluating alternatives to renovations and
516 improvements for that facility, as well as exploring the option of decommissioning the facility,
517 and tying directly into the South Rivanna Treatment Plant. He stated that with the Airport Road
518 Pump Station, they would have a more than adequate system to serve all of Route 29 North, and
519 North Rivanna would not be required.

520

521 Mr. Mawyer stated that within six months, they would come to the board with some discussion
522 about those alternatives.

523

524 Mr. O'Connell asked Ms. McIlwee if she could pull up the previous slide that showed the five-
525 year rates. He stated he wanted to comment on a dilemma regarding the City and County
526 customers. He stated the dilemma about this CIP is not just about the five-year period, but likely
527 the 15-year period. He stated with the level of deferred maintenance and the need for
528 replacement, he believes all the water treatment plants in the CIP are either undergoing major
529 renovations or upgrades, which will improve water quality.

530

531 Mr. O'Connell stated this is tremendously expensive. He stated he has concerns about a 14.3%
532 wholesale water increase in this economy, plus nearly double digits for the next five years. He
533 stated he suspects ACSA will use reserves to assist with the retail rate in the coming year and
534 keep the rate increase more like 5%. He stated eventually, they are going to have significant rate
535 increases for long periods of time. He stated adding those up for a County customer results in a
536 50% increase in five years.

537

538 Mr. O'Connell stated that he, Mr. Mawyer, and Ms. Hildebrand have had discussions about the
539 need to educate their customers for what is coming and why, and how water quality
540 improvement is a major part of that. He stated there are a significant number of wastewater
541 improvements that are mostly smaller projects, but there are a number of them that are somewhat
542 off the radar. He stated there are a lot of dollars that will need to come from customer rates to
543 support this program.

544
545 Mr. Gaffney recalled that in 2002, the infrastructure of the Rivanna Authorities was substandard.
546 He stated they have a long time to catch up to where they were. He stated he believes they have
547 caught up, but they still have progress and growth, with Crozet being a good example of that in
548 terms of having to rebuild the dam and water treatment plant. He stated building in the
549 redundancy of all of the systems is not an inexpensive proposition.

550
551 Dr. Palmer added that where they were with the sewer system in 2003 and 2004, it is a different
552 world in terms of what the Authority has been able to do in improving that sewer system and
553 cleaning up the rivers. She stated it has been amazing, and she thinks the deferred maintenance is
554 a huge reason why they have the increases that they are looking at over time.

555
556 Dr. Palmer stated she does understand Mr. O'Connell's point, and she is very grateful that the
557 Service Authority has done such an excellent job with reserves and financing over the last
558 several years. She stated it is extraordinary what a good job they have done in planning for this
559 with their reserves and rate stabilization.

560
561 Mr. Gaffney asked Mr. O'Connell if he suggests that the educational portion of explaining where
562 they are, how they got there, and where they are going be a combination of the City, County, and
563 Service Authority.

564
565 Mr. O'Connell replied yes. He stated this is the conversation they have had because the issue is
566 the same for any one of their customers. He stated the exact rate amount might differ. He stated
567 depending on where they live, the project may be in their backyard versus somewhere else, but
568 looking at the system as a whole, the needs are there for the whole system to serve their
569 customers.

570
571 Mr. O'Connell stated he does not think the customers are prepared for this kind of increase. He
572 stated the pipeline is not a significant part of the next five years. He stated it trickles in the five-
573 year period after that. He stated this is the project most people talk about, and they do not talk
574 about the other projects. He stated the awareness and publicity needs to be heightened at every
575 chance, and there needs to be a common education program as well.

576

577 Ms. Hildebrand added that they are in the midst of a customer survey update for the City
578 customers. She stated what has been interesting, which goes to the conversations that she, Mr.
579 Mawyer, and Mr. O'Connell have been having, which is that last year, when they did the
580 customer survey, there were little to no comments associated with whether people were getting
581 good value for their money from a water and sewer rate standpoint. She stated this year, in the
582 comments associated with rates, they are receiving a lot of comments that people think their rates
583 are too high.

584
585 Ms. Hildebrand stated getting this information out there as to what people are really paying for is
586 important so that people understand they are building in redundancy and resiliency and taking
587 care of their water and sewer for them.

588
589 Dr. Palmer stated now that people have done such a good job with conservation and are using a
590 lot less water that was anticipated, the average household is using less water than they did ten
591 years ago. She asked how this compares in the bill. She stated she wondered how much people's
592 bills have actually gone up since they are using less water.

593
594 Mr. Gaffney stated this was a great question.

595
596 Mr. Mawyer stated that when RWSA did its study ten years ago, it was 110 gallons per person
597 and now, it is down to 60 gallons per person, to Dr. Palmer's point. He stated he does not know
598 how it has affected their bills, but he remembered that the metric has changed.

599
600 Dr. Palmer stated she thinks this should be part of the education as well. She stated she had no
601 idea how it affected the average bill, at that point.

602
603 Mr. Mawyer stated the rate could be higher, but the total bill may not be.

604
605 Ms. Hildebrand stated this was true.

606
607 Mr. Gaffney stated it would be good to see how this has changed over the years. He asked Mr.
608 O'Connell and Ms. Hildebrand if they had the old data.

609
610 Mr. O'Connell replied that there was actually data in the ten-year update. He stated the average
611 household use is down, but system-wide, it is up because of growth, and the big area of water use
612 is outdoor water use.

613
614 Mr. Gaffney stated he thinks it would be great to do it not on water use (or to have this on the
615 side), but to have it truly comparable, dollar-to-dollar, what was paid each of the last ten years in
616 an average bill, taking an average household or particular household to see if somehow, the

617 conservation has made up for the raises in rates, or what percentage of it has been made up in the
618 rate.

619

620 Mr. O'Connell stated they could do this, but his gut reaction would be that the rate increase
621 exceeds the average household reduction.

622

623 Mr. Gaffney agreed, and asked by what percentage.

624

625 Mr. O'Connell replied that he did not know.

626

627 Mr. Gaffney stated he was just thinking that it helps with the educational portion that they were
628 talking about.

629

630 Mr. O'Connell stated one of the dilemmas is that most of the cost is for things that support the
631 overall system. He stated there is a little growth here and there, but the biggest part is the
632 deferred maintenance and making sure they have redundancy and high water quality. He stated
633 they could look at the rates.

634

635 Dr. Palmer stated given what has been in the news in the recent few weeks and last several years,
636 there are many things to point to that support that water quality and redundancy in the system.
637 She stated what happened in Texas is not going to happen in Charlottesville/Albemarle, even if
638 they have an incredible cold snap.

639

640 Mr. O'Connell stated they are doing everything they can to keep that from happening.

641

642 Dr. Palmer stated there can certainly be frozen pipes, but it is not going to be on the scale that
643 has happened in some other communities.

644

645 Mr. Mawyer stated where it becomes analogous to them is for the drought of record. He stated
646 the current drought of record is back in 2002, when the drought lasted for 18 months. He stated
647 the question is if the next drought of record is 24 months, would the infrastructure be prepared to
648 deal with a drought longer than the last drought of record.

649

650 Dr. Palmer stated she certainly understood where they were coming from, and that Mr.
651 O'Connell was right. She stated she did not know what that education would entail, but she was
652 sure he would tell them.

653

654 Mr. O'Connell stated he wanted to make the board aware of it. He stated they have done a
655 detailed review of the CIP, and the biggest number of things are deferred maintenance or
656 replacement that needs to be done. He stated the question is when to do it, or to continue to put it

657 off. He stated there will be some sticker shock for customers, and they need to prepare the
658 customers for that as much as they can.

659
660 Mr. O'Connell stated Ms. Hildebrand's survey comes off of a year where there was no increase
661 in the rate, and people still had concerns about whether or not they are getting a good value. He
662 stated it is ironic that that has come up in the survey.

663
664 Ms. Hildebrand stated they found this very interesting, as there was no rate increase last year and
665 with the comments coming out.

666
667 Dr. Palmer asked if they were getting more people answering the survey this year.

668
669 Ms. Hildebrand that it was currently about the same. She stated they are still in the midst of it,
670 and it is a month-long survey. She stated this was after the first week, and they have been
671 surprised by some of the comments. She stated it is obvious that they must do more education.

672
673 Ms. Hildebrand stated some of the comments are even associated with another surprise that she
674 has not talked to Mr. O'Connell and Mr. Mawyer about, which has just come up and is
675 associated with water quality. She stated she does not think that people even understand the
676 extensive filtration system, with the granular activated carbon. She stated they have to get out
677 there again to make sure that people understand this.

678
679 Dr. Palmer stated they do not. She stated she did not know about people in the City, but she sees
680 people all of the time having no idea about the GAC system, and they say they do not want to
681 drink the treated water because of all of the publicity in other communities about treated water.
682 She stated this has hurt as well.

683
684 Ms. Hildebrand stated they need to get this out there again and keep it in front of people. She
685 stated they cannot assume that just because they talked about it when it went in place, they
686 remember it.

687
688 Dr. Palmer agreed.

689
690 Mr. Mawyer stated as he has mentioned before, the GAC is a leading technology for the
691 treatment of the PFAS problem, with the per- and polyfluorinated substances that are hot on all
692 the regulators' lists right now as the next thing to regulate. He stated RWSA has the best system
693 that has been identified so far to take those contaminants out of the water. He stated it was an
694 expensive \$30 million that is still in the bond rates that they are paying for.

695

696 Mr. Snook asked if he could ask one question that he knew he was going to get flack about,
697 when the issue comes up. He asked if it is possible to get a rough idea of how much of this price
698 increase might be attributable to additional pipeline issues. He stated as Mr. Mawyer mentioned
699 earlier, this was not much, but he wanted to know if there was a way to quantify this.

700
701 Mr. Mawyer asked what Mr. Snook meant about the additional pipelines.

702
703 Mr. Snook stated he was looking at anticipating the questions that Ms. Dede Smith and others
704 will be asking of why they are doing all these major capital projects when they do not really need
705 them, as Ms. Smith would say. He stated now, there are water rate increases that are very
706 dramatic, and he does not know whether they are connected or coupled at all and if so, by how
707 much. He stated he is trying to anticipate what a response ought to be.

708
709 Mr. Mawyer stated this was a good question. He stated the plan is that in March, they will bring
710 the proposed operating budget to the board. He stated they will run some rate scenarios that
711 would say, for example, if the Rivanna to Ragged pipeline was not in the budget or was deferred,
712 how it would affect the rates. He asked Mr. Snook if this was what he was after.

713
714 Mr. Snook replied that this would be very helpful. He stated his sense of things, which he
715 supposed they would see of more in March when they get the whole budget, is that generally
716 speaking, the longer-term debt service kinds of issues are not what is driving the rate increases.
717 He stated he would like to know more details about that.

718
719 Mr. Mawyer stated the CIP projects drive the rate increases.

720
721 Dr. Palmer stated the Central Water Line would be something happening in the next few years,
722 which is a pipe. She stated this is something that she has been hearing about (by a different
723 name) for a number of years. She stated it was identified in the mid-1980s as a necessary part of
724 the system to deal with the pressure in the system. She stated this is a big-ticket item in the City.

725
726 Mr. Snook stated he had a question related to the Central Water Line. He asked what the
727 relationship is between this and the West Main Streetscape Project. He asked if there was a
728 thought that the Central Waterline would be basically running down Main Street if they were
729 going to be doing the West Main Street project, which is up in the air now. He stated he wanted
730 to know what the alternatives might look like.

731
732 Mr. Mawyer replied that this was an option that the study identified of co-locating water lines
733 with the City project. He stated the Central Waterline project would be one of the projects they
734 would talk about with Ms. Hildebrand and Mr. O'Connell the following day, February 24, in
735 terms of where some corridors might be through the City that would be preferable to others. He

736 stated Ms. Hildebrand could interject on the Main Street project and how this will coordinate
737 with RWSA's work.

738

739 Mr. Snook stated he would perhaps talk to Ms. Hildebrand later in the week.

740

741 Dr. Palmer added that the importance of it to the system is a great thing to talk about with the
742 City residents. She stated it is liable to be disruptive when it goes in.

743

744 Ms. Hildebrand mentioned that when the Rivanna rates are presented and have the division
745 between the City and ACSA, this is really the wholesale rate and only tells part of the story. She
746 stated Mr. O'Connell incorporates it into his rates, and the City incorporates it into the City rates.
747 She stated they tend to be dampened a little once the City incorporates them into their rates, and
748 so that only tells part of the story and the final impact on a customer. She stated they have to
749 keep this in mind when they talk about it. She stated the City will not set their rates until June.

750

751 Mr. Mawyer stated he thinks they all look for opportunities that when they open a road to put in
752 a pipe, they are able to accomplish as much as they can for everyone. He stated this is part of the
753 discussion on the West Main project, but if it is not at that location, there may be other places
754 that both entities can get a benefit from doing a pipe project.

755

756 Dr. Palmer stated Mr. Snook knows that the Ragged Mountain Reservoir to the Observatory Hill
757 Treatment Plant water line and pump station is a big-ticket item, and this is replacing antiquated
758 infrastructure, referring back to deferred maintenance.

759

760 Mr. Gaffney stated it will also be because the Observatory Water Treatment Plant will be able to
761 process 10 million gallons per day, and so they need a much bigger pipe.

762

763 Mr. Mawyer added that they need a larger and reliable pipe. He stated when they crank up the
764 expanded Observatory WTP, they want to be sure they can get the raw water there.

765

766 Mr. Snook stated he was just thinking about it in terms of the debate that Council is having in the
767 next week and month over the West Main Streetscape project, and if it were to turn out that they
768 would save RWSA \$3 million, for example, to be opening up Main Street anyway instead of
769 having to run it through some different route, this would be the kind of thing that would be nice
770 to know.

771

772 Mr. Mawyer reminded Mr. Snook that they would be talking about that project the following
773 day. He noted that Project #5 (South Rivanna to Ragged Mountain Raw Waterline) is 80%
774 funded by ACSA and 20% by the City.

775

776 Mr. O’Connell stated if he did his math correctly, it is less than \$5 million of the five-year CIP
777 (\$169 million) that is going towards the pipeline project. He stated it is a small part of the next
778 five-year picture.

779

780 Mr. Mawyer agreed, adding that it starts in FY 27.

781

782 Mr. O’Connell stated it was somewhat more complicated than that due to the way that some
783 money was set aside toward future bonds. He stated it was not a very significant piece of the
784 \$169 million.

785

786 Mr. Snook stated it sounded like it was about 3%.

787

788 Mr. Mawyer stated this was the plan and that he welcomed the board’s comments. He stated he
789 is working closely with Ms. Hildebrand and Mr. O’Connell and is sensitive to the costs that they
790 are talking about. He stated just like with the pretreatment facility, they are looking for any way
791 that they can decide to maintain water quality without having to spend quite as much money to
792 pump water to Ragged, which is what they are evaluating.

793

794 Mr. Gaffney asked Mr. Mawyer if, for the new members of the board, he could go over the
795 schedule for the next couple of months as it regards the CIP.

796

797 Mr. Mawyer stated in March, they will have both the Solid Waste and the Water and Sewer
798 Operating Budgets introduced to the boards. He stated in May, both boards will have public
799 hearings, with the intent to adopt the budgets and CIPs for FY 22 starting July 1. He stated there
800 will thus be two more budget meetings, in March and May.

801

802 Mr. Mawyer stated in April, there will be other topics, and this will be for the Water Authority
803 only. He stated this will possibly be on sustainability and possibly options for the North Rivanna
804 Water Treatment Plant.

805

806 Mr. Mawyer stated in June, they will be looking at the reservoirs and emerging regulations.

807

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

809 There were none.

810 ***11. CLOSED MEETING***

811 There was no closed meeting.

812

813 ***12. ADJOURNMENT***

814 **At 3:28 p.m., Mr. Richardson moved to adjourn the meeting of the Rivanna Water and**
815 **Sewer Authority. The motion was seconded by Dr. Palmer and passed unanimously (7-0).**

816

817 Respectfully submitted,

818

819

820

821

822

823



Mr. Chip Boyles
Secretary - Treasurer