



Board of Directors Meeting

May 28, 2024

2:15pm



BOARD OF DIRECTORS

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

DATE: **MAY 28, 2024**

LOCATION: **Rivanna Administration Building (2nd Floor Conference Room),
695 Moores Creek Lane, Charlottesville, VA 22902**

TIME: **2:15 p.m.**

AGENDA

1. CALL TO ORDER

2. AGENDA APPROVAL

3. MINUTES OF PREVIOUS BOARD MEETING ON APRIL 23, 2024

4. ELECTION OF CHAIR, VICE CHAIR, & SECRETARY-TREASURER

Mr. Gaffney is currently the Chair, Mr. Sanders is the Vice-Chair, and Mr. Richardson is the Secretary-Treasurer

After any nominations, a motion, second and vote would be in order to elect new Officers for a two-year term starting on June 1, 2024.

5. RECOGNITION

a. Resolution of Appreciation for Mr. David Ulan

6. EXECUTIVE DIRECTOR'S REPORT

7. ITEMS FROM THE PUBLIC

Matters Not Listed for Public Hearing on the Agenda

8. RESPONSES TO PUBLIC COMMENTS

9. CONSENT AGENDA

a. Staff Report on Finance

b. Staff Report on Operations

c. Staff Report on CIP Projects

- d. Staff Report on Administration and Communications*
- e. Staff Report on Wholesale Metering*
- f. Staff Report on Drought Monitoring*
- g. Approval of Fiscal Year 2024-2025 Pay Scale Adjustment*
- h. Approval of Personnel Management Plan Update*

10. OTHER BUSINESS

- a. Presentation and Vote to Consider Approval of the FY 2025-2029 Capital Improvement Plan
Jennifer Whitaker, P.E., Director of Engineering and Maintenance*
- b. Presentation, Public Hearing, and Vote to Consider Approval of the Resolution to Adopt the
FY 2024- 2025 Rate Schedule, and Approval of the FY 2024-2025 Budget
Lonnie Wood, Director of Finance and Information Technology*
- c. Presentation and Roll Call Vote to Consider Issue of Revenue Bond
Lonnie Wood, Director of Finance and Information Technology*
- d. Presentation: Buck Mountain Property Update and Sale of 1706 Buck Mtn. Rd.
Bethany Houchens, Water Resources Coordinator*

11. OTHER ITEMS FROM BOARD/STAFF NOT ON THE AGENDA

12. CLOSED MEETING

13. ADJOURNMENT

GUIDELINES FOR PUBLIC COMMENT AT RIVANNA BOARD OF DIRECTORS MEETINGS

If you wish to address the Rivanna Board of Directors during the time allocated for public comment, please raise your hand or stand when the Chairman asks for public comments.

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for “Items From The Public, Matters Not Listed for Public Hearing on the Agenda.” Each person will be allowed to speak for up to three minutes. When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

During public hearings, the Board will attempt to hear all members of the public who wish to speak on a subject, but it must be recognized that on rare occasion comments may have to be limited because of time constraints. If a previous speaker has articulated your position, it is recommended that you not fully repeat the comments and instead advise the Board of your agreement. The time allocated for speakers at public hearings are the same as for regular Board meetings, although the Board can allow exceptions at its discretion.

Speakers should keep in mind that Board of Directors meetings are formal proceedings and all comments are recorded on tape. For that reason, speakers are requested to speak from the podium and wait to be recognized by the Chairman. In order to give all speakers proper respect and courtesy, the Board requests that speakers follow the following guidelines:

- Wait at your seat until recognized by the Chairman.
- Come forward and state your full name and address and your organizational affiliation if speaking for a group;
- Address your comments to the Board as a whole;
- State your position clearly and succinctly and give facts and data to support your position;
- Summarize your key points and provide the Board with a written statement, or supporting rationale, when possible;
- If you represent a group, you may ask others at the meeting to be recognized by raising their hand or standing;
- Be respectful and civil in all interactions at Board meetings;
- The Board may ask speakers questions or seek clarification, but recognize that Board meetings are not a forum for public debate; Board Members will not recognize comments made from the audience and ask that members of the audience not interrupt the comments of speakers and remain silent while others are speaking so that other members in the audience can hear the speaker;
- The Board will have the opportunity to address public comments after the public comment session has been closed;
- At the request of the Chairman, the Executive Director may address public comments after the session has been closed as well; and
- As appropriate, staff will research questions by the public and respond through a report back to the Board at the next regular meeting of the full Board. It is suggested that citizens who have questions for the Board or staff submit those questions in advance of the meeting to permit the opportunity for some research before the meeting.

The agendas of Board meetings, and supporting materials, are available from the RWSA/RSWA Administration office upon request or can be viewed on the Rivanna website.

Rev. September 7, 2022



RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
April 23, 2024

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, April 23, 2024 at 2:15 p.m. at Rivanna Administrative Building, (2nd Floor Conference Room), 695 Moores Creek Lane, Charlottesville, VA 22902.

Board Members Present: Mike Gaffney, Samuel Sanders, Jeff Richardson, Lauren Hildebrand, Gary O'Connell, Ann Mallek, Brian Pinkston

Board Members Absent: None

Rivanna Staff Present: Bill Mawyer, David Tungate, Jennifer Whitaker, Lonnie Wood, Jacob Woodson, Deborah Anama, Bethany Houchens

Attorney(s) Present: Valerie Long

1. CALL TO ORDER

Mr. Gaffney called the April 23, 2024, regular meeting of the Rivanna Water and Sewer Authority to order at 2:15 p.m.

2. AGENDA APPROVAL

Ms. Mallek moved that the Board approve the agenda as presented. The motion was seconded by Mr. Pinkston and passed unanimously (6-0). (Mr. Sanders was absent).

3. MINUTES OF PREVIOUS BOARD MEETING

a. Minutes of Regular Board Meeting on March 26, 2024

Mr. Gaffney stated that he had one amendment to the minutes, which was to correct the date on line 7 to March 26, 2024.

Mr. Richardson moved that the Board approve the minutes of the March 26, 2024 meeting as amended. The motion was seconded by Ms. Mallek and passed unanimously (6-0). (Mr. Sanders had not arrived).

4. RECOGNITIONS

a. Resolution of Appreciation for Gary O'Connell

Mr. Gaffney presented and read:

Resolution of Appreciation for Mr. Gary B. O'Connell

WHEREAS, Mr. O'Connell has served as a member of the Rivanna Water & Sewer Authority Board of Directors since 1995 and as a member of the Rivanna Solid Waste Authority Board of Directors from 1995 until 2010; and

47 **WHEREAS**, over that same period Mr. O'Connell has demonstrated leadership in water and
48 sewer, solid waste and recycling services, and has been a valuable member of the Boards of Directors and
49 a resource to the Authorities; and

50 **WHEREAS**, Mr. O'Connell's understanding of the water, sewer, solid waste and recycling
51 operations of the Water & Sewer Authority and the Solid Waste Authority has supported a strategic
52 decision-making process that provided benefits to the customers served by the City of Charlottesville and
53 the Albemarle County Service Authority as well as the community as a whole. Through the leadership and
54 skillful support of Mr. O'Connell, major regional initiatives, Agreements and projects were completed for
55 the Authorities during his tenure including:

- 56 - The Environmental Memorandum of Understanding of 2005 which allocated the costs of
57 maintaining the closed landfill cells at the Ivy Material Utilization Center between the City, County
58 and UVA
- 59
- 60 - The Ragged Mountain Dam Project and Cost Allocation Agreements of 2012 to increase the
61 community's drinking water supply by constructing a larger dam at the Ragged Mountain
62 Reservoir and a connecting raw water pipeline from the South Rivanna Reservoir
- 63
- 64 - 2014 Wastewater Projects Cost Allocation Upgrades Agreement to address wet weather flows and
65 future capacity needs of the Urban Wastewater System
- 66
- 67 - The Observatory Water Treatment Plant, Raw Water Pumping and Piping Upgrade Cost and
68 Capacity Allocation Agreement of 2020 to upgrade and expand the water production capacity of
69 the Observatory Water Treatment Plant from 7.7 to 10 mgd, as well as replace and upgrade the
70 raw water pump stations and pipelines between the Ragged Mountain Reservoir and the
71 Observatory Water Treatment Plant
- 72
- 73 - The Northern Area Drinking Water Projects Agreement of 2022 to allocate costs for construction
74 of four new drinking water infrastructure projects, all planned within the northern area of the
75 County described as follows:
 - 76 1. The Airport Road Water Pump Station and Piping Project
 - 77 2. The South Rivanna River Crossing Project
 - 78 3. The North Rivanna River Crossing Project
 - 79 4. The Water Storage Tank Project for the Airport Road Water Pump Station, along with all
80 future capacity and non-capacity water facilities located north of the South Fork Rivanna
81 River
 - 82
- 83 - Major upgrade of Moores Creek AWRRF for nutrient reduction and wet weather capacity
- 84
- 85 - Major renovations of the South Rivanna and Observatory Water Treatment Plants
- 86
- 87 - Construction of the Central Water Line, a major drinking water pipeline to serve the Urban Area
- 88
- 89 - A Strategic Plan for both Authorities
- 90

91 **NOW, THEREFORE, BE IT RESOLVED** that the Rivanna Water & Sewer Authority and the
92 Rivanna Solid Waste Authority Boards of Directors recognize, thank, and commend Mr. O'Connell for his
93 distinguished service, efforts, and achievements as a member of the Rivanna Water & Sewer Authority and
94 the Rivanna Solid Waste Authority, and present this Resolution as a token of esteem with best wishes in his
95 future endeavors.

96

97 **BE IT FURTHER RESOLVED** that this Resolution be entered upon both the permanent Minutes
98 of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority.

Ms. Mallek moved that the Board adopt the Resolution. The motion was seconded by Mr. Pinkston and passed unanimously (5-0). (Mr. O'Connell abstained). (Mr. Sanders had not arrived).

Mr. Gaffney stated that the Resolution stated that it was presented to Gary O'Connell in appreciation of 29 years of dedicated service to the Rivanna Authorities.

Mr. O'Connell stated that he did not know if they knew this or not, but he had a glass case of glass globes, and he would put this gift in the center. He stated that when he moved to Charlottesville in 1981, he learned to trout fish in the Moormans River, above and below the dam. He stated that in a sense, he had been fishing his whole life, and the love of water was one of the things he really enjoyed here.

Mr. O'Connell stated that in 1995 he joined the Board, and it became an even more important part of trying to help protect water resources. He stated that he continued to fish in the Moormans River and actually went up there last week to fish above the Sugar Hollow dam and perform a quick dam inspection as part of the job, so it was a nice perk. He stated that when he became City Manager and talked to the previous City Manager, they started to tell him about Rivanna because it was a piece of cake to attend the Board meetings and not to worry about it. He stated that within six months, the Solid Waste Authority was sued by the neighbors.

Mr. O'Connell stated that he did not recall the exact date, but it did not feel like it was much longer that they had a consent order on the wastewater treatment plant and got into all those wastewater projects. He stated that as they had read, there were a lot of other projects as well. He stated that the project he was most proud of was the water supply plan, which was a team effort that included lots of different people. He stated that it involved many Board members, Executive Directors, attorneys, and others who committed to providing high-quality water to this community for a long time.

Mr. O'Connell stated that he believed that they were the envy of the country when thinking about how clean the water in the Moormans River is and the fact that brook trout can live there, and that this water was provided to their residents, it was outstanding. He stated that this was the fun part of this job, and he appreciated the support that the Authority gives.

Ms. Mallek stated that for the first 20 years of his career, she was in the audience observing and pushing and supporting the work that Mr. O'Connell and the Authorities had helped carry forward. She stated what seared in her memory was the 19-agency meeting at the County Office Building in 2004 or 2005, when the Army Corps of Engineers representative stated that anyone who hoped they would receive their water from the James River should forget it; there was no water unassigned to the James and they should deal with it locally.

Ms. Mallek stated that they thankfully did not need to worry about that anymore. She stated that she agreed with Mr. O'Connell that it was a great team effort with a cast of hundreds who had worked on it for decades. She stated that it was an important legacy he had helped establish and she was proud of the work he had done.

145
146 Mr. Gaffney stated that he also came to the area in 1981 and did not know that Mr. O'Connell
147 arrived during that time until now. He stated that it had been a pleasure serving alongside Mr.
148 O'Connell on the Board. He stated that he initially got to know him through the Chamber of
149 Commerce, where he was an ad hoc Board member. He stated that then, he had the opportunity
150 to work with him on the Rivanna Board and appreciated his dedication to the waters of their area
151 and the infrastructure.

152
153 Mr. Gaffney stated that rebuilding the entire infrastructure from scratch, with no financial
154 resources initially, had been a challenging yet rewarding experience. He stated that Mr.
155 O'Connell had made huge contributions during this process, first with the City and then with the
156 Albemarle County Service Authority. He stated that he was so pleased to have served with Mr.
157 O'Connell for that long and appreciated his support in his position, but also pushing Rivanna in a
158 lot of ways to get them to the narrow path.

159
160 Mr. Gaffney stated that he absolutely agreed that this Rivanna Authority crew, through all of
161 their help, was an envy in the United States. He stated that this was his belief, and it had always
162 been their goal. He stated that they had achieved it, and while they had a lot more work ahead of
163 them, the basis of what they had achieved was incredible and Mr. O'Connell had been a huge
164 part of that success.

165
166 Mr. Pinkston stated that although he did not know Mr. O'Connell that well, his reputation
167 preceded him, and he always appreciated his comments and had learned a lot from listening to
168 him. He stated that as someone just coming into this work in the past couple of years, Mr.
169 O'Connell had been a role model to a number of people around the table. He stated that he had
170 not previously known very much about the water system but had learned so much in the past two
171 years. He stated that he wanted to convey his thanks on behalf of all of those who did not know
172 of the work Mr. O'Connell and others had done, and wished him luck and success in his
173 retirement.

174
175 Mr. Mawyer stated that he would like to add that he met Mr. O'Connell in 1997 when he held
176 the position of County Engineer and served on the Solid Waste Board. He stated that during that
177 time, he worked alongside Mr. O'Connell for four years. He stated that over the past eight years,
178 particularly in this role, Mr. O'Connell has been a great mentor to him. He stated that they would
179 discuss various topics, and Mr. O'Connell would advise him and ask him to consider different
180 perspectives. He stated that he recognized the depth of Mr. O'Connell's knowledge stemming
181 from his extensive experience with community members and the processes he had navigated
182 throughout his long tenure. He stated that he always appreciated Mr. O'Connell's help and
183 thanked him.

184
185 Mr. O'Connell stated that he remembered when Mr. Mawyer stated that they would increase the
186 water level in Ragged Mountain Reservoir by 12 feet, and he asked if he was sure it was the right
187 time. He stated that it worked. He thanked everyone very much and stated he appreciated the
188 opportunities and relationships during his time with the Rivanna Authorities.

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

192
193 Mr. Mawyer stated that it had been a busy month since they last met. He stated that first, he
194 would like to acknowledge the promotion of a team member. He stated that Andrea Bowles
195 found a better opportunity and moved on from the position of Water Resources Manager. He
196 stated that after a competitive process, they were pleased to promote Bethany Houchens, who
197 had been with them for eight years. He stated that Ms. Houchens held a bachelor's degree in
198 environmental science and worked closely with Ms. Bowles for many years. He stated that they
199 were very pleased to promote her. He stated that Ms. Houchens was also a certified
200 Environmental Specialist.

201
202 Ms. Houchens stated that Rivanna provided her with an opportunity to receive comprehensive
203 training while she had been employed here. She stated that the training covered various topics,
204 some of which were not directly related to their work at Rivanna. She stated that the training
205 focused on the CERCLA Reclamation Act, as well as watershed supplies, the National Primary
206 Drinking Water Act, and the Clean Water Act.

207
208 Ms. Houchens stated that attending this training was a valuable experience offered by Rivanna.
209 She stated that furthermore, she had received a Watershed Management certification through the
210 EPA during her time at Rivanna. She stated that in her previous role as a Water Quality
211 Specialist, she gained experience in both reservoir sampling and distribution systems. She stated
212 that she hoped that this background would be beneficial as they moved forward.

213
214 Mr. Mawyer stated that Ms. Houchens and Mr. Tungate attended the Pantops Homeowners
215 Association meeting last night and Ms. Houchens was introduced to the Pantops community. He
216 stated that they were scheduled to attend the Crozet Advisory Committee next month. He stated
217 that they aimed to familiarize the community with their new water resources personnel by having
218 Ms. Houchens attend community events. He stated that over the past month, they had been
219 actively communicating and collaborating.

220
221 Mr. Mawyer stated that they organized the Sixth Annual Central Virginia Utility Managers
222 Meeting, which had been a tradition for the past six years. He stated that this year, they had 24
223 representatives of 10 different localities, from Augusta, Bedford, Waynesboro, Fluvanna,
224 Harrisonburg, Maury County, Rappahannock Service Authority, Upper Occoquan Service
225 Authority, Albemarle County Service Authority, and the City. He stated the event involved
226 networking, discussing industry issues, and sharing experiences.

227
228 Mr. Mawyer stated that they were members of the Virginia Water and Waste Authorities
229 Association. He stated that he attended their annual meeting in Staunton this month, and was re-
230 elected as the First Vice Chair of the organization, so he was on that board of directors. He stated
231 that they were also members of the Virginia Municipal Drinking Water Association, which also
232 met this month. He stated that this group targeted Richmond and the legislation, advocating for
233 water interests. Mr. Mawyer stated that this organization was created a few years ago to
234 advocate for the water interests of utilities in addition to the Virginia Association of Municipal
235 Wastewater Agencies, which advocated for wastewater interests to the Virginia DEQ. He stated
236 that they held quarterly meetings, and he was elected to the Board of Directors for that

organization as well. He stated that their outreach continued to expand.

Mr. Mawyer stated that they were pleased to host students from middle schools visiting their Crozet Water Treatment Plant. He stated that students from Charlottesville Waldorf School and Crozet Elementary School attended, as well as a group of UVA students who came to learn about wastewater facilities. He stated that Betsy Nemeth organized several educational events for them. He stated that they would celebrate during Drinking Water Week with our professionals responsible for creating clean, safe drinking water.

Mr. Mawyer stated that they held a contractor information meeting at the Doubletree Hotel and invited contractors from far and wide to learn about our upcoming construction program. He stated that they informed them about the five projects they were preparing to advertise for construction bids. He stated that the Ragged to Observatory Treatment Plant pipeline and the Central Water Line passing through the City would be advertised for bidding towards the end of this year. He stated that next summer, they would bid the changes to the Ragged Mountain Reservoir to increase the normal pool level by 12 feet after completing perimeter vegetation clearing and altering the intake tower.

Mr. Mawyer stated that the final project was the Rivanna to Ragged pipeline, which they also planned to advertise for bidding next fall in 2025. He stated that this initiative at the contractor meeting aimed to generate interest and attract competitive pricing. He stated that attendees included bidders from various states, as well as suppliers and subcontractors. He stated that the event went well, and he appreciated Jennifer Whitaker, Scott Schiller, Michelle Simpson, Angela Ott, and Austin Marrs for their efforts to organize this event.

Mr. Mawyer stated that the Rivanna Pump Station restoration project continued. He stated that displayed on the slide was a photo of one of the pump motors after it was cleaned and removed from its submerged state. He stated that a four-by-four barrier had been placed between the former locations of the pumps and motors. He stated that the 6 pumps had been shipped to North Carolina for evaluation.

Mr. Mawyer stated that the independent engineer consultant had completed a draft review of the cause analysis, totaling approximately 400 pages. He stated that they were currently reviewing this document to ensure accuracy of facts and figures. He stated that once verified, they would share it with the insurance company for their input and concurrence on the cause of the event.

Mr. Mawyer stated that they had established a Technical Advisory Committee, comprised of staff members, consultants, and contractors, to examine the pumping system's design. He stated that the committee would explore potential modifications, such as whether future pumps should be submersible and capable of functioning underwater. He stated that they would also weigh the pros and cons of various design changes to the pump station. He stated that this committee would support them in making informed decisions for the restoration of the pump station.

Mr. Pinkston asked when Mr. Mawyer anticipated receiving more information about the report.

Mr. Mawyer stated that they were currently reviewing it and hoped to have it to the insurance

283 company within the next few weeks or one month. He stated that then, they would discuss it and
284 hopefully reach an agreement on the cause of the incident.

285
286 Mr. Gaffney asked how many reports there would be. He stated that he knew there had been one
287 so far.

288
289 Mr. Mawyer stated that they were only doing one through their independent consultant. He stated
290 that their other consultant was working on how to restore the plant.

291
292 Mr. Gaffney asked if the insurance company was doing another report.

293
294 Mr. Mawyer stated that the insurance company had their own two engineers involved, but they
295 were waiting for Rivanna's report. He stated that they may do their own independent assessment,
296 but he believed they were waiting for the details of Rivanna's report to see if they agreed with
297 their consultant's determination.

298
299 Ms. Mallek asked if the original designer, Hazen, was doing a study.

300
301 Mr. Mawyer stated the Hazen engineers were working on designs to replace the damaged electric
302 equipment and HVAC penetration thru the stairwell wall into the pump room. He stated that this
303 includes conduit and other submerged electrical equipment. He stated that they would also be
304 reviewing the report, as he assumed they were interested in the engineer's assessment of the
305 situation as well.

306
307 Mr. Pinkston stated that regarding the consent agenda item, he wondered if Mr. Mawyer could
308 explain its purpose or when it would be addressed.

309
310 Mr. Mawyer stated that the reimbursement resolution was a prerequisite action mandated by the
311 IRS in case we needed to reimburse expenses related to the pump station. He stated that if we
312 decided to issue a bond for this specific purpose, we could subsequently reimburse ourselves.

313
314 Mr. Pinkston asked if the bond would be determined after assessing what the insurance would
315 cover and their responsibilities.

316
317 Mr. Mawyer stated that it would be to some degree. He stated that they had other projects
318 requiring bond approval as well. He stated that Mr. Wood would present a bond resolution to
319 them in June or July for authorization, including funds for this project to a certain extent. He
320 stated that they hoped to have a clearer understanding of the required contribution amount by
321 then. He stated that there may be limited contribution from our funds, but it was likely there
322 would be some.

323
324 Mr. O'Connell asked if it was believed that those pumps could be reused.

325
326 Mr. Mawyer stated that the pumps might be reusable, but it was not as likely for the electric
327 pump motors. They possibly could be rewound. He stated that the manufacturer may provide
328 pricing for rewinding these motors or for purchasing new ones. He stated that this was what they

329 were expecting.

330
331 Mr. O'Connell asked if there was discussion about larger pumps. He stated that it sounded like
332 there were different ones being considered.

333
334 Ms. Whitaker stated that they primarily were looking at the arrangement of the station,
335 considering different stations built in deep well configurations like theirs, which were
336 constructed using multiple methods. She stated that each method had its advantages and
337 disadvantages. She stated that they also were looking at a thorough root cause analysis to ensure
338 that all factors contributing to the issue were resolved individually. She stated that Mr. Mawyer
339 had mentioned examining the HVAC, electrical, flow control gates, among other aspects. She
340 stated that their focus regarding the pumps would be solely on those different configurations.

341
342 Mr. Mawyer stated that he did not believe the pumps were too small; they merely did not
343 function as intended during the event. He stated that he thought they were not moving towards
344 larger pumps.

345
346 Mr. Mawyer continued that the EPA had been quite active this month. He stated that on April 10,
347 they issued the first National Primary Drinking Water Regulation for six PFAS compounds,
348 which had previously been discussed as a draft. He stated there had been extensive national
349 discussion about the proposed regulation. He stated that the maximum contaminant level
350 established in the regulation was 4 parts per trillion for PFOA and PFOS compounds, and
351 different levels for several other compounds. He stated that he mentioned earlier that one part per
352 trillion was equivalent to one drop of water in 20 Olympic-sized swimming pools or one second
353 of time in 31,700 years. He stated that it was a small quantity to say the least. He stated that the
354 EPA had set this standard, and they must work towards meeting it.

355
356 Mr. Mawyer stated that their water system had generally been in good condition. He stated that
357 last summer, the North Rivanna water treatment plant experienced an exceedance due to a PFOA
358 concentration of 25 and a PFOS concentration of 6.5 parts per trillion. He stated that after a
359 couple of weeks, they retested, and the concentrations were back below 4. He stated that they
360 had not yet identified what caused this spike. He stated they remained cognizant about potential
361 contaminants in their watershed that could contribute to PFAS in their water supply. He stated
362 that these contaminants can travel through various means including through the air, from
363 furniture, clothes, suntan lotion, and other sources, entering the reservoir.

364
365 Mr. Mawyer stated that staff believed the Authority was in a good position regarding the
366 regulation's impact on them. He stated that they currently had a planned project for 2035
367 involving adding additional GAC vessels to their urban system. He noted that this new regulation
368 might speed up the project's implementation, as compliance was required within five years. He
369 stated that they must adhere to these standards within that timeframe. He stated that the EPA had
370 declared PFOA and PFOS as hazardous substances under the Comprehensive Environmental
371 Response Compensation and Liability Act (CERCLA) on April 19.

372
373 Mr. Mawyer stated that while they were still processing this information, he noted that it was
374 essential to acknowledge that the American Water Works Association opposed this regulation.

375 He stated that they argued that the final rule from the EPA put water systems at risk, leading to
376 increased costs for ratepayers and opened water systems up to costly litigations.

377
378 Mr. Mawyer stated that as a purveyor of PFOS, which came from their water treatment plant or
379 wastewater treatment plant, they might face some regulatory oversight or litigation as a result.
380 He stated that on a more positive note, the Virginia Department of Health had granted them \$3.1
381 million two years ago for granular activated carbon facilities at the Crozet Water Treatment
382 Plant.

383
384 Mr. Mawyer stated that in 2023, they applied again and recently the Virginia Department of
385 Health increased the second grant amount from \$260,000 to \$3.06 million, for an additional \$2.8
386 million for their Emerging Contaminant Program. He stated that these funds came from federal
387 legislation passed through the BIL and were administered by the Virginia Department of Health.
388 He stated that over these past two years, they had received over \$6 million in total, which would
389 significantly support the installation of additional GAC filters at the Crozet Water Treatment
390 Plant.

391
392 Mr. O'Connell asked if that saved the Authority \$6.6 million.

393
394 Mr. Mawyer stated yes. He stated that they would provide an update on all the grants they had
395 applied for either in May or June. He stated that they had applied for a total of \$50 million to
396 support the Rivanna to Ragged Pipeline Project. They had proposed hiring a Sustainability and
397 Grants Coordinator in the personnel proposal for next year to focus on finding prospective grant
398 opportunities and navigating the eligibility requirements for the various federal grant programs.

399
400 Mr. Mawyer stated that for instance, the Emerging Contaminant Program had awarded \$10
401 million last year, with half allocated to disadvantaged communities and the other half not tied to
402 any specific community criteria. He noted that they took this into consideration when applying
403 for that program, ensuring they met the eligibility requirements. He stated that moving forward,
404 they would continue pursuing these grants, and the positive news about receiving \$6 M for the
405 Crozet GAC project was encouraging. He stated that this concluded his report.

406
407 Ms. Mallek stated that regarding the EPA standards, she thought they should anticipate that the 4
408 parts per trillion would decrease as testing capability improved. She stated that she appreciated
409 the storytelling of the one drop in the 20 pools analogy, but this was an example of how
410 incredibly dangerous the material was. She stated that the proven health conditions have already
411 been ignored, which is why it irritated her when she heard the AWWA people say it was too
412 much. She stated that they could not use that argument because the health consequences for their
413 customers were far more severe compared to that. She stated that she hoped they would do
414 themselves a favor and avoid going down that path anymore.

415
416 Ms. Mallek stated that the "producer pays" element should follow the regulation first. She stated
417 that the regulation must come before anything else. She stated communities across the country
418 would not complain, asking not to punish those at the end of the line. She stated they should
419 target the ones who produce this hazardous substance and have made billions of dollars over 60
420 years while knowing it was dangerous and not taking any action. She stated that she did not want

421 them to lose any ground on that issue.

422
423 Ms. Mallek commended the proactive approach regarding the grant. She stated there was a
424 responsibility at the state level to distribute the funds promptly. She stated that the fact that they
425 all were proactive from the start meant that they could help each other, which was fantastic. She
426 stated that if they did not have the capacity or willingness to make that extra effort, then they
427 were lagging behind.

428
429 Ms. Mallek stated that the people in small water systems, with only 3,000 customers, were in
430 deep trouble because they had no staff and could not protect themselves. She stated that many of
431 them had severely contaminated water and needed to inform their customers because if they did
432 not, the customers could not protect themselves either. She stated she was grateful that the
433 Authority was taking a responsible approach and putting their resources where their mouth was
434 to safeguard their customers.

435
436 Mr. Gaffney asked if they had tested for the other three substances in their testing for PFAS.

437
438 Mr. Mawyer stated yes. He stated that Mr. Tungate would review those findings during the
439 monthly assessment of their wastewater testing.

440
441 Mr. O'Connell stated that in the drinking water report that the City and County sent to their
442 customers, the data from 2023 was included so that customers received the information as well.

443
444 Mr. Gaffney stated that Mr. Mawyer mentioned wastewater. He asked if there was any indication
445 of when they would begin testing the discharge into rivers and streams.

446
447 Mr. Mawyer stated no, but it seemed like that may be the next regulatory requirement.

448
449 Mr. Gaffney asked if they needed to proactively test.

450
451 Mr. Mawyer stated that they were testing their wastewater and leachate from the landfill, which
452 was brought to Moores Creek and processed through their wastewater treatment system. He
453 stated that they knew how much PFAS came into the facility and how much goes out. He stated
454 that this was where the CERCLA designation could be a problem, because if they released PFAS
455 back into the streams of the US, they could be liable under the designated CERCLA provisions.
456 He stated that to the wastewater question, it could force them to remove PFAS from wastewater.

457
458 Mr. Gaffney asked what the alternative was. He asked if they would have to run that through the
459 GAC.

460
461 Mr. Mawyer stated that currently, GAC was one of the leading technologies for doing that. He
462 stated that they could double or triple their GAC facilities from what they have now.

463
464 Mr. Gaffney stated that they may recall the \$250 million cost for unknown projects Mr. Mawyer
465 had shared a year or two ago. He stated that this was what it may cost.

467 **6. ITEMS FROM THE PUBLIC**

468
469 Dede Smith stated that she wanted to reiterate that, as a City customer, their only protection from
470 PFAS was the original community water plan developed by the Nature Conservancy, which
471 recommended responsibly filling the Ragged Mountain Reservoir with the only clean water they
472 have had for over 100 years. She stated that the water source, the Moormans River, was truly
473 protected against contamination by PFAS. She stated that she understood that it seems way too
474 late, but the financial requirements since adopting the nine-mile pipeline have only increased and
475 now look to be compounded again due to PFAS. She stated that this was just shocking. She
476 stated that she knew it was not great news, but thanked the Board for the opportunity to speak.
477

478 **7. RESPONSES TO PUBLIC COMMENT**

479 There were no responses.
480

481 **8. CONSENT AGENDA**

- 482
483 *a. Staff Report on Finance*
484
485 *b. Staff Report on Operations*
486
487 *c. Staff Report on CIP Projects*
488
489 *d. Staff Report on Administration and Communications*
490
491 *e. Staff Report on Wholesale Metering*
492
493 *f. Staff Report on Drought Monitoring*
494
495 *g. Approval to Amend Professional Engineering Services Work Authorization –*
496 *Administration Building Renovation and Addition Project – Short Elliot Hendrickson*
497 *Inc.*
498
499 *h. Approval of Construction Contract Award and Amendment to the FY 24 Capital*
500 *Improvement Plan: Red Hill Water Treatment Plant Upgrades – Anderson Construction,*
501 *Inc.*
502
503 *i. Approval of Reimbursement Resolution – Rivanna Pump Station Rehabilitation*

504
505 **Ms. Mallek moved that the Board approve the Consent Agenda. Mr. O’Connell seconded**
506 **the motion and passed unanimously (7-0).**

507 **9. OTHER BUSINESS**

- 508
509
510 *a. Presentation: Succession & Strategic Planning Review*
511 *Bill Mawyer, P.E., Executive Director*

Mr. Mawyer stated that during the Board meeting last month, they made numerous references to Succession and Strategic Planning strategies that were presented to the Board in 2023. He stated that he would now provide a brief review to refresh everyone's memory on this plan. He stated that it encompassed both their Succession Management and Strategic Planning initiatives, focusing on developing staff internally to replace retiring senior staff and fulfill priorities outlined in their Strategic Plan, such as outward communications, environmental stewardship, and infrastructure planning.

Mr. Mawyer stated in their succession planning, the objective was to foster organizational growth and develop their staff internally so they would be eligible for future opportunities. He mentioned that this could be seen through instances like Ms. Houchens' seamless transition to a higher role after Ms. Bowles' departure. He stated that they had a Leadership Development Program managed by Betsy Nemeth and Leah Beard, who were effectively training the next generation of leaders and providing them with ample opportunities.

Mr. Mawyer stated that recently, they provided staff with various opportunities to showcase their skills, such as Ms. Whitaker presenting the Capital Improvement Budget, Mr. Wood presenting the Operating Budget, and Mr. McKalips' Solid Waste Budget presentation. He stated that by doing so, they aimed to prepare staff for advancement within the organization. He stated that in 2023, when examining organization functionally, they sought to integrate both succession planning and strategic initiatives for a comprehensive approach.

Mr. Mawyer stated that in 2024, there were three divisions within the water sewer area: Finance and Administration, Engineering and Maintenance, and Operations. He noted that Solid Waste was a separate division. He stated that Administration handled responsibilities such as payroll, training, budgeting, billing, document management, and Information Technology. He stated that he and Ms. Anama were doing all the media communications, grants, managing the Safety Manager, and acting as FOIA Officer.

Mr. Mawyer stated that organizational changes were made to functionally improve the structure. He stated that starting in July of 2023, the Board approved revisions which created an Administration and Communication division, with Ms. Nemeth selected through a competitive process as Director. He stated that Safety was moved into this new division, and grants were moved into Engineering and Maintenance. He stated that Finance and Administration became Finance and Information Technology, with three focus areas as they still had Procurement. He stated that they moved Ms. Houchens' position to the Environmental Services department within Operations.

Mr. Mawyer stated that the restructuring led to two management changes for water and wastewater treatment plants. He stated that the Central Laboratory and an Industrial Pretreatment program were introduced, and he expected the Board would hear more about them over time. He stated that this organizational change started in 2024.

Ms. Mallek asked which box on the chart was for Water Resources.

Mr. Mawyer stated that it was the box titled "Water Supply Management."

558
559 Mr. Pinkston asked if Human Resources was in the first column.
560

561 Mr. Mawyer stated that HR was in the workforce management area of the Administration &
562 Communications Division. He stated that Ms. Nemeth's group had HR, communications, and
563 media releases. He added that her department also managed security badges. He stated that in FY
564 2023, they crafted a five-year plan that would add 18 positions. He stated that they filled the four
565 positions approved for FY 2024.
566

567 Mr. Mawyer stated that they had hired Tanner Wright as their IT Technician, Betsy Nemeth as
568 their Director of Administration and Communication, and Josh Bowen as their Engineering
569 Inspector Supervisor. He stated that there was a change in priorities; they moved the Wastewater
570 Operator to FY 2025 and advanced the Finance Manager to FY 2024. He stated that they were
571 pleased to have hired Stephanie Deal for that role. He stated that for the four positions for FY
572 2025, they would be hiring a Deputy Executive Director, an Outreach and Communications
573 Coordinator in the Administration & Communications Division, a Wastewater Operator, and a
574 Sustainability and Grants Coordinator in the Engineering & Maintenance Division.
575

576 Mr. Mawyer stated that in the first two years, they focused on organizational structure and
577 management positions. He stated that for the next three years, they would concentrate on staff-
578 level positions such as a Chemist, Accountant, and Water Operator. He stated that they planned
579 to hire another Engineer, Mechanic, and Chemist for research and compliance in FY 2028. He
580 stated their goal was to ensure that they remained a forward-looking utility and that their staff
581 stayed informed about technological advancements.
582

583 Mr. Mawyer stated that when considering the treatment of wastewater and water for the next 10
584 to 20 years, and as they planned to build the necessary infrastructure, it was crucial to understand
585 the available technology and identify what works effectively. He stated the Authority did a great
586 job a decade ago by devising a plan to install the GAC, which now yielded significant benefits.
587 He stated that they aimed to remain at the leading edge, rather than the bleeding edge, of
588 technology. He stated that regarding the PFAS issue, GAC was one of the foremost technologies
589 for removing PFAS contaminants.
590

591 Mr. Mawyer stated that returning to FY 2025, they discussed the role of the Water Resources
592 Manager, which had been reassigned to the Operations & Environmental Services Division. He
593 stated this change was made to emphasize their commitment to Environmental Services and
594 align with strategic planning suggestions. He stated that the water system management had been
595 further strengthened through the appointment of Ms. Houchens in the role of Water Resources
596 Coordinator.
597

598 Mr. Mawyer stated that in their proposal for July 2024, they aimed to further enhance their
599 organizational structure by introducing a Deputy Executive Director to facilitate succession
600 planning for the Executive Director role.
601

602 Mr. Mawyer stated that in FY26, there would be additional positions proposed for recruitment
603 and development within their HR group, and a Safety Associate requested by the Solid Waste

Board. He stated that there would be two Solid Waste positions. He stated that the IT Department was experiencing growing needs due to the increasing control of their systems; thus, they were seeking capable and ample staff to manage these. He stated that they anticipated a major construction program and, as such, proposed an additional Engineering Inspector in FY26.

Mr. Mawyer stated that regarding changes for FY27, there were a few positions that included a Chemist for Industrial Pretreatment. He stated that recently, they had been examining the fats, oils, and grease program, as well as the biological products present in wastewater, to determine whether industries should be required to have pretreatment or if their treatment needed expansion. He explained that a preliminary report suggested investing mega dollars in additional aeration bases; however, after reevaluating the data, they believed this was not as imminent as initially thought. He stated that nonetheless, as their community's population grew, they would eventually need to expand wastewater facilities.

Mr. O'Connell asked if the new positions on the organizational chart were displayed in pink, and added positions were in green.

Mr. Mawyer stated yes. He stated that it was about three to four positions per year in Water and Sewer. He stated that in FY 2029, it was more of the same, with an Accounting Associate, a Mechanic, and another Water Operator. He stated that they may look for a Manager in their Regulatory Compliance group. He stated that in 2030, there was a major change to the organization. He stated that Finance and IT would become separate divisions, each with its own Director.

Mr. Mawyer stated that they planned to expand their management team by adding a second Deputy Executive Director who would oversee Administration, Finance, and IT divisions while the current Deputy Executive Director continued to manage Engineering & Maintenance, and Operations & Environmental Services groups. He stated that one would focus more on Operations and the other would be more for Administration.

Mr. Mawyer stated that in 2035, they planned to accommodate ten years of staff growth by ensuring that their upcoming building addition could house the anticipated expansion. He stated that this included dividing their divisions further: adding a Legal and Procurement division with an in-house attorney, moving Procurement from Finance to the Legal office along with Regulatory Compliance. He stated that they would separate Operations and Environmental Services. He stated that Operations would focus on their ten water and wastewater treatment plants, while Environmental Services would continue to grow in testing, regulatory compliance, and internal treatment expertise.

Mr. Mawyer stated that there would be 169 positions at the end of this plan, up from 102 in 2023. He stated that this would be a 50% increase in the organization over the 12 years of this plan. He stated that this growth represented a vision and a plan that may not unfold perfectly; however, it provided them with a target for consideration as they progressed. He stated that returning to their discussion from last month regarding the budget and succession planning, this strategic plan aligned with their ongoing discussions.

650 Ms. Mallek asked if the Grants Coordinator would begin in the new year or if they were on staff
651 currently.

652
653 Mr. Mawyer stated that the plan was to hire someone for that position between December 2024
654 and January 2025 (Note: this strategy has been updated and the Grants position will be hired in
655 first quarter of FY 25 while federal grant funds are abundant).

656
657 Ms. Mallek stated that the benefit of this approach was that the EPA's nearest regional office was
658 located in Philadelphia. She stated that it had a complete staff of technical advisors. She noted
659 that establishing a personal relationship with the staff there would significantly expedite
660 answering questions and ensuring smooth operations.

661
662 Mr. Mawyer stated that they would look for our Grants person to help them with contacts,
663 available grants, and all those other aspects.

664
665 Ms. Mallek stated that in the past several months, it had become evident that increased focus on
666 outreach and communication would be highly beneficial. She stated that both the Moormans
667 River aspect and the pump station issue illustrated this point, as everyone eagerly sought
668 accurate information. She stated that by providing concrete facts rather than speculative
669 assumptions, they could streamline the process and significantly improve its efficiency. She
670 stated she was intrigued by the mention of pre-treatment initiatives from industry. She asked if
671 they could consider requiring industries to do their own cleanup sooner so to avoid having the
672 responsibility be put on RWSA.

673
674 Mr. Mawyer stated that the analysis would cover whether they should require the industries to
675 complete the task, or if RWSA should do it for a large group of customers. He stated that they
676 could also consider fees. He stated that currently, their sewer regulations include the option to
677 charge fees for discharges with excessive Biological Oxygen Demand (BOD) or high-strength
678 waste. He stated that they had spent a year examining whether to raise these fees and at what
679 level.

680
681 Mr. Mawyer stated that if discharges have a higher BOD, indicating stronger waste, they could
682 be charged an additional fee for the extra treatment required. He stated that implementing such
683 fees may not be popular with some community members, as in the hypothetical example of
684 vineyards being required to pay more due to increased BOD levels. He stated that they must
685 consider how to address the potential influx of high-strength waste from industries like Pepsi-
686 Cola, which is a significant contributor to the City, and decide whether to impose fees or absorb
687 the costs within their CIP.

688
689 Ms. Mallek stated that there was a certain public belief that accountability should go with
690 individuals rather than socializing the risk and privatizing the benefit.

691
692 Mr. Pinkston asked if they had received many federal grants in the past. He asked if the
693 reporting, management, and compliance requirements were involved.

694
695 Mr. Mawyer stated that they would be subject to the federal Davis-Bacon wage requirements and

the Buy American, Build American requirements. He stated that they had not initiated any of those grant projects yet; however, they were well-prepared. He stated that in his previous federal experience, he was accustomed to abiding by such stipulations. He stated that they could handle those management requirements. He stated that the wastewater Enhanced Nutrient Removal construction projects in the past included federal grants and administrative requirements, which staff successfully managed.

Ms. Whitaker stated that the Chesapeake Bay Act was implemented through state legislation, alongside Davis-Bacon and various procurement and reporting requirements. She stated that typically, these grants involved visits from state regulators. She noted that they had gained familiarity with such processes, but each program came with its unique set of rules and requirements. She stated that now, they were designing the Beaver Creek Dam and Spillway Modifications project with expectations of receiving a federal grant which would include the federal administration requirements.

Mr. Gaffney stated that was one of the first questions the contractors asked at the recent information meeting was if federal funds were involved in any of the upcoming projects in the next five years, because it would significantly impact how they bid the project.

Mr. O'Connell asked if it was correct that Rivanna was formed due to a federal grant, and the City and County merged to create Rivanna.

Mr. Mawyer stated that he understood the City and County created the Authority in 1972 in order to qualify for federal wastewater funds.

Ms. Mallek asked if the impact on contractors would be the amount of data they have to collect.

Mr. Gaffney stated that it pertained to how much they would have to pay in labor costs (Davis-Bacon wage requirements).

Mr. Mawyer stated that it may also pertain to how much they would have to pay to get piping and other materials that were made in America.

Mr. Mawyer stated that currently, there were no federal funds in their major projects, but if they could get a grant for the Rivanna to Ragged Pipeline project, it would become a federally funded initiative.

Mr. O'Connell stated that the biggest one they had now was the Beaver Creek Dam project, which would have all the federal requirements.

Presentation: Wastewater Program Review

David Tungate, Director of Operations & Environmental Services, stated that today they would discuss the wastewater program. He stated that the picture on the slide was taken by one of their drone pilots in the IT department and showed an aerial of the Moores Creek facility. He stated that the Moores Creek property included about 80 acres. He stated that there are four wastewater

742 treatment plants: Moores Creek, with a full treatment capacity of 15 MGD; the Stone Robinson
743 Elementary School facility, with a treatment capacity of 7,000 gallons daily; Glenmore
744 wastewater treatment facility with a treatment capacity of 0.381 MGD; and the Scottsville
745 wastewater treatment plant that has a two-tiered permit for 0.100 MGD and 0.20 MGD.

746
747 Mr. Tungate stated that the Moores Creek facility has two influent pump stations: one is known
748 as the Moores Creek pump station that is located adjacent to the front gate, and the other is the
749 Rivanna pump station located on the opposite side of the facility close to the Woolen Mills
750 development. He stated that both pump stations receive wastewater from the community and
751 pump it to the headworks facility to begin the treatment process.

752
753 Mr. Tungate stated that the map of their collection system showed the Rivanna pump station
754 handled approximately 60% of the collection system, while the Moores Creek pump station takes
755 care of the southern half of Charlottesville and the ACSA collection area. He stated that Moores
756 Creek pump station also receives sewage from the Crozet area through a series of 4 lift stations.

757
758 Mr. Tungate stated that the Moores Creek facility is divided into a “wet side” and “dry side”; the
759 slide photo displays the “wet side”, with their administration building visible in the background.
760 He stated that as the water is pumped from the influent pump stations to the headworks and then
761 flows by gravity into the primary clarifiers.

762
763 Mr. Tungate pointed out the aeration basins to the right adjacent to I-64. He stated that
764 wastewater flows to the secondary clarifiers where the water is held after the aeration process.
765 He noted their large chemical storage silos and three clarifiers visible in the picture, the fourth is
766 not in the picture.

767
768 Mr. Tungate stated that moving on to the “dry side” of the Moores Creek facility, he pointed out
769 the three primary digesters up on the hill as one entered the site. He noted that there was a
770 smaller digester with a green roof that holds methane gas generated from the primary digesters.
771 He stated that another smaller digester stores the sludge before it is sent to the solid handling
772 building for dewatering. He stated that the wastewater then proceeds to the tertiary filters, which
773 remove any remaining particulates and fine material in the water.

774
775 Mr. Tungate stated that wastewater is then directed to the ultraviolet (UV) channels, where it
776 must be free of particles for the ultraviolet lamps to provide disinfection effectively. He stated
777 that the treated wastewater is channeled to their outfall on Moores Creek. He stated that lastly, a
778 methane sphere and a flame that burns off excess methane gas. The flame illuminates the plant
779 during the night and in winter when the trees are devoid of leaves.

780
781 Mr. O’Connell asked if there was any filtering at the end of the process or if it was just UV.

782
783 Mr. Tungate stated that wastewater first passes through the tertiary filters, which remove specific
784 particulates, then it proceeds to UV treatment, then out through the effluent channel to Moores
785 Creek.

786
787 Ms. Mallek asked if the testing of the water was done after the tertiary filter and before it went

788 out of the discharge.

789
790 Mr. Tungate stated that he would show them a picture later, but they collected their final effluent
791 sample after the UV treatment.

792
793 He stated that they had influent pump stations: Rivanna and Moores Creek. He stated that these
794 stations had grinders that made any larger materials smaller so they could be pumped. He stated
795 that at the headworks, they first had band screens to remove materials from the water because
796 they did not want insoluble materials in the wastewater process.

797
798 Mr. Tungate stated that this debris came off the screens, was dewatered and compacted, then
799 dumped into a dumpster. He stated that they also had a grit system that removed heavier
800 inorganic material from the wastewater. He added that the higher the flow rates from the influent
801 pump stations, typically the greater amount of grit was captured in the dumpster. He stated that
802 normally the dumpster was emptied once a week.

803
804 Mr. Tungate stated that after the band screens and grit removal, they had primary clarifiers for
805 the settling of sludge and most of the solids. He stated that the primary clarifiers also removed
806 floating oils and grease. He added that there is an odor control system to remove foul air under
807 the aluminum covers of the primary clarifiers. He stated that there is a robust odor control
808 system in the series of four pump stations that pump sewage from Crozet to Moores Creek. He
809 stated that pump station number four was situated at the intersection of routes 240 and 250 in
810 Crozet. The slide showed the odor control system and the flow equalization tank (FET) in the
811 background. The FET is a flow equalization tank and stores excess wastewater during a storm.
812 During high flow events in the sewer system the water is stored in the tank, once flow rate is
813 reduced, the stored water will be slowly returned to the pump station for ultimate delivery to
814 Moores Creek.

815
816 Mr. Tungate stated that the image displayed represented the odor control system, marking the
817 first of three odor control systems on the Crozet force main. He stated that to mitigate odors,
818 RWSA spends approximately \$390,000 annually along route 250, coming east from Crozet.

819
820 Mr. Tungate showed an image of their Crozet odor control equipment at pump station two. He
821 stated that they worked with a vendor to procure this service and applied Bioxide and hydrogen
822 peroxide to combat odors in the Crozet system.

823
824 He stated that the slide showed the aeration process occurring in the aeration basins, which was
825 vital for microbe growth and nutrient reduction. He explained that there are multiple chambers
826 and areas within these basins allowed them to adjust the location of air as needed. He stated that
827 subsequently, secondary clarifiers facilitated additional sludge settlement. The liquid continues
828 to be pumped to the tertiary filters. He stated that this picture was one of their four secondary
829 clarifiers.

830
831 Mr. Pinkston asked how they got the sludge out.

832
833 Mr. Tungate stated that the sludge pumps would transfer sludge from the secondary clarifiers to

the digesters, which he would discuss next. He stated that the sludge is collected on the bottom of the clarifier. He stated that the WW operations staff was very prescriptive in how they run the sludge inventory in the clarifiers. The secondary clarifiers are designed to allow the sludge to settle to the bottom and then be pumped to the digesters.

Mr. Pinkston asked if something similar happened at the primary clarifiers.

Mr. Tungate stated yes. He stated that the sludge is pumped directly from the bottom of the primary clarifiers to the digesters. He stated that the water proceeded from the secondary clarifiers to the sand filters. The function of the sand filters is to remove any small particles to make the UV treatment processes more efficient and effective. After the water is treated through the UV light channels for disinfection it flows to the outfall into Moores Creek. The Moores Creek outfall is visible on the right of the slide. He stated that to answer Ms. Mallek's earlier question, RWSA WW staff collect their effluent sample after UV treatment but before the outfall to Moores Creek. He stated that final effluent sample is the final quality check on the treatment plant's effectiveness.

Mr. Pinkston asked if the sludge from the clarifiers goes to the digesters.

Mr. Tungate stated yes. He stated that the sludge was sent to digesters, where it stayed for 15 to 20 days, during which microbes break down the sludge. He stated that this resulted in a reduced sludge volume due to anaerobic digestion. He stated that the digested sludge was then processed through one of the two centrifuges, which operated at night, six to seven days a week, and produced a byproduct resembling topsoil.

Mr. Tungate stated that they used five trailers for waste disposal, filling two per night. He stated that the material was transported to McGill Environmental in Waverly, Virginia, where it becomes a commercially available compost. He stated that in 2023, Moores Creek processed 14,000 tons of material and made 545 trips to Waverly, Virginia. He stated that they had an agreement with McGill Environmental to allow them to haul back a portion of the finished compost to help offset costs. He stated that the full trailers of biosolids are temporarily stored at the compost yard prior to transportation to McGill Environmental.

Mr. Tungate stated that regarding wastewater compliance, Virginia Department of Environmental Quality allocated 282,994 pounds of nitrogen and 18,525 pounds of phosphorus annually to the Moores Creek AWWRF. For example, the slide shows the March 2024 nitrogen and phosphorus data that indicated Moores Creek discharged 7,600 pounds of nitrogen and 695 pounds of phosphorus. He stated that they were currently under their allotment for both nutrients, with a discharge of only 32% of their nitrogen and 19% of their phosphorus allocation utilized. He stated that RWSA WW staff took pride in the fact that they had only discharged 12% of their allocated nitrogen and 4% of their allocated phosphorus during the first three months of 2024.

Mr. Tungate stated that this allowed RWSA to accumulate excess nitrogen and phosphorus credits, which RWSA can sell in the Virginia nutrient exchange program. He stated that the price per pound of nitrogen and phosphorus varied but could generate revenue between \$60,000 and \$100,000 annually. He stated that lesser-performing wastewater treatment plants in the

James River watershed could purchase those credits.

Mr. Tungate stated that the wastewater treatment facilities were regulated by the Virginia Department of Environmental Quality, and the current slide showed a snapshot of their testing requirements for Moores Creek. He stated that dissolved oxygen and pH tests were performed daily. He stated that E. coli samples were required four times per week, and they were required to have less than 126 cells per milliliter. He stated that their discharge was typically less than 10 cells per milliliter of E. Coli.

Mr. Tungate stated that the Moores Creek plant must be staffed by licensed Operators and have personnel present 24/7. He stated that each shift consisted of two individuals working 12-hour shifts. He stated that adjacent to the Moores Creek pump station, there was a septic receiving station. He stated that in 2023, it processed approximately 9 million gallons of septage with over 6,100 transactions during the calendar year.

Mr. Pinkston asked what Mr. Tungate meant by transactions.

Mr. Tungate stated that there was a requirement that any septic disposal at the RWSA septage receiving station required a login and a PIN so RWSA could determine the source of each disposal for invoice payment. He stated that there were 6,100 individual disposals in CY 2023.

Mr. Pinkston asked if these were individuals who participated.

Mr. Mawyer stated that it was usually commercial haulers delivering septage from rural septic tanks.

Mr. Tungate stated that it could be a septic hauler that brings in truckloads of waste, portable toilets companies, or other providers or haulers that bring in septage.

Mr. Gaffney stated that there was nothing from the City.

Ms. Mallek stated that the County paid extra to cover the infrastructure cost for those septage receiving facilities.

Mr. Tungate stated that regarding their wastewater treatment plants, he would discuss how much they treat at these plants. He stated that at the Moores Creek facility, last year, RWSA WW staff treated 3.5 billion gallons, 44 million gallons at Glenmore, 20 million gallons at Scottsville, and approximately 610,000 gallons at Stone Robinson.

Mr. Pinkston asked if Mr. Tungate stated 3.5 billion gallons.

Mr. Tungate stated yes, 3.5 billion gallons. He stated that they had 610,000 gallons at Stone Robinson. He stated that because Stone Robinson was a school and was not in session during the summer, they could not keep the plant alive, so they actually fed rabbit food to keep the bugs alive so they could continue using the plant when school staff returned in August.

Mr. Tungate stated that their facilities had varying sizes. He stated that Moores Creek, their largest facility, had a capacity of 15 MGD of full treatment capacity. He stated that when they experienced higher flow rates over 15 MGD, they could abbreviate the treatment process. He stated that they stored excess wastewater in holding ponds and changed the aeration treatment process to bypass some treatments for efficient flow through the plant. He stated that there were nine total Operators assigned to this facility. He stated that Glenmore, Scottsville, and Stone-Robinson facilities were visited daily, but not staffed 24/7.

Mr. Tungate stated that each plant had one Operator per shift, two shifts per week, with approximately four hours daily for Glenmore and Scottsville, and one hour per day at Stone-Robinson. He stated that one person usually covered these three "County" facilities in a day. He stated they had two Relief Operators trained to run all plants, who received a premium on their hourly wages and were available for emergencies or additional help. He stated that their management staff included a Manager, Assistant Manager, and Supervisor, making the total wastewater operations staff 16.

Mr. Tungate stated that they were proud of their licensed Operators; their highest-ranking is Class 1 license holders. He stated that currently, they had one unlicensed trainee who had not been with them long and needed to take an exam after six months of hands-on experience. He stated that they had one open position that was in the process of being filled. He stated that out of their 16 staff members, seven held a Class 1 license, while 13 possessed a Class 2 or higher license.

Mr. Pinkston asked what the entry-level educational prerequisites or qualifications were for an individual just starting in the field.

Mr. Tungate stated that most of their Operators possessed a high school diploma. He stated that possessing post-high school education accelerated the licensing process even more, potentially reducing the time required. He stated that a prerequisite for taking these licensing exams was six months of hands-on experience, after which individuals with post-high school education could progress faster.

Mr. Pinkston stated that what had particularly stood out to him during his time on this Board was the fact that the organization served as an excellent starting point and foundation for individuals seeking to launch and develop their careers.

Mr. Tungate stated that they discussed this topic frequently, as many of the Operators he had interviewed, both for water and wastewater positions, often mentioned that they were unaware of the water or wastewater Operator jobs prior to joining. He stated that most of these individuals have transitioned from other industries, such as night managers from Sheetz and McDonald's, hydrogeologists, teachers, and a civil engineer.

Mr. Tungate stated that this diverse group of Water and Wastewater Operators is undeniably fascinating, yet the position is not suited for everyone due to the long hours and 24/7 nature of the job. He stated that a common theme emerges when speaking with potential candidates: they appreciate working for the community, contributing to its well-being, and finding purpose in

972 their daily tasks of providing clean water and treating wastewater for the community.

973
974 Mr. Pinkston stated that they should keep young adults in mind for these positions.

975
976 Mr. Tungate stated that he would discuss the industrial pre-treatment program briefly. He stated
977 that the purpose of the program is to safeguard the sewer system and the operations in their
978 treatment plants by enforcing discharge limits as mandated by the Environmental Protection
979 Agency and the Virginia Department of Environmental Quality. He stated that they implement a
980 Pre-treatment Program that adheres to the provisions of the Clean Water Act of 1972.

981
982 Mr. Tungate stated that permitted businesses submitted a report concerning the Pre-treatment
983 Program on January 31 for the previous year. He stated that Pre-treatment Programs involve
984 examining issues such as oil and grease buildup. He stated that RWSA staff has had discussions
985 with ACSA staff, Jeremy Lynn and Tim Brown, about the Grease Trap Program at restaurants.
986 He stated that the program also pertained to heavy metals, some nutrients like nitrogen and
987 phosphorus, pH levels, and carbonaceous biochemical oxygen demand (CBOD).

988
989 Mr. Tungate stated that there has been an increasing problem with oils and grease being poured
990 down drains, which subsequently coagulates. He stated that in addition to identifying categorical
991 significant industrial users, such as metal finishing and semiconductor manufacturing, they also
992 consider non-categorical users that discharge more than 25,000 gallons a day or have the
993 potential to adversely affect treatment processes at the plant. He stated that they had examined
994 the possibility of regulating businesses with processes that discharged pollutants of concern,
995 including restaurants, breweries, food preparation facilities, and soft drink production sites
996 extensively in the last year.

997
998 Mr. Tungate stated that currently, three significant industrial users, Virginia Diodes, Mikro
999 Systems, and Northrop Grumman, were part of their system, with permits issued on July 31,
1000 2022. He stated that these entities were required to submit a semi-annual report to lab staff in
1001 June and December of each year.

1002
1003 Mr. Tungate stated that the RWSA wastewater departmental budget amounted to \$22.9 million,
1004 with a significant portion allocated to debt service. He stated that in Fiscal Year 2023, they
1005 managed approximately 3.5 billion gallons of wastewater at a cost of approximately \$0.67 per
1006 hundred gallons of wastewater.

1007
1008 Mr. Gaffney stated that Mr. Tungate's presentation was very impressive.

1009
1010 Ms. Mallek asked if Mr. Tungate could describe the grit system a bit more in depth.

1011
1012 Mr. Tungate stated that the flow came into the plant from the pump stations, it is pumped to the
1013 headworks where the grit system takes the grit out of the wastewater. The grit system uses a
1014 system where the heavy grits particles settle to the bottom and are separated.

1015
1016 Ms. Mallek stated that she would understand it better if it was coming in from the freshwater
1017 source, where the turbidity was occurring. She asked if this was after use.

1018
1019 Mr. Tungate stated that this was what was coming in from Rivanna and Moores Creek pump
1020 stations.

1021
1022 Ms. Mallek asked if this was on the wastewater side.

1023
1024 Mr. Tungate stated yes. He stated that they had seen things such as cell phones, pagers, and other
1025 larger items.

1026
1027 Mr. Mawyer asked where the grit may come from.

1028
1029 Mr. Tungate stated that it could be from aggregate from paving operations or small breaks in the
1030 sewer collection system. He stated that materials may get washed in.

1031
1032 Ms. Mallek stated that they had a separated system, so she thought they should not be getting
1033 things from the sides of the streets when it rained.

1034
1035 Mr. Tungate stated that was correct.

1036
1037 Ms. Mallek stated that she knew they were spending a lot of money sending stuff to Waverly.
1038 She asked if Waverly was treating the biosolids further than what is done at Moores Creek. She
1039 stated that she did not understand why we were not just selling compost here. She stated that she
1040 understood there was an odor issue, but that should be taken care of in the process and be
1041 removed.

1042
1043 Mr. Tungate stated that it would be an expensive process to create compost and control odors at
1044 Moores Creek. We produced Class B biosolids, which could not be land applied due to the
1045 presence of pathogens. He stated that in contrast, Class A biosolids could be safely land applied.

1046
1047 Mr. Mawyer asked how they could get to Class A.

1048
1049 Mr. Tungate explained that to achieve Class A status, biosolids underwent additional heating and
1050 drying processes. He noted that a wastewater plant in Harrisonburg had installed a drying facility
1051 for this purpose, resulting in a Class A product. He stated that they had discussed the land
1052 application of biosolids extensively, recognizing its relevance to waste management. He added
1053 that our operations run continuously, irrespective of weather conditions, which he believed made
1054 the RWSA approach quite effective. He stated that they must move the solids out 365 days a
1055 year, regardless of weather and other conditions.

1056
1057 Ms. Mallek asked if this was as much about volume removal as anything else.

1058
1059 Mr. Tungate stated yes. He stated that they did not store anything at Moores Creek except for the
1060 biosolids in the trailer from overnight.

1061
1062 Mr. O'Connell asked if they heated the material at Waverly to get it to Class A.

1063

1064 Mr. Tungate stated that McGill Environmental combined various materials during the
1065 composting process, which includes drying and heating stages to create a product suitable for
1066 land application and or commercial use. He stated that McGill Environmental, who sold the
1067 compost under a trade name, had utilized this product at one of the Washington Redskins
1068 facilities. He stated that McGill incorporate grease, recycled money from the Federal Reserve,
1069 tobacco waste products from Philip Morris, and a series of biosolids from other wastewater
1070 facilities.

1071
1072 Mr. Mawyer stated that they mixed the compost materials and let them dry.

1073
1074 Ms. Mallek asked if it was just sitting out somewhere.

1075
1076 Mr. Tungate stated that they had large Quonset huts with blowers.

1077
1078 Mr. O'Connell asked if it was visible from the road as one passed by Waverly.

1079
1080 Mr. Tungate stated that it was along Beef Steak Road in Waverly, and it is unknown if it is
1081 visible from a road.

1082
1083 Mr. O'Connell stated that he had driven by the facility a week or two ago and did not realize
1084 what it was.

1085
1086 Ms. Mallek stated that regarding the bypass system that was used during heavy rainfall, that was
1087 to hold the extra volume at the other storage pond, and it was not put into the river. She asked if
1088 it was held until it could be processed.

1089
1090 Mr. Tungate stated that was correct. He stated that if they knew there was a storm coming,
1091 RWSA WW staff would pump down the holding ponds, so they had places to store excess
1092 wastewater.

1093
1094 Ms. Mallek stated that the equalization tank was used for that purpose. She stated that perhaps in
1095 the communications materials, staff could share information about how not everything is
1096 flushable. She stated that anyone with a home septic system would never dream of doing that, or
1097 they would have huge expenses. She stated that it was not fair for people to think they could put
1098 whatever they want into the public sewer. She stated that regarding these categorical SIUs, she
1099 would like to know if that was because they were using degreasers for the sheet metal in the
1100 factory.

1101
1102 Mr. Tungate stated yes, it was a chemical process, and any degreasing facilities should be
1103 regulated.

1104
1105 Mr. Mawyer asked what the issue was with those chemicals.

1106
1107 Mr. Tungate stated that those chemicals could disrupt the biological activity at the wastewater
1108 treatment plants.

1109

1110 Mr. Mawyer clarified further that it could kill the bugs essential to the biological wastewater
1111 treatment process.

1112
1113 Ms. Mallek stated that the degreaser issues were why they had the ACME visible records area
1114 and the EPA Superfund site near the airport. She stated that they had contaminated the ground in
1115 those areas, so she was glad that they had a better handle on it now.

1116
1117 ***10. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA***

1118 Mr. Mawyer stated that there would be a reception for Mr. O'Connell after the meeting, and he
1119 hoped everyone would join in the celebration of his service.

1120
1121 ***11. CLOSED MEETING***

1122 There was no reason for a closed meeting.

1123
1124 ***12. ADJOURNMENT***

1125 **At 3:45 p.m., Mr. Pinkston moved to adjourn the meeting of the Rivanna Water and Sewer**
1126 **Authority. Mr. O'Connell seconded the motion, which passed unanimously (7-0).**



**RIVANNA WATER AND SEWER AUTHORITY
BOARD OF DIRECTORS**

Resolution of Appreciation for David Ulan

WHEREAS, Mr. Ulan has served the public for over 20 years including eight years as a Wastewater Operator for the Rivanna Water and Sewer Authority; and

WHEREAS, over the same eight-year period since 2016, Mr. Ulan has demonstrated leadership in his field and has been a valuable resource to the Authority and its employees; and

WHEREAS Mr. Ulan's understanding of the Authority's operation and dedication and loyalty to the Authority has positively impacted the Authority, its customers, and its employees; and

WHEREAS, the Rivanna Water and Sewer Authority Board of Directors is most grateful for the professional and personal contributions Mr. Ulan has provided to the Rivanna Water and Sewer Authority and to its customers and its employees; and

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority Board of Directors recognizes, thanks, and commends Mr. Ulan for his distinguished service, efforts, and achievements as a member of the Rivanna Water and Sewer Authority, and presents this Resolution as a token of esteem, with its best wishes in his retirement.

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

Michael Gaffney, Chairman
Lauren Hildebrand
Ann Mallek
Gary O'Connell
Brian Pinkston
Jeff Richardson
Sam Sanders

MEMORANDUM

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

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: EXECUTIVE DIRECTOR'S REPORT

DATE: MAY 28, 2024

STRATEGIC PLAN PRIORITY: EMPLOYEE DEVELOPMENT

New Credentials for Team Members

The professional qualifications of our staff continue to improve and enhance our services. We congratulate the following employees for successfully completing the test requirements for a higher license from the State:

- Robbie McMullen, Wastewater Operator – Class 1
- Chris Ward, Wastewater Operator - Class 1

Our Maintenance Department staff completed the following Mechanic Training courses this semester:

- Tyrone Hughes CFC Certification & Pumps and Valves
- David Jefferies AC & Refrigeration #4
- Blake Shifflett Industrial Safety OSHA 30
- Steve Minnis Pumps & Valves
- Charles Walker Industrial Safety OSHA 30
- Josh Powell Advanced Machine
- Aaron Heintges Advanced Electrical
- Garrett Carver Advanced Electrical & Pumps & Valves

Congratulations

Congratulations to Jennifer Whitaker, Director of Engineering and Maintenance, 2024 Graduate of the Charlottesville Regional Chamber of Commerce Leaders Lab of Greater Charlottesville, a 9-month leadership training program. Primary elements of this program are Leadership Development, Community Knowledge-Building, and Community Problem - Solving.



STRATEGIC PLAN PRIORITY: PLANNING AND INFRASTRUCTURE

National Dam Safety Awareness Day – May 31st



Information on Rivanna Water & Sewer Authority drinking water reservoirs can be found on our website:

<https://www.rivanna.org/drinking-water-reservoirs/>

Educational resources for dam owners and the public are available on the Association of State Dam Safety Officials (ASDSO) website:

<https://damsafety.org/NDSAD>

Rivanna Pump Station Restoration

Bypass Pumping – The 55 mgd bypass pumping system continues to operate off normal utility power. Staff continue to closely monitor and address minor operational issues as they arise.

Investigations – We had a detailed, lengthy presentation and meeting with SEH, the independent engineer, on May 13 to discuss the facts and chronology presented in the draft 400+ page report. There were a few details about the original construction and inspection we wanted to investigate, and SEH needed to finalize a few details. SEH Engineering has now completed its independent investigation and causation assessment and the report has been submitted to our property insurance carrier, the Virginia Risk Sharing Association (VRSA). After VRSA and its engineer have an opportunity to review the report, we expect to receive information about the coverage to be provided and any deductibles.

Rehabilitation - Staff convened a Technical Advisory Committee including on May 16 with several consultant engineers and contractors to discuss replacement of the 6 pumps. After considering design alternatives, costs, reliability, and condition, the team recommended the 6 existing pumps be rebuilt and new electric pump motors be purchased. That work is moving forward.

Staff are also evaluating alternatives and purchasing equipment to repair the headworks plug valves and replace the pump station influent gate.

Primary Clarifiers at Moores Creek

On May 8th, the contractor completing our major 5Kv electrical system replacement project at Moores Creek incorrectly modified the electrical system for our 2 primary clarifiers resulting in structural damage to the rake and scum arm connections in those basins. Through the efforts of staff and our consultant (Hazen) and contractor (MEB), repairs to one clarifier have been completed and will be followed shortly thereafter by restoration of the second clarifier. We have notified VDEQ about this issue. So far, there have been no odor complaints from neighbors even though we have stored excess wastewater in the open storage ponds. The contractor has acknowledged his mistake and involved his insurance company.

The primary clarifiers are the 2 round basins with aluminum odor-control covers located near the Administration Building, as shown in the photo. The clarifiers provide treatment by permitting the heavier and larger wastewater particles to settle to the bottom of the clarifier. The particles then form a bottom layer of sludge requiring regular removal by the upper and lower rake arms.



STRATEGIC PLAN PRIORITY: COMMUNICATION AND COLLABORATION

Community Outreach

Crozet Community Advisory Committee

Dave Tungate, Director of Operations and Environmental Services gave a presentation to the Crozet Community Advisory Committee on May 8 and shared information about RWSA, as well as Crozet specific projects.



Wetlands Mitigation Project

On April 24, a group of 90 tenth grade students from St. Anne's Belfield School worked with our staff to clean up and remove tree tubes from the wetland mitigation area at Moores Creek. They completed a significant amount of work, and we are grateful for their help. We also had several staff members help with this project: Jennifer Whitaker, David Tungate, Bethany Houchens, Betsy Nemeth, and George Cheape.



Students at Franklin Street Wetlands Mitigation Site

AWWA Annual Seminar



David Tungate, Director of Operations and Environmental Services, Brad Puffenbarger, Assistant Water Manager, and I attended the American Water Works Association's *One Water One Life* Annual Drinking Water Quality and Research Seminar on April 30. Discussion sessions during this all-day seminar included regulatory updates (PFAS), emerging contaminants, efficient use of water resources and exploration of innovative and relevant technologies.

Sugar Hollow Bladder Deflation Community Meeting

Victoria Fort, Jennifer Whitaker, Dave Tungate, and Bethany Houchens met with an advisory group of Sugar Hollow and White Hall community members on May 8. Staff discussed details of the After-Action Report, general community concerns, and shared plans and schedules for future actions, including implementation of an audible alarm system.

Charlottesville Office of Emergency Management

Mr. Jeremy Evans, Emergency Management Coordinator with the City's Office of Emergency Management, met with our leadership team on May 13 and received a virtual tour of our facilities. This provided a good opportunity to make connections and emergency management collaboration between the City and the Authorities.

Greene County Water and Sewer

We provided a windshield and virtual tour and presentation to share information about our organization and facilities with Mr. Dave Hundelt, Director of Water and Sewer for Greene County.

Senator Deeds

On May 22, we met with Senator Creigh Deeds and Ms. Tracy Eppard, Legislative Director, to provide an overview presentation about the sediment that's been found in some homes in the Glenmore subdivision and a few homes in the Ivy area.

Rivanna RiverFest



Our staff, Betsy Nemeth, Leah Beard, and Bethany Houchens, participated in RiverFest on May 19 celebrating the benefits of the Rivanna River. Staff shared information with the community about water conservation, dam safety, and appreciation of our water resources. This free, family-friendly event benefited the Rivanna Conservation Alliance.



MEMORANDUM

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

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

REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: MARCH MONTHLY FINANCIAL SUMMARY – FY 2024

DATE: MAY 28, 2024

Financial Snapshot

The Authority has an overall net deficit of \$2,541,000 for the first nine months of this fiscal year due to unforeseen Urban Wastewater operations and maintenance expenses. Total revenues (operating and debt service) are \$1,511,600 over budget estimates, which is helping to offset the overrun in expenses. Urban Water flows and operations rate revenue are 0.4% above budget estimates, and Urban Wastewater flows and operations rate revenue are 7.6% over budget. Expenses are \$4,052,600 over budget with \$2,524,000 of that excess related to the Rivanna Pump Station failure. Revenues and expenses are summarized in the table below:

	Urban Water	Urban Wastewater	Total Other Rate Centers	Total Authority
Operations				
Revenues	\$ 7,772,231	\$ 8,603,001	\$ 2,142,130	\$ 18,517,362
Expenses	(8,161,115)	(10,879,990)	(2,209,132)	(21,250,237)
Surplus (deficit)	<u>\$ (388,884)</u>	<u>\$ (2,276,989)</u>	<u>\$ (67,002)</u>	<u>\$ (2,732,875)</u>
Debt Service				
Revenues	\$ 8,345,184	\$ 7,798,649	\$ 2,026,187	\$ 18,170,020
Expenses	(8,267,756)	(7,697,423)	(2,012,957)	(17,978,136)
Surplus (deficit)	<u>\$ 77,428</u>	<u>\$ 101,226</u>	<u>\$ 13,230</u>	<u>\$ 191,884</u>
Total				
Revenues	\$ 16,117,415	\$ 16,401,650	\$ 4,168,317	\$ 36,687,382
Expenses	(16,428,871)	(18,577,413)	(4,222,089)	(39,228,373)
Surplus (deficit)	<u><u>\$ (311,456)</u></u>	<u><u>\$ (2,175,763)</u></u>	<u><u>\$ (53,772)</u></u>	<u><u>\$ (2,540,991)</u></u>

A more detailed financial analysis is in the following monthly report and reviews more closely actual financial performance compared to budgeted estimates. There are comments listed that will reference the applicable line items in the financial statement for each rate center and each support department in the following pages. Please refer to the Budget vs Actual financial statements when reviewing these comments.

Detailed Financials

The Authority's total operating revenues through March are \$809,000 over the prorated annual budget estimates, and operating expenses are over budget by \$3,541,800, resulting in a net operating deficit of \$2,732,900. The following comments explain most of the other budget vs. actual variances.

- A. Annual and Quarterly Transactions - Some revenues and expenses are over the prorated year-to-date budget due to one-time receipts of revenues for the year and quarterly or annual payments of expenses. These transactions appear to have significant impacts on the budget vs. actual monthly comparisons but usually even out as the year progresses. Septage receiving support revenue of \$109,440 is billed to the County annually in July. Annual payments are made in the first quarter for certain maintenance agreements and for employer contributions to employees' health savings accounts. The annual payment (\$175,000) to UVA for the Observatory lease was made in September. Insurance premiums are paid at the beginning of each quarter.
- B. Personnel Costs (all Water, Urban Wastewater, Maintenance – pages 2,3,4,5,9) – Some department's salaries are higher than budgeted due to pay increases for plant operators who achieved higher licenses. Urban Water also had some large final leave payouts this fiscal year. The Maintenance department has exceeded the annual budget for overtime and holiday pay due to emergency maintenance needs of the Rivanna Pump Station.
- C. Other Services & Charges (Urban Water, Crozet Water, Scottsville Water, Urban Wastewater – pages 2 to 5) – Utility costs are running higher than originally estimated for Urban Wastewater and all Water departments. Urban Water incurred \$43,600 in unbudgeted watershed management expenses, and Scottsville Water's laboratory analysis fees are running high. Urban Water, Crozet Water, and Urban Wastewater paid unbudgeted annual DEQ permit application fees of \$25,000, \$15,000, and \$10,650, respectively.
- D. Equipment Purchases (Urban Water – page 2) Urban Water incurred \$12,700 unbudgeted equipment rental costs.
- E. Communications (Administration – page 8) – Telephone and data service costs for the Administration department are over the annual budget.
- F. Professional Services (Urban Wastewater, Administration – pages 5,8) - Urban Wastewater has spent \$22,000 more than the annual budget on engineering and technical services costs related to a wastewater sampling study. The Administration department is over the prorated budget but is not over the annual budget in this category.
- G. Operations & Maintenance (Urban Water, Crozet Water, Urban Wastewater – page 2,3,5) – Urban Wastewater has incurred unbudgeted emergency pipelines and appurtenances costs related to the mitigation and bypass pump install and operations for the Rivanna Pump Station incident totaling \$2,524,000 through March. Chemical costs are running high for Urban Water, Crozet Water, and Urban Wastewater.
- H. Information Technology (Scottsville Water – page 4) - Scottsville Water is over budget on SCADA costs.

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024
Fiscal Year 2024

Consolidated
Revenues and Expenses Summary

<i>Budget</i>	<i>Budget</i>	<i>Actual</i>	<i>Budget</i>	<i>Variance</i>
<i>FY 2024</i>	<i>Year-to-Date</i>	<i>Year-to-Date</i>	<i>vs. Actual</i>	<i>Percentage</i>

Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$	22,727,003	\$	17,045,252	\$	17,640,054	\$	594,802	3.49%
Lease Revenue		124,000		93,000		105,034		12,034	12.94%
Admin., Maint. & Engineering Revenue		781,000		585,750		596,494		10,744	1.83%
Other Revenues		647,267		485,450		532,425		46,974	9.68%
Use of Reserves (Water Resources Fund)		80,000		60,000		80,000		20,000	33.33%
Interest Allocation		47,250		35,438		159,849		124,411	351.07%
Total Operating Revenues	\$	24,406,520	\$	18,304,890	\$	19,113,856	\$	808,966	4.42%

Expenses

Personnel Cost	B	\$	11,625,091	\$	8,718,819	\$	8,941,469	\$	(222,651)	-2.55%
Professional Services	F		467,850		350,888		363,272		(12,384)	-3.53%
Other Services & Charges	C		3,479,955		2,609,966		3,282,617		(672,650)	-25.77%
Communications	E		221,440		166,080		202,692		(36,612)	-22.04%
Information Technology			1,269,575		952,181		814,619		137,562	14.45%
Supplies			46,300		34,725		39,382		(4,657)	-13.41%
Operations & Maintenance	A, G		6,035,808		4,526,856		7,293,010		(2,766,154)	-61.11%
Equipment Purchases	D		345,500		259,125		223,420		35,705	13.78%
Depreciation			915,000		686,250		686,250		-	0.00%
Total Operating Expenses		\$	24,406,519	\$	18,304,890	\$	21,846,731	\$	(3,541,842)	-19.35%
Operating Surplus/(Deficit)		\$	1	\$	0	\$	(2,732,875)			

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$	22,119,060	\$	16,589,295	\$	16,589,304	\$	9	0.00%
Septage Receiving Support - County		109,440		82,080		109,440		27,360	33.33%
Buck Mountain Lease Revenue		1,600		1,200		12,741		11,541	961.72%
Trust Fund Interest		179,830		134,873		287,858		152,986	113.43%
Reserve Fund Interest		879,900		659,925		1,170,679		510,754	77.40%
Total Debt Service Revenues	\$	23,289,830	\$	17,467,373	\$	18,170,022	\$	702,649	4.02%

Debt Service Costs

Total Principal & Interest	\$	16,168,944	\$	12,126,708	\$	12,126,708	\$	-	0.00%
Reserve Additions-Interest		879,900		659,925		1,170,679		(510,754)	-77.40%
Debt Service Ratio Charge		725,000		543,750		543,750		-	0.00%
Reserve Additions-CIP Growth		5,516,000		4,137,000		4,137,000		-	0.00%
Total Debt Service Costs	\$	23,289,844	\$	17,467,383	\$	17,978,137	\$	(510,754)	-2.92%
Debt Service Surplus/(Deficit)	\$	(14)	\$	(11)	\$	191,885			

Summary

Total Revenues	\$	47,696,350	\$	35,772,263	\$	37,283,877	\$	1,511,615	4.23%
Total Expenses		47,696,363		35,772,273		39,824,868		(4,052,595)	-11.33%
Surplus/(Deficit)	\$	(13)	\$	(10)	\$	(2,540,991)			

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Urban Water Rate Center
Revenues and Expenses Summary

Budget FY 2024	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
---------------------------	--------------------------------	--------------------------------	------------------------------	--------------------------------

Operating Budget vs. Actual

		Notes								
Revenues										
Operations Rate Revenue		\$	10,021,362	\$	7,516,022	\$	7,543,580	\$	27,559	0.37%
Lease Revenue			94,000		70,500		80,395		9,895	14.04%
Miscellaneous			-		-		-		-	
Use of Reserves (Water Resources Fund)			80,000		60,000		80,000		20,000	33.33%
Interest Allocation			34,200		25,650		68,255		42,605	166.10%
Total Operating Revenues		\$	10,229,562	\$	7,672,172	\$	7,772,231	\$	100,059	1.30%
Expenses										
Personnel Cost	B	\$	2,384,332	\$	1,788,249	\$	1,929,503	\$	(141,254)	-7.90%
Professional Services			178,500		133,875		136,958		(3,083)	-2.30%
Other Services & Charges	C		769,233		576,925		956,852		(379,927)	-65.85%
Communications			103,200		77,400		69,144		8,256	10.67%
Information Technology	H		127,650		95,738		61,256		34,482	36.02%
Supplies			7,000		5,250		11,650		(6,400)	-121.90%
Operations & Maintenance	A, G		2,905,068		2,178,801		2,269,958		(91,157)	-4.18%
Equipment Purchases	D		20,100		15,075		27,782		(12,707)	-84.29%
Depreciation			300,000		225,000		225,000		-	0.00%
Subtotal Before Allocations		\$	6,795,083	\$	5,096,312	\$	5,688,104	\$	(591,791)	-11.61%
Allocation of Support Departments			3,434,478		2,575,859		2,473,012		102,847	3.99%
Total Operating Expenses		\$	10,229,561	\$	7,672,171	\$	8,161,115	\$	(488,944)	-6.37%
Operating Surplus/(Deficit)		\$	1	\$	0	\$	(388,884)			

Debt Service Budget vs. Actual

Revenues						
Debt Service Rate Revenue		\$ 10,193,779	\$ 7,645,334	\$ 7,645,338	\$ 4	0.00%
Trust Fund Interest		77,500	58,125	124,009	65,884	113.35%
Reserve Fund Interest		423,100	317,325	563,096	245,771	77.45%
Lease Revenue		1,600	1,200	12,741	11,541	961.72%
Total Debt Service Revenues		\$ 10,695,979	\$ 8,021,984	\$ 8,345,184	\$ 323,200	4.03%
Debt Service Costs						
Total Principal & Interest		\$ 6,964,779	\$ 5,223,584	\$ 5,223,584	\$ -	0.00%
Reserve Additions-Interest		423,100	317,325	563,096	(245,771)	-77.45%
Debt Service Ratio Charge		400,000	300,000	300,000	-	0.00%
Est. New Debt Service - CIP Growth		2,908,100	2,181,075	2,181,075	-	0.00%
Total Debt Service Costs		\$ 10,695,979	\$ 8,021,984	\$ 8,267,756	\$ (245,771)	-3.06%
Debt Service Surplus/(Deficit)		\$ -	\$ -	\$ 77,429		

Rate Center Summary

Total Revenues	\$ 20,925,541	\$ 15,694,156	\$ 16,117,415	\$ 423,260	2.70%
Total Expenses	20,925,540	15,694,155	16,428,871	(734,716)	-4.68%
Surplus/(Deficit)	\$ 1	\$ 0	\$ (311,456)		
Costs per 1000 Gallons	\$ 3.01		\$ 3.19		
Operating and DS	\$ 6.16		\$ 6.42		
Thousand Gallons Treated	3,397,700	2,548,275	2,558,013	9,738	0.38%
or					
Flow (MGD)	9.309		9.302		

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Crozet Water Rate Center
Revenues and Expenses Summary

<i>Budget FY 2024</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 1,234,752	\$ 926,064	\$ 926,064	\$ -	0.00%
Lease Revenues	30,000	22,500	24,639	2,139	9.51%
Interest Allocation	4,600	3,450	9,111	5,661	164.10%
Total Operating Revenues	\$ 1,269,352	\$ 952,014	\$ 959,814	\$ 7,800	0.82%

Expenses

Personnel Cost	B	\$	341,691	\$	256,268	\$	270,349	\$	(14,081)	-5.49%
Professional Services			22,900		17,175		27		17,148	99.84%
Other Services & Charges	C		133,426		100,070		132,331		(32,261)	-32.24%
Communications			17,600		13,200		12,334		866	6.56%
Information Technology			32,400		24,300		11,054		13,246	54.51%
Supplies			1,500		1,125		1,179		(54)	-4.84%
Operations & Maintenance	G		335,700		251,775		263,925		(12,150)	-4.83%
Equipment Purchases			3,200		2,400		3,130		(730)	-30.41%
Depreciation			60,000		45,000		45,000		-	0.00%
Subtotal Before Allocations		\$	948,417	\$	711,313	\$	739,330	\$	(28,017)	-3.94%
Allocation of Support Departments			320,940		240,705		231,571		9,134	3.79%
Total Operating Expenses		\$	1,269,357	\$	952,018	\$	970,900	\$	(18,883)	-1.98%
Operating Surplus/(Deficit)		\$	(5)	\$	(4)	\$	(11,086)			

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 2,385,720	\$ 1,789,290	\$ 1,789,290	\$ -	0.00%
Trust Fund Interest	13,500	10,125	21,676	11,551	114.08%
Reserve Fund Interest	34,500	25,875	45,656	19,781	76.45%
Total Debt Service Revenues	\$ 2,433,720	\$ 1,825,290	\$ 1,856,622	\$ 31,332	1.72%

Debt Service Costs

Total Principal & Interest	\$ 1,216,725	\$ 912,544	\$ 912,544	\$ -	0.00%
Reserve Additions-Interest	34,500	25,875	45,656	(19,781)	-76.45%
Estimated New Principal & Interest	1,182,500	886,875	886,875	-	0.00%
Total Debt Service Costs	\$ 2,433,725	\$ 1,825,294	\$ 1,845,075	\$ (19,781)	-1.08%
Debt Service Surplus/(Deficit)	\$ (5)	\$ (4)	\$ 11,547		

Rate Center Summary

Total Revenues	\$ 3,703,072	\$ 2,777,304	\$ 2,816,436	\$ 39,132	1.41%
Total Expenses	3,703,082	2,777,311	2,815,975	(38,664)	-1.39%
Surplus/(Deficit)	\$ (10)	\$ (7)	\$ 461		
Costs per 1000 Gallons	\$ 6.26		\$ 5.70		
Operating and DS	\$ 18.27		\$ 16.53		
Thousand Gallons Treated	202,697	152,023	170,336	18,313	12.05%
Flow (MGD)	0.555		0.619		

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Scottsville Water Rate Center
Revenues and Expenses Summary

<i>Budget FY 2024</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$	656,460	\$	492,345	\$	492,345	\$	-	0.00%
Interest Allocation		2,150		1,613		4,316		2,703	167.65%
Total Operating Revenues	\$	658,610	\$	493,958	\$	496,661	\$	2,703	0.55%

Expenses

Personnel Cost	B	\$	223,641	\$	167,731	\$	179,484	\$	(11,753)	-7.01%
Professional Services			5,000		3,750		3,420		330	8.80%
Other Services & Charges	C		31,800		23,850		40,960		(17,110)	-71.74%
Communications			6,750		5,063		12,448		(7,385)	-145.88%
Information Technology	H		19,700		14,775		27,645		(12,870)	-87.10%
Supplies			100		75		572		(497)	-662.87%
Operations & Maintenance			134,800		101,100		109,600		(8,500)	-8.41%
Equipment Purchases			2,000		1,500		2,358		(858)	-57.20%
Depreciation			40,000		30,000		30,000		0	0.00%
Subtotal Before Allocations		\$	463,791	\$	347,843	\$	406,487	\$	(58,643)	-16.86%
Allocation of Support Departments			194,815		146,111		141,306		4,805	3.29%
Total Operating Expenses		\$	658,606	\$	493,955	\$	547,793	\$	(53,838)	-10.90%
Operating Surplus/(Deficit)		\$	4	\$	3	\$	(51,132)			

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$	158,736	\$	119,052	\$	119,052	\$	-	0.00%
Trust Fund Interest		1,650		1,238		2,648		1,411	114.01%
Reserve Fund Interest		10,300		7,725		14,048		6,323	81.85%
Total Debt Service Revenues	\$	170,686	\$	128,015	\$	135,748	\$	7,734	6.04%

Debt Service Costs

Total Principal & Interest	\$	148,991	\$	111,743	\$	111,743	\$	-	0.00%
Reserve Additions-Interest		10,300		7,725		14,048		(6,323)	-81.85%
Estimated New Principal & Interest		11,400		8,550		8,550		-	0.00%
Total Debt Service Costs	\$	170,691	\$	128,018	\$	134,341	\$	(6,323)	-4.94%
Debt Service Surplus/(Deficit)	\$	(5)	\$	(4)	\$	1,407			

Rate Center Summary

Total Revenues	\$	829,296	\$	621,972	\$	632,409	\$	10,437	1.68%
Total Expenses		829,297		621,973		682,134		(60,161)	-9.67%
Surplus/(Deficit)	\$	(1)	\$	(1)	\$	(49,725)			
Costs per 1000 Gallons	\$	38.22			\$	41.15			
Operating and DS	\$	48.13			\$	51.24			
Thousand Gallons Treated		17,230		12,923		13,313		391	3.02%
or									
Flow (MGD)		0.047				0.048			

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Urban Wastewater Rate Center
Revenues and Expenses Summary

Budget FY 2024	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 9,908,321	\$ 7,431,241	\$ 7,998,484	\$ 567,243	7.63%
Stone Robinson WWTP	17,267	12,950	11,524	(1,426)	-11.01%
Septage Acceptance	550,000	412,500	466,625	54,125	13.12%
Nutrient Credits	80,000	60,000	49,915	(10,085)	-16.81%
Miscellaneous Revenue	-	-	4,360	4,360	
Interest Allocation	3,300	2,475	72,092	69,617	2812.80%
Total Operating Revenues	\$ 10,558,888	\$ 7,919,166	\$ 8,603,001	\$ 683,835	8.64%

Expenses

Personnel Cost	B	\$ 1,458,300	\$ 1,093,725	\$ 1,170,030	\$ (76,305)	-6.98%
Professional Services	F	40,000	30,000	75,628	(45,628)	-152.09%
Other Services & Charges	C	2,271,556	1,703,667	1,961,812	(258,145)	-15.15%
Communications		11,600	8,700	11,707	(3,007)	-34.56%
Information Technology		110,600	82,950	44,491	38,459	46.36%
Supplies		1,200	900	2,576	(1,676)	-186.25%
Operations & Maintenance	G	2,086,800	1,565,100	4,283,184	(2,718,084)	-173.67%
Equipment Purchases		73,500	55,125	58,286	(3,161)	-5.73%
Depreciation		470,000	352,500	352,500	(0)	0.00%
Subtotal Before Allocations		\$ 6,523,556	\$ 4,892,667	\$ 7,960,214	\$ (3,067,546)	-62.70%
Allocation of Support Departments		4,035,331	3,026,498	2,919,776	106,722	3.53%
Total Operating Expenses		\$ 10,558,887	\$ 7,919,165	\$ 10,879,990	\$ (2,960,824)	-37.39%
Operating Surplus/(Deficit)		\$ 1	\$ 1	\$ (2,276,989)		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	A	\$ 9,339,509	\$ 7,004,632	\$ 7,004,637	\$ 5	0.00%
Septage Receiving Support - County		109,440	82,080	109,440	27,360	33.33%
Trust Fund Interest		86,900	65,175	139,036	73,861	113.33%
Reserve Fund Interest		410,200	307,650	545,536	237,886	77.32%
Total Debt Service Revenues		\$ 9,946,049	\$ 7,459,537	\$ 7,798,649	\$ 339,112	4.55%

Debt Service Costs

Total Principal & Interest		\$ 7,812,249	\$ 5,859,187	\$ 5,859,187	\$ -	0.00%
Reserve Additions-Interest		410,200	307,650	545,536	(237,886)	-77.32%
Debt Service Ratio Charge		325,000	243,750	243,750	-	0.00%
Est. New Debt Service - CIP Growth		1,398,600	1,048,950	1,048,950	-	0.00%
Total Debt Service Costs		\$ 9,946,049	\$ 7,459,537	\$ 7,697,423	\$ (237,886)	-3.19%
Debt Service Surplus/(Deficit)		\$ -	\$ -	\$ 101,226		

Rate Center Summary

Total Revenues	\$ 20,504,937	\$ 15,378,703	\$ 16,401,649	\$ 1,022,947	6.65%
Total Expenses	20,504,936	15,378,702	18,577,413	(3,198,711)	-20.80%
Surplus/(Deficit)	\$ 1	\$ 1	\$ (2,175,763)		
Costs per 1000 Gallons	\$ 3.11		\$ 3.97		
Operating and DS	\$ 6.05		\$ 6.79		
Thousand Gallons Treated or Flow (MGD)	3,390,400	2,542,800	2,737,332	194,532	7.65%
	9.289		9.954		

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Glenmore Wastewater Rate Center
Revenues and Expenses Summary

<i>Budget FY 2024</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 521,916	\$ 391,437	\$ 391,437	\$ -	0.00%
Interest Allocation	1,700	1,275	3,357	2,082	163.28%
Total Operating Revenues	\$ 523,616	\$ 392,712	\$ 394,794	\$ 2,082	0.53%

Expenses

Personnel Cost	\$ 127,879	\$ 95,909	\$ 103,132	\$ (7,223)	-7.53%
Professional Services	25,000	18,750	14,804	3,946	21.04%
Other Services & Charges	35,400	26,550	35,759	(9,209)	-34.68%
Communications	3,450	2,588	8,827	(6,240)	-241.14%
Information Technology	13,000	9,750	14,789	(5,039)	-51.68%
Supplies	-	-	35	(35)	
Operations & Maintenance	143,550	107,663	100,776	6,887	6.40%
Equipment Purchases	3,800	2,850	2,850	(0)	0.00%
Depreciation	25,000	18,750	18,750	0	0.00%
Subtotal Before Allocations	\$ 377,079	\$ 282,809	\$ 299,722	\$ (16,913)	-5.98%
Allocation of Support Departments	146,534	109,901	106,593	3,308	3.01%
Total Operating Expenses	\$ 523,613	\$ 392,710	\$ 406,315	\$ (13,605)	-3.46%
Operating Surplus/(Deficit)	\$ 3	\$ 2	\$ (11,521)		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 22,680	\$ 17,010	\$ 17,010	\$ -	0.00%
Trust Fund Interest	200	150	345	195	130.28%
Reserve Fund Interest	-	-	-	-	
Total Debt Service Revenues	\$ 22,880	\$ 17,160	\$ 17,355	\$ 195	1.14%

Debt Service Costs

Total Principal & Interest	\$ 18,729	\$ 14,047	\$ 14,047	\$ -	0.00%
Estimated New Principal & Interest	4,150	3,113	3,113	-	0.00%
Reserve Additions-Interest	-	-	-	-	
Total Debt Service Costs	\$ 22,879	\$ 17,159	\$ 17,159	\$ -	0.00%
Debt Service Surplus/(Deficit)	\$ 1	\$ 1	\$ 196		

Rate Center Summary

Total Revenues	\$ 546,496	\$ 409,872	\$ 412,149	\$ 2,277	0.56%
Total Expenses	546,492	409,869	423,474	(13,605)	-3.32%
Surplus/(Deficit)	\$ 4	\$ 3	\$ (11,325)		
Costs per 1000 Gallons	\$ 12.65		\$ 10.94		
Operating and DS	\$ 13.20		\$ 11.40		
Thousand Gallons Treated or Flow (MGD)	41,401	31,051	37,132	6,081	19.58%
	0.113		0.135		

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Scottsville Wastewater Rate Center
Revenues and Expenses Summary

<i>Budget FY 2024</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Operations Rate Revenue	\$ 384,192	\$ 288,144	\$ 288,144	\$ -	0.00%
Interest Allocation	1,300	975	2,717	1,742	178.71%
Total Operating Revenues	\$ 385,492	\$ 289,119	\$ 290,861	\$ 1,742	0.60%

Expenses

Personnel Cost	\$ 127,949	\$ 95,961	\$ 103,132	\$ (7,171)	-7.47%
Professional Services	5,000	3,750	10	3,740	99.73%
Other Services & Charges	24,800	18,600	26,436	(7,836)	-42.13%
Communications	3,800	2,850	5,982	(3,132)	-109.90%
Information Technology	14,025	10,519	413	10,106	96.08%
Supplies	-	-	615	(615)	
Operations & Maintenance	49,500	37,125	30,460	6,665	17.95%
Equipment Purchases	3,700	2,775	2,775	0	0.00%
Depreciation	20,000	15,000	15,000	(0)	0.00%
Subtotal Before Allocations	\$ 248,774	\$ 186,580	\$ 184,823	\$ 1,757	0.94%
Allocation of Support Departments	136,722	102,541	99,301	3,240	3.16%
Total Operating Expenses	\$ 385,495	\$ 289,121	\$ 284,124	\$ 4,997	1.73%
Operating Surplus/(Deficit)	\$ (3)	\$ (2)	\$ 6,737		

Debt Service Budget vs. Actual

Revenues

Debt Service Rate Revenue	\$ 18,636	\$ 13,977	\$ 13,977	\$ -	0.00%
Trust Fund Interest	80	60	144	84	139.87%
Reserve Fund Interest	1,800	1,350	2,341	991	73.44%
Total Debt Service Revenues	\$ 20,516	\$ 15,387	\$ 16,462	\$ 1,075	6.99%

Debt Service Costs

Total Principal & Interest	\$ 7,471	\$ 5,603	\$ 5,603	\$ -	0.00%
Reserve Additions-Interest	1,800	1,350	2,341	(991)	-73.44%
Estimated New Principal & Interest	11,250	8,438	8,438	-	0.00%
Total Debt Service Costs	\$ 20,521	\$ 15,391	\$ 16,382	\$ (991)	-6.44%
Debt Service Surplus/(Deficit)	\$ (5)	\$ (4)	\$ 80		

Rate Center Summary

Total Revenues	\$ 406,008	\$ 304,506	\$ 307,324	\$ 2,818	0.93%
Total Expenses	406,016	304,512	300,506	4,006	1.32%
Surplus/(Deficit)	\$ (8)	\$ (6)	\$ 6,818		
Costs per 1000 Gallons	\$ 16.30		\$ 15.62		
Operating and DS	\$ 17.17		\$ 16.52		
Thousand Gallons Treated or Flow (MGD)	23,643	17,732	18,191	459	2.59%
	0.065		0.066		

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Administration

<i>Budget FY 2024</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Payment for Services SWA	\$	781,000	\$	585,750	\$	585,750	\$	0	0.00%
Bond Proceeds Funding Bond Issuance Costs		-		-		-		-	
Miscellaneous Revenue		-		-		6,624		6,624	
Total Operating Revenues	\$	781,000	\$	585,750	\$	592,374	\$	6,624	1.13%

Expenses

Personnel Cost	\$	2,930,008	\$	2,197,506	\$	2,115,078	\$	82,428	3.75%
Professional Services	F	136,450		102,338		126,018		(23,680)	-23.14%
Other Services & Charges		140,760		105,570		97,822		7,748	7.34%
Communications	E	42,800		32,100		54,609		(22,509)	-70.12%
Information Technology		778,800		584,100		563,371		20,729	3.55%
Supplies		22,800		17,100		17,004		96	0.56%
Operations & Maintenance		64,200		48,150		36,539		11,611	24.11%
Equipment Purchases		15,000		11,250		11,339		(89)	-0.79%
Depreciation		-		-		-		-	
Total Operating Expenses		\$ 4,130,818		\$ 3,098,114		\$ 3,021,781		\$ 76,333	2.46%

Department Summary

Net Costs Allocable to Rate Centers **\$ (3,349,818) \$ (2,512,364) \$ (2,429,406) \$ (82,958) 3.30%**

Allocations to the Rate Centers

Urban Water	44.00%	\$	1,473,920	\$	1,105,440	\$	1,068,939	\$	36,501
Crozet Water	4.00%	\$	133,993		100,495		97,176		3,318
Scottsville Water	2.00%	\$	66,996		50,247		48,588		1,659
Urban Wastewater	48.00%	\$	1,607,913		1,205,935		1,166,115		39,820
Glenmore Wastewater	1.00%	\$	33,498		25,124		24,294		830
Scottsville Wastewater	1.00%	\$	33,498		25,124		24,294		830
	100.00%	\$	3,349,818	\$	2,512,364	\$	2,429,406	\$	82,958

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Maintenance

<i>Budget FY 2024</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Payment for Services SWA	\$	-	\$	-	\$	-	\$	-
Miscellaneous Revenue		-		-		1,067		1,067
Total Operating Revenues	\$	-	\$	-	\$	1,067	\$	1,067

Expenses

Personnel Cost	B	\$	1,553,212	\$	1,164,909	\$	1,237,287	\$	(72,379)	-6.21%
Professional Services			25,000		18,750		-		18,750	100.00%
Other Services & Charges			36,400		27,300		16,920		10,380	38.02%
Communications			11,300		8,475		16,396		(7,921)	-93.46%
Information Technology			17,500		13,125		9,210		3,915	29.83%
Supplies			4,000		3,000		22		2,978	99.25%
Operations & Maintenance			114,150		85,613		82,066		3,547	4.14%
Equipment Purchases			201,000		150,750		97,500		53,250	35.32%
Depreciation			-		-		-		-	
Total Operating Expenses		\$	1,962,562	\$	1,471,921	\$	1,459,401	\$	12,520	0.85%

Department Summary

Net Costs Allocable to Rate Centers		\$	(1,962,562)	\$	(1,471,921)	\$	(1,458,334)	\$	(11,452)	0.78%
<u>Allocations to the Rate Centers</u>										
Urban Water	30.00%	\$	588,768	\$	441,576	\$	437,500	\$	4,076	
Crozet Water	3.50%		68,690		51,517		51,042		476	
Scottsville Water	3.50%		68,690		51,517		51,042		476	
Urban Wastewater	56.50%		1,108,847		831,635		823,959		7,677	
Glenmore Wastewater	3.50%		68,690		51,517		51,042		476	
Scottsville Wastewater	3.00%		58,877		44,158		43,750		408	
	100.00%	\$	1,962,562	\$	1,471,921	\$	1,458,334	\$	13,587	

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Laboratory

<i>Budget FY 2024</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Revenues Notes

N/A

Expenses

Personnel Cost	\$ 456,056	\$ 342,042	\$ 338,932	\$ 3,110	0.91%
Professional Services	-	-	-	-	
Other Services & Charges	14,580	10,935	2,545	8,391	76.73%
Communications	1,400	1,050	526	524	49.86%
Information Technology	1,000	750	6,475	(5,725)	-763.33%
Supplies	1,200	900	2,108	(1,208)	-134.20%
Operations & Maintenance	115,300	86,475	75,547	10,928	12.64%
Equipment Purchases	1,700	1,275	1,275	(0)	0.00%
Depreciation	-	-	-	-	
Total Operating Expenses	\$ 591,236	\$ 443,427	\$ 427,408	\$ 16,019	3.61%

Department Summary

Net Costs Allocable to Rate Centers		\$ (591,236)	\$ (443,427)	\$ (427,408)	\$ (16,019)	3.61%
<u>Allocations to the Rate Centers</u>						
Urban Water	44.00%	\$ 260,144	\$ 195,108	\$ 188,059	\$ 7,048	
Crozet Water	4.00%	23,649	17,737	17,096	641	
Scottsville Water	2.00%	11,825	8,869	8,548	320	
Urban Wastewater	47.00%	277,881	208,411	200,882	7,529	
Glenmore Wastewater	1.50%	8,869	6,651	6,411	240	
Scottsville Wastewater	1.50%	8,869	6,651	6,411	240	
	100.00%	\$ 591,236	\$ 443,427	\$ 427,408	\$ 16,019	

Rivanna Water & Sewer Authority
Monthly Financial Statements - March 2024

Engineering

<i>Budget FY 2024</i>	<i>Budget Year-to-Date</i>	<i>Actual Year-to-Date</i>	<i>Budget vs. Actual</i>	<i>Variance Percentage</i>
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Operating Budget vs. Actual

Notes

Revenues

Payment for Services SWA

Total Operating Revenues

\$	-	\$	-	\$	3,052	\$	3,052
\$	-	\$	-	\$	3,052	\$	3,052

Expenses

Personnel Cost

Professional Services

Other Services & Charges

Communications

Information Technology

Supplies

Operations & Maintenance

Equipment Purchases

Depreciation

Total Operating Expenses

\$	2,022,024	\$	1,516,518	\$	1,494,542	\$	21,976	1.45%
	30,000		22,500		6,406		16,094	71.53%
	22,000		16,500		11,180		5,320	32.24%
	19,540		14,655		10,719		3,936	26.86%
	154,900		116,175		75,916		40,259	34.65%
	8,500		6,375		3,620		2,755	43.22%
	86,740		65,055		40,956		24,099	37.04%
	21,500		16,125		16,125		0	0.00%
	-		-		-		-	
\$	2,365,204	\$	1,773,903	\$	1,659,464	\$	114,440	6.45%

Department Summary

Net Costs Allocable to Rate Centers

\$	(2,365,204)	\$	(1,773,903)	\$	(1,656,411)	\$	(111,387)	6.28%
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Allocations to the Rate Centers

Urban Water

Crozet Water

Scottsville Water

Urban Wastewater

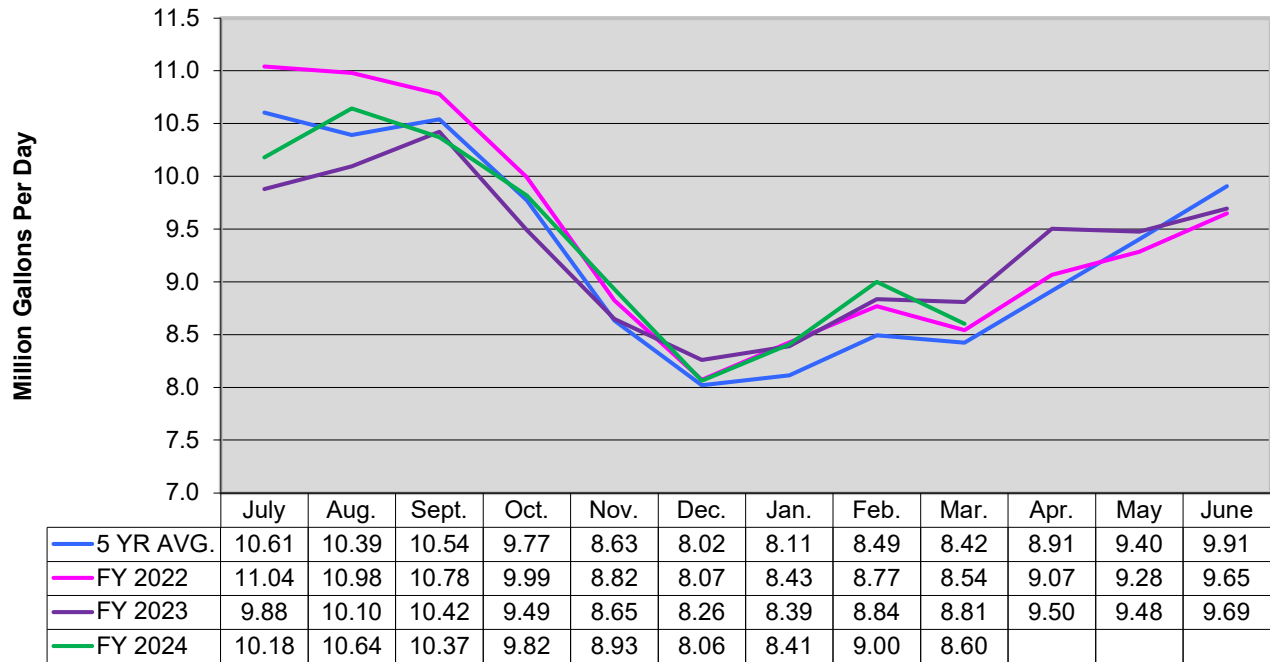
Glenmore Wastewater

Scottsville Wastewater

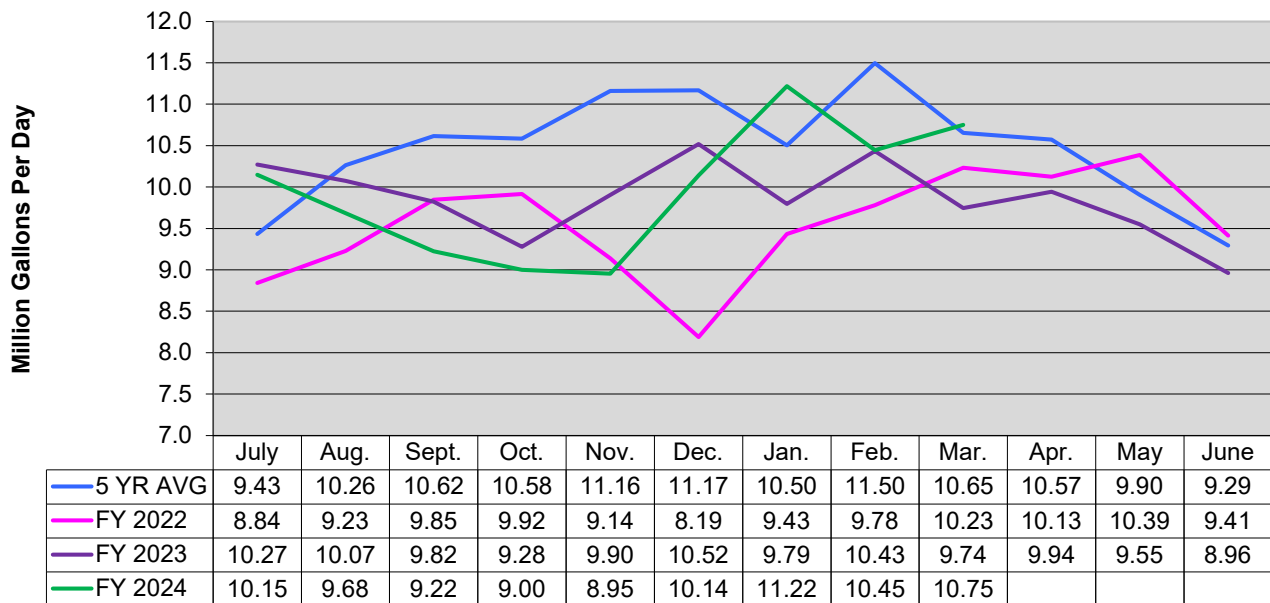
47.00%	\$	1,111,646	\$	833,734	\$	778,513	\$	55,221
4.00%		94,608		70,956		66,256		4,700
2.00%		47,304		35,478		33,128		2,350
44.00%		1,040,690		780,517		728,821		51,696
1.50%		35,478		26,609		24,846		1,762
1.50%		35,478		26,609		24,846		1,762
100.00%	\$	2,365,204	\$	1,773,903	\$	1,656,411	\$	117,492

**Rivanna Water and Sewer Authority
Flow Graphs**

Urban Water Flows



Urban Wastewater Flows



MEMORANDUM

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

**FROM: DAVE TUNGATE, DIRECTOR OF OPERATIONS & ENVIRONMENTAL
SERVICES**

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: OPERATIONS REPORT FOR APRIL 2024

DATE: MAY 28, 2024

WATER OPERATIONS:

The average and maximum daily water volumes produced in April 2024 were as follows:

<i>Water Treatment Plant</i>	<i>Average Daily Production (MGD)</i>	<i>Maximum Daily Production in the Month (MGD)</i>
South Rivanna	7.84	9.19 (4/25/2024)
Observatory	0.93	1.71 (4/9/2024)
North Rivanna	<u>0.46</u>	<u>0.62 (4/29/2024)</u>
<i>Urban Total</i>	9.23	10.61 (4/30/2024)
Crozet	0.60	0.78 (4/29/2024)
Scottsville	0.04	0.052 (4/3/2024)
Red Hill	<u>0.0021</u>	0.004 (4/19/2024)
<i>RWSA Total</i>	9.87	-

- All RWSA water treatment facilities were in regulatory compliance during the month of April.

Status of Reservoirs (as of May 21, 2024):

- Urban Reservoirs are 100% of Total Useable Capacity
 - South Rivanna Reservoir is 100% full
 - Ragged Mountain Reservoir is 100% full
 - Sugar Hollow Reservoir is 100% full
- Beaver Creek Reservoir (Crozet) is 100% full
- Totier Creek Reservoir (Scottsville) is 100% full

WASTEWATER OPERATIONS:

All RWSA Water Resource Recovery Facilities (WRRFs) were in regulatory compliance with their effluent limitations during April 2024. Performance of the WRRFs in April was as follows compared to the respective VDEQ permit limits:

<i>WRRF</i>	<i>Average Daily Effluent Flow (MGD)</i>	<i>Average CBOD₅ (ppm)</i>		<i>Average Total Suspended Solids (ppm)</i>		<i>Average Ammonia (ppm)</i>	
		<i>RESULT</i>	<i>LIMIT</i>	<i>RESULT</i>	<i>LIMIT</i>	<i>RESULT</i>	<i>LIMIT</i>
Moores Creek	10.0	<QL	9	<QL	22	<QL	2.2
Glenmore	0.130	0.40	15	4.0	30	NR	NL
Scottsville	0.07	1.8	25	8.2	30	NR	NL
Stone Robinson	0.002	NR	30	NR	30	NR	NL

NR = Not Required

NL = No Limit

<QL: Less than analytical method quantitative level (2.0 ppm for CBOD, 1.0 ppm for TSS, and 0.1 ppm for Ammonia).

Nutrient discharges at the Moores Creek AWRRF were as follows for April 2024.

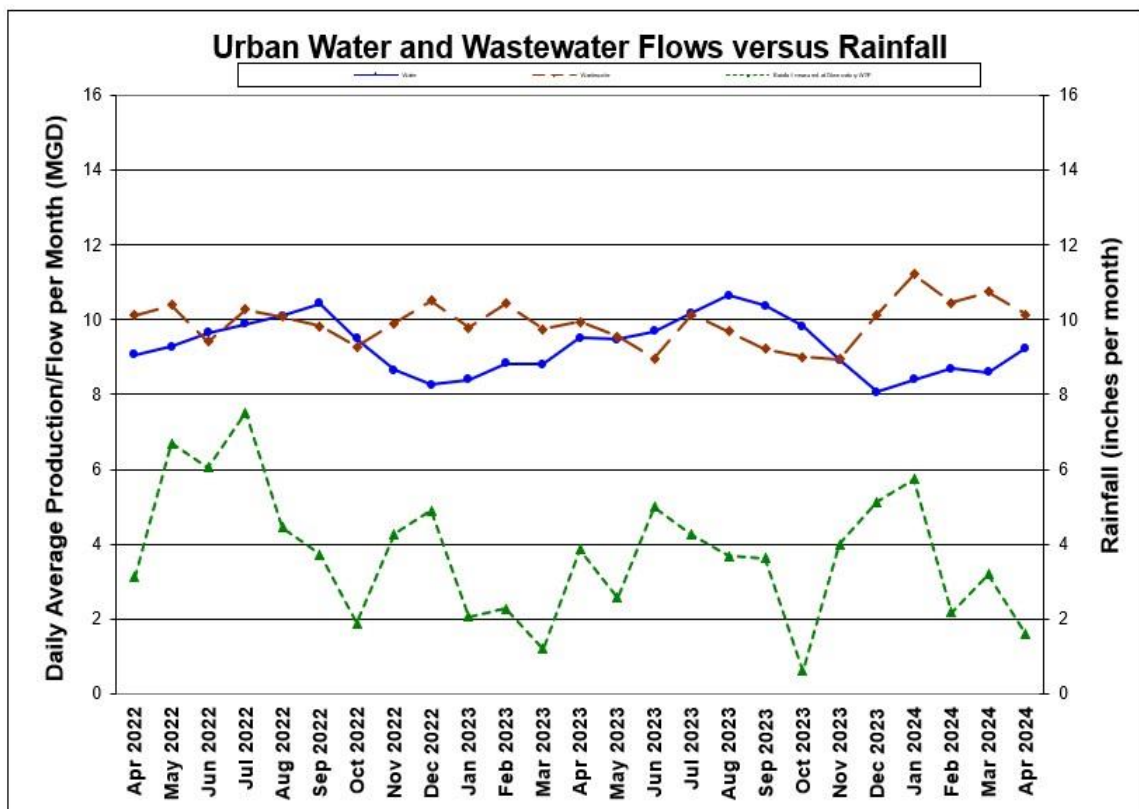
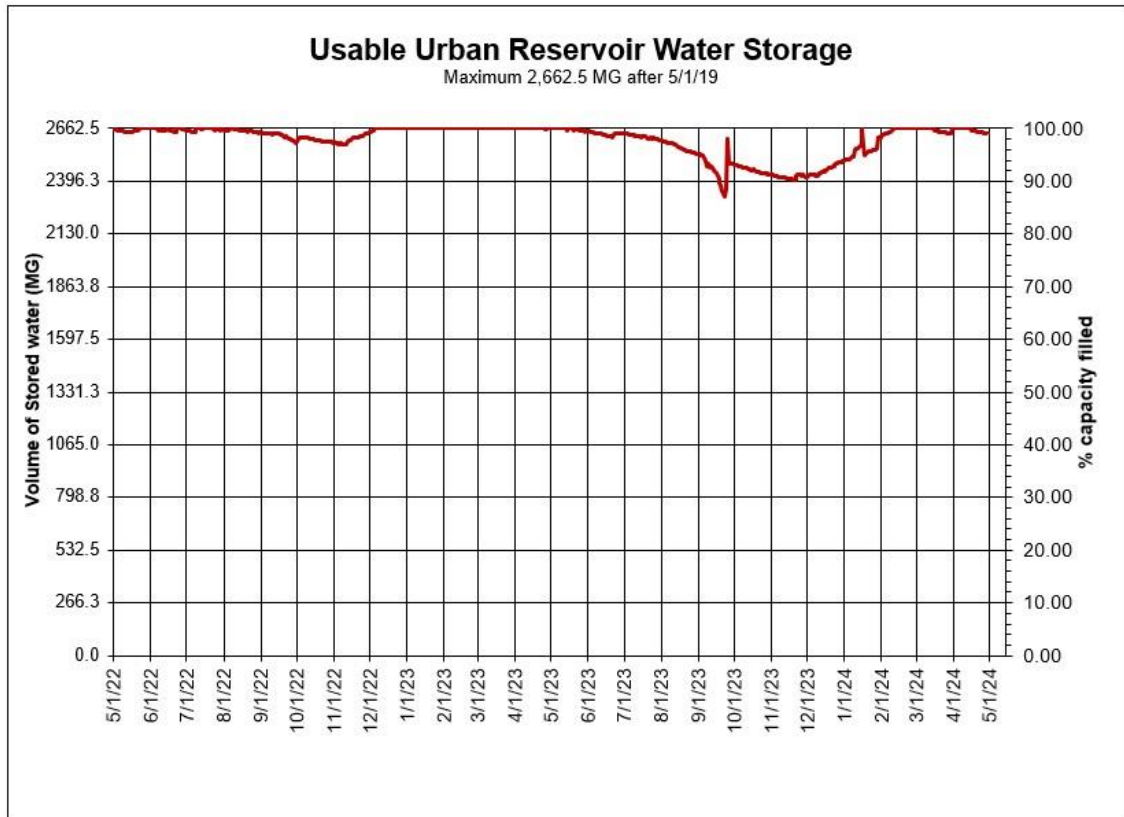
<i>State Annual Allocation (lb./yr.) Permit</i>		<i>Average Monthly Allocation (lb./mo.) *</i>	<i>Moores Creek Discharge April (lb./mo.)</i>	<i>Performance as % of monthly average Allocation*</i>	<i>Year to Date Performance as % of annual allocation</i>
Nitrogen	282,994	23,583	6,372	27%	14%
Phosphorous	18,525	1,636	156	10%	4%

*State allocations are expressed as annual amounts. One-twelfth of that allocation is an internal monthly benchmark for comparative purposes only.

WATER AND WASTEWATER DATA:

The following graphs are provided for review:

- Usable Urban Reservoir Water Storage
- Urban Water and Wastewater Flows versus Rainfall



MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS

FROM: JENNIFER WHITAKER, DIRECTOR OF ENGINEERING & MAINTENANCE

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: CIP PROJECTS REPORT

DATE: MAY 28, 2024

This memorandum reports on the status of the following major Capital Projects as well as other significant operating, maintenance, and planning projects.

For the current CIP and additional project information, please visit: <https://www.rivanna.org/wp-content/uploads/2023/06/2024-2028-CIP-FINAL-DRAFT-1.pdf>

Summary

	Project	Construction Start Date	Construction Completion Date
1	Airport Rd. Water Pump Station and Piping	December 2021	September 2024
2	MC 5kV Electrical System Upgrades	May 2022	December 2024
3	Red Hill Water Treatment Plant Upgrades	September 2024	March 2026
4	South Fork Rivanna River Crossing	April 2025	January 2027
5	Central Water Line	May 2025	March 2029
6	MC Administration Building Renovation and Addition	April 2025	December 2027
7	RMR to OBWTP Raw Water Line and Pump Station	January 2025	June 2029
8	MC Building Upfits and Gravity Thickener Improvements	February 2025	December 2026
9	MC Structural and Concrete Rehabilitation	February 2025	May 2027
10	Crozet Pump Stations Rehabilitation	April 2025	December 2026
11	Crozet WTP GAC Expansion – Phase I	August 2025	March 2027
12	Beaver Creek Dam, Pump Station, and Piping	May 2026	January 2030
13	SFRR to RMR Pipeline, Intake, and Facilities	March 2026	December 2030
14	RMR Pool Raise	October 2025	September 2026
15	Upper Schenks Branch Interceptor, Phase II	TBD	TBD

Under Construction

1. Airport Road Water Pump Station and Piping
2. MC 5kV Electrical System Upgrades
3. Red Hill Water Treatment Plant Upgrades

Design and Bidding

4. South Fork Rivanna River Crossing
5. Central Water Line
6. MC Administration Building Renovation and Addition
7. RMR to OBWTP Raw Water Line and Pump Station
8. MC Building Upfits and Gravity Thickener Improvements
9. MC Structural and Concrete Rehabilitation
10. Crozet Pump Stations Rehabilitation
11. Crozet WTP GAC Expansion – Phase I
12. Beaver Creek Dam, Pump Station, and Piping
13. SFRR to RMR Pipeline, Intake, and Facilities
14. RMR Pool Raise
15. Upper Schenks Branch Interceptor, Phase II

Planning and Studies

16. MCAWRRF Biogas Upgrades

Other Significant Projects

17. Urgent and Emergency Repairs
18. Security Enhancements

Under Construction

1. Airport Road Water Pump Station and Piping

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Anderson Construction, Inc. (ACI) (Lynchburg, VA)
Construction Start:	December 2021
Percent Complete:	95%
Base Construction Contract + Change Order to Date = Current Value:	\$8,520,312 + \$205,908 = \$8,726,221
Completion:	September 2024
Budget:	\$10,000,000

Current Status: The project is substantially complete. Pump station startup and testing is underway.

2. MCAWRRF 5kV Electrical System Upgrades

Design Engineer:	Hazen and Sawyer (Hazen)
Construction Contractor:	Pyramid Electrical Contractors (Richmond, VA)
Construction Start:	May 2022

Percent Complete:	55%
Base Construction Contract +	
Change Order to Date = Current Value:	\$5,180,000 - \$848,368 = \$4,331,632
Completion:	December 2024
Budget:	\$5,635,000

Current Status: Two motor control center replacements have been completed, and a third will start this month. Once this work is complete, the Contractor will focus on the new switchgear and begin the commissioning process for that facility. Improper wiring of a new MCC caused damage to the primary clarifiers. The contractor is working with RWSA and our consultant to resolve the situation.

3. **Red Hill Water Treatment Plant Upgrades**

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Anderson Construction (Lynchburg)
Construction Start:	September 2024
Percent Complete:	Award, 0%
Completion:	March 2026
Budget:	\$2,050,000

Current Status: Construction contract was approved at the April BOD meeting. Contractual paperwork is ongoing with construction anticipated by September. This project received partial grant funding from Albemarle County.

Design and Bidding

4. **South Fork Rivanna River Crossing**

Design Engineer:	Michael Baker International (Baker)
Project Start:	November 2020
Project Status:	90% Design
Construction Start:	April 2025
Completion:	January 2027
Budget:	\$7,300,000

Current Status: All easements have been acquired. An advertisement for construction bids will be issued by September.

5. **Central Water Line**

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2021
Project Status:	90% Design
Construction Start:	May 2025
Completion:	March 2029
Budget:	\$47,000,000

Current Status: The acquisition process for two private easements has been initiated with our real estate consultant and RWSA will negotiate the third easement with UVA along Hereford Drive. Railroad permits were submitted in February 2024. Additional design work associated with a partial

reroute of the water line in the East High Street area is underway. There was not enough subsurface space to install this large 36" water pipe in the intended E. High St. location.

6. Moore's Creek Administration Building Renovation and Addition

Design Engineer:	SEH
Project Start:	October 2022
Project Status:	60% Design
Construction Start:	April 2025
Completion:	December 2027
Budget:	\$20,000,000

Current Status: Revised design is ongoing to incorporate the expanded ~1,500 sq ft exhibit space.

7. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Pump Station

Design Engineer:	Kimley-Horn
Project Start:	August 2018
Project Status:	95% Design
Construction Start:	January 2025
Completion:	June 2029
Budget:	\$46,000,000

Current Status: 100% bid documents were received on April 30, and are under staff review. Staff continue to work with UVA on the final remaining easement, and the Design Engineer has been working on completing final permit submissions, with only VDH remaining. An advertisement for construction bids will be issued in August.

8. MCAWRRF Building Upfits and Gravity Thickener Improvements

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	March 2023
Project Status:	60% Design
Construction Start:	February 2025
Completion:	December 2026
Budget:	\$7,500,000

Current Status: 60% design completion in June.

9. MCAWRRF Structural and Concrete Rehabilitation

Design Engineer:	Hazen and Sawyer (Hazen)
Project Start:	April 2023
Project Status:	60% Design
Construction Start:	February 2025
Completion:	May 2027
Budget:	\$11,300,000

Current Status: Additional efforts to determine extents of required digester rehabilitation have begun. A 90% design submittal of all other aspects is anticipated this month.

10. Crozet Pump Stations Rehabilitation

Design Engineer:	Wiley Wilson
Project Start:	July 2023
Project Status:	90% Design
Construction Start:	April 2025
Completion:	December 2026
Budget:	\$10,350,000

Current Status: Wiley | Wilson is incorporating accepted recommendations from the value engineering workshop into the 90% design documents.

11. Crozet GAC Expansion – Phase I

Design Engineer:	SEH
Project Start:	July 2023
Project Status:	10% Design
Construction Start:	August 2025
Completion:	March 2027
Budget:	\$6,550,000

Current Status: Preliminary design is underway. \$6 M in grant funds from VDH have been awarded for this project.

12. Beaver Creek Dam, Pump Station and Piping Improvements

Design Engineer:	Schnabel Engineering (Dam)
Design Engineer:	Hazen & Sawyer (Pump Station)
Project Start:	February 2018
Project Status:	25% Design
Construction Start:	May 2026
Completion:	January 2030
Budget:	\$47,000,000

Current Status: Design work is underway by Hazen for the new raw water pump station, intake, raw water main, and hypolimnetic oxygenation system, and by Schnabel Engineering for final design of the dam spillway upgrades, temporary detour, and spillway bridge. Geological, survey, and other field investigative work for the dam design are underway.

13. SFRR to RMR Pipeline, Intake, and Facilities

Design Engineer:	Kimley Horn/SEH
Project Start:	July 2023
Project Status:	25% Design
Construction Start:	March 2026

Completion:	December 2030
Budget:	\$79,000,000

Current Status: The Design Engineer continues to work on both the new reservoir intake and the pipe between SFRR and RMR. Installation of a nutrient analyzer at SFRR has been completed and was successfully started up. This is the last step of the water quality study, and a final report is anticipated by September.

14. RMR Pool Raise

Design Engineer:	Schnabel
Project Start:	April 2024
Project Status:	5% Design
Construction Start:	October 2025
Completion:	September 2026
Budget:	\$5,000,000

Current Status: This project will include clearing around the reservoir and minor modifications to the intake tower as necessary to allow an increase in the normal pool elevation from 671' to 683'.

15. Upper Schenks Branch Interceptor, Phase II

Design Engineer:	CHA Consulting
Project Start:	July 2021
Project Status:	Design
Construction Start:	TBD
Completion:	TBD
Budget:	\$4,725,000

Current Status: The design team has provided additional information to assist the County with easement acquisition considerations.

Planning and Studies

16. MCAWRRF Biogas Upgrades

Design Engineer:	SEH
Project Start:	October 2021
Project Status:	Preliminary Engineering/Study (99%)
Completion:	December 2024
Budget:	\$2,145,000

Current Status: This project now includes the Methane Sphere Rehabilitation, in addition to possible Cogeneration upgrades. RWSA and City staff continue to discuss all available options to reuse the biogas.

Other Significant Projects

17. Urgent and Emergency Repairs

Staff are currently working on several urgent repairs within the water and wastewater systems as listed below:

Project No.	Project Description	Approx. Cost
2023-01	Finished Water System ARV Repairs	\$150,000
2024-01	Rivanna Wastewater Pumping Station Flood	TBD
2024-03	MCAWRRF Secondary Clarifier #4 Equipment Failure	\$150,000

- **RWSA Finished Water ARV Repairs:** RWSA Engineering staff recently met with Maintenance staff to identify a list of Air Release Valves (ARVs) that need to be repaired, replaced, or abandoned. Several of these locations will require assistance from RWSA On-Call Maintenance Contractors, due to the complexity of the sites (proximity to roadways, depth, etc.). The initial round will include six (6) sites, all along the South Rivanna Waterline, and will be completed starting in late Spring.
- **Rivanna WWPS Flood:** As discussed in the January and February Board of Directors Meeting and in this month's board packet, the Rivanna Wastewater Pump Station experienced a significant flooding event on the evening of January 9th, 2024, that has rendered the facility inoperable. Installation of a 53 MGD bypass system has been completed, and the bypass has been setup to run automatically, with the capability to notify staff of potential issues as well. In addition, staff continues investigation into the root cause of the event on the dry well side of the facility and has also begun analyzing procurement needs for long-lead equipment items and general pump station rebuild efforts. A wastewater station pump analysis and workshop committee for selection was held on May 16th. The wet well sluice gate replacement has been ordered with an expected delivery in November of this year.
- **MCAWRRF Secondary Clarifier #4 Equipment Failure:** On Sunday Evening, March 3rd, RWSA Wastewater Department staff identified that Secondary Clarifier #4 at MCAWRRF appeared to have a significant mechanical malfunction. Upon further review by staff, the rotating arm of the clarifier mechanism caught the stationary arm, wrapping it around the center of the clarifier. Staff mobilized MEB General Contractors under its On-Call Maintenance Construction Services Contract with Faulconer, and the clarifier was back up and operational with just one stationary arm on Friday, March 8th. Staff are waiting on the necessary parts to complete repairs to the clarifier arms, but in the meantime, the clarifier is operational should it be needed for wet weather events. The remaining repairs will be completed by the RWSA Maintenance Department.

18. Security Enhancements

Design Engineer:	Hazen & Sawyer
Construction Contractor:	Security 101 (Richmond, VA)
Construction Start:	March 2020
Percent Complete:	80% (WA9), 50% (WA10)
Based Construction Contract +	
Change Orders to Date = Current Value:	\$718,428 (WA1) + \$834,742 (WA2-10)
Completion:	June 2024 (WA9), August 2024 (WA10)
Budget:	\$2,810,000

Current Status: WA9 will include installation of card access on all exterior doors at the South Rivanna WTP. Work began during the week of January 29th, with most of the device installation complete at this time, with the site awaiting startup and programming. WA10 will include installation of card access on the exterior doors of the finished water pump station and “795” tank buildings in Scottsville, as part of the recent transfer in ownership of these facilities to RWSA. Materials have been procured for this work, and conduit work has been completed. Design of MCAWRRF entrance modifications with Hazen & Sawyer also continues, with discussions with Dominion Energy also ongoing, as relocation of existing electrical infrastructure will be required. This relocation process will need to be finalized prior to the project proceeding to the bidding phase. Relocation of existing electrical infrastructure will require coordination with the adjacent landowner, as the infrastructure must be completely relocated from the entrance area. As these discussions are ongoing, staff have submitted appropriate permitting documents to Albemarle County.



MEMORANDUM

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

**FROM: BETSY NEMETH, DIRECTOR OF ADMINISTRATION AND
COMMUNICATIONS**

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: ADMINISTRATION AND COMMUNICATIONS REPORT

DATE: MAY 28, 2024

Human Resources

Annual turnover for the Rivanna Water and Sewer Authority is 13.0% for the fiscal year beginning on July 1, 2023 through May 9, 2024.

We have also welcomed two new employees to the team this past month. They are Simon Troupe and Tyler Powell. Both are Water Operator Trainees. We are also happy to announce that Betheny Houchens was promoted to the Water Resources Coordinator position.

We are currently holding Open Enrollment for all of our employees and completing our annual performance evaluations.

Safety

Our Safety Manager attended the Virginia Risk Sharing Association's annual meeting in Richmond. He also spent time with a representative from VRSA to learn how their systems work and about the services they offer.

We continue to review and update our Safety Manual and are currently adding a new chapter for Electrical Safety.

Community Outreach

We were pleased to have several groups tour our facilities in April. On April 12th, a Public Health Class from the University of Virginia took a tour led by Robert Haacke, our Wastewater Manager, of our Moores Creek facility. The sixth-grade class from the Peabody School toured the Moores Creek AWRRF on April 24th.

On April 24, 2024, a group of 90 tenth grade students from St. Anne's Belfield School worked with us to clean up the wetlands mitigation area at Moores Creek. They completed a significant amount of work, and we are grateful for their help. We also had several staff members help with this project: Jennifer Whitaker, David Tungate, Betheny Houchens, Betsy Nemeth, and George Cheape.

MEMORANDUM

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

**FROM: JENNIFER WHITAKER, DIRECTOR OF ENGINEERING &
MAINTENANCE**

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: WHOLESALE METERING REPORT FOR APRIL 2024

DATE: MAY 28, 2024

The monthly and average daily Urban water system usages by the City and the ACSA for April 2024 were as follows:

		<i>Month</i>	<i>Daily Average</i>	
City Usage (gal)		141,514,193	4,717,140	51.1%
ACSA Usage (gal)		135,605,056	4,520,169	48.9%
Total (gal)		277,119,249	9,237,308	

The *RWSA Wholesale Metering Administrative and Implementation Policy* requires that water use be measured based upon the annual average daily water demand of the City and ACSA over the trailing twelve (12) consecutive month period. The *Water Cost Allocation Agreement (2012)* established a maximum water allocation for each party. If the annual average water usage of either party exceeds this value, a financial true-up would be required for the debt service charges related to the Ragged Mountain Dam and the SRR-RMR Pipeline projects. Below are graphs showing the calculated monthly water usage by each party, the trailing twelve-month average (extended back to May 2023), and that usage relative to the maximum allocation for each party (6.71 MGD for the City and 11.99 MGD for ACSA). Completed in 2019 for a cost of about \$3.2 M, our Wholesale Metering Program consists of 25 remote meter locations around the City boundary and 3 finished water flow meters at treatment plants.

Figure 1: City of Charlottesville Monthly Water Usage and Allocation

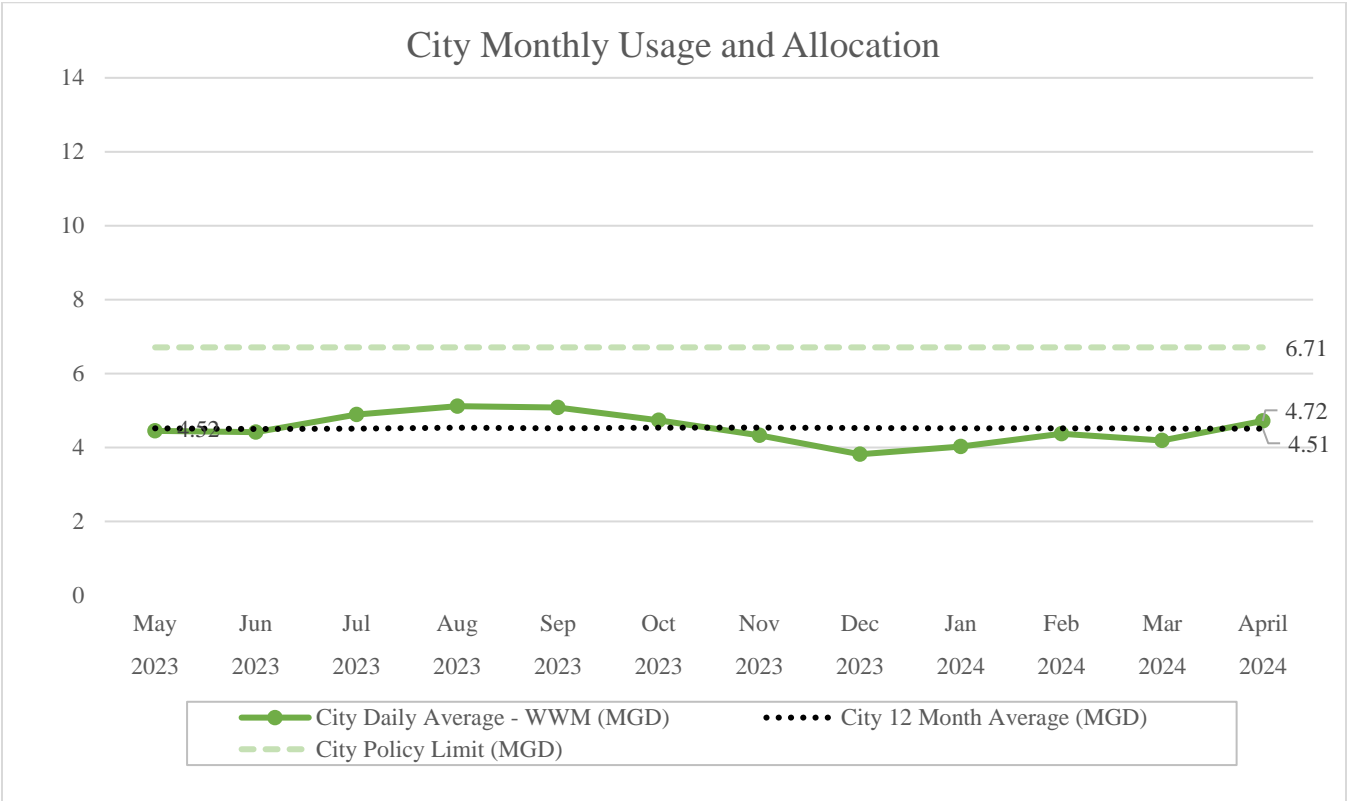
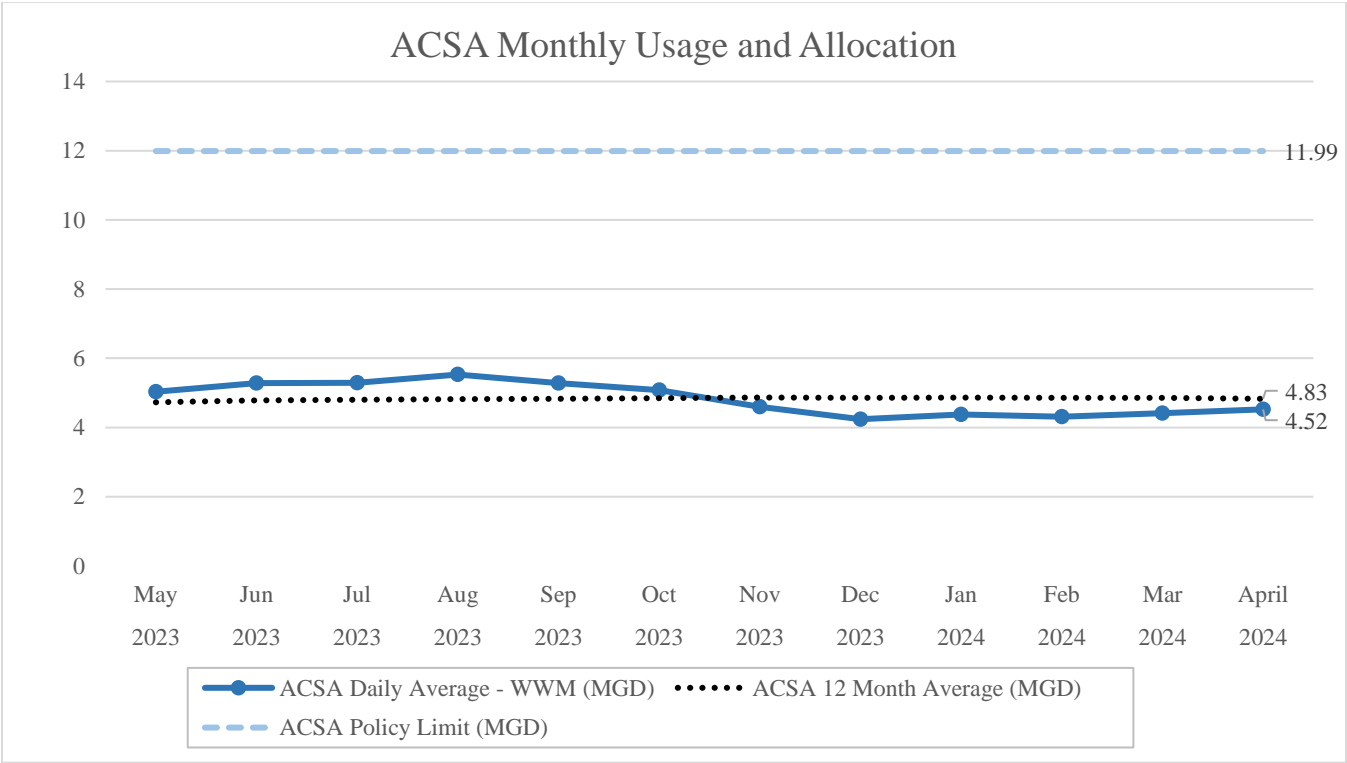
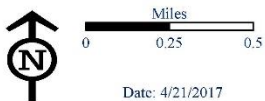


Figure 2: Albemarle County Service Authority Monthly Water Usage and Allocation



Meter Locations for the Wholesale Water Metering Project



Date: 4/21/2017



695 Moores Creek Lane
Charlotteville, VA 22902
p.434-977-2970
www.rivanna.org
www.rivannagis.org

Meter Site Locations - WWMP
01, Pepsi Place
02, Michael Pl / Wilson Ct
03, Wilder Dr
06, Long St / River Rd

08, Franklin St / Carlton Ave / Broadway St
09, Moores Creek Ln
11, Avon St
12, Loma Ln / Harris Rd
14, Old Lynchburg Rd
15, Ivy Rd / Colonnade Dr

16, Ricky Rd / Barracks Rd
17, Ricky Rd (near Wayne Ave)
18, North Berkshire Rd
19, Hydraulic Rd / Inglewood Dr
20, Trader Joes
22, Rio Rd @ Church of Our Savior

23, Greenbrier Dr / Rio Rd
24, Greenbrier Ter
25, University Heights Apts
26, Seminole Trl
28, Rio Rd / Melbourne Rd
29, Pen Park Ln

30, Darden Towle Park
31, Stribling Ave
32, Fontaine Ave



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

**FROM: BETHANY HOUCHENS, WATER RESOURCES COORDINATOR
DAVE TUNGATE, DIRECTOR OF OPERATIONS &
ENVIRONMENTAL SERVICES**

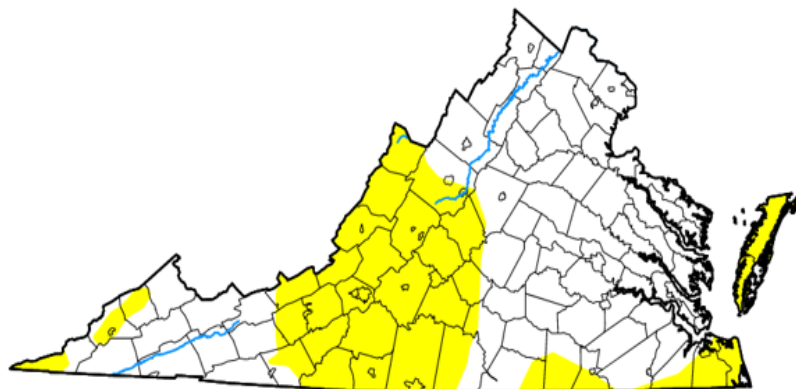
REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: DROUGHT MONITORING REPORT

DATE: MAY 28, 2024

State and Federal Drought Monitoring as of May 17, 2024:








- U.S. Drought Monitoring Report: Indicates there are no drought conditions in Albemarle County or Virginia.



Map released: Thurs. May 16, 2024

Data valid: May 14, 2024 at 8 a.m. EDT

Intensity

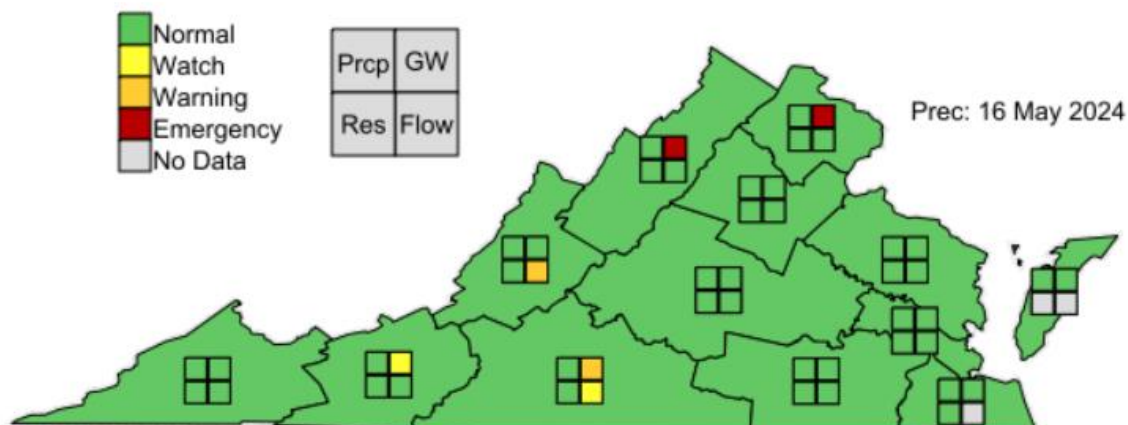
-  None
-  D0 (Abnormally Dry)
-  D1 (Moderate Drought)
-  D2 (Severe Drought)
-  D3 (Extreme Drought)
-  D4 (Exceptional Drought)
-  No Data

Authors

United States and Puerto Rico Author(s):
[Lindsay Johnson](#), National Drought Mitigation Center

Pacific Islands and Virgin Islands Author(s):
[Richard Tinker](#), NOAA/NWS/NCEP/CPC

- VDEQ Drought Status Report: Our region is listed as being in a “Normal” level for all indicators.



Precipitation & Stream Flows

Charlottesville Precipitation					
Year	Month	Observed (in.)	Normal (in.)	Departure (in.)	Comparison to Normal (%)
2021	Jan - Dec	33.82	41.61	-7.79	-19
2022	Jan - Dec	43.53	41.61	+1.92	+5
2023	Jan - Dec	26.95	41.61	-15.98	-35
2024	Jan - Apr	12.25	12.33	-0.8	-0.7

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

USGS Stream Gaging Station Near the Urban Area (May 12-17)				
Gage Name	Rolling 7-day Avg. Stream Flow		Median Daily Streamflow	
	cfs	mgd	cfs	mgd
Mechums River	59.2	38.3	89	57.5
Moormans River	59.0	38.1	74	47.8
NF Rivanna River	118.9	76.8	98	63.3
SF Rivanna River	154.7	100	282	182.3

Median daily flow: May 20th for the period of record (approx. 30 - 80 years)

Status of Reservoirs as of May 22, 2024

- Urban Reservoirs are 100 % of Total Useable Capacity
- Beaver Creek Reservoir (Crozet) is 100% of Total Useable Capacity
- Totier Creek Reservoir (Scottsville) is 100% of Total Useable Capacity

Drought History in Central Virginia

- Severe: 1930, 1966, 1982, 2002
- Longest: May 2007 - April 2009; 103 weeks
- Significant: every 10 -15 years
- Drought of Record: 2001- 2002; 18 months



MEMORANDUM

TO: RIVANNA SOLID WASTE AUTHORITY BOARD OF DIRECTORS
RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: BETSY NEMETH, DIRECTOR OF ADMINISTRATION AND COMMUNICATIONS
LEAH BEARD, HUMAN RESOURCES MANAGER

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: FISCAL YEAR 2024-2025 PAY SCALE ADJUSTMENT

DATE: MAY 28, 2024

This request is to authorize a 3.5% increase in the pay ranges included in our pay scale. This increase will help us hire and retain a highly qualified workforce, reduce compression, and keep pace with inflation in a competitive hiring market. This change will not increase the salary of existing employees (unless below the minimum salary of the pay range, which will include very few employees) and will not increase our budget.

Background

The Rivanna Authorities Personnel Management Plan establishes a procedure for the Executive Director to recommend adjustments to the pay scale. This recommendation supports our Strategic Plan – Workforce Development goal to attract, develop, and retain a professional, highly-skilled, engaged, and diverse team, by increasing starting pay at the lower end of our pay scale and reducing compression at the higher end of our pay scale. Based on the continued inflation in our country and area, we recommend the pay scale be increased by 3.5% on July 1, 2024. While the national unemployment rate in April 2024 was 3.9%, Virginia (2.9%) and the Charlottesville area (2.1%) have lower unemployment rates which continues to make the local job market very competitive. This change will also help us to drive towards a lower turnover rate. As of May 14, 2024, the Rivanna Solid Waste Authority turnover rate is 22.6% and the Rivanna Water & Sewer Authority turnover rate is 13.0% in FY 2024, both of which are higher than our Strategic Plan goal of 10%. Table 1, which is a copy of a comparison between our current pay scale and the recommended pay scale is attached for your review. Table 2, which is a list of the pay grade for each position with the 3.5% increase, is also attached.

Board Action Requested:

Approve a 3.5% increase in our pay scale effective July 1, 2024 to help us hire and retain a highly qualified workforce, reduce compression, and keep pace in a competitive hiring market.

Attachments: Tables 1 and 2

TABLE 1

FY2024 Approved Pay Scale			
Grade	Min	Mid	Max
10	\$37,040	\$49,263	\$61,488
20	\$38,892	\$51,726	\$64,561
30	\$40,837	\$54,313	\$67,788
40	\$42,878	\$57,028	\$71,178
50	\$45,022	\$59,880	\$74,738
60	\$47,273	\$62,875	\$78,474
70	\$49,637	\$66,017	\$82,398
80	\$52,119	\$69,320	\$86,518
90	\$54,725	\$72,785	\$90,843
100	\$57,461	\$76,424	\$95,386
110	\$60,334	\$80,245	\$100,155
120	\$63,352	\$84,257	\$105,163
130	\$66,519	\$88,470	\$110,421
140	\$69,845	\$92,893	\$115,942
150	\$73,337	\$97,537	\$121,739
160	\$77,004	\$102,415	\$127,826
170	\$80,853	\$107,536	\$134,217
180	\$84,896	\$112,913	\$140,928
190	\$89,141	\$118,558	\$147,975
200	\$93,599	\$124,486	\$155,374
210	\$98,279	\$130,710	\$163,143
220	\$103,192	\$137,245	\$171,299
230	\$108,352	\$144,108	\$179,864
240	\$113,770	\$151,313	\$188,857
250	\$119,458	\$158,879	\$198,299
260	\$125,431	\$166,823	\$208,215
270	\$131,702	\$175,164	\$218,625

FY 2025 Proposed Pay Scale			
Grade	Min	Mid	Max
10	\$38,336	\$50,987	\$63,640
20	\$40,253	\$53,536	\$66,821
30	\$42,266	\$56,214	\$70,161
40	\$44,379	\$59,024	\$73,669
50	\$46,598	\$61,976	\$77,354
60	\$48,928	\$65,076	\$81,221
70	\$51,374	\$68,328	\$85,282
80	\$53,943	\$71,746	\$89,546
90	\$56,640	\$75,332	\$94,023
100	\$59,472	\$79,099	\$98,725
110	\$62,446	\$83,054	\$103,660
120	\$65,569	\$87,206	\$108,844
130	\$68,847	\$91,566	\$114,286
140	\$72,290	\$96,144	\$120,000
150	\$75,904	\$100,951	\$126,000
160	\$79,699	\$106,000	\$132,300
170	\$83,683	\$111,300	\$138,915
180	\$87,867	\$116,865	\$145,860
190	\$92,261	\$122,708	\$153,154
200	\$96,875	\$128,843	\$160,812
210	\$101,719	\$135,285	\$168,853
220	\$106,804	\$142,049	\$177,294
230	\$112,144	\$149,152	\$186,159
240	\$117,752	\$156,609	\$195,467
250	\$123,639	\$164,440	\$205,239
260	\$129,821	\$172,662	\$215,503
270	\$136,312	\$181,295	\$226,277

TABLE 2 – Position Title, Pay Grade, and Range

Position Title	Pay Grade	Minimum	Midpoint	Maximum	FLSA Status
Maintenance Worker	10	\$38,336	\$50,987	\$63,640	Non-Exempt
SW Operator/Attendant	20	\$40,253	\$53,536	\$66,821	Non-Exempt
Recycling Technician	20	\$40,253	\$53,536	\$66,821	Non-Exempt
Scale Clerk	30	\$42,266	\$56,214	\$70,161	Non-Exempt
Administrative Assistant	30	\$42,266	\$56,214	\$70,161	Non-Exempt
Mechanic Helper	30	\$42,266	\$56,214	\$70,161	Non-Exempt
Plant Operator Trainee	40	\$44,379	\$59,024	\$73,669	Non-Exempt
Plant Operator 4	40	\$44,379	\$59,024	\$73,669	Non-Exempt
Utility Locator	40	\$44,379	\$59,024	\$73,669	Non-Exempt
Mechanic 4	50	\$46,598	\$61,976	\$77,354	Non-Exempt
Plant Operator 3	60	\$48,928	\$65,076	\$81,221	Non-Exempt
Mechanic 3	60	\$48,928	\$65,076	\$81,221	Non-Exempt
Engineering Inspector 3	60	\$48,928	\$65,076	\$81,221	Non-Exempt
Accounts Payable Technician	70	\$51,374	\$68,328	\$85,282	Non-Exempt
Accounts Receivable Technician	70	\$51,374	\$68,328	\$85,282	Non-Exempt
Administrative Office Technician	70	\$51,374	\$68,328	\$85,282	Non-Exempt
Payroll & Benefits Coordinator	70	\$51,374	\$68,328	\$85,282	Non-Exempt
RSWA Heavy Equipment Operator	70	\$51,374	\$68,328	\$85,282	Non-Exempt
Vehicle Mechanic	70	\$51,374	\$68,328	\$85,282	Non-Exempt
Driver/Equipment Operator	80	\$53,943	\$71,746	\$89,546	Non-Exempt
Plant Operator 2	80	\$53,943	\$71,746	\$89,546	Non-Exempt
Mechanic 2	80	\$53,943	\$71,746	\$89,546	Non-Exempt
Engineering Inspector 2	80	\$53,943	\$71,746	\$89,546	Non-Exempt
Outreach Coordinator	80	\$53,943	\$71,746	\$89,546	Non-Exempt
Business Process Analyst	90	\$56,640	\$75,332	\$94,023	Exempt
Executive Assistant	90	\$56,640	\$75,332	\$94,023	Exempt
Water Quality Specialist	90	\$56,640	\$75,332	\$94,023	Non-Exempt
Engineering Inspector 1	100	\$59,472	\$79,099	\$98,725	Non-Exempt
Sustainability & Grants Coordinator	100	\$59,472	\$79,099	\$98,725	Exempt
Plant Operator 1	100	\$59,472	\$79,099	\$98,725	Non-Exempt
Chemist	110	\$62,446	\$83,054	\$103,660	Non-Exempt
Instrumentation Specialist	110	\$62,446	\$83,054	\$103,660	Non-Exempt
IT Analyst	110	\$62,446	\$83,054	\$103,660	Exempt
Mechanic 1	110	\$62,446	\$83,054	\$103,660	Non-Exempt
Wastewater Supervisor	120	\$65,569	\$87,206	\$108,844	Non-Exempt
Water Supervisor	120	\$65,569	\$87,206	\$108,844	Non-Exempt
IS Assistant Administrator	130	\$68,847	\$91,566	\$114,286	Exempt
Asset Mgmt./Facilities Coordinator	130	\$68,847	\$91,566	\$114,286	Exempt
GIS Coordinator	130	\$68,847	\$91,566	\$114,286	Exempt

Position Title	Pay Grade	Minimum	Midpoint	Maximum	FLSA Status
Water Resources Coordinator	130	\$68,847	\$91,566	\$114,286	Exempt
Engineering Inspection Supervisor	140	\$72,290	\$96,144	\$120,000	Exempt
Senior Accountant	140	\$72,290	\$96,144	\$120,000	Exempt
Maintenance Assistant Manager	140	\$72,290	\$96,144	\$120,000	Exempt
Recycling Assistant Manager	140	\$72,290	\$96,144	\$120,000	Exempt
Solid Waste Assistant Manager	140	\$72,290	\$96,144	\$120,000	Exempt
Wastewater Assistant Manager	140	\$72,290	\$96,144	\$120,000	Exempt
Water Assistant Manager	140	\$72,290	\$96,144	\$120,000	Exempt
Civil Engineer	150	\$75,904	\$100,951	\$126,000	Exempt
Safety Manager	150	\$75,904	\$100,951	\$126,000	Exempt
IT Administrator	170	\$83,683	\$111,300	\$138,915	Exempt
Finance Manager	180	\$87,867	\$116,865	\$145,860	Exempt
Human Resources Manager	180	\$87,867	\$116,865	\$145,860	Exempt
Laboratory Manager	180	\$87,867	\$116,865	\$145,860	Exempt
Maintenance Manager	180	\$87,867	\$116,865	\$145,860	Exempt
Senior IT Administrator	180	\$87,867	\$116,865	\$145,860	Exempt
Senior Civil Engineer	180	\$87,867	\$116,865	\$145,860	Exempt
Solid Waste Manager	180	\$87,867	\$116,865	\$145,860	Exempt
Wastewater Manager	180	\$87,867	\$116,865	\$145,860	Exempt
Water Manager	180	\$87,867	\$116,865	\$145,860	Exempt
Engineering Manager	210	\$101,719	\$135,285	\$168,853	Exempt
IT Manager	210	\$101,719	\$135,285	\$168,853	Exempt
Director of Admin. & Communication	240	\$117,752	\$156,609	\$195,467	Exempt
Director of Solid Waste	240	\$117,752	\$156,609	\$195,467	Exempt
Director of Engineering & Maintenance	250	\$123,639	\$164,440	\$205,239	Exempt
Director of Finance & IT	250	\$123,639	\$164,440	\$205,239	Exempt
Director of Operations & Env. Services	250	\$123,639	\$164,440	\$205,239	Exempt
Deputy Executive Director	270	\$136,312	\$181,295	\$226,277	Exempt

MEMORANDUM

TO: RIVANNA SOLID WASTE AUTHORITY BOARD OF DIRECTORS
RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: BETSY NEMETH, DIRECTOR OF ADMINISTRATION & COMMUNICATIONS
LEAH BEARD, HUMAN RESOURCES MANAGER

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: APPROVAL OF FISCAL YEAR 2024-2025 PERSONNEL MANAGEMENT PLAN UPDATE

DATE: MAY 28, 2024

The Personnel Management Plan (PMP) is the policy guidance of the Authorities to document and communicate labor regulations, management practices, and overall personnel policies approved by the Board. It covers many topics ranging from employee hiring procedures, compensation, and benefits to grievance rights, substance abuse and code of conduct.

Annually, staff must review and update the PMP to reflect recent changes in the labor laws and benefits, and to provide a general review for best practices. Significant changes for FY 2025 include:

- Changes language to ensure that the PMP is gender neutral.
- Adds Cost-of-Living Adjustments as a form of compensation. All Cost-of-Living Increases must be approved by the Board of Directors.
- Increases the Executive Director's authority to award Meritorious Bonus Awards for employees from \$3000 to \$4000. CPI inflation of 22% has occurred since the last time this authorization was increased in 2019.
- Makes RSWA employees eligible for Skills Development Bonus Awards of up to \$500. RWSA mechanics are currently eligible for this award.
- Eliminates a limit on the number of night shift operators in the Water and Wastewater Departments. Managers will have the flexibility to decide resource allocations.

Below is a summary of the changes proposed for the PMP.

Section D. – Compensation Plan and Administration

D.2. Definitions – Removes the limit to the number of night shift operators who can receive differential pay.

D.5. Pay Rates – Removes section about former employee hiring.

D.7. Other forms of Compensation – Allows the Executive Director to authorize

Meritorious Bonuses of up to \$4000.

D.7. Other Forms of Compensation – Makes RSWA employees eligible for the Skills Development Bonus Award.

D.7. Other Forms of Compensation – Adds Cost-of-Living Adjustments as a form of compensation.

Section E. – Harassment Policy

E.5. Manager and Supervisor Responsibilities – Requires managers and supervisors to immediately report any harassment complaints to their Division Director and the Human Resources Manager.

Section F. – Leave Policy and Rules

F.3. Annual Leave – States that annual leave balance will not be paid out in cases of involuntary termination or if the employee does not work a two-week notice.

Section I. – Administrative Policies

I.2. Service Awards – Eliminated. There is a General Administrative Procedure and is duplicated here.

I.4. Voluntary Early Retirement Incentive Program (VERIP) – Notes that any unemployment benefits that the Rivanna Authorities are required to pay for an employee collecting a VERIP stipend will be subtracted from their monthly stipend.

Board Action Requested:

Approve the recommended updates to the Personnel Management Plan to be effective on July 1, 2024.

Attached: Redline of changes to the PMP

RIVANNA AUTHORITY

PERSONNEL MANAGEMENT PLAN

Adopted May 2024

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Style Definition: TOC 4

Contents

A. Introduction and Organization Chart.....	A-5
1. Authority.....	A-5
2. Work Service.....	A-5
3. Organizational Chart.....	A-5
B. Recruitment and Hiring Policy.....	B-7
1. Policy.....	B-7
2. Job Posting.....	B-7
3. Application Policy	B-7
4. Job Offer Policy.....	B-8
5. Criminal Background Checks	B-8
6. Pre-employment Drug Testing.....	B-8
7. Orientation Policy	B-8
C. Personnel File Policy	<u>C-9C-8</u>
1. Policy.....	<u>C-9C-8</u>
2. Description.....	<u>C-9C-8</u>
3. Access	C-9
4. Official Personnel Forms.....	C-10
D. Compensation Plan and Administration	D-11
1. Policy.....	D-11
2. Definitions.....	D-11
3. Job Descriptions.....	D-12
4. Determination of Pay Grade.....	D-13
5. Pay Rates.....	D-15
6. Employee Performance Appraisal and Merit Pay.....	D-16
7. Other Forms of Compensation	D-17
8. Benefits Briefly Explained	D-20
E. Harassment Policy	E-23
1. Policy.....	E-23
2. Workplace Harassment	E-23
3. Sexual Harassment	E-23
4. Employee Responsibilities	E-24
5. Department Manager Responsibilities	E-24
6. Complaint Procedures	<u>E-25E-24</u>
7. Corrective and/or Disciplinary Action.....	E-25
8. Recourse Through Other Policies/Agencies	E-25
F. Leave Policy and Rules	F-27
1. Policy.....	F-27
2. Holiday Leave.....	F-27
3. Annual Leave	F-28
4. Sick Leave.....	F-29

5. Family and Medical Leave Act (FMLA) Provisions	F-31
6. Sick Leave Bank.....	F-34
7. Bereavement Leave	F-35
8. Military Leave	F-36
9. Court Leave.....	F-36
10. Volunteer Time Off (VTO)	F-36
11. Unauthorized Absence/Leave	F-37
12. Workers' Compensation Leave.....	F-37
13. Procedures for Requesting Leave	F-38
14. Maintenance of Leave Records	F-38
G. Disciplinary Policy	G-39
1. Policy.....	G-39
2. Unsatisfactory Work Performance or Misconduct.....	G-39
3. Progressive Discipline Policy.....	G-40
H. Grievance Procedure	H-43
1. Policy.....	H-43
2. Coverage of Grievance Procedure	H-43
3. Definitions.....	H-43
4. Management Responsibilities	H-44
5. Human Resources Department Responsibilities	H-44
6. Grievance Procedure Generally	H-45
7. Grievability.....	H-46
8. Consolidation of Grievances	H-47
9. Step 1 Procedure - Immediate Department Manager.....	H-47
10. Step 2 Procedure - Department Manager	H-47
11. Step 3 Procedure - Divisional Director.....	H-48
12. Step 4 Procedure - Executive Director Level (Final Management Step).....	H-48
13. Step 5 Procedure - Grievance Panel	H-48
14. Composition of the Grievance Panel	H-49
15. Conduct of Grievance Panel Hearing.....	H-50
16. Decision of Grievance Panel Hearing.....	H-51
17. Implementation of Grievance Panel Decision	H-52
I. Administrative Policies.....	I-54
1. Conflict of Interest/Accepting Gifts	I-54
2. Service Awards	I-54 <u>I-54</u>
3. De Minimis Fringe Benefits.....	I-54
4. Termination of Employment	I-54
5. Voluntary Early Retirement Incentive Program (VERIP).....	I-55
6. Anti-Nepotism Policy	I-56
7. Personal Use of Authority Vehicles	I-56
8. Effect of Criminal Conviction or Arrest.....	I-56
9. Fitness for Duty.....	I-57 <u>I-56</u>

10. ID Badges	I-57
11. Dress Code/Personal Hygiene	I-57
12. Safety Shoe Program	Error! Bookmark not defined. I-58
13. Prescription Safety Glasses Program	Error! Bookmark not defined. I-58
14. Social Media Policy	I-58
15. Smoking/Vaping	I-58
16. Transferring Between Authority	I-58
17. Essential Employees	I-58
J. Employee Training, Development and Educational Assistance Program	J-60
1. Policy	J-60
2. Definitions	J-60
3. Employee Eligibility	J-60
4. Essential Training	J-60
5. Advanced Development Training	J-61
6. Degree Program	J-62
7. Pre-Approval	J-63
8. Work Schedule Adjustment	J-63
9. Authority Responsibilities	J-63
10. Employee Responsibilities	J-63
11. Human Resources Responsibilities	J-64
12. Department Manager Responsibilities	J-64
13. Divisional Director Responsibilities	J-64
K. Travel Policy	K-66
1. Policy	K-66
2. Travel Reimbursement Requirements	K-66
3. Authority Vehicles	K-67
4. Mileage	K-67
5. Transportation	K-68
6. Lodging	K-68
7. Meals and Incidentals	K-68
8. Compensation While Traveling, Overnight Travel	K-69
9. Travel Advances	K-69
L. Substance Abuse Policy	L-71
1. Policy	L-71
2. Definitions	L-72
3. Drug and Alcohol Testing Requirements	L-73 L-74
4. Testing Standards	L-76
5. Disciplinary Actions	L-76 L-77
6. Revision Dates	L-77 L-78
M. Attachments and Forms	M-78M-79

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A. Introduction and Organization Chart

It is the policy of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority that a fair and uniform personnel management system be established and maintained in order to ensure effective service to our customers and community.

1. Authority

The policies and procedures in this Manual are intended to cover all aspects of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority (the Authority) personnel management system. They have been adopted or revised by the Authority's Boards of Directors (Boards) on the dates noted in each chapter or section. Administrative authority has been delegated to the Executive Director. The authority to revise or add to this manual remains with the Boards with day-to-day supervision by the department managers, or as delegated, with the exception that *Section D.3., "Compensation Plan and Administration, Job Descriptions"* may be revised as needed by the Executive Director. The authority to add full-time and part-time equivalent permanent staff (FTE'S) and departments remains with the Boards. The authority to retain temporary employees who meet the criteria as temporary, part-time employees as designated by the Virginia Retirement System and the Affordable Care Act (See section D.2 – Compensation Plan and Administration Definitions), has been delegated to the Executive Director. Nothing in this Personnel Manual is to be construed as a contract of employment.

2. Work Service

All employees work under these policies as approved by the Authority's Boards and administered by the Executive Director. The followings categories of work service do not fall under these provisions:

- a. Consultants, contractors, and counsel;
- b. Volunteers, or persons appointed to serve without pay;
- c. Members of Boards, commissions, or committees;
- d. Other positions as designated by the Board.

3. Organizational Chart

The Executive Director may request or recommend changes to the organizational charts from time to time. When this occurs, the organizational charts shall be presented to the Board for review and approval. Once approved, the organizational charts will be updated accordingly. For Authority organizational charts see *Section M. Forms and Attachments*.

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B. Recruitment and Hiring Policy

1. Policy

It is the policy of the Authority to hire employees through a systematic recruitment and selection process that identifies, attracts, and selects the most qualified applicants for employment. All applicants are considered on the basis of job requirements and applicant qualifications and otherwise without regard to race, color, religion, sex, sexual orientation, gender identity, national or ethnic origin, age, marital status, pregnancy, childbirth or related medical conditions, status as a veteran, disability, hairstyles, hair texture, or any other non-job-related factor. The Authority's programs and practices seek to foster internal advancement opportunities for current employees. The Human Resources Department is responsible for overseeing the recruitment and selection process. All recruitment and selection will be done in accordance with applicable policies and laws and no selection decision will be made that would constitute unlawful discrimination in violation of state or federal laws.

2. Job Posting

- a. Open positions can be posted in one of the following ways:
 - 1) The job may be opened to Authority personnel only, in which case interested employees will notify the appropriate department manager or the Human Resources Manager of their interest.
 - 2) The job may be filled by evaluating applications already filed by qualified ~~people~~ ^{persons}.
 - 3) The job may be advertised by contacting local schools, agencies, the Virginia Employment Commission, or by paid advertisements in appropriate newspapers, journals or Web posting and/or television.
- b. All open positions will be posted until filled.
- c. Job advertisement is under the direct supervision of the Human Resources Manager. No position may be opened and filled without notifying the Human Resources Manager and following one of the above procedures. This policy is to ensure that job openings are publicized adequately, both in the interest of fairness and of finding the best candidate for a job opening.

3. Application Policy

- a. All applicants must complete an Authority employment application, ~~either an online application or a paper application~~, or submit a complete resume. All employment applications and resumes are submitted to the Human Resources Manager.
- b. All applications and resumes received for any position must be retained as stated in the retention policy of the Library of Virginia. Destruction of employment applications and resumes at the end of the retention period must be confidential.
- c. All applicant data will be tracked by the Human Resources Department.

4. Job Offer Policy

The Executive Director has final approval of all hiring decisions. A recommendation will be made to the Executive Director by the hiring department manager and/or the Human Resources Manager for all open positions.

5. Criminal Background Checks

All applicants who are offered positions shall be required, as a condition of employment, to authorize the Authority to have a criminal background check investigation performed and additionally a motor vehicle investigation check when driving a motor vehicle is an essential function of the position.

- a. When an applicant has a prior conviction, the nature of the offense, the date of the offense, and the relationship between the offense and the position for which application is sought will be reviewed. The Authorities may withdraw a job offer based on what type of offense an applicant was convicted of in the past.
- b. If an applicant should refuse to permit a background check, the applicant will be removed from further employment consideration.

6. Pre-employment Drug Testing

A post offer drug screening is required of the successful candidate within 2 business days of accepting a job offer. The candidate will submit a urine specimen for drug screening purposes. The candidate must test negative for any illegal drug use to be eligible for employment. All drug and alcohol records are confidential and are maintained in a file separate from the employee's personnel file. *See Section L, "Substance Abuse Policy"* for additional information on the Authority's drug testing policy.

7. Orientation Policy

All new employees will receive a copy of the Authority Employee Handbook prior to their first day of employment. New employees will attend an orientation session with the Human Resources Manager, the Payroll and Benefits Coordinator and the Safety Manager on their first day of employment. During this time, new employees will review all of their employment documentation, complete Employment Eligibility forms, and receive a comprehensive review of safety procedures.

C. Personnel File Policy

1. Policy

This policy establishes guidelines for the personnel files for each employee of the Authority and governs the access, dissemination, and purging of information contained within this file.

2. Description

The Personnel File contains personal information relevant to the individual's employment. These files are maintained under the supervision of the Human Resources Manager and are kept in a file cabinet which is locked at all times except when the files are inspected, or materials are added.

The personnel file shall be the only file which is to be considered official and complete in matters related to wages and salary, employee selection, employee relations, and arbitration hearings. Information pertaining to any personnel related aspect of employment (personnel action forms, letters of reprimand, letters of commendation, unemployment compensation requests, and any other pertinent information) shall be contained within the file.

All documents containing employee health information shall be maintained in a separate locked file and only those individuals with a need to know shall have access to these files as defined in the HIPAA Security Rule.

3. Access

The access, dissemination, and purging of information contained within a personnel file shall be in accordance with the federal Privacy Protection Act of 1974 and may from time to time be amended.

- a. The following individuals or agencies shall be designated as having regular access to the personnel files:
 - 1) The Executive Director.
 - 2) The Director of ~~Finance and~~ Administration and Communications, the Human Resources Manager, and the Payroll & Benefits Coordinator (for administrative purposes).
 - 3) Federal, State, or local law enforcement agencies during a properly warranted investigation of a violation or potential violation of the law.
- b. The following individuals or agencies may inspect a limited number of personnel files:
 - 1) An individual employee or former employee may inspect his or her own official personnel file after presenting proof of identity.
 - 2) An immediate department manager or Divisional Director may inspect portions of the official personnel file of any employee under their supervision.
 - 3) The members of a Grievance Appeals Board may inspect relevant files.
 - 4) The Virginia Employment Commission Unemployment Compensation Division may inspect relevant files.

All personnel files shall be reviewed in the presence of the Executive Director, a Division Director, or the Human Resources Manager. No files shall be removed from the Human Resources Department ~~Administration Building~~ unless needed for a grievance or court hearing.

There will be no release of any personal information contained within a personnel file to any individual or organization not having regular or limited access unless the employee has authorized the release of the information. The authorization from the employee must be in writing and signed by the employee.

Wage and salary information is not considered confidential under Freedom of Information Act laws and may be released as a part of a Freedom of Information Act (FOIA) request.

4. Official Personnel Forms

a. The following forms will be maintained in an employee's personnel file:

- 1) Performance Evaluation forms
- 2) Personnel Action forms
- 3) Employee pay history
- 4) Tax forms
- 5) Any policy sign-off forms
- 6) Any documentation of performance issues, to include reprimands and suspensions
- 7) Original hiring documents such as offer letters and applications
- 8) Any other confidential documents pertaining to that specific employee

b. The following forms will not be maintained in an employee's personnel file:

- 1) Any health-related documents, to include health insurance applications, doctor's notes, physical and drug testing results and Family & Medical Leave forms
- 2) Employment Eligibility Verification Form I-9
- 3) Requests for employment verification

D. Compensation Plan and Administration

1. Policy

By these rules and regulations, the Authority intends to establish a means of providing fair compensation to its employees while ensuring orderly and cost-effective operations. Employees shall be paid based on the value of the work that they perform. Job performance shall be the major factor in determining wage and salary adjustments. Requests and appeals by employees regarding the application of these rules and regulations are to be submitted through appropriate channels, reaching ~~to~~ the Executive Director if necessary.

2. Definitions

Base Pay: An employee's normal hourly rate or annual salary, to include merit and administrative increases through the tenure of their employment. Base pay does not include overtime rates and premium rates. Base pay does include any relief or night shift operator differential pay.

Employee: Individual within a position.

Full-time Employee: A person with a work schedule of 40 hours per week. Treatment plant operators who work the 12-hour rotating shift schedule are also considered full time. Full time employees are eligible to receive benefits.

Intern: A student/trainee who works in a particular position full time for a restricted period of time or part-time, in order to gain work experience in a particular field. All interns will be paid at least the federal minimum wage and are considered temporary employees.

Job Title: A specific job that may have more than one position within it. (Note: a job title is defined by its job description that details the duties, qualifications and skills needed to perform the work.)

Part-time Employee: A part-time employee is an employee with a work schedule of less than 30 hours per week.

Position: An individual job. All positions must be approved by the Board of Directors.

Night Shift Operator – A water or wastewater operator who works a rotating schedule of shifting from day shifts to overnight shifts on a regular basis. Night shift operators must be permanent employees.

The Managers ~~of the of each~~ Water and Wastewater Departments or the Divisional Director shall designate for each department the employees assigned as Night Shift Operators. There shall be only 8 designated night shift operators at any given time in each of the two operating departments, for a total of 16 designated night shift operators.

Pay Grade/Grade: A single pay range within a pay scale to which one or more job titles may be assigned.

Pay Range: The minimum, midpoint and maximum annual salary range within a pay grade paid for a specific job/position.

Pay Scale: A system that determines how much an employee in a job/job ~~position~~^{title} can or may be paid as a base wage/salary for the job/position.

Performance or Merit Increase: An increase within grade to reward performance which meets or exceeds expectations of the position.

Separation or Termination: An employee ceasing to be employed by the Authority, either by resigning or by being dismissed.

Temporary Employee: A person whose employment with the Authority will last no longer than 90 days. These employees are not considered to be part of the Authorities' authorized permanent full-time equivalent staff and not eligible for participation in the Authority benefits program.

Workweek: A fixed and regular recurring period of 168 hours – seven consecutive 24-hour periods. Different workweeks may be established for different employees or groups of employees.

The Authority uses a pay scale of numbered pay grades, with each grade approximately 5% above the previous grade. The pay range for each position has a total spread from the minimum to the maximum of approximately 66%. The determination of a pay grade in which a particular position falls will take into account pay equity for work performed and consistency in pay with positions that perform similar work. The assignment of positions to pay ranges and the pay rates within each grade may be modified both by reclassification, such as through a classification study, or by across-the-board adjustments added to all pay rates as approved by the Authority Boards.

The Executive Director will recommend adjustments to the pay scale annually as needed. All adjustments to the pay scale must be approved by the Board of Directors.

The Authority will conduct a Compensation and Classification Study a minimum of every five years, or sooner as needed, to ensure the internal and external equity of the pay scale.

3. Job Descriptions

Each job title has a specific job description. In the job description, the following items are outlined:

- a. Job Summary: A statement that contains overall job function/duties, department manager responsibilities, if any, and the job title of the department manager of the position.
- b. Essential Job Functions: A detailed list of job responsibilities for the job title.
- c. Minimum Education and Experience: A list of the minimum education and work experience expected of the employee in the job.
- d. Knowledge, Skills and Ability: A list of the basic abilities an employee must possess in order to effectively perform the job.
- e. Physical Requirements: A list of physical acts that the employee must be able to perform in the job.
- f. Work Environment: A summary of the working conditions in which the job is performed.
- g. Special Requirements: Any requirements for the job that are not listed elsewhere in the job description or that are unique to the job.

4. Determination of Pay Grade

All job titles are assigned a pay grade based on:

a. Complexity of the Work

- 1) Unskilled: Work requiring the performance of uncomplicated tasks, physical work.
- 2) Semi-Skilled: Work requiring the performance of uncomplicated work, specialized physical work.
- 3) Skilled: Work requiring specialized physical skills used in the performance of complicated tasks.
- 4) Clerical: Work requiring the use of basic language, mathematical and social skills in orderly duplication, processing, recordation and maintenance of information documents.
- 5) Skilled Clerical: Work requiring the use of basic language, mathematical and social skills in orderly duplication, processing, recordation and maintenance of information and financial documents and requiring typing skills.
- 6) Technical: Work requiring the specific application of detailed procedures and techniques to recurring situations or problems. Work may also require specialized physical skills.
- 7) Paraprofessional: Work requiring the application of advanced knowledge and often advanced social skills in support of professional activities and may include research and data collection, client assistance or other activities.
- 8) Professional: Work requiring the application of advanced knowledge and personal ingenuity, creativity, estimation or related input and often advanced social skills, to the solution of complex problems or situations.
- 9) Administrative: Work requiring the application of general procedural knowledge and advanced social skills in the planning, organizing, coordinating, directing and/or control of agency activities, procedures and practices.

b. Level of Work

- 1) Routine: This is the lowest level of the type of work performed requiring the employee to handle a restricted scope of simple or more basic assignments or problems.
- 2) Responsible: This is the senior and often department manager level of this type of work requiring the employee to handle a variety of typical assignments or problems.
- 3) Difficult: This is the senior and often department manager level of this type of work requiring the employee to handle all assignments or problems except those requiring unit or departmental policy or procedural change.
- 4) Complex: This is the highest level of mastery of this type of work and is often a managerial position. It requires the employee to handle or direct the handling of all assignments or problems.

c. Supervision Received

- 1) Immediate Supervision: The employee works under close supervision and work is checked regularly.
- 2) Regular Supervision: The employee generally works independently, following standard practices requiring only occasional supervision, work is checked periodically for quality accuracy and quantity; department manager normally available for consultation and advice upon request.
- 3) General Supervision: The employee requires only general direction, working from broad policies and on general objectives. Refer specific matters to superior only when interpretation of municipal or agency policies is deemed necessary; sets own standard of performance, limited only by general policies and budget; direct responsibility for final results.
- 4) Supervision Exercised: The employee is responsible for the supervision of others. This is determined by the number of employees supervised – a small group being less than six employees, a medium group being between six and twenty employees and a large group being over 20 employees supervised.

d. Knowledge, Skills, and Abilities

- 1) Some Knowledge: the employee has sufficient familiarity with the subject to know elementary principles and terminology and to understand simple problems.
- 2) General Knowledge: The employee has sufficient knowledge of the subject to enable the employee to work effectively in a limited range of work situations.
- 3) Thorough Knowledge: The employee has almost complete coverage of the subject matter; work calls for sufficient comprehension to solve unusual as well as common-place work problems.
- 4) Comprehensive Knowledge: The employee has the most advanced degree of knowledge likely to be found; work calls for complete mastery and understanding of the subject.

e. Education and Experience

Level of education required for the job, as stated in the job description.

- 1) Some Experience: Sufficient to enable employee to acquire some familiarity with methods and nomenclature in common work situations of the occupational field (usually six months to two years).
- 2) Considerable Experience: Sufficient experience in an occupational field to perform work as assigned with little direct supervision, work calls for a journeyman comprehension of standard work situations (usually two to five years).
- 3) Administrative Experience: Extensive experience as defined and develop or advise on major policy matters and independently direct the operations of a major agency.

f. Special Job Requirements

These are specific requirements that must be met by an employee working in a particular job, such as licensing and specific physical requirements.

g. Current Pay Scale & Position Table

For current pay scale and position table, *see Section M., "Forms and Attachments"*.

h. The Authority will conduct a comprehensive classification and compensation study every five years at a minimum. The Executive Director may, if warranted, recommend an adjustment to the overall pay scale during a year that a survey is not completed, which must be approved by the Board of Directors.

5. Pay Rates

a. Starting Pay

The Executive Director is authorized to hire employees at any point within the salary range based on market conditions and the qualifications of the individual.

Original appointment above the minimum pay rate for a class may be recommended, subject to approval by the Executive Director, if any of the following conditions exist:

- 1) The qualifications and/or experience of the applicant exceed the basic requirements for the position.
- 2) The applicant is a former employee.
- 3) Difficulty of recruitment requires offering a higher pay rate.

b. Promotion, Demotion and Transfer

When an employee is promoted from one job to another having a higher pay range/pay grade and additional responsibilities, the employee shall receive an increase of at least ten percent (10%).

See 7.d. of this Section, "Other Forms of Compensation, Operator License Incentive Program" regarding license increases, which are not considered promotions under these rules and regulations.

When a position is filled by demotion, the employee shall be paid at any rate in the pay grade assigned to the position the employee is demoted to, as determined by the Executive Director.

When a position is filled by a transfer of an employee from a position assigned the same grade, the base pay rate normally shall not change. When an employee chooses to apply and transfers to a position in a lower pay grade, that employee may receive a reduction in base pay, as determined by the Executive Director.

~~c. Former Employee Hiring~~

~~A former employee who is hired to fill a position in the same pay grade in which they previously served, shall be paid the current base pay rate within the grade commensurate with their current work experience and qualifications.~~

~~A former employee who is hired to fill a position in a pay grade other than which they previously served, shall be paid the current base pay rate within the pay grade commensurate with his/her current work experience and qualifications, at the discretion of the Executive Director.~~

~~d.c.~~ Reclassification

A reclassification is the change in a job title or the reassignment of a job title to a different pay grade because the previous title/pay grade/pay range no longer accurately reflects the duties performed. All reclassifications must be approved by the Executive Director.

Any employee whose position is reclassified into a higher pay grade as the result of a Compensation/Classification study or market survey will not automatically be entitled to an increase in base pay, unless their current rate of base pay is below the minimum of the new pay grade.

6. Employee Performance Appraisal and Merit Pay**a. Purpose**

The annual employee performance appraisal is a process that allows an employee and their department manager to discuss the employee's performance from the prior year, as well as to set performance expectations for the following year. Employee performance that meets or exceeds expectations can result in an annual merit increase. Merit increases will take effect on July 1 for the review period of April 1 through March 31. Merit increase funding is a function of the annual budget process and must be reviewed and approved by the Boards of Directors. The total merit pool is a percentage of total salaries.

Specific policy and procedures related to the execution of employee performance appraisals are found in the Performance Evaluation System Manual, a separate manual from this policy, which is approved by the Board of Directors.

b. Appraisal Procedure and Merit Increase Eligibility

If the Boards approve a merit increase with the adopted annual budget, increases can be awarded to all eligible employees, to be allocated based on each employee's performance appraisal by a calculation method stated in the Performance Evaluation System Manual and formally approved by the Board or Directors.

No employee shall receive a salary increase that would cause the employee's base pay rate to exceed the maximum pay rate in the employee's pay grade. If an employee is ineligible for a salary increase because an increase would cause their annual salary to exceed to top

of their pay grade; the employee may receive a performance bonus. *See Section 7.b.1. of this Section, "Other Forms of Compensation, Bonuses, Performance Bonus".*

New employees in a probationary status as of March 31 are not eligible for a merit increase in the next fiscal year; however, the same employee may be eligible of a one-time administrative increase after a successful six-month probation period, pending Executive Director approval. *See 7.c. of this Section, "Other Forms of Compensation, Administrative Increase".*

Eligibility for performance increases shall not be affected by other salary increases, including administrative, promotion, and bonus increases or by a transfer or reclassification provided there remain sufficient range in the grade.

Employee performance information is personal information and shall be handled in a confidential manner and retained in their personnel file.

7. Other Forms of Compensation

a. On-Call Pay

Certain positions are required to participate in an after-hours on-call schedule. In the event of an emergency, the on-call employee is expected to respond immediately and be fit for duty. Employees that are on-call will receive a wage rate of 10% of their hourly base pay rate for every hour waiting to be called outside of their normal work schedule. Lunchtime during the normal workweek is not considered on-call time. Should the employee be required to come into work during their on-call schedule, ~~they~~he/she will receive Unscheduled Premium pay for two hours or the actual hours worked out of schedule. In the case of an emergency operation status, as determined by the Executive Director, other positions may temporarily be included in the on-call schedule. Department Managers shall designate any employee that is in On-Call status for each pay period.

b. Bonuses

- 1) Performance Bonus. An employee who is at the maximum of ~~their~~his or her pay grade shall be eligible for a performance bonus. If an employee is ineligible for a salary increase because an increase would cause their annual salary to exceed to top of their pay grade; the employee may receive a performance bonus as determined by the merit-based pay increases, if any. *See Section D.6.b., "Compensation Plan and Administration, Employee Performance Appraisal and Merit Pay, Appraisal Procedure and Merit Increase Eligibility".*
- 2) Meritorious Bonus Award. The Executive Director may make a cash award to an employee(s) for extraordinary events, such as, extraordinary performance or significant money saving suggestions conceived outside the usual and normal expectations of their position(s). The award is a one-time, lump sum bonus of \$100 to ~~\$43~~000. Only the Executive Director has the authority to award such a bonus.
- 3) Skills Development Bonus Award. Any employee in ~~a~~the Mechanic position or a solid waste position who completes skilled trades courses outside of their normal working

hours and earns a grade of a B or higher will be eligible for a bonus of up to \$500 per class.

c. Administrative Increase

An employee who performs the duties and responsibilities of his position in a consistently superior manner deserving recognition beyond what is provided through pay for performance increases, as determined by the Executive Director, shall be eligible to be considered for an administrative increase where a promotion may not be possible and/or may not be warranted. An administrative increase may also be used to adjust any inequities, which may arise from the application of these rules and regulations. An administrative increase shall have no effect upon eligibility for pay for performance increases.

An administrative increase to advance an employee when such action seems justifiable may be recommended to or by a divisional director and/or the Executive Director. Such a recommendation shall be submitted in writing to the Executive Director for approval and shall state the reason for the recommendation.

An administrative increase shall not exceed 15% within grade.

An administrative increase may be granted in the case of a temporary promotion or transfer, limited to the duration of the temporary assignment.

d. Operator License Incentive Program

~~Peoplersons~~ in an Operator position who pass a licensing exam for a higher-class license than the one currently held will be reclassified and be paid either the minimum for the new pay grade or a rate in the new range 7% above the current salary/base pay, whichever is greater, if the experience requirements have been met.

Granting of a license increase shall not be considered a promotion under these rules and regulations.

e. Overtime

Overtime shall be utilized to relieve specific occasional peak workloads or emergencies, and as a part of the Authority's day-to-day operations.

Non-exempt employees are paid overtime for hours worked in excess of 40 hours in a workweek. Overtime pay is based on the employee's base rate of pay for hours actually worked. This includes compensation for hours worked while in unscheduled premium and compensation while in on-call pay status, which is added to the base rate of pay (or blended). It also includes compensation for relief operator differential pay and nighttime shift differential pay within any given week. It does not include compensation or time for sick, vacation, holiday or other leave granted, holiday premium pay, or discretionary bonuses received within the workweek. Pay for these items is added after overtime is calculated.

This will result in non-exempt employees receiving a Blended Overtime rate each week there is applicable time worked beyond the statutorily required 40 hours per week.

Regular part-time employees and interns receive overtime pay for work hours exceeding 40 hours in a workweek.

All overtime specified above, must be preauthorized by the immediate department manager on a daily basis.

Vacation leave is available to non-exempt employees in lieu of overtime pay. In all instances of overtime, the employee may request in lieu of overtime pay, a vacation leave credit at a rate of 1.5 times the overtime hours worked. An employee may request up to a total of 30 hours of vacation leave time instead of overtime pay (instead of 20 hours of overtime pay) per calendar year as allowed by law. An employee's department manager must approve the request for vacation leave in lieu of overtime.

f. Premium Pay

Holiday Premium Pay: Hourly employees will receive premium pay at the rate of 0.5 times their hourly rate of base pay, in addition to their regular base pay for any hours worked in the workweek that are on an Authority designated regular holiday.

Unscheduled Premium Pay: Hourly employees will receive premium pay at the rate of 0.5 times their hourly base pay rate, in addition to their regular base pay, for any hours worked in the workweek that are unscheduled hours worked due to emergency call-in, special workload needs or covering another employee's work schedule. (Examples: line breaks, plant shutdowns, special construction needs requiring nighttime work.)

g. Pay Differential – Relief Operators

In recognition of the additional demands with the Relief Operator assignment and to implement an incentive to retain qualified operators in Relief Operator assignment, the Relief Operator will be eligible to receive a 10% pay differential above their hourly base pay rate once fully trained at all related facilities as determined by the department manager. This new pay rate becomes their base pay. Relief operators are not eligible for Unscheduled Premium Pay.

At such time when a water or wastewater operator ceases to perform the assignment of a Relief Operator, the 10% pay differential for the Relief Operator assignment will no longer be paid.

h. Night Shift Pay Differential – Water and Wastewater Night Shift Operators

In recognition of the additional demands on water and wastewater operators who are working overnight shift schedules, these operators will be eligible to receive a 2% pay differential above their hourly base pay rate. This new pay rate becomes their base pay. Overnight shift operators must be designated by the Water and Wastewater Managers.

When a water or wastewater operator no longer works the overnight shift schedule, the 2% pay differential for the shift assignment will no longer be paid.

i. Cost of Living Adjustments

A Cost of Living Adjustment is an increase in an employee's compensation intended to help offset increasing inflation and is based primarily on the Bureau of Labor Statistics CPI-U. COLA's are not based on an employee's performance. COLA's can be given in conjunction with merit increases. All COLA increases must be approved by the Board of Directors.

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8. Benefits Briefly Explained

a. Retirement

The Authority is a member of the Virginia Retirement System (VRS). The Authority makes contributions into the plan as determined and instructed by VRS. In addition, the employee pays a minimum 5% employee member contribution as a pre-tax deduction from their creditable compensation. An employee's creditable compensation is their annual salary, or their hourly base pay rate multiplied by 2,080 hours (which is 40 hours per week for a year). Participation in VRS is a condition of employment for all eligible employees.

b. Retirement Pay Out

In recognition of employee service to the Authority, employees who are eligible to retire under the Virginia Retirement System will be paid one of the following upon their retirement based on the VRS Plan in which they participate:

- 1) VRS Hybrid Plan participants will be paid a Service Bonus of \$200 per year of continuous service to the Authority, up to a maximum of \$5,000.
- 2) VRS Plan 1 and Plan 2 participants will be paid a percentage of their accrued sick leave time at the time of retirement, based on the table below, up to a maximum of \$5,000.

Years of Service	%	Benefit Calculation
<3	0	No cash benefit
3 to <5	10	Sick leave balance x employee hourly rate x 10%
5 to <10	15	Sick leave balance x employee hourly rate x 15%
10 to <15	20	Sick leave balance x employee hourly rate x 20%
15 to <20	25	Sick leave balance x employee hourly rate x 25%
20 +	30	Sick leave balance x employee hourly rate x 30%

c. Life Insurance

All Authority employees must participate in a group life insurance plan tied to the retirement plan. The premium and benefits are based upon each employee's base gross salary. The Authority pays the premium cost. The contribution made by the Authority is subject to change as part of the Authority's annual budget. Employees may also elect to purchase additional life insurance and extend coverage to family members. This additional optional life insurance is at the employee's expense.

d. Medical/Dental Insurance

The Authority participates in a major medical and dental plan for employees and their families. The Authority makes a contribution towards the premiums and the employee pays the remaining amount through a payroll deduction. The specific features of this plan are normally subject to change annually.

e. Workers' Compensation

Under State Law, the Authority maintains workers' compensation insurance to pay for treatment of work-related injuries and to protect against loss of income resulting from a job-related injury. See Section F.10., "Leave Policy and Rules, Workers' Compensation Leave".

f. Leave

The various types of leave are covered in Section F., "Leave Policy and Rules".

g. Other Optional Benefits

In addition to optional life insurance noted above, other optional benefits include dependent and health care flexible spending accounts, health savings accounts, optional critical care insurance, a 457 Deferred Compensation Account and gym memberships at a reduced rate.

The Authority retains the right to change, alter or discontinue benefits offered where applicable.

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E. Harassment Policy

1. Policy

It is the policy of the Authority to provide a working environment that is free from all forms of discrimination and conduct that is considered harassing, coercive, intimidating, or disruptive, to include sexual harassment. Actions, words, jokes or comments based on an individual's sex, race, color, national origin, age (over 40), religion, disability, genetic information, sexual orientation, gender identity, pregnancy, childbirth and related medical conditions, hairstyles, hair textures, and any other legally protected characteristic will not be tolerated. This policy includes reporting procedures and remedies in the event of harassing behavior.

2. Workplace Harassment

Offensive behavior toward an employee may constitute workplace harassment if:

- a. The conduct occurs because of a person's inclusion in a legally protected class;
- b. The conduct is unwelcome;
- c. The conduct results in a tangible employment action against the alleged victim (termination, demotion, denial of promotion, decrease in pay, or altering that individual's duties in a way that blocks the individual's opportunity for promotion or salary increase);
- d. Or if the conduct is sufficiently severe or pervasive to create a hostile, intimidating or offensive work environment, to unreasonably interfere with a person's work performance, or to otherwise adversely affect terms, conditions, or opportunities of a person's employment.

Such behavior can include, but is not limited to:

- a. Repeating stereotypical jokes or making stereotypical comments related to race, age, sex, sexual orientation, gender identity, national origin, religion or disability or any other legally protected characteristic;
- b. Displaying derogatory pictures or offensive printed material;
- c. Insults, name-calling, and any other words or comments that demean, stigmatize, intimidate, or single out a person because of one's sex, sexual orientation, gender identity, race, religion, national origin, age, disability or other legally protected status;
- d. Physical contact, invading one's physical space, damaging one's personal property, offensive gestures, or any other demeaning physical act directed at someone based on their legally protected status.

3. Sexual Harassment

Sexual harassment is defined as unwanted sexual advances, or visual, verbal, or physical conduct of a sexual nature. This definition includes many forms of offensive behavior and includes gender-based harassment. The following is a partial list of sexual harassment examples:

- a. Unwanted sexual advances;

- b. Offering employment benefits in exchange for sexual favors;
- c. Making or threatening reprisals after a negative response to sexual advances;
- d. Visual conduct that includes leering, making sexual gestures, or displaying sexually suggestive objects or pictures, cartoons, or posters;
- e. Verbal conduct that includes making or using derogatory comments, epithets, slurs or jokes;
- f. Verbal sexual advances or propositions;
- g. Verbal abuse of a sexual nature, graphic verbal commentaries about an individual's body, sexually degrading words used to describe an individual, or suggestive or obscene letters, notes or invitations;
- h. Physical conduct that includes touching, assaulting, or impeding or blocking movements.

Unwelcome sexual advances (either verbal, written, online or physical), requests for sexual favors, and other verbal, written, online or physical conduct of a sexual nature constitute sexual harassment when:

- a. submission to such conduct is made either explicitly or implicitly a term or condition of employment;
- b. submission or rejecting of the conduct is used as a basis for making employment decisions; or
- c. the conduct has the purpose or effect of interfering with work performance or creating an intimidating, hostile, or offensive work environment.

4. Employee Responsibilities

All employees are responsible for assisting in the prevention of harassment by refraining from participation in, or encouragement of, actions that could be perceived as harassment. An employee who feels they have experienced or witnessed sexual or other unlawful harassment in the workplace is required to immediately report such incidents. Employees are required to report incidents to either their immediate department manager, their divisional director or any other divisional director, the Human Resources Manager, or the Executive Director. Employees are assured that concerns and reports can be made without fear of reprisal or retaliation.

5. ~~Department Managers' and Supervisors'~~ Responsibilities

Each department manager and divisional director is responsible for assisting in the prevention of harassment by monitoring the work environment for signs that harassment may be occurring, counseling employees on the types of behavior prohibited, and knowing and following procedures for reporting and resolving complaints of harassment. Managers and supervisors must immediately report any harassment complaints to their divisional director and the Human Resources Manager.

6. Complaint Procedures

All allegations of sexual or other unlawful harassment will be quickly and discreetly investigated. To the extent possible, confidentiality of the complainant and any other witnesses, as well as the harasser, will be protected against unnecessary disclosure.

- a. Any employee encountering harassment is encouraged to tell the person directly responsible that their actions are unwelcome and offensive. The employee should document all incidents of harassment in order to provide the fullest basis for investigation.
- b. If the incident is serious (i.e., physical advance), unacceptable or repeated, especially if the employee has asked the offender to refrain from such behavior in the past, a written complaint should be filed immediately.
- c. A complaint should be reported to one's immediate department manager, a department manager from another department, their divisional director or any other divisional director, the Human Resources Manager, or the Executive Director. The employer representative taking such complaint must document all information including dates, times, places, names, and quotes.
- d. The employee will be informed as to how and when the employer representative intends to follow up on the complaint. If the situation warrants, immediate steps to protect the employee from further harassment may be taken.

7. Corrective and/or Disciplinary Action

Any employee engaging in sexual or other unlawful harassment will be subject to disciplinary action, including one or more of the following:

- a. A verbal reprimand
- b. A written reprimand
- c. Suspension with or without pay
- d. Discharge/Dismissal

In addition, the filing of a false complaint, or false statements during an investigation will be subject to disciplinary action as stated above.

8. Recourse Through Other Policies/Agencies

Employees who have encountered harassment, or employees accused of harassment, are not precluded by this policy from filing a complaint with the Equal Employment Opportunity Commission (EEOC). Employees may also file an appeal or grievance through the Authority's grievance policy, see *Section H., "Grievance Procedure"*.

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F. Leave Policy and Rules

1. Policy

Department managers shall grant leave in accordance with these policies, on the basis of the work requirements, and whenever possible in accordance with the wishes of the employee. Employees are encouraged to plan the use of their cumulated annual leave far enough in advance that full consideration can be given to their requests.

2. Holiday Leave

It is the policy of the Authority to ensure that all regular employees enjoy the same number of holidays each year, irrespective of the provisions of the section below on granting holiday leave. The standard shall be the number of holidays in a year which will be celebrated by regular employees.

The following holidays are observed by the Authority and shall be granted to all full-time employees with pay, and to part-time, non-benefited employees without pay, unless such employees are required to be on duty as scheduled:

- New Year's Day, January 1
- *Martin Luther King Day, Third Monday in January (Floating)
- *Presidents' Day, Third Monday in February (Floating)
- Memorial Day, Last Monday in May
- *Juneteenth, June 19 (Floating)
- Independence Day, July 4
- Labor Day, First Monday in September
- *Veterans Day, November 11 (Floating)
- Thanksgiving
 - Fourth Wednesday of November, close at 12:00 pm
 - Fourth Thursday and Friday of November
- Christmas Eve, December 24
- Christmas Day, December 25

*The RWSA/RSWA offices will be open. Holiday leave may be taken on the formal holiday with the department manager's approval. If leave is not taken on the holiday, it will become 8 hours of annual leave and will be treated as such. Holiday premium pay will not be paid for time worked on Martin Luther King Day, Presidents' Day, Juneteenth or Veterans Day.

Holidays observed by the Authority shall be subject to the following rules:

- a. Holiday on weekend. In the case of non-shift employees when a holiday falls on Saturday, it shall be observed on the preceding Friday. When a holiday falls on a Sunday, it shall be observed on the following Monday. Employees working shift schedules (water operators, wastewater operators) will observe the holiday on the actual day and be paid accordingly.
- b. Holiday on a mandatory workday. Any hours worked on a holiday will be paid at a rate noted in *Section D., "Compensation and Plan Administration"*. The employee will also

receive 8 hours of holiday pay at their base pay rate. Temporary employees are not eligible for holiday pay.

- c. Holidays during paid leave. A holiday falling within a period of paid leave shall not be counted as a workday when computing the amount of leave debited. When an employee takes unauthorized leave on a holiday, time shall be deducted from his/her sick leave or annual leave or be charged as leave without pay. *See Item 9. of this Section, "Unauthorized Absence/Leave".*
- d. Holiday during unpaid leave. When a holiday falls within a period of leave without pay or immediately preceding or following such leave, the employee shall receive no pay for the holiday.
- e. Employment or separation on a holiday. The employment or separation of a regular or part-time employee shall not be affected by a holiday, except when the employee works that day.

3. Annual Leave

Annual leave is intended to be used for personal leave and for vacations. Annual leave must be scheduled with and approved by the appropriate department manager at least one business day prior to the employee taking the leave time. Final approval rests with the department manager, divisional director or as delegated.

a. Accrual

Annual leave shall normally be accrued to regular full-time employees at the following rates (employees on unpaid leave will not receive an accrual during leave):

Years of Service	<5 Years	5 to <10 Years	10 to <15 Years	15 to <20 Years	20 to <25 Years	25 + Years
Annual Accrual Rate	96 hours	120 hours	144 hours	168 hours	192 hours	216 hours

b. Annual Carry Over

Annual leave may be carried over to the next calendar year at the following rates:

Years of Service	<5 Years	5 to <10 Years	10 to <15 Years	15 to <20 Years	20 to <25 Years	25 + Years
December 31 Maximum	192 hours	240 hours	288 hours	336 hours	384 hours	432 hours

Employees may carry over twice their annual accrual as of January 1st each year. Annual leave in excess of these limits on January 1st shall be lost. Only the Executive Director or ~~their~~^{his} designate may grant an extension to this date.

c. Taking

The following rules pertain to taking annual leave:

- 1) Annual leave shall normally be granted each calendar year. Any annual leave taken

should be approved by the employee's department manager prior to the leave being taken.

2) Annual leave taken shall not exceed the annual leave time that has been accrued by the employee at the time they are taking annual leave. Exceptions must be approved by the Executive Director. Such excess leave granted will be debited against future annual leave credits. Any such negative accumulation at the time of separation must be reimbursed.

3) Failure to return from an approved annual leave may result in an unauthorized leave or in disciplinary action, up to and including termination.

d. Debiting

The amount of annual leave debited will be computed on the basis of the days or hours an employee is scheduled to work during the period when leave is taken. Holidays and other regular days off will not be included.

e. Effect of Separation

1) Provided that an employee has given a two-week notice at the time of resignation and worked through those two-weeks, any unused annual leave shall be paid to the employee at their current hourly base pay. Annual leave will not be paid out in cases of involuntary termination or if the employee does not provide and work a two-week notice.

2) Annual leave credits shall be prorated through the employee's effective date of separation.

3) Upon separation, all annual leave hours shall be cleared from the employee's leave record.

4) Employees shall reimburse the Authority for any unearned or excess leave taken, regardless of leave type, upon separation. Any reimbursement to the Authority or any nonpayment for hours taken shall be documented for the record and appropriate action taken in accordance with these rules and regulations and the documentation filed in the employee's personnel file.

4. Sick Leave

Sick leave is leave with pay granted to an employee for an illness, bodily injury resulting in temporary disability, medically required confinement, medical/dental appointments and the care of a sick family member, to include individuals residing in the same household. Up to 40 hours of sick leave may also be used for bereavement leave in the event of the death of a family member or loved one, per instance. The FMLA policy may apply in some instances of sick leave after the first 12 months of employment.

A doctor's certificate or other documentation of illness may be required by a department manager should absence exceed three days or when misuse of sick leave is suspected. This certificate or documentation will include the nature of the employee's condition and the expected date on which the employee will be able to return to work and perform their normal job duties.

a. Accrual

All employees will accrue sick leave time at a rate of 12 days annually or 3.69 hours per pay period. New employees will be given 20 hours of sick time on their date of hire.

b. Annual Carry Over

- 1) VRS Plan 1 and VRS Plan 2 participating employees do not have any limit to the amount of sick time that they may carry over.
- 2) VRS Hybrid Plan participating employees may accrue up to 480 hours of sick leave time. Accrual of sick leave time will stop when an employee has accrued 480 hours and will begin again if they drop below 480 hours of sick leave time.

c. Taking

The following rules pertain to taking sick leave:

- 1) Sick leave taken shall not exceed the total cumulated sick leave hours earned by the employee.
- 2) Leave without pay may be granted for sickness extending beyond the use of all sick or other leave. *See Item 5 of this Section, "Family and Medical Leave Act (FMLA) Provisions".*
- 3) Employees may use annual leave hours when sick leave hours have been exhausted.

d. Debiting

The amount of sick leave debited will be computed on the basis of the days or hours an employee is scheduled to work during the period when the leave is taken. Holidays and other regular days off will not be included when computing debits.

e. Other Rules and Regulations Regarding Sick Leave

1) Reporting of sickness

- a) An employee who is absent from duty for reasons which entitle them to sick leave shall notify his/her department manager at least four (4) hours before ~~their~~his/her usual reporting time, or as required by ~~their~~his/her department manager, if physically able. Failure to do so may result in unauthorized leave. *See Items 2.b. and 3.a. below.*

2) Investigation of sickness

- a) A department manager may verify the questionable illness of an employee using sick leave by requesting a note from the employee's physician.
- b) Failure by the employee to cooperate in sick leave investigating or to return from sick leave when expected may result in ~~an~~ unauthorized leave or in disciplinary action.

3) False or fraudulent use of sick leave

- a) Use of sick leave for other than the purposes stated above shall be cause of disciplinary action (including suspension or dismissal) against the offending employee.
- 4) Conversion of sick leave
 - a) the use of sick leave for annual leave purposes shall not be permitted.
- f. Sick Leave Pay Out Upon Separation

Accrued sick leave will not be paid out in the event of a termination or resignation. For sick leave pay out upon retirement, see *Section D.8.b., "Compensation Plan and Administration, Benefits Briefly Explained, Retirement Pay Out"*.

5. Family and Medical Leave Act (FMLA) Provisions

Notwithstanding any other provision of this Manual, eligible employees may take up to 12 ~~workweeks~~^{work weeks} of paid or unpaid leave under the provisions of the Family and Medical Leave Act, subject to the following rules and regulations. The twelve (12) month period during which an employee may take up to twelve (12) workweeks of leave under the Family and Medical Leave Act will begin on the first day that leave is taken. *In this Section, see: Item 3, "Annual Leave"; Item 4, "Sick Leave"; and, if eligible, Item 6, "Sick Leave Bank".*

a. General Description

An eligible employee may take family ~~medical~~ leave, continue any paid medical/dental insurance during such leave and be restored to the same position upon their return (or a position equivalent in pay, benefits and terms of employment) in any of the cases of:

- 1) Birth, adoption or foster placement of a child;
- 2) Care of a spouse, child or parent with a serious medical condition;
- 3) Serious health condition of the employee rendering the employee unable to perform an essential function of ~~their~~^{his/her} position;
- 4) Covered military active duty; and
- 5) Care of a covered service member with a serious injury or illness when the employee is the spouse, child, parent or next of kin of the service member, as defined by the Family and Medical Leave Act. This type of leave may be for up to 26 workweeks.

b. Definitions

Child: Includes ~~childson or daughter~~ under the age of 18 or ~~childson or daughter~~ over 18 who is disabled and cannot care for themselves, legal wards, stepchildren and others for whom the employee stands in the place of parent.

Eligible employee: An employee who has been employed at least one year and has worked at least 1,250 hours during the 12 months immediately preceding the proposed leave.

Health Care Provider: A licensed medical doctor or any other person determined by the U.S. Secretary of Labor to be capable of providing health care service.

Parent: Biological parents as well as any others who have acted in the place of a parent to the employee. This does not include parents-in-law.

Serious Medical Condition: A physical or mental illness or an injury requiring inpatient care at a hospital, hospice, or residential medical care facility; or continued treatment by a health-care provider.

Leave due to the birth or adoption must be completed within the 12-month period beginning on the date of birth or adoption. In addition, in cases where the married couple are both employed by the Authority, the two together may be limited to a combined total of twelve (12) workweeks of leave during any 12-month period for the birth or adoption of a child, or for the care of the same ~~childson, daughter,~~ or parent.

c. Notice of Leave

If the need for family ~~/~~medical leave is foreseeable, the employee must give ~~theirhis/her~~ immediate department manager written notice at least 30 days prior to leave, except in extraordinary circumstances. Additionally, if medical treatment is planned the employee must first consult with ~~theirhis/her~~ immediate department manager regarding the dates of such treatment. If this is not possible, the employee must at least give notice as soon as practicable (within one or two business days of learning of the need for leave). Failure to provide such notice may be grounds for delay of leave. As in all cases of leave, a leave request form must be submitted to the immediate department manager. Family ~~/~~medical leave forms are available from department managers or the Human Resources Manager. These forms must be used when specifically requesting family ~~/~~medical leave. In cases where family/medical leave has not been specifically requested, but has been determined as FMLA-qualifying leave, a family ~~/~~medical leave form will be provided and must be completed as soon as possible so that FMLA leave may be approved.

d. Medical Certification

If leave is requested due to the employee's or a covered relation's serious health condition, the employee and relevant health care provider must supply appropriate medical certification. Medical Certification forms are available from the Human Resources Manager. When leave is requested, the Authority will notify employees of the requirement for medical certification and when it is due. Failure to provide requested medical certification in a timely manner may result in delay of leave until such time as it is received. The Authority, at its expense, may require an examination by a second health care provider designated by the Authority if initial medical certification is deemed incomplete or unsatisfactory. If the second health care provider's opinion conflicts with the original medical certification, the Authority, at its expense, may require a third, mutually agreeable, health care provider to conduct an examination and provide a final binding opinion. The Authority may require subsequent medical recertification.

e. Reporting While on Leave

In cases of leave for the employee's own serious health condition, or to care for a covered relation, the employee and the Human Resources Manager will determine how often the employee should contact their department manager regarding the status of their condition and their intention to return to work. In addition, notice must be given as soon as is practicable (within two business days if feasible) if the dates of leave change or are extended, or initially unknown.

f. Pay During FMLA Leave

Family ~~/~~medical leave is legally unpaid leave (with the exception of worker's compensation benefits). The Authority requires an employee taking a leave covered by the FMLA to use first, their sick leave hours, and then their annual leave hours during their FMLA leave. Family ~~/~~medical leave runs concurrently with other type of leave, including leave for work-related injury or illness.

g. Medical and Other Benefits

During an approved family ~~/~~medical leave, the Authority will maintain health benefits for the employee, as in cases of active employment. The Authority will continue to deduct the health and dental insurance premiums from the employees pay. If the employee does not have leave time to use during their family ~~/~~medical leave and the family ~~/~~medical leave is unpaid, the employee is responsible to pay by the 25th of each month, the monthly employee portion of the premium. Employees will be notified if payments are more than 15 days late. If payments are not received within 15 days ~~off from~~ the date of the late notice, coverage will cease, effective on the last day for which premiums have been paid.

Membership with the Virginia Retirement System will not be affected by family ~~/~~medical leave; however, no wages will be reported during periods of unpaid leave. In addition, life insurance premiums will not be paid by the Authority during periods of unpaid leave and must be paid by the employee, as well as applicable premiums for optional life insurance, as set forth above. Upon return to work, the employee may be eligible to purchase the lost service with VRS, if the leave is necessitated by birth or adoption, as defined by VRS policies. The Authority will resume its contribution to life insurance and wage reporting to VRS, with no lapse in credited service.

h. Exemption for Highly Compensated/Key Employees

Highly compensated or key employees (the highest paid 10 percent of employees) may not be returned to their former or equivalent position following a leave if the employee's restoration to their position will cause substantial and grievous economic injury to the Authority. This determination is not based on whether the absence of the employee will cause such substantial and grievous injury to the Authority. The Authority will make this fact-specific determination on a case-by-case basis. The Authority will notify the employee at the time of a leave request if ~~they~~~~he/she~~ qualifies as a "highly compensated" employee,

if the Authority believes that the restoration of the employee to their position may be denied, and of the employee's rights in such instances.

i. Intermittent and Reduced-Schedule Leave

Leave due to a serious health condition, or to care for a covered relation with a serious health condition, can be taken intermittently (in separate blocks of time, due to a single health condition) or on a reduced-leave schedule (reducing the usual number of hours worked per workday or workweek), if medically necessary. Requests for intermittent or reduced leave schedule for birth or adoption of a child must be approved in advance and will be approved on a case-by-case basis. If leave is unpaid, the Authority will reduce the employee's salary based on the amount of time actually worked. In addition, while on intermittent or reduced-schedule leave, the Authority may temporarily transfer the employee to an available alternative position that better accommodates the recurring leave, and which has equivalent pay and benefits.

j. Record Keeping and Anti-Retaliation

The Human Resources Manager shall maintain records necessary to demonstrate compliance with FMLA. A doctor's note is not required for each absence under a FMLA leave. FMLA requires that no employee be subject to any penalty for seeking rights under FMLA or for testifying for or otherwise helping other employees seek rights under FMLA.

6. Sick Leave Bank

Each Authority will maintain a sick leave bank to be used when a member of the bank becomes incapacitated by long-term and/or chronic illness or injury as long as one-third of the eligible employees agree to participate in accordance with the terms contained herein. The sick leave bank is not for use for any other type of illness or injury leave, such as that of a family member.

Membership in the sick leave bank shall be voluntary and open to all eligible personnel who accrue sick leave. Each employee of the Authority who accumulates sick leave is eligible for membership and agrees to donate eight (8) hours of their sick leave to join the bank.

The Human Resources Manager is designated as the administrator of the sick leave bank.

a. Enrollment Procedures

- 1) An eligible employee may enroll within the first thirty days of employment by completing a Sick Bank Donation Form.
- 2) An employee who does not enroll when first eligible may do so between any subsequent January 1 to January 31 period by completing a Sick Bank Donation Form and providing satisfactory evidence of good health from a doctor to the Human Resources Manager.
- 3) An employee gains membership into the sick leave bank by contributing eight (8) hours of their sick leave time to the bank and eight (8) hours thereafter whenever an assessment is required. The donated leave will be deducted from the employee's

accumulated days of sick leave. Employees will be notified of an assessment two (2) weeks prior to any deductions to their sick leave hours.

b. Rules of Use

- 1) The first twenty (20) working days of illness or disability will not be covered by the bank and must be covered by the member's own accumulated leave or leave without pay.
- 2) Requests for use of the sick leave bank must be made in writing by the employee (or representative if the employee is unable to submit the request) prior to the absence for which the leave days are to be used. In extenuating circumstances, retroactive request may be considered. Requests must be supported by a medical doctor's certification.
- 3) A maximum of 180 hours each rolling 12-month period can be used by any one member.
- 4) Hours drawn from the sick leave bank for any one period of eligibility do not need to be used consecutively but must be for the same illness.
- 5) A member of the bank will not be able to use the sick leave bank benefit until all of the employee's leave balances decline to zero.
- 6) Members of the bank will be assessed an additional eight (8) hours of sick leave when the bank is depleted to 40 hours unless they choose not to participate further in the bank. Members who have no sick leave to contribute at the time of assessment will be assessed eight (8) hours and allowed to temporarily maintain a negative balance. Should an employee drop membership at the time of an assessment, the member will not be eligible to rejoin the bank until open enrollment in January of each year and only after providing satisfactory evidence of good health.
- 7) Members utilizing sick leave from the bank will not have to replace hours used except as a regular contributing member of the bank.

c. Termination

Upon termination of employment or membership in the sick leave bank, a participating employee may not withdraw the hours ~~they have~~~~he/she has~~ contributed to the bank.

7. Bereavement Leave

Bereavement Leave is intended to provide full-time employees with paid time off following the death of an immediate family member. An employee may take up to 24 hours per occurrence or loss. Immediate family is defined as spouse, child, step-child, parent, ~~sibling~~~~brother, sister,~~ grandparent, grandchild, guardian, any persons residing in the same household as the employee and spouse's immediate family. After an absence of 24 hours, the employee then may use up to an additional 40 hours of their accrued sick leave, followed by the use of annual leave if sick leave time is exhausted or if 40 hours of sick leave have been used.

8. Military Leave

This policy provides employees with the time required to perform any form of military service for the Armed Forces of the United States, National Guard or Naval Militia whether voluntary or involuntary, called or activated, such as being placed on active duty and for training.

Any full-time employee who is also a member of the organized reserve forces of any of the armed services of the United States, National Guard, or Naval Militia, is entitled to a leave of absence from their duties without loss of accumulated leave or regular salary on all days when in training or when called to duty by the Governor of Virginia, in accordance with the Code of Virginia, Article 10, Section 44-93 and Title 38 of the United States Code, Chapter 43, Section 2024 (d). Up to fifteen (15) days, or time as required by federal law, of Military Leave per calendar year is available to those employees who are called for training with their military units. Employees are required to submit a copy of their orders, prior to the effective date of the leave, to the Executive Director for approval. The Authority will pay to the employee the difference between the employee's military pay and their regular Authority base pay for the period of time that the employee is on Military Leave. It is not intended that the employee receive an amount of compensation greater than he would normally have received from their regular employment for the period of the Military Leave.

The Authority will make all efforts to accommodate National Guard weekend drills.

9. Court Leave

A regular employee shall be granted court leave when summoned to jury duty. Employees serving jury duty will receive full salary and may retain compensation received from the court. Employees are expected to give their department manager notice of jury duty and submit a copy of the official summons for jury duty. If the employee's presence is required for less than a full workday, the employee is required to contact the department manager concerning return to work.

Employees who are subpoenaed to appear as witnesses in legal proceedings in their capacity as an Authority employee will be entitled to treat time spent in such proceedings as compensable working time. However, employees who initiate or are otherwise involved in private legal actions of any kind (excluding employee grievance proceedings) will not be permitted to treat time spent during working hours in connection with such actions as compensable working time. Employees will be required to use accrued annual or compensatory time for all hours spent in connection with such action that occur during working hours.

10. Volunteer Time Off (VTO)

All regular full-time employees can volunteer up to eight (8) hours per calendar year with a charitable institution or association, if such institution or association is not controlled in whole or in part by any church or sectarian society (in compliance with Virginia Code § 15.2-953.). More than one organization may be chosen. Time off must be requested as far in advance as possible for scheduling purposes and can be taken in increments of two (2) hours. Employees will be paid at their normal rate of pay for any volunteer hours used and will not be eligible for premium or overtime pay for any time spent volunteering. VTO will be refreshed at the beginning of each calendar year and cannot be carried over. Unused VTO will not be paid out at time of separation from employment.

VTO may not be used for organizations that discriminate based on race, color, age, gender, religious creed, veteran status, marital status, sexual orientation, pregnancy, childbirth, national origin, or ancestry, physical or mental disability, medical condition or genetic information, or political affiliation.

11. Unauthorized Absence/Leave

Unauthorized absence includes:

- a. Failure to report for a scheduled shift without notifying your department manager.
- b. Failure to report to work at the end of an authorized leave.
- c. Absence without leave time available.

An employee shall receive no pay for the duration of any unauthorized leave and may be subject to disciplinary action, using the following procedure as a guide:

- a. The first occurrence of absence without approved leave shall result in a written reprimand.
- b. The second occurrence of absence without approved leave shall result in a suspension without pay.
- c. The third occurrence of absence without approved leave shall result in immediate dismissal.
- d. Failure to report for three consecutive scheduled shifts without department manager notification shall be considered a voluntary resignation.

12. Workers' Compensation Leave

All Authority employees receive benefits provided by the Virginia Workers' Compensation Act (referred to in this policy as "WCA") if they suffer a work-related injury or disease, and covered employees who are entitled to benefits under the WCA also are eligible for supplemental benefits provided by the Authority.

If an employee suffers a workplace injury that causes them to miss time from work, they will be placed on sick leave. If the disability continues past seven working days, workers' compensation insurance will provide compensation from that point forward. An employee may not receive payment from worker's compensation and sick leave at the same time. If an employee does not have enough sick and/or annual leave hours to cover the first seven days of absence, the employee will be placed on leave without pay.

Temporary modified duty or a reasonable accommodation (a modification or adjustment to the work environment, or to the manner or circumstances under which the position held is customarily performed, that enable a qualified individual with a disability to perform the essential functions of that position) may be offered to an injured employee, once the treating physician states that it is safe for the employee to return to work and once the physician provides information in regard to the employee's capabilities. When an employee is released to modified duty the Authority:

- a. May assign a temporary modified/light duty work assignment for the employee.

- b. May offer temporary modified duty at a reduced wage.
- c. May offer temporary modified duty in a different department than the employee's pre-injury job.
- d. May offer temporary modified duty at a reduced number of hours.
- e. May modify an employee's pre-injury job to accommodate the employee's restrictions.

The Authority will make every effort to place the employee in an available position for which they are qualified for. In all cases, the Authority will comply with the Americans with Disabilities Act and will make reasonable accommodations to maintain the individual as an employee.

13. Procedures for Requesting Leave

For all leave except holiday and unplanned sick leave, a request indicating the type of leave, and duration of leave to include start date and time and end date and time must be approved in advance by the appropriate department manager. The request should be made at least one business day prior to the planned leave time that is being requested. This time is to allow the department manager to make any schedule or workload adjustments necessary to accommodate the request. Unless an absence for voluntary leave is approved by the appropriate department manager, the absence will be regarded as unauthorized leave. All time away from work requires either the use of leave time or prior approval from the Executive Director for unpaid leave.

14. Maintenance of Leave Records

The Human Resources Manager is responsible for maintaining accurate leave records in a form acceptable to the Executive Director. Questions regarding leave time should be addressed to the Human Resources Manager or the appropriate department manager.

G. Disciplinary Policy

1. Policy

This policy provides a guideline to effectively correct an employee's unsatisfactory work performance or misconduct in an effort to promote maximum employee potential. All employees will be covered under this policy. Any disciplinary matters involving drugs or alcohol are covered in *Section L, "Substance Abuse Policy"*.

2. Unsatisfactory Work Performance or Misconduct

Each need for discipline has varying circumstances and requires the exercise of discretion on the part of the employee's department manager. Disciplinary action may be taken for any of the following examples of unsatisfactory work performance and misconduct. These examples are not in any way to be construed as a comprehensive listing of possible violations nor are they to be considered as rigid guidelines.

- a. Recurring tardiness
- b. Absence without leave
- c. Violation of the Substance Abuse Policy
- d. Sleeping on the job
- e. Serious neglect of work
- f. Serious neglect of duty
- g. Insubordination, defined as refusal to comply with a direct order from a department manager
- h. Deliberate or careless conduct endangering the safety of oneself or other employees
- i. Pattern(s) of safety violations, severity of risk to be determined
- j. Negligence in the care and handling of Authority or customer property
- k. Theft or unauthorized use of Authority property or of another employee's property
- l. Incompetence or inefficiency in the performance of required job duties
- m. Use of offensive, abusive, threatening, coercive, indecent or discourteous language toward department managers, divisional directors, other employees, or members of the public
- n. Intentional falsification of personnel records, time records, or any other Authority records or reports
- o. Provoking, instigating or participating in a fight while on duty or on Authority property or in an Authority vehicle
- p. Harassing other employees
- q. Violation of *Section I.1., "Administrative Policies, Conflict of Interest/Accepting Gifts"*.
- r. Violation of Authority Policies

3. Progressive Discipline Policy

The Authority will support the practice whereby all employees will be disciplined by the same process. The discipline of an employee will be a progressive process in most cases, where disciplinary actions of lesser severity than dismissal/involuntary separation can be taken in an attempt to correct an employee's unsatisfactory work performance or misconduct before a dismissal/involuntary separation is initiated. However, the Authority reserves the right to bypass the progressive discipline policy to address breaches of law, Authority policy and actions by employees which hinder the goals and or public perception of the Authority. Disciplinary actions may take any of the following forms and are not necessarily restricted to the order set forth below:

- a. Verbal reprimand
- b. Written reprimand
- c. Suspension
- d. Executive Director Inquiry
- e. Administrative decrease
- f. Demotion
- g. Dismissal/Involuntary Separation

All formal disciplinary actions, as listed above, should be documented. In the case of all of the above, except for a verbal reprimand, the employee should receive a copy of the written notice that will be placed in their personnel file. Any written notice should contain a statement of reasons for the disciplinary action, a warning of what further disciplinary action could result if the situation is not corrected and a statement of the employee's right to appeal in accordance with the Authority's Grievance Procedure, *See Section H., "Grievance Procedure"*.

- a. Verbal Reprimand: A verbal reprimand is a discussion between the department manager and the employee during which the employee is advised and cautioned in reference to unsatisfactory work performance or misconduct. Department managers are required to document the date, subject and details of the conversation for future reference if needed.
- b. Written Reprimand: A written reprimand is a written documentation to the employee from the department manager during which the employee is advised and cautioned with reference to unsatisfactory work performance or misconduct. A copy of the written reprimand should be signed by the employee and retained in their personnel file.
- c. Suspension: A suspension is the temporary prohibiting of an employee to perform his/her duties. The suspension period shall be without pay, to include sick or annual leave time, for just cause or with pay for investigative purposes. All suspensions must be approved by the Executive Director. A copy of the suspension letter should be signed by the employee and retained in their personnel file.
- d. Executive Director Inquiry: Prior to any demotion or dismissal recommendation from the department manager or divisional director, the Human Resources Manager/Director of ~~Finance & Administration~~ and Communications and the Executive Director ~~may~~will

conduct a formal interview with the employee and applicable management staff regarding the merits of the recommendation regarding the employee's unsatisfactory work performance or misconduct. Any disciplinary action that takes place will be approved by the Executive Director and documented in the employee's personnel file.

- e. Administrative Decrease: An administrative decrease is a reduction in an employee's pay. All administrative decreases must be approved by the divisional director and the Executive Director. The letter of notification of an administrative decrease stating the specific reason for the decrease and signed by the employee should be retained in the employee's personnel file.
- f. Demotion: A demotion is a reduction in the pay range of an employee in conjunction with a change in job duties and responsibilities. All demotions must be approved by the divisional director and the Executive Director. The letter of notification of a demotion stating the specific reason for the demotion and signed by the employee should be retained in the employee's personnel file.
- g. Dismissal/Involuntary Separation: A dismissal is an involuntary termination from employment initiated by the Authority as a result of the employee's unsatisfactory work performance or misconduct. All dismissals/involuntary separations must be approved by the divisional director and the Executive Director and are subject to appeal or Loudermill hearing/grievance.

All formal disciplinary actions, as listed above, should be documented. In the cases above, except for a verbal reprimand, the employee should receive a copy of the written notice that will be placed in their personnel file. Any written notice should contain a statement of reasons for the disciplinary action, a warning of what further disciplinary action could result if the situation is not corrected and a statement of the employee's right to appeal in accordance with the Authority's Grievance Policy. See Section H., "Grievance Procedure".

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H. Grievance Procedure

1. Policy

The Authority Grievance Procedure affords an immediate and impartial method for the resolution of disputes that may arise between the Authority and employees in the Authority service.

2. Coverage of Grievance Procedure

This procedure applies to all non-probationary employees in permanent full-time and permanent part-time positions in the Authority.

This procedure shall not apply to the following employees:

- a. Appointees of the Board of Directors;
- b. Employees in temporary or seasonal positions;
- c. Student interns, volunteers, or persons appointed to serve without pay;
- d. Probationary employees; and
- e. The Executive Director

3. Definitions

Executive Director: shall mean either the Executive Director or his/her designee.

Grievance: shall mean a complaint or dispute by an employee eligible to use this procedure relating to ~~their~~^{his or her} employment, including but not limited to:

- a. disciplinary actions, including dismissals, demotions and suspensions, provided that dismissals shall be grievable only when resulting from formal discipline or unsatisfactory job performance;
- b. the application of personnel policies, procedures, rules and regulations;
 - 1) acts of retaliation as the result of using the grievance procedure or of participation in the grievance of another Authority employee;
- c. acts of retaliation because the employee has complied with any law of the United States or of the Commonwealth of Virginia, has reported any violation of such law to a governmental authority, or has reported an incidence of fraud, abuse, or gross mismanagement; and
- d. complaints of discrimination on the basis of sex, sexual orientation, gender identity, race, color, creed, political affiliation, religion, national origin, age, disability or other legally protected status.

Grievant: shall mean an eligible employee who has filed a complaint under this procedure.

Human Resources Manager: shall mean either the Human Resources Manager or ~~their~~^{his/her} designee.

Management: shall mean the Board of Directors and its designees who establish policy for the Authority.

4. Management Responsibilities

Management retains the exclusive right to manage the affairs and operations of the Authority. Accordingly, the following complaints are non-grievable:

- a. establishment and revision of wages or salaries, position classification or general benefits;
- b. work activity accepted by the employee as a condition of employment or work activity which may reasonably be expected to be a part of the job content;
- c. the contents of established personnel policies, procedures, rules and regulations;
- d. failure to promote except where the employee can show that established promotional policies or procedures were not followed or applied fairly;
- e. the methods, means and personnel by which or by whom work activities are to be carried out;
- f. termination, layoff, demotion or suspension from duties because of lack of work, reduction in work force, or job elimination, except where such action affects an employee who has been reinstated within the previous six months as the result of the final determination of a grievance;
- g. the hiring, promotion, transfer, assignment and retention of employees within the Authority; and
- h. the relief of employees from duties of the Authority in emergencies.

In any grievance brought under the exception to Section 4.f above, the Authority's action shall be upheld upon a showing by the Authority that:

- a. there was a valid business reason for the action, and
- b. the employee was notified of the reason in writing prior to the effective date of the action.

5. Human Resources Department Responsibilities

The Authority Human Resources Department shall serve as an impartial administrator of this process. Upon the filing of a grievance, the Human Resources Department shall do the following:

- a. establish and maintain a file;
- b. ensure that all parties are aware of the process;
- c. monitor procedures and time frames;
- d. notify either party of noncompliance;
- e. be informed of the status of the grievance by both parties at each step;
- f. maintain appropriate documentation; and

g. perform all other responsibilities as specified in this Procedure.

6. Grievance Procedure Generally

For purposes of this procedure, “days” shall be defined as calendar days and time periods shall begin to run on the day following that on which any action is taken, or report rendered, without regard to weekends or Authority-observed holidays. If a time period specified in this procedure ends on a weekend or holiday, the last day of the time period shall be the next full business day following the weekend or holiday.

For example, a written grievance under Step 1 must be presented to the ~~grievant’s~~ grievant’s immediate department manager within five (5) days of the department manager’s verbal reply to the informal grievance. The five (5) days shall begin to run on the day after receipt of the department manager’s verbal reply and shall terminate on the fifth day following. If the fifth day is a weekend or holiday, the time period shall terminate at the end of the next full business day.

Time limits established under this procedure are intended to be strictly construed and enforced. However, in the interests of fairness, such time limits may be extended if both parties agree to such extensions in writing.

All stages of this procedure beyond Step 1 shall be reduced to writing on forms supplied by the Human Resources Department. With the exception of the final management step, the only ~~people~~ persons who may normally be present in the management step meetings are the grievant, the appropriate Authority official and appropriate witnesses for each side. Witnesses shall be present only while actually providing testimony. At Step 4 and above, the grievant may, at ~~their~~ his option, choose to have a representative of ~~their~~ his choice, including legal counsel. If the grievant is represented by legal counsel or other person(s), the Authority likewise has the option of being represented by legal counsel, provided that a person may not serve as both a witness and a representative at any Step under this procedure.

The grievant shall bear any and all costs involved in employing representation and preparing ~~their~~ his case at all steps of this procedure, including but not limited to attorneys’ fees and expenses and any costs of judicial filings or appeals.

After the initial filing of a written grievance, failure of either party to comply with all substantial procedural requirements of this procedure, without just cause, shall result in a decision in favor of the other party on any grievable issue, provided that the noncomplying party fails to correct the noncompliance within five (5) days of receipt of written notification by the other party of the compliance violation.

However, the right of the grievant to correct compliance violations shall not apply to any determinations under Steps 1 through 3, or to grievability determinations, provided that the grievant has previously received written notice of the applicable deadlines for appealing such determinations at the time the determination was rendered but has failed to respond in a timely fashion.

The Executive Director may require a clear written explanation of the basis for any requests for just cause extensions or exceptions and shall determine all compliance issues. Such determinations by

the Executive Director are subject to appeal by the grievant by filing a petition with the Circuit Court of Albemarle County within thirty (30) days of the compliance determination. The grievant shall be solely responsible for filing such petition.

7. Grievability

Decisions regarding grievability, including the question of access to this procedure, shall be made by the Executive Director. Grievability decisions shall be made at the request of the grievant or ~~their~~^{his} divisional director or immediate department manager within ten (10) days of such request. A copy of the Executive Director's decision concerning grievability shall be sent to the grievant, to the divisional director and/or immediate department manager and to the Human Resources Manager.

Decisions by the Executive Director that an issue or complaint is not grievable may be appealed by the grievant to the Circuit Court of Albemarle County for a hearing de novo on the issue of grievability as provided in Virginia Code § 15.2-1507(A)(9).

Proceedings for the review of the Executive Director's decision regarding grievability shall be instituted by filing a notice of appeal with the Executive Director within ten (10) days from the date of receipt of the decision and giving a copy thereof to all other parties. Within ten (10) days thereafter, the Executive Director shall transmit to the Clerk of the Circuit Court of Albemarle County a copy of ~~their~~^{his} decision, a copy of the notice of appeal, and any exhibits that may have been provided in connection with the resolution of the issue of grievability. A list of the evidence furnished to the court shall also be furnished to the grievant.

The failure of the Executive Director to transmit the record shall not prejudice the rights of the grievant. If the Executive Director fails to transmit the record within the time required, the Circuit Court, on motion of the grievant, may issue a writ of certiorari requiring the Executive Director to transmit the record on or before a certain date.

The Circuit Court, sitting without a jury, shall hear the appeal on the record transmitted by the Executive Director and such additional evidence as may be necessary to resolve any controversy as to the correctness of the record. The Court, in its discretion, may receive such other evidence as the ends of justice require. The Court may affirm, reverse or modify the decision of the Executive Director. The decision of the Court is final and is not appealable.

The issue of grievability may be raised at any step of the Grievance Procedure prior to the panel hearing provided in Section 13 of this procedure, or it shall be deemed waived by all parties. Once raised, the issue shall be resolved before further processing of the complaint. A request that grievability be determined shall toll the time limits under this procedure. Time limits shall begin to run again the day after the decision on grievability is made by the Executive Director or the Circuit Court.

The classification of a complaint as nongrievable by either the Executive Director or the Circuit Court of Albemarle County shall not be construed to restrict any employee's right to seek, or management's right to provide, customary administrative review of complaints outside the scope of the Grievance Procedure.

8. Consolidation of Grievances

If more than one grievance is filed arising from the same factual circumstances, the Executive Director may, at any time prior to a panel hearing, consolidate those grievances for joint processing, including grievability determinations. If consolidation occurs, all time limits set forth in this procedure shall thereafter be calculated from the date of the last filed grievance. Once consolidated, the grievances shall all be processed as a single matter pursuant to this procedure.

9. Step 1 Procedure - Immediate Department Manager

No later than fifteen (15) days after the occurrence or condition giving rise to the grievance, the employee affected shall identify the grievance verbally to ~~their~~^{his} immediate department manager. Within ten (10) days of such identification, the immediate department manager shall give ~~their~~^{his} response to the employee with respect to the particular grievance. The failure of an employee to identify the grievance within the time specified above shall constitute forfeiture and a waiver of any rights to proceed further and shall terminate the grievance.

If a satisfactory resolution is not reached by this informal process, the employee shall notify the Human Resources Department of the intent to file a grievance and shall obtain a copy of Grievance Form, see *Section M., "Forms and Attachments"*. The employee shall reduce the grievance to writing on the Grievance Form, Part A, identifying specifically and in detail the nature of the grievance and the requested remedy. Should ~~they~~^{he} prevail in the grievance, an employee is entitled only to the relief specifically requested. Such written grievance shall be presented to the immediate department manager within five (5) days of the department manager's verbal reply to the oral grievance. The department manager shall then reply in writing to this written grievance within five (5) days of receiving it.

If the employee's immediate department manager is also ~~their~~^{his} department manager, ~~they~~^{he} shall pass by Step 2 of this procedure and proceed immediately to Step 3. If the employee's immediate department manager is the divisional director, ~~they~~^{he} shall pass by Steps 2 and 3 and proceed to Step 4. If the employee's immediate department manager is the Executive Director, ~~they~~^{he} shall pass by Steps 2, 3 and 4 and proceed to Step 5.

10. Step 2 Procedure - Department Manager

If a satisfactory resolution is not reached at the conclusion of Step 1 as outlined above, the grievant shall have the right to appeal as follows. Within five (5) days following receipt of the Step 1 (written reply), the grievant shall notify ~~their~~^{his} department manager and the Human Resources Department in writing on the Grievance Form, Part A that resolution has not occurred and shall supply the reasons why the grievant believes that resolution has not occurred. The department manager shall schedule and hold a meeting with the grievant to review the grievance within five (5) days of receipt of such submission, or on such other date as the parties may mutually agree.

The only persons who may be present at this meeting are the grievant and the department manager. The Human Resources Manager may be present if requested by either party. The meeting may be adjourned to another time or place by agreement of the parties. A written reply to the grievance shall be provided to the employee and the Human Resources Department within five (5) days after the meeting.

11. Step 3 Procedure - Divisional Director

If a satisfactory resolution is not reached at the conclusion of Step 2 as outlined above, the grievant shall have the right to appeal as follows. Within five (5) days following receipt of the Step 2 written reply, the grievant shall notify the divisional director and the Human Resources Department in writing on the Grievance Form, Part A that resolution has not occurred and shall supply the reasons why the grievant believes that resolution has not occurred. The divisional director shall schedule and hold a meeting with the grievant to review the grievance within five (5) days of receipt of such submission, or on such other date as the parties may mutually agree.

The only ~~persons~~people who may be present at this meeting are the grievant and the divisional director. The Human Resources Manager may be present if requested by either party. The meeting may be adjourned to another time or place by agreement of the parties.

A written reply to the grievance shall be provided to the employee and the Human Resources Department within five (5) days after the meeting.

12. Step 4 Procedure - Executive Director Level (Final Management Step)

If a satisfactory resolution is not reached at the termination of Step 3 as outlined above in Section 11, the grievant shall notify the Human Resources Department, indicate on the Grievance Form, Part A that resolution has not occurred and submit the grievance to the Executive Director within five (5) days following receipt of the Step 3 reply. The Executive Director or ~~their~~his designee shall schedule and hold a meeting with the grievant to review the grievance within ten (10) days of receipt of such submission, or on such other date as the parties may mutually agree.

The grievant may have legal representation or another representative present at the Step 4 meeting. If the grievant is represented by legal counsel or another representative, the Executive Director may also have legal counsel or another representative present. The grievant shall inform the Authority in writing of the name of his legal counsel or other representative at least five (5) days prior to the Step 4 meeting and failure to do so shall result in a waiver by the employee of ~~their~~his right to representation. The Executive Director or designee shall, in ~~their~~his sole discretion, determine whether the testimony of a witness is relevant or, if witnesses have testified, whether additional testimony by other witnesses is necessary.

A written reply to the grievance shall be provided to the grievant and the Human Resources Department within ten (10) days after the Step 4 meeting, or on such other date as the parties may mutually agree.

13. Step 5 Procedure - Grievance Panel

If a satisfactory resolution is not reached at the termination of Step 4 as outlined above in Section 12, the grievant shall notify the Human Resources Department, indicate on the Grievance Form, Part A that resolution has not occurred and request a hearing before a Grievance Panel ("Panel"). The request shall be submitted to the Human Resources Manager within five (5) days following receipt of the Step 4 reply.

An impartial Grievance Panel shall be constituted and selected for each grievance hearing. The Human Resources Manager shall arrange for the Panel selection. If the Human Resources Manager

is a party to the grievance, the request form shall be submitted to the Director of Administration and Communications, who shall make the necessary arrangements.

14. Composition of the Grievance Panel

The Panel shall be composed of three (3) members who shall be chosen in the following manner: one member shall be appointed by the grievant, one member shall be appointed by the Executive Director and a third member shall be selected by the first two Panel members. To ensure an objective, impartial Panel, no ~~persons-people~~ having direct involvement with the grievance being heard by the Panel, or with the complaint or dispute giving rise to the grievance, shall serve on the Panel. Managers who are in a direct line of supervision of a grievant, ~~persons-people~~ residing in the same household as the grievant and the following relatives of a participant in the grievance process or a participant's spouse are prohibited from serving as panel members: spouse, parent, child, descendants of a child, sibling, ~~niece, nephewsiblings' children~~, and first cousin.

Both the grievant and the Executive Director shall make their appointments to the Panel within ten (10) days after the request for a panel hearing is filed. The Human Resources Manager shall be notified of the appointments on the Grievance Form Part B. The two panel members chosen by the grievant and Executive Director shall select the third panel member within ten (10) days after the request for a panel hearing is filed and shall notify the Human Resources Manager of their selection. Unless it is necessary to involve the Circuit Court in the selection of the third member, a complete panel shall be selected within ten (10) days after the request for a panel hearing is filed.

In all cases where the first two members cannot reach an agreement as to the third member within ten (10) days, the Human Resources Manager, after confirming such fact, shall immediately notify the Director of Administration and Communications who shall request the Chief Judge of the Circuit Court of Albemarle County to appoint the third member pursuant to the selection procedures outlined in paragraph one of this section. The Authority and grievant shall share equally in the costs and expenses, if any, of the third panel member.

The Authority, at its sole option, may use an administrative hearing officer in employee termination or retaliation cases. When the Authority elects to use an administrative hearing officer as the third panel member in an employee termination or retaliation case, the administrative hearing officer shall be appointed by the Executive Secretary of the Supreme Court. The appointment shall be made from the list of administrative hearing officers maintained by the Executive Secretary pursuant to Va. Code § 9-6.14:14.1. If the Authority elects to use an administrative hearing officer, it shall bear the expense of such officer's services.

In all cases, the third member shall serve as chairperson of the panel. The chairperson shall set the time for the hearing and notify the Human Resources Manager, who shall in turn notify the grievant and Executive Director. The grievant and the Executive Director shall each be responsible for arranging the presence of their respective witnesses. The hearing shall be held as soon as possible after the date of the original request for a hearing, allowing sufficient time for access to records as specified in paragraph six below. Either party may have an attorney or other representative of ~~their~~^{his} choice present at the Panel hearing.

The Human Resources Manager shall provide the Panel with copies of the grievance record prior to the hearing and provide the grievant with a list of documents furnished to the Panel. At least ten (10) days prior to the hearing, the grievant and his attorney or other representative shall be allowed access to, and copies of all relevant documents intended by the Authority to be used in the hearing. At least five (5) days prior to the hearing, the grievant and the Authority shall exchange lists of witnesses and exhibits to be called or introduced at the proceeding.

15. Conduct of Grievance Panel Hearing

The Panel is constituted solely for the purpose of determining whether a grievance filed by an employee is substantiated and what remedy, if any, should be provided. The Panel may not formulate or change Authority policy, rules or procedures. The Panel shall determine whether the grievant has demonstrated, by a preponderance of the evidence, that the action complained of was without cause, or done in violation of a law, rule, regulation or other policy. The Panel shall not otherwise substitute its judgment for that of management.

The Panel shall conduct the hearing as follows:

- a. At the request of either party, the hearing shall be private and limited to the grievant, the Panel members, the legal counsel or other representative of the grievant and the Authority, appropriate witnesses as they testify, and any court reporters or other official recorders of the hearing. At the request of either party, witnesses shall be separated from the hearing room and allowed to be present only during the time that they actually testify.
- b. The Panel shall consider the grievance without regard to any proposed disposition (including offers of settlement) by any lower authority, unless the grievant and the Executive Director shall agree in writing that the issue(s) shall be so limited. In all other cases, the Panel shall consider the matter as if presented to it in the first instance.

The Panel may at any time ask the parties or their representatives for statements clarifying the issues involved in the grievance.

Exhibits, when offered by the grievant or the Authority, may be received as evidence by the Panel, and when so received shall be marked and made a part of the record.

Both parties shall have the right to make opening statements, starting with the grievant. After opening statements, the order of the hearing shall be as follows: the grievant shall proceed first and shall bear the ultimate burden of persuasion. At the conclusion of the grievant's evidence, the Authority shall have the opportunity to present its evidence. At the conclusion of the Authority's presentation, the Chairperson shall specifically inquire of all parties whether they have any further evidence to offer or witnesses to be heard. Upon receiving a negative response, the Chairperson shall permit the parties to summarize their cases (beginning with the grievant) and shall then declare the hearing closed.

Both parties have the right to offer evidence, cross-examine witnesses, and shall produce such additional evidence as the Panel deems necessary for understanding and ruling upon the dispute. There shall be no formal rules of evidence at the hearing; however, the Panel shall have the right

to determine the relevancy of any evidence offered. All evidence shall be taken in the presence of the Panel and the parties, except by mutual consent of the parties.

The hearing may be reopened by the Panel on its own motion or upon application of either party for good cause shown at any time before a final decision is made.

Upon the request of the Panel, the Authority or the grievant, the Human Resources Manager shall insure that a verbatim record of the hearing is made and retained in ~~their~~^{his/her} custody for not less than 12 months. The record may be in writing or by a taped recording. The party requesting the record shall bear the costs of preparation and transcription, including any costs associated with attendance of a court reporter. If both the grievant and the Authority request such a record, they shall share equally in all costs incurred.

The Human Resources Manager or ~~their~~^{his/her} designee may be called upon by the Panel or either party as a witness at any time to provide specific policy interpretation or clarification of applicable Authority policy and these procedures.

In any matters not covered by this section, the Panel shall determine the applicable procedures to be followed.

16. Decision of Grievance Panel Hearing

The decision of the Panel shall be filed in writing by the Chairperson with the Executive Director and the grievant no later than thirty (30) days after the completion of the hearing. The decision shall summarize the grievance and the evidence, shall make specific findings of fact, and shall state in full the reasons for the decision, and the remedy (if any) to be granted. Decisions shall be made by majority vote of the entire Panel. The decision of the Panel shall be final and binding and shall be consistent with law and written policy.

The question of whether the relief granted by the Panel is consistent with written policy shall be determined by the Executive Director, or ~~their~~^{his} designee, unless such person has a direct personal involvement with the event or events giving rise to the grievance, in which case the decision shall be made by the Commonwealth's Attorney of Albemarle County. The Executive Director or Commonwealth's Attorney shall request the Panel to reconsider any decision which in ~~their~~^{his} judgment is inconsistent with the laws or written policy applicable to grievance resolution. ~~They~~^{He} shall not disturb any decision consistent with the laws or written policy.

If the Panel determines that the grievant prevails on any grievable complaint or dispute, it may remedy that complaint or dispute by ordering that the grievant be reinstated to a former position; awarding back pay; or ordering expungement of information contained in the grievant's personnel file(s) maintained by the Authority Human Resources Department or individual department; or rendering opinions specifying the application or interpretation of Authority personnel policies and procedures as they may relate to the specific facts of the grievance. The grievant shall not, however, be entitled to any relief that ~~they have~~^{he has} not specifically requested in the original written grievance form, unless the parties have mutually agreed otherwise as to alternative relief.

If, in response to a grievable complaint or dispute, the Panel finds that a divisional director or other Authority official failed to follow established procedures governing promotion, demotion, transfer,

hiring or layoff, the Panel shall remand the grievance back to the divisional director or official with instructions that the actions taken be rescinded, and proper procedures be followed for the matter at issue. In connection with such remand, the Panel may make appropriate provisional orders concerning the case.

17. Implementation of Grievance Panel Decision

The Executive Director shall implement any remedy that may be ordered by the Panel, provided that such remedy is consistent with applicable law and Authority personnel policies. If the Executive Director determines that the Panel decision is not consistent with applicable law or Authority personnel policies, the following steps shall be taken:

- a. The Executive Director shall inform the Panel and the grievant of ~~htheiris~~ determination within ten (10) days of ~~theirhis~~ receipt of the Panel's written decision; and,
- b. The Executive Director shall not implement the decision of the Panel.

Either party may petition the Albemarle County Circuit Court for an order requiring implementation of the Panel decision. The review of the Circuit Court shall be limited to the question of whether the panel's decision is consistent with provisions of law and written policy.

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I. Administrative Policies

1. Conflict of Interest/Accepting Gifts

All employees are expected to make business decisions that are in the best interest of the Authority and the customers it serves. Employees are prohibited from engaging in any private business or professional activity, or having a financial interest in such activity, which would be or appear to be in conflict with their public responsibilities. Any employees having official responsibility for procurement transactions will conduct themselves in a manner that avoids the appearance of impropriety or unlawful conflicts of interest.

An employee cannot accept money, loans, trips, gifts, gift cards, reward cards, favor, service, business or professional opportunity of any value that might influence them in the performance of their official duties, or when it is known there is a reasonable likelihood that the item is being offered to influence an Authority employee in the performance of their duties. Employees are responsible for avoiding any impropriety or the appearance of impropriety. If there is a question as to what is permissible, the final decision will be made by the Executive Director.

~~2. Service Awards~~

~~This is a program that recognizes employees' years of work service. Awards are presented for service in five year increments. All awards are presented annually in a mass setting.~~

~~Gift cards or cash are fully taxable under IRS regulations; all appropriate federal, state and other taxes will be withheld from the employee's next payroll.~~

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~~3.2.~~ De Minimis Fringe Benefits

De minimis fringe benefits are defined by the Internal Revenue Service as any property or service given to an employee by the employer which, after taking into account the frequency provided, whose value is so small as to make accounting for it unreasonable or administratively impracticable. Any benefit, with the exception of cash or gift cards, with a value of under \$25 will be considered as a de minimis fringe benefit by the Authority and will not be subject to taxation. In accordance with Internal Revenue Service regulations, any cash or gift cards given to employees as awards or benefits will be subject to taxation.

~~4.3.~~ Termination of Employment

Any employee who voluntarily terminates their employment with the Authority is expected to give ~~two-week~~^{two weeks} notice to their department manager. All Authority property, to include phones, uniforms and any other equipment supplied to the employee by the Authority, is to be returned prior to any employee's last day of employment. If the employee fails to return any Authority property, they will be expected to reimburse the Authority for the cost of the property through a payroll deduction from their last paycheck.

5.4. Voluntary Early Retirement Incentive Program (VERIP)

a. Eligibility

Participants in the VERIP must be regular full-time employees eligible for benefits and meet the following requirements:

- 1) Be eligible for early or full retirement under the provisions of the Virginia Retirement System (VRS). Part-time employees must meet the same criteria as if covered under VRS.
- 2) Have been employed by the Authority for 10 of the last 13 years prior to retirement and meet the VRS requirements.
- 3) Employees retiring under the disability provisions of VRS and/or Social Security shall not be eligible for the VERIP.

b. Benefits

VERIP benefits shall be paid monthly for a period of five years after retirement or until age 65, whichever comes first.

Benefits under VERIP will be calculated as follows:

- 1) Compute the annual VRS benefit. This computation shall include any reductions for early VRS retirement if appropriate;
- 2) Recompute the annual VRS benefit with the addition of five more years of service, or the number of additional years needed to reach age 65, whichever is the lesser;
- 3) The difference between these two calculations shall be the annual VERIP benefit to be paid on a monthly basis.

The Board will pay the employee the amount of the Board's contribution toward an individual employee's health insurance as long as the employee is covered by VERIP benefits. The benefit will be paid to the retiree on a monthly basis.

If, at any point during their VERIP period, the Authorities receive a billing notice from the Virginia Employment Commission for unemployment benefits, those will be deducted from the employee's monthly VERIP payment.

If the retiree returns to work in a part-time position with the Authority and chooses to participate in the Authority's health care program while receiving VERIP benefits, there will be no additional Board contribution towards the individual's health insurance.

c. Application

Applications for VERIP must be made to the Executive Director prior to December 1st of the year preceding the fiscal year the VERIP takes effect. Applications received after December 1 may be approved based on the needs of the Authority.

d. VERIP Contract

Any employee retiring under the VERIP program must read and sign a VERIP Contract. The contract is administered by the Human Resources Manager, and it reviews all of the provisions and rules of the VERIP program, as well as information specific to the employee.

e. Administration

Administration of the VERIP policy is delegated by the Board of Directors to the Executive Director.

f. Duration

Once an employee has been approved for VERIP, the benefits will continue without interruption as outlined in this policy. Subsequent ~~alternations~~alterations or deletion of this policy shall not affect the benefits of those who have retired under these provisions.

This policy automatically continues unless the Board acts to discontinue the policy for another year.

6-5. Anti-Nepotism Policy

No administrator or any other person in a department manager position shall have under his or her direct supervision any employee whose relationship is that of ~~father, mother, parents, brother, sister, sibling~~ spouse, ~~child, son, daughter, child son-in-law or daughter-in-law, aunt, uncle, parents' sibling~~, or same relative of spouse and any other relatives or individuals residing with the employee. In the event of a promotion which brings about the conditions thus described, the employee of lower rank shall be transferred to another position for which ~~he or she is~~they are qualified when and if such a vacancy occurs.

7-6. Personal Use of Authority Vehicles

Personal use of Authority vehicles is not permitted. Employees who use vehicles for personal errands or chores not incidental to work assignments are subject to disciplinary action.

8-7. Effect of Criminal Conviction or Arrest

It is the policy of the Board not to employ or to continue the employment of personnel who may be deemed unsuited for service by reason of arrest and/or criminal conviction.

Any employee who is arrested for a criminal violation of any kind, whether misdemeanor or felony, is required to report such arrest promptly to their department manager or divisional director within one (1) business day unless mitigating circumstances exist. This reporting requirement applies regardless of whether such arrest has occurred on-duty or off-duty. Failure to comply with this reporting requirement shall be grounds for disciplinary action, up to and including dismissal. In addition, all employees shall have the continuing duty to notify the Authority of any arrest or criminal conviction that occurs subsequent to being hired by the Authority.

Department managers or divisional directors shall contact the Executive Director or designee upon receiving notification that an employee has been arrested. The Authority reserves the right to determine appropriate disciplinary action in such cases, up to and including dismissal, depending upon the facts and circumstances surrounding the arrest.

9.8. Fitness for Duty

All job descriptions will clearly state the minimum physical and emotional health requirements of the particular job. Employees are responsible for familiarizing themselves with these requirements. If there is a question about an employee's fitness for duty, the employee will be required to complete a fitness for duty examination at the expense of the Authority.

Results of the fitness for duty examination will be shared with the employee. If the fitness for duty examination indicates that the employee requires some treatment prior to resuming their employment responsibilities, the employee is responsible for obtaining treatment sufficient to qualify as again fit for duty before returning to work. The employee may use leave authorized by this policy during the period of absence to the extent leave is available. If the Authority physician or the EAP counselor indicates that the employee is not fit for duty on a permanent basis, the employee may also have benefits such as retirement disability.

If the fitness for duty examination indicates that the employee could perform their responsibilities with some reasonable accommodation to the job, the Executive Director will determine whether or not such modifications to the job can be made.

When employees return to work after hospitalization or prolonged absence for health reasons, a doctor's release to return to duty is required. Should circumstances dictate, the Executive Director may require that the employee be examined by the Authority physician prior to allowing the employee to return to duty.

10.9. ID Badges

As a vital part of the Authority's security system, an identification badge with the employee's name, photo and department will be issued to employees on their first day of employment. All employees are required to carry an ID badge during their shift or while conducting any Authority business on or off premises. All employees are required to produce said ID badge when requested.

If an identification badge is lost or stolen, the employee must report the loss to their supervisor immediately and obtain a replacement. A fee of \$5.00 will be assessed for all replacement badges. Lost or stolen cards should be reported to the department manager as soon as possible. Failure to be able to display or produce your ID badge when requested or excessive loss or damage to cards can lead to disciplinary action.

Upon termination, employees will be required to return ID badges to the Human Resources Department.

11.10. Dress Code/Personal Hygiene

All employees are expected to dress neat and professionally based on the needs of their position.

- a. Uniforms are provided to certain departments. Employees in those departments are expected to wear their uniforms. Uniforms are to be returned to the Authority upon termination of employment.
- b. Any Personal Protective Equipment required in a certain location or work environment must be worn.

12.11. Social Media Policy

The primary online presence for the Authority will be the Authority's website. If it is deemed necessary to establish an additional online presence via social media, the Director of Administration & Communications~~Communications Manager~~ will be responsible for maintaining that presence. This policy will be further amended at that time.

13.12. Smoking/Vaping

Smoking and vaping are not permitted in any Authority building or vehicle. Additionally, employees are not permitted to smoke or vape at building entrances. Smoking and vaping will be permitted in designated areas and employees are expected to dispose of cigarette butts in the appropriate receptacles.

14.13. Transferring Between Authority

Employees may apply for open positions in the other Authority. If an employee transfers to the other Authority, they will maintain their years of service with the Authority. At the time of transfer, all annual and sick leave balances will be transferred to that Authority with no loss of accrued time. The employee will continue to accrue leave time based on their combined years of service.

15.14. Essential Employees

Employees who are designated as required to work when the main office is closed due to weather or other emergencies are considered essential. Essential employees generally must work to maintain ongoing and safe operations and basic public services, such as Water Operators, Wastewater Operators, Chemists and Mechanics. Occasionally, employees who are not normally considered essential may be required to work if the circumstances require it. This determination will be made by the Executive Director and/or the employee's Manager or Divisional Director.

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J. Employee Training, Development and Educational Assistance Program

1. Policy

The Authority promotes professional excellence and encourages employees to achieve their highest potential through education, training, and mentoring. The Authority encourages employees to use developmental opportunities to enhance their career progression, develop fully in their current position, and/or prepare for and become eligible to seek promotional opportunities within the organization. Training and education are separated into three categories: Essential Training, Advanced Development Training and Degree Programs.

2. Definitions

Advanced Development Training: Voluntary training and education that will assist the employee in their pursuit ~~towards~~^{of} an advanced skill or licensing level.

Degree Program: Training and education that will result in credit or credit hours towards a college degree.

Essential Training: All training that is determined by the employee's department manager or divisional director to be necessary to perform duties of the employee's current position.

Financial Assistance: Financial assistance offered and paid for by the Authority, available to an employee participating in approved Advanced Development Training and Degree Programs.

Work Schedule: An employee's assigned hours to work as required by their position.

3. Employee Eligibility

Employees who have been employed for six months or less, are eligible to apply for Essential Training but are not eligible to participate in Advanced Development Training or Degree Programs. Employees who have been employed for more than six months are eligible to apply for Essential Training, Advanced Development Training and Degree Programs.

4. Essential Training

- a. All training and education that is determined by the department manager and/or the divisional director as necessary to perform the duties of the employee's current position to include:
 - 1) Training and education necessary to maintain and/or improve the employee's knowledge, skills and ability to perform the required job tasks;
 - 2) Training and education mandated by law; and
 - 3) Training and education necessary to keep up with technological or process changes.
- b. Types of Essential Training includes:
 - 1) Authority sponsored in-house training;
 - 2) Off-site training;

- 3) Seminars or conferences; and
- 4) Webinars.
- c. Textbooks or study materials purchased for Essential Training may be:
 - 1) Prepaid and purchased by the Authority; or
 - 2) Prepaid and purchased by the employee, who will then be reimbursed by the Authority.
- d. Registration or Enrollment Fees will be:
 - 1) Paid for in advance by the Authority if possible; or
 - 2) Paid for by the employee and be reimbursed.
- e. Expense Reimbursement

Expenses paid by the employee related to the approved Essential Training are reimbursable. Request for reimbursement must be submitted to the Authority within 60 days after the expenses ~~were~~have been incurred. Request for reimbursement must be clear, concise, itemized and include original receipts.

5. Advanced Development Training

- a. All training and education that will assist the employee in their pursuit towards an advanced skill or licensing level as well as enhancing the employee's contribution to the Authority.
- b. Types of Advanced Development Training includes but is not limited to:
 - 1) Authority pre-approved training and education programs for operator correspondence courses (Sacramento); and
 - 2) Authority pre-approved mechanic training programs.
- c. Textbooks and/or study materials purchased for Advanced Development Training may be:
 - 1) Prepaid and purchased by the Authority; or
 - 2) Prepaid and purchased by the employee.
- d. Registration or Enrollment Fees will be:
 - 1) Paid for in advance by the Authority if possible; or
 - 2) Paid for by the employee and to be reimbursed.
- e. Expense Reimbursement

Expenses paid by the employee related to the approved Advanced Development Training are reimbursable. Request for reimbursement must be submitted to the Authority within 60 days after the expenses ~~were~~have been incurred. Request for reimbursement must be clear, concise, itemized and include original receipts.

6. Degree Program

- a. All training and education that will result in the earning of credit or credit hours towards a college degree and will enhance the employee's contribution to the Authority.

- 1) A Degree Program is not required to maintain the employee's current position.
 - 2) A Degree Program must be directly related to the employee's current position.

- b. Registration, enrollment, tuition, textbooks and study materials must be paid for by the employee.

- c. Financial Assistance & Reimbursement Requirements

The Authority offers financial assistance to those employees participating in an approved Degree Program. Through the financial assistance program, employees may request reimbursement for expenses related to an approved Degree Program to include registration/enrollment/tuition fees, textbooks, study materials or other degree related expenses.

- 1) All reimbursements are conditional upon the approval of the Authority's annual budget.
 - 2) The Authority will reimburse up to a maximum of \$5,250 per calendar year (January 1 through December 31) for eligible educational expenses paid for by the employee.
 - 3) Reimbursements that exceed the maximum of \$5,250 per calendar year will be held and reimbursed in upcoming calendar years until all expenses have been reimbursed.

- d. Employee Requirements for Education Reimbursement

- 1) The employee's Degree Program and request for financial assistance must be pre-approved by the employee's department manager and divisional director;
 - 2) The employee must complete all course requirements within the prescribed timeframe;
 - 3) The employee must receive a passing grade of a C or higher for all undergraduate or business courses;
 - 4) The employee must receive a passing grade of a B or higher for all graduate college courses;
 - 5) The employee must submit an official grade transcript within 60 days of course completion;
 - 6) The employee must remain employed by the Authority; and
 - 7) In the event of voluntarily separation of employment the employee shall be required to repay all received reimbursed expenses from the prior 12-month period.

e. Tax Liability for Tuition Reimbursements

In some circumstances, education aid or reimbursement may be considered taxable income under the IRS regulations. Generally, educational assistance for job-related courses is not counted as taxable income. If an employee receives more than the annual IRS maximum allowable amount for educational assistance, the amount exceeding the IRS maximum will be subject to payroll taxes.

7. Pre-Approval

All employee requests for training, regardless of type, must be pre-approved by the employee's department manager or divisional director before registration.

8. Work Schedule Adjustment

Provided it is in the best interest of both the employee and the Authority, an adjusted work schedule may be approved if the Essential Training or Advanced Development Training is not allowed to be conducted during the normal work schedule hours. All requests will be approved on a ~~case-by-case~~ case-by-case basis and must occur before training registration. Adjusted work schedules will not be granted for Degree Programs.

9. Authority Responsibilities

- a. Provide for the training and education necessary for employees to obtain or renew required certificates and licenses necessary for the position.
- b. Provide for the training and education necessary to keep up with changing work requirements.
- c. Provide for the training and education which is mandated by law.
- d. Provide timely payment and/or reimbursement upon receipt of all required expense reimbursement requests and transcripts if applicable.
- e. Register employees for training and education provided employee gives ample time to process. See employee's responsibilities below.

10. Employee Responsibilities

- a. Must submit a completed training request form to the department manager in enough time to process request.
- b. Complete all registration forms and if necessary, register in person at the training site.
- c. Complete all the required applications related to examinations.
- d. Employees seeking assistance from the Administration Office with registration, fees, travel and/or lodging arrangements must be made 30 days prior to travel and/or registration date.
- e. Must provide proof of successful completion.

- f. Expense Reimbursement Requests for reimbursement must be submitted to the Authority within 60 days after the expenses were incurred. Reimbursement requests must be clear, concise, itemized and include original receipts.

11. Human Resources Responsibilities

The Human Resources Manager or designee will maintain records of training, education and related requirements.

12. Department Manager Responsibilities

- a. The department manager will promptly review all employee requests for training and consistently apply the rules relating to this policy.
- b. The department manager will monitor the employee's progress.
- c. The department manager will develop an annual training and education needs assessment and request funds need in the department budget.

13. Divisional Director Responsibilities

The divisional director will ensure the rules of this policy are consistently applied.

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K. Travel Policy

1. Policy

This policy establishes guidelines for the approval and reimbursement of travel related expenses. The Authority will reimburse employees traveling on official Authority business for reasonable and necessary expenses incurred. It is the policy of the Authority to limit travel costs to expenses that are necessary for providing essential services to its customers. The use of Authority funds to accommodate personal comfort and convenience is not permitted. Travelers and travel planners must seek ways to reduce the cost of travel.

2. Travel Reimbursement Requirements

a. Travel Request

All travel outside of the Authority's service area (Charlottesville or Albemarle County) requiring reimbursable travel expenses must be approved in advance by the employee's department manager or divisional director. The employee traveling must complete a Travel Request Form. (Please note – if travel expenses are related to properly approved training, education or conference attendance, then the appropriate form for that approval will suffice for approval of related travel request. This is for the form approval only and all policies herein apply.) Each Travel Request Form should detail anticipated or estimated expenses for the trip. The USGSA can be used to estimate travel costs.

The Authority has a policy of reimbursement for reasonable costs actually incurred to exempt such payments to employees from federal and state taxation. When an employee is seeking reimbursement of expenses incurred during a trip, they should complete an Expense Reimbursement Form, and have it approved by their department manager. An approved Travel Request Form should be attached to all Expense Reimbursement Forms that include overnight trips.

b. Reservations

Whenever possible, travel reservations should be made in advance through the Administration department. This would include airline tickets, hotel reservations, conference fees and any other travel cost that can be paid in advance.

Itemized receipts must be provided for all reimbursed travel. Any travel costs submitted without an itemized receipt will not be reimbursed, to include meals. An Expense Reimbursement Form should be completed with all receipts attached.

c. Expense Submittal

- 1) An Expense Reimbursement Form must be submitted to an employee's department manager within 14 days of the completion of the trip. The following expenses are reimbursable for overnight stays:

- a) Mileage
 - b) Transportation (airfare, rail, bus, rental car, taxi)
 - c) Tolls and Parking
 - d) Lodging
 - e) Meals
 - f) Registration Fees (conferences)
- 2) The following expenses are not reimbursable:
- a) Lost or stolen property
 - b) Alcoholic beverages
 - c) Damages to personal items
 - d) Movies charged to hotel bill
 - e) All expenses related to personal negligence such as fines
 - f) Entertainment expenses
 - g) Towing charges
 - h) Expenses for children, spouses or other companions while traveling
 - i) Travel insurance

This list is not all inclusive and traveler should use prudent judgement regarding travel expenses. Department managers have a responsibility to question any costs that seem to be unreasonable and deny any costs that are unreasonable or undocumented.

3. Authority Vehicles

Employees are encouraged to use Authority vehicles for business travel whenever possible. Vehicles can be reserved in advanced and can be used for overnight travel. All Authority vehicles must be signed out by the employee who is driving the vehicle. Authority vehicles must be returned immediately when the employee returns from a trip.

Employees who have take-home Authority vehicles should use those vehicles for all business travel.

Authority vehicles should not be used for any personal travel unless approved by the Executive Director or the Divisional Director.

4. Mileage

When traveling outside the service area, employees are permitted to use their personally owned vehicle when an Authority owned vehicle is not available, or when the use of a personally owned vehicle is cost-beneficial to the Authority. Employees electing to use their personal vehicle as a matter of convenience will not be reimbursed for mileage unless approved by their department manager.

Mileage will be reimbursed (when traveling outside of the service area) at the current same rate as the Federal IRS published rate for business travel deduction.

Round trip mileage for reimbursement purposes will be total miles traveled to and from the destination from the employee's home or Administration Office location, whichever is shorter. (i.e. any normal commuting costs are not reimbursable.)

5. Transportation

a. Air Travel

- 1) Any air travel booked should be at economy airfare unless approved by the Executive Director or if the difference between the airfare purchased and economy airfare is paid for by the employee.
- 2) All flight reservations must be made by the Administration department.
- 3) Any baggage fees incurred will be reimbursed for a checked bag. Any baggage fees that are incurred due to a bag being over the air carriers weight limits or multiple bags checked must have a legitimate business reason or they will not be reimbursed.
- 4) Any change fees incurred due to flight changes made by the employee must have a legitimate business reason or they will not be reimbursed.

b. Other Transportation

Other forms of transportation can be used for business travel is permissible if the reduction in cost is beneficial to the Authority.

c. Rental Cars

- 1) Employees traveling to attend conferences should book the hotel where the conference is being held or a hotel within walking distance whenever possible.
- 2) All rental car reservations will be made through the Administration department.
- 3) Any fees, other than basic car rental expenses will not be reimbursed.

6. Lodging

- a. Reimbursement for lodging will include hotel nightly rate and any hotel taxes, fees or surcharges. Any other charges will not be reimbursed unless approved by the employee's department manager and/or divisional director. An itemized hotel bill must be provided.
- b. If travel plans change and a hotel reservation needs to be cancelled, it is the responsibility of the employee to notify either the Administration department so that the reservation can be cancelled or to cancel it themselves so as to not incur a cancellation charge.

7. Meals and Incidentals

- a. The employee must provide itemized receipts in order to be reimbursed for meals and incidentals.
- b. Employees will be reimbursed for tips up to 15% on meals.

- c. Any meal or incidental expenses deemed excessive will not be reimbursed. The Authority will use the U.S. GSA per diem as a guideline when appropriate.

8. Compensation While Traveling, Overnight Travel

- a. Overnight travel is travel away from home community, as defined by the FLSA and the Code of Virginia.
- b. An employee will be compensated for travel away from home when it clearly cuts across the employee's normal workday or the hours that correspond to an employee's normal work hours on nonworking days.
- c. An employee will be compensated for any hours spent in a class or training that was mandated by a department manager or divisional director.
- d. An employee will be compensated for time spent driving other employees to a location in an Authority vehicle if the employee was directed to do so by a department manager or divisional director.
- e. If an employee is offered transportation (air, rail, etc.) for travel away from home and chooses to use his/her own vehicle, either the time spent driving their own vehicle or the time it would have taken to use the offered transportation will be compensated if the time clearly cuts across the employee's normal workday.

9. Travel Advances

Cash advance for travel should be avoided; however, occasionally there is a need for an employee to estimate the costs of travel and obtain a cash advance. Once a cash advance has been approved (request must be made 30 days in advance of need) the employee is responsible for handing in all receipts to document the costs incurred like any other travel event. If the cash advance was more than the documented receipts, the employee will be required to pay the difference to the Authority. If, however, there were more costs (documented by receipts turned in) than the cash advance, the Authority will pay the employee the difference.

Then all the rules for submitting the documentation of costs will apply per 4 above. Any excess the employee will have to reimburse the Authority any shortage the Authority will pay the employee.

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L. Substance Abuse Policy

1. Policy

It is the policy of the Authority to ensure that its' workplaces are free of alcohol, illegal drugs and controlled substances by prohibiting the use, possession, purchase, distribution, or sale of these substances. Although the sale and use of alcohol by an adult is legal, the possession, use, or distribution of alcohol in the workplace or in any Authority vehicle is strictly prohibited.

This policy is applicable while employees are engaged in any work-related activity which includes performance of Authority business or any services for or by the Authority.

The use or distribution of alcohol; reporting to work under the influence of alcohol, or having alcohol in the body system at work, whether the alcohol was consumed at work or away from work, are all prohibited in the workplace. The Authority prohibits the use of alcohol while assigned to "on call" duty.

The unlawful possession, use, manufacture, or distribution of a controlled substance or illegal drug; the reporting to work under the influence of a controlled substance or illegal drug; having an illegal drug in the body system; or possession of drug paraphernalia are all prohibited in the workplace.

All Authority employees must report the use of any prescribed controlled substance or prescribed drug which may affect their ability to perform any aspect of their job to their Supervisor.

All Authority employees must notify their supervisor of any arrests, charges and/or convictions for criminal drug statute violations or of any alcohol beverage control law or law that governs driving while intoxicated.

When reasonable suspicion exists that any employee has reported to work under the influence of alcohol, illegal drugs, or is impaired due to the abuse or misuse of controlled substances or prescribed medications, the employee may be subject to assessment, testing, and disciplinary action or termination of employment.

This policy establishes clear and uniform guidelines in accordance with federal and state regulations for the Commonwealth of Virginia regarding alcohol, drugs, or controlled substances, including the provisions of the Drug-Free Workplace Act of 1988.

- Further, the purpose of this policy is to make every effort to provide and maintain a drug and alcohol-free workplace. The policy shall cover all Authority employees.
- The policy is to establish an Anti-Drug/Alcohol Misuse Policy that complies with the Department of Transportation's (DOT) 49 CFR parts 382 and 40, which mandates that employers provide Drug and Alcohol testing for drivers who are required to hold commercial driver's licenses (CDL), for the use of alcohol and controlled substances. Part 40 outlines the manner in which and by whom these tests are conducted.

The policy's goal is to comply with the Drug Free Workplace statute to eliminate the presence and/or use of alcohol, controlled substances and illegal drugs in the workplace.

- The intent of this policy is to ensure that all Authority workplaces and sites are safe, productive and secure for employees and the public we serve.
- This policy prohibits the use of alcohol and/or illegal drugs in the workplace as such use may affect an employee's job performance; bring discredit upon the reputation of the Rivanna Authorities as the employer, threaten the safety of fellow employees, the general public, and expose the Rivanna Authorities to any liability.

The Authority shall:

- Maintain a copy of the Drug Use/Alcohol Abuse policy in an accessible location.
- Enforce the policy and take appropriate action against individuals who are convicted or violate the policy as soon as possible from the date of the conviction or violation.
- Promptly deal with any possession, consumption, and /or distribution of alcohol, an illegal drug or controlled substance in the workplace, in accordance with legal and administrative disciplinary procedures as outlined in the Personnel Management Plan. Managers should contact their Division Director or Human Resource Manager for guidance and/or access to the Substance Abuse Policy located in the Personnel Management Plan. However, in emergency situations supervisors should first ensure the safety of others and then, if necessary, contact 911 should the situation warrant such.

2. Definitions

Alcoholic Liquors/Alcohol: These include alcohol, beer, wine, and any liquid or solid containing alcohol and capable of being consumed.

Arrest/Charges: To be taken into custody or to be formally accused by law enforcement due to a violation of criminal statute.

Commercial Driver's License: Some maintenance and solid waste personnel are required to obtain and maintain a Class-A Commercial Driver's License as part of their job. Employees that have a Class-A License have a lower Breath Alcohol Concentration (BAC) limit of less than (0.04) while a non-CDL holder may have a (BAC) level of less than (0.08).

Controlled Substance: A federally regulated substance listed Schedules I through V of Section 202 of the Controlled Substance Act (21 U.S.C.812) and Virginia Code (2.2) that when taken into the body, may impair one's mental faculties and /or physical performance.

Conviction: A finding of guilt, (including a plea of no contest) or the imposition of a sentence or both, by any judicial body charged with the responsibility to determine violations of the federal or state criminal drug statutes.

Criminal Drug Statute: A criminal statute involving the manufacture, distribution, dispensation, use, or possession of any controlled substance.

Employee: Any person who works full-time or part-time, or temporary staff who are directly engaged in the performance of work for the Authority.

Legal Drug: Legal drugs include medications prescribed by a physician (to include controlled substances), and over the counter medications which have been legally obtained and are being used solely for the purpose for which they were prescribed by a physician or manufactured.

Illegal Drug: Any drug which is not legally obtainable or is being used in a manner or for a purpose other than as prescribed. Illegal drugs include those controlled substances under federal law or State Law (Virginia) which are not authorized for sale, possession, use, and legal drugs which are obtained or distributed illegally.

Substance Abuse Professional (SAP): A licensed physician (medical doctor or doctor of osteopathy), or licensed or certified psychologist, social worker, employee assistance professional, or addiction counselor (certified by the National Association of Alcoholism and Drug Abuse Counselors Certification Commission), with knowledge of and clinical experience in the diagnosis and treatment of drug and alcohol related disorders.

Workplace: A worksite where service or work is conducted in the performance of an employee's employment. The workplace shall include jobsite, facilities, properties, buildings, offices, structures, automobiles, trucks, and any location that work is performed as a representative of the Authority.

3. Drug and Alcohol Testing Requirements

Employees whose position requires them to have a Class A Commercial Driver's License and who operate vehicles requiring a Commercial Driver's License shall be tested in accordance with federal requirements as provided by the Federal Motor Carrier Safety Administration. Other types of employee drug testing and reasons for employee drug and alcohol testing are outlined below. Employees who are not required to have a Class A Commercial Driver's License are not required to be randomly tested, however may be tested post-accident or due to reasonable suspicion. All newly hired employees are required to take a drug test prior to their first day of employment.

f. Types of Drug and Alcohol Testing

- 1) Random Testing – All ~~fulltime~~full-time and part time employees will be subject to unannounced drug and alcohol testing based on random selection by an outside contractor.
 - The percentage of employees tested from the CDL Pool will be determined by requirements from the Federal Motor Carrier Safety Administration and will be subject to changes based on these requirements.

- 2) Post-Accident – As soon as possible following an accident involving an Authority vehicle, the Authority shall test the employee driving the vehicle when any of the following apply:

- The accident involves a fatality.
- The accident involves bodily injury to any person who receives immediate medical treatment away from the accident scene.
- The employee receives (or is expected to receive) a citation under state of local law for a moving violation arising from the accident.
- One or more motor vehicles incur damage requiring the vehicle(s) to be towed away from the accident scene.

It is the employee's immediate supervisor's responsibility to ensure that the above provisions for post-accident testing are followed. The employee involved should submit to the test within two hours of the accident if able. Any employee who does not remain available for testing, unless they are receiving emergency medical care, shall be deemed as refusing to submit to testing. If the employee is receiving medical care at an emergency facility, every attempt should be made to get a test performed however, any effort to get a test should stop after 32 hours.

- 3) Pre-Employment – Any person who has been offered a position with the Authority must take and pass a drug test, at the Authority's expense, within 2 business days of receiving the job offer. If an applicant does not pass the drug test, their job offer will be rescinded immediately, and they will not be eligible for employment with the Authority for a period of three years.
- 4) Reasonable Suspicion – The Authority will test any employee when there is reasonable cause to believe that the employee is under the influence of drugs or alcohol during work hours or while on call. Only an employee's supervisor, department manager or divisional director can send an employee for reasonable suspicion testing. If an employee is sent for drug or alcohol testing due to reasonable suspicion, they must be driven to and from the testing facility by another employee. Any factors leading to testing based on reasonable suspicion must be documented in writing. In making a determination of reasonable suspicion, the following should be considered:
- Physical signs and symptoms that the employee is under the influence.
 - Evidence of alcohol or drug use, such as bottles, cans or drug paraphernalia.
 - Occurrence of a serious or potentially serious accident that may have been caused by flagrant violation of established safety, security or other policy/procedure.

- Adequately documented pattern of unsatisfactory work performance for which no apparent non-impairment related reason exists, or a change in an employee's prior pattern of work performance, especially where there is some evidence of alcohol or drug related impairment at the workplace.
- 5) Return to Duty – An employee who has engaged in prohibited conduct based on this policy must undergo a return to duty test with a negative result before returning to their job duties. If an employee refuses to submit to return to duty testing, they will not be permitted to return to work.
- 6) Follow-Up – Any employee who has engaged in prohibited conduct based on this policy will be subject to unannounced random follow up testing. The testing will be conducted while the employee is on duty. A minimum of six tests will be conducted in the twelve months following an employee's return to duty or more if directed by a substance abuse professional (SAP). The SAP can terminate the requirement for the follow-up testing in excess of the minimum at any time if it is determined that the testing is no longer necessary.

g. Testing Notification

The Medical Review Officer (MRO) will notify the employee of the results of random, reasonable suspicion, and post-accident drug/alcohol tests if the results are verified as positive, prior to notification of the employee's department head. The MRO will notify a job candidate of results from a pre-employment drug test that are verified to be positive before notifying the Authority.

Should the employee want the split sample retested as the result of a positive test, the employee needs to make arrangements with the Medical Review Officer's (MRO) staff for prepaying to have the test redone. The Authority will not be responsible for the expense of the retest.

h. Refusal to Test and Uncompleted Tests

Compliance with this drug/alcohol testing policy is a condition of employment. Refusal to take a required drug/alcohol test, failure of a drug/alcohol test, or attempting to adulterate a sample may result in the termination of employment by the Authority.

i. Recordkeeping

The Authority will maintain all records and documentation in the Administration Office and under the control of the Executive Director and the Human Resources Manager. Each record shall be kept private and confidential and stored in a secured location. With the exception of the testing laboratory, MRO, designated supervisor(s), Human Resources Manager, or upon request of the FMCSA or other federal or state agency officials as part of an accident investigation, the results of individual drug and alcohol tests will not be

released to anyone without the expressed written authorization of the individual tested. Drug and alcohol tests and/or rehabilitation records will only be released to subsequent employers upon written consent from the covered employee. Then only the specific information requested by the employer will be released.

j. Employee Assistance Program (EAP)

The Authority contracts with an Employee Assistance Program (EAP). EAP services are available to all employees. The EAP staff can provide employees with the appropriate education regarding the use of prohibited drugs.

4. Testing Standards

All testing procedures performed under this policy must be in compliance with United States Department of Transportation Drug and Alcohol Regulations, 49 CFR, Part 40, regardless of if the testing is administered to an employee in the CDL Pool or the Non-CDL Pool. This includes regulations regarding sample collection, testing laboratories, medical review officers and the verification process.

The Authority is required by the Federal Motor Carrier Safety Administration (FMCSA) to adhere to the minimum annual percentage rate for random controlled substance testing for drivers of commercial motor vehicles requiring a commercial driver's license as determined by the FMCSA. This rate is subject to change on an annual basis and effects the CDL Pool only.

All test results are considered confidential information and will not be released to third parties without the specific written consent of the employee.

a. Medical Review Officer (MRO)

The Medical Review Officer must meet the criteria in the US Department of Transportation's 49 CFR Parts 382 and 40.

b. Testing Laboratory

The testing laboratory for this policy must meet the criteria set in the US Department of Transportation's 49 CFR Part 382 and 40.

c. Specimen Collection Requirements

Specimen collection will be as required in the US Department of Transportation's 49 CFR Parts 382 and 40.

5. Disciplinary Actions

Once the Medical Review Officer (MRO) makes a determination that there is no legitimate medical explanation for a confirmed positive test result other than the unauthorized use of alcohol or a prohibited drug, the Authority will not knowingly allow such employee or person to work in any capacity. The employee shall be suspended or placed on unpaid leave immediately and referred to the Employee Assistance Program. The employee may return to work only after a Substance Abuse Professional (SAP) has determined the employee is fit for duty and has successfully

completed the prescribed drug rehabilitation program. The employee must also have a negative drug screening under return-to-duty testing.

An employee will be dismissed immediately if:

- a. The employee refuses to report to a substance abuse professional (SAP) for assessment and evaluation and/or referral for treatment with an Authority substance abuse professional.
- b. The employee is referred for rehabilitation by a substance abuse professional, and then refuses to enter or fails to successfully complete the rehabilitation program.
- c. The employee refuses to provide an adequate urine sample for drug testing without a valid medical explanation after receiving notice of the requirement to be tested, or who engages in conduct that clearly obstructs the testing procedure.
- d. The employee tests positive a second time during their employment with the Authority.
- e. The employee is in their probationary period.

Possession of illegal drugs on Authority property or in an Authority vehicle is considered unacceptable and will be considered grounds for termination of employment with the Authority.

6. Revision Dates

The policy was originally implemented January 1, 1996 and has been revised on the following effective dates:

November 25, 1996

September 24, 1999

July 25, 2005

April 2019

March 2021

July 2023

M. Attachments and Forms

- a. Rivanna Water & Sewer Authority Organizational Chart (*Section A*)
- b. Rivanna Solid Waste Authority Organizational Chart (*Section A*)
- c. Authority Pay Grade and Scale, Table 1 (*Section D*)
- d. Authority Pay Grade and Scale with Title, Table 2 (*Section D*)
- e. Sick Leave Bank Enrollment Form (*Section F*)
- f. Grievance Procedure Form Part A & Part B (*Section H*)
- g. Technology System Acceptable Use Policy (*Section I*)
- h. Employee Expense Reimbursement Form (*Section J*)
- i. Employee Training and Development Form (*Section J*)
- j. Employee Mileage Reimbursement Form (*Section K*)
- k. Employee Travel Request Form (*Section K*)
- l. Employee Drug and Alcohol Testing Pool Designation Letter (*Section L*)
- m. Employee Handbook



MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS

FROM: JENNIFER A. WHITAKER, DIRECTOR OF ENGINEERING AND
MAINTENANCE

REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: APPROVAL OF THE FY 2025-2029
CAPITAL IMPROVEMENT PLAN

DATE: MAY 28, 2024

We are pleased to present the proposed FY 2025 – 2029 Capital Improvement Plan (CIP) which includes 64 projects totaling \$371 M. This CIP was reviewed in detail with the Board during the February 2024 meeting, and will be briefly reviewed again today. We continue to strategically serve the needs of the community while meeting or exceeding regulatory requirement. This CIP funds completion of the community's Water Supply Plan by 2030, an upgrade of Crozet Raw Water infrastructure, as well as critical finished water transmission projects. Combined, these projects provide the reliability and resiliency needed to address the growing requirements of regulations, economic development and changing climate conditions. This CIP will strategically renew critical assets throughout our systems to ensure we meet the quantity, quality, and reliability expectations of the public drinking water and wastewater customers in our community.

During this five-year period, the CIP will strengthen our drinking water systems with essential projects including:

- ***Community Water Supply Plan Components*** - the South Fork Rivanna Reservoir to Ragged Mtn Reservoir Water Pipe and Pumping Project; the Ragged Mountain to Observatory Water Pipe and Pumping Project; Raising the Normal Pool at Ragged Mountain Reservoir and adding aeration and Oxygenation Systems to the reservoirs.
- ***Critical Finished Water Transmission projects*** – Completion of the Airport Road Pump Station; the Central Water Line; Additional Crossings of the South and North Fork Rivanna River, Crozet and Scottsville Pipe Replacement, Emmett Street and Berkmar Drive Ext Waterline Betterments, and Decommissioning of the North Rivanna WTP.
- ***Enhancements of our Abilities to Address Emerging Contaminants*** - Additional Granular Activated Carbon Water Filtering Facilities at the Crozet and Red Hill Water Treatment Plants
- ***Crozet Water Supply Projects*** - Modifications to the Beaver Creek Reservoir Dam, Construction of a New Pump Station, and Raw Water Piping

We will also complete significant improvements to our wastewater treatment and collection facilities to ensure regulatory compliance and environmental protection. The proposed CIP includes essential wastewater projects including:

- ***Renovations and Repairs to Wastewater Facilities*** - Moores Creek, Scottsville, Glenmore, Crozet Pump Stations, and the Albemarle Berkley Pump Station
- ***Repairs and Replacement of Wastewater Piping and Manholes*** - Crozet, Albemarle-Berkley, Powell Creek, Moores Creek, Upper Rivanna Interceptors; Upper Schenks Branch Phase 2
- ***Power System Upgrades*** – Scottsville WRRF Whole Plant Generator and Moores Creek AWRRF 5kV Electrical System

Board Action Requested:

Approve the FY 2025 – 2029 CIP totaling \$371 million.

Capital Improvement Plan

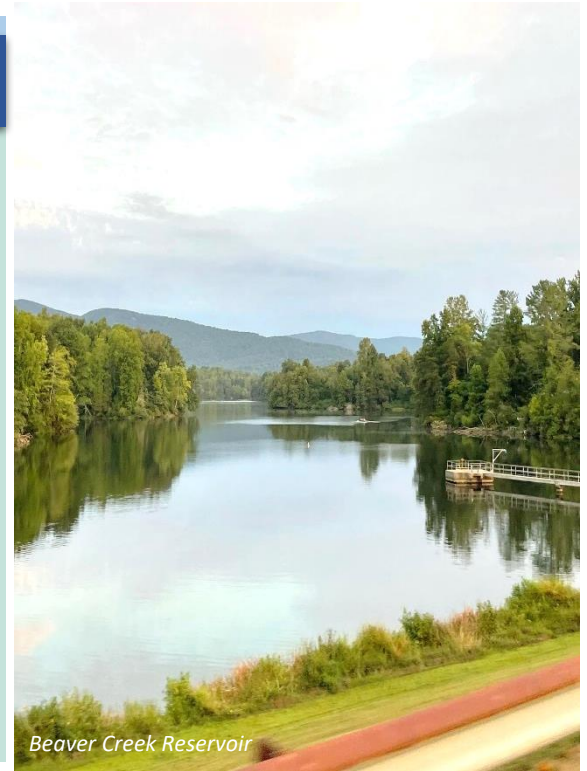
Fiscal Years 2025-2029

Adopted May 2024



OUR MISSION

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



Rivanna Water & Sewer Authority
695 Moores Creek Lane
Charlottesville, Virginia 22902



I.	INTRODUCTION	2
II.	FINANCIAL SUMMARY BY CATEGORY	6
III.	PROJECT DETAILS	8
	Completed Projects	9
	Urban Water	
	Community Water Supply Plan	13
	Urban Water Treatment Plants and Reservoirs	16
	Finished Water Storage/Transmission	20
	Non-Urban Water	
	Crozet Water System	24
	Scottsville Water System	28
	Urban Wastewater	
	Wastewater Interceptors/Pumping Stations	31
	Moores Creek Advanced Water Resource Recovery Facility	35
	Non-Urban Wastewater	
	Scottsville Wastewater System	41
	Glenmore Wastewater System	43
	All Systems	45
IV.	APPENDIXES	49
	CIP Financial Summary	50
	Water System Summary	57
	Wastewater System Summary	58
	All Systems Summary	59

Introduction

The Capital Improvement Plan (CIP) for Fiscal Years 2025-2029 has been prepared as a strategic and financially responsible plan for the Rivanna Water and Sewer Authority (RWSA) to complete major infrastructure construction projects. The projects included in the CIP are necessary to achieve the RWSA's core mission of providing safe, high-quality drinking water and environmentally responsible wastewater treatment services for the City of Charlottesville and the Albemarle County Service Authority (ACSA). The CIP is a 5-year planning document which provides an estimated budget and schedule for projects as they advance through the design and construction process.

The infrastructure requirements of the Capital Improvement Plan are developed through our Asset Management and Master Planning programs to address water and wastewater capacity demands, regulatory mandates and rehabilitation needs. Each year, these projects are reviewed and prioritized by the RWSA management team and brought forth for review by the Board of Directors.

During the past year, several capital projects were completed or are nearing the end of multi-year construction and as such are being removed from the 2025-2029 CIP. These projects account for approximately \$43.9 million or 13.5% of the FY 2024-2028 CIP. These projects include:

- 1 South Rivanna Reservoir to Ragged Mountain Reservoir Right-of-Way
- 7 Observatory Water Treatment Plant Improvements
- 18 South Rivanna Hydro Decommissioning
- 19 South Rivanna Water Treatment Plant Improvements
- 52 Asset Management
- 53 Security Enhancements
- 54 IT Infrastructure

The total 5-year 2025-2029 CIP is approximately \$371 million, with the previous expenditures on active projects totaling \$14.4 million, leaving a net proposed 5-year projected expenditure of \$356.6 million.

There are seven (7) new projects added to the CIP this year. The total estimated expenditures for the projects equal \$2.7 million and include:

- 6 South Rivanna Water Treatment Plants – Hypo Tank Replacements
- 13 Dam Concrete and Steel Repairs
- 15 Buck Mountain Property Dam Remediation
- 51 Moores Creek AWRRF Blower Building Ventilation Improvements
- 62 Radio Upgrades
- 63 IT Equipment Secure Cabinets
- 64 eV Charging Infrastructure

There were no projects with mid-year cost additions.

There were four (4) projects that rolled in to the 5-Year CIP totaling \$0.79 million:

- 11 South Rivanna Water Treatment Plant – Main Plant Generator Replacement
- 24 SCADA Panel Relocations
- 32 Crozet Ground Tank Painting
- 61 Climate Change Flood Resilience

There was one (1) project whose timeline was accelerated totaling \$13.62 million:

- 3 SFRR to RMR Pipeline, Intake & Facilities

There were thirty-nine (39) projects that were subject to inflation and scope progression resulting in a total proposed increase of \$25.1 million. Below are those projects showing the existing amount and the recommended total CIP amount:

- 1 Ragged Mountain Reservoir to Observatory WTP Raw Water Line (\$33 million existing / \$33.5 million proposed)
- 2 Ragged Mountain Reservoir to Observatory WTP Raw Water Pump Station (\$11.3 million existing / \$12.3 million proposed)
- 3 SFRR to RMR Pipeline, Intake & Facilities (\$39.6 existing / \$75.3 proposed)
- 4 SFRR Aeration & RMR HLOS Systems (\$1.4 million existing / \$6.6 million proposed)
- 7 Observatory WTP – Improvements (\$2 million existing / \$2 million proposed)
- 9 South Rivanna WTP – Improvements (\$1.9 million existing / \$1.9 million proposed)
- 10 Urban WTP's – GAC Building Dehumidification (\$0.2 million existing / \$2.2 proposed)
- 12 North Rivanna WTP – Decommissioning (\$2.7 million existing / \$2.9 million proposed)
- 16 Central Water Line (\$41 million existing / \$47 million proposed)
- 17 South Fork Rivanna River Crossing (\$6.9 million existing / \$7.3 million proposed)
- 19 Avon, Pantops and Observatory Tank Painting (\$2.2 million existing / \$10 million proposed)
- 21 Emmet Street Betterment (\$10.6 million existing / \$9.2 million proposed)
- 22 Berkmar Drive Ext. Waterline – Phase 2 (\$1.4 million existing / \$1.4 million proposed)
- 23 Urban Storage Evaluation and Tank(s) Addition (\$0.87 million existing / \$2.9 million proposed)
- 25 Beaver Creek Dam Alteration (\$22.7 million existing / \$23.7 million proposed)
- 26 Beaver Creek New Raw Water Pump Station & Intake (\$20.2 million existing / \$23.4 million proposed)
- 27 Buck's Elbow Tank and Waterball painting (\$1.1 million existing / \$1.7 million proposed)
- 28 Crozet WTP – GAC Building Dehumidification (\$0.05 million existing / \$0.65 million proposed)
- 31 Crozet Finished Water Greyrock Pump Station (\$0.18 million existing / \$1.5 million proposed)
- 34 Red Hill WTP – Upgrades & GAC Addition (\$0.74 million existing / \$0.8 million proposed)
- 35 Scottsville AC Pipe Replacement (\$0.08 million existing / \$0.275 million proposed)

- 36 Scottsville WTP – GAC Building Dehumidification (\$0.05 million existing / \$0.66 proposed)
- 37 Upper Schenks Branch Interceptor (\$5.3 million existing / \$5.9 million proposed)
- 39 Crozet Pump Station 1, 2, 3 Rehabilitation (\$10.3 million existing / \$10.9 million proposed)
- 40 Albemarle Berkeley Pump Station Upgrade (\$0.115 million existing / \$0.84 million proposed)
- 41 Interceptor Sewer and Manhole Repair – Phase 2 (\$1.2 million existing / \$1.4 million proposed)
- 42 Interceptor Sewer and Manhole Repair – Phase 2 (\$0.6 million existing / \$1.7 million proposed)
- 43 Moores Creek AWWRF Engineering and Administration Building (\$10.5 million existing / \$20 million proposed)
- 44 Moores Creek AWWRF Biogas Upgrades (\$3.6 million existing / \$5.6 million proposed)
- 45 Moores Creek AWWRF Building Upfits and Gravity Thickener Improvements (\$4.5 million existing / \$5.1 million proposed)
- 46 Moores Creek AWWRF Meter and Valve Replacements (\$0.775 million existing / \$0.475 million proposed)
- 47 Moores Creek AWWRF 5kV Electrical System Upgrade (\$5.6 million existing / \$6.2 million proposed)
- 48 Moores Creek AWWRF Yard Piping Upgrades (\$0.315 million existing / \$0.8 million proposed)
- 53 Scottsville WRRF Lagoon Outfall Rehabilitation (\$0.025 million existing / \$0.3 million proposed)
- 54 Scottsville WRRF Polymer Feed Addition (\$0.026 million existing / \$0.27 million proposed)
- 55 Glenmore WRRF Polymer Feed Addition (\$0.003 million existing / \$0.03 million proposed)
- 56 Glenmore WRRF Upgrade (\$0 million existing / \$1.3 million proposed)
- 59 IT Infrastructure (\$0.37 million existing / \$0.6 million proposed)
- 60 ACM Remediation (\$0.094 million existing / \$0.71 million proposed)

In summary, the FY 25-29 CIP is largely driven by an increase in project costs and accelerated projects. The impact of all cost factors can be seen in Table 1 below:

Table 1	
FY Line Item	Cost
24-28 Capital Improvement Plan	\$326,125,000
Mid-Year Additions	\$ 0
FY 29 Projects	\$ 47,391,000
Inflation and Scope Additions	\$ 25,082,750
New Projects	\$ 2,685,988
Accelerated Projects	\$ 13,620,000
Completed Projects	\$(43,904,302)
Total	\$371,000,436

FINANCIAL SUMMARY
MAJOR SYSTEM CATEGORIES

FINANCIAL SUMMARY

Major System Categories – Water

	Five-Year Capital Program			Projected Future Expenses by Year						
System Description	Current CIP	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Recommended CIP	Work-in-Progress
Urban Water (UW)										
Community Water Supply Plan	\$85,365,000	\$42,410,000	\$10,855,000	\$10,955,000	\$28,215,000	\$28,250,000	\$24,860,000	\$24,640,000	\$127,775,000	\$1,079,491
Urban Water Treatment Plants & Reservoirs	\$7,925,000	\$5,095,000	\$4,445,000	\$945,000	\$3,930,000	\$325,000	\$600,000	\$2,775,000	\$13,020,000	\$76,110
Finished Water Storage/Distribution	\$73,050,000	\$9,546,000	\$22,515,000	\$9,670,000	\$14,130,000	\$12,800,000	\$14,715,000	\$8,766,000	\$82,596,000	\$8,252,084
Subtotal (UW)	\$166,340,000	\$57,051,000	\$37,815,000	\$21,570,000	\$46,275,000	\$41,375,000	\$40,175,000	\$36,181,000	\$223,391,000	\$9,407,685
Non-Urban Water (NUW)										
Crozet Water System	\$51,310,000	\$7,490,000	\$9,575,000	\$85,000	\$14,865,000	\$14,185,000	\$16,895,000	\$3,195,000	\$58,800,000	\$1,578,889
Scottsville Water System	\$1,420,000	\$1,680,000	\$511,000	\$299,000	\$0	\$0	\$695,000	\$1,595,000	\$3,100,000	\$42,486
Subtotal (NUW)	\$52,730,000	\$9,170,000	\$10,086,000	\$384,000	\$14,865,000	\$14,185,000	\$17,590,000	\$4,790,000	\$61,900,000	\$1,621,375
WATER TOTAL	\$219,070,000	\$66,221,000	\$47,901,000	\$21,954,000	\$61,140,000	\$55,560,000	\$57,765,000	\$40,971,000	\$285,291,000	\$11,029,060

FINANCIAL SUMMARY

Major System Categories – Wastewater

	Five-Year Capital Program			Projected Future Expenses by Year						
System Description	Current CIP	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Recommended CIP	Work-in-Progress
Urban Wastewater (UWW)										
Wastewater Interceptors and Pumping Stations	\$17,945,000	\$4,865,000	\$6,840,000	\$2,180,000	\$6,530,000	\$2,675,000	\$1,095,000	\$3,490,000	\$22,810,000	\$286,477
Moore's Creek AWWRF	\$40,275,000	\$13,500,000	\$19,860,000	\$13,525,000	\$19,105,000	\$515,000	\$390,000	\$380,000	\$53,775,000	\$1,751,403
Subtotal (UWW)	\$58,220,000	\$18,365,000	\$26,700,000	\$15,705,000	\$25,635,000	\$3,190,000	\$1,485,000	\$3,870,000	\$76,585,000	\$2,037,880
Non-Urban Wastewater (NUWW)										
Scottsville WRRF	\$571,000	\$519,000	\$495,000	\$25,000	\$0	\$0	\$60,000	\$510,000	\$1,090,000	\$65,940
Glenmore WRRF	\$30,000	\$1,615,000	\$0	\$75,000	\$750,000	\$60,000	\$40,000	\$720,000	\$1,645,000	\$0
Subtotal (NUWW)	\$601,000	\$2,134,000	\$495,000	\$100,000	\$750,000	\$60,000	\$100,000	\$1,230,000	\$2,735,000	\$65,940
WASTEWATER TOTAL	\$58,821,000	\$20,499,000	\$27,195,000	\$15,805,000	\$26,385,000	\$3,250,000	\$1,585,000	\$5,100,000	\$79,320,000	\$2,103,820
All Systems Security & Technology	\$4,329,698	\$2,059,738	\$3,915,698	\$787,738	\$155,000	\$80,000	\$131,000	\$1,320,000	\$6,389,436	\$1,229,368
TOTAL	\$282,220,698	\$88,779,738	\$79,011,698	\$38,546,738	\$87,680,000	\$58,890,000	\$59,481,000	\$47,391,000	\$371,000,436	\$14,362,248

PROJECT DETAILS

Page	9	Completed Projects
Page	13	Urban Water
Page	24	Non-Urban Water
Page	31	Urban Wastewater
Page	41	Non-Urban Wastewater
Page	45	All Systems

Completed Projects

During fiscal year 2024, several capital improvement projects were completed, were advanced to the final phases of close-out, or were largely completed. Presented in the table below are the seven (7) completed projects, pertinent information on the adopted budgets, as well as the projected final costs and any anticipated savings. There was a total completed project cost savings of \$0.5 million.

1. South Rivanna Reservoir to Ragged Mountain Reservoir Right Of Way: The approved 50-year Community Water Supply Plan includes the future construction of a new raw water pipeline from the South Fork Rivanna Reservoir to the Ragged Mountain Reservoir. This new pipeline will replace the Upper Sugar Hollow Pipeline along an alternative alignment to increase raw water transfer capacity in the Urban Water System. The project included a detailed routing study to account for recent and proposed development and road projects in Albemarle County and the University of Virginia, as well as preliminary design, preparation of easement documents, and acquisition of water line easements. Prior expenditures also covered a previous review of the 2009 conceptual design that was requested by the Board.
7. Observatory Water Treatment Plant Improvements: The Observatory Water Treatment Plant was originally constructed in the mid-1950s, and prior to this project, much of the original equipment remained. As a result, that equipment was inefficient, prone to unexpected failure, and did not have readily accessible replacement parts. Based on a Needs Assessment Study, the plant is undergoing a wholesale upgrade including improvements to the flocculators, sedimentation basins, filters, and chemical feed facilities to enhance future reliability. In addition, the existing reinforced concrete flume, which conveys treated water from the sedimentation basins to the filters, is being replaced, filter control valves and piping are being replaced, and electrical and SCADA control systems are being upgraded. A portion of this project was previously completed during the Granular Activated Carbon (GAC) project, where the flocculator systems were upgraded with new mechanical and electrical equipment, including variable speed drives for optimal efficiency. In addition to providing needed equipment upgrades, these improvements will increase the plant's capacity from 7.7 million gallons per day to 10 million gallons per day to provide needed reliability and redundancy in the Urban System. As part of this capacity increase, the plant's GAC treatment capacity is being increased as well, with the addition of four GAC contactors. A large portion of this project has been completed with only final startup and testing of the new chemical systems, final instrumentation and SCADA programming efforts and punch list items remaining.
18. South Rivanna Hydro Decommissioning: The South Fork Hydropower Plant was a small hydroelectric generating facility constructed in 1987. The plant had historically operated intermittently, as river flows allowed. The generated power was used at the South Rivanna Water Treatment Plant, thereby reducing power purchased off the electric grid. During an effort to troubleshoot and repair the turbine, a large rain and lightning event caused unexpected flooding into the facility. Insurance paid damages to more recent improvements, but not the pre-existing needs to repair the turbine. Engineering investigations in 2013 associated with the failed mechanical equipment and flood event confirmed the need for further disassembly and inspection of the turbine shaft and blade linkages from a remote factory location.

Due to the complexity of possible rehabilitation, the associated Federal Energy Regulatory Commission (FERC) dam permitting, and the numerous variables in the economic analysis, proposals were solicited from national hydropower experts to initiate a feasibility study to determine the cost effectiveness of rehabilitating the hydropower plant while making sure to account for FERC-related costs and issues. The feasibility study was completed in May 2016 and determined that rehabilitation of the facility had a small likelihood for a positive return on investment. This conclusion was brought to the Board of Directors along with a recommendation to initiate the surrender of the exemption to licensure and decommission the facility. The Board approved this recommendation and staff filed the Surrender Application with FERC. The application was approved in 2020 and the decommissioning of the facility, which includes removing defunct electrical components, abandoning components of the turbine, replacement of the 72” sluice gate and re-establishment of the penstock as a reservoir drain. All the work has been completed minus the replacement of the sluice gate which is delayed based on factory lead time. The gate replacement is expected in August of 2024.

19. South Rivanna Water Treatment Plant Improvements: The South Rivanna Water Treatment Plant previously completed limited upgrades as part of the Urban Granular Activated Carbon project. Over the course of that project, several other significant needs were identified and assembled into this single improvement project. Under this project the following improvements are being made: a new alum and fluoride storage facility; installation of two additional filters to meet firm capacity needs and new filter control panels; building around the lime storage facilities; the addition of a second variable frequency drive at the Raw Water Pump Station as well as other general pump station improvements; the relocation for the electrical gear from a subterranean location at the Sludge Pumping Station to a new aboveground enclosure; a new administration building on site for additional office, meeting, and storage space; high service pump improvements and the addition of variable frequency drives to three of the pumps; sedimentation basin improvements; replacement of filter inlet valves and actuators; remodeling of the existing filter building for better lab and control space and painting throughout; new clarifier drives; and incoming electrical system improvements for the facility. These upgrades will improve the reliability and resiliency of the plant, particularly at higher flow rates. The majority of this work is complete with only completion of sludge pumping improvements, a new IT data center in the Dewatering Building and punch list items remaining.
52. Asset Management: Asset management is the practice of managing infrastructure to minimize the total cost of owning and operating assets while providing desired levels of service. By doing so, asset management ensures planned maintenance activities occur and that capital assets are replaced, repaired, or upgraded at the right time, while guaranteeing the necessary resources are available to perform these activities. When the project began, RWSA had some components of an asset management program in place (i.e. GIS and a work order system), but through the Strategic Planning process identified the need to further develop the program. To fully realize the program, a consultant was procured to assist with a four-phase implementation process. Phase one included facilitation and development of an asset management strategic plan; phase two included development and management of a pilot study where the results of the strategic plan were applied to a specific facility; phase three included procurement and implementation of software (Cityworks) to facilitate the overall program; and phase 4 includes assistance through full implementation of the complete asset management program. With phases one through three

complete, RWSA is focusing its efforts on completing phase four, full asset management implementation.

53. Security Enhancements: Water utilities are required by federal law to conduct vulnerability assessments (VA) and have emergency response plans. RWSA completed an update of its VA for the water system in collaboration with other regional partners and identified a number of security improvements that could be applied to both its water and wastewater systems. The purpose of this project was to install security improvements at RWSA facilities, with the initial focus on an enhanced access control program. Other improvements will include: industrial strength door and window components, security gate and fencing modifications, an improved lock and key program, facility signage, closed circuit television (CCTV) enhancements, intrusion detection systems (IDS), additional security lighting, mass emergency notification systems, and emergency call stations/panic buttons. In addition, upgrades will be made to the entrance of MCAWRRF, to better secure the facility and vet individuals as they enter. In order to implement an access control system at Authority-owned facilities, staff procured an Implementer to finalize system design/requirements, procure all necessary equipment, and install the chosen system. Access control system implementation is nearly complete across all RWSA facilities; however, work continues to finalize this process. As such, the budget is being partially capitalized.
54. IT Infrastructure: Systematic Network upgrades and standardization for aging switches and other infrastructure. SCADA asset inventory assessment and management policy to help establish plans for PLC and other IO asset maintenance. New business process implementations are ongoing – the general ledger/accounting systems currently in use will most likely need replacing as the current system will have an end of life in the late 2020's.

Completed Projects

Line No.	Proj. No.	Project Description	Five-Year Capital Program			
			Adopted Budget 5/2023	Previous Expenditures (6/30/2023)	Final Projected Costs/Close Out	Savings
1	20.01	South Rivanna Reservoir to Ragged Mountain Reservoir Right of Way	\$2,740,000	\$1,946,353	\$2,740,000	\$0
7	20.06	Observatory Water Treatment Plant Improvements - Partial Capitilization FY 24	\$70,000,000	\$17,404,211	\$20,000,000	\$0
18	20.15	South Rivanna Hydropower Plant Decommissioning	\$1,010,000	\$511,588	\$14,000,000	\$0
19	20.16	South Rivanna Water Treatment Plant Improvements - Partial Capitilization FY 24	\$19,500,000	\$18,952,244	\$19,500,000	\$0
52	20.45	Asset Management - Partial Capitilization FY 23	\$427,552	\$427,552	\$427,552	\$0
53	20.46	Security Enhancements - Partial Capitilization FY 24	\$2,227,552	\$1,076,034	\$2,227,552	\$0
54	20.47	IT Infrastructure - Partial Capitilization FY 23	\$226,750	\$226,750	\$226,750	\$0
TOTAL			\$96,131,854	\$40,544,732	\$59,121,854	\$0

CIP 24-28 Total	CIP 24-28 Completed or Removed	CIP 24-28 Remaining	CIP 25-29 New Funding	CIP 25-29 New Total
\$326,125	\$43,904,302	\$282,220,698	\$88,779,738	\$371,000,436

Community Water Supply Plan

The Community Water Supply Plan represents the program developed with substantial community input to fulfill RWSA's contractual obligation to the City of Charlottesville (City) and the Albemarle County Service Authority (ACSA) to provide adequate drinking water for their future needs. This initiative started in 2003 to find a long-term solution that could achieve both local support and meet federal and state requirements. After multiple community meetings, updates with local officials, and frequent consultations with federal and state agencies, local support was obtained to apply for federal and state permits to expand the Ragged Mountain Reservoir and build a future pipeline between the South Rivanna and Ragged Mountain Reservoirs, with stream and wetlands mitigation to be provided through property in the Buck Mountain Creek area and property adjacent to a lower reach of Moores Creek near its confluence with the Rivanna River. Federal and state permits were granted in 2008 and amended in 2011.

The first phase of this long-term program centered around the expansion of the Ragged Mountain Reservoir, a project that would simultaneously address a legal obligation to correct safety deficiencies on the existing site. Through a combination of technical investigations, engineering evaluations, and continued public discussion, a decision was reached in February 2011 through the City Council and Board of Supervisors to build the new dam as an earthen dam, with the initial phase raising the reservoir pool height by 30 feet. The decision also outlined an objective of the further pursuit of water conservation through the City and ACSA, and the pursuit of opportunities for dredging of the South Rivanna Reservoir, with the second phase of reservoir expansion in the future. The Ragged Mountain Dam Agreement was amended in late 2023 and authorized the implementation and modifications for the additional 12 feet of storage at the Ragged Mountain Reservoir.

Project Descriptions:

1. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line: Raw water is transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant (OBWTP) by way of two 18-inch cast iron water lines which have been in service for more than 110 and 70 years, respectively. In addition to the need to increase transfer capacity between the RMR and OBWTP, increased frequency of emergency repairs and expanded maintenance requirements necessitates replacement of these water lines with a single, new raw water main. This new raw water main is expected to be constructed of 36-inch ductile iron pipe and will span a distance of approximately 21,400 linear feet, including the connection of the proposed RMR raw water pump station with the Southern terminus of the SRR-RMR raw water line constructed on the Birdwood Golf Course that was completed in 2019.
2. Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station: The Ragged Mountain Reservoir (RMR) to Observatory Water Treatment Plant (OBWTP) raw water pump station is planned to replace the existing Stadium Road and Royal Pump Stations, which have exceeded their design lives and would require significant upgrades to reliably meet the upgraded capacity of the Observatory WTP. The pump station will be designed initially to pump up to 10 million gallons per day (MGD) to the expanded Observatory WTP and will be integrated with the planned South Fork Rivanna Reservoir (SFRR) to RMR pipeline for

improved operational flexibility and cost efficiencies. This integrated pump station will include the capacity to transfer up to 16 MGD of raw water from RMR back to the South Rivanna WTP, as well as boost water from SFRR up to RMR and OBWTP. The pump station property was purchased as part of the SFRR to RMR raw water main preliminary design and right of way acquisition project.

3. South Fork Rivanna Reservoir to Ragged Mountain Pipeline, Intake and Facilities: The South Fork Rivanna Reservoir (SFRR) to Ragged Mountain Reservoir (RMR) Pipeline is a part of the approved and permitted Community Water Supply Plan. The pipeline and associated facilities will give RWSA the ability to move water between the two reservoirs, further enhancing the management capabilities of the Urban System water supply. The SFRR to RMR Pipeline, Intake, and Facilities Project will include construction of a 36" raw water pipeline, connecting SFRR and RMR, a new raw water intake and pump station at SFRR to bring total withdrawal capacity from SFRR to 41 MGD, and a discharge pipe at RMR to enable placement of the transferred water at the appropriate depth. Design and construction of approximately 380 LF of piping along the alignment, as a betterment opportunity through the Victorian Heights development, located on Woodburn Road, is also included in the work. Construction of the new intake and pump station will permanently close the existing boat ramp on RWSA property at SFRR to the public.

In addition, this project will also include raising of the RMR pool an additional 12', to bring the normal pool of the reservoir to the full design elevation of 683'. This portion of the project will include all clearing and grading work necessary to facilitate the raise, along with a geotechnical evaluation of the existing dam, and coordination with all community stakeholders impacted by the work. Prior to the completion of the SFRR-RMR pipeline, filling will take place as conditions allow via the existing Sugar Hollow Raw Waterline.

4. South Fork Rivanna Reservoir Aeration & Ragged Mountain Reservoir Hypolimnetic Oxygenation Systems: Through RWSA's ongoing Reservoir Water Quality Monitoring Program and the South Fork Rivanna Reservoir (SFRR) to Ragged Mountain Reservoir (RMR) Pretreatment Evaluation Study, water quality benefits for an Aeration System at SFRR and a Hypolimnetic Oxygenation System at RMR have been identified. While these systems would be configured differently for each reservoir, the purpose of each system is to inject Oxygen into the depths of each reservoir. Iron and manganese concentrations are reduced, thus improving water quality within the reservoir and for downstream treatment processes.

Community Water Supply Plan

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year						
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
1	20.03	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line	\$33,000,000	\$500,000	\$3,900,000	\$6,290,000	\$9,110,000	\$9,100,000	\$5,100,000		\$33,500,000	\$436,775
2	20.04	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station	\$11,300,000	\$1,050,000	\$2,175,000	\$2,065,000	\$3,170,000	\$3,170,000	\$1,770,000		\$12,350,000	\$346,983
3	20.48 20.49	South Fork Rivanna Reservoir to Ragged Mountain Pipeline, Intake & Facilities	\$39,665,000	\$35,660,000	\$4,780,000	\$2,600,000	\$15,935,000	\$15,980,000	\$16,490,000	\$19,540,000	\$75,325,000	\$295,733
4	23.02	South Fork Rivanna Reservoir Aeration and Ragged Mountain Reservoir HLOS Systems	\$1,400,000	\$5,200,000					\$1,500,000	\$5,100,000	\$6,600,000	
		TOTAL	\$85,365,000	\$42,410,000	\$10,855,000	\$10,955,000	\$28,215,000	\$28,250,000	\$24,860,000	\$24,640,000	\$127,775,000	\$1,079,491

Urban Water Treatment Plants and Reservoirs

The Urban Water Treatment Plants and Reservoirs consist of the Observatory Water Treatment Plant (OBWTP) and Ragged Mountain/Sugar Hollow Reservoir System which is comprised of the water treatment facility on Observatory Mountain and the associated raw water infrastructure that stores and conveys source water to the plant. The raw water storage system includes the new Ragged Mountain Dam (constructed in 2014, with a useable raw water storage capacity of 1.44 billion gallons) and the Sugar Hollow Dam (originally constructed in 1947, upgraded in 1999 and downstream discharge improvements completed in September 2014, with a useable raw water storage capacity of 339 million gallons as updated by a 2015 bathymetric survey). The system also includes 17.6 miles of 18-inch raw water cast-iron mains, originally installed in 1908, 1922, and 1946. The Sugar Hollow Raw Water Main historically conveyed water from the Sugar Hollow Dam to the Observatory Water Treatment Plant, however, as a result of the New Ragged Mountain Dam project, the main now discharges directly into Ragged Mountain Reservoir. The remaining downstream section of the Sugar Hollow main now conveys raw water from the Ragged Mountain Reservoir to the treatment plant. The line crosses the Mechums River (where an abandoned pumping station is sited) on its way to Ragged Mountain Reservoir, and eventually passes through the Royal Pumping Station and terminates at the OBWTP. The Ragged Mountain Raw Water Main conveys water from the Ragged Mountain Reservoir through the Stadium Road Pumping Station and terminates at the OBWTP.

It also includes the South Rivanna Water System which is comprised of the source water, storage, conveyance and treatment infrastructure currently serving the urban area from the South Fork Rivanna River. The system includes the South Fork Rivanna Reservoir and Dam (built in 1966) with a raw water storage capacity of 1,248 MG of which 885MG is useable. The Dam is co-located with the raw water intake and pump station, as well as a small hydroelectric generation facility. The source water from the South Rivanna Reservoir is treated at the South Rivanna treatment plant (12-mgd rated capacity).

The North Rivanna Water System is also a part of this area and is comprised of a river intake and raw water pumping station on the North Fork of the Rivanna River, as well as the North Fork Water Treatment Plant (2-mgd rated capacity built in 1973). The North Rivanna System provides water to the ACSA service area located along US Route 29, between Forest Lakes subdivision and Piney Mountain Road.

Project Descriptions:

5. Observatory Water Treatment Plant Improvements: The Observatory Water Treatment Plant was originally constructed in the mid-1950s, and prior to this project, much of the original equipment remained. As a result, that equipment was inefficient, prone to unexpected failure, and did not have readily accessible replacement parts. Based on a Needs Assessment Study, the plant is undergoing a wholesale upgrade including improvements to the flocculators, sedimentation basins, filters, and chemical feed facilities to enhance future reliability. In addition, the existing reinforced concrete flume, which conveys treated water from the sedimentation basins to the filters, is being replaced, filter control valves and piping are being replaced, and electrical and SCADA control systems are being upgraded. A portion of this project was previously completed during the Granular Activated Carbon (GAC) project, where the flocculator systems were

upgraded with new mechanical and electrical equipment, including variable speed drives for optimal efficiency. In addition to providing needed equipment upgrades, these improvements will increase the plant's capacity from 7.7 million gallons per day to 10 million gallons per day to provide needed reliability and redundancy in the Urban System. As part of this capacity increase, the plant's GAC treatment capacity is being increased as well, with the addition of four GAC contactors. A large portion of this project has been completed with only final startup and testing of the new chemical systems, final instrumentation and SCADA programming efforts and punch list items remaining.

6. Observatory Water Treatment Plant – Hypo Tank Replacements: Sodium hypochlorite is fed at the OBWTP for disinfection of the treated water and maintenance of a free chlorine residual in the distribution system. The chemical is stored in two 12,000 gallon fiberglass reinforced plastic (FRP) tanks in a separate building at the plant which was constructed in 1999. One of the existing tanks is original to the building and the second tank was installed in 2005. Due to the age of the tanks and the critical nature of this chemical usage at the plant, the intent of this project is to replace the two existing tanks with new 12,000-gallon FRP tanks. In addition to the tanks themselves, this project would include the replacement of access ladders, platforms, piping connections and tank tie-downs.
7. Observatory Water Treatment Plant – Backwash Basin Sludge Removal and Inspection: The concrete backwash basins were built in the 1920's and 1950's as part of the original water treatment plant to be used as open storage for the filtered water. They are currently used to settle solids out of the backwash water before it is decanted to the sanitary sewer system. This project involves removal of the settled sludge and a complete inspection of the basins to determine the extent of concrete repairs needed to extend their useful life.
8. South Rivanna Water Treatment Plant Improvements: The South Rivanna Water Treatment Plant previously completed limited upgrades as part of the Urban Granular Activated Carbon project. Over the course of that project, several other significant needs were identified and assembled into this single improvement project. Under this project the following improvements are being made: a new alum and fluoride storage facility; installation of two additional filters to meet firm capacity needs and new filter control panels; building around the lime storage facilities; the addition of a second variable frequency drive at the Raw Water Pump Station as well as other general pump station improvements; the relocation for the electrical gear from a subterranean location at the Sludge Pumping Station to a new aboveground enclosure; a new administration building on site for additional office, meeting, and storage space; high service pump improvements and the addition of variable frequency drives to three of the pumps; sedimentation basin improvements; replacement of filter inlet valves and actuators; remodeling of the existing filter building for better lab and control space and painting throughout; new clarifier drives; and incoming electrical system improvements for the facility. These upgrades will improve the reliability and resiliency of the plant, particularly at higher flow rates. The majority of this work is complete with only completion of sludge pumping improvements, a new IT data center in the Dewatering Building and punch list items remaining.
9. South Rivanna Water Treatment Plant – Sanitary Sewer Connection: Residual liquids and solids produced during the water treatment process at the South Rivanna Water Treatment Plant are

routed through an equalization basin to two residuals clarifiers. Sludge is pumped to a belt filter press in the Solids Handling Facility, and clarified water is discharged to the South Fork Rivanna River under a VPDES permit issued by the Virginia DEQ. In the future, anticipated increases in solids processing will necessitate an alternative means of disposing of sludge from the treatment process. This project includes preliminary and final design of a new sewer connection to convey sludge to the sanitary sewer system, as well as right of way acquisition, permitting, and construction costs.

10. Urban Water Treatment Plants – GAC Building Dehumidification: Granular Activated Carbon (GAC) treatment was installed at the Urban water treatment plants (South Rivanna and Observatory) in 2018. The buildings constructed around the GAC vessels were not conditioned and only included unit heaters and portable dehumidifiers. As a result of the large GAC vessels in these buildings, the humidity levels in the area tend to promote condensation which can then lead to corrosion of the equipment and general degradation. While the portable dehumidifiers were beneficial, they tended to be unreliable and insufficient to maintain lower humidity levels in the buildings. As a result, the purpose of this project is to install permanent industrial dehumidification systems in the GAC buildings associated with the Urban water treatment plants. This project would include the dehumidification units as well as the necessary ductwork, electrical improvements, and architectural modifications required for a complete installation.
11. South Rivanna Water Treatment Plant – Main Plant Generator Replacement: During recent treatment plant upgrades, the condition of the existing main plant generator was evaluated, and it was determined that while the generator was capable of meeting our current needs at the plant, we should plan for a future replacement. This replacement would help ensure the appropriate level of electrical service resiliency for the plant and would include a new prime rated generator, automatic transfer switch, associated electrical switchgear, feeder cables and other appurtenances necessary to allow this replacement to take place while still providing the plant with backup power during the construction process.
12. North Rivanna Water Treatment Plant Decommissioning: The North Rivanna Water Treatment Plant (NRWTP) has been in use since the 1970's with minimal upgrades aside from the addition of Granular Activated Carbon in 2018. A Needs Assessment was performed that identified additional improvements that would be required for the plant to continue to reliably provide drinking water to the North Rivanna Pressure Zone. Due to the anticipated expense of these proposed improvements, a feasibility study was performed to determine if the NRWTP should be upgraded or decommissioned. The study concluded that the plant should be decommissioned, and expenses saved could be better applied to other improvements throughout the Urban Water System. As a result, this project includes demolition of the plant facilities, removal of the low head dam on the North Fork Rivanna River and returning the property to its pre-existing conditions.
13. Dam Concrete and Steel Repairs: RWSA operates several dams for water supply and sediment storage. These include concrete gravity dams and earthen embankment dams, ranging in age from 10 to over 80 years. Over time, normal wear and tear from water passage and weather can cause degradation of concrete and steel structures. To ensure continued safe operation of these dams into the future, it is imperative to complete periodic maintenance and repairs. This project

includes funding for the evaluation, design, and construction of concrete and steel repairs at the Lickinghole Creek Dam, Totier Creek Dam, South Rivanna Dam, and Sugar Hollow Dam. Repairs are expected to include injection grouting of voids in concrete structures, concrete surface repairs, recoating steel hoist beams, and installation of new hoist trolleys, among others.

14. South Rivanna Water Treatment Plant – PAC Upgrades: The SRWTP currently utilizes a repurposed lime silo reconfigured to feed powdered activated carbon (PAC). PAC is fed in the mixing basin where it is mixed with the raw water prior to entering the rapid mix basins. The PAC storage silo and feed system has reached the end of its useful life and requires frequent maintenance attention to maintain operations. The purpose of this project is to replace the existing PAC system with a new modern PAC storage and slurry feed system similar to the one installed at the Crozet WTP and the one under construction at the Observatory WTP. This project would include demolition of the existing PAC silo and feed pumps, site work and grading required for the new PAC silo location and installation of a new PAC storage and slurry feed system complete with all necessary dry feed equipment, metering pumps, HVAC equipment and electrical and control equipment.
15. Buck Mountain Property Dam Remediation: The RWSA Buck Mountain Property in Free Union includes a small pond dam acquired as part of the property acquisition in the early 1980's. Based on the height of the dam and volume of water impounded in the pond, the dam is considered a low-hazard impounding structure subject to Virginia Dam Safety Regulations. Recent evaluations by Schnabel Engineering revealed defects in the dam consistent with age and wear that should be addressed in order to comply with state regulations. This CIP project includes funds to dewater the pond and temporarily modify the dam for safety purposes until funding is allocated for the repair, modification, or removal of the dam, currently planned for 2030 or later.

Urban Water Treatment Plants and Reservoirs

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year						
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
5	20.06	Observatory Water Treatment Plant - Improvements	\$2,000,000		\$2,000,000						\$2,000,000	
6	25.05	Observatory Water Treatment Plants - Hypo Tank Replacements		\$300,000		\$35,000	\$105,000	\$160,000			\$300,000	
7	23.05	Observatory Water Treatment Plant - Backwash Basin Sludge Removal and Inspection	\$50,000	\$515,000					\$80,000	\$485,000	\$565,000	
8	20.16	South Rivanna Water Treatment Plant - Improvements	\$1,900,000		\$1,900,000						\$1,900,000	
9	23.11	South Rivanna Water Treatment Plant - Sanitary Sewer Connection		\$750,000				\$165,000	\$285,000	\$300,000	\$750,000	
10	23.04 23.09	Urban Water Treatment Plants - GAC Building Dehumidification	\$200,000	\$1,975,000					\$235,000	\$1,940,000	\$2,175,000	
11	22.08	South Rivanna Water Treatment Plant - Main Plant Generator Replacement		\$50,000						\$50,000	\$50,000	
12	20.18	North Rivanna Water Treatment Plant - Decommissioning	\$2,675,000	\$265,000	\$485,000	\$195,000	\$2,260,000				\$2,940,000	\$76,110
13	25.01	Dam Concrete and Steel Repairs		\$1,190,000		\$415,000	\$775,000				\$1,190,000	
14	24.01	South Rivanna Water Treatment Plant - PAC Upgrades	\$1,100,000		\$60,000	\$250,000	\$790,000				\$1,100,000	
15	25.04	Buck Mountain Property Dam Remediation		\$50,000		\$50,000					\$50,000	
		TOTAL	\$7,925,000	\$5,095,000	\$4,445,000	\$945,000	\$3,930,000	\$325,000	\$600,000	\$2,775,000	\$13,020,000	\$76,110

Finished Water Storage/Transmission – Urban System

The urban finished water storage and transmission system serves to provide transmission of treated water from the three RWSA water plants (Observatory, South Rivanna, and North Rivanna) to the distribution networks of the Albemarle County Service Authority, the City of Charlottesville, and the University of Virginia. The system includes approximately 40 miles of pipeline, six water storage tanks: Avon Street (2 MG), Pantops (5 MG), Piney Mountain (0.7 MG), Stillhouse (0.7 MG), Observatory (3 MG), and Lewis Mountain (0.5 MG), and the Alderman Road and Stillhouse pumping stations.

Project Descriptions:

16. Central Water Line: The southern half of the Urban Area water system is currently served by the Avon Street and Pantops storage tanks. The Avon Street tank is hydraulically well connected to the Observatory Water Treatment Plant while the Pantops tank is well connected to the South Rivanna Water Treatment Plant. The hydraulic connectivity between the two tanks, however, is less than desired, creating operational challenges and reducing system flexibility. In 1987, the City and ACSA developed the Southern Loop Agreement, outlining project phasing and cost allocations, as envisioned at the time. The first two phases of the project were constructed shortly thereafter. The third phase, known as the “Eastern Branch” is the subject of the current project. The initial funding for this project was used for route alignment determination, hydraulic modeling, and preliminary design. Due to the complicated nature of our finished water systems, it was decided at the August 2018 Board meeting that a more comprehensive approach was warranted and we should complete the Finished Water Master Plan prior to moving forward with final design and construction of the Avon to Pantops Water Main. The Finished Water Master plan was completed in 2021 and the Central Water Line project was prioritized for design and construction in coordination with the City and ACSA. The project will consist of approximately 5 miles of new 24-inch and 30-inch through the City to connect the Observatory Water Treatment Plant to an existing RWSA transmission main at East High and Long St. to ensure the increased hydraulic capacity of 10 MGD from the water treatment plant upgrades can be utilized. As part of this project, several City water mains will be replaced where co-located with the Central Water Line and the City will reimburse RWSA for that work.
17. South Fork Rivanna River Crossing: RWSA has previously identified through master planning that a 24-inch water main will be needed from the South Rivanna Water Treatment Plant (SRWTP) to Hollymead Town Center to meet future water demands. Two segments of this water main were constructed as part of the VDOT Rt. 29 Solutions projects, including approximately 10,000 linear feet (lf) of 24-inch water main along Rt. 29 and 600 lf of 24-inch water main along the new Berkmar Drive Extension, behind the Kohl’s department store. To complete the connection between the SRWTP and the new 24-inch water main in Rt. 29, there is a need to construct a new river crossing at the South Fork Rivanna River. The selected alternative will include a 1,200 lf trenchless river crossing to minimize environmental impacts. Acquisition of right-of-way is required for the river crossing and along Rio Mills Road.
18. Airport Rd. Pump Station and North Rivanna Transmission Main: The Rt. 29 Pipeline and Pump Station master plan was developed in 2007 and originally envisioned a multi-faceted

project that reliably connected the North and South Rivanna pressure bands, reduced excessive operating pressures, and developed a new Airport pressure zone to serve the highest elevations near the Airport and Hollymead Town Center. The master plan was updated in 2018 to reflect the changes in the system and demands since 2007. This project, along with the South Rivanna River Crossing project, will provide a reliable and redundant finished water supply to the North Rivanna area. Once the North Rivanna Water Treatment Plant is abandoned, the Airport Road Pump Station will be the primary means to supply water to the North Zone. The proposed pump station will be able to serve system demands at both the current high pressure and a future low-pressure condition. These facilities will also lead to a future phase implementation which will include a storage tank and the creation of the Airport pressure zone. To complete the connection between the new 24-inch water main in Rt. 29 and the pump station, construction will include two “gap” sections of 24-inch water main between the already completed sections in the vicinity of Kohl’s. Much of the new water main route is within VDOT right-of-way; however, acquisition of right-of-way was required on the Kohl’s Property at Hollymead Town Center.

19. Avon, Pantops, and Observatory Tank Painting: The Avon, Pantops and Observatory Ground Storage Tanks have volumes of 2-million, 3-million, and 5-million gallons respectively, and each of the tanks are located within the Urban Pressure Band of RWSA’s Finished water Distribution System. The Urban Pressure Band services most of the City and ACSA critical customers (UVA, UVA/MJ Hospital, Senior Living Facilities, Defense Contractors, etc.). Each of the tanks play a pivotal role in maintaining system pressures and providing increased flows during fires and other system emergencies.

RWSA inspects its tanks on a regular basis and following recent inspections of the interior and exterior of each of the three tanks it was determined that these tanks are due for rehabilitation and necessary repairs. Each tank is slated to have its interior and exterior coatings rehabilitated, taken out of service, in turn, in order to complete repairs. While each tank is offline, roofing/structural repairs and safety enhancements will be made as appropriate to further protect the integrity of the tank.

20. Second N. Rivanna River Crossing & Select Pipe Replacement: The North Rivanna water distribution system has a 12-inch water line crossing of the North Rivanna River which is difficult to access and vulnerable to erosion and washout. The Finished Water Master Plan recommended we install a second redundant river crossing to ensure water can be conveyed north of the river to the Piney Mountain Tank from the new Airport Road Pump Station once the North Rivanna Water Treatment Plant is decommissioned. Approximately 1.2 miles of cast iron water line which has the highest system pressures and has experienced numerous emergency line breaks will be replaced as part of this project to improve system resiliency.
21. Emmet Street Betterment: The Urban Finished Water Master Plan identified several necessary upgrades to the urban water distribution system to improve system performance and reliability. One of the identified improvements is an upgrade and extension of the existing RWSA water main along the Emmet Street corridor from the UVA Dell Pond to Hydraulic Road. This project will utilize planned road, streetscape, utility, and development projects along the Emmet Street corridor to complete portions of the Emmet Street water main improvements as betterment, with the goal of completing the approximately 2-mile-long water main by 2030. The project scope

includes planning and coordination between RWSA, UVA, the City of Charlottesville, and VDOT, design services for the betterment and “gap” sections of water line, construction funding, and construction management services. Current identified projects with betterment opportunities include: the UVA Ivy Corridor Redevelopment, UVA Contemplative Commons, the City of Charlottesville Emmet Streetscape Projects (multiple phases), and intersection improvements at Barracks Road, and the US-250/Emmet Street Interchange.

22. Berkmar Drive Ext. Waterline Phase 2: This water line project will be completed as betterment with the construction of the last section of the VDOT Berkmar Drive Extended project. VDOT has begun preliminary design, however, the construction is not anticipated for several years. This betterment will include approximately 1,000 feet of 16-inch waterline which will connect the new Airport Road Pump Station to an RWSA main in Airport Road. This second feed out of the new pump station will provide more redundancy to supply the North Zone once the North Rivanna Water Treatment Plant is decommissioned.
23. Urban Storage Evaluation and Tank(s) Addition: The Finished Water Master Plan outlined the need to evaluate our water storage system for fire suppression, to address frequent tank cycling, and to evaluate alternatives for realizing more useable volume in each tank. Once an evaluation is completed, this project will determine the best pressure bands to add storage to ease operational constraints. This project envisions the addition of two more water storage tanks which may be at existing tank locations or new ones.
24. SCADA Panel Relocations: At many remote water storage tank sites, control panels and PLCs associated with operation and monitoring of the tanks are located in valve vaults. These locations are a concern based on limited access to the electrical and instrumentation components as well as the condition of the space and the associated impact to the longevity of the devices. This project includes installation of new control panels and PLCs aboveground in weatherproof enclosures under a self-supporting canopy that would protect staff from direct weather impacts during operation or maintenance activities at seven water storage tank sites throughout the RWSA water distribution system. The components located in the valve vaults would be demolished after the new components were installed to minimize monitoring downtime.

Finished Water Storage/Transmission – Urban System

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year						
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
16	20.10	Central Water Line	\$41,000,000	\$6,000,000	\$4,300,000	\$7,250,000	\$10,350,000	\$10,350,000	\$10,350,000	\$4,400,000	\$47,000,000	\$1,040,961
17	20.12	South Fork Rivanna River Crossing	\$6,900,000	\$400,000	\$5,500,000	\$400,000	\$1,400,000				\$7,300,000	\$307,143
18	20.13	Airport Rd. Pump Station and North Rivanna Transmission Main	\$10,000,000		\$10,000,000						\$10,000,000	\$5,792,592
19	20.50 20.51 20.64	Avon, Pantops and Observatory Tank Painting	\$2,200,000	\$1,745,000				\$245,000	\$2,100,000	\$1,600,000	\$3,945,000	
20	20.58	Second North Rivanna River Crossing and Select Pipe Replacement	\$30,000	\$620,000					\$30,000	\$620,000	\$650,000	
21	23.06	Emmet Street Betterment	\$10,650,000	(\$1,415,000)	\$2,495,000	\$2,020,000	\$2,225,000	\$1,250,000	\$1,245,000		\$9,235,000	\$1,111,388
22	24.09	Berkmar Drive Ext. Waterline - Phase 2	\$1,400,000	\$40,000	\$220,000		\$100,000	\$650,000	\$470,000		\$1,440,000	
23	24.12	Urban Storage Evaluation and Tank(s) Addition	\$870,000	\$2,110,000			\$55,000	\$305,000	\$520,000	\$2,100,000	\$2,980,000	
24	24.13	SCADA Panel Relocations		\$46,000						\$46,000	\$46,000	
		TOTAL	\$73,050,000	\$9,546,000	\$22,515,000	\$9,670,000	\$14,130,000	\$12,800,000	\$14,715,000	\$8,766,000	\$82,596,000	\$8,252,084

Crozet Water System

The Crozet Water System includes the source water, raw water conveyance, finished water treatment, transmission and storage infrastructure for the Crozet community in western Albemarle County. The source water for this system is the Beaver Creek Reservoir and Beaver Creek (Garnett) Dam which were built in 1964 with a current useable storage capacity of 521 million gallons. Raw water is treated at the Crozet Water Treatment Plant (2.0 mgd rated capacity) and provides finished water to the Albemarle County Service Authority. The system includes the Crozet Elevated (Waterball) Tank (0.05 MG) for water treatment plant backwash; the Crozet Ground Storage Tank (0.5 MG) and pump station, and the Buck's Elbow Storage Tank (2.0 MG).

Project Descriptions:

25. Beaver Creek Dam Alteration: RWSA operates the Beaver Creek Dam and reservoir as the sole raw water supply for the Crozet Area. In 2011, an analysis of the Dam Breach inundation areas and changes to the Virginia Department of Conservation and Recreation (DCR) Impounding Structures Regulations prompted a change in hazard classification of the dam from Significant to High Hazard. This change in hazard classification requires that the capacity of the spillway be increased. Following the completion of a planning study in 2023, staff will proceed with final design and construction of a labyrinth spillway and chute with a bridge to allow Browns Gap Turnpike to cross over the new spillway. Work for this project will be coordinated with the new relocated raw water pump station and intake. Federal funding through the Natural Resources Conservation Service (NRCS) is being pursued to cover a portion of the design and construction costs.
26. Beaver Creek New Raw Water Pump Station & Intake: The existing Raw Water Pump Station and Intake at the Beaver Creek Reservoir was constructed in 1964 and is located at the foot of the Beaver Creek Dam. Obligatory dam safety upgrades to the Beaver Creek Dam spillway necessitate moving the pump station away from its current location downstream of the dam. Additionally, the Drinking Water Infrastructure Plan for the Crozet water service area recommends installation of a new Raw Water Pump Station and Intake to meet new minimum instream flow requirements and provide adequate raw water pumping capacity to serve the growing Crozet community for the next 50 years. The new pump station will be constructed adjacent to the dam on the Beaver Creek Reservoir. The new intake structure will include enhanced controls as well as a Hypolimnetic Oxygenation System to enhance water quality within the reservoir.
27. Buck's Elbow Tank and Waterball Painting: The 2,000,000-gallon Buck's Elbow Ground Storage Tank provides finished water storage for the Crozet Area while the 50,000-gallon Crozet Waterball Tank serves as filter backwash storage at the Crozet Water Treatment Plant (CZWTP). Routine inspections of these tanks in 2012 indicated that the tanks would require recoating by 2020. The current coating system has lasted beyond this initial prediction and as such was moved to 2028. The project includes recoating the interior and top-coating the exterior of both tanks to prevent corrosion. Minor repairs and improvements to both tanks, such as foundation repairs and safety enhancements, will precede the painting work due to necessity of repairs.

28. Crozet Water Treatment Plant – GAC Building Dehumidification: Granular Activated Carbon (GAC) treatment was installed at the Crozet Water Treatment Plant in 2018. The building constructed around the GAC vessels was not conditioned and only included unit heaters and portable dehumidifiers. As a result of the large GAC vessels in this building, the humidity levels in the area tend to promote condensation which can then lead to corrosion of the equipment and general degradation. While the portable dehumidifiers were beneficial, they tended to be unreliable and insufficient to maintain lower humidity levels in the building. As a result, the purpose of this project is to install a permanent industrial dehumidification system in the GAC building. This project would include the dehumidification units as well as the necessary ductwork, electrical improvements, and architectural modifications required for a complete installation.
29. Crozet AC Pipe Replacement: This project includes the installation of approximately 5,000 linear feet of new 18-inch ductile iron water line along Three Notched Road in Crozet. It will replace the final remaining section of 12-inch RWSA transite (asbestos cement) pipe built in the 1970's which is difficult to repair due to health and safety hazards. The new water line will connect the new Crozet Finished Water Pump Station at the Water Treatment Plant to the end of the previous transite replacement project at the entrance to Western Ridge and will provide more reliable service to carry the capacity of the recent water treatment plant upgrades.
30. Crozet Water Treatment Plant – Full GAC Treatment: In order to enhance RWSA's resiliency and commitment to long term finished water quality, the Authority has committed to expanding the Granular Activated Carbon (GAC) capacity at the Crozet WTP to match the current plant capacity. GAC has been identified as a leading best management practice to remove disinfection by product pre-cursors and similar potential contaminants from source water and can be used to manage removal of other emerging contaminants and compounds that are under consideration for regulation in the future. As a result, GAC treatment capacity will provide the Crozet WTP with the flexibility to provide high quality drinking water under various future conditions. This project includes an expansion of the existing GAC building, additional GAC vessels and the necessary pumps, piping, and electrical components to connect the expanded facility to the existing treatment plant.
31. Crozet Finished Water Greyrock Pump Station: RWSA's Bucks Elbow Ground Storage Tank (BET) currently can only be cycled as low as 26-feet (11-feet below overflow), due to the high elevation of several homes in the Greyrock area of Crozet. This results in about 0.6 million gallons (MG) of the total 2 MG being available for use. As a part of the proposed improvements, a small booster station will be installed near the tank site with a series of pressure reducing valves in order to allow the tank to cycle as low as 18-feet, making an additional 0.4 MG of water inside BET available for use. This will allow RWSA staff to cycle the tank lower, reducing water age and improving overall water quality in this area of the distribution system.
32. Crozet Ground Tank Painting: The 500,000-gallon Crozet Ground Storage Tank provides Chlorine Contact Time at the Crozet Water Treatment Plant (CZWTP) and serves as a clearwell for the Crozet Finished Water Pump Station. Inspections of this tank in 2018 and 2022 indicated that the tank's exterior will require top-coating by 2028 to prevent corrosion. The

project includes design, construction, and bid-phase services for top-coating of the tank exterior plus minor repairs and safety improvements as needed.

Crozet Water System

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
25	20.19	Beaver Creek Dam Alteration	\$22,700,000	\$1,000,000	\$3,975,000		\$5,825,000	\$6,900,000	\$7,000,000		\$23,700,000	\$987,079
26	20.20 21.15	Beaver Creek New Raw Water Pump Station & Intake	\$20,200,000	\$3,200,000	\$4,150,000		\$5,150,000	\$6,000,000	\$8,100,000		\$23,400,000	\$591,810
27	21.01	Buck's Elbow Tank and Waterball Painting	\$1,180,000	\$520,000		\$85,000		\$75,000	\$1,100,000	\$440,000	\$1,700,000	
28	23.10	Crozet Water Treatment Plant - GAC Building Dehumidification	\$50,000	\$615,000					\$60,000	\$605,000	\$665,000	
29	23.13	Crozet AC Pipe Replacement	\$450,000	\$725,000					\$450,000	\$725,000	\$1,175,000	
30	23.14	Crozet Water Treatment Plant - Full GAC Treatment	\$6,550,000		\$1,450,000		\$3,890,000	\$1,210,000			\$6,550,000	
31	23.30	Crozet Finished Water Greyrock Pump Station	\$180,000	\$1,405,000					\$185,000	\$1,400,000	\$1,585,000	
32	20.55	Crozet Ground Tank Painting		\$25,000						\$25,000	\$25,000	
		TOTAL	\$51,310,000	\$7,490,000	\$9,575,000	\$85,000	\$14,865,000	\$14,185,000	\$16,895,000	\$3,195,000	\$58,800,000	\$1,578,889

Scottsville Water System

The Scottsville Water System is comprised of the raw water conveyance, finished water treatment, transmission and storage infrastructure for the Town of Scottsville in southern Albemarle County. The source water for this system is the Totier Creek Intake, and the backup supply is the Totier Creek Reservoir, which was built in 1971 with a current useable capacity of 182 million gallons. Raw water is treated at the Scottsville Water Treatment Plant (0.25 mgd rated capacity) and provides finished water to the Albemarle County Service Authority. The system includes the Scottsville Storage Tank (0.25 MG). In 2023 ACSA conveyed to RWSA the Scottsville Finished Water Pump Station on James River Road, the Rt. 795 Tank (0.7 MG) and the piping in between.

Project Description:

33. Scottsville Water Treatment Plant – Upgrade: The Scottsville Water Treatment Plant was originally constructed in 1967, and other than the addition of Granular Activated Carbon (GAC) treatment and interior finished water piping improvements, much of the original plant, including process and electrical equipment, remains in service. As a result, a needs assessment for the plant was completed that identified a number of additional improvements required to maintain a high level of treatment and water quality for the Scottsville community. Improvements include upgrades to the raw water pump stations, general electrical system upgrades, construction of a building addition to allow for more effective chemical storage and other general space needs, rehabilitation of the existing lab space, and other treatment process-based upgrades.
34. Red Hill Water Treatment Plant – Upgrades & GAC Addition: The Red Hill Water Treatment Plant was constructed in a joint effort of ACSA and RWSA in 2009 and consists of a well, pneumatic tank and pump house that provides treated water to the Red Hill Elementary School and adjoining neighborhood. Originally the facility was operated primarily as a well head and pump house. More recently the facility has operated as a water treatment facility with a well as source water. As such, there have been several chemical process additions, automation, online monitoring and an increase in operator wet chemistry testing. The current building is well beyond its physical capacity and this project will serve to expand the building and improve the configuration of the process and laboratory needs of the WTP.

Furthermore, to enhance RWSA's resiliency and commitment to long term finished water quality, the Authority has committed to adding Granular Activated Carbon (GAC) treatment at the Red Hill WTP, sized to match the current plant capacity. GAC has been identified as a leading best management practice to remove disinfection by product pre-cursors and similar potential contaminants from source water and can be used to manage removal of other emerging contaminants and compounds that are under consideration for regulation in the future. As a result, full GAC treatment capacity will provide the Red Hill WTP with the flexibility to provide high quality drinking water under various future conditions. This project includes a building expansion to independently house sodium hypochlorite, fluoride and GAC treatment as well as piping, valves and pumping improvements necessary to incorporate these components into the existing treatment plant.

35. Scottsville Asbestos-Cement Pipeline Replacement: This project is intended to replace all remaining RWSA waterline in Scottsville that is currently constructed of asbestos-cement not included under ACSA's Phase 4 Waterline Replacement Project. The scope of the project generally includes approximately 500 linear feet of raw waterline replacement between the filter building and Totier Creek intake behind Scottsville WTP. The proposed budget includes design for the new water main, as well as bid/quote package assistance.
36. Scottsville Water Treatment Plant – GAC Building Dehumidification: Granular Activated Carbon (GAC) treatment was installed at the Scottsville Water Treatment Plant in 2018. The building constructed around the GAC vessels was not conditioned and only included unit heaters and portable dehumidifiers. As a result of the large GAC vessels in this building, the humidity levels in the area tend to promote condensation which can then lead to corrosion of the equipment and general degradation. While the portable dehumidifiers were beneficial, they tended to be unreliable and insufficient to maintain lower humidity levels in the building. As a result, the purpose of this project is to install a permanent industrial dehumidification system in the GAC building. This project would include the dehumidification units as well as the necessary ductwork, electrical improvements, and architectural modifications required for a complete installation.

Scottsville Water System

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
33	22.06	Scottsville Water Treatment Plant - Upgrade	\$550,000	\$800,000					\$550,000	\$800,000	\$1,350,000	
34	22.07 23.17	Red Hill Water Treatment Plant - Upgrades & GAC Addition	\$740,000	\$70,000	\$511,000	\$299,000					\$810,000	\$42,486
35	23.16	Scottsville AC Pipe Replacement	\$80,000	\$195,000					\$85,000	\$190,000	\$275,000	
36	23.18	Scottsville Water Treatment Plant - GAC Building Dehumidification	\$50,000	\$615,000					\$60,000	\$605,000	\$665,000	
		TOTAL	\$1,420,000	\$1,680,000	\$511,000	\$299,000	\$0	\$0	\$695,000	\$1,595,000	\$3,100,000	\$42,486

Wastewater Interceptors/Pumping Stations

The RWSA wastewater interceptors and pumping stations convey wastewater from the collection systems of the City of Charlottesville and Albemarle County Service Authority to the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF). This grouping includes: the Crozet Interceptor and four associated pumping stations; the Moores Creek Interceptor and Relief Sewer; the Morey Creek, Maury Hills, Powell Creek, Meadow Creek, Schenks Branch, Woodbrook and Rivanna Interceptors; as well as the Albemarle-Berkley Interceptor and associated Albemarle Pumping Station. Also included in this system are the two primary pump stations into the MCAWRRF, the Rivanna and Moores Creek Pump Stations.

Project Descriptions:

37. Upper Schenks Branch Interceptor: The Schenks Branch Interceptor is located in the eastern part of the City of Charlottesville and ties into the Meadowcreek Interceptor. The interceptor was constructed in the mid-1950s of 21-inch clay and concrete pipe. The existing interceptor is undersized to serve present and future wet weather flows as determined by the City, and is to be upgraded to 30-inch pipe. The Upper Schenks Branch Interceptor consists of two sections along McIntire Road. Both of these sections have been designed with the first phase of this project located in the City's Schenks Branch Greenway, completed in early 2016. The second phase of the Upper Schenks Interceptor will be replaced by RWSA in coordination with the City of Charlottesville's sewer upgrades as easement negotiations with Albemarle County are completed.
38. Maury Hill Branch Sewer Replacement: The Maury Hill Branch Sewer is an 8-inch diameter clay sewer constructed in the 1970's. It ties into the Morey Creek Interceptor and primarily collects wastewater from the UVA Fontaine Research Park and a small portion of the adjacent City of Charlottesville neighborhoods. As a result of growth at the research park and increasing wastewater flows, the sewer line will need to be upsized to 12-inch diameter ductile iron pipe to properly convey flows for current and future needs. Since the existing pipe is also a clay sewer, the system has experienced a significant amount of inflow and infiltration (I&I). Installing a new ductile iron pipe and concrete manholes will reduce the I&I in the system and have a positive impact on the capacity of downstream sewers as well. Staff continues to coordinate with UVA staff on the upcoming expansion of the Fontaine Research Park, so flows in the existing sewer can be monitored accordingly.
39. Crozet Pump Station 1, 2, and 3 Rehabilitation: The Crozet Interceptor Pump Stations were constructed in the 1980's and many of the components are original. This project initially included the replacement of pumps and valves at Pump Station 2 in order to improve pumping capabilities at this location and provide spare parts for the pumps at Pump Station 1. It also included roof replacements at all four pump stations, siding replacement for the wet well enclosure at Pump Station 3, and installation of new wells at Pump Stations 3 and 4. The pump station improvements now also include new electrical motor control centers as they are obsolete and past their useful life, generators, power transfer switches, pumps and valves at all pump stations.

40. Albemarle Berkley Pump Station Upgrade: The Albemarle-Berkeley Pump Station was constructed in 1975 and conveys flows from several Albemarle County Public Schools (ACPS) and other ACSA customers into RWSA's gravity Albemarle-Berkeley Interceptor. Recently, the pump station's run times have increased, with the pumps running nearly continuously for some periods. It is anticipated that much of the pumping infrastructure has reached or exceeded its expected lifespan, and that the equipment may be in need of replacement.

A Capacity Analysis of the existing pump station has been completed, utilizing present flow rates, area-specific population projections, and known development projects on and adjacent to the ACPS campus in order to provide pump station buildout sizing to serve the area for the next 50 years. With the Capacity Analysis complete, this Pump Station Upgrade Project will utilize consultant assistance in order to formulate a set of bidding documents that will include the construction of a new pumping station that is sized to meet the current and future flows as determined by the Capacity Analysis, along with all equipment necessary for staff to safely remove individual pumps from service for maintenance purposes or temporarily bypass the station entirely as needed. Once the new pump station has been constructed and is in service, the existing pump station will be demolished, with that portion of the site returned to pre-existing conditions. This project is also being coordinated with the ongoing ACPS Master Planning Process.

39. Interceptor Sewer and Manhole Repair - Phase 2: This project is used to conduct assessments of various interceptors as well as rehabilitation of interceptors that do not have a separate CIP project. Phase 1 of the Interceptor Sewer and Manhole Repair Project included completion of the baseline evaluation of all RWSA interceptors (except the 42/48" Upper Rivanna Interceptor & those replaced with new pipe), as well as completion of rehabilitation on the Upper Morey Creek Interceptor and high-priority rehabilitation on the Powell Creek and Woodbrook Interceptors. Planned projects for Phase 2 include completion of the baseline evaluation by performing closed-circuit television inspections of the Upper Rivanna Interceptor. In addition, the force mains on the Crozet and Albemarle-Berkely Interceptors will be inspected, as well as inverted siphons on the Powell Creek and Moores Creek Interceptors. These inspections will require specialty equipment to complete due to the vastly different flow conditions in these portions of the interceptors. Additional high-priority rehabilitation, possibly on the Maury Hills Branch Interceptor and other sewers, will be completed under this phase as funds allow, with additional rehabilitation efforts to take place under Phase 3. Sanitary sewer evaluation includes identification of inflow & infiltration (I & I), as well as structural defects and other maintenance issues to enable overall program planning and future rehabilitation scoping. Rehabilitation of existing sanitary sewer pipe and manholes reduces Inflow & Infiltration (I & I) in the system, thus reducing the chance for sanitary sewer overflows (SSOs) during high flow events and protecting downstream treatment processes.
40. Interceptor Sewer and Manhole Repair - Phase 3: This project is used to conduct assessments of various interceptors as well as rehabilitation of interceptors that do not have a separate CIP project. Phase 2 of the Interceptor Sewer and Manhole Repair Project, which is currently underway, includes completion of the baseline evaluation of all RWSA interceptors, including the 42-48" Upper Rivanna Interceptor, gravity portions of the Crozet Interceptor (downstream of Crozet Pump Station No. 4), force mains on the Crozet and Albemarle-Berkeley

Interceptors, as well as inverted siphons on the Powell Creek and Moores Creek Interceptors. Phase 3 of this project will take data from the previous two phases and utilize that to perform rehabilitation on RWSA's largest interceptors, including the Moores Creek Interceptor, Upper Rivanna Interceptor, Crozet Interceptor, and others. Rehabilitation is anticipated to include continued usage of cured in place piping (CIPP) and point replacements of pipe as necessary, as well as cementitious manhole coatings and frame and cover replacements.

Urban Wastewater Interceptors/Pumping Stations

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
37	20.25	Upper Schenks Branch Interceptor	\$5,300,000	\$600,000	\$4,725,000		\$400,000	\$775,000			\$5,900,000	\$50,787
38	20.29	Maury Hill Branch Sewer Replacement	\$350,000	\$1,650,000					\$350,000	\$1,650,000	\$2,000,000	
39	20.30	Crozet Pump Station 1, 2, 3 Rehabilitation	\$10,350,000	\$550,000	\$1,105,000	\$2,100,000	\$5,795,000	\$1,900,000			\$10,900,000	\$42,267
40	20.31	Albemarle Berkley Pump Station Upgrade	\$115,000	\$725,000					\$130,000	\$710,000	\$840,000	
41	21.07	Interceptor Sewer and Manhole Repair (Phase 2)	\$1,230,000	\$195,000	\$1,010,000	\$80,000	\$335,000				\$1,425,000	\$193,423
42	24.02	Interceptor Sewer and Manhole Repair (Phase 3)	\$600,000	\$1,145,000					\$615,000	\$1,130,000	\$1,745,000	
		TOTAL	\$17,945,000	\$4,865,000	\$6,840,000	\$2,180,000	\$6,530,000	\$2,675,000	\$1,095,000	\$3,490,000	\$22,810,000	\$286,477

Moores Creek Advanced Water Resource Recovery Facility

The Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF) is the largest wastewater treatment facility within the RWSA system. The plant was originally constructed in 1958 and upgraded and expanded in 1981 and 1982, and currently has a rated capacity of 15 mgd. From 2009 thru 2012 the facility was again upgraded to provide enhanced nutrient removal, and increased wet weather pumping and treatment capacity. This site includes the infrastructure for the wastewater treatment process as well as the RWSA administration facilities.

Project Descriptions:

43. Moores Creek AWRRF Engineering and Administration Building: RWSA currently has its administrative headquarters in two buildings on the grounds of the Moores Creek Advanced Water Resource Recovery Facility. The two-story Administration Building was constructed in the late 1970's and houses offices, IT server space, meeting space and a full-service laboratory. The second building is a series of four trailers installed between 2003-2010 that house the Engineering department. There is currently a need to house additional staff; increase office and meeting space; plan for the replacement of the trailers; increase available parking; bring the IT server workrooms to modern standards; and provide classroom space for education outreach. This project was coordinated with the recent MCAWRRF Master Plan and expansion of the building will take place primarily in the lower parking lot adjacent to the existing building.
44. Moores Creek AWRRF Biogas Upgrades: The MCAWRRF has an existing cogeneration facility that was constructed in 2011. The purpose of the facility was to provide a beneficial purpose for using the gas produced by the digester process at the plant, and in doing so provide both process heating fluid to the digester tanks and electrical energy to the plant's electrical distribution system. Unfortunately, the existing cogeneration facility requires expensive recurring maintenance services, has proprietary equipment which further complicates servicing needs, and has had a number of operational issues that have impeded the benefit this facility was intended to provide. As a result, a Cogeneration System Analysis was performed to determine a recommended approach for proceeding with improvements to the existing facility, installation of a new cogeneration facility without the issues of the previous facility or removing the cogeneration facility altogether and providing a backup boiler. Following this analysis and the initial decision to proceed with replacement of the cogeneration facility, a State of the Industry study was performed, which found that many of the aforementioned issues are common across almost all cogeneration installations. This prompted staff to perform a wider study of the industry as a whole in which it was found that many facilities are transitioning to treating the digester gas produced and transferring the gas into local natural gas pipelines so it can be reused by residential and commercial consumers. While this is still being examined by RWSA and the City of Charlottesville, whom operates the gas utility in this area, the current project budget assumes implementation of this type of system. In addition to the gas conditioning system, this project also includes rehabilitation of the existing Methane Sphere at MCAWRRF, in order to extend its service life in accordance with the MCAWRRF Master Plan.

As the preliminary biogas evaluation is completed and a method to beneficially reuse the gas is finalized, staff will utilize consultant assistance to design and bid a project that not only allows the chosen technology to be implemented, but also performs critical spot and coating repairs to the existing gas sphere that was constructed in the 1980s. The work will also include adjustments as appropriate to the biogas processing system.

45. Moore's Creek AWWRF Building Upfits and Gravity Thickener Improvements: This project will address the renovation needs of the current Maintenance and Operations building space requirements, improvements to the existing gravity thickener system, and installation of actuators on the secondary clarifier influent gate valves. The Moore's Creek Maintenance and Operations Department facilities are over 40 years old, no longer meeting current staffing and operational needs. In accordance with the Moore's Creek Master Plan, this project will increase and update personnel spaces such as offices, lunchrooms, labs, and locker rooms in the Maintenance, Blower, and Sludge Pumping Buildings to meet needs over an interim timeframe of approximately 15 years. Additionally, the project will construct increased oil and grease storage that will meet all current best practices for safety and address the need for additional parts storage. As part of the existing gravity thickener system, RWSA added temporary provisions to dose polymer to improve settling and thickening performance, which has proved to be effective and increased operational performance. The current polymer feed system consists of a bulk polymer tote stored on grade adjacent to the gravity thickener rapid mix and splitter structure. The current system is uncovered and manually operated with totes being moved as needed for chemical feed. This project will allow for a permanent polymer feed system with proper provisions for chemical deliveries and weather protection, including additional space for sodium hypochlorite chemical storage and feed as part of the gravity thickener odor control system. The relocation of the sodium hypochlorite storage and feed will also allocate spacing needs as part of the previously discussed operational building renovations in the existing Sludge Pumping Building. Furthermore, access points will be installed on the thickener effluent line feeding the existing sludge pumps to allow for flushing, cleaning and inspection efforts to occur. Finally, the current secondary clarifier influent gate valves are manually operated, which can be time consuming, and during a wet weather event, the clarifiers need to be placed in service as quickly and safely as possible. The use of SCADA controlled actuators would streamline the process immensely. This work includes the installation of eight (8) new actuators on the influent gates of the secondary clarifiers.
46. Moore's Creek AWWRF Meter and Valve Replacements: As part of the 2018 Odor Control Phase II Project, the post digestion clarifiers were eliminated from use and the gravity thickener overflow was diverted through existing piping directly to the Moore's Creek Pump Station at the head of the treatment facility. This resulted in less odor generation, however, the gravity thickener overflow lost its metering location at the post digestion clarifiers. A new metering manhole location was installed near the Moore's Creek Pump Station where several plant recycle flows come together. Unfortunately, this meter location has been problematic and is subject to backwater flows from the pump station and meter fouling from grease and solids. This project includes evaluation and implementation of alternatives for installation of individual meters on each recycle flow line at locations that will provide less operation and maintenance problems.

The circulation of Waste Activated Sludge (WAS) and Return Activated Sludge (RAS) is important in the wastewater process to maintain a healthy balance of microorganisms. The existing WAS and RAS flow meters are original to the 1980's construction of the facility and are nearly 40 years old. These meters can no longer be calibrated and replacement parts are not available. Replacement of these existing meters, in addition to installation of new meters for the primary and thickened sludge is necessary for process and operational efficiency and is currently under construction.

47. Moore's Creek AWWRF 5kV Electrical System Upgrade: After discussions through the Moore's Creek Facilities Master Plan, it was identified that several areas of the MCAWWRF, including the Blower Building, Sludge Pumping Building, Grit Removal Building, Moore's Creek Pumping Station, and the Administration Building are all still connected to the original 5kV switchgear in the Blower Building. This equipment, including the associated cabling, switchgear, transformers, and motor control centers (MCCs), has a useful life expectancy of 20-30 years. Most of this equipment was installed around 1980. With the equipment having well exceeded its useful life expectancy at this point, safety is a concern given the large electric loads that the cabling and other equipment are handling on a day-to-day basis. Failure of the existing 5kV infrastructure could also result in temporary outages of certain treatment processes, and repairs could take weeks to months given the lead times associated with equipment of this age. In July 2020, staff recommended that a CIP Project be started as soon as possible to encompass replacement of the original 1980s-vintage 5kV cables, switchgear, transformers, and MCCs. Construction is underway, although severe lead time issues have been experienced on the new electrical equipment being installed under the project. All work has been coordinated with the Moore's Creek Facilities Master Plan.
48. Moore's Creek AWWRF Yard Piping Upgrades: The original 36-inch Rivanna Pump Station force main was constructed around 1980 and carried flow from the original 25 MGD pump station in Riverview Park. Now that the pump station has been relocated to MCAWWRF and upsized to 53 MGD, it is desirable to install a second force main based on the age of the pipe and for redundancy. This work will include construction of a second parallel 36-inch force main from the Rivanna Pump Station, across Moore's Creek, and up to the headworks. A routing study will be completed prior to completion of the new Administration Building to minimize potential conflicts with future force main construction.
49. Moore's Creek AWWRF Structural and Concrete Rehabilitation: This project comprises rehabilitation, repair and installation of multiple structural components throughout the MCAWWRF facility, to include concrete repairs in both the equalization basins and holding ponds, rehabilitation to the existing primary clarifiers and associated influent splitter box, installation of a bridge crane over the aeration basins for NRCY pump removal, improved access to the elevated valves and associated actuators in the Rivanna pump station, and rehabilitation to both the digester complex and compost shed roof and drainage system.

The existing holding ponds and equalization basins were constructed in 1977 and are showing signs of degradation. With now completed condition assessment inspections and subsequent recommendations, this project includes crack repair, spalling repair, joint repair, and coating of miscellaneous metals and valves associated with these critical structures.

Inspections performed on the two existing primary clarifiers and associated influent splitter box noted several deficiencies including structural and mechanical components, concrete degradation and corrosion around pipe penetrations in need of repair or replacement, and due to advanced corrosion of metal components within the clarifiers, coatings were recommended to avoid additional deterioration. This project will provide for the rehabilitation, replacement and/ or coatings of these previously identified components within the primary clarifiers and influent splitter box.

The aeration basins located at Moores Creek are a series of chambers that each have uniquely controlled oxygen and nutrient loading conditions. Mid-way thru the basins is ten nutrient recycle (NRCY) pumps. When maintenance or replacement of these pumps are required, staff must currently hire a long boom crane, which can be costly and disruptive to operations, especially in emergency conditions. This project will provide for the permanent means to remove and reinstall existing NRCY pumps.

Two of the six pumps in the Rivanna Pump Station are smaller and were designed to be replaced if future average day flows warrant increased capacity. The current configuration resulted in some valves being located approximately 40 feet above the pump floor level. Valve maintenance activities have been challenging due to their height. A project is proposed to either modify the piping configuration or install a catwalk from the upper mezzanine level to each valve to provide a safer means of accessing each valve.

Moores Creek AWRRF has five digester vessels. The two smaller digesters were part of the original 1958 plant construction. The three larger digesters were part of the 1979 plant upgrades following construction of the bridge over Moores Creek and the south side of the plant. Although numerous upgrades have been constructed at the digester complex over the last 11 years (including heating, mixing, gas compression, and roof repairs), the overall condition of the concrete and complex is reaching its useful life. This project includes addressing remaining repairs to the existing digester complex, including safety repairs, to extend the useful life approximately 10-15 years while RWSA plans, designs, and constructs a new digester complex at another location on the Moores Creek site.

Finally, in the early 1980's a large metal-framed roof was constructed to house the biosolids composting operations, which has subsequently ceased operation. The area was repurposed as a covered equipment maintenance yard, solids handling facility and material storage lock-up. The roof system is exhibiting signs of rafter deterioration and ongoing drainage and leakage issues. This project will evaluate and perform remediation needs at this facility.

50. Moores Creek AWRRF MCPS Slide Gates, Valves and Bypass & Septage Receiving Upgrades: Through separate procurements, previous inspections of the large aluminum slide gates at the influent side of the Moores Creek Pump Station have been conducted to determine the extent of repairs needed to stop them from leaking. Results of these investigations will be used to design the repair of the existing slide gates and add new gates so staff can have the flexibility to stop or divert flow to perform maintenance activities. In addition, this project will include the repair of 3 control valves within the pump station and provide permanent

bypass connections so the entire pump station can be bypassed more efficiently in the future when needed. To reduce odors and address maintenance concerns at the existing north septage receiving station, the project will enclose the leachate discharge pit, provide for better containment of discharged materials, and install rock traps and grinders with all associated process piping to prevent downstream blockages at the Moores Creek Pump Station.

51. Moores Creek AWRRF Blower Building Ventilation Improvements: The existing blower building at the MCAWWRF currently experiences issues related to high temperatures occurring within the building. The original building was designed for aeration blowers and a plant generator and was retrofitted to remove all this equipment and now houses upgraded blowers for the plant aeration treatment system. However, the heat generation from the newer equipment has been creating intermittent issues with high ambient temperatures causing blower equipment to fault out in warmer months due to current ventilation not being adequate. This project will look to evaluate and upgrade the ventilation system to ensure reliability for critical process operation and eliminate the excessive heat generation issues.

Moores Creek Advanced Water Resource Recovery Facility

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
43	20.34	Moores Creek AWRRF Engineering and Administration Building	\$10,500,000	\$9,500,000	\$1,200,000	\$8,300,000	\$10,500,000				\$20,000,000	\$246,592
44	20.40 20.67	Moores Creek AWRRF Biogas Upgrades	\$3,595,000	\$2,055,000	\$3,365,000		\$1,770,000	\$515,000			\$5,650,000	\$61,484
45	20.68	Moores Creek AWRRF Building Upfits and Gravity Thickener Improvements	\$4,555,000	\$595,000	\$1,265,000	\$2,990,000	\$895,000				\$5,150,000	\$17,011
46	21.11 21.17	Moores Creek AWRRF Meter and Valve Replacements	\$775,000	(\$300,000)	\$775,000	(\$300,000)					\$475,000	\$163,254
47	21.18	Moores Creek AWRRF 5kV Electrical System Upgrade	\$5,635,000	\$565,000	\$5,830,000	\$370,000					\$6,200,000	\$1,245,490
48	22.10	Moores Creek AWRRF Yard Piping Upgrades	\$315,000	\$485,000		\$30,000			\$390,000	\$380,000	\$800,000	
49	20.39 20.67 22.11 22.12 24.07	Moores Creek AWRRF Structural and Concrete Rehabilitation	\$11,300,000		\$7,095,000		\$4,205,000				\$11,300,000	\$17,572
50	24.08 21.19	Moores Creek AWRRF MCPS Slide Gates, Valves, Bypass and Septage Receiving Upgrades	\$3,600,000		\$330,000	\$2,055,000	\$1,215,000				\$3,600,000	
51	25.07	Moores Creek AWRRF Blower Building Ventilation Improvements		\$600,000		\$80,000	\$520,000				\$600,000	
		TOTAL	\$40,275,000	\$13,500,000	\$19,860,000	\$13,525,000	\$19,105,000	\$515,000	\$390,000	\$380,000	\$53,775,000	\$1,751,403

Scottsville Wastewater System

The Scottsville Wastewater System includes the influent pumping station, the Water Resource Recovery Facility (WRRF) constructed in 1983, and the historical treatment lagoon (now incorporated into the plant operation). The water resource recovery facility has a rated capacity of 0.2 mgd.

Project Descriptions:

52. Scottsville WRRF Whole Plant Generator and ATS: The current back-up power generator at the Scottsville Water Resource Recovery Facility does not power the entire plant. It serves only the facilities needed to send flow to the lagoon for storage and UV disinfection. This project will provide back-up power for the entire plant and influent pump station and will offer greater treatment flexibility and monitoring capability for the operations staff, particularly when the plant is unmanned and monitored remotely.
53. Scottsville Lagoon Outfall Rehabilitation: The Scottsville Wastewater Lagoon outfall is original to the wastewater plant from its construction. The overflow tower was recently inspected in 2021 by Bander Smith and repairs were recommended. The concrete tower has four intakes, and the fourth intake is currently buried under debris. The tower is in fair condition and could use some general concrete repairs. All valves are recommended for replacement and removal of 2-3 feet of material is recommended from around the outflow tower.
54. Scottsville WRRF Polymer Feed Addition: The Scottsville WRRF Polymer Feed system has reached the end of its useful life and needs replacement. This project will focus on constructing a new polymer feed system and an enclosure to house the chemicals for the plant.

Scottsville Water Resource Recovery Facility

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
52	21.12	Scottsville WRRF Whole Plant Generator and ATS	\$520,000		\$495,000	\$25,000					\$520,000	\$65,940
53	23.24	Scottsville WRRF Lagoon Outfall Rehabilitation	\$25,000	\$275,000					\$30,000	\$270,000	\$300,000	
54	23.25	Scottsville WRRF Polymer Feed Addition	\$26,000	\$244,000					\$30,000	\$240,000	\$270,000	
		TOTAL	\$571,000	\$519,000	\$495,000	\$25,000	\$0	\$0	\$60,000	\$510,000	\$1,090,000	\$65,940

Glenmore Wastewater System

The 0.381-mgd water resource recovery facility, located within the Glenmore subdivision, is owned by ACSA and operated by RWSA. The facility includes an influent pumping station located immediately adjacent to the treatment facility.

Project Descriptions:

55. Glenmore WRRF - Polymer Feed Addition: The Glenmore WRRF currently has two existing automated chemical feed systems, one of which includes polymer. The polymer system is primarily used to feed polymer to the WAS as a settling aid for the sludge holding tank. The current systems are near the end of their useful life and are in need of replacement. The new polymer feed system will consist of drums or totes and chemical feed pumps to dose polymer to the WAS to improve sludge settling in the digester.
56. Glenmore WRRF - Upgrade: The Glenmore WRRF was originally constructed in 1993 and much of the original facility remains in service. As a result of the age several needs assessment for the facility were completed that identified a number of additional improvements required to maintain quality service for the Glenmore community. The most recent needs assessment included improvements to the influent pump station coarse screen, influent pump station dry well ventilation, aeration blower, aeration basin, RAS/WAS pump station, chemical feed system, flocculator paddle, UV disinfection channel, non-potable water system, emergency generator, and capital equipment replacement or rehabilitation.

Glenmore Water Resource Recovery Facility

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
55	23.26	Glenmore WRRF Polymer Feed Addition	\$30,000	\$280,000					\$40,000	\$270,000	\$310,000	
56	24.14	Glenmore WRRF Upgrade		\$1,335,000		\$75,000	\$750,000	\$60,000		\$450,000	\$1,335,000	
		TOTAL	\$30,000	\$1,615,000	\$0	\$75,000	\$750,000	\$60,000	\$40,000	\$720,000	\$1,645,000	\$0

All Systems

Project Descriptions:

57. Asset Management: Asset management is the practice of managing infrastructure to minimize the total cost of owning and operating assets while providing desired levels of service. By doing so, asset management ensures planned maintenance activities occur and that capital assets are replaced, repaired, or upgraded at the right time, while guaranteeing the necessary resources are available to perform these activities. When the project began, RWSA had some components of an asset management program in place (i.e. GIS and a work order system), but through the Strategic Planning process identified the need to further develop the program. To fully realize the program, a consultant was procured to assist with a four-phase implementation process. Phase one included facilitation and development of an asset management strategic plan; phase two included development and management of a pilot study where the results of the strategic plan were applied to a specific facility; phase three included procurement and implementation of software (Cityworks) to facilitate the overall program; and phase 4 includes assistance through full implementation of the complete asset management program. With phases one through three complete, RWSA is focusing its efforts on completing phase four, full asset management implementation.
58. Security Enhancements: Water utilities are required by federal law to conduct vulnerability assessments (VA) and have emergency response plans. RWSA completed an update of its VA for the water system in collaboration with other regional partners and identified a number of security improvements that could be applied to both its water and wastewater systems. The purpose of this project was to install security improvements at RWSA facilities, with the initial focus on an enhanced access control program. Other improvements will include: industrial strength door and window components, security gate and fencing modifications, an improved lock and key program, facility signage, closed circuit television (CCTV) enhancements, intrusion detection systems (IDS), additional security lighting, mass emergency notification systems, and emergency call stations/panic buttons. In addition, upgrades will be made to the entrance of MCAWRRF, to better secure the facility and vet individuals as they enter. In order to implement an access control system at Authority-owned facilities, staff procured an Implementer to finalize system design/requirements, procure all necessary equipment, and install the chosen system. Access control system implementation is nearly complete across all RWSA facilities; however, work continues to finalize this process. As such, the budget is being partially capitalized.
59. IT Infrastructure: At many remote water storage tank sites, control panels and PLCs associated with operation and monitoring of the tanks are located in valve vaults. These locations are a concern based on limited access to the electrical and instrumentation components as well as the condition of the space and the associated impact to the longevity of the devices. This project includes installation of new control panels and PLCs aboveground in weatherproof enclosures under a self-supporting canopy that would protect staff from direct weather impacts during operation or maintenance activities at seven water storage tank sites throughout the RWSA water distribution system. The components located in the valve vaults would be demolished after the new components were installed to minimize monitoring downtime.

60. ACM Remediation: Based on the age of many RWSA facilities, the potential for the presence of Asbestos-Containing Materials (ACM) in various buildings has been assumed. A 2005 Workplace Assessment that evaluated the presence of ACM at the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF) was performed and then many facilities had individual assessments prior to construction projects where the ACM needed to be disposed of properly before refurbishment of the existing building or as a part of a larger demolition process. In order to confirm the presence of any ACM at all remaining RWSA facilities, an asbestos survey was completed in 2022. Based on this report, additional abatement procedures were identified for seven buildings at the MCAWRRF that had not been remediated previously and the filter building at the Scottsville Water Treatment Plant. This project includes proper removal and disposal of these ACM and refurbishment of the associated building components required as a result.
61. Climate Change Flood Resilience Enhancements: RWSA owns and operates a number of water and wastewater facilities that may be at risk of future flooding. One of the ways climate change is expected to manifest itself in Central Virginia is via more frequent and intense rainfall and flooding events. While RWSA facilities were generally designed to perform during 100-year flood level conditions, future flooding could result in higher water levels that would require facility improvements to ensure continued operation during these events. This project includes installation of flood mitigation measures at vulnerable assets/facilities throughout the RWSA system that are likely to be impacted by these potential higher flood levels. Necessary improvements have been identified at six separate facilities and multiple structures and buildings at many of the sites. Improvements include raising electrical and control equipment to higher levels, replacement of existing pumps with submersible style/rated pumps, raising HVAC intakes and exhausts to higher elevations, and dry floodproofing structures when feasible to minimize floodwater intrusion.
62. Radio Upgrades: The regional 800 MHz Public Safety Communication System, in which the Rivanna Water and Sewer Authority participates in to provide internal and emergency radio communication, was nearing the end of its service life. Because of technology changes (software and hardware) the Charlottesville-UVA-Albemarle County Emergency Communications Center (ECC) needed to upgrade or replace the system to keep it useable. This project planned for the upgrade or replacement of major technology components and equipment of the existing system include electronic components at all tower sites and the prime site at the ECC facility; new console equipment at the regional ECC; equipment such as tower site generators and UPS systems; an additional tower site (to improve service in southern Albemarle County); microwave backbone; and replacement of the system recording facilities. RWSA was apportioned a part of the project cost proportionately based on the number of radios. In addition to this assessment from the ECC, the Authority replaced its fleet of portable radios.
63. IT Equipment Secure Cabinets: As part of our overall Cyber Security initiatives, specifically physical security, we are in the process of making sure all of our facilities have a locked network cabinet/rack or a locked closet for all IT networking equipment. This also includes all of our remote Tanks, and Pump Stations. Currently we are over 50% complete. Any new or current capital improvement projects at all locations, we are securing the network cabinets

and when appropriate, separating the network equipment in an environmentally controlled closet.

64. eV Charging Infrastructure: This project will investigate and implement eV charging infrastructure for staff and visitor vehicles as well as RWSA fleet vehicles and rolling stock. Initially charging facilities will be predominantly at Moores Creek AWRRF, where staff and visitor density is the highest. This will allow for greater utilization of the charging facilities. As the eV fleet expands, additional charging locations will be added. This project will be performed in concert with building renovations and fleet conversion to hybrid and electric vehicles.

All Systems

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
57	20.45	Asset Management	\$752,448		\$717,448	\$35,000					\$752,448	\$3,884
58	20.46	Security Enhancements	\$2,980,000		\$2,695,000	\$285,000					\$2,980,000	\$1,225,484
59	20.47	IT Infrastructure	\$373,250	\$226,750	\$373,250	\$226,750					\$600,000	
60	23.27	ACM Remediation	\$94,000	\$617,000					\$96,000	\$615,000	\$711,000	
61	24.06	Climate Change Flood Resilience	\$130,000	\$670,000	\$130,000					\$670,000	\$800,000	
62	25.10	Radio Upgrades		\$210,988		\$210,988					\$210,988	
63	25.08	IT Equipment Secure Cabinets		\$200,000			\$120,000	\$80,000			\$200,000	
64	25.09	eV Charging Infrastructure		\$135,000		\$30,000	\$35,000		\$35,000	\$35,000	\$135,000	
		TOTAL	\$4,329,698	\$2,059,738	\$3,915,698	\$787,738	\$155,000	\$80,000	\$131,000	\$1,320,000	\$6,389,436	\$1,229,368

APPENDICES

CIP Financial Summary

Water System Summary

Wastewater System Summary

All Systems Summary

CIP Financial Summary

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
1	20.03	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line	\$33,000,000	\$500,000	\$3,900,000	\$6,290,000	\$9,110,000	\$9,100,000	\$5,100,000	\$0	\$33,500,000	\$436,775
2	20.04	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station	\$11,300,000	\$1,050,000	\$2,175,000	\$2,065,000	\$3,170,000	\$3,170,000	\$1,770,000	\$0	\$12,350,000	\$346,983
3	20.48	South Rivanna Reservoir to Ragged Mountain Pipeline, Intake & Facilities	\$39,665,000	\$35,660,000	\$4,780,000	\$2,600,000	\$15,935,000	\$15,980,000	\$16,490,000	\$19,540,000	\$75,325,000	\$295,733
4	23.02	South Rivanna Reservoir Aeration and Ragged Mountain Reservoir HLOS Sytems	\$1,400,000	\$5,200,000	\$0	\$0	\$0	\$0	\$1,500,000	\$5,100,000	\$6,600,000	\$0
5	20.06	Observatory Water Treatment Plant - Improvements	\$2,000,000		\$2,000,000						\$2,000,000	
6	25.05	Observatory Water Treatment Plants - Hypo Tank Replacements		\$300,000		\$35,000	\$105,000	\$160,000			\$300,000	
7	23.05	Observatory Water Treatment Plant - Backwash Basin Sludge Removal and Inspection	\$50,000	\$515,000	\$0	\$0	\$0	\$0	\$80,000	\$485,000	\$565,000	\$0
8	20.16	South Rivanna Water Treatment Plant - Improvements	\$1,900,000		\$1,900,000						\$1,900,000	
9	23.11	South Rivanna Water Treatment Plant - Sanitary Sewer Connection		\$750,000				\$165,000	\$285,000	\$300,000	\$750,000	
10	23.04 23.09	Urban Water Treatment Plants - GAC Building Dehumidification	\$200,000	\$1,975,000					\$235,000	\$1,940,000	\$2,175,000	

CIP Financial Summary

(Continued)

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
11	22.08	South Rivanna Water Treatment Plant - Main Plant Generator Replacement		\$50,000						\$50,000	\$50,000	
12	20.18	North Rivanna Water Treatment Plant - Decommissioning	\$2,675,000	\$265,000	\$485,000	\$195,000	\$2,260,000				\$2,940,000	\$76,110
13	25.01	Dam Concrete and Steel Repairs		\$1,190,000		\$415,000	\$775,000				\$1,190,000	
14	24.01	South Rivanna Water Treatment Plant - PAC Upgrades	\$1,100,000		\$60,000	\$250,000	\$790,000				\$1,100,000	
15	25.04	Buck Mountain Property Dam Remediation	\$0	\$50,000	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	\$0
16	20.10	Central Water Line	\$41,000,000	\$6,000,000	\$4,300,000	\$7,250,000	\$10,350,000	\$10,350,000	\$10,350,000	\$4,400,000	\$47,000,000	\$1,040,961
17	20.12	South Fork Rivanna River Crossing	\$6,900,000	\$400,000	\$5,500,000	\$400,000	\$1,400,000	\$0	\$0	\$0	\$7,300,000	\$307,143
18	20.13	Airport Rd. Pump Station and North Rivanna Transmission Main	\$10,000,000	\$0	\$10,000,000	\$0	\$0	\$0	\$0	\$0	\$10,000,000	\$5,792,592
19	20.50	Avon, Pantops and Observatory Tank Painting	\$2,200,000	\$1,745,000	\$0	\$0	\$0	\$245,000	\$2,100,000	\$1,600,000	\$3,945,000	\$0
20	20.58	Second North Rivanna River Crossing and Select Pipe Replacement	\$30,000	\$620,000	\$0	\$0	\$0	\$0	\$30,000	\$620,000	\$650,000	\$0

CIP Financial Summary

(Continued)

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
21	23.06	Emmet Street Betterment	\$10,650,000	(\$1,415,000)	\$2,495,000	\$2,020,000	\$2,225,000	\$1,250,000	\$1,245,000	\$0	\$9,235,000	\$1,111,388
22	24.09	Berkmar Drive Ext. Waterline - Phase 2	\$1,400,000	\$40,000	\$220,000	\$0	\$100,000	\$650,000	\$470,000	\$0	\$1,440,000	\$0
23	24.12	Urban Storage Evaluation and Tank(s) Addition	\$870,000	\$2,110,000	\$0	\$0	\$55,000	\$305,000	\$520,000	\$2,100,000	\$2,980,000	\$0
24	24.13	SCADA Panel Relocations	\$0	\$46,000	\$0	\$0		\$0	\$0	\$46,000	\$46,000	\$0
25	20.19	Beaver Creek Dam Alteration	\$22,700,000	\$1,000,000	\$3,975,000	\$0	\$5,825,000	\$6,900,000	\$7,000,000	\$0	\$23,700,000	\$987,079
26	20.20 21.15	Beaver Creek New Raw Water Pump Station & Intake	\$20,200,000	\$3,200,000	\$4,150,000	\$0	\$5,150,000	\$6,000,000	\$8,100,000	\$0	\$23,400,000	\$591,810
27	21.01	Buck's Elbow Tank and Waterball Painting	\$1,180,000	\$520,000	\$0	\$85,000	\$0	\$75,000	\$1,100,000	\$440,000	\$1,700,000	\$0
28	23.10	Crozet Water Treatment Plant - GAC Building Dehumidification	\$50,000	\$615,000	\$0	\$0	\$0	\$0	\$60,000	\$605,000	\$665,000	\$0
29	23.13	Crozet AC Pipe Replacement	\$450,000	\$725,000	\$0	\$0	\$0	\$0	\$450,000	\$725,000	\$1,175,000	\$0
30	23.14	Crozet Water Treatment Plant - Full GAC Treatment	\$6,550,000	\$0	\$1,450,000	\$0	\$3,890,000	\$1,210,000	\$0	\$0	\$6,550,000	\$0

CIP Financial Summary

(Continued)

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
31	23.30	Crozet Finished Water Greyrock Pump Station	\$180,000	\$1,405,000	\$0	\$0	\$0	\$0	\$185,000	\$1,400,000	\$1,585,000	\$0
32	20.55	Crozet Ground Tank Painting	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$25,000	\$25,000	\$0
33	22.06	Scottsville Water Treatment Plant - Upgrade	\$550,000	\$800,000	\$0	\$0	\$0	\$0	\$550,000	\$800,000	\$1,350,000	\$0
34	22.07 23.17	Red Hill Water Treatment Plant - Upgrades & GAC Addition	\$740,000	\$70,000	\$511,000	\$299,000	\$0	\$0	\$0	\$0	\$810,000	\$42,486
35	23.16	Scottsville AC Pipe Replacement	\$80,000	\$195,000	\$0	\$0	\$0	\$0	\$85,000	\$190,000	\$275,000	\$0
36	23.18	Scottsville Water Treatment Plant - GAC Building Dehumidification	\$50,000	\$615,000	\$0	\$0	\$0	\$0	\$60,000	\$605,000	\$665,000	\$0
37	20.25	Upper Schenks Branch Interceptor	\$5,300,000	\$600,000	\$4,725,000	\$0	\$400,000	\$775,000	\$0	\$0	\$5,900,000	\$50,787
38	20.29	Maury Hill Branch Sewer Replacement	\$350,000	\$1,650,000	\$0	\$0	\$0	\$0	\$350,000	\$1,650,000	\$2,000,000	\$0
39	20.30	Crozet Pump Station 1, 2, 3 Rehabilitation	\$10,350,000	\$550,000	\$1,105,000	\$2,100,000	\$5,795,000	\$1,900,000	\$0	\$0	\$10,900,000	\$42,267
40	20.31	Albemarle Berkley Pump Station Upgrade	\$115,000	\$725,000	\$0	\$0	\$0	\$0	\$130,000	\$710,000	\$840,000	\$0

CIP Financial Summary

(Continued)

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
41	21.07	Interceptor Sewer and Manhole Repair (Phase 2)	\$1,230,000	\$195,000	\$1,010,000	\$80,000	\$335,000	\$0	\$0	\$0	\$1,425,000	\$193,423
42	24.02	Interceptor Sewer and Manhole Repair (Phase 3)	\$600,000	\$1,145,000	\$0	\$0	\$0	\$0	\$615,000	\$1,130,000	\$1,745,000	\$0
43	20.34	Moore's Creek AWWRF Engineering and Administration Building	\$10,500,000	\$9,500,000	\$1,200,000	\$8,300,000	\$10,500,000	\$0			\$20,000,000	\$246,592
44	20.67	Moore's Creek AWWRF Biogas Upgrades	\$3,595,000	\$2,055,000	\$3,365,000	\$0	\$1,770,000	\$515,000	\$0	\$0	\$5,650,000	\$61,484
45	20.68	Moore's Creek AWWRF Building Upfits and Gravity Thickener Improvements	\$4,555,000	\$595,000	\$1,265,000	\$2,990,000	\$895,000	\$0	\$0	\$0	\$5,150,000	\$17,011
46	21.11	Moore's Creek AWWRF Meter and Valve Replacements	\$775,000	(\$300,000)	\$775,000	(\$300,000)	\$0	\$0	\$0	\$0	\$475,000	\$163,254
47	21.18	Moore's Creek AWWRF 5kV Electrical System Upgrade	\$5,635,000	\$565,000	\$5,830,000	\$370,000	\$0				\$6,200,000	\$1,245,490
48	22.10	Moore's Creek AWWRF Yard Piping Upgrades	\$315,000	\$485,000	\$0	\$30,000	\$0	\$0	\$390,000	\$380,000	\$800,000	\$0
49	22.12	Moore's Creek AWWRF Structural and Concrete Rehabilitation	\$11,300,000	\$0	\$7,095,000	\$0	\$4,205,000	\$0	\$0	\$0	\$11,300,000	\$17,572
50	24.08	Moore's Creek AWWRF MCPS Slide Gates, Valves, Bypass and Septage Receiving Upgrades	\$3,600,000	\$0	\$330,000	\$2,055,000	\$1,215,000	\$0	\$0	\$0	\$3,600,000	\$0

CIP Financial Summary

(Continued)

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
51	25.07	Moore's Creek AWWRF Blower Building Ventilation Improvements	\$0	\$600,000	\$0	\$80,000	\$520,000	\$0	\$0	\$0	\$600,000	\$0
52	21.12	Scottsville WRRF Whole Plant Generator and ATS	\$520,000	\$0	\$495,000	\$25,000	\$0	\$0	\$0	\$0	\$520,000	\$65,940
53	23.24	Scottsville WRRF Lagoon Outfall Rehabilitation	\$25,000	\$275,000	\$0	\$0	\$0	\$0	\$30,000	\$270,000	\$300,000	\$0
54	23.25	Scottsville WRRF Polymer Feed Addition	\$26,000	\$244,000	\$0	\$0	\$0	\$0	\$30,000	\$240,000	\$270,000	\$0
55	20.42	Glenmore WRRF Polymer Feed Addition	\$30,000	\$280,000	\$0	\$0	\$0	\$0	\$40,000	\$270,000	\$310,000	\$0
56	24.14	Glenmore WRRF Upgrade	\$0	\$1,335,000	\$0	\$75,000	\$750,000	\$60,000	\$0	\$450,000	\$1,335,000	\$0
57	20.45	Asset Management	\$752,448	\$0	\$717,448	\$35,000	\$0				\$752,448	\$3,884
58	20.46	Security Enhancements	\$2,980,000	\$0	\$2,695,000	\$285,000	\$0				\$2,980,000	\$1,225,484
59	20.47	IT Infrastructure	\$373,250	\$226,750	\$373,250	\$226,750					\$600,000	
60	23.27	ACM Remediation	\$94,000	\$617,000	\$0	\$0	\$0	\$0	\$96,000	\$615,000	\$711,000	\$0

CIP Financial Summary

(Continued)

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2023)
			Current CIP Adopted 5/2023	Proposed Changes	Current Capital Budget	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		
61	24.06	Climate Change Flood Resilience	\$130,000	\$670,000	\$130,000	\$0	\$0	\$0	\$0	\$670,000	\$800,000	\$0
62	25.10	Radio Upgrades	\$0	\$210,988	\$0	\$210,988	\$0	\$0	\$0	\$0	\$210,988	\$0
63	25.08	IT Equipment Secure Cabinets	\$0	\$200,000	\$0	\$0	\$120,000	\$80,000	\$0	\$0	\$200,000	\$0
64	25.09	eV Charging Infrastructure	\$0	\$135,000	\$0	\$30,000	\$35,000	\$0	\$35,000	\$35,000	\$135,000	\$0
Total			\$282,220,698	\$88,779,738	\$79,011,698	\$38,546,738	\$87,680,000	\$58,890,000	\$59,481,000	\$47,391,000	\$371,000,436	\$14,362,248

Water System Summary

	Summary			Projected Future Expenses by Year						
Urban Water System	Current CIP	Changes	Current Capital Budget	FY25	FY26	FY27	FY28	FY29	Recommended CIP	Work-in -Progress
PROJECT COSTS										
Community Water Supply Plan	\$ 85,365,000	\$ 42,410,000	\$ 10,855,000	\$ 10,955,000	\$ 28,215,000	\$ 28,250,000	\$ 24,860,000	\$ 24,640,000	\$ 127,775,000	\$ 1,079,491
Urban Water Treatment and Reservoir	4,025,000	5,095,000	4,445,000	945,000	3,930,000	325,000	600,000	2,775,000	13,020,000	76,110
Finished Water Storage/Distribution - Urban System	73,050,000	9,546,000	22,515,000	9,670,000	14,130,000	12,800,000	14,715,000	8,766,000	82,596,000	8,252,084
Total Projects Urban Water Systems	\$ 162,440,000	\$ 57,051,000	\$ 37,815,000	\$ 21,570,000	\$ 46,275,000	\$ 41,375,000	\$ 40,175,000	\$ 36,181,000	\$ 223,391,000	\$ 9,407,685
FUNDING SOURCES URBAN SYSTEM - TO DATE										
Work-in-Progress			\$ 9,407,700	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 9,407,700	
Debt Proceeds - 2018 & 2021Bond			4,216,100	-	-	-	-	-	4,216,100	
Capital Funds Available			-	-	-	-	-	-	-	
SUBTOTAL			13,623,800	-	-	-	-	-	13,623,800	
FUNDING SOURCES URBAN SYSTEM - NEEDS										
Future Cash reserve transfer to Capital Fund				\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 500,000	\$ 500,000	\$ 4,000,000	
Grants				\$ 500,000	\$ 1,000,000	\$ 1,500,000	\$ 1,000,000		4,000,000	
New Debt Needed			20,291,200	20,070,000	44,275,000	38,875,000	38,675,000	35,681,000	197,867,200	
SUBTOTAL			20,291,200	21,570,000	46,275,000	41,375,000	40,175,000	36,181,000	205,867,200	
TOTAL URBAN WATER FUNDING			\$ 33,915,000	\$ 21,570,000	\$ 46,275,000	\$ 41,375,000	\$ 40,175,000	\$ 36,181,000	\$ 219,491,000	
									\$219,491,000	
Estimated Bond Issues					\$84,636,200		\$113,231,000		\$197,867,200	
	Summary			Projected Future Expenses by Year						
Non-Urban Water System	Current CIP	Proposed Changes	Current Capital Budget	FY25	FY26	FY27	FY28	FY29	Recommended CIP	Work-in -Progress
PROJECT COSTS										
Crozet Water System	\$ 51,310,000	\$ 7,490,000	\$ 9,575,000	\$ 85,000	\$ 14,865,000	\$ 14,185,000	\$ 16,895,000	\$ 3,195,000	\$ 58,800,000	\$ 1,578,890
Scottsville Water System	1,420,000	1,680,000	511,000	299,000	-	-	695,000	1,595,000	3,100,000	42,486
Total Rural Water Systems	\$ 52,730,000	\$ 9,170,000	\$ 10,086,000	\$ 384,000	\$ 14,865,000	\$ 14,185,000	\$ 17,590,000	\$ 4,790,000	\$ 61,900,000	\$ 1,621,376
Non-URBAN FUNDING SOURCES										
Work in Progress			\$ 1,621,400	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,621,400	
Grants				46,890	6,451,410	7,086,770	7,332,430		20,917,500	
Capital Funds Available			-						-	
Debt Proceeds - 2018 & 2021Bond			-	-	-	-	-	-	-	
Future Cash reserve transfer to Capital Fund			-	450,000	250,000	100,000	-	-	800,000	
New Debt Needed			8,464,600	(112,890)	8,163,590	6,998,230	10,257,570	4,790,000	38,561,100	
TOTAL NON-URBAN WATER FUNDING			\$ 10,086,000	\$ 384,000	\$ 14,865,000	\$ 14,185,000	\$ 17,590,000	\$ 4,790,000	\$ 61,900,000	
Estimated Bond Issues				\$16,515,300			22,045,800		\$38,561,100	

Wastewater System Summary

	Summary			Projected Future Expenses by Year						
Urban Wastewater System	Current CIP	Changes	Current Capital Budget	FY25	FY26	FY27	FY28	FY29	Recommended CIP	Work-in - Progress
PROJECT COSTS										
Wastewater Interceptor/Pumping Stations	\$ 17,945,000	\$ 4,865,000	\$ 6,840,000	\$ 2,180,000	\$ 6,530,000	\$ 2,675,000	\$ 1,095,000	\$ 3,490,000	\$ 22,810,000	\$ 286,477
Moore's Creek WWTP	40,275,000	13,500,000	19,860,000	13,525,000	19,105,000	515,000	390,000	380,000	53,775,000	1,751,403
Total Urban Wastewater Systems	\$ 58,220,000	\$ 18,365,000	\$26,700,000	\$15,705,000	\$25,635,000	\$3,190,000	\$1,485,000	\$3,870,000	\$76,585,000	\$2,037,880
FUNDING SOURCES URBAN SYSTEM - IN PLACE										
Work-in-Progress			\$ 2,037,800	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,037,800	
Debt Proceeds - 2018 & 2021Bond			1,237,800	-	-	-	-	-	1,237,800	
Capital Funds Available			1,300,000	-	-	-	-	-	1,300,000	
SUBTOTAL			4,575,600	-	-	-	-	-	4,575,600	
FUNDING SOURCES URBAN SYSTEM - NEEDS										
Future Cash Reserves			\$ -	\$ 1,500,000	\$ 1,500,000	\$ 1,500,000	\$ -	\$ 1,500,000	\$ 6,000,000	
New Debt Needed			22,124,400	14,205,000	24,135,000	1,690,000	1,485,000	2,370,000	66,009,400	
SUBTOTAL			22,124,400	\$15,705,000	25,635,000	3,190,000	1,485,000	3,870,000	72,009,400	
TOTAL URBAN WASTEWATER FUNDING			\$ 26,700,000	\$ 15,705,000	\$ 25,635,000	\$ 3,190,000	\$ 1,485,000	\$ 3,870,000	\$ 76,585,000	
Estimated Bond Issues					\$ 60,464,400		\$ 5,545,000		\$ 66,009,400	
Non-Urban Wastewater System	Current CIP	Proposed Changes	Current Capital Budget	FY25	FY26	FY27	FY28	FY29	Recommended CIP	Work-in - Progress
PROJECT COSTS										
Glenmore WWTP	\$ 30,000	\$ 1,615,000	\$ -	\$ 75,000	\$ 750,000	\$ 60,000	\$ 40,000	\$ 720,000	\$ 1,645,000	\$ -
Scottsville WWTP	571,000	519,000	495,000	25,000	-	-	60,000	510,000	1,090,000	65,940
Total Rural Wastewater Systems	\$601,000	\$2,134,000	\$ 495,000	\$ 100,000	\$ 750,000	\$ 60,000	\$ 100,000	\$ 1,230,000	\$ 2,735,000	\$ 65,940
FUNDING SOURCES RURAL SYSTEM - NEEDS										
Work in Progress			\$ 65,940	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 65,940	
Debt Proceeds - 2018 & 2021Bond			\$ -	\$ -	-	-	-	-	-	
Future Cash Reserve			-	-	-	-	-	-	-	
New Debt Needed			429,060	100,000	750,000	60,000	100,000	1,230,000	2,669,060	
TOTAL RURAL WASTEWATER FUNDING			\$ 495,000	\$ 100,000	\$ 750,000	\$ 60,000	\$ 100,000	\$ 1,230,000	\$ 2,735,000	
Estimated Bond Issues					\$ 1,339,060					

All Systems Summary

	Summary			Projected Future Expenses by Year						
Shared Projects - All Rate Centers	Current CIP	Changes	Current Capital Budget	FY25	FY26	FY27	FY28	FY29	Recommended CIP	Work-in - Progress
PROJECT COSTS										
Authority Wide Projects	\$ 4,329,698	\$ 2,059,738	\$ 3,915,698	\$ 787,738	\$ 155,000	\$ 80,000	\$ 131,000	\$ 1,320,000	\$ 6,389,436	\$ 1,229,368
Total Projects Urban Water Systems	\$ 4,329,698	\$ 2,059,738	\$ 3,915,698	\$ 787,738	\$ 155,000	\$ 80,000	\$ 131,000	\$ 1,320,000	\$ 6,389,436	\$ 1,229,368
FUNDING SOURCES										
Work in Progress			\$ 1,229,400						\$ 1,229,400	
Possible Future Reserves			\$ 1,000,000	\$ 500,000	\$0			\$500,000	\$ 2,000,000	
New Debt Needed			\$ 1,686,298	\$ 287,738	\$ 155,000	\$ 80,000	\$ 131,000	\$ 820,000	\$ 3,160,036	
									-	
TOTAL URBAN WATER FUNDING			\$ 3,915,698	\$ 787,738	\$ 155,000	\$ 80,000	\$ 131,000	\$ 1,320,000	\$ 6,389,436	
Estimated Bond Issues					\$3,160,036					

Summary Information

	2025 - 2029	2024 - 2028	
	Draft	Adopted	
	<u>CIP</u>	<u>CIP</u>	<u>Change \$</u>
<u>Project Cost</u>			
Urban Water Projects	\$ 223,391,000	\$ 209,590,000	\$ 13,801,000
Urban Wastewater Projects	76,585,000	58,220,000	18,365,000
Non-Urban Projects & Shared	71,024,400	58,315,000	12,709,400
Total Project Cost Estimates	\$ 371,000,400	\$ 326,125,000	\$ 44,875,400
<u>Funding in place</u>			
Work-in-Progress (paid for)	\$ 14,362,040	\$ 35,570,900	(21,208,860)
Debt Proceeds Available	9,353,800	25,472,300	(16,118,500)
Cash-Capital Available	1,300,000	2,000,000	(700,000)
	\$ 25,015,840	\$ 63,043,200	\$ (38,027,360)
<u>Financing Needs</u>			
Possible Future Reserves	\$ 12,800,000	\$ 10,435,000	2,365,000
Grants	24,917,500	20,560,000	4,357,500
New Debt	308,267,060	232,086,800	76,180,260
	\$ 345,984,560	\$ 263,081,800	\$ 82,902,760
Total Funding	\$ 371,000,400	\$ 326,125,000	\$ 44,875,400
Percentage of funding in place	6.7%	19.3%	
Ratio of debt to expense	89.5%	89.9%	
Ratio of grant to expense	6.7%	6.3%	
Ratio of cash to expense	3.8%	3.8%	

Summary Information

Detail by Major Systems	<u>Total CIP</u>	<u>Urban Water Projects</u>	<u>Urban Wastewater Projects</u>	<u>Shared Projects</u>	<u>Water Non-Urban Projects</u>	<u>Wastewater Non-Urban Projects</u>
<u>Project Cost</u>						
Urban Water Projects	\$ 223,391,000	\$ 223,391,000	\$ -		\$ -	\$ -
Urban Wastewater Projects	76,585,000	-	76,585,000		-	-
Non-Urban Projects & Shared	71,024,400	-	-	6,389,400	61,900,000	2,735,000
Total Project Cost Estimates	\$ 371,000,400	\$ 223,391,000	\$ 76,585,000	\$ 6,389,400	\$ 61,900,000	\$ 2,735,000
<u>Funding in place</u>						
Work-in-Progress (paid for)	\$ 14,362,040	\$ 9,407,500	\$ 2,037,800	\$ 1,229,400	\$ 1,621,400	\$ 65,940
Debt Proceeds available	9,353,800	8,116,000	1,237,800	-	-	-
Cash-Capital Available	1,300,000	-	1,300,000	-	-	-
Subtotal	\$ 25,015,840	\$ 17,523,500	\$ 4,575,600	\$ 1,229,400	\$ 1,621,400	\$ 65,940
<u>Financing Needs</u>						
Possible Future Reserves	\$ 12,800,000	4,000,000	6,000,000	2,000,000	800,000	-
Grants	24,917,500	4,000,000	-	-	20,917,500	
New Debt	308,267,060	197,867,500	66,009,400	3,160,000	38,561,100	2,669,060
Subtotal	\$ 345,984,560	\$ 205,867,500	\$ 72,009,400	\$ 5,160,000	\$ 60,278,600	\$ 2,669,060
Total Funding	\$ 371,000,400	\$ 223,391,000	\$ 76,585,000	\$ 6,389,400	\$ 61,900,000	\$ 2,735,000
Percentage of funding in place	6.7%	7.8%	6.0%	19.2%	2.6%	2.4%
Ratio of debt to expense	89.5%	92.2%	87.8%	49.5%	62.3%	97.6%
Ratio of cash to expense	3.8%	1.8%	9.5%	31.3%	1.3%	0.0%

Summary Information

	<u>Urban Water</u>	<u>Urban Wastewater</u>	<u>Non-Urban</u>	<u>Shared</u>	<u>Total</u>	<u>Current Adopted</u>
Adopted CIP 2024 - 2028	\$ 209,590,000	\$ 58,220,000	\$ 57,714,000	\$ 601,000	\$ 326,125,000	
Completed or closed projects	(47,150,000)	-	-	(654,302)	(47,804,302)	
Adopted - Adjusted	162,440,000	58,220,000	57,714,000	(53,302)	278,320,698	
<u>Changes:</u>						
Rollover for FY 2029 (roughly)	36,631,000	3,870,000	6,020,000	128,500	46,649,500	
Adjustments on existing projects or new projects	20,420,000	14,495,000	901,000	6,314,238	42,130,238	
Total Changes	57,051,000	18,365,000	6,921,000	6,442,738	88,779,738	
Total Proposed CIP 2025 - 2029	\$ 219,491,000	\$ 76,585,000	\$ 64,635,000	\$ 6,389,436	\$ 367,100,436	326,125,000
Years 6 - 10 (FY 2030-34)					\$ 104,093,000	218,641,755
Years 11 - 15 (FY 2035-39)					\$ 107,318,000	165,880,000
TOTAL 15 YEAR CIP					\$ 578,511,436	\$ 710,646,755
						(47,804,302) Completed
						\$ 662,842,453 Net CIP

Summary Information

Draft 2

		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
City of Charlottesville Charges													
Urban Water													
Operating Rate	Per 1000 gal.	\$ 2,653	\$ 2,949	\$ 3,363	\$ 3,699	\$ 4,069	\$ 4,476	\$ 4,924	\$ 5,219	\$ 5,532	\$ 5,864	\$ 6,216	\$ 6,589
	% Change	13.1%	11.2%	14.0%	10.0%	10.0%	10.0%	10.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge	Per month	249,497	307,200	376,226	448,561	508,606	576,011	643,652					
		1.3%	23.1%	22.5%	19.2%	13.4%	13.3%	11.7%					
Revenue Requirements:				16.38%									
Operating Rate Revenue	Annual	\$ 4,417,300	\$ 4,810,300	\$ 5,598,400	\$ 6,158,240	\$ 6,774,064	\$ 7,451,470	\$ 8,196,617	\$ 8,688,414	\$ 9,209,719	\$ 9,762,303	\$ 10,348,041	\$ 10,968,923
Debt Service Revenues	Annual	2,994,000	3,686,400	4,514,700	5,382,736	6,103,269	6,912,128	7,723,818	-	-	-	-	-
Total		\$ 7,411,300	\$ 8,496,700	\$ 10,113,100	\$ 11,540,976	\$ 12,877,333	\$ 14,363,598	\$ 15,920,435	\$ 8,688,414	\$ 9,209,719	\$ 9,762,303	\$ 10,348,041	\$ 10,968,923
	\$ Change		\$ 1,085,400	\$ 1,616,400	\$ 1,427,876	\$ 1,336,357	\$ 1,486,265	\$ 1,556,837	\$ 491,797	\$ 521,305	\$ 552,583	\$ 585,738	\$ 620,882
	% Change		14.6%	19.0%	14.1%	11.6%	11.5%	10.8%					
Urban Wastewater													
Operating Rate	Per 1000 gal.	2,664	2,922	3,247	3,572	3,929	4,322	4,754	5,039	5,341	5,662	6,002	6,362
	% Change	5.8%	9.7%	11.1%	10.0%	10.0%	10.0%	10.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge	Per month	384,637	394,890	415,446	436,712	455,092	473,672	494,962					
		2.3%	2.7%	5.2%	5.1%	4.2%	4.1%	4.5%					
Revenue Requirements:				13.51%									
Operating Rate Revenue	Annual	\$ 4,245,800	\$ 4,557,800	\$ 5,173,500	\$ 5,690,850	\$ 6,259,935	\$ 6,885,929	\$ 7,574,521	\$ 8,028,993	\$ 8,510,732	\$ 9,021,376	\$ 9,562,659	\$ 10,136,418
Debt Service Revenues	Annual	4,615,644	4,738,800	4,985,500	5,240,540	5,461,100	5,684,060	5,939,540	-	-	-	-	-
Total		\$ 8,861,444	\$ 9,296,600	\$ 10,159,000	\$ 10,931,390	\$ 11,721,035	\$ 12,569,989	\$ 13,514,061	\$ 8,028,993	\$ 8,510,732	\$ 9,021,376	\$ 9,562,659	\$ 10,136,418
	\$ Change		\$ 435,156	\$ 862,400	\$ 772,390	\$ 789,645	\$ 848,954	\$ 944,073	\$ 454,471	\$ 481,740	\$ 510,644	\$ 541,283	\$ 573,760
	% Change		4.9%	9.3%	7.6%	7.2%	7.2%	7.5%					
Total all Rate Centers													
Operating Rate Revenue		\$ 8,663,100	\$ 9,368,100	\$ 10,771,900	\$ 11,849,090	\$ 13,033,999	\$ 14,337,399	\$ 15,771,139	\$ 16,717,407	\$ 17,720,452	\$ 18,783,679	\$ 19,910,699	\$ 21,105,341
Debt Service Revenues		7,609,644	8,425,200	9,500,200	10,623,276	11,564,369	12,596,188	13,663,358	13,663,358	13,663,358	13,663,358	13,663,358	13,663,358
Total City All Revenues		\$ 16,272,744	\$ 17,793,300	\$ 20,272,100	\$ 22,472,366	\$ 24,598,368	\$ 26,933,587	\$ 29,434,497	\$ 30,380,765	\$ 31,383,810	\$ 32,447,037	\$ 33,574,057	\$ 34,768,699
	\$ Change		\$ 1,520,556	\$ 2,478,800	\$ 2,200,266	\$ 2,126,002	\$ 2,335,219	\$ 2,500,910	\$ 946,268	\$ 1,003,044	\$ 1,063,227	\$ 1,127,021	\$ 1,194,642
	% Change		9.3%	13.9%	10.9%	9.5%	9.5%	9.3%					
10-Year CIP Debt Service													
Total Estimated Charge		\$ 16,272,744	\$ 17,793,300	\$ 20,272,100	\$ 22,574,132	\$ 24,878,797	\$ 27,518,556	\$ 30,445,274	\$ 1,179,251	\$ 867,688	\$ 525,705	\$ 688,347	\$ 1,094,969
	% Change		\$ 0	13.9%	11.4%	10.2%	10.6%	10.6%	3.7%	2.2%	2.2%	3.9%	4.7%
Additional Annual Revenues													
				\$ 2,478,800	\$ 2,302,032	\$ 2,304,665	\$ 2,639,759	\$ 2,926,718	\$ 1,114,742	\$ 691,481	\$ 721,244	\$ 1,289,663	\$ 1,601,264
				13.9%	11.4%	10.2%	10.6%	10.6%	3.7%	2.2%	2.2%	3.9%	4.7%

Summary Information

		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
ACSA Charges													
Urban Water													
Operating Rate	Per 1000 gal.	2.653	2.949	3.363	3.699	4.069	4.476	4.924	5.219	5.532	5.864	6.216	6.589
	% Change	0.0%	11.2%	14.0%	10.0%	10.0%	10.0%	10.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge	Per month	\$ 442,355	\$ 542,282	673,264	810,644	935,905	1,068,138	1,201,275					
		8.1%	22.6%	24.2%	20.4%	15.5%	14.1%	12.5%					
Revenue Requirements:				11.82%	10.00%	10.00%	10.00%	10.00%					
Operating Rate Revenue	Annual	\$ 4,597,600	\$ 5,211,100	\$ 5,826,900	\$ 6,409,590	\$ 7,050,549	\$ 7,755,604	\$ 8,531,164	\$ 9,043,034	\$ 9,585,616	\$ 10,160,753	\$ 10,770,398	\$ 11,416,622
Debt Service Revenues	Annual	5,308,200	6,507,400	8,079,200	9,727,722	11,230,860	12,817,652	14,415,304	-	-	-	-	-
Total		\$ 9,905,800	\$ 11,718,500	\$ 13,906,100	\$ 16,137,312	\$ 18,281,409	\$ 20,573,256	\$ 22,946,468	\$ 9,043,034	\$ 9,585,616	\$ 10,160,753	\$ 10,770,398	\$ 11,416,622
	\$ Change		\$ 1,812,700	\$ 2,187,600	\$ 2,231,212	\$ 2,144,097	\$ 2,291,847	\$ 2,373,212	\$ 511,870	\$ 542,582	\$ 575,137	\$ 609,645	\$ 646,224
	% Change		\$ 0	18.7%	16.0%	13.3%	12.5%	11.5%					
Urban Wastewater													
Operating Rate	Per 1000 gal.	2.664	2.922	3.247	3.572	3.929	4.322	4.754	5.039	5.341	5.662	6.002	6.362
	% Change	5.8%	9.7%	11.1%	10.0%	10.0%	10.0%	10.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge	Per month	\$ 355,205	\$ 383,403	412,149	458,802	497,712	536,622	575,532					
		5.1%	0.0%	7.5%	11.3%	8.5%	7.8%	7.3%					
Revenue Requirements:				9.04%	10.00%	10.00%	10.00%	10.00%					
Operating Rate Revenue	Annual	\$ 4,787,800	\$ 5,350,500	\$ 5,834,000	\$ 6,417,400	\$ 7,059,140	\$ 7,765,054	\$ 8,541,559	\$ 9,054,053	\$ 9,597,296	\$ 10,173,134	\$ 10,783,522	\$ 11,430,533
Debt Service Revenues	Annual	4,262,460	4,600,800	4,945,800	5,505,625	5,972,545	6,439,465	6,906,385	-	-	-	-	-
Total		\$ 9,050,260	\$ 9,951,300	\$ 10,779,800	\$ 11,923,025	\$ 13,031,685	\$ 14,204,519	\$ 15,447,944	\$ 9,054,053	\$ 9,597,296	\$ 10,173,134	\$ 10,783,522	\$ 11,430,533
	\$ Change		\$ 901,040	\$ 828,500	\$ 1,143,225	\$ 1,108,660	\$ 1,172,834	\$ 1,243,425	\$ 512,494	\$ 543,243	\$ 575,838	\$ 610,388	\$ 647,011
	% Change		10.0%	8.3%	10.6%	9.3%	9.0%	8.8%					
Non-Urban Rate Centers													
Operating Rate Revenue	Annual	\$ 2,565,900	\$ 2,797,300	3,101,200	3,411,320	3,752,452	4,127,697	4,540,467	4,812,895	5,101,669	5,407,769	5,732,235	6,076,169
	Annual	2,342,600	2,585,800	2,862,100	3,245,900	3,629,700	4,013,500	4,397,300	-	-	-	-	-
Total		\$ 4,908,500	\$ 5,383,100	\$ 5,963,300	\$ 6,657,220	\$ 7,382,152	\$ 8,141,197	\$ 8,937,767	\$ 4,812,895	\$ 5,101,669	\$ 5,407,769	\$ 5,732,235	\$ 6,076,169
			\$ 474,600	\$ 580,200	\$ 693,920	\$ 724,932	\$ 759,045	\$ 796,570	\$ 272,428	\$ 288,774	\$ 306,100	\$ 324,466	\$ 343,934
			9.7%	10.8%	11.6%	10.9%	10.3%	9.8%					
Total all Rate Centers													
Operating Rate Revenue		\$11,951,300	\$ 13,358,900	\$ 14,762,100	\$ 16,238,310	\$ 17,862,141	\$ 19,648,355	\$ 21,613,191	\$ 22,909,982	\$ 24,284,581	\$ 25,741,656	\$ 27,286,155	\$ 28,923,324
Debt Service Revenues		11,913,260	13,694,000	15,887,100	18,479,247	20,833,105	23,270,617	25,718,989	25,718,989	25,718,989	25,718,989	25,718,989	25,718,989
Total ACSA All Revenues		\$23,864,560	\$ 27,052,900	\$ 30,649,200	\$ 34,717,557	\$ 38,695,246	\$ 42,918,972	\$ 47,332,180	\$ 48,628,971	\$ 50,003,570	\$ 51,460,645	\$ 53,005,144	\$ 54,642,313
	\$ Change		\$ 3,188,340	\$ 3,596,300	\$ 4,068,357	\$ 3,977,689	\$ 4,223,726	\$ 4,413,208	\$ 1,296,791	\$ 1,374,599	\$ 1,457,075	\$ 1,544,499	\$ 1,637,169
	% Change		13.4%	13.3%	13.3%	11.5%	10.9%	10.3%					
10-Year CIP Debt Service					347,458	929,234	1,649,343	2,490,682	2,857,773	2,660,491	2,345,940	2,562,393	3,003,685
Total Estimated Charge		\$23,864,560	\$ 27,052,900	\$ 30,649,200	\$ 35,065,015	\$ 39,624,480	\$ 44,568,315	\$ 49,822,862	\$ 51,486,744	\$ 52,664,061	\$ 53,806,585	\$ 55,567,537	\$ 57,645,999
	% Change		\$ 0	13.3%	14.4%	13.0%	12.5%	11.8%	3.3%	2.3%	2.2%	3.3%	3.7%
Additional Annual Revenues				\$ 3,596,300	\$ 4,415,815	\$ 4,559,465	\$ 4,943,835	\$ 5,254,547	\$ 1,663,882	\$ 1,177,317	\$ 1,142,524	\$ 1,760,952	\$ 2,078,461
				13.3%	14.4%	13.0%	12.5%	11.8%	3.3%	2.3%	2.2%	3.3%	3.7%

Summary Information

	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029		FY 2030	FY 2031	FY 2032	FY 2033	FY 2034
RWSA													
Operations Revenues													
Urban Water	\$ 9,014,900	\$ 10,021,400	\$ 11,425,300	\$ 12,567,830	\$ 13,824,613	\$ 15,207,074	\$ 16,727,782		\$ 17,731,449	\$ 18,795,336	\$ 19,923,056	\$ 21,118,439	\$ 22,385,545
Urban Wastewater	9,033,600	9,908,300	11,007,500	12,108,250	13,319,075	14,650,983	16,116,081		17,083,046	18,108,028	19,194,510	20,346,181	21,566,951
Other Rate Centers	2,565,900	2,797,300	3,101,200	3,411,320	3,752,452	4,127,697	4,540,467		4,812,895	5,101,669	5,407,769	5,732,235	6,076,169
Total	\$20,614,400	\$22,727,000	\$25,534,000	\$28,087,400	\$30,896,140	\$33,985,754	\$37,384,329		\$39,627,389	\$42,005,033	\$44,525,334	\$47,196,855	\$50,028,666
Change \$		2,112,600	2,807,000	2,553,400	2,808,740	3,089,614	3,398,575		2,243,060	2,377,643	2,520,302	2,671,520	2,831,811
Change %		10.2%	12.4%	10.0%	10.0%	10.0%	10.0%		6.0%	6.0%	6.0%	6.0%	6.0%
Debt Service Charge Revenues													
Urban Water	8,302,200	10,193,800	12,593,900	15,110,458	17,334,129	19,729,780	22,139,122						
Urban Wastewater	8,878,104	9,339,600	9,931,300	10,746,165	11,433,645	12,123,525	12,845,925						
Other Rate Centers	2,342,600	2,585,800	2,862,100	3,245,900	3,629,700	4,013,500	4,397,300						
Total	\$19,522,904	\$22,119,200	\$25,387,300	\$29,102,523	\$32,397,474	\$35,866,805	\$39,382,347		\$39,382,347	\$39,382,347	\$39,382,347	\$39,382,347	\$39,382,347
Change \$		2,596,296	3,268,100	3,715,223	3,294,951	3,469,331	3,515,542						
Change %		13.3%	14.8%	14.6%	11.3%	10.7%	9.8%						
Total RWSA Customer Revenues	\$40,137,304	\$44,846,200	\$50,921,300	\$57,189,923	\$63,293,614	\$69,852,559	\$76,766,676		\$79,009,736	\$81,387,380	\$83,907,681	\$86,579,202	\$89,411,013
Change \$		\$ 4,708,896	\$ 6,075,100	\$ 6,268,623	\$ 6,103,691	\$ 6,558,945	\$ 6,914,117		\$ 2,243,060	\$ 2,377,643	\$ 2,520,302	\$ 2,671,520	\$ 2,831,811
Change %		11.7%	13.5%	12.3%	10.7%	10.4%	9.9%		2.9%	3.0%	3.1%	3.2%	3.3%
Additional for 10-Year CIP													
Total Estimated Charge	\$40,137,304	\$44,846,200	\$50,921,300	\$57,639,147	\$64,503,277	\$72,086,871	\$80,268,135		\$83,046,760	\$84,915,558	\$86,779,327	\$89,829,942	\$93,509,666
% Change		0.0%	13.5%	13.2%	11.9%	11.8%	11.3%		3.5%	2.3%	2.2%	3.5%	4.1%
Additional Annual Revenues													
			\$ 50,921,300	\$ 57,639,147	\$ 64,503,277	\$ 72,086,871	\$ 80,268,135		\$ 83,046,760	\$ 84,915,558	\$ 86,779,327	\$ 89,829,942	\$ 93,509,666
			\$ 6,075,100	\$ 6,717,847	\$ 6,864,130	\$ 7,583,594	\$ 8,181,264		\$ 2,778,625	\$ 1,868,798	\$ 1,863,769	\$ 3,050,615	\$ 3,679,725
			13.5%	13.2%	11.9%	11.8%	11.3%		3.5%	2.3%	2.2%	3.5%	4.1%

Capital Improvement Program FY25-29

RWSA BOARD OF DIRECTORS
MAY 28, 2024
DIRECTOR OF ENGINEERING & MAINTENANCE
JENNIFER WHITAKER



Goals of the *FY 25 – 29 CIP*

1. Maintain our drinking water and wastewater infrastructure to provide reliable services which comply with or exceed regulatory requirements.
2. In preparation for the uncertainties of climate change, enhance the capacity, reliability and resilience of our community's drinking water supply by completing the Rivanna to Ragged Pipeline and Pumping project as soon as possible (by 2030); completing the Ragged Mountain to Observatory Pipeline and Pumping Project, and raising the Ragged Mtn. Reservoir normal pool and begin filling by 2026 (as rainfall patterns allow).
3. Install critical drinking water infrastructure to reliably meet the needs of the entire service area now and in the future by constructing the Airport Road Pumping Station, the second South and North Fork Rivanna River crossings, the Central Waterline, and decommissioning of the North Fork WTP.
4. Continue to enhance our abilities to address emerging contaminants at both the water and wastewater facilities. Provide additional GAC filtering capacity at Red Hill and Crozet WTPs using grant funding from Albemarle County (\$400k) and VDH (\$6.23 M).
5. Leverage partnerships with City Utilities, UVA, and VDOT to reduce costs and disruption of piping projects in key roadways such as the Emmet Street and High Street corridors.
6. Complete the CIP in an environmentally protective and financially responsible manner.



FY 25 – 29 Capital Improvement Program

64 Projects, \$371 M

Urban Water	Urban Wastewater	Non-Urban Projects & Shared	Total
\$223.4 M	\$76.6 M	\$71 M	\$371 M

Line Item	Cost
FY 24-28 Capital Improvement Plan	\$326,125,000
Completed Projects	(\$43,904,302)
FY 29 Projects	\$47,391,000
New Projects (7)	\$2,685,988
Accelerated Projects (1)	\$13,620,000
Inflation and & Scope Additions	<u>\$25,082,750</u>
Total	\$371,000,436

Capital Improvement Program

5 Year Plan

Already Paid For	Ex. Debt Proceeds	Cash Reserves	Grants	New Debt	Total
\$14.4 M	\$9.4 M	\$14.1 M	\$24.9 M*	\$308.3 M	\$371 M

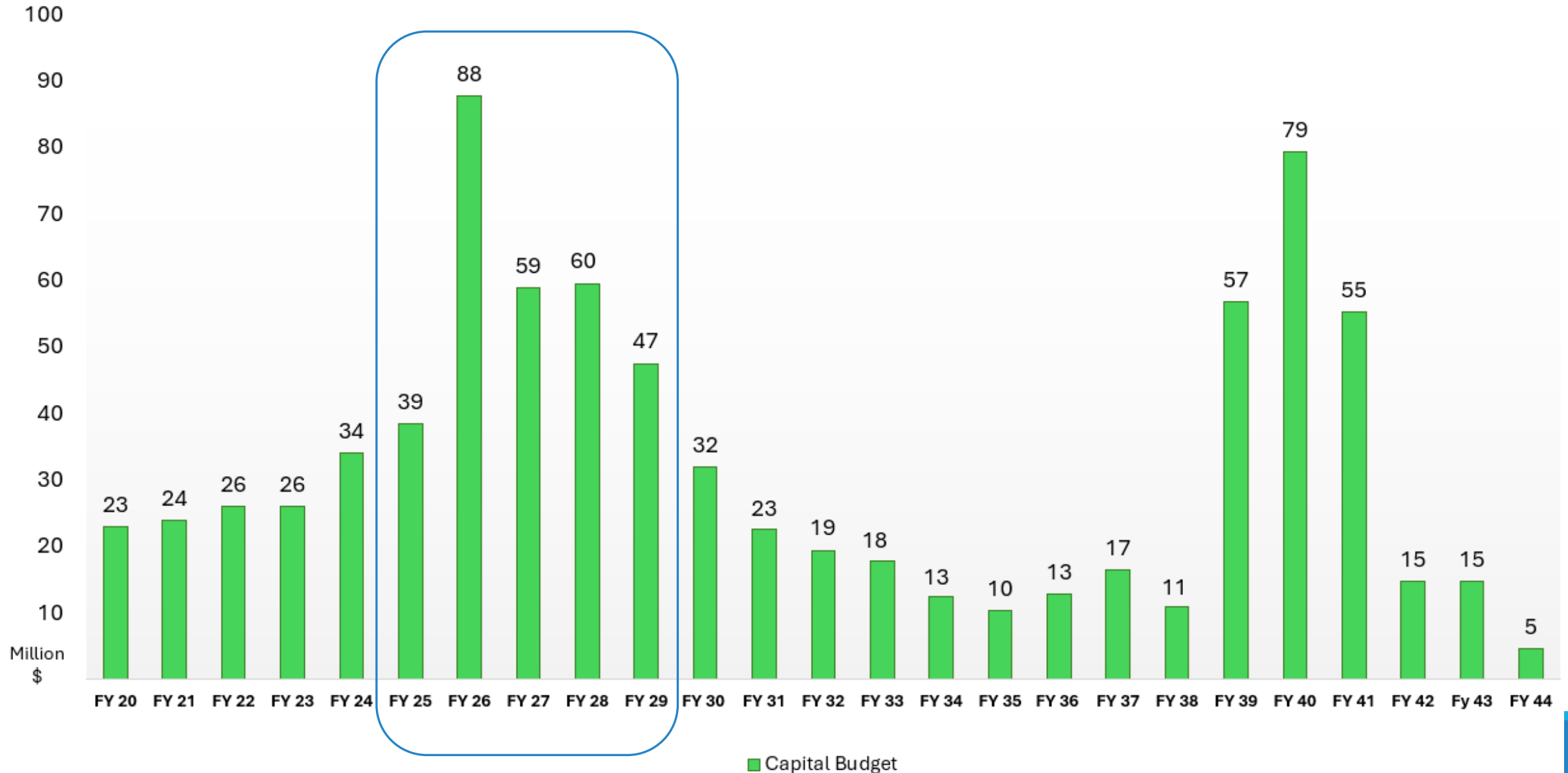
* Additional Grant Funding received April 24 = \$2.8 M

15 Year Plan

Line Item	Cost
FY 25-29 CIP (Years 1-5)	\$371 M
FY 30-34 CIP (Years 6-10)	\$104 M
FY 35-29 CIP (Years 11-15)	<u>\$107 M</u>
Total	\$582 M

25 Year Capital Budget History & Projections

FY 2020 – FY 2044





Major Programs and Projects



- **Water Treatment Plants: \$18 M**

- GAC Facility Dehumidification
- South Rivanna PAC Upgrades
- Observatory Hypo Tank Replacements
- Observatory Back Wash Tank
- South Rivanna Main Plant Generator Replacement
- Crozet GAC Filters*
- Scottsville & Red Hill Upgrade & GAC Addition
- SRWTP & OBWTP Improvements

- **Capacity: \$122 M**

- Airport Rd Water Pump Station and Piping
- Admin Building Renovation & Addition
- SRR to RMR Raw Water Piping*
- Emmet St. Water Piping
- Berkmar Ext. Waterline Phs. 2
- Maury Hill Sewer Replacement
- Glenmore WRRF Upgrade

- **Operations and Maintenance / Safety: \$63 M**

- Dam Concrete and Steel Repairs
- Security Enhancements
- WW Piping and MH Repairs
- MC Biogas Upgrades
- MC Maintenance, Blower, Pumping Building Repairs
- MC Concrete and Steel Repairs
- Tank Painting and Rehabilitation
- Crozet WW Pump Station Rehabilitations
- SRR and RMR HLOS and Aeration
- Crozet Greyrock Pump Station
- MCPS and Septage Receiving Upgrades
- ACM Remediation



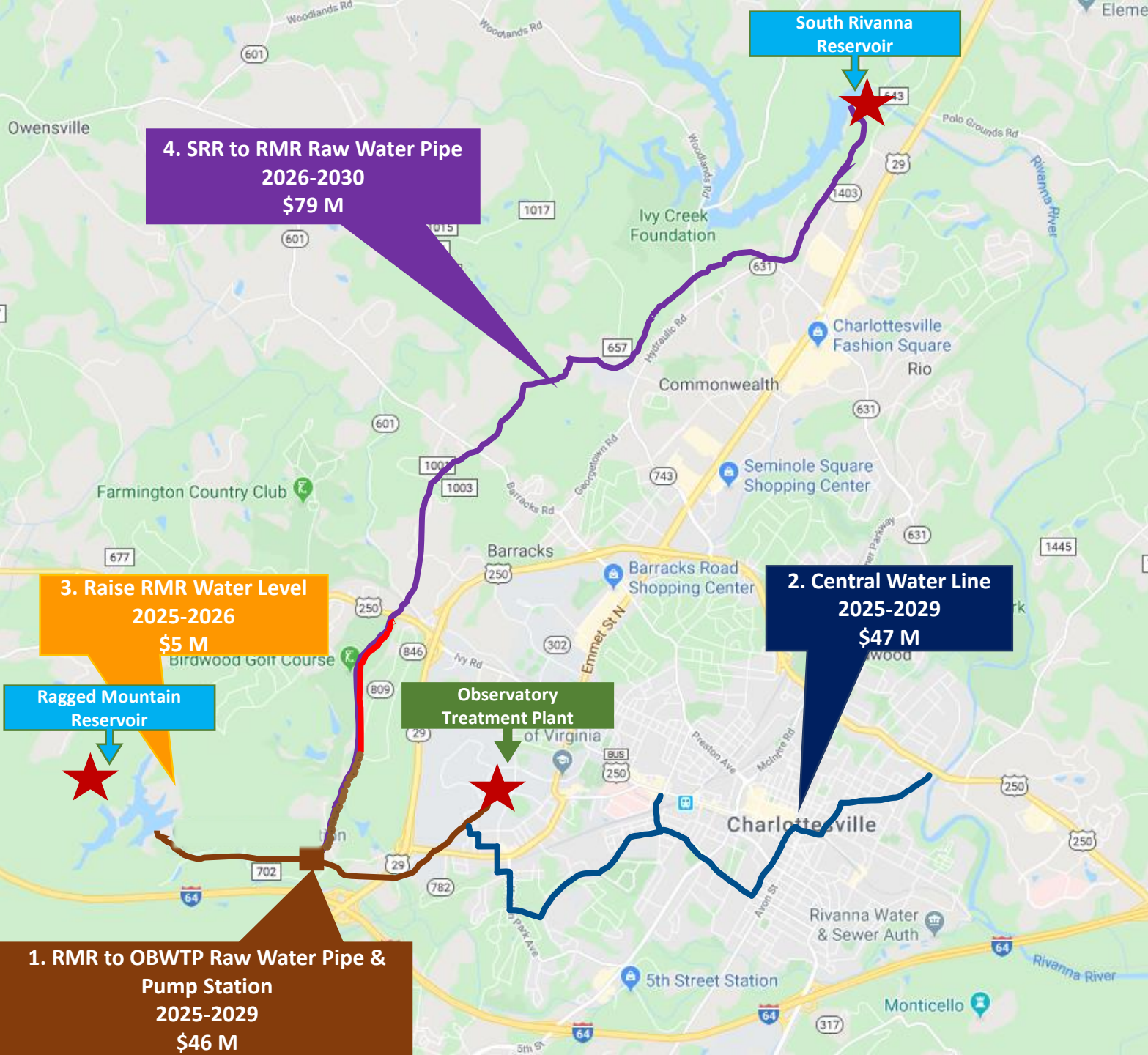
- **Regulatory: \$50 M**

- Beaver Creek Dam, Pump Station and Piping*
- Buck Mtn. Property Dam Remediation
- North Rivanna WTP Decommissioning*

- **Reliability / Redundancy : \$117 M**

- RMR to OBWTP Piping and Pumping
- Central Water Line
- MC 5kv Electrical System Upgrade
- South Fork Rivanna River Crossing
- Scottsville WWTP Emergency Generator*
- Upper Schenks Branch Interceptor
- AC Pipe Replacement
- North Fork Rivanna River Crossing
- Flood Resilience Enhancements*
- IT Infrastructure
- Asset Management

* Indicates Partial Grant Funding



Water Supply Projects

(May 2024)

1. RMR to OBWTP Raw Water
Pipe & Pump Station
2025-2029

\$46 M

2. Central Water Line
2025-2029

\$47 M

3. Raise RMR Water Level
2025-2026

\$5 M

4. SRR to RMR Raw Water Pipe
2026-2030

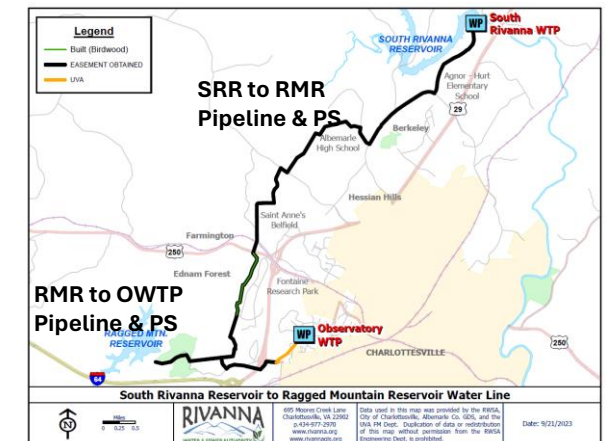
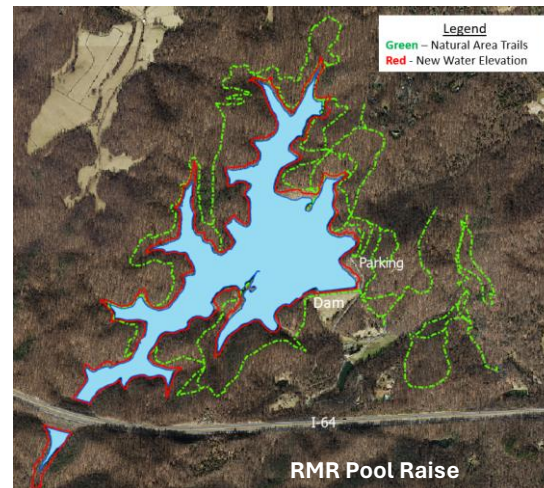
\$79 M

ACSA \$118 M
City \$59 M

\$177 M

Questions and Board Action Requested

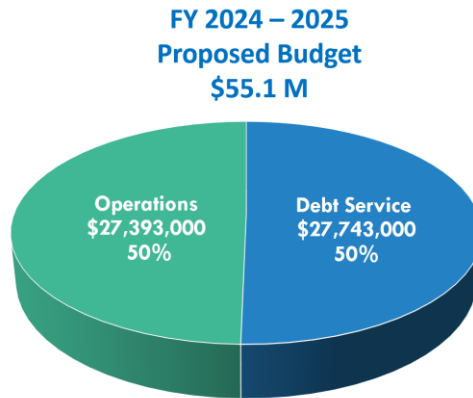
Approve the FY 2025-2029 Capital Improvement Plan totaling \$371,000,436.



Rivanna Water and Sewer Authority
Proposed
FY 2024-2025 Budget

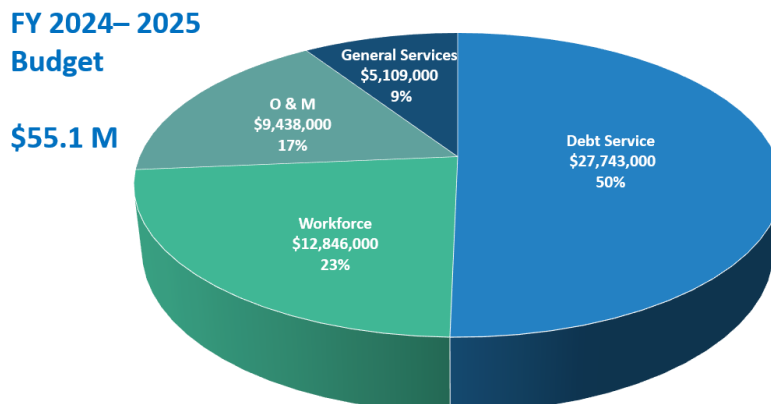
Budget Overview

The Rivanna Water and Sewer Authority provides wholesale drinking water and wastewater treatment services for the City of Charlottesville Utilities Department (City) and the Albemarle County Service Authority (ACSA). An FY 2024-2025 budget of \$55,136,000 is proposed to support the quality of life and economic development desired by both localities. The proposed budget was developed to strategically provide these water and wastewater services for our community in a reliable, regulatory compliant, environmentally protective, and financially responsible manner.



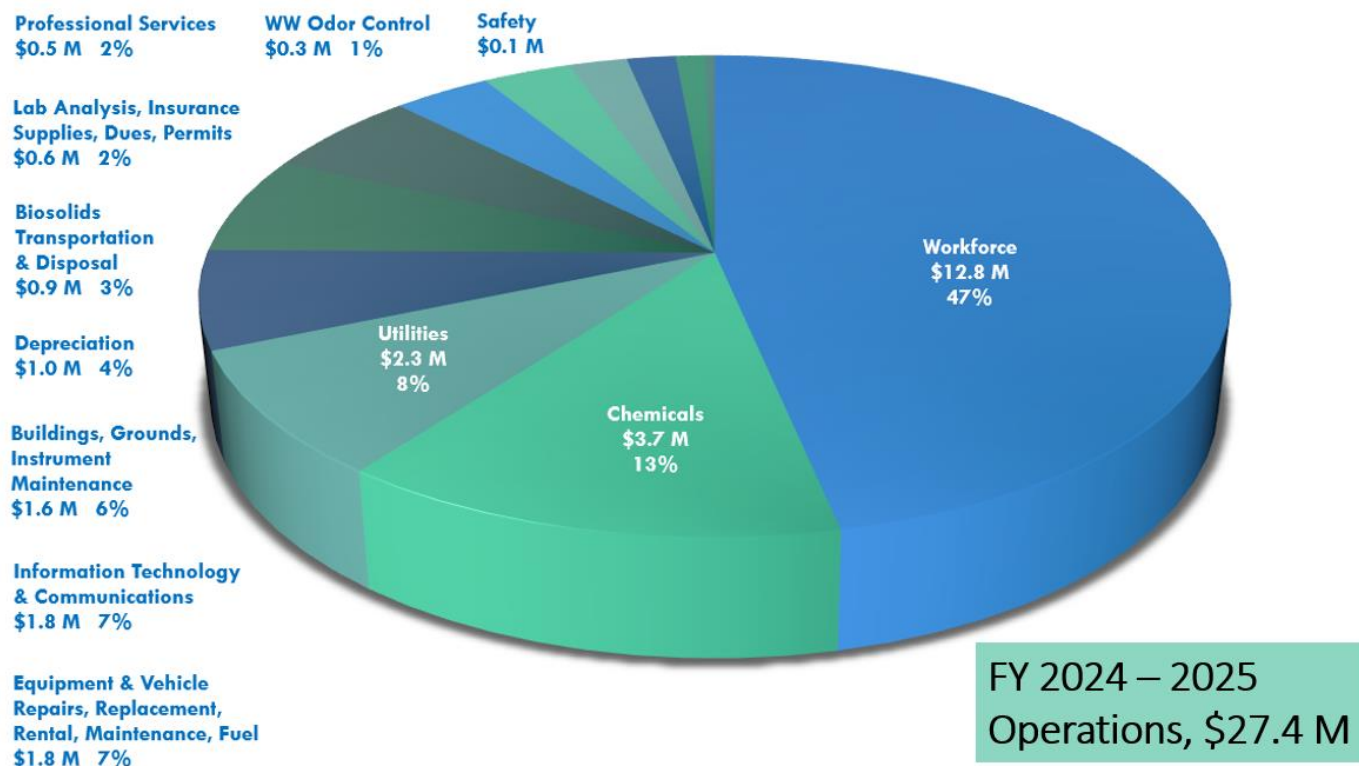
To provide the capacity and reliability needed to appropriately serve our customers, we are guided by our Strategic Plan priorities of Optimization and Resiliency, Communication and Collaboration, Planning and Infrastructure, Environmental Stewardship, and Workforce Development. The proposed budget includes \$27,393,000 for Operating expenses and \$27,743,000 for Debt Service charges, including a total budget increase of \$7,437,000, or 15.6%.

Operating expenses include General Services (professional and nonprofessional contract services; utilities; biosolids transportation and disposal; odor control; information technology; insurance; permits; and communications), Operation and Maintenance (chemicals; repairs and maintenance for buildings, vehicles, and equipment; fuel; and depreciation) and Workforce (salaries; benefits; training; and uniforms). Debt Service charges represent 50% of our budget and provide funding to construct and renew our major infrastructure including water and wastewater treatment plants, pumping stations, piping systems and reservoir facilities.



**Rivanna Water and Sewer Authority
Proposed
FY 2024-2025 Budget**

A detailed outline of our Operating expenses is shown below:



To support our Operational, Capital and Strategic Plan goals, the FY 2024-2025 budget proposes an increase of \$2,986,000 in Operating expenses and an increase of \$4,451,000 in Debt Service charges for a total budget increase of \$7,437,000. Rates in the Urban Rate Centers are proposed to increase:

- \$0.414 per 1000 gallons = 14% for water
- \$0.325 per 1000 gallons = 11% for wastewater

Monthly Debt Service charges to City Utilities will increase:

- \$69,026 = 22% for Urban water
- \$29,332 = 7% for Urban wastewater

Monthly Debt Service charges to the ACSA will increase:

- \$130,982 = 24% for Urban water
- \$38,755 = 10% for Urban wastewater
- \$51,488 = 11% for non-Urban water and wastewater

Rivanna Water and Sewer Authority
Proposed
FY 2024-2025 Budget

Actual Water and Wastewater Flows

Actual FY 2022-2023 water and wastewater retail flows reported by City Utilities and ACSA are used to allocate the Urban Area operating rates and charges, in accordance with the “Working Agreement on Urban Area Wholesale Flow Allocation and Billing Methodology” (1983). Based on the actual retail flows reported, the allocation of costs resulted in a \$230,000 charge increase for the City and a \$230,000 charge decrease for the ACSA.

Allocation of flows (based on retail flows):

	<u>FY 2024</u>	<u>FY 2025</u>
City Water	48%	49%
ACSA Water	52%	51%
City Wastewater	46%	47%
ACSA Wastewater	54%	53%

Expenses

Utility and chemical costs for our water and wastewater treatment processes continue to be major drivers of our expense increases. Expanded laboratory testing for PFAS compounds and other emerging contaminants will also increase our budget as we strive to protect our environment and our customers. Four additional positions are proposed to strengthen our resources as we work to achieve Strategic Plan priorities including brand identity, community outreach, diversity in our workforce, and leadership development. The proposed budget includes a 3% cost-of-living and 2% merit pool for staff salary increases to help us retain and attract qualified staff to provide our essential services. A brief description of proposed budget investments includes:

A. Increase in Operating Expenses:	\$2,986,000
1. Water and Wastewater Programs, net increase:	\$1,828,000
a. Water and Wastewater Utilities	\$690,000
b. Water and Wastewater Chemicals	\$625,000
c. Technology, Paychex, SCADA	\$200,000
d. Laboratory Analysis – PFAS, Pharmaceuticals	\$130,000
2. Personnel:	\$1,157,000
a. 3% cola + 2% merit	\$425,000
b. VRS, Taxes, Health and Life Insurance	\$364,000
c. FY 24 positions	\$163,000
d. Additional positions (partial year)	\$205,000
▪ Deputy Executive Director	
▪ Wastewater Operator	

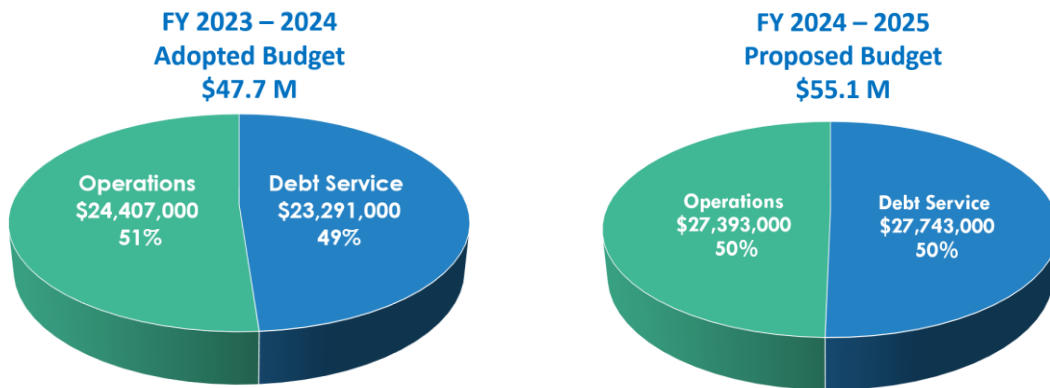
**Rivanna Water and Sewer Authority
Proposed
FY 2024-2025 Budget**

- Outreach and Communications Coordinator
- Sustainability and Grants Coordinator

B. Increase in Debt Service Charges:

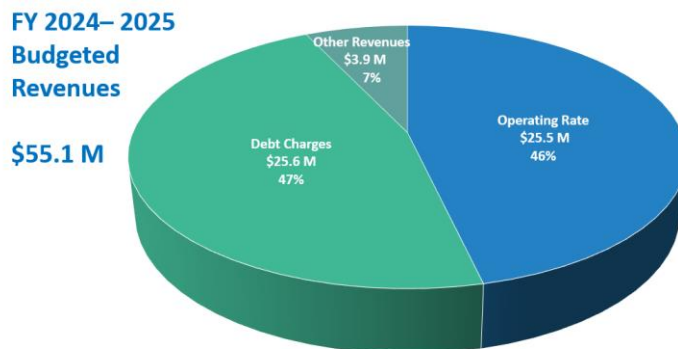
\$4,451,000

Debt Service costs of \$27,743,000 represent the largest component of our budget (50%). These debt costs are estimated to increase \$4,451,000 to support our investment in major infrastructure projects in our FY 25 – 29 CIP. Some of those projects include the Airport Road Water Pump Station, Central Water Line, Ragged Mtn Reservoir to Observatory WTP Water Line and Pump Station, South Fork Rivanna Reservoir to Ragged Mtn. Reservoir Water Line, Beaver Creek Reservoir Dam, Pump Station and Water Line, and any costs not reimbursed by our property insurance company for the repairs to the Rivanna Pump Station. The Authority’s overall ratio of Operating expenses and increasing Debt Service costs now share equal allocations of the total budget, as shown below in comparison to FY 2023-2024:



Revenues

Revenues for FY 2024 - 2025 are based upon estimated Operating Rate revenues of \$25,534,000, Debt Service charges of \$25,612,000, and other non-customer revenues of \$3,990,000 (RSWA allocation, septage receiving, nutrient credits, County septage station support, and interest income), as shown below:



A summary of the major inflation and investment-driven budget increases follows, and a detailed line-by-line comparison is provided in **Appendix 8** for the Authority as a whole.

Rivanna Water and Sewer Authority

Proposed FY 2024-2025 Budget

Summary of Budget Expenses FY 2025

3/20/2024

Significant Line - item increases

Draft 3 for Draft 4 of Budget

	<u>Line Item</u>	<u>Items</u>	<u>Budget Change over Prior year</u>
<u>Personnel cost in general</u>			
• Salary Adjustment 3% COLA & 2% Merit increase	11000	425,000	
• New Positions Half-year funding (Deputy, HR, WW Operator, Grant/Sustainability)	11000	205,000	
• Fund 2024 Positions to fully fund	11000	163,000	
• Personnel costs related changes (VRS, Taxes, Life Ins., Health)	12000	364,000	
Total change in personnel and benefit costs			\$ 1,157,000
<u>General overall changes</u>			
<u>All Departments</u>			
• IT / SCADA Support and Maintenance	31000		\$ 200,500
• Insurance - New facilities and rate increases	21100		\$ 24,000
• Training	13150		\$ 19,400
<u>Urban Water</u>			
• Lab - several new tests for PFAS, Pharmaceutical byproducts	21350		\$ 30,800
• Utilities - bring to FY 2023 actual levels	21400		\$ 225,000
• Dam Main. - See Data Table Worksheet	41300		\$ 47,500
• Chemicals - See Data Table Worksheet	41450		\$ 462,400
<u>Urban Wastewater</u>			
• Utilities - bring to trend	21400		\$ 260,000
• Chemicals	41450		\$ 170,800
<u>Crozet</u>			
• Lab - several new tests for PFAS, Pharmaceutical byproducts	21350		\$ 18,600
• Utilities - bring to FY 2023 actual levels	21400		\$ 12,500
• B & G - bring to trend - FY 2023 level	41100		\$ 19,500
• Chemicals - See Data Table Worksheet	41450		\$ 57,900
• Instrumentation - new Zeta Meter \$20,000	41600		\$ 11,200
<u>Scottsville Water</u>			
• Lab - several new tests for PFAS, Pharmaceutical byproducts	21350		\$ 30,900
• Utilities - bring to FY 2023 actual levels	21400		\$ 5,500
• Dam Maintenance	41300		\$ 3,500
• Instrumentation - new equipment installed	41600		\$ 3,800

Rivanna Water and Sewer Authority
Proposed
FY 2024-2025 Budget

Summary of Budget Expenses
FY 2025

3/20/2024

Significant Line - item increases

Draft 3 for Draft 4 of Budget

	<u>Line Item</u>	<u>Items</u>	<u>Budget</u> <u>Change over</u> <u>Prior year</u>
• Chemicals - See Data Table Worksheet	41450		\$ 8,500
<u>Glenmore WW</u>			
• Depreciation			\$ 15,000
<u>Administration</u>			
• Other - Personnel (service awards, EAP, Open Enrollment)	13350		\$ 6,000
• Administrative Services - Deputy Dir. recruitment consultant \$50K	20200		\$ 16,800
• General Other - Paychex \$50k, Web Design \$50k	21420		\$ 65,000
<u>Maintenance</u>			
• Cellphone and Wireless - iPad	22200		\$ 5,200
• Fuel and Lubricants (last year was \$27k actual)	41650		\$ 15,000
<u>Lab</u>			
• Materials and Supplies (FY 2023 actuals were \$85K)	41400		\$ 35,000
• Equipment Maintenance	41450		\$ (23,500)
• Instrumentation (FY 2023 actuals were \$17k)	41600		\$ 10,500
• New Equipment over \$10,000	81250		\$ 20,000
<u>Engineering</u>			
• Asset Management - Citywork annual subscription and Support	31325		\$ 56,800
• All other changes			\$ (5,300)
FY 2025 Total increases in estimated operating expenses			\$ 2,985,800

Rivanna Water and Sewer Authority
Proposed
FY 2024-2025 Budget

Debt Service & Capital Improvements

Debt service requirements for the Capital Improvement Plan (CIP) are included in the budget request. The FY 25-29 CIP totals \$370 M, a net increase of \$44.8 M as compared to the FY 24-28 CIP. A budget increase of \$25 M is included in the five-year CIP for inflation and scope revisions to existing projects, one project totaling \$13 M was accelerated, seven projects totaling \$2.6 M were added, and projects totaling \$47 M transitioned into FY 2029. More detailed information on the proposed FY 2025 – 2029 CIP can be found at <http://www.rivanna.org/financials-and-procurement/>.

The table below shows the changes in estimated project costs reflected in the CIP:

Project Cost	2024-2028 Adopted CIP	Projects Completed	New or Additional Project Costs	2025-2029 Draft CIP	Change \$	Change %
Urban Water Projects	\$ 209,590,000	\$ (47,150,000)	\$ 60,951,000	\$ 223,391,000	\$ 13,801,000	7%
Urban Wastewater Projects	58,220,000	-	18,365,000	76,585,000	18,365,000	24%
Shared Projects	4,984,000	(654,300)	6,442,700	10,772,400	5,788,400	54%
Non-Urban Projects	53,331,000	-	6,921,000	60,252,000	6,921,000	11%
Total Project Cost Estimates	\$ 326,125,000	\$ (47,804,300)	\$ 92,679,700	\$ 371,000,400	\$ 44,875,400	12%

The Authority has programmed into the FY 2024-2025 budget charges that fund the additional debt service anticipated by the proposed CIP. Cumulatively, the Authority has built 33.2% of future debt service costs into the rates and charges for all rate centers in FY 2024-2025. This is done by using the CIP as a guide for future debt needs, and including an average charge increase over that five-year period. This proactive approach prevents large spikes in charges for any given year in which new debt is actually issued - effectively leveling the impact on charges.

For example, current Urban Water charges have 27% (\$2.9 M) of the needed future debt service revenues already built into the charges to cover the total funding needed for the next five years, which is \$10.78 M. This will require the remaining \$7.9 M to be included in the future debt service charge as an annual increase over the next four years to fund the Water projects within the CIP.

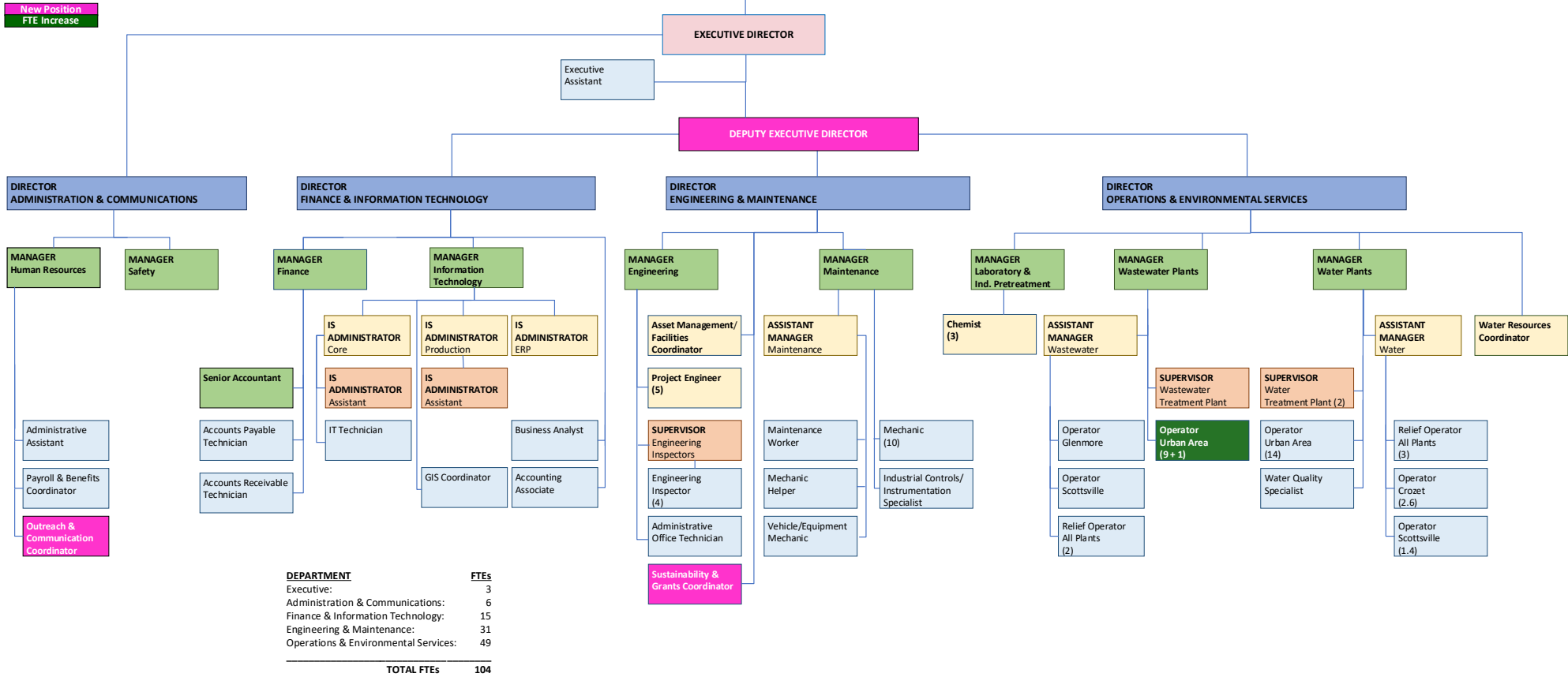
Next Five Years			
	Annual Estimated NEW Debt Service related to 5-year CIP <u>New Debt</u>	New Debt Service Cost built into <u>FY 2025 Rates</u>	Percentage of Debt Service in <u>FY 2025 Rates</u>
Urban Water	\$ 14,921,000	\$ 5,310,600	35.6%
Urban Wastewater	4,970,000	2,143,800	43.1%
Non-Urban Rate Centers	3,128,000	1,593,000	50.9%
	\$ 23,019,000	\$ 9,047,400	39.3%

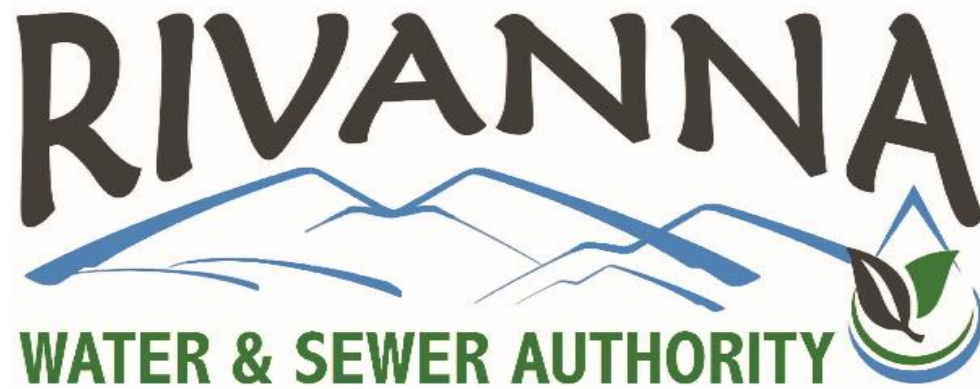
Rivanna Water and Sewer Authority
Proposed
FY 2024-2025 Budget

RIVANNA WATER & SEWER AUTHORITY
Organizational Chart

FY 2024 – 2025 Proposed Budget

One employee per position unless noted in parenthesis ()





VALUES

The Rivanna Authorities are committed to the following values:

- Integrity
- Teamwork
- Respect
- Quality

Proposed Budget

Fiscal Year 2024 – 2025

RIVANNA WATER & SEWER AUTHORITY

FY 2025 Proposed Budget

Prepared:

March 5, 2024

Adopted:

Draft 5 BOD Draft

Table of Contents

	<u>Page</u>
Budget Highlights	
Narrative	i-vii
Departmental Summary of Revenues and Expenses	1
Summary of Itemized Rates	2
Summary of Charges to Customers	3
Urban Water:	Summary Sheet 7
	Expense Detail 8-9
Crozet Water:	Summary Sheet 11
	Expense Detail 12-13
Scottsville Water:	Summary Sheet 15
	Expense Detail 16-17
Wastewater: Urban Wastewater:	Summary Sheet 21
	Expense Detail 22-23
Glenmore Wastewater:	Summary Sheet 25
	Expense Detail 26-27
Scottsville Wastewater:	Summary Sheet 29
	Expense Detail 30-31
Support Departments:	
Administration	35-37
Finance & IT	39-41
Maintenance	43-45
Lab	47-49
Engineering	51-53
Appendices:	
1 - Flow Projections	57
2 - Urban Water Debt Service Rates	58
3 - Urban Wastewater Debt Service Rates	59
4 - Other Rate Centers Debt Service Rates	60
5 - Debt Summary	61
6 - Stone Robinson	62
7 - Detailed Summary of Revenues	63
8 - Detailed Summary of Expenses	64-65
9 - Staffing by Department	66-67

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Budget Highlights

- Executive Summary Narrative

Budget Details

Pages 1 - 64

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Departmental Summary of Revenues and Expenses

Summary of Revenues

	FY 2024	FY 2025	\$ Change	% Change
Operations Revenues				
Urban Water	\$ 10,230,000	\$ 11,587,000	1,357,000	13.26%
Crozet Water	1,269,000	1,460,000	191,000	15.05%
Scottsville Water	659,000	747,000	88,000	13.35%
Urban Wastewater	10,559,000	11,749,000	1,190,000	11.27%
Glenmore Wastewater	524,000	537,000	13,000	2.48%
Scottsville Wastewater	385,000	408,000	23,000	5.97%
Administration	781,000	364,000	(417,000)	-53.39%
Finance & IT	-	541,000	541,000	
Maintenance	-	-	-	
Lab	-	-	-	
Engineering	-	-	-	
Total	\$ 24,407,000	\$ 27,393,000	\$ 2,986,000	12.23%

Debt Service Revenues				
Urban Water	\$ 10,696,000	\$ 13,534,000	2,838,000	26.53%
Crozet Water	2,434,000	2,717,000	283,000	11.63%
Scottsville Water	171,000	201,000	30,000	17.54%
Urban Wastewater	9,946,000	11,206,000	1,259,000	12.67%
Glenmore Wastewater	23,000	49,000	26,000	113.04%
Scottsville Wastewater	21,000	36,000	15,000	71.43%
Total	\$ 23,291,000	\$ 27,743,000	\$ 4,451,000	19.11%

Total Revenues \$ 47,698,000 \$ 55,136,000 \$ 7,437,000 15.59%

Summary of Expenses

	FY 2024	FY 2025	\$ Change	% Change
Operations Expenses				
Urban Water	\$ 6,795,000	\$ 7,690,000	895,000	13.17%
Crozet Water	948,000	1,097,000	149,000	15.72%
Scottsville Water	464,000	530,000	66,000	14.22%
Urban Wastewater	6,524,000	7,219,000	695,000	10.65%
Glenmore Wastewater	377,000	378,000	1,000	0.27%
Scottsville Wastewater	249,000	259,000	10,000	4.02%
Administration	4,131,000	1,758,000	(2,373,000)	-57.44%
Finance & IT	-	3,226,000	3,226,000	
Maintenance	1,963,000	1,997,000	34,000	1.73%
Lab	591,000	633,000	42,000	7.11%
Engineering	2,365,000	2,606,000	241,000	10.19%
Total	\$ 24,407,000	\$ 27,393,000	\$ 2,986,000	12.23%

Debt Service Expenses				
Urban Water	\$ 10,696,000	\$ 13,534,000	2,838,000	26.53%
Crozet Water	2,434,000	2,717,000	283,000	11.63%
Scottsville Water	171,000	201,000	30,000	17.54%
Urban Wastewater	9,946,000	11,205,000	1,259,000	12.66%
Glenmore Wastewater	23,000	49,000	26,000	113.04%
Scottsville Wastewater	21,000	36,000	15,000	71.43%
Total	\$ 23,291,000	\$ 27,742,000	\$ 4,451,000	19.11%

Total Expenses \$ 47,698,000 \$ 55,135,000 \$ 7,437,000 15.59%

Total Budgetary Surplus/ (Deficit)	\$ -	\$ 1,000	\$ -
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These figures are rounded from the detail pages of this budget model and some immaterial differences will be present.

Summary of Itemized Rates

URBAN RATE CENTERS			FY 2024	FY 2025	\$ Change	% Change
<u>Operating Rates</u> (\$ per 1,000 Gallons)						
	Operations	Water	\$ 2.949	\$ 3.363	\$ 0.414	14.04%
	Operations	Wastewater	2.922	3.247	0.325	11.12%
<u>Debt Service Charges</u> (\$ Monthly Charge)						
<u>Water</u>						
	Debt Service	CITY	\$ 307,200	\$ 376,226	\$ 69,026	22.47%
	Debt Service	ACSA	542,282	673,264	130,982	24.15%
<u>Wastewater</u>						
	Debt Service	CITY *	\$ 394,890	\$ 424,222	\$ 29,332	7.43%
	Debt Service	ACSA *	383,403	422,158	38,755	10.11%
OTHER RATE CENTERS (Monthly)			FY 2024	FY 2025	\$ Change	% Change
<u>Crozet Water</u>						
	Operations		\$ 99,757	\$ 118,387	\$ 18,630	18.68%
	Debt Service		198,810	215,864	17,054	8.58%
<u>Scottsville Water</u>						
	Operations		\$ 54,705	\$ 61,832	\$ 7,127	13.03%
	Debt Service		13,228	15,868	2,640	19.96%
	Water Total		\$ 366,500	\$ 411,951	\$ 45,451	12.40%
<u>Glenmore Wastewater</u>						
	Operations		\$ 43,493	\$ 44,426	\$ 933	2.15%
	Debt Service		1,890	4,065	2,175	115.08%
<u>Scottsville Wastewater</u>						
	Operations		\$ 32,016	\$ 33,785	\$ 1,769	5.53%
	Debt Service		1,553	2,713	1,160	74.69%
	Wastewater Total		\$ 78,952	\$ 84,989	\$ 6,037	7.65%
Total Monthly Other Rate Center Charges - ACSA			\$ 445,452	\$ 496,940	\$ 51,488	11.56%

Summary of Charges to Customers

	<u>FY 2024</u>	<u>FY 2025</u>	<u>Change</u> <u>\$</u>	<u>Change</u> <u>%</u>
<u>City - Charges From RWSA</u>				
Urban Water				
Operating Rate Charges	\$ 4,810,300	\$ 5,598,400	\$ 788,100	16.4%
Debt Service Charges	* 3,686,400	4,514,700	828,300	22.5%
	<u>\$ 8,496,700</u>	<u>\$ 10,113,100</u>	<u>\$ 1,616,400</u>	<u>19.0%</u>
Urban Wastewater				
Operating Rate Charges	\$ 4,557,800	\$ 5,173,500	\$ 615,700	13.5%
Debt Service Charges	4,738,800	5,090,800	352,000	7.4%
	<u>\$ 9,296,600</u>	<u>\$ 10,264,300</u>	<u>\$ 967,700</u>	<u>10.4%</u>
Total City Charges	<u>\$ 17,793,300</u>	<u>\$ 20,377,400</u>	<u>\$ 2,584,100</u>	<u>14.5%</u>

<u>ACSA - Charges From RWSA</u>				
Urban Water				
Operating Rate Charges	\$ 5,211,100	\$ 5,826,900	\$ 615,800	11.8%
Debt Service Charges	* 6,507,400	8,079,200	1,571,800	24.2%
	<u>\$ 11,718,500</u>	<u>\$ 13,906,100</u>	<u>\$ 2,187,600</u>	<u>18.7%</u>
Urban Wastewater				
Operating Rate Charges	\$ 5,350,500	\$ 5,834,000	\$ 483,500	9.0%
Debt Service Charges	4,600,800	5,065,900	465,100	10.1%
	<u>\$ 9,951,300</u>	<u>\$ 10,899,900</u>	<u>\$ 948,600</u>	<u>9.5%</u>
Other Rate Centers				
Operating Rate Charges	\$ 2,797,300	\$ 3,101,200	\$ 303,900	10.9%
Debt Service Charges	2,585,800	2,862,100	276,300	10.7%
	<u>\$ 5,383,100</u>	<u>\$ 5,963,300</u>	<u>\$ 580,200</u>	<u>10.8%</u>
Total ACSA Charges	<u>\$ 27,052,900</u>	<u>\$ 30,769,300</u>	<u>\$ 3,716,400</u>	<u>13.7%</u>

<u>RWSA Customer Revenue Charges</u>				
Operating Rate Revenues				
Urban Water	\$ 10,021,400	\$ 11,425,300	\$ 1,403,900	14.0%
Urban Wastewater	9,908,300	11,007,500	1,099,200	11.1%
Other Rate Centers	2,797,300	3,101,200	303,900	10.9%
	<u>\$ 22,727,000</u>	<u>\$ 25,534,000</u>	<u>\$ 2,807,000</u>	<u>12.4%</u>
Debt Service Rate Revenues				
Urban Water	\$ 10,193,800	\$ 12,593,900	\$ 2,400,100	23.5%
Urban Wastewater	9,339,600	10,156,700	817,100	8.7%
Other Rate Centers	2,585,800	2,862,100	276,300	10.7%
	<u>\$ 22,119,200</u>	<u>\$ 25,612,700</u>	<u>\$ 3,493,500</u>	<u>15.8%</u>
Total RWSA Customer Revenues	<u>\$ 44,846,200</u>	<u>\$ 51,146,700</u>	<u>\$ 6,300,500</u>	<u>14.0%</u>

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Water Rate Centers

Rivanna Water and Sewer Authority

Fiscal Year 2024-2025

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Urban Water Summary

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	
Projected Flow (MGD)	9.309		9.309	0.00%

Operations Budget

Projected Revenues

Operations Rate	\$	2.949			\$	3.363	14.04%
Revenue	\$	10,021,362	\$ 5,245,531	\$ 10,491,062	\$	11,425,341	14.01%
Lease Revenues		94,000	53,651	107,302		90,000	-4.26%
Use of Reserves (Water Resources Fund)		80,000	80,000	80,000		-	-100.00%
Miscellaneous		-	-	-		-	
Interest Allocation		34,200	36,693	73,386		71,500	109.06%
Total Operations Revenues	\$	10,229,562	\$ 5,415,875	\$ 10,751,750	\$	11,586,841	13.27%

Projected Expenses

Personnel Cost	\$	2,384,332	\$ 1,250,228	\$ 2,530,920	\$	2,570,828	7.82%
Professional Services		178,500	72,026	334,052		177,000	-0.84%
Other Services and Charges		769,233	639,217	1,228,434		1,076,746	39.98%
Communications		103,200	47,219	94,438		89,700	-13.08%
Information Technology		127,650	48,367	95,934		109,400	-14.30%
Supplies		7,000	7,504	15,008		7,900	12.86%
Operations and Maintenance		2,905,068	1,567,630	3,190,260		3,334,814	14.79%
Equipment Purchases		20,100	20,531	41,062		23,300	15.92%
Depreciation & Reserves		300,000	150,000	300,000		300,000	0.00%
Subtotal Before Allocations	\$	6,795,083	\$ 3,802,722	\$ 7,830,108	\$	7,689,688	13.17%
Allocation of Support Departments		3,434,479	1,573,045	3,219,980		3,897,153	13.47%
Total Operations Expenses	\$	10,229,562	\$ 5,375,767	\$ 11,050,088	\$	11,586,841	13.27%

Operations Cost per 1,000 gallons	\$3.011	\$3.410	13.25%
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Debt Service Budget

Projected Revenue

Debt Service Rates	CITY	\$	307,200			\$	376,226	22.47%		
	ACSA	\$	542,282			\$	673,264	24.15%		
Debt Service Rate Revenue - CITY		\$	3,686,400	\$	1,843,200	\$	3,686,400	\$	4,514,709	22.47%
Debt Service Rate Revenue - ACSA			6,507,379		3,253,692		6,507,384		8,079,165	24.15%
Trust Fund Interest			77,500		88,649		177,298		185,000	138.71%
Reserve Fund Interest			423,100		385,608		771,216		744,800	76.03%
Lease Revenue			1,600		1,884		3,768		10,000	525.00%
Total Debt Service Revenue		\$	10,695,979	\$	5,573,033	\$	11,146,066	\$	13,533,674	26.53%

Principal, Interest & Reserves

Total Principal & Interest	\$	6,964,724	\$ 3,482,390	\$ 6,964,780	\$	7,078,274	1.63%
Reserve Additions - Interest		423,100	385,608	771,216		744,800	76.03%
Debt Service Ratio Charge		400,000	200,000	400,000		400,000	0.00%
Est. New Debt Service - CIP Growth		2,908,100	1,454,050	2,908,100		5,310,600	82.61%
Total Debt Principal and Interest	\$	10,695,924	\$ 5,522,048	\$ 11,044,096	\$	13,533,674	26.53%

Rate Center Summary

Total Revenues	\$	20,925,541	\$ 10,988,908	\$ 21,897,816	\$	25,120,515	20.05%
Total Expenses		20,925,486	10,897,815	22,094,184		25,120,515	20.05%
Surplus/(Deficit)	\$	55	\$ 91,093	\$ (196,368)	\$	-	

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Urban Water

Expense Detail							2024	2024
Expense Center: Urban Water			Current Year Activity				vs.	vs.
Object Code	Line Item	Adopted Budget FY 2023-2024	Six Month Actual 12/31/2023	Projected Year end 6/30/2024	Proposed Budget FY 2024-2025	2025 Variance \$	2025 Variance %	
10000	Salaries & Benefits							
11000	Salaries	\$ 1,580,700	\$ 891,681	\$ 1,783,362	\$ 1,709,600	\$ 128,900	8.15%	
11010	Overtime & Holiday Pay	135,000	47,371	130,000	135,000	-	0.00%	
12010	FICA	131,251	70,073	140,146	141,112	9,861	7.51%	
12020	Health Insurance	315,400	128,851	257,702	331,100	15,700	4.98%	
12026	Employee Assistance Program	350	184	368	350	-	0.00%	
12030	Retirement	132,621	69,210	138,420	146,684	14,063	10.60%	
12040	Life Insurance	18,810	8,560	17,120	22,909	4,099	21.79%	
12050	Fitness Program	2,000	2,322	4,644	2,000	-	0.00%	
12060	Worker's Comp Insurance	27,300	13,191	17,588	27,300	-	0.00%	
	Subtotal	\$ 2,343,432	\$ 1,231,443	\$ 2,489,350	\$ 2,516,055	\$ 172,623	7.37%	
13000	Other Personnel Costs							
13100	Employee Dues & Licenses	\$ 4,000	\$ -	\$ 4,000	\$ 4,500	\$ 500	12.50%	
13150	Education & Training	10,100	7,311	14,622	21,573	11,473	113.59%	
13200	Travel & Lodging	1,800	1,244	2,488	2,700	900	50.00%	
13250	Uniforms	23,000	9,958	19,916	24,000	1,000	4.35%	
13325	Recruiting & Medical Testing	1,000	180	360	1,000	-	0.00%	
13350	Other	1,000	92	184	1,000	-	0.00%	
	Subtotal	\$ 40,900	\$ 18,785	\$ 41,570	\$ 54,773	\$ 13,873	33.92%	
	Professional Services							
20100	Legal Fees	\$ 1,500	\$ 4,584	\$ 9,168	\$ -	\$ (1,500)	-100.00%	
20200	Financial & Admin. Services	5,000	3,600	7,200	5,000	-		
20250	Bond Issue Costs	-	-	-	-	-		
20300	Engineering & Technical Services	172,000	63,842	317,684	172,000	-	0.00%	
	Subtotal	\$ 178,500	\$ 72,026	\$ 334,052	\$ 177,000	\$ (1,500)	-0.84%	
	Other Services and Charges							
21100	General Liability/Property Ins.	\$ 44,900	\$ 23,369	\$ 46,738	\$ 56,125	\$ 11,225	25.00%	
21150	Advertising & Communication	-	-	-	-	-		
21250	Watershed Management	71,000	97,873	145,746	54,000	(17,000)	-23.94%	
21253	Safety Programs/Supplies	28,200	14,993	29,986	27,000	(1,200)	-4.26%	
21300	Authority Dues/Permits/Fees	8,000	36,310	72,620	11,981	3,981	49.76%	
21350	Laboratory Analysis	40,133	24,259	48,518	120,495	80,362	200.24%	
21400	Utilities	525,000	408,059	816,118	750,000	225,000	42.86%	
21420	General Other Services	52,000	34,354	68,708	57,145	5,145	9.89%	
21430	Governance & Strategic Support	-	-	-	-	-		
21450	Bad Debt	-	-	-	-	-		
	Subtotal	\$ 769,233	\$ 639,217	\$ 1,228,434	\$ 1,076,746	\$ 307,513	39.98%	
22000	Communication							
22100	Radio	\$ 3,200	\$ 2,936	\$ 5,872	\$ 3,000	\$ (200)	-6.25%	
22150	Telephone & Data Service	90,000	38,294	76,588	75,000	(15,000)	-16.67%	
22200	Cell Phones, Wireless data	10,000	5,989	11,978	11,700	1,700	17.00%	
	Subtotal	\$ 103,200	\$ 47,219	\$ 94,438	\$ 89,700	\$ (13,500)	-13.08%	
31000	Information Technology							
31100	Computer Hardware	\$ 10,000	\$ 6,170	\$ 12,340	\$ 5,000	\$ (5,000)	-50.00%	
31150	SCADA Maint. & Support	101,150	40,610	81,220	99,500	(1,650)	-1.63%	
31200	Maintenance & Support Services	500	1,187	2,374	500	-	0.00%	
31250	Software & Subscriptions	-	-	-	-	-		
31300	Security Systems	16,000	400	800	4,400	(11,600)		
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-		
	Subtotal	\$ 127,650	\$ 48,367	\$ 95,934	\$ 109,400	\$ (18,250)	-14.30%	
33000	Supplies							
33100	Office Supplies	\$ 2,000	\$ 1,228	\$ 2,456	\$ 2,500	\$ 500	25.00%	
33150	Subscriptions/Reference Material	-	-	-	-	-		
33350	Postage & Delivery	5,000	6,276	12,552	5,400	400	8.00%	
	Subtotal	\$ 7,000	\$ 7,504	\$ 15,008	\$ 7,900	\$ 900	12.86%	
41000	Operation & Maintenance							
41100	Building & Grounds	\$ 241,500	\$ 104,947	\$ 209,894	\$ 168,750	\$ (72,750)	-30.12%	
41150	Building/land Lease, Rental	175,000	175,000	175,000	175,000	-	0.00%	
41300	Dam Maintenance	95,200	77,439	154,878	142,700	47,500	49.89%	
41350	Pipeline/Appurtenances	62,500	78,472	156,944	62,500	-	0.00%	
41400	Materials, Supplies & Tools	40,000	12,646	25,292	40,000	-	0.00%	
41450	Chemicals	1,720,088	966,436	2,162,872	2,182,464	462,376	26.88%	
41500	Vehicle Maintenance	10,000	11,128	22,256	8,000	(2,000)	-20.00%	
41550	Equipment Repair, Replace, Maint.	261,000	76,816	153,632	257,000	(4,000)	-1.53%	
41600	Instrumentation & Metering	189,775	39,506	79,012	189,700	(75)	-0.04%	
41650	Fuel & Lubricants	29,000	8,309	16,618	27,700	(1,300)	-4.48%	
41700	General Other Maintenance	81,005	16,931	33,862	81,000	(5)	-0.01%	

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Urban Water

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
	<i>Subtotal</i>	\$ 2,905,068	\$ 1,567,630	\$ 3,190,260	\$ 3,334,814	\$ 429,746	14.79%
81000	Equipment Purchases						
81200	Rental & Leases		\$ 10,481	\$ 20,962	\$ -	\$ -	0.00%
81250	Equipment (over \$10,000)		-	-	-	-	0.00%
81300	Vehicle Replacement Fund	20,100	10,050	20,100	23,300	3,200	15.92%
	<i>Subtotal</i>	\$ 20,100	\$ 20,531	\$ 41,062	\$ 23,300	\$ 3,200	15.92%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 1,473,920	\$ 673,123	\$ 1,407,060	\$ 613,212	\$ (860,708)	-58.40%
95110	Finance & IT	-			1,181,544	1,181,544	
95300	Engineering Allocation	1,111,646	519,896	1,035,729	1,225,017	113,371	10.20%
95150	Maintenance Allocation	588,769	264,620	547,433	599,025	10,256	1.74%
95200	Laboratory Allocation	260,144	115,406	229,758	278,355	18,211	7.00%
	<i>Subtotal</i>	\$ 3,434,479	\$ 1,573,045	\$ 3,219,980	\$ 3,897,153	\$ 462,674	13.47%
	Depreciation	\$ 300,000	\$ 150,000	\$ 300,000	\$ 300,000	\$ -	0.00%
	<i>Subtotal</i>	\$ 300,000	\$ 150,000	\$ 300,000	\$ 300,000	\$ -	0.00%
	Total	\$ 10,229,562	\$ 5,375,767	\$ 11,050,088	\$ 11,586,841	\$ 1,357,279	13.27%

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Crozet Water Summary

Projected Flow (MGD)

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	
0.555			0.555	0.00%

Operations Budget

Projected Revenues

Operations Rate (monthly)

Revenue	\$ 1,234,752	\$ 617,376	\$ 1,234,752	\$ 1,420,644	15.06%
Leases	30,000	16,410	32,820	30,000	0.00%
Interest Allocation	4,600	4,898	9,796	8,900	93.48%
Total Operations Revenues	\$ 1,269,352	\$ 638,684	\$ 1,277,368	\$ 1,459,544	14.98%

Projected Expenses

Personnel Cost	\$ 341,691	\$ 175,297	\$ 349,476	\$ 365,428	6.95%
Professional Services	22,900	-	-	22,900	0.00%
Other Services and Charges	133,426	90,819	181,638	163,107	22.25%
Communications	17,600	8,392	16,784	19,000	7.95%
Information Technology	32,400	9,872	23,428	35,000	8.02%
Supplies	1,500	738	1,476	1,600	6.67%
Operations and Maintenance	335,700	148,216	342,032	426,600	27.08%
Equipment Purchases	3,200	2,330	4,660	3,300	3.13%
Depreciation	60,000	30,000	60,000	60,000	0.00%
Subtotal Before Allocations	\$ 948,417	\$ 465,664	\$ 979,494	\$ 1,096,935	15.66%
Allocations of Support Departments	320,940	146,802	300,816	362,608	12.98%
Total Operations Expenses	\$ 1,269,357	\$ 612,466	\$ 1,280,310	\$ 1,459,543	14.98%

Operations Cost per 1,000 gallons

\$6.266	\$7.205	14.99%
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Debt Service Budget

Projected Revenue

Debt Service Rates (monthly)

Debt Service Rate Revenue - ACSA	\$ 2,385,720	\$ 1,192,860	\$ 2,385,720	\$ 2,590,368	8.58%
Trust Fund Interest	13,500	15,495	30,990	32,400	140.00%
Use of Reserves	-	-	-	-	-
Reserve Fund Interest	34,500	31,265	62,530	93,800	171.88%
Total Debt Service Revenue	\$ 2,433,720	\$ 1,239,620	\$ 2,479,240	\$ 2,716,568	11.62%

Principal, Interest & Reserves

Total Principal & Interest - Existing	\$ 1,216,725	\$ 608,363	\$ 1,216,726	\$ 1,131,172	-7.03%
Estimated New Principal & Interest	1,182,500	591,250	1,182,500	1,491,600	26.14%
Reserve Additions - Interest	34,500	31,265	62,530	93,800	171.88%
Total Debt Principal and Interest	\$ 2,433,725	\$ 1,230,878	\$ 2,461,756	\$ 2,716,572	11.62%

Rate Center Summary

Total Revenues	\$ 3,703,072	\$ 1,878,304	\$ 3,756,608	\$ 4,176,112	12.77%
Total Expenses	3,703,082	1,843,344	3,742,066	4,176,115	12.77%
Surplus/(Deficit)	\$ (10)	\$ 34,960	\$ 14,542	\$ (3)	
Rates - (Monthly)					
ACSA	\$ 298,567			\$ 334,251	11.95%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Crozet Water

Expense Detail							2024	2024
Rate Center: Crozet Water			Current Year Activity				vs.	vs.
Object		Adopted Budget	Six Month	Projected	Proposed	2025	2025	
Code	Line Item	FY 2023-2024	Actual	Year end	Budget	Variance	Variance	
			12/31/2023	6/30/2024	FY 2024-2025	\$	%	
10000	Salaries & Benefits							
11000	Salaries	\$ 221,000	\$ 124,456	\$ 248,912	\$ 240,000	\$ 19,000	8.60%	
11010	Overtime & Holiday Pay	25,000	6,725	13,450	23,000	(2,000)	-8.00%	
12010	FICA	18,819	9,801	19,602	20,120	1,301	6.91%	
12020	Health Insurance	44,700	18,025	36,050	46,900	2,200	4.92%	
12026	Employee Assistance Program	50	26	52	50	-	0.00%	
12030	Retirement	18,542	9,698	19,396	20,592	2,050	11.06%	
12040	Life Insurance	2,630	1,395	2,790	3,216	586	22.28%	
12050	Fitness Program	300	308	616	300	-	0.00%	
12060	Worker's Comp Insurance	4,300	2,052	2,736	4,300	-	0.00%	
Subtotal		\$ 335,341	\$ 172,486	\$ 343,604	\$ 358,478	\$ 23,137	6.90%	
13000	Other Personnel Costs							
13100	Employee Dues & Licenses	\$ 250	\$ -	\$ 250	\$ 500	\$ 250	100.00%	
13150	Education & Training	2,000	1,008	2,016	2,500	500	25.00%	
13200	Travel & Lodging	200	177	354	200	-	0.00%	
13250	Uniforms	3,500	1,417	2,834	3,500	-	0.00%	
13325	Recruiting & Medical Testing	200	26	52	150	(50)	-25.00%	
13350	Other	200	183	366	100	(100)	-50.00%	
Subtotal		\$ 6,350	\$ 2,811	\$ 5,872	\$ 6,950	\$ 600	9.45%	
20100	Professional Services							
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -		
20200	Financial & Admin. Services	-	-	-	-	-		
20250	Bond Issue Costs	-	-	-	-	-		
20300	Engineering & Technical Services	22,900	-	-	22,900	-	0.00%	
Subtotal		\$ 22,900	\$ -	\$ -	\$ 22,900	\$ -		
21100	Other Services and Charges							
21100	General Liability/Property Ins.	\$ 2,900	\$ 1,513	\$ 3,026	\$ 3,190	\$ 290	10.00%	
21150	Advertising & Communication	-	-	-	-	-		
21250	Watershed Management	-	-	-	-	-		
21253	Safety Programs/Supplies	7,700	1,122	2,244	5,000	(2,700)	-35.06%	
21300	Authority Dues/Permits/Fees	1,200	16,032	32,064	2,237	1,037	86.42%	
21350	Laboratory Analysis	21,626	10,577	21,154	40,180	18,554	85.79%	
21400	Utilities	100,000	61,575	123,150	112,500	12,500	12.50%	
21420	General Other Services	-	-	-	-	-		
21430	Governance & Strategic Support	-	-	-	-	-		
21450	Bad Debt	-	-	-	-	-		
Subtotal		\$ 133,426	\$ 90,819	\$ 181,638	\$ 163,107	\$ 29,681	22.25%	
22000	Communication							
22100	Radio	\$ 400	\$ 490	\$ 980	\$ 300	\$ (100)	-25.00%	
22150	Telephone & Data Service	16,000	7,063	14,126	17,200	1,200	7.50%	
22200	Cell Phones, Wireless data	1,200	839	1,678	1,500	300	25.00%	
Subtotal		\$ 17,600	\$ 8,392	\$ 16,784	\$ 19,000	\$ 1,400	7.95%	
31000	Information Technology							
31100	Computer Hardware	\$ 5,000	\$ -	\$ 3,000	\$ 2,000	\$ (3,000)	-60.00%	
31150	SCADA Maint. & Support	24,000	10,556	21,112	33,000	9,000	37.50%	
31200	Maintenance & Support Services	-	-	-	-	-		
31250	Software & Subscriptions	-	(684)	(684)	-	-		
31300	Security Systems	3,400	-	-	-	(3,400)		
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-		
Subtotal		\$ 32,400	\$ 9,872	\$ 23,428	\$ 35,000	\$ 2,600	8.02%	
33000	Supplies							
33100	Office Supplies	\$ -	\$ -	\$ -	\$ -	\$ -		
33150	Subscriptions/Reference Material	-	-	-	-	-		
33350	Postage & Delivery	1,500	738	1,476	1,600	100	6.67%	
Subtotal		\$ 1,500	\$ 738	\$ 1,476	\$ 1,600	\$ 100	6.67%	
41000	Operation & Maintenance							
41100	Building & Grounds	\$ 26,000	\$ 17,809	\$ 35,618	\$ 45,500	\$ 19,500	75.00%	
41150	Building/land Lease, Rental	-	-	-	-	-		
41300	Dam Maintenance	-	3,850	7,700	-	-		
41350	Pipeline/Appurtenances	2,000	1,000	2,000	2,000	-	0.00%	
41400	Materials, Supplies & Tools	5,000	879	1,758	7,000	2,000	40.00%	
41450	Chemicals	212,400	87,382	220,364	270,300	57,900	27.26%	

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Crozet Water

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
41500	Vehicle Maintenance	1,000	1,549	3,098	1,300	300	30.00%
41550	Equipment Repair, Replace, Maint.	40,000	31,281	62,562	40,000	-	0.00%
41600	Instrumentation & Metering	34,300	1,252	2,504	45,500	11,200	32.65%
41650	Fuel & Lubricants	5,000	1,389	2,778	5,000	-	0.00%
41700	General Other Maintenance	10,000	1,825	3,650	10,000	-	0.00%
Subtotal		\$ 335,700	\$ 148,216	\$ 342,032	\$ 426,600	\$ 90,900	27.08%
81000	Equipment Purchases						
81200	Rental & Leases	\$ -	\$ 730	\$ 1,460	\$ -	\$ -	
81250	Equipment (over \$10,000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	3,200	1,600	3,200	3,300	100	3.13%
Subtotal		\$ 3,200	\$ 2,330	\$ 4,660	\$ 3,300	\$ 100	3.13%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 133,993	\$ 61,193	\$ 127,915	\$ 55,747	\$ (78,246)	-58.40%
95110	Finance & IT	-			107,413	107,413	
95300	Engineering Allocation	94,608	44,246	88,147	104,257	9,649	10.20%
95150	Maintenance Allocation	68,690	30,872	63,867	69,886	1,196	1.74%
95200	Laboratory Allocation	23,649	10,491	20,887	25,305	1,656	7.00%
Subtotal		\$ 320,940	\$ 146,802	\$ 300,816	\$ 362,608	\$ 41,668	12.98%
Depreciation		\$ 60,000	\$ 30,000	\$ 60,000	\$ 60,000	\$ -	0.00%
Subtotal		\$ 60,000	\$ 30,000	\$ 60,000	\$ 60,000	\$ -	0.00%
Total		\$ 1,269,357	\$ 612,466	\$ 1,280,310	\$ 1,459,543	\$ 190,186	14.98%

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Scottsville Water Summary

Projected Flow (MGD)

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	
0.047			0.047	0.00%

Operations Budget

Projected Revenues

Operations Rate (monthly)

Revenue	\$ 54,705			\$ 61,832	13.03%
Interest Allocation	\$ 656,460	\$ 328,230	\$ 656,460	\$ 741,984	13.03%
	2,150	2,320	4,640	4,600	113.95%
Total Operations Revenues	\$ 658,610	\$ 330,550	\$ 661,100	\$ 746,584	13.36%

Projected Expenses

Personnel Cost	\$ 223,641	\$ 116,403	\$ 232,359	\$ 239,452	7.07%
Professional Services	5,000	2,205	4,410	5,000	0.00%
Other Services and Charges	31,800	22,382	44,764	68,490	115.38%
Communications	6,750	3,989	7,978	7,000	3.70%
Information Technology	19,700	4,600	19,200	13,400	-31.98%
Supplies	100	181	362	200	100.00%
Operations and Maintenance	134,800	54,348	129,576	154,600	14.69%
Equipment Purchases	2,000	1,601	3,202	2,200	10.00%
Depreciation	40,000	20,000	40,000	40,000	0.00%
Subtotal Before Allocations	\$ 463,791	\$ 225,709	\$ 481,851	\$ 530,342	14.35%
Allocations of Support Departments	194,815	88,838	182,342	216,247	11.00%
Total Operations Expenses	\$ 658,606	\$ 314,547	\$ 664,193	\$ 746,589	13.36%

Operations Cost per 1,000 gallons	\$38.391		\$43.520	13.36%
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Debt Service Budget

Projected Revenue

Debt Service Rates - Monthly

Debt Service Rate Revenue - ACSA	\$ 13,228			\$ 15,868	19.96%
Trust Fund Interest	\$ 158,736	\$ 79,368	\$ 158,736	\$ 190,416	19.96%
Reserve Fund Interest	1,650	1,893	3,786	4,000	142.42%
	10,300	9,620	19,240	7,000	-32.04%
Total Debt Service Revenue	\$ 170,686	\$ 90,881	\$ 181,762	\$ 201,416	18.00%

Principal, Interest & Reserves

Total Principal & Interest	\$ 148,991	\$ 74,496	\$ 148,992	\$ 148,815	-0.12%
Estimated New Principal & Interest	11,400	5,700	11,400	45,600	300.00%
Reserve Additions-Interest	10,300	9,620	19,240	7,000	-32.04%
Total Debt Principal and Interest	\$ 170,691	\$ 89,816	\$ 179,632	\$ 201,415	18.00%

Rate Center Summary

Total Revenues	\$ 829,296	\$ 421,431	\$ 842,862	\$ 948,000	14.31%
Total Expenses	829,297	404,363	843,825	948,004	14.31%
Surplus/ (Deficit)	\$ (1)	\$ 17,068	\$ (963)	\$ (4)	
Rates - Monthly					
ACSA	\$ 67,933			\$ 77,700	14.38%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Scottsville Water

Expense Detail				Current Year Activity		2024 vs. 2025 Variance \$		2024 vs. 2025 Variance %	
Object Code	Line Item	Adopted Budget FY 2023-2024	Six Month Actual 12/31/2023	Projected Year end 6/30/2024	Proposed Budget FY 2024-2025				
10000	Salaries & Benefits								
11000	Salaries	\$ 146,200	\$ 82,712	\$ 165,424	\$ 158,200	\$ 12,000		8.21%	
11010	Overtime & Holiday Pay	14,000	4,498	8,996	14,000	-		0.00%	
12010	FICA	12,255	6,519	13,038	13,173	918		7.49%	
12020	Health Insurance	30,000	11,990	23,980	31,200	1,200		4.00%	
12026	Employee Assistance Program	30	17	34	35	5		16.67%	
12030	Retirement	12,266	6,455	12,910	13,574	1,308		10.66%	
12040	Life Insurance	1,740	978	1,956	2,120	380		21.84%	
12050	Fitness Program	200	200	400	200	-		0.00%	
12060	Worker's Comp Insurance	2,600	1,270	1,693	2,600	-		0.00%	
Subtotal		\$ 219,291	\$ 114,639	\$ 228,431	\$ 235,102	\$ 15,811		7.21%	
13000	Other Personnel Costs								
13100	Employee Dues & Licenses	\$ 400	\$ -	\$ 400	\$ 400	\$ -		0.00%	
13150	Education & Training	2,000	672	1,344	2,000	-		0.00%	
13200	Travel & Lodging	100	119	238	100	-		0.00%	
13250	Uniforms	1,600	949	1,898	1,600	-		0.00%	
13325	Recruiting & Medical Testing	150	17	34	150	-		0.00%	
13350	Other	100	7	14	100	-		0.00%	
Subtotal		\$ 4,350	\$ 1,764	\$ 3,928	\$ 4,350	\$ -		0.00%	
Professional Services									
20100	Legal Fees	\$ -	\$ 618	\$ 1,236	\$ -	\$ -			
20200	Financial & Admin. Services	-	-	-	-	-			
20250	Bond Issue Costs	-	-	-	-	-			
20300	Engineering & Technical Services	5,000	1,587	3,174	5,000	-		0.00%	
Subtotal		\$ 5,000	\$ 2,205	\$ 4,410	\$ 5,000	\$ -			
Other Services and Charges									
21100	General Liability/Property Ins.	\$ 1,100	\$ 1,149	\$ 2,298	\$ 1,540	\$ 440		40.00%	
21150	Advertising & Communication	-	-	-	-	-			
21250	Watershed Management	-	-	-	-	-			
21253	Safety Programs/Supplies	4,200	1,777	3,554	3,600	(600)		-14.29%	
21300	Authority Dues/Permits/Fees	1,200	603	1,206	1,650	450		37.50%	
21350	Laboratory Analysis	6,300	6,143	12,286	37,200	30,900		490.48%	
21400	Utilities	19,000	12,710	25,420	24,500	5,500		28.95%	
21420	General Other Services	-	-	-	-	-		#DIV/0!	
21430	Governance & Strategic Support	-	-	-	-	-			
21450	Bad Debt	-	-	-	-	-			
Subtotal		\$ 31,800	\$ 22,382	\$ 44,764	\$ 68,490	\$ 36,690		115.38%	
22000	Communication								
22100	Radio	\$ 250	\$ 250	\$ 500	\$ 300	\$ 50		20.00%	
22150	Telephone & Data Service	5,500	3,066	6,132	5,600	100		1.82%	
22200	Cell Phones, Wireless data	1,000	673	1,346	1,100	100		10.00%	
Subtotal		\$ 6,750	\$ 3,989	\$ 7,978	\$ 7,000	\$ 250		3.70%	
31000	Information Technology								
31100	Computer Hardware	\$ 5,000	\$ -	\$ -	\$ 2,000	\$ (3,000)		-60.00%	
31150	SCADA Maint. & Support	13,500	3,916	17,832	11,000	(2,500)		-18.52%	
31200	Maintenance & Support Services	-	-	-	-	-			
31250	Software & Subscriptions	-	684	1,368	-	-		0.00%	
31300	Security Systems	1,200	-	-	400	(800)			
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-			
Subtotal		\$ 19,700	\$ 4,600	\$ 19,200	\$ 13,400	\$ (6,300)		-31.98%	
33000	Supplies								
33100	Office Supplies	\$ -	\$ 63	\$ 126	\$ -	\$ -			
33150	Subscriptions/Reference Material	-	-	-	-	-			
33350	Postage & Delivery	100	118	236	200	100		100.00%	
Subtotal		\$ 100	\$ 181	\$ 362	\$ 200	\$ 100		100.00%	
41000	Operation & Maintenance								
41100	Building & Grounds	\$ 20,800	\$ 7,790	\$ 15,580	\$ 22,600	\$ 1,800		8.65%	
41150	Building/land Lease, Rental	-	-	-	-	-			
41300	Dam Maintenance	-	-	-	3,500	3,500			
41350	Pipeline/Appurtenances	-	2,112	4,224	-	-			
41400	Materials, Supplies & Tools	2,500	1,988	3,976	2,500	-		0.00%	
41450	Chemicals	49,600	15,322	51,524	58,100	8,500		17.14%	
41500	Vehicle Maintenance	800	1,180	2,360	900	100		12.50%	

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Scottsville Water

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
41550	Equipment Repair, Replace, Maint.	25,000	13,563	27,126	25,000	-	0.00%
41600	Instrumentation & Metering	26,200	763	1,526	30,000	3,800	14.50%
41650	Fuel & Lubricants	2,400	655	1,310	2,000	(400)	-16.67%
41700	General Other Maintenance	7,500	10,975	21,950	10,000	2,500	33.33%
Subtotal		\$ 134,800	\$ 54,348	\$ 129,576	\$ 154,600	\$ 19,800	14.69%
81000	Equipment Purchases						
81200	Rental & Leases	\$ -	\$ 601	\$ 1,202	\$ -	-	
81250	Equipment (over \$10,000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	2,000	1,000	2,000	2,200	200	10.00%
Subtotal		\$ 2,000	\$ 1,601	\$ 3,202	\$ 2,200	\$ 200	10.00%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 66,996	\$ 30,597	\$ 63,957	\$ 27,873	\$ (39,123)	-58.40%
95110	Finance & IT	-			53,707	53,707	
95300	Engineering Allocation	47,304	22,123	44,074	52,128	4,824	10.20%
95150	Maintenance Allocation	68,690	30,872	63,867	69,886	1,196	1.74%
95200	Laboratory Allocation	11,825	5,246	10,444	12,653	828	7.00%
Subtotal		\$ 194,815	\$ 88,838	\$ 182,342	\$ 216,247	\$ 21,432	11.00%
Depreciation		\$ 40,000	\$ 20,000	\$ 40,000	\$ 40,000	\$ -	0.00%
Subtotal		\$ 40,000	\$ 20,000	\$ 40,000	\$ 40,000	\$ -	0.00%
Total		\$ 658,606	\$ 314,547	\$ 664,193	\$ 746,589	\$ 87,983	13.36%

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Wastewater Rate Centers

Rivanna Water and Sewer Authority

Fiscal Year 2024-2025

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Urban Wastewater Summary

Projected Flow (MGD)

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	
9.289			9.289	0.00%

Operations Budget

Projected Revenues

Operations Rate	\$ 2.922			\$ 3.247	11.12%
Revenue	\$ 9,908,321	\$ 5,123,514	\$ 10,247,028	\$ 11,007,464	11.09%
Stone Robinson WWTP	17,267	8,411	16,822	17,768	2.90%
Septage Acceptance	550,000	312,376	624,752	600,000	9.09%
Nutrient Credits	80,000	49,915	99,830	50,000	-37.50%
Miscellaneous Revenue	-	4,360	8,720	-	
Interest Allocation	3,300	38,755	77,510	74,000	2142.42%
Total Operations Revenues	\$ 10,558,888	\$ 5,537,331	\$ 11,074,662	\$ 11,749,232	11.27%

Projected Expenses

Personnel Cost	\$ 1,458,300	\$ 751,417	\$ 1,499,284	\$ 1,615,345	10.77%
Professional Services	40,000	18,874	37,748	35,000	-12.50%
Other Services and Charges	2,271,556	1,295,013	2,590,026	2,721,750	19.82%
Communications	11,600	8,531	17,062	14,800	27.59%
Information Technology	110,600	32,166	64,332	95,500	-13.65%
Supplies	1,200	1,907	3,814	2,600	116.67%
Operations and Maintenance	2,086,800	949,611	2,559,222	2,190,500	4.97%
Equipment Purchases	73,500	39,911	79,822	73,500	0.00%
Depreciation & Reserves	470,000	235,000	470,000	470,000	0.00%
Subtotal before allocations	\$ 6,523,556	\$ 3,332,430	\$ 7,321,310	\$ 7,218,995	10.66%
Allocations of Support Departments	4,035,332	1,842,670	3,781,015	4,530,237	12.26%
Total Operations Expenses	\$ 10,558,888	\$ 5,175,100	\$ 11,102,325	\$ 11,749,232	11.27%

Operations Cost per 1,000 gallons \$3.114 \$3.465 11.27%

Debt Service Budget

Projected Revenue

Debt Service Rate	CITY \$ 394,890			\$ 424,222	7.43%
	ACSA \$ 383,403			\$ 422,158	10.11%
Debt Service Rate Revenue - CITY	\$ 4,738,675	\$ 2,369,340	\$ 4,738,680	\$ 5,090,669	7.43%
Debt Service Rate Revenue - ACSA	4,600,834	2,300,418	4,600,836	5,065,891	10.11%
County MOU - Septage	109,440	109,440	109,440	109,440	0.00%
Trust Fund Interest	86,900	99,390	198,780	208,200	139.59%
Reserve Fund Interest	410,200	373,582	747,164	731,800	78.40%
Total Debt Service Revenue	\$ 9,946,049	\$ 5,252,170	\$ 10,394,900	\$ 11,206,000	12.67%

Principal, Interest & Reserves

Total Principal & Interest	\$ 7,812,249	\$ 3,906,125	\$ 7,812,250	\$ 7,780,072	-0.41%
Reserve Additions - Interest	410,200	373,582	747,164	731,800	78.40%
Debt Service Ratio Charge	325,000	162,500	325,000	325,000	0.00%
Est. New Debt Service - CIP Growth	1,398,600	699,300	1,398,600	2,368,300	69.33%
Total Debt Principal and Interest	\$ 9,946,049	\$ 5,141,507	\$ 10,283,014	\$ 11,205,172	12.66%

Rate Center Summary

Total Revenues	\$ 20,504,937	\$ 10,789,501	\$ 21,469,562	\$ 22,955,232	11.95%
Total Expenses	20,504,937	10,316,607	21,385,339	22,954,404	11.95%
Surplus/(Deficit)	\$ -	\$ 472,894	\$ 84,223	\$ 828	

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Urban Wastewater

Expense Detail							2024	2024
Rate Center: Urban Wastewater			Current Year Activity				vs.	vs.
Object		Adopted	Six Month	Projected	Proposed	2025	2025	
Code	Line Item	Budget	Actual	Year end	Budget	Variance	Variance	
		FY 2023-2024	12/31/2023	6/30/2024	FY 2024-2025	\$	%	
10000	Salaries & Benefits							
11000	Salaries	\$ 986,900	\$ 524,955	\$ 1,049,910	\$ 1,099,350	\$ 112,450	11.39%	
11010	Overtime & Holiday Pay	55,000	21,838	43,676	60,000	5,000	9.09%	
12010	FICA	79,705	40,753	81,506	88,690	8,985	11.27%	
12020	Health Insurance	204,800	95,314	190,628	222,700	17,900	8.74%	
12026	Employee Assistance Program	250	124	248	250	-	0.00%	
12030	Retirement	82,801	41,107	82,214	94,324	11,523	13.92%	
12040	Life Insurance	11,744	3,914	7,828	14,731	2,987	25.43%	
12050	Fitness Program	1,400	995	1,990	1,400	-	0.00%	
12060	Worker's Comp Insurance	11,000	5,325	7,100	13,000	2,000	18.18%	
	Subtotal	\$ 1,433,600	\$ 734,325	\$ 1,465,100	\$ 1,594,445	\$ 160,845	11.22%	
13000	Other Personnel Costs							
13100	Employee Dues & Licenses	\$ 2,500	\$ 1,878	\$ 3,756	\$ 2,500	\$ -	0.00%	
13150	Education & Training	8,000	7,653	15,306	4,000	(4,000)	-50.00%	
13200	Travel & Lodging	1,200	1,520	3,040	1,400	200	16.67%	
13250	Uniforms	11,000	5,138	10,276	11,000	-	0.00%	
13325	Recruiting & Medical Testing	1,000	611	1,222	1,000	-	0.00%	
13350	Other	1,000	292	584	1,000	-	0.00%	
	Subtotal	\$ 24,700	\$ 17,092	\$ 34,184	\$ 20,900	\$ (3,800)	-15.38%	
	Professional Services							
20100	Legal Fees	\$ 5,000	\$ -	\$ -	\$ -	\$ (5,000)		
20200	Financial & Admin. Services	5,000	2,175	4,350	5,000	-		
20250	Bond Issue Costs	-	-	-	-	-		
20300	Engineering & Technical Services	30,000	16,699	33,398	30,000	-	0.00%	
	Subtotal	\$ 40,000	\$ 18,874	\$ 37,748	\$ 35,000	\$ (5,000)		
	Other Services and Charges							
21100	General Liability/Property Ins.	\$ 93,500	\$ 48,587	\$ 97,174	\$ 102,850	\$ 9,350	10.00%	
21150	Advertising & Communication	-	-	-	-	-		
21250	Watershed Management	-	-	-	-	-		
21253	Safety Programs/Supplies	20,900	14,192	28,384	29,000	8,100	38.76%	
21300	Authority Dues/Permits/Fees	36,000	30,996	61,992	36,000	-	0.00%	
21350	Laboratory Analysis	14,000	10,530	21,060	10,800	(3,200)	-22.86%	
21400	Utilities	940,000	654,331	1,308,662	1,376,000	436,000	46.38%	
21420	General Other Services	1,167,156	536,377	1,072,754	1,167,100	(56)	0.00%	
21430	Governance & Strategic Support	-	-	-	-	-		
21450	Bad Debt	-	-	-	-	-		
	Subtotal	\$ 2,271,556	\$ 1,295,013	\$ 2,590,026	\$ 2,721,750	\$ 450,194	19.82%	
22000	Communication							
22100	Radio	\$ 2,000	\$ 2,247	\$ 4,494	\$ 3,000	\$ 1,000		
22150	Telephone & Data Service	5,000	3,208	6,416	5,700	700		
22200	Cell Phones, Wireless data	4,600	3,076	6,152	6,100	1,500	32.61%	
	Subtotal	\$ 11,600	\$ 8,531	\$ 17,062	\$ 14,800	\$ 3,200	27.59%	
31000	Information Technology							
31100	Computer Hardware	\$ 15,000	\$ -	\$ -	\$ 7,000	\$ (8,000)	-53.33%	
31150	SCADA Maint. & Support	92,000	32,166	64,332	81,000	(11,000)	-11.96%	
31200	Maintenance & Support Services	-	-	-	-	-		
31250	Software & Subscriptions	-	-	-	-	-		
31300	Security Systems	3,600	-	-	7,500	3,900		
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-		
	Subtotal	\$ 110,600	\$ 32,166	\$ 64,332	\$ 95,500	\$ (15,100)	-13.65%	
33000	Supplies							
33100	Office Supplies	\$ 1,000	\$ 1,523	\$ 3,046	\$ -	\$ (1,000)	-100.00%	
33150	Subscriptions/Reference Material	-	-	-	-	-		
33350	Postage & Delivery	200	384	768	2,600	2,400	1200.00%	
	Subtotal	\$ 1,200	\$ 1,907	\$ 3,814	\$ 2,600	\$ 1,400	116.67%	
41000	Operation & Maintenance							
41100	Building & Grounds	\$ 55,800	\$ 44,804	\$ 89,608	\$ 57,600	\$ 1,800	3.23%	
41150	Building/land Lease, Rental	-	-	-	-	-		
41300	Dam Maintenance	-	-	-	-	-		
41350	Pipeline/Appurtenances	62,500	10,018	620,036	62,500	-	0.00%	
41400	Materials, Supplies & Tools	57,000	14,107	28,214	60,000	3,000	5.26%	
41450	Chemicals	1,031,100	503,808	1,007,616	1,131,900	100,800	9.78%	
41500	Vehicle Maintenance	20,000	9,539	19,078	27,000	7,000	35.00%	
41550	Equipment Repair, Replace, Maint.	658,900	302,521	605,042	651,000	(7,900)	-1.20%	
41600	Instrumentation & Metering	171,500	44,459	148,918	181,000	9,500	5.54%	
41650	Fuel & Lubricants	40,000	35,882	71,764	34,500	(5,500)	-13.75%	

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Urban Wastewater

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
41700	General Other Maintenance	(10,000)	(15,527)	(31,054)	(15,000)	(5,000)	-50.00%
	Subtotal	\$ 2,086,800	\$ 949,611	\$ 2,559,222	\$ 2,190,500	\$ 103,700	4.97%
81000	Equipment Purchases						
81200	Rental & Leases	\$ -	\$ 3,161	\$ 6,322	\$ -	\$ -	#DIV/0!
81250	Equipment (over \$10,000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	73,500	36,750	73,500	73,500	-	0.00%
	Subtotal	\$ 73,500	\$ 39,911	\$ 79,822	\$ 73,500	\$ -	0.00%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 1,607,913	\$ 734,316	\$ 1,534,974	\$ 668,958	\$ (938,955)	-58.40%
95110	Finance & IT	-			1,288,957	1,288,957	
95300	Engineering Allocation	1,040,690	486,711	969,618	1,146,824	106,134	10.20%
95150	Maintenance Allocation	1,108,848	498,368	1,030,999	1,128,164	19,316	1.74%
95200	Laboratory Allocation	277,881	123,275	245,424	297,334	19,453	7.00%
	Subtotal	\$ 4,035,332	\$ 1,842,670	\$ 3,781,015	\$ 4,530,237	\$ 494,905	12.26%
	Depreciation	\$ 470,000	\$ 235,000	\$ 470,000	\$ 470,000	\$ -	0.00%
	Subtotal	\$ 470,000	\$ 235,000	\$ 470,000	\$ 470,000	\$ -	0.00%
	Total	\$ 10,558,888	\$ 5,175,100	\$ 11,102,325	\$ 11,749,232	\$ 1,190,344	11.27%

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Glenmore Wastewater Summary

Projected Flow (MGD)

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	
0.113			0.113	

Operations Budget

Projected Revenues

Operations Rate (monthly)

Revenue	\$ 521,916	\$ 260,958	\$ 521,916	\$ 533,112	2.15%
Interest Allocation	1,700	1,805	3,610	3,700	117.65%
Total Operations Revenues	\$ 523,616	\$ 262,763	\$ 525,526	\$ 536,812	2.52%

Projected Expenses

Personnel Cost	\$ 127,879	\$ 66,225	\$ 132,189	\$ 133,566	4.45%
Professional Services	25,000	11,686	203,372	10,000	
Other Services and Charges	35,400	21,643	43,286	41,840	18.19%
Communications	3,450	1,652	3,304	3,700	7.25%
Information Technology	13,000	14,789	29,578	14,350	10.38%
Supplies	-	-	-	-	
Operations and Maintenance	143,550	57,103	114,206	130,600	-9.02%
Equipment Purchases	3,800	1,900	3,800	3,500	-7.89%
Depreciation	25,000	12,500	25,000	40,000	60.00%
Subtotal before allocations	\$ 377,079	\$ 187,498	\$ 554,735	\$ 377,556	0.13%
Allocations of Support Departments	146,535	66,696	136,734	159,261	8.68%
Total Operations Expenses	\$ 523,614	\$ 254,194	\$ 691,469	\$ 536,817	2.52%

Operations Cost per 1,000 gallons

\$12.695

\$13.015

Debt Service Budget

Projected Revenue

Debt Service Rate (monthly)

Debt Service Rate Revenue - ACSA	\$ 22,680	\$ 11,340	\$ 22,680	\$ 48,780	115.08%
Trust Fund Interest	200	247	494	500	
Reserve Fund Interest	-	-	-	-	#DIV/0!
Total Debt Service Revenue	\$ 22,880	\$ 11,587	\$ 23,174	\$ 49,280	115.38%

Principal, Interest & Reserves

Total Principal & Interest	\$ 18,729	\$ 9,365	\$ 18,730	\$ 18,720	-0.05%
Estimated New Principal & Interest	4,150	2,075	4,150	30,560	636.39%
Reserve Additions - Interest	-	-	-	-	#DIV/0!
Total Debt Principal and Interest	\$ 22,879	\$ 11,440	\$ 22,880	\$ 49,280	115.39%

Rate Center Summary

Total Revenues	\$ 546,496	\$ 274,350	\$ 548,700	\$ 586,092	7.25%
Total Expenses	546,493	265,634	714,349	586,097	7.25%
Surplus/(Deficit)	\$ 3	\$ 8,716	\$ (165,649)	\$ (5)	
Rates (Monthly)					
ACSA	\$ 45,383			\$ 48,491	6.85%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Glenmore Wastewater

		Current Year Activity		Proposed Budget FY 2024-2025	2024 vs. 2025 Variance \$		2024 vs. 2025 Variance %	
Object Code	Line Item	Adopted Budget FY 2023-2024	Six Month Actual 12/31/2023	Projected Year end 6/30/2024				
10000	Salaries & Benefits							
11000	Salaries	\$ 86,850	\$ 46,173	\$ 92,346	\$ 90,500	\$ 3,650	4.20%	
11010	Overtime & Holiday Pay	4,500	2,001	4,002	4,500	-	0.00%	
12010	FICA	6,988	3,602	7,204	7,268	280	4.01%	
12020	Health Insurance	18,600	8,509	17,018	19,500	900	4.84%	
12026	Employee Assistance Program	20	11	22	20	-	0.00%	
12030	Retirement	7,287	3,653	7,306	7,765	478	6.56%	
12040	Life Insurance	1,034	530	1,060	1,213	179	17.31%	
12050	Fitness Program	100	70	140	100	-	0.00%	
12060	Worker's Comp Insurance	800	391	521	1,000	200	25.00%	
	Subtotal	\$ 126,179	\$ 64,940	\$ 129,619	\$ 131,866	\$ 5,687	4.51%	
13000	Other Personnel Costs							
13100	Employee Dues & Licenses	\$ 150	\$ 35	\$ 70	\$ 150	\$ -	0.00%	
13150	Education & Training	500	552	1,104	500	-	0.00%	
13200	Travel & Lodging	100	141	282	100	-	0.00%	
13250	Uniforms	850	475	950	850	-	0.00%	
13325	Recruiting & Medical Testing	50	56	112	50	-	0.00%	
13350	Other	50	26	52	50	-	0.00%	
	Subtotal	\$ 1,700	\$ 1,285	\$ 2,570	\$ 1,700	\$ -	0.00%	
	Professional Services							
20100	Legal Fees		\$ -	\$ -	\$ -	\$ -		
20200	Financial & Admin. Services		150	300	-	-		
20250	Bond Issue Costs		-	-	-	-		
20300	Engineering & Technical Services	25,000	11,536	203,072	10,000	(15,000)	-60.00%	
	Subtotal	\$ 25,000	\$ 11,686	\$ 203,372	\$ 10,000	\$ (15,000)		
	Other Services and Charges							
21100	General Liability/Property Ins.	\$ 400	\$ 168	\$ 336	\$ 440	\$ 40	10.00%	
21150	Advertising & Communication		-	-	-	-		
21250	Watershed Management		-	-	-	-		
21253	Safety Programs/Supplies	2,300	607	1,214	4,300	2,000	86.96%	
21300	Authority Dues/Permits/Fees	3,700	3,374	6,748	4,800	1,100	29.73%	
21350	Laboratory Analysis	2,000	500	1,000	2,800	800	40.00%	
21400	Utilities	27,000	16,994	33,988	29,500	2,500	9.26%	
21420	General Other Services	-	-	-	-	-		
21430	Governance & Strategic Support	-	-	-	-	-		
21450	Bad Debt	-	-	-	-	-		
	Subtotal	\$ 35,400	\$ 21,643	\$ 43,286	\$ 41,840	\$ 6,440	18.19%	
22000	Communication							
22100	Radio	\$ 250	\$ 250	\$ 500	\$ 300	\$ 50		
22150	Telephone & Data Service	2,500	985	1,970	2,550	50		
22200	Cell Phones, Wireless data	700	417	834	850	150		
	Subtotal	\$ 3,450	\$ 1,652	\$ 3,304	\$ 3,700	\$ 250		
31000	Information Technology							
31100	Computer Hardware	\$ 5,000	\$ -	\$ -	\$ 2,000	\$ (3,000)	-60.00%	
31150	SCADA Maint. & Support	8,000	14,789	29,578	10,750	2,750	34.38%	
31200	Maintenance & Support Services		-	-	-	-		
31250	Software & Subscriptions	-	-	-	1,600	1,600		
31300	Security Systems	-	-	-	-	-		
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-		
	Subtotal	\$ 13,000	\$ 14,789	\$ 29,578	\$ 14,350	\$ 1,350	10.38%	
33000	Supplies							
33100	Office Supplies	\$ -	\$ -	\$ -	\$ -	\$ -		
33150	Subscriptions/Reference Material	-	-	-	-	-		
33350	Postage & Delivery	-	-	-	-	-		
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -		
41000	Operation & Maintenance							
41100	Building & Grounds	\$ 9,500	\$ 5,007	\$ 10,014	\$ 9,500	\$ -	0.00%	
41150	Building/land Lease, Rental	-	-	-	-	-		
41300	Dam Maintenance	-	-	-	-	-		
41350	Pipeline/Appurtenances	-	-	-	-	-		

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Glenmore Wastewater

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
41400	Materials, Supplies & Tools	8,500	426	852	4,000	(4,500)	-52.94%
41450	Chemicals	5,300	2,604	5,208	5,300	-	0.00%
41500	Vehicle Maintenance	750	267	534	-	(750)	-100.00%
41550	Equipment Repair, Replace, Maint.	40,000	2,641	5,282	33,900	(6,100)	-15.25%
41600	Instrumentation & Metering	5,000	-	-	5,000	-	0.00%
41650	Fuel & Lubricants	3,000	1,346	2,692	3,900	900	30.00%
41700	General Other Maintenance	71,500	44,812	89,624	69,000	(2,500)	-3.50%
Subtotal		\$ 143,550	\$ 57,103	\$ 114,206	\$ 130,600	\$ (12,950)	-9.02%
81000	Equipment Purchases						
81200	Rental & Leases		\$ -	\$ -	\$ -	\$ -	
81250	Equipment (over \$10,000)		-	-	-	-	
81300	Vehicle Replacement Fund	3,800	1,900	3,800	3,500	(300)	-7.89%
Subtotal		\$ 3,800	\$ 1,900	\$ 3,800	\$ 3,500	\$ (300)	-7.89%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 33,498	\$ 15,298	\$ 31,979	\$ 13,937	\$ (19,561)	-58.39%
95110	Finance & IT	-			26,853	26,853	
95300	Engineering Allocation	35,478	16,592	33,055	39,096	3,618	10.20%
95150	Maintenance Allocation	68,690	30,872	63,867	69,886	1,196	1.74%
95200	Laboratory Allocation	8,869	3,934	7,833	9,489	620	6.99%
Subtotal		\$ 146,535	\$ 66,696	\$ 136,734	\$ 159,261	\$ 12,726	8.68%
Depreciation		\$ 25,000	\$ 12,500	\$ 25,000	\$ 40,000	\$ 15,000	60.00%
Subtotal		\$ 25,000	\$ 12,500	\$ 25,000	\$ 40,000	\$ 15,000	60.00%
Total		\$ 523,614	\$ 254,194	\$ 691,469	\$ 536,817	\$ 13,203	2.52%

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Scottsville Wastewater Summary

Projected Flow (MGD)

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	
0.065			0.065	

Operations Budget

Projected Revenues

Operations Rate (monthly)

Revenue	\$ 384,192	\$ 192,096	\$ 384,192	\$ 405,420	5.53%
Interest Allocation	1,300	1,461	2,922	2,700	107.69%
Total Operations Revenues	\$ 385,492	\$ 193,557	\$ 387,114	\$ 408,120	5.87%

Projected Expenses

Personnel Cost	\$ 127,949	\$ 66,225	\$ 132,189	\$ 133,636	4.44%
Professional Services	5,000	-	-	5,000	0.00%
Other Services and Charges	24,800	17,594	35,188	33,400	34.68%
Communications	3,800	5,878	11,756	3,650	-3.95%
Information Technology	14,025	413	826	15,150	8.02%
Supplies	-	615	1,230	-	
Operations and Maintenance	49,500	17,933	35,866	44,500	-10.10%
Equipment Purchases	3,700	1,850	3,700	3,500	-5.41%
Depreciation	20,000	10,000	20,000	20,000	0.00%
Subtotal before allocations	\$ 248,774	\$ 120,508	\$ 240,755	\$ 258,836	4.04%
Allocations of Support Departments	136,722	62,286	127,610	149,278	9.18%
Total Operations Expenses	\$ 385,496	\$ 182,794	\$ 368,365	\$ 408,114	5.87%

Operations Cost per 1,000 gallons \$16.249 \$17.202 105.86%

Debt Service Budget

Projected Revenue

Debt Service Rate (monthly)

Debt Service Rate Revenue - ACSA	\$ 18,636	\$ 9,318	\$ 18,636	\$ 32,556	74.69%
Trust Fund Interest	80	103	206	200	150.00%
Reserve Fund Interest	1,800	1,603	3,206	3,400	88.89%
Total Debt Service Revenue	\$ 20,516	\$ 11,024	\$ 22,048	\$ 36,156	76.23%

Principal, Interest & Reserves

Total Principal & Interest	\$ 7,471	\$ 3,736	\$ 7,472	\$ 7,453	-0.24%
Estimated New Principal & Interest	11,250	5,625	11,250	25,300	124.89%
Reserve Additions - Interest	1,800	1,603	3,206	3,400	88.89%
Total Debt Principal and Interest	\$ 20,521	\$ 10,964	\$ 21,928	\$ 36,153	76.18%

Rate Center Summary

Total Revenues	\$ 406,008	\$ 204,581	\$ 409,162	\$ 444,276	9.43%
Total Expenses	406,017	193,758	390,293	444,267	9.42%
Surplus/(Deficit)	\$ (9)	\$ 10,823	\$ 18,869	\$ 9	
Rates (Monthly)					
ACSA	\$ 33,569			\$ 36,498	8.73%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Scottsville Wastewater

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024 vs. 2025 Variance \$	2024 vs. 2025 Variance %
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024			
10000	Salaries & Benefits						
11000	Salaries	\$ 86,850	\$ 46,173	\$ 92,346	\$ 90,500	\$ 3,650	4.20%
11010	Overtime & Holiday Pay	4,500	2,001	4,002	4,500	-	0.00%
12010	FICA	6,988	3,602	7,204	7,268	280	4.01%
12020	Health Insurance	18,600	8,509	17,018	19,500	900	4.84%
12026	Employee Assistance Program	20	11	22	20	-	0.00%
12030	Retirement	7,287	3,653	7,306	7,765	478	6.56%
12040	Life Insurance	1,034	530	1,060	1,213	179	17.31%
12050	Fitness Program	100	70	140	100	-	0.00%
12060	Worker's Comp Insurance	800	391	521	1,000	200	25.00%
	Subtotal	\$ 126,179	\$ 64,940	\$ 129,619	\$ 131,866	\$ 5,687	4.51%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 100	\$ 35	\$ 70	\$ 100	\$ -	0.00%
13150	Education & Training	600	552	1,104	600	-	0.00%
13200	Travel & Lodging	100	141	282	100	-	0.00%
13250	Uniforms	850	475	950	850	-	0.00%
13325	Recruiting & Medical Testing	70	57	114	70	-	0.00%
13350	Other	50	25	50	50	-	0.00%
	Subtotal	\$ 1,770	\$ 1,285	\$ 2,570	\$ 1,770	\$ -	0.00%
20100	Professional Services						
20100	Legal Fees		\$ -	\$ -	\$ -	\$ -	
20200	Financial & Admin. Services		-	-	-	-	
20250	Bond Issue Costs		-	-	-	-	
20300	Engineering & Technical Services	5,000	-	-	5,000	-	0.00%
	Subtotal	\$ 5,000	\$ -	\$ -	\$ 5,000	\$ -	
21100	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 1,000	\$ 504	\$ 1,008	\$ 1,100	\$ 100	10.00%
21150	Advertising & Communication		-	-	-	-	
21250	Watershed Management		-	-	-	-	
21253	Safety Programs/Supplies	2,500	651	1,302	4,700	2,200	88.00%
21300	Authority Dues/Permits/Fees	3,700	3,374	6,748	4,800	1,100	29.73%
21350	Laboratory Analysis	1,600	2,050	4,100	2,800	1,200	75.00%
21400	Utilities	16,000	11,015	22,030	20,000	4,000	25.00%
21420	General Other Services	-	-	-	-	-	
21430	Governance & Strategic Support	-	-	-	-	-	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	\$ 24,800	\$ 17,594	\$ 35,188	\$ 33,400	\$ 8,600	34.68%
22000	Communication						
22100	Radio	\$ 250	\$ 250	\$ 500	\$ 300	\$ 50	20.00%
22150	Telephone & Data Service	3,300	5,422	10,844	2,950	(350)	-10.61%
22200	Cell Phones, Wireless data	250	206	412	400	150	60.00%
	Subtotal	\$ 3,800	\$ 5,878	\$ 11,756	\$ 3,650	\$ (150)	-3.95%
31000	Information Technology						
31100	Computer Hardware	\$ 5,000	\$ -	\$ -	\$ 2,000	\$ (3,000)	-60.00%
31150	SCADA Maint. & Support	7,825	413	826	10,750	2,925	37.38%
31200	Maintenance & Support Services	-	-	-	-	-	
31250	Software & Subscriptions	-	-	-	-	-	
31300	Security Systems	1,200	-	-	2,400	1,200	
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-	
	Subtotal	\$ 14,025	\$ 413	\$ 826	\$ 15,150	\$ 1,125	8.02%
33000	Supplies						
33100	Office Supplies	\$ -	\$ -	\$ -	\$ -	\$ -	
33150	Subscriptions/Reference Material	-	-	-	-	-	
33350	Postage & Delivery	-	615	1,230	-	-	
	Subtotal	\$ -	\$ 615	\$ 1,230	\$ -	\$ -	
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 10,400	\$ 3,631	\$ 7,262	\$ 11,000	\$ 600	5.77%
41150	Building/land Lease, Rental	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	-	-	-	-	-	
41400	Materials, Supplies & Tools	2,500	570	1,140	2,000	(500)	-20.00%
41450	Chemicals	1,000	2,975	5,950	1,000	-	0.00%
41500	Vehicle Maintenance	600	267	534	-	(600)	-100.00%
41550	Equipment Repair, Replace, Maint.	15,000	6,072	12,144	13,900	(1,100)	-7.33%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Rate Center: Scottsville Wastewater

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
41600	Instrumentation & Metering	5,000	-	-	2,000	(3,000)	-60.00%
41650	Fuel & Lubricants	1,800	598	1,196	1,400	(400)	-22.22%
41700	General Other Maintenance	13,200	3,820	7,640	13,200	-	0.00%
Subtotal		\$ 49,500	\$ 17,933	\$ 35,866	\$ 44,500	\$ (5,000)	-10.10%
81000	Equipment Purchases						
81200	Rental & Leases		\$ -	\$ -	\$ -	\$ -	
81250	Equipment (over \$10,000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	3,700	1,850	3,700	3,500	(200)	-5.41%
Subtotal		\$ 3,700	\$ 1,850	\$ 3,700	\$ 3,500	\$ (200)	-5.41%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ 33,498	\$ 15,298	\$ 31,979	\$ 13,937	\$ (19,561)	-58.39%
95110	Finance & IT	-			26,853	26,853	
95300	Engineering Allocation	35,478	16,592	33,055	39,096	3,618	10.20%
95150	Maintenance Allocation	58,877	26,462	54,743	59,903	1,026	1.74%
95200	Laboratory Allocation	8,869	3,934	7,833	9,489	620	6.99%
Subtotal		\$ 136,722	\$ 62,286	\$ 127,610	\$ 149,278	\$ 12,556	9.18%
Depreciation		\$ 20,000	\$ 10,000	\$ 20,000	\$ 20,000	\$ -	0.00%
Subtotal		\$ 20,000	\$ 10,000	\$ 20,000	\$ 20,000	\$ -	0.00%
Total		\$ 385,496	\$ 182,794	\$ 368,365	\$ 408,114	\$ 22,618	5.87%

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Support Departments

Fiscal Year 2024-2025

Rivanna Water and Sewer Authority

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Administration Summary

FY 2024			FY 2025	Budget % Change
<i>Budgeted FY 2024</i>	Actual for 6 months	Projected 12 months	<i>Proposed Budget</i>	

Operations Budget Projected Revenues & Sources

Payment for Services SWA	\$ 781,000	\$ 390,500	\$ 781,000	\$ 364,200	-53.37%
Bond Proceeds Funding Bond Issuance Costs	-	-	-	-	
Miscellaneous Revenue	-	5,996	5,996	-	#DIV/0!
Total Operations Revenues	\$ 781,000	\$ 396,496	\$ 786,996	\$ 364,200	-53.37%

Projected Expenses

Personnel Cost	\$ 2,930,008	\$ 1,374,909	\$ 2,740,141	\$ 1,348,563	-53.97%
Professional Services	136,450	59,060	153,274	153,250	12.31%
Other Services and Charges	140,760	85,507	153,606	161,100	14.45%
Communications	42,800	41,237	82,474	9,700	-77.34%
Information Technology	778,800	327,760	755,520	5,000	-99.36%
Supplies	22,800	9,258	18,516	14,000	-38.60%
Operations and Maintenance	64,200	21,001	66,150	57,250	-10.83%
Equipment Purchases	15,000	7,589	15,178	9,000	-40.00%
Depreciation	-	-	-	-	
Total Operations Expenses	\$ 4,130,818	\$ 1,926,321	\$ 3,984,859	\$ 1,757,863	-57.45%

Department Summary										
Total Revenues		\$	781,000	\$	396,496	\$	786,996	\$	364,200	-53.37%
Total Expenses			4,130,818		1,926,321		3,984,859		1,757,863	-57.45%
Net Costs Allocable to Rate Centers			<u>\$ (3,349,818)</u>		<u>\$ (1,529,825)</u>		<u>\$ (3,197,863)</u>		<u>\$ (1,393,663)</u>	-58.40%
<u>Allocations to the Rate Centers</u>										
Urban Water	44.00%	\$	1,473,920	\$	673,123	\$	1,407,060	\$	613,212	
Crozet Water	4.00%		133,993		61,193		127,915		55,747	
Scottsville Water	2.00%		66,996		30,597		63,957		27,873	
Urban Wastewater	48.00%		1,607,913		734,316		1,534,974		668,958	
Glenmore Wastewater	1.00%		33,498		15,298		31,979		13,937	
Scottsville Wastewater	1.00%		33,498		15,298		31,979		13,937	
	100.00%	\$	3,349,818	\$	1,529,825	\$	3,197,864	\$	1,393,664	

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Administration

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024 vs. 2025 Variance \$	2024 vs. 2025 Variance %
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024			
10000	Salaries & Benefits						
11000	Salaries	\$ 2,157,400	\$ 1,012,168	\$ 2,024,336	\$ 993,200	\$ (1,164,200)	-53.96%
11010	Overtime & Holiday Pay	500	1,531	3,062	100	(400)	-80.00%
12010	FICA	165,079	67,180	134,360	75,987	(89,092)	-53.97%
12020	Health Insurance	314,550	148,939	297,878	131,100	(183,450)	-58.32%
12026	Employee Assistance Program	300	160	320	150	(150)	-50.00%
12030	Retirement	181,006	85,817	171,634	85,217	(95,789)	-52.92%
12040	Life Insurance	25,673	15,077	30,154	13,309	(12,364)	-48.16%
12050	Fitness Program	3,000	692	1,384	1,500	(1,500)	-50.00%
12060	Worker's Comp Insurance	9,700	4,690	6,253	5,000	(4,700)	-48.45%
	Subtotal	\$ 2,857,208	\$ 1,336,254	\$ 2,669,381	\$ 1,305,563	\$ (1,551,645)	-54.31%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 1,800	\$ 555	\$ 1,110	\$ 1,500	\$ (300)	-16.67%
13150	Education & Training	38,500	15,947	31,894	10,500	(28,000)	-72.73%
13200	Travel & Lodging	5,000	9,275	12,000	2,500	(2,500)	-50.00%
13250	Uniforms	5,000	818	1,636	1,500	(3,500)	-70.00%
13325	Recruiting & Medical Testing	3,500	1,181	2,362	2,000	(1,500)	-42.86%
13350	Other	19,000	10,879	21,758	25,000	6,000	31.58%
	Subtotal	\$ 72,800	\$ 38,655	\$ 70,760	\$ 43,000	\$ (29,800)	-40.93%
20100	Professional Services						
20200	Legal Fees	\$ 60,000	\$ 7,423	\$ 50,000	\$ 60,000	\$ -	0.00%
20250	Financial & Admin. Services	46,450	26,654	53,308	63,250	16,800	36.17%
20300	Bond Issue Costs	-	-	-	-	-	0.00%
	Engineering & Technical Services	30,000	24,983	49,966	30,000	-	0.00%
	Subtotal	\$ 136,450	\$ 59,060	\$ 153,274	\$ 153,250	\$ 16,800	12.31%
21100	Other Services and Charges						
21150	General Liability/Property Ins.	\$ 5,700	\$ 2,942	\$ 5,884	\$ 3,500	\$ (2,200)	-38.60%
21250	Advertising & Communication	18,000	6,140	12,280	18,500	500	2.78%
21253	Watershed Management	-	-	-	-	-	-
21300	Safety Programs/Supplies	11,560	8,589	17,178	15,000	3,440	29.76%
21350	Authority Dues/Permits/Fees	44,100	28,460	56,920	-	(44,100)	-100.00%
21400	Laboratory Analysis	-	-	-	-	-	-
21420	Utilities	1,400	913	1,826	1,600	200	14.29%
21430	General Other Services	37,500	18,400	36,800	102,500	65,000	173.33%
21450	Governance & Strategic Support	20,000	1,359	2,718	20,000	-	0.00%
	Bad Debt	2,500	18,704	20,000	-	(2,500)	-
	Subtotal	\$ 140,760	\$ 85,507	\$ 153,606	\$ 161,100	\$ 20,340	14.45%
22000	Communication						
22100	Radio	\$ 1,800	\$ 1,742	\$ 3,484	\$ 2,200	\$ 400	22.22%
22150	Telephone & Data Service	23,000	30,394	60,788	-	(23,000)	-100.00%
22200	Cell Phones, Wireless data	18,000	9,101	18,202	7,500	(10,500)	-58.33%
	Subtotal	\$ 42,800	\$ 41,237	\$ 82,474	\$ 9,700	\$ (33,100)	-77.34%
31000	Information Technology						
31100	Computer Hardware	\$ 145,000	\$ 47,657	\$ 145,314	\$ -	\$ (145,000)	-100.00%
31150	SCADA Maint. & Support	59,000	14,592	29,184	-	(59,000)	-100.00%
31200	Maintenance & Support Services	167,000	194,142	388,284	5,000	(162,000)	-97.01%
31250	Software & Subscriptions	312,800	71,369	192,738	-	(312,800)	-100.00%
31300	Security Systems	95,000	-	-	-	(95,000)	-
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-	-
	Subtotal	\$ 778,800	\$ 327,760	\$ 755,520	\$ 5,000	\$ (773,800)	-99.36%
33000	Supplies						
33100	Office Supplies	\$ 15,000	\$ 5,371	\$ 10,742	\$ 10,000	\$ (5,000)	-33.33%
33150	Subscriptions/Reference Material	800	396	792	-	(800)	-100.00%
33350	Postage & Delivery	7,000	3,491	6,982	4,000	(3,000)	-42.86%
	Subtotal	\$ 22,800	\$ 9,258	\$ 18,516	\$ 14,000	\$ (8,800)	-38.60%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 50,000	\$ 19,858	\$ 49,716	\$ 45,000	\$ (5,000)	-10.00%
41150	Building/land Lease, Rental	6,200	3,540	7,080	6,500	300	4.84%
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	-	-	-	-	-	-
41400	Materials, Supplies & Tools	1,500	172	344	750	(750)	-50.00%
41450	Chemicals	-	-	-	-	-	-
41500	Vehicle Maintenance	2,500	(6,074)	2,000	3,000	500	20.00%
41550	Equipment Repair, Replace, Maint.	-	-	-	-	-	-
41600	Instrumentation & Metering	-	-	-	-	-	-

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Administration

Expense Detail					2024		2024	
Department: Administration					Current Year Activity		vs.	
Object Code	Line Item	Adopted Budget FY 2023-2024	Six Month Actual 12/31/2023	Projected Year end 6/30/2024	Proposed Budget FY 2024-2025	2025 Variance \$	2025 Variance %	
41650	Fuel & Lubricants	4,000	3,505	7,010	2,000	(2,000)	-50.00%	
41700	General Other Maintenance		-	-	-	-		
Subtotal		\$ 64,200	\$ 21,001	\$ 66,150	\$ 57,250	\$ (6,950)	-10.83%	
81000	Equipment Purchases							
81200	Rental & Leases	\$ -	\$ 89	\$ 178	\$ -	\$ -		
81250	Equipment (over \$10,000)	-	-	-	-	-		
81300	Vehicle Replacement Fund	15,000	7,500	15,000	9,000	(6,000)	-40.00%	
Subtotal		\$ 15,000	\$ 7,589	\$ 15,178	\$ 9,000	\$ (6,000)	-40.00%	
95000	Allocations from Departments							
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -		
95110	Finance & IT							
95300	Engineering Allocation	-	-	-	-	-		
95150	Maintenance Allocation	-	-	-	-	-		
95200	Laboratory Allocation	-	-	-	-	-		
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -		
Depreciation		-	-	-	\$ -	-		
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -		
Total		\$ 4,130,818	\$ 1,926,321	\$ 3,984,859	\$ 1,757,863	\$ (2,372,955)	-57.45%	

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Finance & IT Summary

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	

Operations Budget
Projected Revenues & Sources

Payment for Services SWA	\$	-	\$	-	\$	-	\$	541,000
Bond Proceeds Funding Bond Issuance Costs		-		-		-		-
Miscellaneous Revenue		-		-		-		-
Total Operations Revenues	\$	-	\$	-	\$	-	\$	541,000
Personnel Cost	\$	-	\$	-	\$	-	\$	2,083,478
Professional Services		-		-		-		42,000
Other Services and Charges		-		-		-		46,000
Communications		-		-		-		65,000
Information Technology		-		-		-		962,850
Supplies		-		-		-		14,500
Operations and Maintenance		-		-		-		5,000
Equipment Purchases		-		-		-		7,500
Depreciation		-		-		-		-
Total Operations Expenses	\$	-	\$	-	\$	-	\$	3,226,328

Department Summary								
Total Revenues	\$	-	\$	-	\$	-	\$	541,000
Total Expenses		-		-		-		3,226,328
Net Costs Allocable to Rate Centers	\$	-	\$	-	\$	-	\$	(2,685,328)
Allocations to the Rate Centers								
Urban Water	44.00%	\$	-	\$	-	\$	-	1,181,544
Crozet Water	4.00%		-		-		-	107,413
Scottsville Water	2.00%		-		-		-	53,707
Urban Wastewater	48.00%		-		-		-	1,288,957
Glenmore Wastewater	1.00%		-		-		-	26,853
Scottsville Wastewater	1.00%		-		-		-	26,853
	100.00%	\$	-	\$	-	\$	-	2,685,327

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Finance & IT

Expense Detail			Current Year Activity				2024	2024
Department: Finance & IT							vs.	vs.
Object		Adopted	Six Month	Projected	Proposed	2025	2025	
Code	Line Item	Budget	Actual	Year end	Budget	Variance	Variance	
		FY 2023-2024	12/31/2023	6/30/2024	FY 2024-2025	\$	%	
10000	Salaries & Benefits							
11000	Salaries	\$ -	\$ -	\$ -	\$ 1,543,700	\$ 1,543,700		
11010	Overtime & Holiday Pay	-	-	-	-	-		
12010	FICA	-	-	-	118,093	118,093		
12020	Health Insurance	-	-	-	217,400	217,400		
12026	Employee Assistance Program	-	-	-	150	150		
12030	Retirement	-	-	-	132,449	132,449		
12040	Life Insurance	-	-	-	20,686	20,686		
12050	Fitness Program	-	-	-	1,500	1,500		
12060	Worker's Comp Insurance	-	-	-	6,000	6,000		
Subtotal		\$ -	\$ -	\$ -	\$ 2,039,978	\$ 2,039,978	#DIV/0!	
13000	Other Personnel Costs							
13100	Employee Dues & Licenses	\$ -	\$ -	\$ -	\$ 2,000	\$ 2,000		
13150	Education & Training	-	-	-	27,000	27,000		
13200	Travel & Lodging	-	-	-	8,000	8,000		
13250	Uniforms	-	-	-	5,000	5,000		
13325	Recruiting & Medical Testing	-	-	-	500	500		
13350	Other	-	-	-	1,000	1,000		
Subtotal		\$ -	\$ -	\$ -	\$ 43,500	\$ 43,500	#DIV/0!	
Professional Services								
20100	Legal Fees	\$ -	\$ -	\$ -	\$ 5,000	\$ 5,000		
20200	Financial & Admin. Services	-	-	-	37,000	37,000		
20250	Bond Issue Costs	-	-	-	-	-		
20300	Engineering & Technical Services	-	-	-	-	-		
Subtotal		\$ -	\$ -	\$ -	\$ 42,000	\$ 42,000	#DIV/0!	
Other Services and Charges								
21100	General Liability/Property Ins.	\$ -	\$ -	\$ -	\$ 3,500	\$ 3,500		
21150	Advertising & Communication	-	-	-	-	-		
21250	Watershed Management	-	-	-	-	-		
21253	Safety Programs/Supplies	-	-	-	-	-		
21300	Authority Dues/Permits/Fees	-	-	-	42,500	42,500		
21350	Laboratory Analysis	-	-	-	-	-		
21400	Utilities	-	-	-	-	-		
21420	General Other Services	-	-	-	-	-		
21430	Governance & Strategic Support	-	-	-	-	-		
21450	Bad Debt	-	-	-	-	-		
Subtotal		\$ -	\$ -	\$ -	\$ 46,000	\$ 46,000	#DIV/0!	
22000	Communication							
22100	Radio	\$ -	\$ -	\$ -	\$ -	\$ -		
22150	Telephone & Data Service	-	-	-	55,000	55,000		
22200	Cell Phones, Wireless data	-	-	-	10,000	10,000		
Subtotal		\$ -	\$ -	\$ -	\$ 65,000	\$ 65,000	#DIV/0!	
31000	Information Technology							
31100	Computer Hardware	\$ -	\$ -	\$ -	\$ 186,250	\$ 186,250		
31150	SCADA Maint. & Support	-	-	-	104,000	104,000		
31200	Maintenance & Support Services	-	-	-	283,500	283,500		
31250	Software & Subscriptions	-	-	-	299,100	299,100		
31300	Security Systems	-	-	-	90,000	90,000		
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-		
Subtotal		\$ -	\$ -	\$ -	\$ 962,850	\$ 962,850	#DIV/0!	
33000	Supplies							
33100	Office Supplies	\$ -	\$ -	\$ -	\$ 7,500	\$ 7,500		
33150	Subscriptions/Reference Material	-	-	-	1,000	1,000		
33350	Postage & Delivery	-	-	-	6,000	6,000		
Subtotal		\$ -	\$ -	\$ -	\$ 14,500	\$ 14,500	#DIV/0!	
41000	Operation & Maintenance							
41100	Building & Grounds	\$ -	\$ -	\$ -	\$ -	\$ -		
41150	Building/land Lease, Rental	-	-	-	-	-		
41300	Dam Maintenance	-	-	-	-	-		
41350	Pipeline/Appurtenances	-	-	-	-	-		
41400	Materials, Supplies & Tools	-	-	-	-	-		

41450	Chemicals	-	-	-	-	-	-					
41500	Vehicle Maintenance	-	-	-	-	3,000	3,000					
41550	Equipment Repair, Replace, Maint.	-	-	-	-	-	-					
41600	Instrumentation & Metering	-	-	-	-	-	-					
41650	Fuel & Lubricants	-	-	-	-	2,000	2,000					
41700	General Other Maintenance	-	-	-	-	-	-					
Subtotal		\$	-	\$	-	\$	5,000	\$	5,000	#DIV/0!		
81000	Equipment Purchases											
81200	Rental & Leases	\$	-	\$	-	\$	-	\$	-			
81250	Equipment (over \$10,000)	-	-	-	-	-	-	-	-			
81300	Vehicle Replacement Fund	-	-	-	-	-	7,500	-	7,500			
Subtotal		\$	-	\$	-	\$	-	\$	7,500	\$	7,500	#DIV/0!
95000	Allocations from Departments											
95100	Administrative Allocation	\$	-	\$	-	\$	-	\$	-			
95110	Finance & IT	-	-	-	-	-	-	-	-			
95300	Engineering Allocation	-	-	-	-	-	-	-	-			
95150	Maintenance Allocation	-	-	-	-	-	-	-	-			
95200	Laboratory Allocation	-	-	-	-	-	-	-	-			
Subtotal		\$	-	\$	-	\$	-	\$	-	\$	-	
Depreciation		-	-	-	-	-	-	-	-			
Subtotal		\$	-	\$	-	\$	-	\$	-	\$	-	
Total		\$	-	\$	-	\$	-	\$	3,226,328	\$	3,226,328	

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Maintenance Summary

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	

Operations Budget

Projected Revenues

Miscellaneous Revenue	\$ -	\$ 1,067	\$ 2,134	\$ -	
Payment for Services SWA	-	-	-	-	
Total Operations Revenues	\$ -	\$ 1,067	\$ 2,134	\$ -	

Projected Expenses

Personnel Cost	\$ 1,553,212	\$ 744,663	\$ 1,483,789	\$ 1,645,860	5.96%
Professional Services	25,000	-	-	10,000	
Other Services and Charges	36,400	10,615	21,230	29,140	-19.95%
Communications	11,300	12,261	702	16,200	43.36%
Information Technology	17,500	505	1,010	7,500	-57.14%
Supplies	4,000	-	-	3,500	-12.50%
Operations and Maintenance	114,150	50,090	120,180	138,800	21.59%
Equipment Purchases	201,000	65,000	200,000	145,750	-27.49%
Depreciation	-	-	-	-	
Total Operations Expenses	\$ 1,962,562	\$ 883,134	\$ 1,826,911	\$ 1,996,750	1.74%

Department Summary

Total Revenues		\$ -	\$ 1,067	\$ 2,134	\$ -
Total Expenses		1,962,562	883,134	1,826,911	1,996,750
Net Costs Allocable to Rate Centers		\$ (1,962,562)	\$ (882,067)	\$ (1,824,777)	\$ (1,996,750)
Allocations to the Rate Centers					
Urban Water	30.00%	\$ 588,769	\$ 264,620	\$ 547,433	\$ 599,025
Crozet Water	3.50%	68,690	30,872	63,867	69,886
Scottsville Water	3.50%	68,690	30,872	63,867	69,886
		-	-	-	
Urban Wastewater	56.50%	1,108,848	498,368	1,030,999	1,128,164
Glenmore Wastewater	3.50%	68,690	30,872	63,867	69,886
Scottsville Wastewater	3.00%	58,877	26,462	54,743	59,903
	100.00%	\$ 1,962,564	\$ 882,066	\$ 1,824,776	\$ 1,996,750

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Maintenance

Expense Detail			Current Year Activity			2024	2024
Department: Maintenance						vs.	vs.
Object Code	Line Item	Adopted Budget FY 2023-2024	Six Month Actual 12/31/2023	Projected Year end 6/30/2024	Proposed Budget FY 2024-2025	2025 Variance \$	2025 Variance %
10000	Salaries & Benefits						
11000	Salaries	\$ 1,066,100	\$ 523,954	\$ 1,047,908	\$ 1,127,800	\$ 61,700	5.79%
11010	Overtime & Holiday Pay	15,000	5,542	11,084	15,500	500	3.33%
12010	FICA	82,704	39,250	78,500	87,462	4,758	5.75%
12020	Health Insurance	235,100	103,002	206,004	246,800	11,700	4.98%
12026	Employee Assistance Program	275	133	266	275	-	0.00%
12030	Retirement	89,446	42,131	84,262	96,765	7,319	8.18%
12040	Life Insurance	12,687	7,485	14,970	15,113	2,426	19.12%
12050	Fitness Program	-	-	-	-	-	0.00%
12060	Worker's Comp Insurance	17,200	8,306	11,075	17,200	-	0.00%
Subtotal		\$ 1,518,512	\$ 729,803	\$ 1,454,069	\$ 1,606,915	\$ 88,403	5.82%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 250	\$ -	\$ -	\$ 375	\$ 125	50.00%
13150	Education & Training	15,000	8,890	17,780	24,200	9,200	61.33%
13200	Travel & Lodging	650	649	1,298	650	-	0.00%
13250	Uniforms	15,500	3,571	7,142	11,720	(3,780)	-24.39%
13325	Recruiting & Medical Testing	2,500	335	670	1,000	(1,500)	-60.00%
13350	Other	800	1,415	2,830	1,000	200	25.00%
Subtotal		\$ 34,700	\$ 14,860	\$ 29,720	\$ 38,945	\$ 4,245	12.23%
Professional Services							
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	25,000	-	-	10,000	(15,000)	
Subtotal		\$ 25,000	\$ -	\$ -	\$ 10,000	\$ (15,000)	
Other Services and Charges							
21100	General Liability/Property Ins.	\$ 7,400	\$ 3,867	\$ 7,734	\$ 8,140	\$ 740	10.00%
21150	Advertising & Communication	-	-	-	-	-	
21250	Watershed Management	-	-	-	-	-	
21253	Safety Programs/Supplies	25,000	5,935	11,870	17,000	(8,000)	-32.00%
21300	Authority Dues/Permits/Fees	-	-	-	-	-	
21350	Laboratory Analysis	-	-	-	-	-	
21400	Utilities	-	-	-	-	-	
21420	General Other Services	4,000	813	1,626	4,000	-	0.00%
21430	Governance & Strategic Support	-	-	-	-	-	
21450	Bad Debt	-	-	-	-	-	
Subtotal		\$ 36,400	\$ 10,615	\$ 21,230	\$ 29,140	\$ (7,260)	-19.95%
Communication							
22000	Radio	\$ 500	\$ 3,995	\$ 7,990	\$ 500	\$ -	0.00%
22150	Telephone & Data Service	800	-	-	500	(300)	-37.50%
22200	Cell Phones, Wireless data	10,000	8,266	16,532	15,200	5,200	52.00%
Subtotal		\$ 11,300	\$ 12,261	\$ 24,522	\$ 16,200	\$ 4,900	43.36%
Information Technology							
31000	Computer Hardware	\$ 13,000	\$ 42	\$ 84	\$ 5,000	\$ (8,000)	-61.54%
31150	SCADA Maint. & Support	-	-	-	-	-	
31200	Maintenance & Support Services	2,500	463	926	-	(2,500)	-100.00%
31250	Software & Subscriptions	2,000	-	-	2,500	500	25.00%
31300	Security Systems	-	-	-	-	-	
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-	
Subtotal		\$ 17,500	\$ 505	\$ 1,010	\$ 7,500	\$ (10,000)	-57.14%
Supplies							
33000	Office Supplies	\$ 4,000	\$ -	\$ -	\$ 3,500	\$ (500)	-12.50%
33150	Subscriptions/Reference Material	-	-	-	-	-	
33350	Postage & Delivery	-	-	-	-	-	
Subtotal		\$ 4,000	\$ -	\$ -	\$ 3,500	\$ (500)	-12.50%
Operation & Maintenance							
41000	Building & Grounds	\$ 20,000	\$ 3,164	\$ 6,328	\$ 22,950	\$ 2,950	14.75%
41150	Building/land Lease, Rental	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	5,000	394	788	5,000	-	0.00%
41400	Materials, Supplies & Tools	25,000	12,716	25,432	31,000	6,000	24.00%
41450	Chemicals	-	-	-	-	-	
41500	Vehicle Maintenance	16,800	17,199	34,398	13,000	(3,800)	-22.62%
41550	Equipment Repair, Replace, Maint.	30,350	1,194	22,388	26,850	(3,500)	-11.53%
41600	Instrumentation & Metering	2,000	1,299	2,598	10,000	8,000	400.00%
41650	Fuel & Lubricants	15,000	14,124	28,248	30,000	15,000	100.00%
41700	General Other Maintenance	-	-	-	-	-	
Subtotal		\$ 114,150	\$ 50,090	\$ 120,180	\$ 138,800	\$ 24,650	21.59%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Maintenance

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024 vs. 2025 Variance \$	2024 vs. 2025 Variance %
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024			
81000	Equipment Purchases						
81200	Rental & Leases	\$ 1,000	\$ -	\$ -	\$ 750	\$ (250)	-25.00%
81250	Equipment (over \$10,000)	70,000	-	70,000	15,000	(55,000)	-78.57%
81300	Vehicle Replacement Fund	130,000	65,000	130,000	130,000	-	0.00%
	<i>Subtotal</i>	\$ 201,000	\$ 65,000	\$ 200,000	\$ 145,750	\$ (55,250)	-27.49%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	
95110	Finance & IT						
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
	<i>Subtotal</i>	\$ -	\$ -	\$ -	\$ -	\$ -	
	Depreciation	-	-	-	-	-	
	<i>Subtotal</i>	\$ -	\$ -	\$ -	\$ -	\$ -	
	Total	\$ 1,962,562	\$ 883,134	\$ 1,850,731	\$ 1,996,750	\$ 34,188	1.74%

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Laboratory Summary

FY 2024			FY 2025	Budget % Change
<i>Budgeted FY 2024</i>	Actual for 6 months	Projected 12 months	<i>Proposed Budget</i>	

Operations Budget

Projected Revenues

N/A

Projected Expenses

Personnel Cost	\$ 456,056	\$ 229,057	\$ 456,420	\$ 463,225	1.57%
Professional Services	-	-	-	-	
Other Services and Charges	14,580	674	1,348	9,550	-34.50%
Communications	1,400	351	-	1,050	-25.00%
Information Technology	1,000	-	-	-	-100.00%
Supplies	1,200	351	702	1,300	8.33%
Operations and Maintenance	115,300	31,004	62,008	133,600	15.87%
Equipment Purchases	1,700	850	1,700	23,900	1305.88%
Depreciation	-	-	-	-	
<i>Total Operations Expenses</i>	\$ 591,236	\$ 262,287	\$ 522,178	\$ 632,625	7.00%

Department Summary					
Total Revenues	\$ -	\$ -	\$ -	\$ -	
Total Expenses	591,236	262,287	522,178	632,625	7.00%
Net Costs Allocable to Rate Centers	\$ (591,236)	\$ (262,287)	\$ (522,178)	\$ (632,625)	
<u>Allocations to the Rate Centers</u>					
Urban Water	44.00%	\$ 260,144	\$ 115,406	\$ 229,758	\$ 278,355
Crozet Water	4.00%	23,649	10,491	20,887	25,305
Scottsville Water	2.00%	11,825	5,246	10,444	12,653
		-	-	-	
Urban Wastewater	47.00%	277,881	123,275	245,424	297,334
Glenmore Wastewater	1.50%	8,869	3,934	7,833	9,489
Scottsville Wastewater	1.50%	8,869	3,934	7,833	9,489
	100.00%	\$ 591,237	\$ 262,286	\$ 522,179	\$ 632,625

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Laboratory

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024 vs. 2025 Variance \$	2024 vs. 2025 Variance %
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024			
10000	Salaries & Benefits						
11000	Salaries	\$ 312,800	\$ 171,510	\$ 343,020	\$ 331,100	\$ 18,300	5.85%
11010	Overtime & Holiday Pay	17,000	4,272	8,544	2,500	(14,500)	-85.29%
12010	FICA	25,230	13,100	26,200	25,520	290	1.15%
12020	Health Insurance	58,800	19,453	38,906	61,700	2,900	4.93%
12026	Employee Assistance Program	60	36	72	60	-	0.00%
12030	Retirement	26,244	13,098	26,196	28,408	2,164	8.25%
12040	Life Insurance	3,722	2,332	4,664	4,437	715	19.21%
12050	Fitness Program	200	216	432	-	(200)	-100.00%
12060	Worker's Comp Insurance	5,300	2,541	3,388	5,300	-	0.00%
	Subtotal	\$ 449,356	\$ 226,558	\$ 451,422	\$ 459,025	\$ 9,669	2.15%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 100	\$ -	\$ -	\$ 100	\$ -	0.00%
13150	Education & Training	4,500	1,455	2,910	2,000	(2,500)	-55.56%
13200	Travel & Lodging	500	924	1,848	500	-	0.00%
13250	Uniforms	1,000	60	120	800	(200)	-20.00%
13325	Recruiting & Medical Testing	500	-	-	500	-	0.00%
13350	Other	100	60	120	300	200	200.00%
	Subtotal	\$ 6,700	\$ 2,499	\$ 4,998	\$ 4,200	\$ (2,500)	-37.31%
20100	Professional Services						
20100	Legal Fees		\$ -	\$ -	\$ -	\$ -	
20200	Financial & Admin. Services		-	-	-	-	
20250	Bond Issue Costs		-	-	-	-	
20300	Engineering & Technical Services		-	-	-	-	
	Subtotal	\$ -	\$ -	\$ -	\$ -	\$ -	
21100	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 500	\$ 252	\$ 504	\$ 550	\$ 50	10.00%
21150	Advertising & Communication		-	-	-	-	
21250	Watershed Management		-	-	-	-	
21253	Safety Programs/Supplies	6,580	33	66	1,000	(5,580)	-84.80%
21300	Authority Dues/Permits/Fees	5,500	330	660	5,500	-	0.00%
21350	Laboratory Analysis	1,000	59	118	2,500	1,500	150.00%
21400	Utilities	-	-	-	-	-	
21420	General Other Services	1,000	-	-	-	(1,000)	-100.00%
21430	Governance & Strategic Support	-	-	-	-	-	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	\$ 14,580	\$ 674	\$ 1,348	\$ 9,550	\$ (5,030)	-34.50%
22000	Communication						
22100	Radio	\$ -	\$ -	\$ -	\$ -	\$ -	
22150	Telephone & Data Service	-	-	-	-	-	
22200	Cell Phones, Wireless data	1,400	351	702	1,050	(350)	-25.00%
	Subtotal	\$ 1,400	\$ 351	\$ 702	\$ 1,050	\$ (350)	
31000	Information Technology						
31100	Computer Hardware	\$ -	\$ -	\$ -	\$ -	\$ -	
31150	SCADA Maint. & Support	-	-	-	-	-	
31200	Maintenance & Support Services	1,000	-	-	-	(1,000)	-100.00%
31250	Software & Subscriptions	-	-	-	-	-	
31300	Security Systems	-	-	-	-	-	
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	-	
	Subtotal	\$ 1,000	\$ -	\$ -	\$ -	\$ (1,000)	-100.00%
33000	Supplies						
33100	Office Supplies	\$ 1,000	\$ 253	\$ 506	\$ 1,200	\$ 200	20.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	
33350	Postage & Delivery	200	98	196	100	(100)	-50.00%
	Subtotal	\$ 1,200	\$ 351	\$ 702	\$ 1,300	\$ 100	8.33%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ -	\$ 169	\$ 338	\$ -	\$ -	
41150	Building/land Lease, Rental	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	-	-	-	-	-	
41400	Materials, Supplies & Tools	45,000	20,805	41,610	80,000	35,000	77.78%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Laboratory

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
41450	Chemicals	10,000	718	1,436	5,000	(5,000)	-50.00%
41500	Vehicle Maintenance	1,000	692	1,384	2,500	1,500	
41550	Equipment Repair, Replace, Maint.	29,500	3,384	6,768	6,000	(23,500)	-79.66%
41600	Instrumentation & Metering	28,800	4,731	9,462	39,300	10,500	36.46%
41650	Fuel & Lubricants	1,000	505	1,010	800	(200)	-20.00%
41700	General Other Maintenance	-	-	-	-	-	
Subtotal		\$ 115,300	\$ 31,004	\$ 62,008	\$ 133,600	\$ 18,300	15.87%
81000	Equipment Purchases						
81200	Rental & Leases	\$ -	\$ -	\$ -	\$ -	\$ -	
81250	Equipment (over \$10,000)	-	-	-	20,000	20,000	
81300	Vehicle Replacement Fund	1,700	850	1,700	3,900	2,200	129.41%
Subtotal		\$ 1,700	\$ 850	\$ 1,700	\$ 23,900	\$ 22,200	1305.88%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	
95110	Finance & IT	-	-	-	-	-	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	
Depreciation		-	-	-	-	-	
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	
Total		\$ 591,236	\$ 262,287	\$ 522,880	\$ 632,625	\$ 41,389	7.00%

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Engineering Summary

FY 2024			FY 2025	Budget % Change
Budgeted FY 2024	Actual for 6 months	Projected 12 months	Proposed Budget	

Operations Budget

Projected Revenues

Payment for Services SWA

\$ - \$ 1,483 \$ 2,966 \$ -

Total Operations Revenues

\$ - \$ 1,483 \$ 2,966 \$ -

Projected Expenses

Personnel Cost

\$ 2,022,024 \$ 991,172 \$ 1,975,211 \$ 2,216,684 9.63%

Professional Services

30,000 5,806 11,612 32,500 8.33%

Other Services and Charges

22,000 5,450 9,387 20,465 -6.98%

Communications

19,540 7,831 15,662 15,150 -22.47%

Information Technology

154,900 66,161 132,322 211,900 36.80%

Supplies

8,500 1,671 3,342 5,600 -34.12%

Operations and Maintenance

86,740 18,804 37,608 82,620 -4.75%

Equipment Purchases

21,500 10,750 21,500 21,500 0.00%

Depreciation

- - - -

Total Operations Expenses

\$ 2,365,204 \$ 1,107,645 \$ 2,206,644 \$ 2,606,419 10.20%

Department Summary

Total Revenues

\$ - \$ 1,483 \$ 2,966 \$ -

Total Expenses

2,365,204 1,107,645 2,206,644 2,606,419 10.20%

Net Costs Allocable to Rate Centers

\$ (2,365,204) \$ (1,106,162) \$ (2,203,678) \$ (2,606,419)

Allocations to the Rate Centers

Urban Water

47.00% \$ 1,111,646 \$ 519,896 \$ 1,035,729 \$ 1,225,017

Crozet Water

4.00% 94,608 44,246 88,147 104,257

Scottsville Water

2.00% 47,304 22,123 44,074 52,128

Urban Wastewater

44.00% 1,040,690 486,711 969,618 1,146,824

Glenmore Wastewater

1.50% 35,478 16,592 33,055 39,096

Scottsville Wastewater

1.50% 35,478 16,592 33,055 39,096

100.00% \$ 2,365,204 \$ 1,106,160 \$ 2,203,678 \$ 2,606,418

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Engineering

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024 vs. 2025 Variance \$	2024 vs. 2025 Variance %
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024			
10000	Salaries & Benefits						
11000	Salaries	\$ 1,489,000	\$ 753,703	\$ 1,507,406	\$ 1,645,000	\$ 156,000	10.48%
11010	Overtime & Holiday Pay	13,000	7,412	14,824	13,000	-	0.00%
12010	FICA	114,903	55,625	111,250	126,837	11,934	10.39%
12020	Health Insurance	206,000	79,076	158,152	232,100	26,100	12.67%
12026	Employee Assistance Program	250	115	230	250	-	0.00%
12030	Retirement	124,927	62,748	125,496	138,016	13,089	10.48%
12040	Life Insurance	17,719	11,243	22,486	19,576	1,857	10.48%
12050	Fitness Program	4,300	1,298	2,596	4,300	-	0.00%
12060	Worker's Comp Insurance	22,200	10,699	14,265	-	(22,200)	-100.00%
	Subtotal	\$ 1,992,299	\$ 981,919	\$ 1,956,705	\$ 2,179,079	\$ 186,780	9.38%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 3,250	\$ 918	\$ 1,836	\$ 3,250	\$ -	0.00%
13150	Education & Training	10,000	5,979	11,958	15,680	5,680	56.80%
13200	Travel & Lodging	10,000	1,015	2,030	13,200	3,200	32.00%
13250	Uniforms	4,375	500	1,000	4,375	-	0.00%
13325	Recruiting & Medical Testing	1,500	-	-	500	(1,000)	-66.67%
13350	Other	600	841	1,682	600	-	0.00%
	Subtotal	\$ 29,725	\$ 9,253	\$ 18,506	\$ 37,605	\$ 7,880	26.51%
20100	Professional Services						
20100	Legal Fees	\$ 2,500	\$ -	\$ -	\$ 5,000	\$ 2,500	100.00%
20200	Financial & Admin. Services	2,500	3,300	6,600	2,500	-	-
20250	Bond Issue Costs	-	-	-	-	-	-
20300	Engineering & Technical Services	25,000	2,506	5,012	25,000	-	0.00%
	Subtotal	\$ 30,000	\$ 5,806	\$ 11,612	\$ 32,500	\$ 2,500	8.33%
21100	Other Services and Charges						
21100	General Liability/Property Ins.	\$ 4,400	\$ 2,270	\$ 3,027	\$ 4,840	\$ 440	10.00%
21150	Advertising & Communication	200	-	-	200	-	0.00%
21250	Watershed Management	-	-	-	-	-	-
21253	Safety Programs/Supplies	9,825	2,564	5,128	6,675	(3,150)	-32.06%
21300	Authority Dues/Permits/Fees	1,500	-	-	1,500	-	0.00%
21350	Laboratory Analysis	250	-	-	250	-	0.00%
21400	Utilities	825	616	1,232	2,000	1,175	142.42%
21420	General Other Services	-	-	-	-	-	-
21430	Governance & Strategic Support	5,000	-	-	5,000	-	-
21450	Bad Debt	-	-	-	-	-	-
	Subtotal	\$ 22,000	\$ 5,450	\$ 9,387	\$ 20,465	\$ (1,535)	-6.98%
22000	Communication						
22100	Radio	\$ 4,600	\$ 2,747	\$ 5,494	\$ 1,000	\$ (3,600)	-78.26%
22150	Telephone & Data Service	1,500	71	142	750	(750)	-50.00%
22200	Cell Phones, Wireless data	13,440	5,013	10,026	13,400	(40)	-0.30%
	Subtotal	\$ 19,540	\$ 7,831	\$ 15,662	\$ 15,150	\$ (4,390)	-22.47%
31000	Information Technology						
31100	Computer Hardware	\$ 12,000	\$ 4,940	\$ 9,880	\$ 2,000	\$ (10,000)	-83.33%
31150	SCADA Maint. & Support	-	-	-	-	-	-
31200	Maintenance & Support Services	56,700	60,921	121,842	16,800	(39,900)	-70.37%
31250	Software & Subscriptions	5,500	300	600	49,700	44,200	803.64%
31300	Security Systems	33,300	-	-	39,200	5,900	-
31325	Asset Mgt / Project Mgt Systems	47,400	-	-	104,200	56,800	-
	Subtotal	\$ 154,900	\$ 66,161	\$ 132,322	\$ 211,900	\$ 57,000	36.80%
33000	Supplies						
33100	Office Supplies	\$ 7,000	\$ 884	\$ 1,768	\$ 3,500	\$ (3,500)	-50.00%
33150	Subscriptions/Reference Material	900	600	1,200	1,500	600	66.67%
33350	Postage & Delivery	600	187	374	600	-	0.00%
	Subtotal	\$ 8,500	\$ 1,671	\$ 3,342	\$ 5,600	\$ (2,900)	-34.12%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 19,240	\$ 3,832	\$ 7,664	\$ 14,240	\$ (5,000)	-25.99%
41150	Building/land Lease, Rental	1,900	1,141	2,282	2,100	200	10.53%
41300	Dam Maintenance	-	-	-	-	-	-
41350	Pipeline/Appurtenances	17,000	5,583	11,166	16,280	(720)	-4.24%
41400	Materials, Supplies & Tools	14,000	3,030	6,060	15,000	1,000	7.14%
41450	Chemicals	-	-	-	-	-	-
41500	Vehicle Maintenance	24,000	1,130	2,260	24,000	-	0.00%
41550	Equipment Repair, Replace, Maint.	1,000	589	1,178	1,400	400	40.00%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Department: Engineering

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
41600	Instrumentation & Metering	-	-	-	-	-	
41650	Fuel & Lubricants	9,600	3,499	6,998	9,600	-	0.00%
41700	General Other Maintenance	-	-	-	-	-	
Subtotal		\$ 86,740	\$ 18,804	\$ 37,608	\$ 82,620	\$ (4,120)	-4.75%
81000	Equipment Purchases						
81200	Rental & Leases	\$ -	\$ -	\$ -	\$ -	\$ -	
81250	Equipment (over \$10,000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	21,500	10,750	21,500	21,500	-	0.00%
Subtotal		\$ 21,500	\$ 10,750	\$ 21,500	\$ 21,500	\$ -	0.00%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	
95110	Finance & IT	-	-	-	-	-	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	
Depreciation		-	-	-	-	-	
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	
Total		\$ 2,365,204	\$ 1,107,645	\$ 2,206,644	\$ 2,606,419	\$ 241,215	10.20%

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APPENDICES

Rivanna Water and Sewer Authority

Fiscal Year 2024-2025

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Flow Projections

		(1,000 GALLONS)			(MILLION GALLONS PER DAY)		
		<u>FY 2024</u>	<u>FY 2025</u>	<u>% Change</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>% Change</u>
Water							
	Urban	3,397,700	3,397,700	0.00%	9.309	9.309	0.00%
	Crozet	202,697	202,697	0.00%	0.555	0.555	0.00%
	Scottsville	17,230	17,230	0.00%	0.047	0.047	0.00%
Total		<u>3,617,627</u>	<u>3,617,627</u>	<u>0.00%</u>	<u>9.911</u>	<u>9.911</u>	<u>0.00%</u>
Wastewater							
	Urban	3,390,400	3,390,400	0.00%	9.289	9.289	0.00%
	Glenmore	41,401	41,401	0.00%	0.113	0.113	0.00%
	Scottsville	23,643	23,643	0.00%	0.065	0.065	0.00%
Total		<u>3,455,444</u>	<u>3,455,444</u>	<u>0.00%</u>	<u>9.467</u>	<u>9.467</u>	<u>0.00%</u>

Allocation (Urban Area Only)	<u>FY 2024</u>	<u>FY 2025</u>	<u>Allocation % Change</u>
<u>Water</u>			
City	48%	49%	2.08%
ACSA	52%	51%	-1.92%
<u>Wastewater</u>			
City	46%	47%	2.17%
ACSA	54%	53%	-1.85%

FY 2025 allocations are based on FY 2023 retail flows reported by the City and ACSA.

		(1,000 GALLONS)			(MILLION GALLONS PER DAY)		
		<u>FY 2024</u>	<u>FY 2025</u>	<u>% Change</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>% Change</u>
Allocation (Urban Area Only)							
<u>Water</u>							
	City	1,630,896	1,664,873	2.08%	4.468	4.561	2.08%
	ACSA	1,766,804	1,732,827	-1.92%	4.841	4.747	-1.94%
		<u>3,397,700</u>	<u>3,397,700</u>				
<u>Wastewater</u>							
	City	1,559,584	1,593,488	2.17%	4.273	4.366	2.18%
	ACSA	1,830,816	1,796,912	-1.85%	5.016	4.923	-1.85%
		<u>3,390,400</u>	<u>3,390,400</u>				

URBAN WATER DEBT SERVICE COSTS

Summary of Debt Service Budget to be included in Monthly Charges

City Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2025	City %	City Amount	Annual Total
ALLOCATION BASED ON FLOWS					
<i>Regional Water System Projects:</i>					
9.2% of 2019 Refunding Bond	\$	129,414	49.00%	\$ 63,413	
14.2% of 2015B Bond - New Projects		240,165	49.00%	117,681	181,094
<i>Revenues that offset Debt Service</i>					
Trust Fund Interest		(185,000)	49.00%	(90,650)	
Use of Reserves		-	FIXED	-	
Lease Revenues		(10,000)	49.00%	(4,900)	(95,550)
RATES BASED ON FIXED AGREEMENTS					
<i>2003 & 2012 Urban Water Agreement</i>					
<i>Water Supply Expansion (15%/85%)</i>					
100% of 2012B Revenue Bond		1,338,372	15.00%	200,756	
9.0% of 2015B Bond - Refunding		142,487	15.00%	21,373	
<i>Water Pipeline (20%/80%)</i>					
10.4% of 2018 Bond		162,586	20.00%	32,517	
<i>Non-Water Supply - Other Projects (48%/52%)</i>					
47.4% of 2015B Bond - Refunding		750,434	48.00%	360,208	
77.8% of 2015B Bond - New Projects		1,315,836	48.00%	631,601	
37.7% of 2018 Bond		1,038,745	48.00%	498,598	
91.6% of 2021 Bond		1,268,158	48.00%	608,716	
<i>South Rivanna Expansion of 1999</i>					
10.3% of 2015B Bond - Refunding		163,069	0.00%	-	2,353,769
<i>Southern Loop Water Line, West Branch</i>					
0.8% of 2019 Refunding Bond		10,730	24.51%	2,630	2,630
<i>South Rivanna Connector Main</i>					
3.0% of 2019 Refunding Bond		42,243	52.00%	21,966	21,966
<i>Northern Area Agreement</i>					
25% of 2021 Bond		476,035	0.00%	-	-
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Charge from 2025-2029 CIP		5,310,600	FIXED	1,906,800	1,906,800
Debt Service Coverage Ratio / Policy Charge		400,000	36.00%	144,000	144,000
Total Debt Service For Rate Computation	\$	12,593,874		\$ 4,514,709	\$ 4,514,709

ACSA Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2025	ACSA %	ACSA Amount	Annual Total
ALLOCATION BASED ON FLOWS					
<i>Regional Water System Projects:</i>					
9.2% of 2019 Refunding Bond	\$	129,414	51.00%	\$ 66,001	
14.2% of 2015B Bond - New Projects		240,165	51.00%	122,484	188,485
<i>Revenues that offset Debt Service</i>					
Trust Fund Interest		(185,000)	51.00%	(94,350)	
Use of Reserves		-	FIXED	-	
Lease Revenues		(10,000)	51.00%	(5,100)	(99,450)
RATES BASED ON FIXED AGREEMENTS					
<i>2003 & 2012 Urban Water Agreement</i>					
<i>Water Supply Expansion (15%/85%)</i>					
100% of 2012B Revenue Bond		1,338,372	85.00%	1,137,616	
9.0% of 2015B Bond - Refunding		142,487	85.00%	121,114	
<i>Water Pipeline (20%/80%)</i>					
10.4% of 2018 Bond		162,586	80.00%	130,069	
<i>Non-Water Supply - Other Projects (48%/52%)</i>					
47.4% of 2015B Bond - Refunding		750,434	52.00%	390,226	
77.8% of 2015B Bond - New Projects		1,315,836	52.00%	684,235	
37.7% of 2018 Bond		1,038,745	52.00%	540,147	
91.6% of 2021 Bond		1,268,158	52.00%	659,442	
<i>South Rivanna Expansion of 1999</i>					
10.3% of 2015B Bond - Refunding		163,069	100.00%	163,069	3,825,918
<i>Southern Loop Water Line, West Branch</i>					
0.8% of 2019 Refunding Bond		10,730	75.49%	8,100	8,100
<i>South Rivanna Connector Main</i>					
3.0% of 2019 Refunding Bond		42,243	48.00%	20,277	20,277
<i>Northern Area Agreement</i>					
25% of 2021 Bond		476,035	100.00%	476,035	476,035
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Charge from 2025-2029 CIP		5,310,600	FIXED	3,403,800	3,403,800
Debt Service Coverage Ratio / Policy Charge		400,000	64.00%	256,000	256,000
Total Debt Service For Rate Computation	\$	12,593,874		\$ 8,079,165	\$ 8,079,165

SUMMARY OF DEBT SERVICE REVENUES:			
CITY SHARE OF TOTAL DEBT SERVICE	\$	4,514,709	36%
ACSA SHARE OF TOTAL DEBT SERVICE		8,079,165	64%
	\$	12,593,874	100%

URBAN WASTEWATER DEBT SERVICE COSTS
Summary of Debt Service Budget to be Included in Charges

City Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2025	City %	City Amount	
ALLOCATION BASED ON FLOWS					
<i>System Projects Rate</i>					
22.9% of 2015B Bond Refunding		\$ 362,551	47%	\$ 170,399	
100% 2005A Bond VRA/VRLF		150,976	47%	70,959	
88.5% of 2009A Bond VRA/VRLF		1,419,716	47%	667,267	
37.9% of 2011 A,B Bond VRA/VRLF		192,130	47%	90,301	
24.5% of 2019 Refunding Bond		344,106	47%	161,730	
100% of 2016 Bond		626,483	47%	294,447	
6.3% of 2021 Bond		91,399	47%	42,958	
2.4% of 2018 Bond		54,195	47%	25,472	1,523,533
<i>Revenues/Reserves that offset Debt Service</i>					
County MOU - Septage		(109,440)	47%	(51,437)	
Use of Reserves		-	Fixed	-	
Trust Fund Interest		(208,200)	47%	(97,854)	(149,291)
ALLOCATION BASED ON FIXED AGREEMENTS					
<i>2014 Wastewater Agreement</i>					
Meadowcreek	97.9% of 2010A and 10.9% of 2019 Bonds	1,095,638	Segments	708,775	
Wet Weather MCWWTP	11.5% of 2009A and 62.1% of 2011 A/B Bonds	499,293	Segments	270,138	
Moore's Creek Pump Stn.	100% of 2011 D/E Bond	296,944	Segments	184,550	
Rivanna Pump Stn. & F.M.	5.8% of 2019 and 100% of 2014A Bonds	1,851,718	Segments	961,258	
Albemarle Berkley Pump Stn.	3.4% of 2019 Refunding Bond	47,230	0%	-	
Crozet Interceptor	2.3% of 2019 and 13.8% of 2018	343,441	0%	-	
Schenks Branch Agreement	16.1% of 2019, 2.1% of 2010A, and 100% of 2015A Bonds	315,319	100%	315,319	2,440,040
<i>Four Party Rate</i>					
Regional System Projects	3.9% of 2019 Refunding Bond	53,990	N/A	16,585	
Crozet Interceptor	0.7% of 2019 Refunding Bond	10,758	N/A	3,305	
Facilities Purchase	1.4% of 2019 Refunding Bond	19,704	N/A	6,053	25,943
Moore's Creek Relief IS, Pt 1	0.3% of 2019 Refunding Bond	4,481	30%	1,344	1,344
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Charge from 2025-2029 CIP		2,368,300	Fixed	1,086,600	1,086,600
Debt Service Coverage Ratio / Policy Charge		325,000	50%	162,500	162,500
Total		\$ 10,155,732		\$ 5,090,669	\$ 5,090,669

ACSA Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2025	ACSA %	ACSA Amount	
ALLOCATION BASED ON FLOWS					
<i>System Projects Rate</i>					
22.9% of 2015B Bond Refunding		\$ 362,551	53%	\$ 192,152	
100% 2005A Bond VRA/VRLF		150,976	53%	80,017	
88.5% of 2009A Bond VRA/VRLF		1,419,716	53%	752,449	
37.9% of 2011 A,B Bond VRA/VRLF		192,130	53%	101,829	
24.5% of 2019 Refunding Bond		344,106	53%	182,376	
100% of 2016 Bond		626,483	53%	332,036	
6.3% of 2021 Bond		91,399	53%	48,441	
2.4% of 2018 Bond		54,195	53%	28,723	1,718,023
<i>Revenues/Reserves that offset Debt Service</i>					
County MOU - Septage		(109,440)	53%	(58,003)	
Use of Reserves		-	53%	-	
Trust Fund Interest		(208,200)	53%	(110,346)	(168,349)
ALLOCATION BASED ON FIXED AGREEMENTS					
<i>2014 Wastewater Agreement</i>					
Meadowcreek	97.9% of 2010A and 10.9% of 2019 Bonds	1,095,638	Segments	387,404	
Wet Weather MCWWTP	11.5% of 2009A and 62.1% of 2011 A/B Bonds	499,293	Segments	229,155	
Moore's Creek Pump Stn.	100% of 2011 D/E Bond	296,944	Segments	112,395	
Rivanna Pump Stn. & F.M.	5.8% of 2019 and 100% of 2014A Bonds	1,851,718	Segments	890,746	
Albemarle Berkley Pump Stn.	3.4% of 2019 Refunding Bond	47,230	100%	47,230	
Crozet Interceptor	2.3% of 2019 and 13.8% of 2018	343,441	100%	343,441	
Schenks Branch Agreement	16.1% of 2019, 2.1% of 2010A, and 100% of 2015A Bonds	315,319	0%	-	2,010,371
<i>Four Party Rate</i>					
Regional System Projects	3.9% of 2019 Refunding Bond	53,990	N/A	37,405	
Crozet Interceptor	0.7% of 2019 Refunding Bond	10,758	N/A	7,453	
Facilities Purchase	1.4% of 2019 Refunding Bond	19,704	N/A	13,651	58,509
Moore's Creek Relief IS, Pt 1	0.3% of 2019 Refunding Bond	4,481	70%	3,137	3,137
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Charge from 2025-2029 CIP		2,368,300	Fixed	1,281,700	1,281,700
Debt Service Coverage Ratio / Policy Charge		325,000	50%	162,500	162,500
Total		\$ 10,155,732		\$ 5,065,891	\$ 5,065,891

SUMMARY OF DEBT SERVICE REVENUES:			
CITY SHARE OF TOTAL DEBT SERVICE	\$ 5,090,669	50%	
ACSA SHARE OF TOTAL DEBT SERVICE	5,065,891	50%	
	\$ 10,156,560	100%	

OTHER RATE CENTERS DEBT SERVICE RATES

Summary of Debt Service Payments Due

	Existing Estimated Debt Service Budget FY 2025	FY 2024	Estimated New Debt Service	ACSA Monthly Rate
WATER				
<u>Crozet Water</u>				
<i>System Upgrades</i>				
13.9% of 2019 Refunding Bond	\$ 193,882	\$ 194,567		
17.0% of 2012A Bond (new money)	-	-		
7.4% of 2015B Bond Refunding	117,156	117,267		
5.9% of 2015B Bond New Projects	99,787	99,665		
35.7% of 2018 Bond	720,347	805,226		
Estimated DS - CIP Growth Charge	1,491,600	1,182,500	\$ 309,100	
Revenues that offset Debt Service				
Use of Reserves	-	-		
Trust Fund Interest	(32,400)	(13,500)	-	
	\$ 2,590,372	\$ 2,385,725	\$ 309,100	\$ 215,864
<u>Scottsville Water</u>				
<i>System Upgrades</i>				
3.4% of 2019 Refunding Bond	\$ 47,702	\$ 47,871		
4.2% of 2012A Bond (new money)	-	-		
2.7% of 2015B Bond Refunding	42,746	42,787		
2.1% of 2015B Bond New Projects	35,517	35,474		
1.2% of 2021 Bond	22,850	22,859		
Estimated DS - CIP Growth Charge	45,600	11,400	\$ 34,200	
Revenues that offset Debt Service				
Trust Fund Interest	(4,000)	(1,650)	-	
	\$ 190,415	\$ 158,741	\$ 34,200	\$ 15,868
WASTEWATER				
<u>Glenmore Wastewater</u>				
<i>System Upgrades</i>				
0.1% of 2015B Bond Refunding	\$ 1,583	\$ 1,585		
0.9% of 2021 Bond	17,137	17,144		
Estimated DS - CIP Growth Charge	30,560	4,150	\$ 26,410	
Revenues that offset Debt Service	-	-		
Trust Fund Interest	(500)	(200)	-	
	\$ 48,780	\$ 22,679	\$ 26,410	\$ 4,065
<u>Scottsville Wastewater</u>				
<i>Facilities Purchase</i>				
0.3% of 2012A Refunding Bond	\$ -	\$ -		
<i>System Upgrades</i>				
0.3% of 2019 Refunding Bond	4,287	4,302		
0.2% of 2015B Bond Refunding	3,166	3,169		
Estimated DS - CIP Growth Charge	25,300	11,250	\$ 14,050	
Revenues that offset Debt Service				
Trust Fund Interest	(200)	(80)	-	
	\$ 32,553	\$ 18,641	\$ 14,050	\$ 2,713
TOTAL	\$ 2,862,120	\$ 2,585,786	\$ 383,760	\$ 238,510

DEBT SUMMARY

	Total Revenue Bond Debt	Total FY 2025 Debt Service
<u>CURRENT EXISTING DEBT</u>		
<u>DEBT BY BOND ISSUE</u>		
2005 A Bond VRA/VRLF	\$ 367,768	\$ 150,976
2009A Bond	9,520,985	1,604,199
2010A Bond	5,829,589	962,522
2011A Bond	3,069,385	443,608
2011B Bond	438,199	63,331
2011D,E Bond	2,180,719	296,944
2012A Bond (refunding & new money)	-	-
2012B Bond	19,220,000	1,338,372
2014A Bond	19,152,238	1,770,751
2015A Bond	769,406	70,593
2015B Bond (refunding & new money)	32,320,000	3,274,500
2016 Bond	7,020,000	626,483
2018 Bond	33,745,000	2,258,141
2019 Bond	16,155,000	1,399,945
2021 Bond	35,655,000	1,904,141
	\$ 185,443,289	\$ 16,164,506

Ratio of Debt Service / Total Debt 8.7%

PRINCIPAL AND INTEREST PAYMENTS BY CENTER - Annual

Urban Water	\$ 7,078,274
Crozet Water	1,131,172
Scottsville Water	148,815
Urban Wastewater	7,780,072
Glenmore Wastewater	18,720
Scottsville Wastewater	7,453
	\$ 16,164,506

Stone Robinson School WWTP Estimated Charges

		Total	Monthly
Expenses			
Fixed Costs			
Wages		\$ 5,621	
Benefits		2,473	
Mileage		900	
	Subtotal	\$ 8,994	
	Overhead at 35%	3,148	
	Total Fixed Charge	\$ 12,142	
Variable Costs			
Sludge hauls from digester		\$ 1,575	
Belts oil etc.		1,000	
Chemicals		2,500	
	Subtotal	\$ 5,075	
	Overhead at 35%	551	
	Total Variable Charge	\$ 5,626	
Total Annual Charge Estimate		\$ 17,768	\$ 1,481

All Rate Centers

Detailed Summary of Revenues

	<i>FY 2024</i>	<i>FY 2025</i>	<i>\$ Change</i>	<i>% Change</i>
<u>OPERATIONS</u>				
Operations Rate Revenues	\$ 22,727,003	\$ 25,533,965	\$ 2,806,962	12.35%
Other Operations Revenues				
Interest Allocation	\$ 47,250	\$ 165,400	\$ 118,150	250.05%
Stone Robinson WWTP	17,267	17,768	501	2.90%
Septage/Sludge Acceptance	550,000	600,000	50,000	9.09%
Leases	124,000	120,000	(4,000)	-3.23%
Administration	781,000	364,200	(416,800)	-53.37%
Finance & IT	-	541,000	541,000	
Nutrient Credits	80,000	50,000	(30,000)	-37.50%
Use of Reserves	80,000	-	(80,000)	-100.00%
Miscellaneous	-	-	-	
	\$ 1,679,517	\$ 1,858,368	\$ 178,851	10.65%
Total Operations Revenues	\$ 24,406,520	\$ 27,392,333	\$ 2,985,813	12.23%
<u>DEBT SERVICE</u>				
Debt Service Rate Revenues				
City	\$ 8,425,075	\$ 9,605,378	\$ 1,180,303	14.01%
ACSA	13,693,985	16,007,176	2,313,191	16.89%
	\$ 22,119,060	\$ 25,612,554	\$ 3,493,494	15.79%
Other Debt Service Revenues				
Interest	1,059,730	2,011,100	951,370	89.77%
County MOU - Septage	109,440	109,440	-	0.00%
Leases	1,600	10,000	8,400	525.00%
	\$ 1,170,770	\$ 2,130,540	\$ 959,770	81.98%
Total Debt Service Revenues	\$ 23,289,830	\$ 27,743,094	\$ 4,453,264	19.12%
Total Revenues	\$ 47,696,350	\$ 55,135,427	\$ 7,439,077	15.60%

Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail

Authority as a Whole

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
10000	Salaries & Benefits						
11000	Salaries	\$ 8,133,800	\$ 4,177,485	\$ 8,354,970	\$ 9,028,950	\$ 895,150	11.01%
11010	Overtime Pay	283,500	103,191	241,640	272,100	(11,400)	-4.02%
12010	FICA	643,922	309,505	619,010	711,530	67,608	10.50%
12020	Health Insurance	1,446,550	621,668	1,243,336	1,560,000	113,450	7.84%
12026	Employee Assistance Program	1,605	817	1,634	1,610	5	0.31%
12030	Retirement	682,427	337,570	675,140	771,559	89,132	13.06%
12040	Life Insurance	96,793	52,044	104,088	118,523	21,730	22.45%
12050	Fitness Program	11,600	6,171	12,342	11,400	(200)	-1.72%
12060	Worker's Comp Insurance	101,200	48,856	65,140	82,700	(18,500)	-18.28%
	Subtotal	\$ 11,401,397	\$ 5,657,307	\$ 11,317,300	\$ 12,558,372	\$ 1,156,975	10.15%
13000	Other Personnel Costs						
13100	Employee Dues & Licenses	\$ 12,800	\$ 3,421	\$ 11,492	\$ 15,375	\$ 2,575	20.12%
13150	Education & Training	91,200	50,019	100,038	110,553	19,353	21.22%
13200	Travel & Lodging	19,650	15,205	23,860	29,450	9,800	49.87%
13250	Uniforms	66,675	23,361	46,722	65,195	(1,480)	-2.22%
13325	Recruiting & Medical Testing	10,470	2,463	4,926	6,920	(3,550)	-33.91%
13350	Other	22,900	13,820	27,640	30,200	7,300	31.88%
	Subtotal	\$ 223,695	\$ 108,289	\$ 214,678	\$ 257,693	\$ 33,998	15.20%
20100	Professional Services						
20200	Legal Fees	\$ 69,000	\$ 12,625	\$ 60,404	\$ 70,000	\$ 1,000	1.45%
20250	Financial & Admin. Services	58,950	35,879	71,758	112,750	53,800	91.26%
20300	Bond Issue Costs	-	-	-	-	-	0.00%
	Engineering & Technical Services	339,900	121,153	612,306	309,900	(30,000)	-8.83%
	Subtotal	\$ 467,850	\$ 169,657	\$ 744,468	\$ 492,650	\$ 24,800	5.30%
21100	Other Services and Charges						
21150	General Liability/Property Ins.	\$ 161,800	\$ 84,621	\$ 167,729	\$ 185,775	\$ 23,975	14.82%
21250	Advertising & Communication	18,200	6,140	12,280	18,700	500	2.75%
21253	Watershed Management	71,000	97,873	145,746	54,000	(17,000)	-23.94%
21300	Safety Programs/Supplies	118,765	50,463	100,926	113,275	(5,490)	-4.62%
21350	Authority Dues/Permits/Fees	104,900	119,479	238,958	110,968	6,068	5.78%
21400	Laboratory Analysis	86,909	54,118	108,236	217,025	130,116	149.72%
21420	Utilities	1,629,225	1,166,213	2,332,426	2,316,100	686,875	42.16%
21430	General Other Services	1,261,656	589,944	1,179,888	1,330,745	69,089	5.48%
21450	Governance & Strategic Support	25,000	1,359	2,718	25,000	-	0.00%
	Bad Debt	2,500	18,704	20,000	-	(2,500)	
	Subtotal	\$ 3,479,955	\$ 2,188,914	\$ 4,308,907	\$ 4,371,588	\$ 891,633	25.62%
22000	Communication						
22100	Radio	\$ 13,250	\$ 14,907	\$ 29,814	\$ 10,900	\$ (2,350)	-17.74%
22150	Telephone & Data Service	147,600	88,503	177,006	165,250	17,650	11.96%
22200	Cell Phones, Wireless data	60,590	33,931	67,862	68,800	8,210	13.55%
	Subtotal	\$ 221,440	\$ 137,341	\$ 274,682	\$ 244,950	\$ 23,510	10.62%
31000	Information Technology						
31100	Computer Hardware	\$ 215,000	\$ 58,809	\$ 170,618	\$ 213,250	\$ (1,750)	-0.81%
31150	SCADA Maint. & Support	305,475	117,042	244,084	350,000	44,525	14.58%
31200	Maintenance & Support Services	227,700	256,713	513,426	305,800	78,100	34.30%
31250	Software & Subscriptions	320,300	71,669	194,022	352,900	32,600	10.18%
31300	Security Systems	153,700	400	800	143,900	(9,800)	-6.38%
31325	Asset Mgt / Project Mgt Systems	47,400	-	-	104,200	56,800	119.83%
	Subtotal	\$ 1,269,575	\$ 504,633	\$ 1,122,150	\$ 1,470,050	\$ 200,475	15.79%
33000	Supplies						
33100	Office Supplies	\$ 30,000	\$ 9,322	\$ 18,644	\$ 28,200	\$ (1,800)	-6.00%
33150	Subscriptions/Reference Material	1,700	996	1,992	2,500	800	47.06%
33350	Postage & Delivery	14,600	11,907	23,814	20,500	5,900	40.41%
	Subtotal	\$ 46,300	\$ 22,225	\$ 44,450	\$ 51,200	\$ 4,900	10.58%
41000	Operation & Maintenance						
41100	Building & Grounds	\$ 453,240	\$ 211,011	\$ 432,022	\$ 397,140	\$ (56,100)	-12.38%
41150	Building/land Lease, Rental	183,100	179,681	184,362	183,600	500	0.27%
41300	Dam Maintenance	95,200	81,289	162,578	146,200	51,000	53.57%
41350	Pipeline/Appurtenances	149,000	97,579	795,158	148,280	(720)	-0.48%
41400	Materials, Supplies & Tools	201,000	67,339	134,678	242,250	41,250	20.52%
41450	Chemicals	3,029,488	1,579,245	3,454,970	3,654,064	624,576	20.62%
41500	Vehicle Maintenance	77,450	36,877	87,902	82,700	5,250	6.78%
41550	Equipment Repair, Replace, Maint.	1,100,750	438,061	896,122	1,055,050	(45,700)	-4.15%
41600	Instrumentation	462,575	92,010	244,020	502,500	39,925	8.63%

**Rivanna Water and Sewer Authority
Fiscal Year 2024-2025 Proposed Budget
Expense Detail**

Authority as a Whole

Object Code	Line Item	Adopted Budget FY 2023-2024	Current Year Activity		Proposed Budget FY 2024-2025	2024	2024
			Six Month Actual 12/31/2023	Projected Year end 6/30/2024		vs. 2025 Variance \$	vs. 2025 Variance %
41650	Fuel & Lubricants	110,800	69,812	139,624	118,900	8,100	7.31%
41700	General Other Maintenance	173,205	62,836	125,672	168,200	(5,005)	-2.89%
Subtotal		\$ 6,035,808	\$ 2,915,740	\$ 6,657,108	\$ 6,698,884	\$ 663,076	10.99%
81000	Equipment Purchases						
81200	Rental & Leases	\$ 1,000	\$ 15,062	\$ 30,124	\$ 750	\$ (250)	-25.00%
81250	Equipment (over \$10,000)	70,000	-	70,000	35,000	(35,000)	-50.00%
81300	Vehicle Replacement Fund	274,500	137,250	274,500	281,200	6,700	2.44%
Subtotal		\$ 345,500	\$ 152,312	\$ 374,624	\$ 316,950	\$ (28,550)	-8.26%
95000	Allocations from Departments						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	\$ -	-
95110	Finance & IT	-	-	-	-	-	-
95300	Engineering Allocation	-	-	-	-	-	-
95150	Maintenance Allocation	-	-	-	-	-	-
95200	Laboratory Allocation	-	-	-	-	-	-
Subtotal		\$ -	\$ -	\$ -	\$ -	\$ -	-
Depreciation		\$ 915,000	\$ 457,500	\$ 915,000	\$ 930,000	\$ 15,000	1.64%
Subtotal		\$ 915,000	\$ 457,500	\$ 915,000	\$ 930,000	\$ 15,000	1.64%
Total		\$ 24,406,520	\$ 12,313,918	\$ 25,973,367	\$ 27,392,337	\$ 2,985,817	12.23%

Audit Check	
Less revenue allocation in Admin.	(905,200)
Less revenue allocation in Maint.	-
Less revenue allocation in Eng.	-
Detail Check on Expenses	\$ 26,487,137
Total Summary Sheet Rate Center Only	\$ 26,487,136

Roughly \$2.4 is target increase

RWSA Staffing by Department

	Approved Positions FY 2024	Changes	Positions FY 2025
OPERATIONS			
<u>Engineering & Maintenance</u>			
Director of Engineering & Maintenance	1		1
Engineering Department			
Engineering Manager	1		1
Asset Management Coordinator	1		1
Senior Civil, Civil Engineers	5		5
Grant/Sustainability Coordinator	0	1	1
Water Resources Manager	1		1
Construction Inspector Supervisor	0	1	1
Engineering Technician/Inspector	5	-1	4
Administrative Office Technician	1		1
(Director FTE included) Subtotal	15	1	16
Maintenance Department			
Maintenance Manager	1		1
Asst. Maintenance Manager	1		1
Mechanics	10		10
Industrial Controls/Instrumentation Specialist	1		1
Vehicle Equipment Mechanic	1		1
Mechanic Helper	1		1
Maintenance Workers	1		1
Subtotal	16		16
<u>Operations</u>			
Director of Operations	1		1
Laboratory			
Laboratory Manager	1		1
Chemist	3		3
Subtotal	4		4
Wastewater Department			
Wastewater Manager	1		1
Wastewater Assistant Manager	1		1
Treatment Supervisor	1		1
<u>Plant Operators (14 total)</u>			
Operators - Relief Shift Differential all plants	2		2
Operators - Urban	9	1	10
Operator - Glenmore	1		1
Operator - Scottsville	1		1
Subtotal	16	1	17
Water Department			
Water Manager	1		1
Water Assistant Manager	1		1
Water Quality Specialist	1		1
Water Treatment Plant Supervisor	2		2
<u>Plant Operators</u>			
Operators - Relief Shift Differential all plants	3		3
Operators - Urban	14.6		14.6

RWSA Staffing by Department

	Approved Positions FY 2024	Changes	Positions FY 2025			
OPERATIONS						
Operators - Crozet	2		2			
Operators - Scottsville	1.4		1.4			
Subtotal	26	0.0	26			
Subtotal	78	2	80			
				FTE Split		
				RWSA	SWA	
Joint Administrative Staff						
Executive Director	1		1	0.85	0.15	1.00
Deputy Executive Director	0	1	1	0.85	0.15	1.00
Director of Administration	1		1	0.80	0.20	1.00
Executive Coordinator	1		1	0.60	0.40	1.00
HR Manager	1		1	0.75	0.25	1.00
Payroll & Benefits Coordinator	1		1	0.75	0.25	1.00
Communications/Outreach Coordinator	0	1	1	0.75	0.25	1.00
Administrative Assistant	1		1	0.75	0.25	1.00
Safety Manager	1		1	0.75	0.25	1.00
Director of Finance	1		1	0.85	0.15	1.00
Finance Manager	1		1	0.85	0.15	1.00
Senior Accountant	1		1	0.80	0.20	1.00
Accounting Associate	1		1	0.80	0.20	1.00
Accounts Payable Technician	1		1	0.80	0.20	1.00
Accounts Receivable Technician	1		1	0.20	0.80	1.00
Business System Analyst	1		1	0.60	0.40	1.00
<u>IT/SCADA</u>						
Information Systems Administrator - Core	1		1	0.60	0.40	1.00
Information Systems Administrator - ERP	1		1	0.80	0.20	1.00
Information Systems Administrator - Operation	1		1	1.00	0.00	1.00
Information Systems Asst. Administrator - Core	1		1	0.60	0.40	1.00
GIS Coordinator	1		1	1.00	0.00	1.00
IT Manager	1		1	0.80	0.20	1.00
IT Systems Analyst - Operations	1		1	0.80	0.20	1.00
IT Systems Analyst - ERP/Core	1		1	0.80	0.20	1.00
Administration and allocation with RSWA	22	2	24	18.15	5.85	24.00
Total all positions	100.00	4.00	104.00			
FTE Position Allocated to RSWA	-5.40		-5.85			
Total Adjusted FTEs	94.60		98.15			



MEMORANDUM

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

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT: ADOPTION OF THE FY 2024-2025 RATE SCHEDULE AND APPROVAL OF
THE FY 2024-2025 BUDGET**

DATE: MAY 28, 2024

The proposed Fiscal Year 2024-2025 budget totaling \$55.1 million was reviewed in detail with the Board during the March 26, 2024 meeting, and will be briefly reviewed again today. The proposed budget includes \$27.4 million for Operating expenses and \$27.7 million for Debt Service charges and represents a 15.6% increase above the current budget. The proposed budget includes resources required to improve our water supply and water treatment infrastructure, meet debt service obligations, comply with regulatory mandates, and invest in our workforce. Through these resources, wholesale water and wastewater services will be provided to the Charlottesville Utilities Department and the Albemarle County Service Authority (ACSA) in a collaborative, effective, and fiscally responsible manner. Charges will increase 14.5% to City Utilities and 13.7% to the ACSA to support these essential services.

The proposed budget includes a \$7.4 million increase in expenses primarily to support an increase of \$4.4 million in debt service costs for our capital projects. Operating expenses will increase \$2.9 million largely for water and wastewater treatment chemicals and utilities, as well as support for our workforce. A 3% cost of living increase for all RWSA and RSWA staff, including the Executive Director, and a merit pool of 2% for eligible employees, are proposed with both to be effective in July 2024. The proposed cost of living adjustment will help the Authorities retain the specialized, licensed, and professional employees we require to provide our drinking water, wastewater, refuse and recycling services for our community. Competition for qualified employees in the utility and solid waste workforce marketplace is challenging due to the low unemployment (2.1%) in the Charlottesville/Albemarle region. The proposed merit pool will allow us to reward employees for successful completion of performance goals over the past year.

The proposed budget includes four additional positions:

- Deputy Executive Director
- Sustainability and Grants Coordinator
- Wastewater Operator
- Outreach & Communications Coordinator

Board Action Requested:

Adopt the attached Rate Schedule with any revisions after conducting a Public Hearing and approve the Fiscal Year 2024-2025 Budget totaling \$55.1 million to be effective on July 1, 2024.



695 Moores Creek Lane | Charlottesville, Virginia 22902-9016

434.977.2970
434.293.8858
www.rivanna.org

**RESOLUTION
TO ADOPT THE RATE SCHEDULE
FOR FISCAL YEAR 2024-2025, EFFECTIVE JULY 1, 2024
BY THE RIVANNA WATER AND SEWER AUTHORITY**

WHEREAS, the Rivanna Water and Sewer Authority (the “Authority”) Board of Directors has reviewed the proposed Rate Schedule for Fiscal Year 2024-2025; and

WHEREAS, the Authority conducted a public hearing for the proposed Rate Schedule on May 28, 2024, after advertising the actual date fixed for the public hearing in the Daily Progress on May 14, 2024 and May 21, 2024, and

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority hereby adopts the Rate Schedule for Fiscal Year 2024-2025, to be effective on July 1, 2024.

RATE SCHEDULE

<u>Water Rates & Charges</u>				
<u>Urban Area</u>				
ACSA & City	Operating	\$ 3.363	Per 1,000 gallons	
City	Debt Service	\$ 376,226	Per month	
ACSA	Debt Service	\$ 673,264	Per month	

<u>Crozet</u>				
ACSA	Operating	\$ 118,387	Per month	
ACSA	Debt Service	\$ 215,864	Per month	

<u>Scottsville</u>				
ACSA	Operating	\$ 61,832	Per month	
ACSA	Debt Service	\$ 15,868	Per month	

<u>Wastewater Rates & Charges</u>				
<u>Urban Area</u>				
ACSA & City	Operating	\$ 3.247	Per 1,000 gallons	
City	Debt Service	\$ 424,222	Per month	
ACSA	Debt Service	\$ 422,158	Per month	

<u>Glenmore</u>				
ACSA	Operating	\$ 44,426	Per month	
ACSA	Debt Service	\$ 4,065	Per month	

<u>Scottsville</u>				
ACSA	Operating	\$ 33,785	Per month	
ACSA	Debt Service	\$ 2,713	Per month	

The Rivanna Water & Sewer Authority (Rivanna) was created by the City of Charlottesville (City) and the County of Albemarle to supply and treat water for drinking and to provide wastewater treatment. The above fees represent Rivanna’s fees and charges to the City and the Albemarle County Service Authority (ACSA) for these services and are not the same as the City and ACSA charges to individual residents and businesses. Debt Service covers capital related project costs and are different for the City and ACSA reflecting terms of contractual agreements.

The City and the ACSA distribute drinking water and collect wastewater from individual residents and businesses and charge retail rates that combine charges from the above schedule to reflect their service costs, including Rivanna’s costs.

Information about the budget may be obtained on the Rivanna website at www.rivanna.org. Please call 977-2970 ext. 0 or send e-mail to info@rivanna.org with any questions you may have.



Proposed Budget FY 2024 - 2025

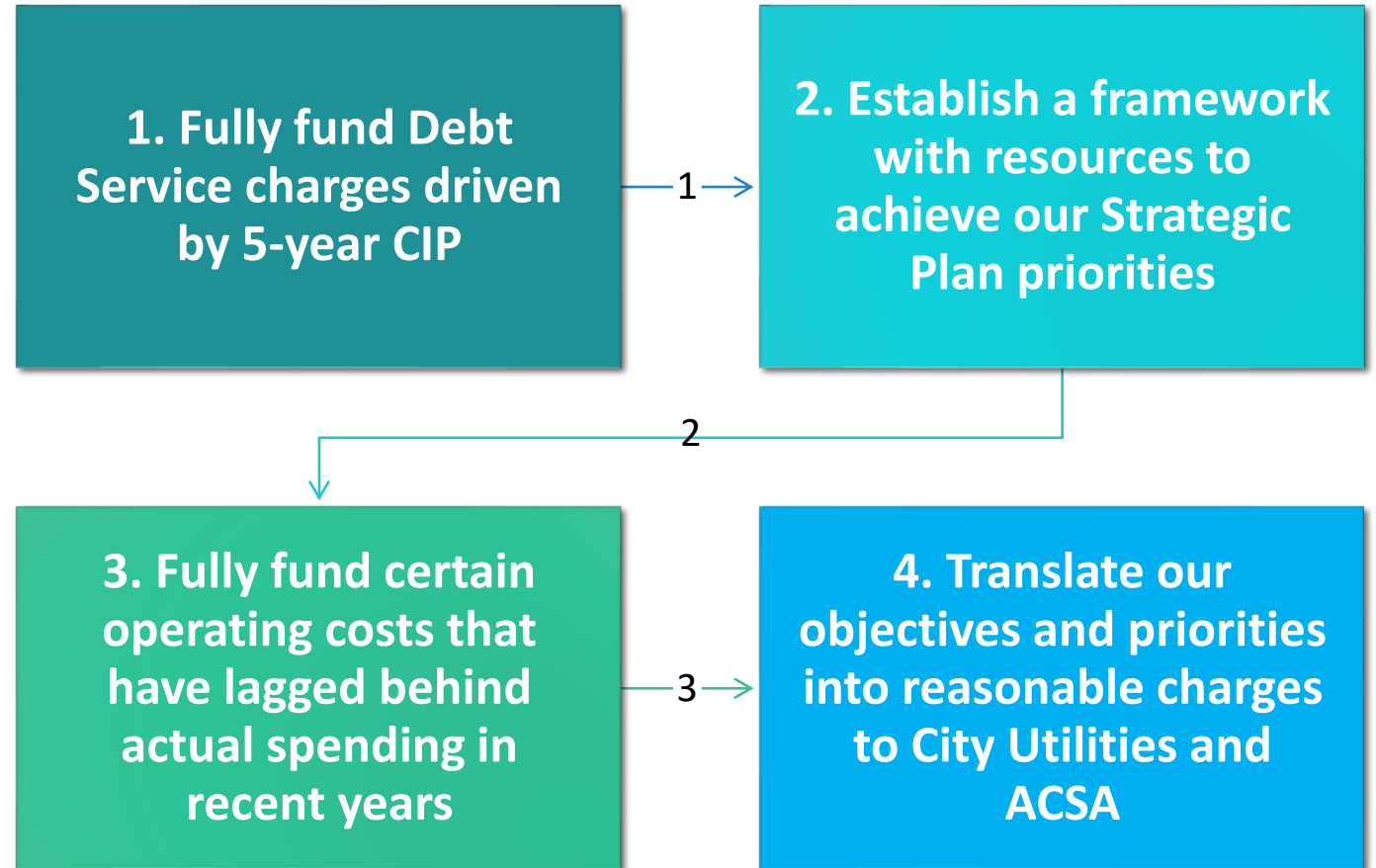


PRESENTED TO THE BOARD OF DIRECTORS

BY LONNIE WOOD, DIRECTOR OF FINANCE & INFORMATION TECHNOLOGY

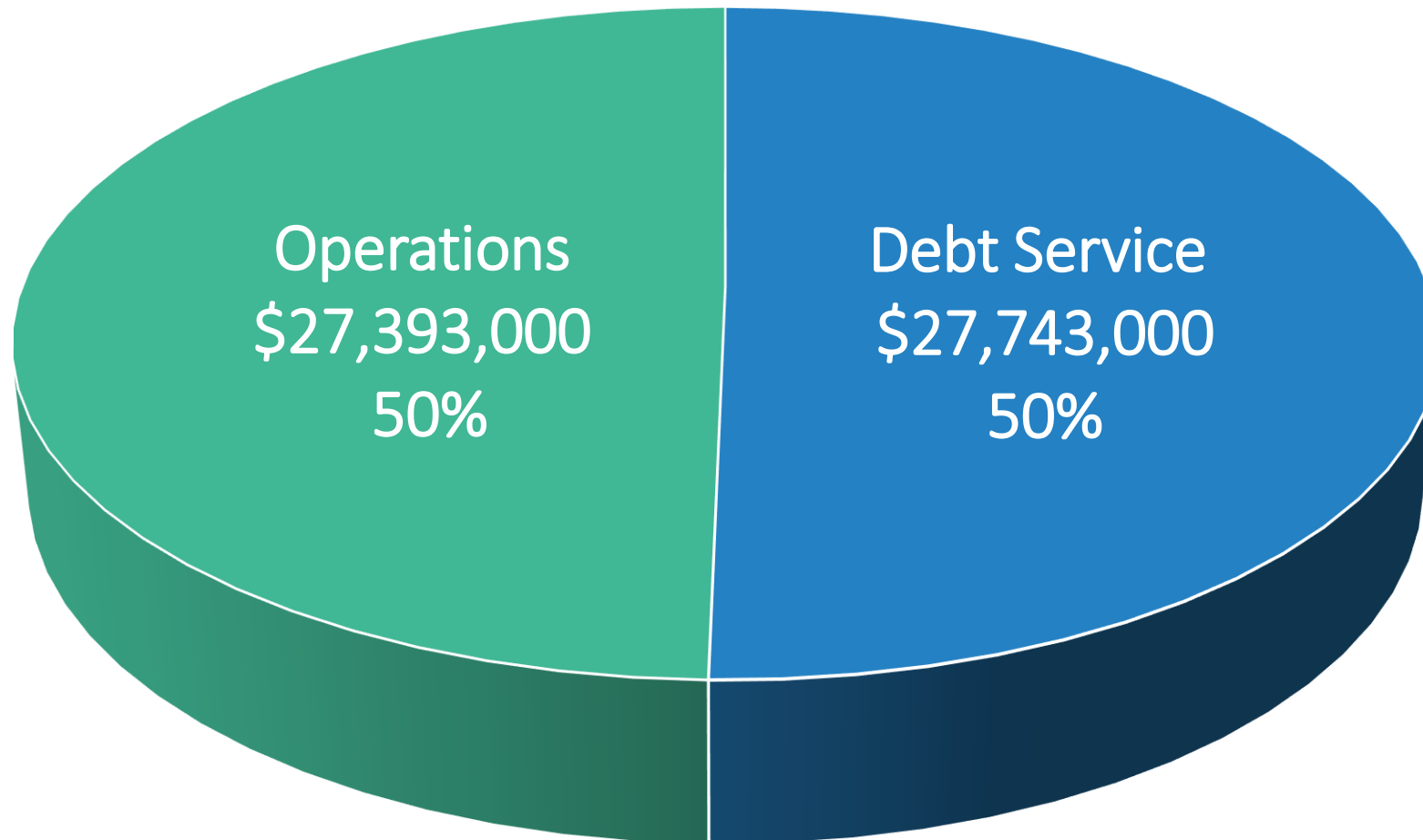
MAY 28, 2024

Focus of the FY 2024 – 2025 Budget



FY 2024 – 2025

Proposed Budget \$55.1 M



Budget Summary

FY 2024 – 2025

<u>Budget Summary</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>\$ Change</u>	<u>% Change</u>
Operations	\$ 24,407,000	\$ 27,393,000	\$ 2,986,000	12.2%
Debt Service	<u>23,291,000</u>	<u>27,743,000</u>	<u>\$ 4,451,000</u>	<u>19.1%</u>
	\$ 47,698,000	\$ 55,136,000	\$ 7,437,000	15.6%

Rate Summary

Per 1,000 gallon

Operating - Urban W	\$ 2.949	\$ 3.363	\$ 0.414	14.0%
Operation - Urban WW	2.922	3.247	0.325	11.1%

Fixed Monthly

Debt Service - City - Urban	\$ 702,090	\$ 800,488	\$ 98,398	14.0%
Debt Service - ACSA - Urban	925,685	1,095,422	169,737	18.3%

Operating and Debt Service Charges

Non-Urban - Fixed Monthly	\$ 445,452	\$ 496,940	\$ 51,488	11.6%
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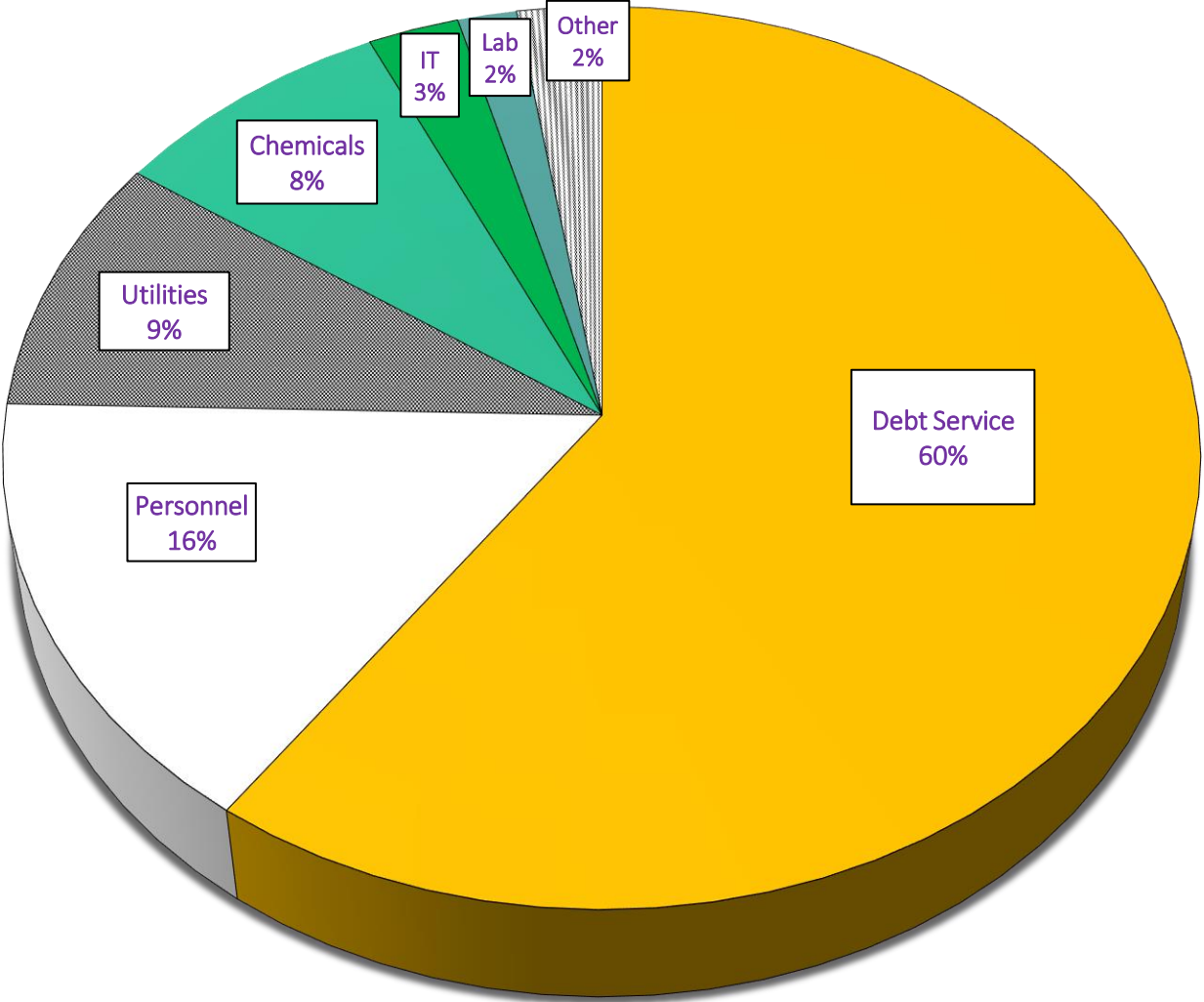
Revenue Estimates

<u>Revenue Estimates</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>\$ Change</u>	<u>% Change</u>
Customer Charges	\$ 44,846,200	\$ 51,146,700	\$ 6,300,500	14.0%
Interest	1,107,000	2,176,500	1,069,500	96.6%
SWA Admin/Fin/IT Support	781,000	905,200	124,200	15.9%
Septage Acceptance	550,000	600,000	50,000	9.1%
All other revenues	413,800	308,200	(105,600)	-25.5%
	47,698,000	55,136,600	7,438,600	15.6%

<u>Customer Charge Estimates</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>\$ Change</u>	<u>% Change</u>
City	\$ 17,793,300	\$ 20,377,400	\$ 2,584,100	14.5%
ACSA	27,052,900	30,769,300	3,716,400	13.7%
Total Customer Charges	\$ 44,846,200	\$ 51,146,700	\$ 6,300,500	14.0%

Cost Increase Drivers

FY 2025 vs 2024



Cost Drivers

Debt Service	\$	4,451,000	60%
Personnel		1,157,000	16%
Utilities		686,900	9%
Chemicals		624,600	8%
IT Systems		200,500	3%
Lab Testing		130,100	2%
All other changes		186,900	2%
Total Increase	\$	7,437,000	



Personnel Cost Increases

• <i>Salary Adjustment</i>	\$425,000
<i>3% COLA & 2% Merit</i>	
• <i>4 Additional Positions</i>	\$205,000
<i>partial-year funding</i>	
• <i>Fully Fund FY 2024 Positions</i>	\$163,000
• <i>Personnel cost related changes</i>	\$364,000
<i>(VRS, Taxes, Life Ins., Health)</i>	<hr/>
<i>Total change in personnel and benefit costs</i>	\$1,157,000

Additional Positions



Personnel

1. Deputy Executive Director:

- *Manage the Finance & Information Technology, Engineering & Maintenance, and Operations & Environmental Services Divisions of the Authority.*

2. Grants and Sustainability Coordinator:

- *Responsible for acquiring and coordinating local, state, federal, corporate grants, as well as other external funding sources to support the Rivanna Authorities strategic and capital initiatives. Responsible for managing, coordinating, facilitating, and advising the development, implementation, and improvement of policies and initiatives that promote local environmental, energy, economic, and social sustainability efforts.*

3. Outreach/Communication Coordinator:

- *Develops, implements and manages effective communications, marketing and public outreach programs to inform and educate the local community about the services that the Rivanna Authorities perform. Manages website and social media pages.*

4. Wastewater Operator:

- *Move full and empty biosolids trailers at Moores Creek (about 500 trailers per year) from the solids building to the compost yard 5-6 days per week. This task is currently completed by shift operators.*
- *Assist with County plant operations. County WW plants are operated by 1 person, and at times a second Operator is needed. Assistance is currently provided by WW Managers.*
- *Assist with high flow events at any of the 4 WWTPs.*

Financial Forecast

•RWSA Charge Increase (%):	<u>FY</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>
• City		14.5	11.7	10.6	10.9	10.9
• ACSA		13.7	14.5	13.3	12.7	12.0
•FY 25 Capital Budget		\$79 m				
•FY 25 - 29 CIP		\$371 m, less Grants of \$20.5 m				
•New CIP Debt Anticipated		\$308 m				

**RESOLUTION
TO ADOPT THE RATE SCHEDULE
FOR FISCAL YEAR 2024-2025, EFFECTIVE JULY 1, 2024
BY THE RIVANNA WATER AND SEWER AUTHORITY**

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Questions?

Actions to be Considered by the Board:

1. Conduct a Public Hearing on the proposed FY 2024-2025 Rate Schedule.
2. After receiving any comments, consider:
 - Approval of the Resolution to Adopt the FY 2024 - 2025 Rate Schedule
 - Approval of the FY 2024-2025 Budget



695 MOORES CREEK LANE
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FAX: 434.293.8858
WWW.RIVANNA.ORG

MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY
BOARD OF DIRECTORS

FROM: LONNIE WOOD, DIRECTOR OF FINANCE & INFORMATION
TECHNOLOGY

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: SERIES 2024 BOND ISSUE

DATE: MAY 28, 2024

The Authority has reached the point on several projects that will require debt financing through a Series 2024 Bond issue. This financing will fund portions of the following projects. Most of these projects are in the design phase or nearing the bid process, while several are in the construction phase as work-in-progress. Below are the costs and funding needs for these projects:

#	GL	Project	CIP through FY30	Budget for Future Financing FY 2027-2030	Portion of Budget considered for Bond Issue	Cash reserves and other funding sources	Future Bond Issues	2024 Bond Rounded
1	1011	RMR to OBWTP Raw Water Line	\$ 33,500,000	\$ 14,287,401	\$ 19,212,599	\$ 600,000	\$ 10,000,000	\$ 8,613,000
2	1013	RMR to OBWTP Raw Water Pump Station	12,350,000	5,007,732	7,342,268	250,000	2,000,000	5,092,000
3	5005	Security Enhancements (MC Front Gate)	2,980,000	-	2,980,000	1,050,000		1,930,000
4	1219	Central Water Line	47,000,000	26,281,344	20,718,656	650,000	10,000,000	10,069,000
5	3229	MCAWRRF 5kV Electrical System Upgrade	6,200,000	-	6,200,000	200,000		6,000,000
6	3231	MCAWRRF Eng & Admin Building	20,000,000	79,257	19,920,743	650,000	5,000,000	14,271,000
7	3220	MCAWRRF Structural & Concrete Rehabilitation	11,300,000	759,756	10,540,244	350,000	2,000,000	8,190,000
8	3233	MCAWRRF Building Upfits and GT Improvements	5,150,000	-	5,150,000	150,000		5,000,000
9		SRWTP - PAC Upgrades	1,100,000	-	1,100,000	50,000		1,050,000
10	1224	Emmet Street Betterment	9,235,000	2,668,082	6,566,918	4,200,000		2,367,000
11	1017	SRR to RMR Pipeline, Intake & Facilities	84,000,000	60,763,125	23,236,875	750,000	15,000,000	7,487,000
12	3025	Crozet PS Rehabilitation	10,310,000	1,440,941	8,869,059	300,000		8,569,000
13		Rivanna Pump Station (Malfunction Repairs)	25,000,000	-	25,000,000	10,800,000		14,200,000
			\$ 268,125,000	\$ 111,287,638	\$ 156,837,361	\$ 20,000,000	\$ 44,000,000	\$ 92,838,000

Some of these projects will be fully funded with this bond issue and others will be partially funded due to the timing of the projects and how it affects the bond. Some of our projects will last over a 5 to 6 year period, and some have not been advertised for bids yet, thus the timing of the spend-down will most likely be adjusted. As a rule, we try to have all bond fund proceeds used or spent within two years, primarily due to the arbitrage rebate rules established by the IRS

that regulate spend down and yield restriction requirements. A description of the projects is attached to this Memorandum.

In April, the Authority applied for participation in the Virginia Resources Authority (VRA) 2024 Summer Pooled Loan/Bond Program to fund these projects. This program allows the Authority to participate with other governmental applicants in a single bond that is issued by the VRA on a more statewide basis. Effectively, the VRA buys Rivanna's bond within that program. The program allows for normal VRA issuance costs (underwriting, VRA legal and financial advisor fees) to be spread among all issuers and is administratively more efficient from a staffing standpoint. VRA has a strong credit rating, and its bonds are backed by the moral obligation of the Commonwealth, which means the rates are favorable even with a 12.5 basis point of par added for VRA's annual administrative fees. The Authority has used this program in the past with the Series 2021, 2018, 2015B and 2012A Bonds.

The needed net bond proceeds shown previously is \$92,838,000. To determine the size of the bond, the costs associated with the bond issuance are added to the Series 2024 Bond for funding with the resulting proceeds. A summary of the total bond size is as follows:

Estimated Not to Exceed (NTE)	
2024 Bond Summary	
Construction Funds Needed	\$ 92,838,000
Local Costs of Issuance (COI)	150,000
Capital Reserve Allowance	275,000
VRA COI and Underwriting Fees	850,000
Total Proceeds Needed	<u>\$ 94,113,000</u>
% Allowance for Discount Pricing	\$ 4,987,000
Total Bond	<u><u>\$ 99,100,000</u></u>

I want to stress the preliminary nature of the estimate reflected in this summary. The bond issue and closing will not take place for nearly two months. These numbers will vary during that time as interest rates and bond pricing can change daily. Staff will need the flexibility to work within financing parameters, including a "not to exceed" bond size, which are provided in the attached bond resolution.

Included with this memo are the following:

- Resolution authorizing the Series 2024 Bond issue;
- Thirty-Third Supplemental Trust Agreement; and
- Financing Agreement between VRA and Rivanna Water & Sewer Authority.

The two financing documents are being presented as to form and will be modified in the amounts and other details as they are known at the time of closing after the bond pricing information is finalized and available. The Resolution allows for the Executive Director to accept the details of the bond sale within the parameters of such Bond Resolution. The not-to-exceed amount of \$99.1 million was recommended by the financial advisors for the purpose of allowing flexibility in

structuring the eventual bond sale and includes a not-to-exceed \$250,000 for local costs of issuance. In addition, the resolution includes a not-to-exceed True Interest Cost (“TIC”) interest rate of 5.5% (VRA Staff recommendation) and a not-to-exceed final maturity of 30 years.

On the day of pricing, the Authority will only issue the amount of debt necessary to fund the projects as disclosed in this Memorandum plus the related financing costs. Flexibility in the not-to-exceed parameters is necessary so that the Authority can secure the required funding under the most favorable terms possible within the interest rate environment at the time of sale. This flexibility is needed to effectively manage the bond pricing process with regards to original issue premium and discount bond pricing, callable and non-callable bond options, and other investor preferences/requirements that will impact the Authority's bond pricing structure.

We expect to close on the Series 2024 Bond around August 7. During the week prior to this date, the Chair, Secretary, Treasurer, Executive Director, General Counsel, and the Finance Director will need to meet to execute the documents required in connection to the issuance of the Series 2024 Bond.

Board Action Requested:

Approve and adopt the Resolution authorizing the issuance of the Series 2024 Bond in an amount not to exceed \$99,100,000 and an interest rate not to exceed 5.5% and authorize the Director of Finance & Information Technology to take other necessary steps as described in the Resolution to fulfill the RWSA requirements of the attached Financing Agreement to close the transaction on or about August 7, 2024. Further, it is requested that the Board authorize the Finance Director to accept minor and non-substantial changes to the attached drafts of the bond documents, should they be necessary prior to closing, in consultation with the Authority’s General Counsel.

Attachments:

- *Project Descriptions*
- *Resolution authorizing the issuance of the bonds*
- *Thirty-Third Supplemental Agreement of Trust between Rivanna Water and Sewer Authority and the Bank of New York Mellon Trust Company, N.A.*
- *Financing Agreement between the Virginia Resources Authority and the Rivanna Water and Sewer Authority*

Project Descriptions:

20.03 Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line: Raw water is transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant (OBWTP) by way of two 18-inch cast iron water lines which have been in service for more than 110 and 70 years, respectively. In addition to the need to increase transfer capacity between the RMR and OBWTP, increased frequency of emergency repairs and expanded maintenance requirements necessitates replacement of these water lines with a single, new raw water main. This new raw water main is expected to be constructed of 36-inch ductile iron pipe and will span approximately 21,400 linear feet, including the connection of the proposed RMR raw water pump station with the Southern terminus of the SRR-RMR raw water line constructed on the Birdwood Golf Course that was completed in 2019.

20.04 Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station: The Ragged Mountain Reservoir (RMR) to Observatory Water Treatment Plant (OBWTP) raw water pump station is planned to replace the existing Stadium Road and Royal Pump Stations, which have exceeded their design lives and would require significant upgrades to reliably meet the upgraded capacity of the Observatory WTP. The pump station will be designed initially to pump up to 10 million gallons per day (MGD) to the expanded Observatory WTP and will be integrated with the planned South Fork Rivanna Reservoir (SFRR) to RMR pipeline for improved operational flexibility and cost efficiencies. This integrated pump station will include the capacity to transfer up to 16 MGD of raw water from RMR back to the South Rivanna WTP, as well as boost water from SFRR up to RMR and OBWTP. The pump station property was purchased as part of the SFRR to RMR raw water main preliminary design and right of way acquisition project.

20.46 Security Enhancements: Water utilities are required by federal law to conduct vulnerability assessments (VA) and have emergency response plans. RWSA completed an update of its VA for the water system in collaboration with other regional partners and identified a number of security improvements that could be applied to both its water and wastewater systems. The purpose of this project was to install security improvements at RWSA facilities, with the initial focus on an enhanced access control program. Other improvements will include industrial strength door and window components, security gate and fencing modifications, an improved lock and key program, facility signage, closed circuit television (CCTV) enhancements, intrusion detection systems (IDS), additional security lighting, mass emergency notification systems, and emergency call stations/panic buttons. In addition, upgrades will be made to the entrance of MCAWRRF, to better secure the facility and vet individuals as they enter. To implement an access control system at Authority-owned facilities, staff procured an Implementer to finalize system design/requirements, procure all necessary equipment, and install the chosen system. Access control system implementation is nearly complete across all RWSA facilities; however, work continues to finalize this process. As such, the budget is being partially capitalized.

20.10 Central Water Line: The southern half of the Urban Area water system is currently served by the Avon Street and Pantops storage tanks. The Avon Street tank is hydraulically well connected to the Observatory Water Treatment Plant while the Pantops tank is well connected to the South Rivanna Water Treatment Plant. The hydraulic connectivity between the two tanks, however, is less than desired, creating operational challenges and reducing system flexibility. In 1987, the City and ACSA developed the Southern Loop Agreement, outlining project phasing and cost allocations, as envisioned at the time. The first two phases of the project were constructed shortly thereafter. The third phase, known as the “Eastern Branch” is the subject of the current project. The initial funding for this project was used for route alignment determination, hydraulic modeling, and preliminary design. Due to the complicated nature of our finished water systems, it was decided at the August 2018 Board meeting that a more comprehensive approach was warranted, and we should complete the Finished Water Master Plan prior to moving forward with final design and construction of the Avon to Pantops Water Main. The Finished Water Master plan was completed in 2021 and the Central Water Line project was prioritized for design and construction in

coordination with the City and ACSA. The project will consist of approximately 5 miles of new 24-inch and 30-inch water lines through the City to connect the Observatory Water Treatment Plant to an existing RWSA transmission main at East High and Long St. to ensure the increased hydraulic capacity of 10 MGD from the water treatment plant upgrades can be utilized. As part of this project, several City water mains will be replaced where co-located with the Central Water Line and the City will reimburse RWSA for that work.

21.18 Moore's Creek AWWRF 5kV Electrical System Upgrade: After discussions through the Moore's Creek Facilities Master Plan, it was identified that several areas of the MCAWWRF, including the Blower Building, Sludge Pumping Building, Grit Removal Building, Moore's Creek Pumping Station, and the Administration Building are all still connected to the original 5kV switchgear in the Blower Building. This equipment, including the associated cabling, switchgear, transformers, and motor control centers (MCCs), has a useful life expectancy of 20-30 years. Most of this equipment was installed around 1980. With the equipment having well exceeded its useful life expectancy at this point, safety is a concern given the large electric loads that the cabling and other equipment are handling on a day-to-day basis. Failure of the existing 5kV infrastructure could also result in temporary outages of certain treatment processes, and repairs could take weeks to months given the lead times associated with equipment of this age. In July 2020, staff recommended that a CIP Project be started as soon as possible to encompass replacement of the original 1980s-vintage 5kV cables, switchgear, transformers, and MCCs. Construction is underway, although severe lead-time issues have been experienced on the new electrical equipment being installed under the project. All work has been coordinated with the Moore's Creek Facilities Master Plan.

20.34 Moore's Creek AWWRF Engineering and Administration Building: RWSA currently has its administrative headquarters in two buildings on the grounds of the Moore's Creek Advanced Water Resource Recovery Facility. The two-story Administration Building was constructed in the late 1970's and houses offices, IT server space, meeting space and a full-service laboratory. The second building is a series of four trailers installed between 2003-2010 that house the Engineering department. There is currently a need to house additional staff; increase office and meeting space; plan for the replacement of the trailers; increase available parking; bring the IT server workrooms to modern standards; and provide classroom space for education outreach. This project was coordinated with the recent MCAWWRF Master Plan and expansion of the building will take place primarily in the lower parking lot adjacent to the existing building.

22.12 Moore's Creek AWWRF Structural and Concrete Rehabilitation: This project comprises rehabilitation, repair and installation of multiple structural components throughout the MCAWWRF facility, to include concrete repairs in both the equalization basins and holding ponds, rehabilitation to the existing primary clarifiers and associated influent splitter box, installation of a bridge crane over the aeration basins for NRCY pump removal, improved access to the elevated valves and associated actuators in the Rivanna pump station, and rehabilitation to both the digester complex and compost shed roof and drainage system.

The existing holding ponds and equalization basins were constructed in 1977 and are showing signs of degradation. With now completed condition assessment inspections and subsequent recommendations, this project includes crack repair, spalling repair, joint repair, and coating of miscellaneous metals and valves associated with these critical structures.

Inspections performed on the two existing primary clarifiers and associated influent splitter box noted several deficiencies including structural and mechanical components, concrete degradation, and corrosion around pipe penetrations in need of repair or replacement, and due to advanced corrosion of metal components within the clarifiers, coatings were recommended to avoid additional deterioration. This project will provide for the rehabilitation, replacement and/ or coatings of these previously identified components within the primary clarifiers and influent splitter box.

The aeration basins located at Moores Creek are a series of chambers that each have uniquely controlled oxygen and nutrient loading conditions. Mid-way through the basins is ten nutrient recycle (NRCY) pumps. When maintenance or replacement of these pumps are required, staff must currently hire a long boom crane, which can be costly and disruptive to operations, especially in emergency conditions. This project will provide for the permanent means to remove and reinstall existing NRCY pumps.

Two of the six pumps in the Rivanna Pump Station are smaller and were designed to be replaced if future average day flows warrant increased capacity. The current configuration resulted in some valves being located approximately 40 feet above the pump floor level. Valve maintenance activities have been challenging due to their height. A project is proposed to either modify the piping configuration or install a catwalk from the upper mezzanine level to each valve to provide a safer means of accessing each valve.

Moores Creek AWRRF has five digester vessels. The two smaller digesters were part of the original 1958 plant construction. The three larger digesters were part of the 1979 plant upgrades following construction of the bridge over Moores Creek and the south side of the plant. Although numerous upgrades have been constructed at the digester complex over the last 11 years (including heating, mixing, gas compression, and roof repairs), the overall condition of the concrete and complex is reaching its useful life. This project includes addressing remaining repairs to the existing digester complex, including safety repairs, to extend the useful life approximately 10-15 years while RWSA plans, designs, and constructs a new digester complex at another location on the Moores Creek site.

Finally, in the early 1980's a large metal-framed roof was constructed to house the biosolids composting operations, which has subsequently ceased operation. The area was repurposed as a covered equipment maintenance yard, solids handling facility and material storage lock-up. The roof system is exhibiting signs of rafter deterioration and ongoing drainage and leakage issues. This project will evaluate and perform remediation needs at this facility.

20.68 Moores Creek AWRRF Building Upfits and Gravity Thickener Improvements: This project will address the renovation needs of the current Maintenance and Operations building space requirements, improvements to the existing gravity thickener system, and installation of actuators on the secondary clarifier influent gate valves. The Moores Creek Maintenance and Operations Department facilities are over 40 years old, and no longer meet current staffing and operational needs. In accordance with the Moores Creek Master Plan, this project will increase and update personnel spaces such as offices, lunchrooms, labs, and locker rooms in the Maintenance, Blower, and Sludge Pumping Buildings to meet needs over an interim timeframe of approximately 15 years. Additionally, the project will construct increased oil and grease storage that will meet all current best practices for safety and address the need for additional parts storage. As part of the existing gravity thickener system, RWSA added temporary provisions to dose polymer to improve settling and thickening performance, which has proved to be effective and increased operational performance. The current polymer feed system consists of a bulk polymer tote stored on grade adjacent to the gravity thickener rapid mix and splitter structure. The current system is uncovered and manually operated with totes being moved as needed for chemical feed. This project will allow for a permanent polymer feed system with proper provisions for chemical deliveries and weather protection, including additional space for sodium hypochlorite chemical storage and feed as part of the gravity thickener odor control system. The relocation of the sodium hypochlorite storage and feed will also allocate spacing needs as part of the previously discussed operational building renovations in the existing Sludge Pumping Building. Furthermore, access points will be installed on the thickener effluent line feeding the existing sludge pumps to allow for flushing, cleaning, and inspection efforts to occur. Finally, the current secondary clarifier influent gate valves are manually operated, which can be time consuming, and during a wet weather event, the clarifiers need to be placed in service as quickly and safely as possible. The use of SCADA controlled actuators would streamline the process immensely. This work includes the installation of eight (8) new actuators on the influent gates of the secondary clarifiers.

24.01 South Rivanna Water Treatment Plant – PAC Upgrades: The SRWTP currently utilizes a repurposed lime silo reconfigured to feed powdered activated carbon (PAC). PAC is fed in the mixing basin where it is mixed with the raw water prior to entering the rapid mix basins. The PAC storage silo and feed system has reached the end of its useful life and requires frequent maintenance attention to maintain operations. The purpose of this project is to replace the existing PAC system with a new modern PAC storage and slurry feed system similar to the one installed at the Crozet WTP and the one under construction at the Observatory WTP. This project would include demolition of the existing PAC silo and feed pumps, site work and grading required for the new PAC silo location and installation of a new PAC storage and slurry feed system complete with all necessary dry feed equipment, metering pumps, HVAC equipment and electrical and control equipment.

23.06 Emmet Street Betterment: The Urban Finished Water Master Plan identified several necessary upgrades to the urban water distribution system to improve system performance and reliability. One of the identified improvements is an upgrade and extension of the existing RWSA water main along the Emmet Street corridor from the UVA Dell Pond to Hydraulic Road. This project will utilize planned road, streetscape, utility, and development projects along the Emmet Street corridor to complete portions of the Emmet Street water main improvements as betterment, with the goal of completing the approximately 2-mile-long water main by 2030. The project scope includes planning and coordination between RWSA, UVA, the City of Charlottesville, and VDOT, design services for the betterment and “gap” sections of water line, construction funding, and construction management services. Current identified projects with betterment opportunities include: the UVA Ivy Corridor Redevelopment, UVA Contemplative Commons, the City of Charlottesville Emmet Streetscape Projects (multiple phases), and intersection improvements at Barracks Road, and the US-250/Emmet Street Interchange.

20.48 South Fork Rivanna Reservoir to Ragged Mountain Pipeline, Intake and Facilities: The South Fork Rivanna Reservoir (SFRR) to Ragged Mountain Reservoir (RMR) Pipeline is a part of the approved and permitted Community Water Supply Plan. The pipeline and associated facilities will give RWSA the ability to move water between the two reservoirs, further enhancing the management capabilities of the Urban System water supply. The SFRR to RMR Pipeline, Intake, and Facilities Project will include construction of a 36” raw water pipeline, connecting SFRR and RMR, a new raw water intake and pump station at SFRR to bring total withdrawal capacity from SFRR to 41 MGD, and a discharge pipe at RMR to enable placement of the transferred water at the appropriate depth. Design and construction of approximately 380 LF of piping along the alignment, as a betterment opportunity through the Victorian Heights development, located on Woodburn Road, is also included in the work. Construction of the new intake and pump station will permanently close the existing boat ramp on RWSA property at SFRR to the public.

20.30 Crozet Pump Station 1, 2, and 3 Rehabilitation: The Crozet Interceptor Pump Stations were constructed in the 1980’s and many of the components are original. This project initially included the replacement of pumps and valves at Pump Station 2 to improve pumping capabilities at this location and provide spare parts for the pumps at Pump Station 1. It also included roof replacements at all four pump stations, siding replacement for the wet well enclosure at Pump Station 3, and installation of new wells at Pump Stations 3 and 4. The pump station improvements now also include new electrical motor control centers as they are obsolete and past their useful life, generators, power transfer switches, pumps, and valves at all pump stations.

Rivanna WW Pumping Station – CIP Code not yet assigned: The Rivanna Wastewater Pumping Station (RVWWPS) is a 53-mgd rated capacity wastewater pumping station at the Moores Creek Advanced Water Resource Recovery Facility. The pumping station was constructed in 2017. On January 9, 2024, the wetwell level rose and water entered the pump rooms. The non-immersion duty pumps and appurtenances were destroyed.

This project is phased in the immediate response and mitigations with temporary pump arounds. The next phase was longer term pump around construction, cleanup, investigation, and design for reconstruction. The last phase will be reconstruction of the pump station. Our insurance carrier is involved in this effort and there may be some recovery for some of these costs.

Currently these costs are being paid out of the Authority's operating budget. A capital project will be created within the next few months and these costs will be accumulated and funded with and like any other capital project. The estimated budget is between \$22 – 25 million.

COVERING CERTIFICATE FOR RESOLUTION

The undersigned Executive Director of the Rivanna Water and Sewer Authority (the “Authority”), certifies as follows:

1. Attached hereto is a true, correct and complete copy of a resolution entitled “RESOLUTION AUTHORIZING THE ISSUANCE, SALE AND AWARD BY THE RIVANNA WATER AND SEWER AUTHORITY OF ITS TAXABLE REGIONAL WATER AND SEWER SYSTEM REVENUE BOND IN A PRINCIPAL AMOUNT NOT TO EXCEED \$99,100,000 AND PROVIDING FOR THE FORM, DETAILS AND PAYMENT THEREOF” (the “Resolution”), as adopted at a regular meeting of the members of the Authority held on May 28, 2024, by the affirmative roll-call vote of a majority of all members of the Authority.

2. Such meeting of the Authority was held at the time and place established by the Authority for its regular meetings.

3. The minutes of such meeting reflect the attendance of the members and their votes on the Resolution as follows:

Member	Attendance (Present/Absent)	Vote (Aye/Nay/Abstain)
Michael A. Gaffney		
Lauren Hildebrand		
Ann Mallek		
Gary B. O’Connell		
Brian Pinkston		
Jeff Richardson		
Sam Sanders		

4. The Resolution has not been repealed, revoked, rescinded or amended and is in full force and effect on the date hereof.

WITNESS my signature and the seal of the Rivanna Water and Sewer Authority, this ____ day of May 2024.

(SEAL)

William I. Mawyer, Jr., P.E.
Executive Director
Rivanna Water and Sewer Authority

RESOLUTION AUTHORIZING THE ISSUANCE, SALE AND AWARD BY THE RIVANNA WATER AND SEWER AUTHORITY OF ITS TAXABLE REGIONAL WATER AND SEWER SYSTEM REVENUE BOND IN A PRINCIPAL AMOUNT NOT TO EXCEED \$99,100,000 AND PROVIDING FOR THE FORM, DETAILS AND PAYMENT THEREOF

WHEREAS, the Rivanna Water and Sewer Authority (the “Authority”) has entered into a Service Agreement dated June 12, 1973, as amended (the “Service Agreement”), by and between the Authority, the Albemarle County Service Authority (the “Service Authority”), the City of Charlottesville, Virginia (the “City”), and the County of Albemarle, Virginia (the “County”), providing for the acquisition by the Authority of certain existing water and wastewater facilities from the City and the Service Authority, the construction by the Authority of new facilities requested by the City and/or the Service Authority, and the financing, operation and maintenance by the Authority of all such facilities (collectively, the “System”);

WHEREAS, pursuant to the provisions of the Service Agreement and an Agreement of Trust dated as of October 1, 1979 (the “Master Trust Agreement”), between the Authority and The Bank of New York Mellon Trust Company, N.A. (the “Trustee”), the Authority desires to issue its Taxable Regional Water and Sewer System Revenue Bond, Series 2024, in a principal amount not to exceed \$99,100,000 (the “2024 Bond”), and use the proceeds to finance the acquisition, construction and equipping of various water and wastewater projects included (or to be included) in the Authority’s five-year capital improvement plan, including without limitation projects for the conveyance of water and wastewater, treatment plant upgrades and facility expansion and improvements (collectively, the “Project”), together with related issuance expenses;

WHEREAS, the Authority has applied to the Virginia Resources Authority (“VRA”) for the purchase of the 2024 Bond, and VRA has indicated its willingness to purchase the 2024 Bond from the proceeds of one or more series of its Infrastructure and State Moral Obligation Revenue Bonds (Virginia Pooled Financing Program) (collectively, the “VRA Bonds”), in accordance with the terms of (a) a Local Bond Sale and Financing Agreement (the “Financing Agreement”), between VRA and the Authority, and (b) a Thirty-Third Supplemental Agreement of Trust (the “Thirty-Third Supplemental Agreement” and, together with the Master Trust Agreement, as previously supplemented and amended, the “Trust Agreement”), between the Authority and the Trustee, the forms of which have been made available to the Authority prior to this meeting;

WHEREAS, the Financing Agreement shall indicate that the sum of \$92,838,000 (plus a sufficient amount to pay local costs of issuance, the allocable amount of VRA’s costs of issuance, a deposit to the VRA capital reserve fund and an allocable amount of underwriter’s discount) is the amount of proceeds requested for the Project from VRA, which total amount may be revised at the written request of the Authority prior to VRA’s bond pricing if approved by VRA (such final amount, the “Proceeds Requested”);

WHEREAS, VRA has advised the Authority that VRA’s objective is to pay the Authority a purchase price for the 2024 Bond that in VRA’s judgment reflects its market value (the “Purchase Price Objective”) taking into consideration the Proceeds Requested and such factors as the purchase price received by VRA for the VRA Bonds, the issuance costs of the VRA Bonds

(consisting of the underwriters' discount and other costs incurred by VRA) (collectively, the "VRA Costs") and other market conditions relating to the sale of the VRA Bonds;

WHEREAS, VRA's determination of the Purchase Price Objective may result in the 2024 Bond having a purchase price other than par and consequently (a) the Authority may have to issue the 2024 Bond in a principal amount that is greater than or less than the Proceeds Requested in order to receive an amount of proceeds substantially equal to the Proceeds Requested or (b) if the maximum authorized principal amount of the 2024 Bond set forth in Section 5 below does not exceed the Proceeds Requested by at least the amount of any VRA Costs and any original issue discount, the purchase price to be paid to the Authority, given the Purchase Price Objective and market conditions, will be less than the Proceeds Requested; and

WHEREAS, the Financing Agreement shall provide that the terms of the 2024 Bond may not exceed the parameters set forth below in Section 5;

BE IT RESOLVED BY RIVANNA WATER AND SEWER AUTHORITY:

1. It is found and determined that it is in the best interests of the Authority and its customers for the Authority (a) to promote the increased quality of drinking water and meet regulatory responsibilities and requirements, (b) to promote efficient water quality management for the upper Rivanna River Basin, (c) to ensure a reliable supply of potable water for the City and the County and their citizens and (d) otherwise to further the purposes of the Virginia Water and Waste Authorities Act (Chapter 51, Title 15.2 of the Code of Virginia 1950, as amended), all by undertaking the issuance of the 2024 Bond and using the proceeds thereof to finance the Project and to pay the related issuance costs. Accordingly, the Authority authorizes the issuance and sale of the 2024 Bond to VRA in accordance with the terms of this resolution and the Financing Agreement and as an "Additional Bond" in accordance with the terms of the Trust Agreement. It is further determined that the Project will be part of the System as contemplated by the Service Agreement and the Trust Agreement.

2. The Chair and Vice-Chair of the Authority, either of whom may act, are authorized to execute and deliver the Thirty-Third Supplemental Agreement. The Thirty-Third Supplemental Agreement shall be in substantially the form made available at this meeting, which is approved, with such completions, omissions, insertions and changes not inconsistent with this resolution as may be approved by the Chair or Vice-Chair, whose approval shall be evidenced conclusively by the execution and delivery thereof.

3. The Chair and the Vice-Chair of the Authority, either of whom may act, are authorized to execute and deliver the Financing Agreement. The Financing Agreement shall be in substantially the form made available at this meeting, which is approved, with such completions, omissions, insertions and changes not inconsistent with this resolution as may be approved by the Chair or Vice-Chair, whose approval shall be evidenced conclusively by the execution and delivery thereof. For purposes of this resolution, all capitalized terms used but not otherwise defined herein shall have the same meanings as set forth in the Financing Agreement.

4. The 2024 Bond shall be payable solely from Revenues, certain reserves or proceeds of insurance and secured on a parity as to such pledge with the Authority's outstanding bonds and

any Additional Bonds issued pursuant to the Trust Agreement. The 2024 Bond shall be a limited obligation of the Authority, and nothing in the 2024 Bond, the Trust Agreement or the Financing Agreement shall be deemed to create or constitute a pledge of the faith and credit of the Commonwealth of Virginia or any political subdivision thereof, including the Authority, the Service Authority, the City and the County.

5. The 2024 Bond shall be issued as a single, registered bond, designated “Taxable Regional Water and Sewer System Revenue Bond, Series 2024,” or such other designation as the Chair or Vice-Chair shall determine, shall be dated the date that is 30 days prior to the closing date of the VRA Bonds and shall be numbered R-1. The Authority authorizes the issuance and sale of the 2024 Bond on such terms as shall be determined by VRA subject to the Purchase Price Objective and market conditions described in the recitals hereof; provided, however, that the 2024 Bond (a) shall be in a principal amount not to exceed \$99,100,000, (b) shall mature no later than December 31, 2054, (c) shall have a “true” interest cost not to exceed 5.50% (exclusive of “Supplemental Interest” as provided in the Financing Agreement), (d) shall be sold to VRA at a price that is substantially equal to the Proceeds Requested and (e) shall be subject to prepayment upon the terms set forth in the Financing Agreement. Subject to the preceding terms, the Authority further authorizes the Executive Director to accept the final terms presented by VRA, including (x) the final principal amount of the 2024 Bond and (y) the amortization schedule (including the principal installment dates and amounts) for the 2024 Bond.

If the limitation on the maximum principal amount of the 2024 Bond set forth in this Section 5 restricts VRA’s ability to generate the Proceeds Requested, taking into account the VRA Costs, the Purchase Price Objective and market conditions, the Executive Director is authorized to accept a purchase price for the 2024 Bond at an amount less than the Proceeds Requested. The actions of the Executive Director in determining the final terms of the 2024 Bond shall be conclusive, and no further action shall be necessary on the part of the Authority.

As set forth in the Financing Agreement, the Authority agrees to pay such “Supplemental Interest” and other charges as provided therein, including such amounts as may be necessary to maintain or replenish the VRA Reserve. The principal of and premium, if any, and interest on the 2024 Bond shall be payable in lawful money of the United States of America.

The 2024 Bond shall be substantially in the form attached as an exhibit to the Thirty-Third Supplemental Agreement.

6. The Chair, the Vice-Chair and the Secretary-Treasurer of the Authority are hereby authorized and directed to have the 2024 Bond prepared and executed pursuant to the Trust Agreement, to deliver it to the Trustee for authentication and to cause the 2024 Bond so executed and authenticated to be delivered to, or at the direction of, VRA upon payment therefor.

7. In accordance with Section 503(b) of the Trust Agreement, the following matters are stated:

(a) The amounts required to be on deposit at all times in the Bond Fund are as determined pursuant to Section 707 of the Trust Agreement.

(b) The estimated cost of each expected purpose (excluding costs of issuance) for which the 2024 Bond is to be issued are as follows:

Purpose	Cost
RMR to OBWTP Raw Water Line	\$ 8,613,000
RMR to OBWTP Raw Water Pump Station	5,092,000
Security Enhancements (MC Front Gate)	1,930,000
Central Water Line	10,069,000
MCAWRRF 5kV Electrical System Upgrade	6,000,000
MCAWRRF Eng & Admin Building	14,271,000
MCAWRRF Structural & Concrete Rehabilitation	8,190,000
MCAWRRF Building Upfits and GT Improvements	5,000,000
SRWTP - PAC Upgrades	1,050,000
Emmet Street Betterment	2,367,000
SRR to RMR Pipeline, Intake & Facilities	7,487,000
Crozet PS Rehabilitation	8,569,000
Rivanna Pump Station (Malfunction Repairs)	14,200,000
Total	<u>\$92,838,000</u>

(c) The expenses incidental to the issuance of the 2024 Bond are estimated not to exceed \$1,000,000 (including local costs of issuance, VRA's costs of issuance and underwriters' discount).

(d) No deposit to the Debt Service Reserve Fund will be made with respect to the 2024 Bond.

(e) No capitalized interest is expected to be financed from proceeds of the 2024 Bond.

8. The officers of the Authority are authorized and directed to execute and deliver all certificates, instruments and documents, including a nonarbitrage certificate and tax compliance agreement (the "Tax Compliance Agreement"), and to take such further action as they may consider necessary or desirable in connection with the issuance and sale of the 2024 Bond pursuant to this resolution, the Financing Agreement, the Trust Agreement and the Thirty-Third Supplemental Agreement.

9. The Authority covenants that it shall not take or omit to take any action the taking or omission of which will cause the VRA Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Internal Revenue Code of 1986, as amended, and regulations issued pursuant thereto (the "Code"), or otherwise cause interest on the VRA Bonds to be includable in the gross income for federal income tax purposes of the registered owners thereof under existing law. Without limiting the generality of the foregoing, the Authority shall comply with any provision of the Tax Compliance Agreement that may require the Authority at any time to rebate to the United States any part of the earnings derived from the investment of the gross proceeds of the 2024 Bond, unless the Authority receives an opinion of nationally recognized bond counsel that such compliance is not required or is no longer required to prevent interest on the VRA Bonds from

being included in the gross income for federal income tax purposes of the registered owners thereof under existing law. The Authority shall pay any such required rebate from legally available funds.

10. The Authority covenants that it shall not permit the proceeds of the 2024 Bond or the facilities financed therewith to be used in any manner that would result in (a) 5% or more of such proceeds or facilities being used in a trade or business carried on by any person other than a governmental unit, as provided in Section 141(b) of the Code, (b) 5% or more of such proceeds or facilities being used with respect to any output facility (other than a facility for the furnishing of water), within the meaning of Section 141(b)(4) of the Code, or (c) 5% or more of such proceeds being used directly or indirectly to make or finance loans to any persons other than a governmental unit, as provided in Section 141(c) of the Code; provided, however, that if the Authority receives an opinion of nationally recognized bond counsel that any such covenants need not be complied with to prevent the interest on the VRA Bonds from being includable in the gross income for federal income tax purposes of the registered owners thereof under existing law, the Authority need not comply with such covenants.

11. The Authority authorizes and consents to the inclusion of information with respect to the Authority contained in VRA's Preliminary Official Statement and VRA's Official Statement in final form, both prepared in connection with the sale of the VRA Bonds. If appropriate, such disclosure documents shall be distributed in such manner and at such times as VRA shall determine. The Executive Director is authorized and directed to take such actions as may be necessary or appropriate to aid VRA in ensuring compliance with Securities and Exchange Commission Rule 15c2-12.

12. The Authority has heretofore received and reviewed the Information Statement (the "Information Statement") describing the State Non-Arbitrage Program of the Commonwealth of Virginia ("SNAP") and the Contract Creating the State Non-Arbitrage Program Pool (the "Contract"), and the Authority has determined to authorize the Chair or Vice-Chair, if and as necessary, to utilize SNAP in connection with the investment of the proceeds of the 2024 Bond. The Authority acknowledges the Treasury Board of the Commonwealth of Virginia is not, and shall not be, in any way liable to the Authority in connection with SNAP, except as otherwise provided in the Contract.

13. The officers of the Authority are authorized and directed to execute and deliver all certificates and other instruments considered necessary or desirable in connection with the issuance, sale and delivery of the 2024 Bond pursuant to this resolution, the Financing Agreement and the Trust Agreement. All other actions of the officers of the Authority in conformity with the purposes and intent of this resolution and in furtherance of the issuance and sale of the 2024 Bond are ratified, approved and confirmed.

14. The Secretary-Treasurer of the Authority is authorized and directed to arrange for a certified copy of this resolution to be filed with reasonable dispatch in the office of the Clerk of the Circuit Court of Albemarle County, Virginia.

15. This resolution shall take effect immediately.

THIRTY-THIRD SUPPLEMENTAL AGREEMENT OF TRUST

between

RIVANNA WATER AND SEWER AUTHORITY

and

**THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,
as Trustee**

Dated as of [June ____], 2024

**Authorizing the Issuance of
Taxable Regional Water and Sewer System Revenue Bond
Series 2024**

TABLE OF CONTENTS

Page

ARTICLE I SUPPLEMENTAL AGREEMENT

Section 33-101.	Authorization of Supplemental Agreement.....	2
Section 33-102.	Definitions	2
Section 33-103.	Reference to Articles and Sections.....	3

ARTICLE II AUTHORIZATION, DETAILS AND FORM OF SERIES 2024 Bond

Section 33-201.	Authorization of Series 2024 Bond	3
Section 33-202.	Details of Series 2024 Bond	3
Section 33-203.	Payment Provisions of Series 2024 Bond	4
Section 33-204.	Form of Series 2024 Bond.....	5
Section 33-205.	Delivery of Series 2024 Bond	5

ARTICLE III PREPAYMENT OF SERIES 2024 Bond

Section 33-301.	Prepayment of Series 2024 Bond	5
-----------------	--------------------------------------	---

ARTICLE IV PROCEEDS OF SERIES 2024 Bond

Section 33-401.	Use of Proceeds of Series 2024 Bond	5
-----------------	---	---

ARTICLE V SECURITY FOR SERIES 2024 Bond

Section 33-501.	Security for Series 2024 Bond.....	6
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ARTICLE VI AMENDMENTS TO MASTER TRUST AGREEMENT EFFECTIVE IMMEDIATELY

Section 33-601.	Effective Date of Amendments	6
Section 33-602.	Amendment to Section 705 of the Master Trust Agreement.....	6
Section 33-603.	Amendment to Section 707 of the Master Trust Agreement.....	7

ARTICLE VII MISCELLANEOUS

Section 33-701.	Limitation of Rights	11
Section 33-702.	Successors and Assigns	11
Section 33-703.	Severability	11
Section 33-704.	Applicable Law	11

Section 33-705. Counterparts	11
Exhibit A – Form of Series 2024 Bond	A-1

THIS THIRTY-THIRD SUPPLEMENTAL AGREEMENT OF TRUST dated as of [June ____], 2024 (this “Supplemental Agreement”), by and between **RIVANNA WATER AND SEWER AUTHORITY**, a public body politic and corporate and political subdivision of the Commonwealth of Virginia (the “Authority”), and **THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.**, a national banking association, as successor trustee to NationsBank of Virginia, N.A., as successor to Sovran Bank, N.A., as successor to Virginia National Bank, as trustee (in such capacity, together with any successor in such capacity, herein called the “Trustee”);

W I T N E S S E T H:

WHEREAS, the Authority and the Trustee have entered into an Agreement of Trust dated as of October 1, 1979 (the “Master Trust Agreement”), as previously supplemented and amended from time to time (the Master Trust Agreement and the supplemental agreements collectively referred to herein as the “Trust Agreement”), pursuant to which the Authority has issued its revenue bonds from time to time, including its currently outstanding Taxable Regional Water and Sewer System Revenue Bond, Series 2005A; Taxable Regional Water and Sewer System Revenue Bond, Series 2009A; Taxable Regional Water and Sewer System Revenue Bond, Series 2010A; Taxable Regional Water and Sewer System Revenue Bond, Series 2011A; Taxable Regional Water and Sewer System Revenue Bond, Series 2011B; Taxable Regional Water and Sewer System Revenue Bond, Series 2011D; Taxable Regional Water and Sewer System Revenue Bond, Series 2011E; Regional Water and Sewer System Revenue Bonds, Series 2012B; Taxable Regional Water and Sewer System Revenue Bond, Series 2014A; Taxable Regional Water and Sewer System Revenue Bond, Series 2015A; Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2015B; Regional Water and Sewer System Revenue Bond, Series 2016; Taxable Regional Water and Sewer System Revenue Bond, Series 2018; Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2019, and Taxable Regional Water and Sewer System Revenue Bond, Series 2021 (the outstanding principal amounts of such bonds collectively referred to herein as the “Outstanding Bonds”), to finance and refinance certain facilities for a regional water and sewer system (the “System”) to serve on a wholesale basis the City of Charlottesville, Virginia, and the Albemarle County Service Authority;

WHEREAS, the Authority is not in default under the Trust Agreement or in payment of the principal of or interest on the Outstanding Bonds;

WHEREAS, within the limitations of and in compliance with the Trust Agreement, the Authority is authorized to issue Additional Bonds (as defined in the Master Trust Agreement), secured on a parity with the Outstanding Bonds to the extent provided in the Trust Agreement, to finance or refinance the cost of improvements, extensions and additions to the System;

WHEREAS, the Authority has determined to issue its Taxable Regional Water and Sewer System Revenue Bond, Series 2024, in the principal amount of \$[_____] (the “Series 2024 Bond”), and to use the proceeds thereof to finance the acquisition, construction and equipping of various water and wastewater projects included (or to be included) in the Authority’s five-year capital improvement plan, including without limitation projects for the conveyance of water and wastewater, treatment plant upgrades and facility expansion and improvements (collectively, the “Supplemental Project”), together with related issuance expenses;

WHEREAS, the Authority has entered into a Local Bond Sale and Financing Agreement dated as of [June ____], 2024, with the Virginia Resources Authority (“VRA”) for the sale of the Series 2024 Bond to, and the purchase of the same by, VRA;

WHEREAS, the Authority has taken all necessary action to make the Series 2024 Bond, when authenticated by the Trustee and issued by the Authority, a valid and binding limited obligation of the Authority and to constitute this Supplemental Agreement a valid and binding agreement authorizing and providing for the details of the Series 2024 Bond; and

WHEREAS, the Authority has determined that it is desirable to make certain amendments to the Master Trust Agreement to provide for the payment of the principal of, premium, if any, and interest on the Series 2024 Bond;

NOW, THEREFORE, THIS THIRTY-THIRD SUPPLEMENTAL AGREEMENT OF TRUST WITNESSETH that the Authority does covenant and agree with the Trustee and with the respective holders, from time to time, of the Outstanding Bonds and the Series 2024 Bond, as follows:

ARTICLE I SUPPLEMENTAL AGREEMENT

Section 33-101. Authorization of Supplemental Agreement.

This Supplemental Agreement is authorized and executed by the Authority and delivered to the Trustee pursuant to and in accordance with Articles V and XIII of the Master Trust Agreement. All covenants, conditions and agreements of the Trust Agreement shall apply with full force and effect to the Series 2024 Bond and to the holder thereof, except as otherwise provided herein.

Section 33-102. Definitions.

Except as otherwise defined herein, terms defined in the Master Trust Agreement are used in this Supplemental Agreement with the same meanings assigned to them in the Master Trust Agreement. In addition, the following terms shall have the following meanings:

“2024 Financing Agreement” shall mean the Local Bond Sale and Financing Agreement dated as of [June ____], 2024, between the Authority and VRA, as supplemented and amended.

“Bond Counsel” shall mean counsel nationally recognized on the subject of municipal bonds.

“Cost of the Supplemental Project” shall have the same meaning assigned to the term “Cost of the Project” in Section 603 of the Master Trust Agreement, as applied to the Supplemental Project.

“Local Account” shall have the meaning assigned to such term in the 2024 Financing Agreement.

“Series 2024 Bond” shall mean the \$[_____] Taxable Regional Water and Sewer System Revenue Bond, Series 2024, to be issued pursuant to the terms of this Supplemental Agreement.

“Supplemental Agreement” shall mean this Thirty-Third Supplemental Agreement of Trust between the Authority and the Trustee, which supplements and amends the Trust Agreement.

“Supplemental Project” shall have the meaning set forth in the recitals hereto.

“VRA” shall mean the Virginia Resources Authority.

“VRA Trustee” shall have the meaning assigned to such term in the 2024 Financing Agreement.

Section 33-103. Reference to Articles and Sections.

Unless otherwise indicated, all references herein to particular articles or sections are references to articles or sections of this Supplemental Agreement.

ARTICLE II

AUTHORIZATION, DETAILS AND FORM OF SERIES 2024 Bond

Section 33-201. Authorization of Series 2024 Bond.

There is authorized to be issued as an Additional Bond pursuant to Article V of the Master Trust Agreement a revenue bond of the Authority in the principal amount of \$[_____] , which shall be designated “Taxable Regional Water and Sewer System Revenue Bond, Series 2024,” to provide funds to finance the Cost of the Supplemental Project (including related costs of issuance).

Section 33-202. Details of Series 2024 Bond.

The Series 2024 Bond shall be dated [_____] , 2024, shall be issued as a single, registered bond, shall be numbered R-1 and shall be in the principal amount of \$[_____]. The Series 2024 Bond shall bear interest at rates per year calculated on the basis of a 360-day year of twelve 30-day months, payable semiannually on April 1 and October 1, beginning October 1, 2024, and shall mature in installments on October 1 in years and amounts at such rates, as follows:

Installment Date (October 1)	Installment Amount	Interest Rate
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Section 33-203. Payment Provisions of Series 2024 Bond.

(a) The Series 2024 Bond shall be payable solely from revenues, and nothing in the 2024 Financing Agreement, the Series 2024 Bond or this Supplemental Agreement shall be deemed to create or constitute an indebtedness or pledge of the faith and credit of the Commonwealth of Virginia (the “Commonwealth”) or of any county, city, town or other political subdivision of the Commonwealth, including the Authority, the City of Charlottesville, Virginia, Albemarle County, Virginia, and the Albemarle County Service Authority. All payments due on the Series 2024 Bond shall be payable as provided in the 2024 Financing Agreement in lawful money of the United States of America. As set forth in the 2024 Financing Agreement, the Authority agrees to pay “Supplemental Interest” and other charges as provided therein. Payments shall be made, at the option of the registered owner, (i) by check or draft mailed to the registered owner at its address as it appears on the registration books kept for that purpose by the Trustee on

the 15th day of the month preceding the payment date or (ii) by wire transfer pursuant to the most recent wire instructions received by the Trustee from such registered owner. The Authority intends that amounts constituting interest on the Series 2024 Bond will be included in the gross income of the holder thereof for federal income tax purposes.

(b) Except as otherwise provided herein, the Series 2024 Bond shall be payable, executed, authenticated, registrable, exchangeable and secured, all as set forth in the Master Trust Agreement.

Section 33-204. Form of Series 2024 Bond.

The Series 2024 Bond shall be in substantially the form set forth in Exhibit A, with such appropriate variations, omissions and insertions as are permitted or required by the Master Trust Agreement and this Supplemental Agreement. The terms and provisions of the Series 2024 Bond that are set forth in Exhibit A shall be deemed to be incorporated into this Supplemental Agreement as though fully set forth herein.

Section 33-205. Delivery of Series 2024 Bond.

The Trustee shall authenticate and deliver the Series 2024 Bond when there have been filed with or delivered to it all items required by Section 503 of the Master Trust Agreement.

ARTICLE III

PREPAYMENT OF SERIES 2024 Bond

Section 33-301. Prepayment of Series 2024 Bond.

The Series 2024 Bond shall be subject to prepayment as set forth in Section 6.2 of the 2024 Financing Agreement. The optional redemption and notice provisions set forth in Sections 401 and 402 of the Master Trust Agreement shall not apply to the Series 2024 Bond.

ARTICLE IV

PROCEEDS OF SERIES 2024 Bond

Section 33-401. Use of Proceeds of Series 2024 Bond.

The net proceeds of the Series 2024 Bond (\$[_____]) shall be held in the Local Account to be disbursed in accordance with Section 4.3 of the 2024 Financing Agreement to be used in the manner prescribed by Section 504 of the Master Trust Agreement to pay the Cost of the Supplemental Project (\$[_____]) (including costs related to the issuance of the Series 2024 Bond of approximately \$[_____]). The Trustee hereunder shall be provided copies of any monthly reports and other statements provided to the Authority by VRA or the VRA Trustee with respect to the disbursements made from the Local Account. Any balance remaining in the Local Account upon completion of the Supplemental Project shall be transferred in accordance with the provisions of the 2024 Financing Agreement and in a manner consistent with the provisions of Section 605 of the Master Trust Agreement.

ARTICLE V

SECURITY FOR SERIES 2024 BOND

Section 33-501. Security for Series 2024 Bond; Not Secured by Debt Service Reserve Fund.

(a) The Series 2024 Bond shall be issued pursuant to the Master Trust Agreement and this Supplemental Agreement and shall be equally and ratably secured under the Trust Agreement with the Outstanding Bonds and any Additional Bonds issued pursuant to Article V of the Master Trust Agreement, without preference, priority or distinction of any Bonds over any other Bonds, as provided in the Master Trust Agreement.

(b) The existing Debt Service Reserve Fund shall not secure the Series 2024 Bond. No debt service reserve fund or account is currently established or funded in connection with the issuance of the Series 2024 Bond.

ARTICLE VI

AMENDMENTS TO MASTER TRUST AGREEMENT EFFECTIVE IMMEDIATELY

Section 33-601. Effective Date of Amendments.

Pursuant to Section 1301(e)(2) of the Master Trust Agreement, the amendments provided in this article shall be effective upon the execution of this Supplemental Agreement.

Section 33-602. Amendment to Section 705 of the Master Trust Agreement.

Section 705 of the Master Trust Agreement is hereby amended and restated to read as follows (changes being reflected in bold):

Section 705. Establishment of Funds. The following funds are hereby established:

(a) Operating Fund, to be held by the Authority;

(b) Bond Fund, in which there are established a Series 2005A Debt Service Account, a Series 2009A Debt Service Account, a Series 2010A Debt Service Account, a Series 2011A Debt Service Account, a Series 2011B Debt Service Account, a Series 2011D Debt Service Account, a Series 2011E Debt Service Account, a Series 2014A Debt Service Account, a Series 2015A Debt Service Account, a Series 2015B Debt Service Account, a Series 2018 Debt Service Account, a Series 2019 Debt Service Account, a Series 2021 Debt Service Account, **a Series 2024 Debt Service Account**, an Interest Account, a Principal Account and a Sinking Fund Account, all to be held by the Trustee;

(c) Debt Service Reserve Fund, to be held by the Trustee;

(d) Facilities Lease Fund, to be held by the Authority;

(e) Improvement Fund, to be held by the Authority; and

(f) Rate Stabilization Fund (Urban Area Wastewater Facilities), to be held by the Authority.

Section 33-603. Amendment to Section 707 of the Master Trust Agreement.

Section 707 of the Master Trust Agreement is hereby amended and restated to read as follows (changes being reflected in bold):

Section 707. Bond Fund. The Authority shall transfer from available moneys in the Operating Fund to the Trustee for deposit in the Bond Fund such amounts as shall be necessary to make the following deposits in the following order:

(a) first, in the Series 2005A Debt Service Account the next finance payment, if any, as required by Section 6.1 of the 2005 Financing Agreement between the Authority and VRA dated as of November 1, 2005, due on the Series 2005A Bond, within the next six succeeding months;

(b) second, in the Series 2009A Debt Service Account the next finance payment, if any, as required by Section 6.1 of the 2009 Financing Agreement due on the Series 2009A Bond, within the next six succeeding months;

(c) third, in the Series 2010A Debt Service Account the next finance payment, if any, as required by Section 6.1 of the 2010 Financing Agreement due on the Series 2010A Bond, within the next six succeeding months;

(d) fourth, in the Series 2011A Debt Service Account the next finance payment, if any, as required by Section 6.1 of the 2011 Financing Agreement due on the Series 2011A Bond, within the next six succeeding months;

(e) fifth, in the Series 2011B Debt Service Account the next finance payment, if any, as required by Section 6.1 of the 2011 Financing Agreement due on the Series 2011B Bond, within the next six succeeding months;

(f) sixth, in the Series 2011D Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2011 Financing Agreement due on the Series 2011D Bond, within the next six succeeding months;

(g) seventh, in the Series 2011E Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2011 Financing Agreement due on the Series 2011E Bond, within the next six succeeding months;

(h) eighth, in the Series 2014A Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2014A Financing Agreement due on the Series 2014A Bond, within the next six succeeding months;

(i) ninth, in the Series 2015A Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2015 Financing Agreement due on the Series 2015A Bond, within the next six succeeding months;

(j) tenth, in the Series 2015B Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2015B Financing Agreement due on the Series 2015B Bond, within the next six succeeding months;

(k) eleventh, in the Series 2018 Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2018 Financing Agreement due on the Series 2018 Bond, within the next six succeeding months;

(l) twelfth, in the Series 2019 Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2019 Financing Agreement due on the Series 2019 Bond, within the next six succeeding months;

(m) thirteenth, in the Series 2021 Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2021 Financing Agreement due on the Series 2021 Bond, within the next six succeeding months;

(n) fourteenth, in the Series 2024 Debt Service Account, the next finance payment, if any, as required by Section 6.1 of the 2024 Financing Agreement due on the Series 2024 Bond, within the next six succeeding months;

(o) **fifteenth**, in the Interest Account, such amount, if any, as may be required to make the total amount on deposit therein equal to the amount of interest which will become due on the Bonds, *other than* the Series 2005A Bond, the Series 2009A Bond, the Series 2010A Bond, the Series 2011A Bond, the Series 2011B Bond, the Series 2011D Bond, the Series 2011E Bond, the Series 2014A Bond, the Series 2015A, the Series 2015B Bond, the Series 2018 Bond, the Series 2019 Bond, the Series 2021, **or the Series 2024 Bond**, within the next succeeding six months;

(p) **sixteenth**, in the Principal Account, such amount, if any, as may be required to make the total amount on deposit therein equal to the amount of principal of the Bonds, *other than* the Series 2005A Bond, the Series 2009A Bond, the Series 2010A Bond, the Series 2011A Bond, the Series 2011B Bond, the Series 2011D Bond, the Series 2011E Bond, the Series 2014A Bond, the Series 2015A Bond, the Series 2015B Bond, the Series 2018 Bond, the Series 2019 Bond, the Series 2021 Bond, **or the Series 2024 Bond**, maturing within the next succeeding 12 months; and

(q) **seventeenth**, in the Sinking Fund Account, such amount, if any, as may be required to make the total amount on deposit therein equal to the amount of any sinking fund installment due within the next succeeding 12 months with respect to any Additional Bonds which are issued as term bonds.

Notwithstanding the foregoing, if an Event of Default occurs as described in Sections 1101(a) or 1101(b) and so long as such Event of Default shall continue, the transfers set forth in Section 707(a) through (q) shall not be made. The Trustee shall determine what moneys are on deposit in all the accounts in the Bond Fund. The Trustee shall then allocate among the accounts any moneys on deposit in the Operating Fund available for transfer into the Bond Fund, any moneys drawn out of the Debt Service Reserve Fund and any other available moneys so that all bondholders are paid ratably,

taking into account such available moneys and moneys on deposit in all the accounts in the Bond Fund.

The Trustee shall provide for the redemption of any Additional Bonds which may be issued as term bonds in accordance with the schedule in the supplement to this agreement authorizing their issuance; provided, however, that on or before the sixtieth day next preceding any such sinking fund payment date, the Authority may:

(i) pay to the Trustee for deposit in the Sinking Fund Account on or before such sixtieth day such amount as the Authority may determine, accompanied by a certificate signed by an Authorized Representative of the Authority directing the Trustee to apply such amount to the purchase of Bonds required to be redeemed on such sinking fund payment date, and the Trustee shall thereupon use all reasonable efforts to expend such funds as nearly as may be practicable in the purchase of such Bonds, with all unmatured coupons, if any, attached, at a price not exceeding the principal amount thereof plus accrued interest to such sinking fund redemption date; or

(ii) deliver to the Trustee for cancellation such Bonds required to be redeemed on such sinking fund payment date, in any aggregate principal amount desired with all unmatured coupons, if any, attached; or

(iii) instruct the Trustee to apply a credit against the Authority's sinking fund redemption obligation for any Bonds which have been issued as term bonds which previously have been redeemed (other than through the operation of the sinking fund) and canceled by the Trustee but not theretofore applied as a credit against any sinking fund redemption obligation.

Each Bond so purchased, delivered or previously redeemed shall be credited by the Trustee at 100% of the principal amount thereof against the obligation of the Authority on such sinking fund redemption date and shall reduce accordingly the amount to be on deposit in the Sinking Fund Account. Any excess over such obligation shall be credited against future sinking fund redemption obligations in chronological order, and the principal amount of such Bonds to be redeemed by operation of the sinking fund and the amount to be on deposit in the Sinking Fund Account shall be accordingly reduced. Any funds received by the Trustee pursuant to subsection (i) of the previous paragraph but not expended as provided therein for the purchase of Bonds within seven days after said sixtieth day shall be retained in the Sinking Fund Account and shall thereafter be used only for a credit against future deposits to the Sinking Fund Account or, upon the direction of an Authorized Representative of the Authority, for transfer to the Interest Account to be used as a credit against transfers to be made thereto.

The Trustee shall pay the principal of and interest on the Bonds (*other than* the Series 2005A Bond, the Series 2009A Bond, the Series 2010A Bond, the Series 2011A Bond, the Series 2011B Bond, the Series 2011D Bond, the Series 2011E Bond, the Series 2014A Bond, the Series 2015A Bond, the Series 2015B Bond, the Series 2018 Bond, the Series 2019 Bond, the Series 2021 Bond, **and the Series 2024 Bond**) from the Principal Account and the Interest Account, respectively, as the same become due. The Trustee shall

pay the finance payment on the Series 2005A Bond from the Series 2005A Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2009A Bond from the Series 2009A Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2010A Bond from the Series 2010A Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2011A Bond from the Series 2011A Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2011B Bond from the Series 2011B Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2011D Bond from the Series 2011D Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2011E Bond from the Series 2011E Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2014A Bond from the Series 2014A Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2015A Bond from the Series 2015A Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2015B Bond from the Series 2015B Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2018 Bond from the Series 2018 Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2019 Bond from the Series 2019 Debt Service Account as the same becomes due. The Trustee shall pay the finance payment on the Series 2021 Bond from the Series 2021 Debt Service Account as the same becomes due. **The Trustee shall pay the finance payment on the Series 2024 Bond from the Series 2024 Debt Service Account as the same becomes due.** In the event the balances in the accounts in the Bond Fund on any interest, principal or finance payment date (whether at maturity or by mandatory sinking fund redemption) are insufficient for the purposes thereof, the Trustee shall transfer to such Accounts such amounts as may be necessary therefor (1) first from any rate stabilization fund created with respect to such series of Bonds, then (2) in the case of the Series 2005A Bond, the Series 2009A Bond, the Series 2010A Bond, the Series 2011A Bond, the Series 2011B Bond, the Series 2011D Bond and the Series 2011E Bond, from the Debt Service Reserve Fund, then (3) from the Improvement Fund and then (4) from the Facilities Lease Fund. In the event the balance in any account in the Bond Fund on any interest, principal or finance payment date (whether at maturity or by mandatory sinking fund redemption) exceeds the amounts required by this section, such excess shall be transferred to any other account in the Bond Fund the balance in which is insufficient for the purposes thereof in the following order of priority: Series 2005A Debt Service Account, Series 2009A Debt Service Account, Series 2010A Debt Service Account, Series 2011A Debt Service Account, Series 2011B Debt Service Account, Series 2011D Debt Service Account, Series 2011E Debt Service Account, Series 2014A Debt Service Account, Series 2015A Debt Service Account, Series 2015B Debt Service Account, Series 2018 Debt Service Account, Series 2019 Debt Service Account, Series 2021 Debt Service Account, **Series 2024 Debt Service Account**, Interest Account, Principal Account and Sinking Fund Account. If there is no insufficiency in any account in the Bond Fund, such excess shall be transferred, if the Debt Service Reserve Fund does not then hold the Required Reserve, to the Debt Service Reserve Fund and otherwise shall be held in the account containing such excess to be credited against future deposits to such account.

ARTICLE VII

MISCELLANEOUS

Section 33-701. Limitation of Rights.

With the exception of the rights herein expressly conferred, nothing expressed or mentioned in or to be implied from this Supplemental Agreement is intended or shall be construed to give any person other than the parties hereto and the holder of the Series 2024 Bond any legal or equitable right, remedy or claim under or in respect to this Supplemental Agreement or any covenant, condition and agreement herein contained; this Supplemental Agreement and all of the covenants, conditions and agreements hereof being intended to be and being for the sole and exclusive benefit of the parties hereto and the holder of the Series 2024 Bond as herein provided.

Section 33-702. Successors and Assigns.

This Supplemental Agreement shall be binding upon, inure to the benefit of and be enforceable by the parties hereto and their respective successors and assigns.

Section 33-703. Severability.

If any provision of this Supplemental Agreement shall be held invalid by any court of competent jurisdiction, such holding shall not invalidate any other provision hereof.

Section 33-704. Applicable Law.

This Supplemental Agreement shall be governed by the applicable laws of the Commonwealth.

Section 33-705. Counterparts.

This Supplemental Agreement may be executed in several counterparts, each of which shall be an original and all of which together shall constitute one and the same instrument.

[Remainder of this page intentionally left blank.]

IN WITNESS WHEREOF, the Authority and the Trustee have caused this Thirty-Third Supplemental Agreement of Trust to be executed in their respective corporate names by their duly authorized officers, all as of the date first above written.

RIVANNA WATER AND SEWER AUTHORITY

By_____

**THE BANK OF NEW YORK MELLON TRUST
COMPANY, N.A., as Trustee**

By_____

Name_____

Title_____

FORM OF SERIES 2024 Bond

*Interest on this bond is not excludable from the gross income of
the registered owner hereof for federal income tax purposes.*

R-1

[____], 2024

UNITED STATES OF AMERICA

COMMONWEALTH OF VIRGINIA

Rivanna Water and Sewer Authority

Taxable Regional Water and Sewer System Revenue Bond

Series 2024

Rivanna Water and Sewer Authority (the “Authority”), a public body politic and corporate and political subdivision of the Commonwealth of Virginia (the “Commonwealth”) duly created pursuant to the Virginia Water and Waste Authorities Act, Chapter 51, Title 15.2, Code of Virginia of 1950, as amended (the “Act”), for value received, acknowledges itself indebted and promises to pay to the Virginia Resources Authority, or its registered assigns or legal representative (“VRA”), the principal sum of [_____] AND XX/100 DOLLARS (\$[_____]). Principal of this bond shall be payable in annual installments in the amounts and on the dates set forth in Schedule I attached hereto. Interest on this bond shall be payable on each April 1 and October 1, commencing October 1, 2024, computed on the basis of a 360-day year of twelve 30-day months at the rates set forth in Schedule I.

If any installment of principal of and interest on this bond is not paid to the registered owner of this bond within five days after its due date, the Authority shall pay to VRA a late payment charge in an amount equal to five percent (5%) of the overdue installment.

Subject to the provisions of the Local Bond Sale and Financing Agreement dated as of [June ____], 2024 (the “Financing Agreement”), between VRA and the Authority, so long as this bond is held by or for the account of VRA or its registered assigns or legal representative, interest is payable by (i) check or draft mailed to the registered owner of this bond at the address that appears on the 15th day of the month preceding each interest payment date on the registration books kept by The Bank of New York Mellon Trust Company, N.A., as successor trustee (the “Trustee”), or (ii) wire transfer pursuant to the most recent wire instructions received by the Trustee from such registered owner. Principal of and premium, if any, and interest on this bond shall be payable in lawful money of the United States of America. In case the payment date on this bond shall not be a Business Day (as defined below), then payment of principal, premium, if any, and interest need not be made on such date, but may be made on the next succeeding Business Day, and, if made on such next succeeding Business Day, no additional interest shall accrue for the period after such

payment date. “Business Day” means any day on which commercial banking institutions generally are open for business in New York, New York, and Richmond, Virginia.

This bond is issued under an Agreement of Trust dated as of October 1, 1979 (the “Master Trust Agreement”), between the Authority and the Trustee, as supplemented and amended from time to time, and as further supplemented and amended by a Thirty-Third Supplemental Agreement of Trust dated as of [June ____], 2024 (collectively, the “Trust Agreement”), and is secured equally and ratably on a parity with the outstanding balance of the Authority’s Taxable Regional Water and Sewer System Revenue Bond, Series 2005A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2009A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2010A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2011A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2011B; its Taxable Regional Water and Sewer System Revenue Bond, Series 2011D; its Taxable Regional Water and Sewer System Revenue Bond, Series 2011E; its Regional Water and Sewer System Revenue Bonds, Series 2012B; its Taxable Regional Water and Sewer System Revenue Bond, Series 2014A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2015A; its Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2015B; its Regional Water and Sewer System Revenue Bond, Series 2016; its Taxable Regional Water and Sewer System Revenue Bond, Series 2018; its Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2019, and its Taxable Regional Water and Sewer System Revenue Bond, Series 2021 (collectively, the “Prior Bonds”), to the extent provided in the Trust Agreement and the Financing Agreement. Reference is made to the Trust Agreement for a description of the provisions, among others, with respect to the nature and extent of the security, the rights, duties and obligations of the Authority and the Trustee, the rights of the registered owner of this bond and the terms upon which this bond is issued and secured.

Additional bonds secured on a parity with this bond and the Prior Bonds may be issued on the terms provided in the Trust Agreement. This bond is authorized and issued pursuant to the Act and the Trust Agreement to finance the acquisition, construction and equipping of capital improvements to the System and to pay related costs of issuance. The Authority’s obligations under this bond shall terminate when all amounts due and to become due pursuant to this bond, the Financing Agreement and the Trust Agreement have been paid in full.

This bond is a limited obligation of the Authority and (except to the extent payment with respect to this bond shall be made from the proceeds from the sale of this bond or the income, if any, derived from the investment thereof) are payable solely from certain revenues to be derived from the ownership or operation of the System (as defined in the Trust Agreement), which serves, on a wholesale basis, the City of Charlottesville, Virginia, and the Albemarle County Service Authority, as the same may from time to time exist, certain pledged reserves, income from investments pursuant to the Trust Agreement and proceeds of insurance, which revenues and other moneys have been pledged pursuant to the Trust Agreement to secure payment thereof. This bond shall not be deemed to constitute a pledge of the faith and credit of the Commonwealth or any political subdivision thereof, including the Authority, the City of Charlottesville, Virginia, Albemarle County, Virginia, and the Albemarle County Service Authority (collectively, the “Political Subdivisions”).

Neither the Commonwealth nor any political subdivision thereof, including the Political Subdivisions, shall be obligated to pay the principal of this bond or other costs incident thereto except from the revenues pledged therefor, and neither the faith and credit nor the taxing power of the Commonwealth or any political subdivision thereof, including the Political Subdivisions, is pledged to the payment of the principal of or interest on this bond or other costs incident thereto. The Authority has no taxing power.

If any failure of the Authority to pay all or any portion of any required payment of the principal of or premium, if any, or interest on this bond results in a withdrawal from or a drawing on any VRA Reserve (as defined in the Financing Agreement), the interest rates applicable to this bond shall be increased to interest rates sufficient to reimburse the VRA Reserve for any foregone investment earnings on the funds withdrawn therefrom and pay any interest, fees or penalties assessed as a result of the withdrawal from or drawing on the VRA Reserve. The increment of interest payable pursuant to the increase in rates shall be referred to as "Supplemental Interest." The term "interest" as used in this bond shall include Supplemental Interest, when and if payable. The Authority's obligation to pay Supplemental Interest shall commence on the date of the withdrawal or drawing of funds from the VRA Reserve occasioned by the Authority's failure to pay a required payment or portion thereof as described above (the "Supplemental Interest Commencement Date"). The Authority's obligation to pay Supplemental Interest shall terminate on the date on which the Authority makes all payments required but outstanding since the date of the initial failure to pay (the "Supplemental Interest Termination Date"). From the Supplemental Interest Commencement Date to the Supplemental Interest Termination Date, Supplemental Interest shall be due and payable on the regularly scheduled interest payment dates provided for in this bond. As soon as reasonably possible after the Supplemental Interest Commencement Date and before the next regularly scheduled interest payment date provided for in this bond, VRA shall deliver to the Authority a certificate as to the increase in interest rates and the amount of Supplemental Interest. The certificate shall set forth in reasonable detail the basis for the increase in interest rates and the manner of calculation of the increase and the amount of Supplemental Interest. Such certificate shall be conclusive (absent manifest error) as to the interest rate increase and amount of Supplemental Interest set forth therein. In determining the interest rate increase and the amount of Supplemental Interest, VRA may use any reasonable averaging and attribution methods.

This bond is subject to prepayment to the extent and under the terms set forth in the Trust Agreement and the Financing Agreement. The optional redemption and notice provisions set forth in Sections 401 and 402 of the Master Trust Agreement shall not apply to this bond.

This bond is issued as a registered bond and may be transferred only in accordance with the provisions with respect thereto as provided in the Trust Agreement and the Financing Agreement.

The registered owner of this bond shall have no right to enforce the provisions of the Trust Agreement, to institute action to enforce the covenants therein, to take any action with respect to any Event of Default under the Trust Agreement or to institute, appear in or defend any suit or other proceeding with respect thereto, except as provided in the Trust Agreement. Modifications or alterations of the Trust Agreement, or of any supplement thereto, may be made only to the extent and in the circumstances permitted by the Trust Agreement.

Upon surrender of this bond at the corporate trust office of the Trustee in Pittsburgh, Pennsylvania, together with an assignment duly executed by the registered owner or his duly authorized attorney or legal representative in such form as shall be satisfactory to the Trustee, the Authority shall execute, and the Trustee shall authenticate and deliver in exchange, a new bond or bonds in the manner and subject to the limitations and conditions provided in the Trust Agreement, having an equal aggregate principal amount, in authorized denominations, of the same series, form and maturity, bearing interest at the same rate, and registered in names as requested by the then registered owner hereof or his duly authorized attorney or legal representative. Any such exchange shall be at the expense of the Authority, except that the Trustee may charge the person requesting such exchange the amount of any tax or other governmental charge required to be paid with respect thereto.

All acts, conditions and things required to happen, exist or be performed precedent to and in connection with the issuance of this bond have happened, exist and have been performed.

This bond shall not be valid until the Trustee shall have executed the Certificate of Authentication appearing hereon and inserted the date of authentication hereon.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Rivanna Water and Sewer Authority has caused this bond to be signed by its Chair or Vice Chair, its seal to be affixed hereto and attested by its [Assistant] Secretary-Treasurer, and this bond to be dated the date first above written.

RIVANNA WATER AND SEWER AUTHORITY

(SEAL)

By _____
[Vice] Chair

ATTEST:

[Assistant] Secretary-Treasurer

CERTIFICATE OF AUTHENTICATION

Date Authenticated: [_____], 2024

This bond is the Series 2024 Bond described in the within-mentioned Trust Agreement.

**THE BANK OF NEW YORK
MELLON TRUST COMPANY, N.A.**

By _____
Authorized Signature

ASSIGNMENT

FOR VALUE RECEIVED the undersigned sell(s), assign(s) and transfer(s) unto

_(please print or typewrite name and address including postal zip code of Transferee)

PLEASE INSERT SOCIAL SECURITY OR OTHER
IDENTIFYING NUMBER OF TRANSFEREE

: :
: :
: :

the within bond and all rights thereunder, irrevocably constituting and appointing

_____,
Attorney, to transfer said bond on the books kept for the registration thereof, with full power of
substitution in the premises.

Dated: _____

Signature Guaranteed

NOTICE: Signature(s) must be
guaranteed by an Eligible Guarantor
Institution such as a Commercial
Bank, Trust Company, Securities
Broker/Dealer, Credit Union, or
Savings Association who is a member
of a medallion program approved by
The Securities Transfer Association, Inc.
Inc.

(Signature of Registered Owner)

NOTICE: The signature above must
correspond with the name of the
registered owner as it appears on the
front of this bond in every particular,
without alteration or enlargement
or any change whatsoever.

TRANSFER OF BOND

The transfer of this bond may be registered by the registered owner or its duly authorized attorney or legal representative upon presentation hereof to the Registrar who shall make note of such transfer in books kept by the Registrar for that purpose and in the registration blank below.

<u>Date of Registration</u>	<u>Name of Registered Owner</u>	<u>Signature of Registrar</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

SCHEDULE I

Installment Date (October 1)	Installment Amount	Interest Rate
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RIVANNA WATER AND SEWER 2024 SERIES BOND ISSUE



Presented to the Board of Directors

By Lonnie Wood, Director of Finance & Information Technology

May 28, 2024



#	GL	Project	CIP through FY30	Budget for Future Financing FY 2027-2030	Future Bond Issues	Portion of Budget considered for Bond Issue	Cash reserves and other funding sources	2024 Bond Rounded
1	1011	RMR to OBWTP Raw Water Line	\$ 33,500,000	\$ 14,287,401	\$ 10,000,000	\$ 9,212,599	\$ 600,000	\$ 8,613,000
2	1013	RMR to OBWTP Raw Water Pump Station	12,350,000	5,007,732	2,000,000	5,342,268	250,000	5,092,000
3	5005	Security Enhancements (MC Front Gate)	2,980,000	-		2,980,000	1,050,000	1,930,000
4	1219	Central Water Line	47,000,000	26,281,344	10,000,000	10,718,656	650,000	10,069,000
5	3229	MCAWRRF 5kV Electrical System Upgrade	6,200,000	-		6,200,000	200,000	6,000,000
6	3231	MCAWRRF Eng & Admin Building	20,000,000	79,257	5,000,000	14,920,743	650,000	14,271,000
7	3220	MCAWRRF Structural & Concrete Rehabilitation	11,300,000	759,756	2,000,000	8,540,244	350,000	8,190,000
8	3233	MCAWRRF Building Upfits and GT Improvements	5,150,000	-		5,150,000	150,000	5,000,000
9		SRWTP - PAC Upgrades	1,100,000	-		1,100,000	50,000	1,050,000
10	1224	Emmet Street Betterment	9,235,000	2,668,082		6,566,918	4,200,000	2,367,000
11	1017	SRR to RMR Pipeline, Intake & Facilities	84,000,000	60,763,125	15,000,000	8,236,875	750,000	7,487,000
12	3025	Crozet PS Rehabilitation	10,310,000	1,440,941		8,869,059	300,000	8,569,000
13		Rivanna Pump Station (Malfunction Repairs)	25,000,000	-		25,000,000	10,800,000	14,200,000
			\$ 268,125,000	\$ 111,287,638	\$ 44,000,000	\$ 112,837,362	\$ 20,000,000	\$ 92,838,000



Overview

The Virginia Pooled Financing Program (VPFP) is a general municipal pool program that provides Virginia local governments with efficient public debt market access to finance or refinance essential projects at competitive interest rates. Through the VPFP, VRA sells municipal bonds and then loans the proceeds to local governments, which benefit from VRA's strong credit ratings, competitive interest rates, and straightforward application process.

The VPFP offers loan structuring flexibility, while allowing localities to finance or refinance multiple different project types through a single transaction. The VRA team manages all aspects of the bond issuance process and guides applicants to and after loan closing.

VPFP Value-Added Benefits

- Competitive "AAA/AA" market interest rates
- Customized loan terms and amortization structures
- Economies of scale through shared costs of issuance among pool participants
- Streamlined, efficient application and loan closing process
- Loan terms up to 30 years
- Dedicated loan servicing and administrative support throughout the life of the borrowing
- Reliable and consistent market access (2-3 issuances per year at a minimum)

Estimated Not to Exceed (NTE)

2024 Bond Summary

Construction Funds Needed	\$ 92,838,000
Local Costs of Issuance (COI)	150,000
Capital Reserve Allowance	275,000
VRA COI and Underwriting Fees	850,000
Total Proceeds Needed	<u>\$ 94,113,000</u>
% Allowance for Discount Pricing	\$ 4,987,000
Total Bond	<u><u>\$ 99,100,000</u></u>

Legal documents: Bond Counsel

Christopher Kulp, Hunton Andrews Kurth LLP

❖ Authorizing Resolution

- Thirty-Third Supplemental Agreement of Trust
- VRA Financing agreements
 - *Sets parameters for the bond issue when bonds are sold*
 - *Docs are approved to form*

Summary

Resolution Authorizing the Issuance and Sale of RWSA Regional Water and Sewer Revenue Bond:

- Not-to-exceed amount of \$99.1 Million
- Not-to-exceed interest rate of 5.5%
- Term no greater than 30-years

Questions?

Board Action May 28, 2024

Roll Call Vote to Approve and Adopt:

Resolution Authorizing the Issuance, Sale and Award by the Rivanna Water and Sewer Authority of its Taxable Regional Water and Sewer System Revenue Bond in a Principal Amount Not To Exceed \$99,100,000 and Providing for the Form, Details and Payment Thereof

LOCAL BOND SALE AND FINANCING AGREEMENT

between

VIRGINIA RESOURCES AUTHORITY

and

RIVANNA WATER AND SEWER AUTHORITY

Dated as of June 14, 2024

**Virginia Resources Authority
Infrastructure and State Moral Obligation Revenue Bonds
(Virginia Pooled Financing Program)
Series 2024B [(Tax-Exempt)]**

TABLE OF CONTENTS

Page

ARTICLE I DEFINITIONS

Section 1.1	Definitions.....	1
Section 1.2	Rules of Construction	5

ARTICLE II REPRESENTATIONS

Section 2.1	Representations by VRA.....	6
Section 2.2	Representations by Local Government	6
Section 2.3	Representations Remade as of the Sale Date	8

ARTICLE III PURCHASE OF THE LOCAL BOND

Section 3.1	Purchase of the Local Bond	9
Section 3.2	Issuance Expenses.....	9
Section 3.3	Schedule 1.1	10
Section 3.4	Conditions Precedent to Purchase of the Local Bond.....	10

ARTICLE IV USE OF PURCHASE PRICE

Section 4.1	Deposit of Purchase Price; Investment of Amounts in Local Account	12
Section 4.2	Agreement to Accomplish Project	12
Section 4.3	Disbursement of Purchase Price and Earnings	12
Section 4.4	No Sufficiency Warranty by VRA; Local Government Required to Complete Project.....	14

ARTICLE V PLEDGE AND SECURITY

Section 5.1	Pledge.....	14
Section 5.2	Rate Covenant.....	14
Section 5.3	Annual Budget of the System	14
Section 5.4	Qualified Independent Consultant's Report	15
Section 5.5	Limitation on Amendments to Certain Documents	15

ARTICLE VI PAYMENT AND REDEMPTION OF LOCAL BOND

Section 6.1	Payment of Local Bond and Related Amounts.....	15
Section 6.2	Defeasance and Redemption of Local Bond.....	17
Section 6.3	Payments and Rights Assigned.....	18
Section 6.4	Obligations Absolute and Unconditional.....	18

TABLE OF CONTENTS (cont.)

Page

ARTICLE VII OPERATION AND USE COVENANTS

Section 7.1	Maintenance	18
Section 7.2	Additions and Modifications.....	18
Section 7.3	Permits	18
Section 7.4	Use	18
Section 7.5	Inspection and Local Government's Books and Records.....	19
Section 7.6	Ownership	19
Section 7.7	Sale or Encumbrance	19
Section 7.8	Collection of Revenues	19
Section 7.9	Intentionally Omitted	19
Section 7.10	Intentionally Omitted	19
Section 7.11	Intentionally Omitted	19
Section 7.12	Lawful Charges	19
Section 7.13	Construction Contractors	20
Section 7.14	Engineering Services	20

ARTICLE VIII INSURANCE, DAMAGE AND DESTRUCTION

Section 8.1	Insurance	20
Section 8.2	Requirements of Policies	21
Section 8.3	Notice of Damage, Destruction or Condemnation.....	21
Section 8.4	Damage and Destruction.....	21
Section 8.5	Condemnation and Loss of Title	21

ARTICLE IX SPECIAL COVENANTS

Section 9.1	Tax Covenants	22
Section 9.2	Maintenance of Existence	22
Section 9.3	Financial Records and Statements	22
Section 9.4	Certification as to No Default and Tax Compliance.....	22
Section 9.5	Notice of Issuance of Additional Bonds of Local Government.....	22
Section 9.6	Further Assurances.....	23
Section 9.7	Assignment by Local Government	23
Section 9.8	Continuing Disclosure	23
Section 9.9	Other Indebtedness.....	26
Section 9.10	Additional Indebtedness.....	26
Section 9.11	Litigation; Material Change	26

TABLE OF CONTENTS (cont.)

Page

ARTICLE X DEFAULTS AND REMEDIES

Section 10.1	Events of Default	27
Section 10.2	Intentionally Omitted	28
Section 10.3	Other Remedies	28
Section 10.4	Delay and Waiver	28

ARTICLE XI MISCELLANEOUS

Section 11.1	Intentionally Omitted	28
Section 11.2	Successors and Assigns	28
Section 11.3	Amendments	28
Section 11.4	Limitation of Local Government's Liability	28
Section 11.5	Applicable Law	28
Section 11.6	Severability	29
Section 11.7	Notices	29
Section 11.8	Right to Cure Default	29
Section 11.9	Term of Agreement	29
Section 11.10	Counterparts	29

Exhibit A	Form of Local Bond
Exhibit B	Description of the Project
Exhibit C	Pending or Threatened Actions, Suits, Proceedings, or Investigations
Exhibit D	Form of Requisition
Exhibit E	Operating Data
Exhibit F	Form of Opinion of Counsel to the Local Government
Exhibit G	Form of Certification as to No Default and Tax Compliance
Exhibit H	Description of Special Use Arrangements
Exhibit I	Form of Annual Budget
Exhibit J	Existing Parity Bonds

Schedule 1.1	Final Terms
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LOCAL BOND SALE AND FINANCING AGREEMENT

This **LOCAL BOND SALE AND FINANCING AGREEMENT** is dated as of June 14, 2024, and is between the **VIRGINIA RESOURCES AUTHORITY**, a public body corporate and a political subdivision of the Commonwealth of Virginia ("VRA"), and the **RIVANNA WATER AND SEWER AUTHORITY**, a public body corporate and politic and political subdivision of the Commonwealth of Virginia (the "Local Government").

A. VRA intends to issue its Related Series of VRA Bonds, as hereinafter defined, and to use a portion of the proceeds thereof to acquire from the Local Government the Local Bond, as hereinafter defined.

B. VRA and the Local Government wish to set forth herein certain terms, conditions and provisions related to the purchase of the Local Bond, the application of the proceeds thereof, the payment of the debt service thereon and the security therefor, and the use and maintenance of the Related Financed Property, as hereinafter defined.

NOW, THEREFORE, VRA and the Local Government agree as follows:

ARTICLE I DEFINITIONS

Section 1.1 Definitions. Each capitalized term contained in this Agreement has the meaning set forth below:

"2024B Acquisition Fund" has the meaning set forth in the Related Supplemental Series Indenture.

"Act" means the Virginia Resources Authority Act, Chapter 21, Title 62.1 of the Code of Virginia of 1950, as amended.

"Agreement" means this Local Bond Sale and Financing Agreement dated the date first written above, between VRA and the Local Government, as modified, altered, amended or supplemented in accordance with the terms hereof.

"Annual Budget" means the budget of the System for each Fiscal Year.

"Business Day" means any day on which commercial banking institutions are generally open for business in New York, New York and Richmond, Virginia.

"Closing Date" means August 7, 2024, or such other date as may be determined by VRA.

"Consulting Engineer" has the meaning set forth in the Local Master Indenture, and for the purposes of this Agreement, such term shall include, at the discretion of the Local Government, the Local Engineer.

"Customers" means the Local Government's two customers under the Service Agreement, the City of Charlottesville, Virginia, and the Albemarle County Service Authority.

"Effective Date" means June 14, 2024, which is the deadline for the Local Government to provide an executed copy of this Agreement to VRA.

"Event of Default" has the meaning set forth in Section 10.1.

"Existing Parity Bonds" has the meaning set forth in Section 2.2(n).

"Financing Parameters" means the parameters established by the governing body of the Local Government regarding the terms and conditions of the Local Bond, which may include a maximum par amount, maximum "true" interest cost or targeted savings.

"Fiscal Year" has the meaning set forth in the Local Master Indenture.

"Government Obligations" means direct obligations of, or obligations the payment of the principal of and interest on which is unconditionally guaranteed by, the United States of America.

"Local Account" means the local account established for the Local Bond within the 2024B Acquisition Fund.

"Local Authorization" means the resolution adopted on May 28, 2024, by a majority of the members of the governing body of the Local Government approving (i) the transactions contemplated by and authorizing the execution and delivery of the Local Bond Documents and (ii) the execution, issuance and sale of the Local Bond subject to the Financing Parameters.

"Local Bond" means the Local Government's Taxable Regional Water and Sewer System Revenue Bond, Series 2024, issued in the original principal amount set forth in Schedule 1.1, as such bond may be amended or modified.

"Local Bond Documents" means this Agreement, the Local Master Indenture and the Local Tax Document.

"Local Engineer" means an officer or employee of the Local Government so designated in writing by a Local Representative, which officer or employee (i) is licensed as a professional engineer in Virginia, (ii) has recognized standing in the field of water and sewer engineering and licensed as professional engineers in Virginia that the Local Government designates in writing, subject to VRA's reasonable approval and (iii) is subject to VRA's reasonable approval.

"Local Government" means the Rivanna Water and Sewer Authority.

"Local Master Indenture" means the Agreement of Trust dated as of October 1, 1979, between the Local Government and the Local Trustee, as previously amended and supplemented, and as further amended and supplemented by the Thirty-Third Supplemental Agreement of Trust to be dated as of [June 14, 2024], between the Local Government and the Local Trustee, as amended and supplemented in accordance with its terms.

"Local Representative" means (i) the chair or vice chair of the governing body of the Local Government, (ii) the chief executive officer of the Local Government and (iii) any other official or employee of the Local Government authorized by resolution of the governing body of the Local Government to perform the act or sign the document in question.

"Local Tax Document" means the Nonarbitrage Certificate and Tax Compliance Agreement dated the Closing Date, between the Local Government and VRA, as modified, altered, amended and supplemented.

"Local Trustee" means The Bank of New York Mellon Trust Company, N.A. (as successor to NationsBank, National Association, as successor to Sovran Bank, N.A., as successor to Virginia National Bank), and its successors serving in such capacity, as trustee under the Local Master Indenture.

"Master Indenture" means the Master Indenture of Trust dated as of December 1, 2003, between VRA and the Trustee, as modified, altered, amended and supplemented in accordance with its terms.

"Net Revenues Available for Debt Service" means the Revenues less amounts necessary to pay Operation and Maintenance Expenses.

"Operation and Maintenance Expenses" has the same meaning as the term "Operating Expenses" in the Local Master Indenture.

"Parity Bonds" means any of the Local Government's "Bonds" issued under the Local Master Indenture.

"Parity Debt" means any of the Local Government's Parity Bonds, including the Local Bond.

"Proceeds Requested" means \$[_____] plus an amount sufficient to pay related costs of issuance], or such other amount requested in writing by the Local Government and approved by VRA prior to the Sale Date.

"Project" means the project described in Exhibit B.

"Project Budget" means the budget for the Project set forth in Schedule 1.1.

"Project Costs" means the costs of the Project to the extent such costs are included in the definition of "cost" set forth in Section 62.1-199 of the Act, and includes the refunding of obligations of VRA or the Local Government issued to finance or refinance "costs" set forth in Section 62.1-199 of the Act.

"Purchase Price" has the meaning set forth in Schedule 1.1 and represents the amount received by the Local Government from the sale of the Local Bond to VRA. The Purchase Price of the Local Bond will be determined by adding to or subtracting from the par amount of the Local Bond the Local Government's share of the net original issue premium or discount on the Related Series of VRA Bonds and by subtracting from the par amount of the Local Bond the Local

Government's share of VRA's expenses as set forth in Section 3.2 and the Local Government's share of the deposit on the Closing Date to any applicable VRA Reserve. It is acknowledged that the Purchase Price does not include any accrued interest on the Local Bond from its dated date to the Closing Date.

"Qualified Independent Consultant" means an independent professional consultant having the skill and experience necessary to provide the particular certificate, report or approval required by the provision of this Agreement in which such requirement appears, including without limitation a Consulting Engineer and an independent certified public accountant or firm of independent certified public accountants; provided, however, all Qualified Independent Consultants are subject to the reasonable approval of VRA.

"Registrar" means the Local Trustee.

"Related Financed Property" means the land, building, equipment and other property, the acquisition, construction, renovation, or equipping of which was financed by the Local Bond as part of the Project.

"Related Portion of VRA Bonds" means the portion of the Related Series of VRA Bonds allocable to the Local Bond (as determined by VRA), including any bonds issued by VRA to refund such Related Series of VRA Bonds in whole or in part.

"Related Series of VRA Bonds" means the Virginia Resources Authority Infrastructure and State Moral Obligation Revenue Bonds (Virginia Pooled Financing Program), Series 2024B [(Tax-Exempt)] (or such other series of Infrastructure and State Moral Obligation Revenue Bonds (Virginia Pooled Financing Program that is specified in Schedule 1.1), in the original aggregate principal amount set forth in Schedule 1.1, and, unless the Local Government receives notice to the contrary from VRA, any bonds issued by VRA to refund the Related Series of VRA Bonds in whole or in part.

"Related Supplemental Series Indenture" means the Fifty-Eighth Supplemental Series Indenture of Trust dated as of August 1, 2024, between VRA and the Trustee, as modified, altered, amended and supplemented in accordance with its terms and those of the Master Indenture.

"Revenue Fund" has the meaning set forth in the Master Indenture.

"Revenues" means (i) all rates, fees, rentals, charges and other income properly allocable to the System under generally accepted accounting principles or resulting from the Local Government's ownership or operation of the System and all rights to receive the same, whether now existing or hereafter coming into existence, exclusive of user and other deposits subject to refund until such deposits have become the Local Government's property, (ii) the proceeds of any insurance covering business interruption loss relating to the System, (iii) interest on any money or securities related to the System held by or on behalf of the Local Government, except as otherwise provided by the Local Master Indenture, and (iv) any other income from other sources now or hereafter pledged or specifically made available by or on behalf of the Local Government to or for the payment of Operation and Maintenance Expenses or debt service on Parity Debt.

"Sale Date" means [July 24, 2024], or such other date specified in Schedule 1.1.

"Service Agreement" means the Service Agreement dated June 12, 1973, among the Local Government, the City of Charlottesville, Virginia, the Albemarle County Service Authority and the Board of County Supervisors acting for and on behalf of Albemarle County, as supplemented and amended from time to time.

"Subordinate Debt" means obligations of the Local Government secured by a pledge of Revenues expressly made subordinate to the pledge securing the Local Bond and any other Parity Bonds, and any obligations to make deposits related to reserve funds, rebate funds and similar funds or accounts established for the benefit of the Local Bond or any other Parity Bonds.

"Supplemental Interest" has the meaning set forth in Section 6.1.

"System" has the meaning set forth in the Local Master Indenture.

"Trustee" means U.S. Bank Trust Company, National Association, Richmond, Virginia, as trustee under the Master Indenture and the Related Supplemental Series Indenture, or its successors serving in such capacity.

"UVA" means the Rector and Visitors of the University of Virginia, a public corporation and educational institution of the Commonwealth of Virginia.

"Virginia SNAP" means the Commonwealth of Virginia State Non-Arbitrage Program.

"VRA" means the Virginia Resources Authority, a public body corporate and a political subdivision of the Commonwealth of Virginia.

"VRA Bonds" means the Related Series of VRA Bonds and any additional bonds issued under the Master Indenture.

"VRA Reserve" means any one or more of the Capital Reserve Fund, the Infrastructure Debt Service Reserve Fund, the Operating Reserve Fund, a CRF Credit Facility or an Infrastructure Revenue DSRF Facility, each as defined in the Master Indenture.

Section 1.2 Rules of Construction. The following rules apply to the construction of this Agreement unless the context requires otherwise:

(a) Singular words connote the plural number as well as the singular and vice versa.

(b) Words importing the redemption or calling for redemption of the Local Bond do not refer to or connote the payment of the Local Bond at its stated maturity.

(c) All references in this Agreement to particular Articles, Sections or Exhibits are references to Articles, Sections or Exhibits of this Agreement unless otherwise indicated.

(d) The headings and table of contents as used in this Agreement are solely for convenience of reference and do not constitute a part of this Agreement and do not affect its meaning, construction or effect.

ARTICLE II REPRESENTATIONS

Section 2.1 Representations by VRA. VRA represents to the Local Government as follows:

(a) VRA is a duly created and validly existing public body corporate and political subdivision of the Commonwealth of Virginia vested with the rights and powers conferred upon it under the Act.

(b) VRA has full right, power and authority to (i) issue, sell and deliver the Related Series of VRA Bonds, (ii) direct the Trustee to use a portion of the proceeds of the Related Series of VRA Bonds to purchase the Local Bond from the Local Government as contemplated under the Related Supplemental Series Indenture and this Agreement and (iii) carry out and consummate all other transactions contemplated by this Agreement.

(c) VRA has duly authorized, executed and delivered this Agreement, and this Agreement constitutes a legal, valid and binding obligation of VRA enforceable against VRA in accordance with its terms.

Section 2.2 Representations by Local Government. The Local Government represents to VRA as of the Effective Date as follows:

(a) The Local Government is a duly created and validly existing Virginia "local government" (as defined in Section 62.1-199 of the Act) and is vested with the rights and powers conferred upon it by Virginia law.

(b) The Local Government has full right, power and authority to (i) adopt the Local Authorization and execute and deliver the Local Bond Documents and all related documents, (ii) issue and sell the Local Bond and deliver the Local Bond to the Trustee, (iii) own and operate the System, (iv) undertake the Project and (v) carry out and consummate all of the transactions contemplated by the Local Authorization, the Local Bond, the Local Bond Documents, and the Service Agreement.

(c) The Local Authorization authorized the execution and delivery of this Agreement, and this Agreement is in substantially the same form as presented to the Local Government's governing body at its meeting at which the Local Authorization was adopted. The Local Authorization was filed in the Circuit Court of the County of Albemarle, Virginia, on _____, 2024.

(d) The Local Government has obtained all governmental permits, licenses, registrations, certificates, authorizations and approvals required to have been obtained as of the Effective Date for the Local Government's (i) adoption of the Local Authorization, (ii) execution and delivery of the Local Bond Documents and the Local Bond, (iii) performance of its obligations under the Local Bond Documents, the Local Bond, and the Service Agreement, (iv) the undertaking of the Project and (v) the operation and use of the System. The Local Government knows of no reason why any such required governmental permits, licenses, registrations,

certificates, authorizations or approvals not required to be obtained by the Effective Date cannot be obtained as required in the future.

(e) The Local Government has executed and delivered this Agreement, and this Agreement constitutes a legal, valid and binding obligation of the Local Government enforceable against the Local Government in accordance with its terms.

(f) When executed and delivered in accordance with the Local Authorization and this Agreement, the Local Bond will have been executed and delivered by duly authorized officials of the Local Government and will constitute a legal, valid and binding limited obligation of the Local Government enforceable against the Local Government in accordance with its terms.

(g) The issuance of the Local Bond and the execution and delivery of the Local Bond Documents and the performance by the Local Government of its obligations thereunder and under the Service Agreement are within the powers of the Local Government and will not conflict with, or constitute a breach or result in a violation of, (i) to the best of the Local Government's knowledge, any federal or Virginia constitutional or statutory provision, including the Local Government's charter or articles of incorporation, if any, (ii) any agreement or other instrument to which the Local Government is a party or by which it is bound or (iii) any order, rule, regulation, decree or ordinance of any court, government or governmental authority having jurisdiction over the Local Government or its property.

(h) The Local Government is not in default in the payment of the principal of or interest on any of its indebtedness for borrowed money and is not in default under any instrument under and subject to which any indebtedness for borrowed money has been incurred. No event or condition has happened or existed, or is happening or existing, under the provisions of any such instrument, including but not limited to this Agreement, which constitutes, or which, with notice or lapse of time, or both, would constitute an event of default thereunder.

(i) The Local Government (i) to the best of the Local Government's knowledge, is not in violation of any existing law, rule or regulation applicable to it in any way that would have a material adverse effect on its financial condition or its ability to perform its obligations under the Local Bond, the Local Bond Documents, or the Service Agreement and (ii) is not in default under any indenture, mortgage, deed of trust, lien, lease, contract, note, order, judgment, decree or other agreement, instrument or restriction of any kind to which the Local Government is a party or by which it is bound or to which any of its assets is subject that would have a material adverse effect on its financial condition or its ability to perform its obligations under the Local Bond and the Local Bond Documents. The Local Government's execution and delivery of the Local Bond and the Local Bond Documents and its compliance with the terms and conditions thereof will not conflict with or result in a breach of or constitute a default under any of the foregoing.

(j) The Local Government reasonably expects that, unless otherwise permitted by the terms of the Local Bond Documents or approved by VRA, the Local Government will own, operate and control the System at all times during the term of the Local Bond.

(k) Except as set forth in Exhibit C, no litigation has been served upon the Local Government, nor, to the best of the Local Government's knowledge, are there any pending or threatened against the Local Government, any actions, suits, proceedings or investigations of a legal, equitable, regulatory, administrative or legislative nature (i) affecting the creation, organization or existence of the Local Government or the title of its officers to their respective offices, (ii) seeking to prohibit, restrain or enjoin the approval, execution, delivery or performance of the Local Authorization, the Local Bond Documents, the Service Agreement or the issuance or delivery of the Local Bond, (iii) in any way contesting or affecting the validity or enforceability of the Local Bond, the Local Authorization, the Local Bond Documents, the Service Agreement or any agreement or instrument relating to any of the foregoing, (iv) in which a judgment, order or resolution may have a material adverse effect on the Local Government or its business, assets, condition (financial or otherwise), operations or prospects or on its ability to perform its obligations under the Local Authorization, the Local Bond Documents, the Local Bond, or the Service Agreement or (v) affecting the Project.

(l) The financial statements, applications and other information that the Local Government furnished to VRA in connection with this Agreement fairly and accurately portray the Local Government's financial condition, as of their dates, and there has been no material adverse change in the financial condition of the Local Government since the date of the financial statements provided to VRA in connection with this Agreement.

(m) Nothing that would constitute an Event of Default hereunder has occurred and is continuing, and no event or condition exists that with the passage of time or the giving of notice, or both, would constitute an Event of Default hereunder.

(n) A list of all Parity Debt that is outstanding on the date of this Agreement is attached as Exhibit J (the "Existing Parity Bonds").

(o) Except for the Existing Parity Bonds, there is no indebtedness of the Local Government secured by a pledge of Revenues prior to or on a parity with the lien of the pledge of Revenues that secures the Local Bond.

Section 2.3 Representations Remade as of the Sale Date. (a) It shall be a condition precedent of VRA's obligation to sell the Related Series of VRA Bonds that the Local Government's representations and warranties set forth in Section 2.2 be true and accurate in all respects on and as of the Sale Date. For the avoidance of doubt, all references to the Effective Date in Section 2.2 shall be deemed to refer to the Sale Date for purposes of this Section 2.3(a).

(b) If prior to the Sale Date, any representation or warranty set forth in Section 2.2 becomes untrue or inaccurate, then the Local Government shall notify VRA within one Business Day of becoming aware of such facts, and VRA, in its sole and absolute discretion, shall determine whether to sell VRA Bonds on behalf of the Local Government, which series of VRA Bonds (if any) to sell on behalf of the Local Government and any additional conditions precedent to the sale of such VRA Bonds or the purchase of the Local Bond.

ARTICLE III PURCHASE OF THE LOCAL BOND

Section 3.1 Purchase of the Local Bond. (a) Subject to the terms and conditions and in reliance upon the representations, warranties and agreements set forth or incorporated herein, VRA shall purchase, solely from the proceeds of the Related Series of VRA Bonds, all, but not less than all, of the Local Bond from the Local Government, and the Local Government shall, subject to the Financing Parameters, sell and deliver to VRA the Local Bond for the Purchase Price. The Local Government acknowledges that the Purchase Price is determined by VRA, is subject to VRA's Purchase Price Objective (as defined below) and market conditions as described below, and is expected to be substantially equal to the Proceeds Requested. The Local Government shall issue the Local Bond pursuant to the Local Authorization and the Local Master Indenture and in substantially the form of Exhibit A to this Agreement. As a condition of VRA entering into this Agreement, the Local Government shall deliver to VRA a copy of the Local Authorization as adopted prior to the date hereof.

(b) The Local Government acknowledges that VRA has advised the Local Government that its objective is to pay the Local Government the Purchase Price for its Local Bond which in VRA's judgment reflects the market value of the Local Bond ("Purchase Price Objective"), taking into consideration the Financing Parameters, the purchase price received by VRA for the Related Series of VRA Bonds, the underwriters' discount and other issuance costs of the Related Series of VRA Bonds and other market conditions relating to the sale of the Related Series of VRA Bonds. The Local Government further acknowledges that VRA has advised it that such factors may result in the Local Bond having a value other than par and that in order to receive an amount of proceeds that is substantially equal to the Proceeds Requested, the Local Government may need to issue the Local Bond with a par amount that is greater or less than the Proceeds Requested. The Local Government shall not issue the Local Bond if doing so would violate any Financing Parameter. Subject to the preceding sentence, the Local Government shall issue the Local Bond at a par amount that provides, to the fullest extent practicable given VRA's Purchase Price Objective, a Purchase Price at least equal to the Proceeds Requested, all in accordance with the Local Authorization. The Local Government acknowledges that the Purchase Price will be less than the Proceeds Requested if any Financing Parameter prevents VRA from generating a Purchase Price substantially equal to the Proceeds Requested, based upon VRA's Purchase Price Objective.

Section 3.2 Issuance Expenses. VRA shall pay, or cause to be paid, from the proceeds of the Related Series of VRA Bonds all expenses incident to the performance of VRA's obligations under and the fulfillment of the conditions imposed by this Agreement in connection with the issuance, sale and delivery of the Related Series of VRA Bonds and the purchase of the Local Bond on the Closing Date, including, but not limited to: (i) the cost, if any, of preparing and delivering the Related Series of VRA Bonds; (ii) the cost of preparing, printing and delivering the Preliminary Official Statement and the Official Statement for the Related Series of VRA Bonds and any amendment or supplement thereto; (iii) the fees and expenses of the financial advisor(s) and bond counsel to VRA; and (iv) all other costs and expenses incurred by VRA. The Local Government shall pay all expenses of the Local Government incident to the issuance, sale and delivery of the Local Bond, including, but not limited to the fees and disbursements of the financial advisor, counsel and bond counsel to the Local Government from the Purchase Price or other funds of the Local Government.

Section 3.3 Schedule 1.1. VRA shall complete Schedule 1.1, which shall set forth, among other things, the principal amount, interest rates, payment schedule and Purchase Price with respect to the Local Bond and the principal amount of the Related Series of VRA Bonds on or after the Sale Date. VRA shall deliver the completed Schedule 1.1 to the Local Government and shall attach Schedule 1.1 to this Agreement. Upon delivery to the Local Government, the completed Schedule 1.1 shall become a part of this Agreement the same as if it were a part hereof on the Effective Date.

Section 3.4 Conditions Precedent to Purchase of the Local Bond. VRA shall not be required to cause the Trustee to purchase the Local Bond unless:

(a) VRA has received the following, all in form and substance satisfactory to VRA:

(1) Certified copies of the Local Authorization and all other ordinances and resolutions of the Local Government relating to the Local Bond Documents and the Local Bond, if any.

(2) A certificate of the appropriate officials of the Local Government dated the Closing Date as to the matters set forth in Section 2.2 and Section 2.3 (to the extent applicable), including appropriate certifications regarding the Local Bond Documents, and such other matters as VRA may reasonably require.

(3) Evidence that the Local Government has performed and satisfied all of the terms and conditions contained in this Agreement to be performed and satisfied by it as of such date.

(4) An opinion of counsel to the Local Government in substantially the form attached as Exhibit F.

(5) An opinion of bond counsel to the Local Government in form and substance reasonably satisfactory to VRA.

(6) Evidence that the Local Government has complied with the insurance provisions set forth in Section 910 of the Local Master Indenture.

(7) The executed Local Bond and original executed counterparts of the Local Tax Document.

(8) A certificate of the Consulting Engineer giving the Consulting Engineer's estimate of the construction portion of the total Project Costs to be financed with the proceeds of the Local Bond, which estimate must be in an amount and otherwise compatible with the financing plan described in the Project Budget.

(9) A certificate of the Consulting Engineer (i) to the effect that the Purchase Price and funds available from the other sources specified in the Project Budget will be sufficient to pay the construction portion of the estimated Project Costs and (ii) specifying the date the Local Government is expected to complete the Project.

(10) A certificate of a Consulting Engineer or a Qualified Independent Consultant, including supporting documentation, to the effect that during the first two complete Fiscal Years following the estimated completion date of the Project, the projected Net Revenues Available for Debt Service will satisfy the Local Government's rate covenant under Section 5.2(a). In providing this certificate, the Consulting Engineer or Qualified Independent Consultant may take into consideration future System rate increases, provided that such rate increases have been duly approved by the Local Government's governing body and any other person or entity required to give approval for the rate increase to become effective. In addition, the Consulting Engineer or Qualified Independent Consultant may take into consideration additional future revenues to be derived under existing contractual arrangements entered into by the Local Government and from reasonable estimates of growth in the Local Government's consumer base.

(11) A certificate of the Consulting Engineer to the effect that (i) all governmental permits, licenses, registrations, certificates, authorizations and approvals for the undertaking of the Project, as enumerated in the certificate, and the operation and use of the System required to have been obtained as of the Closing Date have been obtained and (ii) the Consulting Engineer knows of no reason why any such required governmental permits, licenses, registrations, certificates, authorizations and approvals for the undertaking of the Project, as enumerated in the certificate, and the operation and use of the System cannot be obtained as required in the future.

(12) Evidence that the Local Government has satisfied all conditions precedent to the issuance of the Local Bond as a "Parity Bond" under the financing documents for the Existing Parity Bonds, including the Local Master Indenture.

(13) Evidence that the Local Government is in compliance with the construction contract provisions set forth in Section 4.4 with respect to any existing contracts as of the Closing Date.

(14) Such other documentation, certificates and opinions as VRA may reasonably require as set forth in Schedule 1.1.

(b) The initial purchasers of the Related Series of VRA Bonds have paid in full and VRA has accepted the purchase price for the Related Series of VRA Bonds on the Closing Date. It is understood that the sole source of funds to pay the Purchase Price is a portion of the proceeds of the Related Series of VRA Bonds.

ARTICLE IV USE OF PURCHASE PRICE

Section 4.1 Deposit of Purchase Price; Investment of Amounts in Local Account.

(a) On the Closing Date, VRA shall cause the Trustee to deposit the Purchase Price into the Local Account and to apply the Purchase Price and the earnings thereon as set forth in the Related Supplemental Series Indenture, this Agreement, the Local Master Indenture, and the Local Tax Document.

(b) The Local Government acknowledges and consents to the investment of the Purchase Price and the earnings thereon allocable to pay the Local Government's related costs of issuance, if any, in Virginia SNAP.

Section 4.2 Agreement to Accomplish Project. (a) The Local Government shall cause the Project to be acquired, constructed, expanded, renovated, equipped or financed as described in Exhibit B and in accordance with the Project Budget, this Agreement, the Local Tax Document and the plans, specifications and designs prepared by the Consulting Engineer and approved by the Local Government. The Local Government shall use its best efforts to complete, or cause to be completed, the Project by the date set forth in the certificate delivered under Section 3.4(a)(9). The Local Government shall obtain the approval of all applicable regulatory agencies of all plans, specifications and designs for the Project. The Local Government shall maintain complete and accurate books and records of the Project Costs and permit VRA or the Trustee through their representatives to inspect such books and records at any reasonable time.

(b) If requested by VRA, upon completion of the Project, the Local Government shall promptly deliver to VRA and the Trustee a certificate signed by a Local Representative and by the Consulting Engineer stating (i) that the Project has been completed substantially in accordance with this Article and in substantial compliance with all material applicable laws, ordinances, rules and regulations, (ii) the date of such completion and (iii) that all certificates of occupancy or other material permits then necessary for the use, occupancy and operation of the Related Financed Property have been issued or obtained. Such certificate shall be accompanied by a copy of the final requisition submitted to the Trustee pursuant to Section 4.3, including Schedule 1 thereto.

(c) If upon completion of the Project and payment of all related costs of issuance, there is a balance remaining in the Local Account, the Trustee shall apply any remaining balance at the written direction of the Local Government for previously-paid interest on the Local Bond or in such other manner that is permitted under the Act; provided that VRA shall be reasonably assured that such application will not have an adverse effect on the tax status of the Related Series of VRA Bonds.

Section 4.3 Disbursement of Purchase Price and Earnings. Except as provided in Section 4.2(c), the Local Government shall apply the amounts in the Local Account solely and exclusively to the payment or reimbursement of the Local Government for the Project Costs. Not more frequently than once per calendar month, the Trustee shall disburse amounts from the Local Account to the Local Government or as directed by the Local Government upon the Trustee's receipt of the following:

(a) A requisition (upon which the Trustee and VRA shall be entitled to rely) signed by a Local Representative and containing all information called for by, and otherwise being in the form of, Exhibit D (including the Schedules thereto).

(b) Receipts, vouchers, statements, bills of sale or other evidence of payment of the related Project Costs.

(c) If any requisition includes an item for payment for labor or to contractors, builders or materialmen:

(1) a certificate, signed by a Local Engineer, stating that such work was actually performed or such materials, supplies or equipment were actually furnished or installed in or about the construction of the Project; and

(2) a certificate, signed by a Local Representative (that may rely on representations of counsel or a title insurance agency reasonably acceptable to VRA), stating that no notice of any lien, right to lien or attachment upon, or claim affecting the right to receive payment of, any of the money payable under the requisition to any of the persons, firms or corporations named in it has been received, or if any notice of any such lien, attachment or claim has been received, such lien, attachment or claim has been released or discharged or will be released or discharged upon payment of the requisition.

(d) If any requisition includes an item for payment of the cost of acquisition of any lands or easements, or any rights or interests in or relating to lands, there shall also be attached to such requisition:

(1) a certificate, signed by a Local Engineer, stating that such lands, easements, rights or interests are being acquired and are necessary or convenient for the construction of the Project; and

(2) a certificate, signed by a Local Representative (that may rely on representations of counsel or a title insurance agency reasonably acceptable to VRA), stating that upon payment therefor the Local Government will have title in fee simple to, or easements, rights or interests sufficient for the purposes of, the Project over and through the subject lands.

Following VRA's approval of each such requisition and accompanying invoice(s) and certificate(s), which approval will not unreasonably be withheld, the Trustee shall pay the requisition from the Local Account in accordance with the instructions in such requisition.

The Local Government agrees that any amounts disbursed to it or for its account from the Local Account pursuant to this Section 4.3 will be (i) immediately applied to reimburse the Local Government for Project Costs it has already paid or (ii) actually spent to pay Project Costs not later than five banking days after receipt.

Section 4.4 Construction Contractors. The Local Government shall cause each general construction contractor employed in the accomplishment of the Project to furnish a performance bond and a payment bond each in an amount equal to 100% of the particular contract price. Such bonds must list the Local Government, VRA and the Trustee as beneficiaries. Neither VRA nor the Trustee shall make any claims or exercise any rights under such bonds unless and until an Event of Default occurs. The Local Government shall cause each contractor to maintain during the construction period covered by the particular construction contract builder's risk insurance, workmen's compensation insurance, public liability insurance, property damage insurance and vehicle liability insurance in amounts and on terms satisfactory to the Consulting Engineer.

Section 4.5 Disclaimer of Warranty. The Project is being undertaken at the Local Government's request and by the Local Government. VRA MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, WITH RESPECT TO THE MERCHANTABILITY, CONDITION OR FITNESS OF THE PROJECT OR OF THE RELATED FINANCED PROPERTY FOR THE LOCAL GOVERNMENT'S PURPOSES.

Section 4.6 No Sufficiency Warranty by VRA; Local Government Required to Complete Project. VRA makes no warranty, either express or implied, that the Purchase Price will be sufficient to pay all or any particular portion of the Project Costs. If the Purchase Price is not sufficient to pay in full the cost of the Project, the Local Government shall complete the Project at its own expense and shall not be entitled to any reimbursement therefor from VRA or any abatement, diminution or postponement of its payments under the Local Bond or this Agreement.

ARTICLE V PLEDGE AND SECURITY

Section 5.1 Pledge. As set forth in Section 712 of the Local Master Indenture, all Revenues derived from the ownership or operation of the System and all moneys in the funds established by the Local Master Indenture and enumerated in Section 712 are trust funds and are pledged to the payment of the Bonds issued under and as defined in the Local Master Indenture, including the principal of and interest on the Local Bond and the payment and performance of the Local Government's obligations under this Agreement.

Section 5.2 Rate Covenant. (a) The Local Government shall fix and collect rates, fees and other charges for the use of and for services furnished or to be furnished by the System, and will from time to time revise such rates, fees and other charges to the extent required to satisfy the revenue covenant in Section 702 of the Local Master Indenture.

(b) If, for any reason, the Net Revenues Available for Debt Service are insufficient to satisfy the covenant set forth in subsection (a), the Local Government shall (i) on its demand, pay to VRA a rate maintenance penalty fee in an amount of \$5,000 and (ii) within 90 days adjust and increase its rates, fees and other charges or reduce its Operating Expenses so as to provide sufficient Net Revenues Available for Debt Service to satisfy such requirement.

(c) On or before the last day of each Fiscal Year, the Local Government shall review the adequacy of its rates, fees and other charges for the next Fiscal Year, and, if such review indicates the Local Government's rates, fees and other charges will be insufficient to satisfy the rate covenant in subsection (a), the Local Government shall promptly take appropriate action to increase its rates, fees and other charges or reduce its Operating Expenses to cure any deficiency.

Section 5.3 Annual Budget of the System. Not less than 15 days before the first day of each Fiscal Year, the Local Government shall submit to its governing body and to VRA a copy of a preliminary annual budget, containing all information called for by, and otherwise being in the form of, Exhibit I to this Agreement, for such Fiscal Year setting forth a schedule of the rates, fees and other charges to be imposed by the Local Government, the Revenues estimated to be generated thereby and the expenditures anticipated by the Local Government for operations, maintenance, repairs, replacements, improvements, debt service and other purposes. The Local

Government shall adopt, prior to the first day of each Fiscal Year, a budget for such Fiscal Year. The Local Government shall ensure that the adopted budget contains the information required to be included in the preliminary budget. Such budget as approved by the Local Government's governing body is referred to in this Agreement as the Annual Budget. The Local Government may at any time during any Fiscal Year amend the Annual Budget for such Fiscal Year so long as such amendment does not result in an Event of Default. The Local Government shall promptly submit to VRA, in an electronic format, a copy of the Annual Budget and any amendments thereto.

Section 5.4 Qualified Independent Consultant's Report. (a) If at the end of any Fiscal Year, the Local Government is not in compliance with the rate covenant made by the Local Government in Section 5.2(a), within 210 days after the end of such Fiscal Year, the Local Government shall obtain a report from the Qualified Independent Consultant. The Local Government shall ensure that the report gives advice and makes recommendations as to the proper maintenance, repair, replacement and operation of the System for the next ensuing Fiscal Year and estimating the costs thereof as to the rates, fees, and other charges which should be established by the Local Government to satisfy the rate covenant in Section 5.2(a). The Local Government shall promptly furnish a copy of such report to VRA and, subject to Section 5.4(b), take measures to implement the recommendations of the Qualified Independent Consultant within 90 days of obtaining such report.

(b) If the Local Government determines that the Qualified Independent Consultant's recommendations are impractical or inappropriate, the Local Government may in lieu thereof adopt other procedures which the Local Government believes will bring it into compliance with the rate covenant made by the Local Government in Section 5.2(a) when such measures have been implemented and become fully effective. Such alternative plan shall be filed with VRA not later than 30 days after receipt of the Qualified Independent Consultant's report along with a detailed explanation of the Local Government's reason for rejecting the Qualified Independent Consultant's recommendations. Notwithstanding anything herein to the contrary, VRA reserves the right, in its sole discretion, to reject such alternate procedures and, to the extent permitted by law, require the Local Government to comply with the Qualified Independent Consultant's recommendations.

Section 5.5 Limitation on Amendments to Certain Documents. After the Sale Date, the Service Agreement shall not be terminated, permitted to lapse or amended in whole or in part without the prior written consent of the Local Trustee, Local Government, the City of Charlottesville, Virginia, the Albemarle County Service Authority and the Board of County Supervisors acting for and on behalf of Albemarle County. Any such consent shall be given in accordance with the Local Authorization and Local Master Indenture.

ARTICLE VI PAYMENT AND REDEMPTION OF LOCAL BOND

Section 6.1 Payment of Local Bond and Related Amounts. (a) Until the principal of and premium, if any, and interest on the Local Bond and all other amounts payable under this Agreement have been paid in full, the Local Government shall pay or cause to be paid from the Revenues to the Trustee or VRA, as applicable, the following amounts:

(1) to the Trustee, the amounts required by the Local Bond on such dates and in such manner as provided for in the Local Bond – the term "interest," as used in the Local Bond and this Agreement, includes Supplemental Interest, when and if payable;

(2) to the Trustee or to VRA, no later than 15 days after VRA provides notice to the Local Government, any amounts payable under the Local Tax Document, including without limitation the costs of any rebate calculation agent;

(3) to VRA, on its demand, a late payment penalty in an amount equal to 5.0% of the payment on the Local Bond not paid within five days after its due date;

(4) to the Trustee, the Local Government's share (as determined by VRA) of the annual fees and expenses of the Trustee, less the Local Government's share of the net earnings on the Revenue Fund, Infrastructure Revenue Debt Service Fund and Moral Obligation Debt Service Fund established under the Master Indenture (as determined by VRA), and the Local Government shall pay such amounts no later than 15 days after VRA or the Trustee sends to the Local Government a written bill for them; and

(5) to VRA, to the extent permitted by law, the reasonable costs and expenses, including reasonable attorneys' fees, if any, incurred by VRA in connection with (i) an Event of Default or default by the Local Government under this Agreement (ii) any amendment to or discretionary action that VRA undertakes at the request of the Local Government under this Agreement, any other document related to the Related Series of VRA Bonds or the Local Bond or (iii) any claim, lawsuit or other challenge to the Local Bond, the VRA Bonds or this Agreement that arises, at least in part, out of the Local Government's authorization of its issuance of the Local Bond, and the Local Government shall pay such amounts no later than 15 days after VRA or the Trustee sends to the Local Government a written bill for them.

(b) If any failure of the Local Government to pay all or any portion of any required payment of the principal of or premium, if any, or interest on the Local Bond results in a withdrawal from or a drawing on any VRA Reserve, the interest rates applicable to the Local Bond shall be increased to interest rates sufficient to reimburse the VRA Reserve for any foregone investment earnings on the funds withdrawn therefrom and pay any interest, fees or penalties assessed as a result of the withdrawal from or drawing on the VRA Reserve. The increment of interest payable pursuant to the increase in rates shall be referred to as "Supplemental Interest." The Local Government's obligation to pay Supplemental Interest shall commence on the date of the withdrawal or drawing of funds from the VRA Reserve occasioned by the Local Government's failure to pay a required payment or portion thereof as described above (the "Supplemental Interest Commencement Date"). The Local Government's obligation to pay Supplemental Interest shall terminate on the date on which the Local Government makes all payments required but outstanding since the date of the initial failure to pay (the "Supplemental Interest Termination Date"). From the Supplemental Interest Commencement Date to the Supplemental Interest Termination Date, Supplemental Interest shall be due and payable on the regularly scheduled interest payment dates provided for in the Local Bond. As soon as reasonably possible after the Supplemental Interest Commencement Date and before the next regularly scheduled interest payment date provided for in the Local Bond, VRA shall deliver to the Local Government a certificate as to the increase in

interest rates and the amount of Supplemental Interest. The certificate shall set forth in reasonable detail the basis for the increase in interest rates and the manner of calculation of the increase and the amount of Supplemental Interest. Such certificate shall be conclusive (absent manifest error) as to the interest rate increase and amount of Supplemental Interest set forth therein. In determining the interest rate increase and the amount of Supplemental Interest, VRA may use any reasonable averaging and attribution methods.

(c) The Local Government shall pay the amounts described above and make payments as scheduled under the Local Bond without any credit for any amount being withdrawn from or drawn on a VRA Reserve pursuant to the Master Indenture.

Section 6.2 Defeasance and Redemption of Local Bond. (a) The Local Government shall not defease or redeem the Local Bond (in whole or in part), except as provided in this Section 6.2.

(b) The Local Government shall satisfy the following conditions prior to the defeasance and redemption of the Local Bond:

(1) The Local Government shall provide to VRA not less than 60 days' prior written notice of the deposit of the funds described in (2), (3) and (4) below.

(2) The Local Government shall deposit with the Trustee an amount sufficient for VRA to establish an escrow of cash and non-callable, non-prepayable Government Obligations the principal of and interest on which will be sufficient (without reinvestment) to cause the defeasance under Article XII of the Master Indenture of the portion of the Related Portion of VRA Bonds corresponding to the portion of the Local Bond to be defeased or prepaid (the "Allocated Portion"). The defeasance of the Allocated Portion may be either to maturity or an earlier redemption date as determined by the Local Government.

(3) The Local Government shall deposit with VRA cash in an amount sufficient, as determined by VRA, to pay for a verification report required for the defeasance of the Allocated Portion under Article XII of the Master Indenture, any costs incurred by VRA in connection with the redemption, refunding and defeasance of the Allocated Portion, all amounts overdue or then due on the Local Bond (including, without limitation, any Supplemental Interest) and all amounts overdue, due or to become due under Section 6.1(a) of this Agreement.

(4) The Local Government shall deposit with VRA cash in an amount equal to the present value of interest that would be paid on the principal of the Allocated Portion at a rate equal to 0.125%, payable semiannually, to the maturity dates of the Allocated Portion or, if earlier, the redemption date or dates of the Allocated Portion. Present value shall be determined by using a discount rate equal to the true interest cost of the Related Portion of VRA Bonds.

(c) VRA will determine which Related Portion of VRA Bonds will be designated as the Allocated Portion and the amounts to be deposited under subsection (b)(2) and

(3) above using such reasonable allocation and estimation methods as may be selected by VRA, and VRA's determinations shall be conclusive (absent manifest error).

(d) The Local Government acknowledges that no funds in any VRA Reserve will be available to the Local Government for the defeasance or redemption of the Local Bond.

Section 6.3 Payments and Rights Assigned. The Local Government hereby consents to VRA's assignment to the Trustee of VRA's rights under this Agreement and the Local Bond. The Local Government also hereby acknowledges and consents to the reservation by VRA of the right and license to enjoy and enforce VRA's rights under the Local Bond and this Agreement so long as no Event of Default (as defined in the Master Indenture) with respect to the Related Series of VRA Bonds has occurred and is continuing. Even though VRA will be the registered owner of the Local Bond, the Local Government shall pay directly to the Trustee all amounts payable by the Local Government under the Local Bond and this Agreement (except for those amounts specifically indicated as payable to VRA under Section 6.1 or Section 11.8, which the Local Government shall pay directly to VRA).

Section 6.4 Obligations Absolute and Unconditional. The obligation of the Local Government to make the payments required by the Local Bond and this Agreement from the sources pledged therefor shall be absolute and unconditional. The Local Government shall pay all such amounts without abatement, diminution or deduction (whether for taxes or otherwise) regardless of any cause or circumstance whatsoever including, without limitation, any defense, set-off, recoupment or counterclaim that the Local Government may have or assert against VRA, the Trustee or any other person.

ARTICLE VII OPERATION AND USE COVENANTS

Section 7.1 Maintenance. At its own cost and expense the Local Government shall operate the System in a proper, sound and economical manner in compliance with all legal requirements and shall maintain the System in good repair and operating condition and from time to time shall make all necessary repairs, renewals and replacements.

Section 7.2 Additions and Modifications. At its own expense the Local Government from time to time may make any renewals, replacements, additions, modifications or improvements to the System that the Local Government deems desirable, provided that any such renewal, replacement, addition, modification or improvement does not (i) materially reduce the value of the System or (ii) negatively affect the structural or operational integrity of any part of the System. The Local Government shall ensure that all such renewals, replacements, additions, modifications or improvements comply with all applicable federal, state and local laws, rules, regulations, orders, permits, authorizations and requirements. All such renewals, replacements, additions, modifications and improvements shall become part of the System.

Section 7.3 Permits. The Local Government shall comply with Section 904 of the Local Master Indenture and shall, upon request, promptly furnish to VRA and the Trustee copies of all permits, consents and approvals referred to in Section 904 of the Local Master Indenture.

Section 7.4 Use. The Local Government shall comply with all lawful requirements of any governmental authority regarding the System, whether now existing or subsequently enacted, whether foreseen or unforeseen or whether involving any change in governmental policy or requiring structural, operational or other changes to the System, irrespective of the cost of making the same. The Local Government shall provide copies to VRA of all documents filed with the Trustee and the Local Trustee, and the Trustee and the Local Trustee shall provide copies to VRA of all documents filed with the Local Government.

Section 7.5 Inspection and Local Government's Books and Records. The Local Government shall permit VRA, the Trustee and their duly authorized representatives and agents such reasonable rights of access to the System as may be necessary to determine whether the Local Government is in compliance with the requirements of this Agreement, and the Local Government shall permit such parties, at all reasonable times and upon reasonable prior notice to the Local Government, to examine and copy the Local Government's books and records that relate to the System.

Section 7.6 Ownership. The Local Government shall not construct, reconstruct or install any part of the System on (i) lands other than those which the Local Government (a) owns, (b) can acquire title to or a perpetual easement over, (c) has a leasehold interest or similar contractual right from either one of its two Customers or the County of Albemarle, Virginia, or (d) has a ground leasehold interest, lease or license from UVA, in any case sufficient for the Local Government's purposes, or (ii) lands in which the Local Government has acquired a right or interest less than a fee simple or perpetual easement, unless (1) such part of the System is lawfully located in a public street or highway or (2) the Local Government provides a written opinion of counsel or a report of a Qualified Independent Consultant, either of which shall be in a form reasonably acceptable to VRA, that indicates that the lands and the Local Government's right or interest therein is sufficient for the Local Government's purposes.

Section 7.7 Sale or Encumbrance. No part of the System shall be sold, exchanged, leased, mortgaged, encumbered or otherwise disposed of except (i) with the written consent of VRA or (ii) as provided in Section 907 of the Local Master Indenture.

Section 7.8 Collection of Revenues. The Local Government shall use its best efforts to collect all rates, fees and other charges due to it, including, without limitation, the perfection of liens on premises served by the System for the amount of all delinquent rates, fees and other charges where such action is permitted by law, the Local Master Indenture and the Service Agreement. The Local Government shall, to the full extent permitted by law, discontinue and shut off, or cause to be discontinued and shut off, services and facilities of the System, and use its best efforts to cause to be shut off water service furnished otherwise than through the System, to customers of the System who are delinquent beyond any customary grace periods in the payment of rates, fees and other charges due to the Local Government.

Section 7.9 Intentionally Omitted.

Section 7.10 Intentionally Omitted.

Section 7.11 Intentionally Omitted.

Section 7.12 Lawful Charges. The Local Government shall pay when due all taxes, fees, assessments, levies and other governmental charges of any kind whatsoever (collectively, the "Governmental Charges") which are (i) assessed, levied or imposed against the System or the Local Government's interest in it, or (ii) incurred in the operation, maintenance, use and occupancy of the System. The Local Government shall pay or cause to be discharged, or shall make adequate provision to pay or discharge, all lawful claims and demands for labor, materials, supplies or other objects which, if unpaid, might by law become a lien upon all or any part of the System or the Revenues (collectively, the "Mechanics' Charges"). The Local Government, however, after giving VRA 10 days' notice of its intention to do so, at its own expense and in its own name, may contest in good faith any Governmental Charges or Mechanics' Charges. If such a contest occurs, the Local Government may permit the same to remain unpaid during the period of the contest and any subsequent appeal unless, in VRA's reasonable opinion, such action may impair the lien on Revenues granted by this Agreement, in which event, such Governmental Charges or Mechanics' Charges promptly shall be satisfied or secured by posting with the Trustee or an appropriate court a bond in form and amount satisfactory to VRA. Upon request, the Local Government shall furnish to VRA proof of payment of all Governmental Charges and Mechanics' Charges the Local Government is required to pay under this Agreement.

Section 7.13 Construction Contractors. (a) Except as provided in (b) below, the Local Government shall cause each general construction contractor who is employed in the accomplishment of the Project (or a portion thereof), to furnish a performance bond and a payment bond each in an amount equal to 100% of the particular contract price. Such bonds must list the Local Government, VRA and the Trustee as beneficiaries. Neither VRA nor the Trustee shall make any claims or exercise any rights under such bonds unless and until an Event of Default occurs. The Local Government shall maintain or cause each contractor to maintain during the construction period covered by the particular construction contract builder's risk insurance, workmen's compensation insurance, public liability insurance, property damage insurance and vehicle liability insurance in amounts and on terms satisfactory to the Consulting Engineer.

(b) For any general construction contractor who is employed in the accomplishment of the Project (or a portion thereof), and who is responding to bids issued prior to the date of this Agreement or who has otherwise entered into a contract or other agreement with the Local Government prior to the date of this Agreement, the provisions of (a) above shall not be required. However, to the extent payment and performance bonds are obtained, the Local Government shall apply proceeds thereof in accordance with Section 4.2.

Section 7.14 Engineering Services. The Local Government shall retain or employ a Consulting Engineer as provided in Section 906 of the Local Master Indenture.

ARTICLE VIII INSURANCE, DAMAGE AND DESTRUCTION

Section 8.1 Insurance. The Local Government shall maintain or cause to be maintained the insurance coverages required by Section 910 of the Local Master Indenture.

Neither VRA nor the Trustee shall have any responsibility or obligation with respect to (i) the procurement or maintenance of insurance or the amounts or the provisions with respect to policies of insurance or (ii) the application of the proceeds of insurance.

The Local Government shall provide annually to VRA a certificate or certificates of the respective insurers evidencing the fact that the insurance required by this Section is in force and effect.

Section 8.2 Requirements of Policies. The Local Government shall maintain all insurance required by Section 8.1 with generally recognized responsible insurance companies selected by the Local Government and reasonably acceptable to VRA. Such insurance may be written with deductible amounts comparable to those on similar policies carried by other utility systems of like size and character to the System. If the Local Government does not maintain such insurance with an insurer licensed to do business in Virginia or placed under the requirements of the Virginia Surplus Lines Insurance Law, Chapter 48, Title 38.2, Code of Virginia of 1950, as amended, or any successor statute, the Local Government shall provide evidence reasonably satisfactory to VRA that such insurance is enforceable under Virginia law.

Section 8.3 Notice of Damage, Destruction or Condemnation. In case of (i) any damage to or destruction of any material part of the System, (ii) a taking of all or any part of the System or any right in it under the exercise of the power of eminent domain, (iii) any loss of the System because of failure of title or (iv) the commencement of any proceedings or negotiations which might result in such a taking or loss, the Local Government shall notify VRA in writing within ten Business Days of the occurrence describing generally the nature and extent of such damage, destruction, taking, loss, proceedings or negotiations.

Section 8.4 Damage and Destruction. If all or any part of the System is destroyed or damaged by fire or other casualty, and the Local Government shall not have exercised its option, if such option is available, to redeem the outstanding Local Bond pursuant to Section 6.2, the Local Government shall restore promptly the property damaged or destroyed to substantially the same condition as before such damage or destruction, with such alterations and additions as the Local Government may determine and which will not impair the capacity or character of the System for the purposes for which it then is being used or is intended to be used. The Local Government may apply so much as may be necessary of the net proceeds of insurance received on account of any such damage or destruction to payment of the cost of such restoration, either on completion or as the work progresses. If such net proceeds are not sufficient to pay in full the cost of such restoration, the Local Government shall pay so much of the cost as may be in excess of such net proceeds.

Section 8.5 Condemnation and Loss of Title. If title to or the temporary use of all or any part of the System shall be taken under the exercise of the power of eminent domain or lost because of failure of title, and the Local Government shall not have exercised its option, if such option is available, to redeem the outstanding Local Bond pursuant to Section 6.2, the Local Government shall cause the net proceeds from any such condemnation award or from any title insurance to be applied to the restoration of the System to substantially its condition before the exercise of such power of eminent domain or failure of title. If such net proceeds are not sufficient

to pay in full the cost of such restoration, the Local Government shall pay so much of the cost as may be in excess of such net proceeds.

ARTICLE IX SPECIAL COVENANTS

Section 9.1 Tax Covenants. The Local Government shall not directly or indirectly use or permit the use of any of the proceeds of the Local Bond or any other of its funds, in such manner as would, or enter into, or allow any other person or entity to enter into, any arrangement, formal or informal, that would, or take or omit to take any other action that would, cause interest on any of the Related Series of VRA Bonds to be includable in gross income for federal income tax purposes or to become a specific item of tax preference for purposes of the federal alternative minimum tax. Insofar as the Local Tax Document imposes duties and responsibilities on the Local Government, including the payment of any arbitrage rebate in respect of the Related Series of VRA Bonds, as of the Closing Date they are specifically incorporated by reference into this Agreement. The Local Government also consents to the reasonable calculation of any "rebate amount" to be paid with respect to the Related Portion of VRA Bonds by a rebate calculation service selected by VRA.

Section 9.2 Maintenance of Existence. The Local Government shall maintain its existence as a public body corporate and politic and political subdivision of the Commonwealth of Virginia under Virginia law, and shall not dissolve or otherwise dispose of all or substantially all of its assets or consolidate or merge with or into another entity without VRA's prior written consent, which consent will not be unreasonably withheld.

Section 9.3 Financial Records and Statements. The Local Government shall maintain proper books of record and account in which proper entries shall be made in accordance with generally accepted government accounting standards, consistently applied, of all its business and affairs. The Local Government shall have an annual audit of the financial condition of the Local Government (and at the reasonable request of VRA, of the System) made in accordance with Section 911 of the Local Master Indenture; provided, however, that such annual audit shall be prepared within one hundred and eighty (180) days after the end of each Fiscal Year. The annual audit shall include a supplemental schedule demonstrating whether the Local Government satisfied the rate covenant set forth in Section 5.2 for such fiscal year. The Local Government shall furnish to VRA, in an electronic format, a copy of such report immediately after it is accepted by the Local Government. Such report shall include statements in reasonable detail, certified by such accountant, reflecting the Local Government's financial position as of the end of such Fiscal Year and the results of the Local Government's operations and changes in the financial position thereof for the Fiscal Year. The Local Government agrees to file, or to cause the Trustee to file, with VRA each of the documents required to be filed with the Local Trustee pursuant to the Local Master Indenture at the time each such document is required to be filed with the Local Trustee.

Section 9.4 Certification as to No Default and Tax Compliance. The Local Government shall deliver to VRA, within 180 days after the close of each Fiscal Year, a certification in substantially the form attached as Exhibit G and signed by a Local Representative.

Section 9.5 Notice of Issuance of Additional Bonds of Local Government. The Local Government agrees to notify VRA before the issuance of any Additional Bonds as defined in the Local Master Indenture. Notwithstanding anything else in this Agreement to the contrary, the Local Government may not issue Additional Bonds or any other obligations or indebtedness to refund or refinance some or all of the Local Bond without VRA's prior written consent.

Section 9.6 Further Assurances. The Local Government shall to the fullest extent permitted by law pass, make, do, execute, acknowledge and deliver such further resolutions, acts, deeds, conveyances, assignments, transfers and assurances as may be necessary or desirable for the better assuring, conveying, granting, assigning and confirming the rights and collateral, if any, assigned or pledged by this Agreement, or as may be required to carry out the purposes of this Agreement. The Local Government shall at all times, to the fullest extent permitted by law, defend, preserve and protect the pledges made under this Agreement and all rights of VRA under this Agreement against all claims and demands of all persons, including without limitation the payment of certain costs of VRA as described in Section 6.1(a)(5).

Section 9.7 Assignment by Local Government. The Local Government shall not assign its rights and obligations under the Local Bond or this Agreement, or both, without the prior written consent of VRA.

Section 9.8 Continuing Disclosure. (a) For purposes of this Section 9.8, the following terms and phrases have the following meanings:

"Annual Financial Information" with respect to any Fiscal Year for the Local Government means the following:

(i) the financial statements (consisting of at least a balance sheet and a statement of revenues and expenses) of the System ,which financial statements must be (A) prepared annually in accordance with generally accepted accounting principles in effect from time to time consistently applied (provided that nothing in this clause (A) will prohibit the Local Government after the date of this Agreement from changing such other principles so as to comply with generally accepted accounting principles as then in effect or to comply with a change in applicable law) and (B) audited by an independent certified public accountant or firm of such accountants in accordance with generally accepted auditing standards as in effect from time to time (provided that if audited financial statements are not available for filing when required by this Section or the Rule (as defined herein), unaudited financial statements will be filed and audited financial statements will be filed as soon as possible thereafter); and

(ii) operating data of the type set forth in Exhibit E.

"Dissemination Agent" means any person, reasonably acceptable to VRA, whom the Local Government contracts in writing to perform its obligations as provided in subsection (i) of this Section.

"Financial Obligation" means a (i) debt obligation; (ii) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt

obligation; or (iii) a guarantee of (i) or (ii). The term Financial Obligation does not include municipal securities as to which a final official statement has been otherwise provided to the MSRB under the Rule.

"Make Public" or "Made Public" has the meaning set forth in subsection (c) of this Section.

"Material Local Government" means the Local Government if the aggregate outstanding principal amount of the Local Bond and any other of the Local Government's local bonds purchased with proceeds of the VRA Bonds represent 15% or more of the outstanding aggregate principal amount of the local bonds and leases purchased with proceeds of the VRA Bonds.

"Rule" means Rule 15c2-12, as it may be amended from time to time, under the Securities Exchange Act of 1934 and any similar rules of the SEC relating to disclosure requirements in the offering and sale of municipal securities, all as in effect from time to time.

"SEC" means the U.S. Securities and Exchange Commission.

(b) The Local Government shall Make Public or cause to be Made Public:

(1) Within seven months after the end of the Local Government's Fiscal Year (commencing with the Fiscal Year in which the Closing Date occurs), Annual Financial Information for such Fiscal Year as of the end of which the Local Government constitutes a Material Local Government. Annual Financial Information may be set forth in the documents Made Public or may be included in a document Made Public by specific reference to any document available to the public on the internet website of the Municipal Securities Rulemaking Board ("MSRB") or filed with the SEC. If the document referred to is a final official statement, then it must be available from the MSRB.

(2) In a timely manner, notice of any failure by the Local Government to Make Public or cause to be Made Public Annual Financial Information pursuant to the terms of part (1) of this subsection.

(c) For purposes of this Section, information and notices shall be deemed to have been "Made Public" if transmitted to VRA, to the Trustee and to the MSRB in an electronic format as prescribed by the MSRB.

(d) The Local Government shall also notify VRA of the occurrence of any of the following events that may from time to time occur with respect to the Local Bond, such notice to be given in a timely manner not in excess of five Business Days after the occurrence of the event:

- (1) principal and interest payment delinquencies;
- (2) non-payment related defaults;
- (3) unscheduled draws on debt service reserves reflecting financial difficulties;

(4) unscheduled draws on any credit enhancement maintained with respect to the Local Bond reflecting financial difficulties;

(5) substitution of credit or liquidity providers, or their failure to perform;

(6) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701 – TEB) or other notices or determinations with respect to the Local Bond that could affect the tax status of the Related Series of VRA Bonds, or other events with respect to the Local Bond that could affect the tax status of the Related Series of VRA Bonds;

(7) modifications to rights of holders;

(8) bond calls and tender offers;

(9) defeasances;

(10) release, substitution, or sale of property securing repayment of the Local Bond;

(11) rating changes;

(12) bankruptcy, insolvency, receivership or similar event of the Local Government;

(13) the consummation of a merger, consolidation, or acquisition involving the Local Government or the sale of all or substantially all of the assets of the Local Government, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such action, other than pursuant to its terms;

(14) appointment of a successor or additional trustee for the Local Bond, if any, or the change of name of a trustee;

(15) the failure of the Local Government on or before the date required by this Agreement to provide Annual Financial Information to the persons and in the manner required by this Agreement;

(16) incurrence of a Financial Obligation of the Local Government, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Local Government, any of which affect security holders, if material; and

(17) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Local Government, any of which reflect financial difficulties.

(e) Additionally, upon request of VRA, the Local Government shall certify in writing that it has made all filings and disclosures required under this Section or any similar undertaking pursuant to the Rule.

(f) Notwithstanding anything in this Agreement to the contrary, the Local Government need not comply with the provisions of subsections (a) through (e) above unless and until VRA has notified the Local Government that it satisfied the objective criteria for a Material Local Government as of the end of VRA's immediately preceding fiscal year.

(g) (1) If the Local Government fails to comply with any covenant or obligation set forth in this Section, any holder (within the meaning of the Rule) of VRA Bonds then Outstanding may, by notice to the Local Government, proceed to protect and enforce its rights and the rights of the other holders by an action for specific performance of the Local Government's covenants or obligations set forth in this Section.

(2) Notwithstanding anything herein to the contrary, any failure of the Local Government to comply with any disclosure obligation specified in this Agreement (i) shall not be deemed to constitute an Event of Default under this Agreement and (ii) shall not give rise to any right or remedy other than that described in part (1) of this subsection.

(h) The Local Government may from time to time disclose certain information and data in addition to that required under this Section. Notwithstanding anything in this Agreement to the contrary, the Local Government shall not incur any obligation to continue to provide, or to update, such additional information or data.

(i) The Local Government may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligation to cause to be Made Public the information described in this Section and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. It is not necessary for purposes of this Article that the Dissemination Agent have any agency relationship with the Local Government for purposes of state law.

(j) All documents Made Public under this Section shall be accompanied by identifying information as prescribed by the MSRB.

Section 9.9 Other Indebtedness. The Local Government shall pay when due all amounts required by any other indebtedness of the Local Government and perform all of its obligations in connection with all other indebtedness of the Local Government.

Section 9.10 Additional Indebtedness. The Local Government shall not incur any indebtedness or issue any bonds, notes or other evidences of indebtedness secured by a pledge of Revenues, except Parity Debt or Subordinate Debt issued in accordance with the terms and conditions of the Local Master Indenture.

Section 9.11 Litigation; Material Change. The Local Government shall promptly notify VRA of (i) the existence and status of any litigation that general counsel to the Local Government determines is not reasonably certain to have a favorable outcome and which individually or in the aggregate could have a material adverse effect on the financial condition or

operations of the System or the Local Government's ability to perform its payment and other obligations under this Agreement or the Local Bond or (ii) any change in any material fact or circumstance represented or warranted in this Agreement.

ARTICLE X DEFAULTS AND REMEDIES

Section 10.1 Events of Default. Each of the following events is an "Event of Default":

(a) The failure to pay any installment of principal of or premium, if any, on the Local Bond when due (whether at maturity, by mandatory or optional redemption, by acceleration or otherwise).

(b) The failure to pay any installment of interest (including Supplemental Interest) on the Local Bond when due.

(c) The failure to make any other payment or deposit required by this Agreement within 15 days after its due date.

(d) The Local Government's failure to perform or observe any of the other covenants, agreements or conditions of the Local Bond or this Agreement and the continuation of such failure for a period of 60 days after written notice specifying such failure and requesting that it be cured is given to the Local Government by VRA, or, in the case of any such failure which cannot with diligence be cured within such 60-day period, the Local Government's failure to proceed promptly to commence to cure the failure and thereafter to prosecute the curing of the failure with diligence.

(e) Any warranty, representation or other statement by or on behalf of the Local Government contained in this Agreement or in any instrument furnished in compliance with or in reference to this Agreement or in connection with the issuance and sale of the Local Bond is false and misleading in any material respect.

(f) Any bankruptcy, insolvency or other similar proceeding shall be instituted by or against the Local Government under any federal or state bankruptcy or insolvency law and, if instituted against the Local Government, is not dismissed within 60 days after filing.

(g) Any proceeding shall be instituted, with the Local Government's consent or acquiescence, for the purpose of effecting a composition between the Local Government and its creditors or for the purpose of adjusting such creditors' claims under any federal or state statute now or hereafter enacted, if such claims are under any circumstances payable from the Revenues.

(h) An order or decree shall be entered, with the Local Government's consent or acquiescence, appointing a receiver or receivers of the System or any part of it or of the Revenues, or if such order or decree, having been entered without the Local Government's consent or acquiescence, shall not be vacated or discharged or stayed on appeal within 60 days after its entry.

(i) The occurrence of an Event of Default under and as defined by the Local Master Indenture or under the terms of any Subordinate Debt, the Prior Bonds, Existing Parity Bonds or Parity Bonds and the failure to cure such default or obtain a waiver thereof within any period of time permitted thereunder.

Section 10.2 Intentionally Omitted.

Section 10.3 Other Remedies. Upon the occurrence and continuation of an Event of Default, and subject to Article XI of the Local Master Indenture, VRA may proceed to protect and enforce its rights by mandamus or other action, suit or proceeding at law or in equity for specific performance of any agreement contained in the Local Bond, this Agreement or the Local Master Indenture. No remedy conferred by this Agreement upon or reserved to the registered owners of the Local Bond is intended to be exclusive of any other remedy, but each such remedy shall be cumulative and shall be in addition to any other remedy given to VRA under this Agreement or the Local Master Indenture or now or hereafter existing at law or in equity or by statute.

Section 10.4 Delay and Waiver. No delay or omission to exercise any right or power accruing upon any default or Event of Default shall impair any such right or power or shall be construed to be a waiver of any such default or Event of Default or acquiescence in it, and every such right and power may be exercised from time to time and as often as may be deemed expedient. No waiver of any default or Event of Default under this Agreement shall extend to or shall affect any subsequent default or Event of Default or shall impair any rights or remedies consequent to it.

**ARTICLE XI
MISCELLANEOUS**

Section 11.1 Intentionally Omitted.

Section 11.2 Successors and Assigns. This Agreement shall be binding upon, inure to the benefit of and be enforceable by the parties and their respective successors and assigns.

Section 11.3 Amendments. VRA and the Local Government shall have the right to amend from time to time any of this Agreement's terms and conditions, provided that all amendments shall be in writing and shall be signed by or on behalf of VRA and the Local Government. The Local Government may amend or modify its continuing disclosure obligations under Section 9.7 of this Agreement provided that such amendment or modification complies with the Rule, as determined by the opinion of bond counsel to VRA, as it exists at the time of modification.

Section 11.4 Limitation of Local Government's Liability. Notwithstanding anything in the Local Bond or this Agreement to the contrary, the Local Government's obligations hereunder and under the Local Bond are not its general obligations, but are limited obligations payable solely from the Revenues which are specifically pledged for such purpose. Neither the Local Bond nor this Agreement shall be deemed to create or constitute a debt or a pledge of the faith and credit of the Local Government and the Local Government shall not be obligated to pay the principal of or premium, if any, or interest on the Local Bond or other costs incident to them except from the Revenues and other funds pledged for such purpose. In the absence of fraud or intentional misconduct, no present or future director, official, officer, employee or agent of the Local

Government shall be liable personally to VRA in respect of this Agreement or the Local Bond or for any other action taken by such individual pursuant to or in connection with the financing provided for in this Agreement or the Local Bond.

Section 11.5 Applicable Law. This Agreement shall be governed by Virginia law.

Section 11.6 Severability. If any clause, provision or section of this Agreement shall be held illegal or invalid by any court, the illegality or invalidity of such clause, provision or section shall not affect the remainder of this Agreement which shall be construed and enforced as if such illegal or invalid clause, provision or section had not been contained in this Agreement. If any agreement or obligation contained in this Agreement is held to be in violation of law, then such agreement or obligation shall be deemed to be the agreement or obligation of VRA and the Local Government, as the case may be, only to the extent permitted by law.

Section 11.7 Notices. Unless otherwise provided for herein, all demands, notices, approvals, consents, requests, opinions and other communications under the Local Bond or this Agreement shall be in writing and shall be deemed to have been given when delivered in person or mailed by first class registered or certified mail, postage prepaid, addressed (a) if to the Local Government, at the address specified for notices on the signature page; (b) if to VRA, at 1111 East Main Street, Suite 1920, Richmond, Virginia 23219, Attention: Executive Director; or (c) if to the Trustee, at Three James Center, 1051 E. Cary Street, Suite 600, Richmond, Virginia 23219, Attention: Corporate Trust Department. A duplicate copy of each demand, notice, approval, consent, request, opinion or other communication given by any party named in this Section shall also be given to each of the other parties named. VRA, the Local Government and the Trustee may designate, by notice given hereunder, any further or different addresses to which subsequent demands, notices, approvals, consents, requests, opinions or other communications shall be sent or persons to whose attention the same shall be directed.

Section 11.8 Right to Cure Default. If the Local Government fails to make any payment or to perform any act required by it under the Local Bond or this Agreement, VRA or the Trustee, without prior notice to or demand upon the Local Government and without waiving or releasing any obligation or default, may (but shall be under no obligation to) make such payment or perform such act. All amounts so paid by VRA or the Trustee and all costs, fees and expenses so incurred shall be payable by the Local Government as an additional obligation under this Agreement, together with interest thereon at the rate of 15% per year until paid. The Local Government's obligation under this Section shall survive the payment of the Local Bond.

Section 11.9 Term of Agreement. This Agreement is effective as of the Effective Date. Except as otherwise specified, the Local Government's obligations under the Local Bond and this Agreement shall expire upon payment in full of the Local Bond and all other amounts payable by the Local Government under this Agreement.

Section 11.10 Assurance Regarding Tax Status. The Local Government agrees that VRA's process of determining its "reasonable assurance" that a particular action may have no adverse effect on the tax status of the Related Series of VRA Bonds may include obtaining an approving opinion of nationally-recognized bond counsel.

Section 11.11 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original and all of which together shall constitute but one and the same instrument.

[Signature Pages Follow]

WITNESS the following signatures, all duly authorized.

VIRGINIA RESOURCES AUTHORITY

By: _____
Shawn B. Crumlish, Executive Director

**RIVANNA WATER AND SEWER
AUTHORITY**

By: _____

Name: Michael Gaffney

Title: Chair

Address for Notices:

695 Moores Creek Lane
Charlottesville, Virginia 22902
Attention: Executive Director

The Trustee, by the execution hereof, accepts the duties imposed on it by this Agreement.

**U.S BANK TRUST COMPANY, NATIONAL
ASSOCIATION**, as Trustee

By: _____
Monique L. Green, Vice President

EXHIBIT A

FORM OF LOCAL BOND

Interest on this bond is not excludable from the gross income of the registered owner hereof for federal income tax purposes.

R-1

July 7, 2024

UNITED STATES OF AMERICA

COMMONWEALTH OF VIRGINIA

Rivanna Water and Sewer Authority

Taxable Regional Water and Sewer System Revenue Bond

Series 2024

Rivanna Water and Sewer Authority (the “Authority”), a public body politic and corporate and political subdivision of the Commonwealth of Virginia (the “Commonwealth”) duly created pursuant to the Virginia Water and Waste Authorities Act, Chapter 51, Title 15.2, Code of Virginia of 1950, as amended (the “Act”), for value received, acknowledges itself indebted and promises to pay to the Virginia Resources Authority, or its registered assigns or legal representative (“VRA”), the principal sum of _____ MILLION _____ HUNDRED _____ THOUSAND AND XX/100 DOLLARS (\$_____). Principal of this bond shall be payable in annual installments in the amounts and on the dates set forth in Schedule I attached hereto. Interest on this bond shall be payable on each April 1 and October 1, commencing October 1, 2024, computed on the basis of a 360-day year of twelve 30-day months at the rates set forth in Schedule I.

If any installment of principal of and interest on this bond is not paid to the registered owner of this bond within five days after its due date, the Authority shall pay to VRA a late payment charge in an amount equal to five percent (5%) of the overdue installment.

Subject to the provisions of the Local Bond Sale and Financing Agreement dated as of June 14, 2024 (the “Financing Agreement”), between VRA and the Authority, so long as this bond is held by or for the account of VRA or its registered assigns or legal representative, interest is payable by (i) check or draft mailed to the registered owner of this bond at the address that appears on the 15th day of the month preceding each interest payment date on the registration books kept by The Bank of New York Mellon Trust Company, N.A., as successor trustee (the “Trustee”), or (ii) wire transfer pursuant to the most recent wire instructions received by the Trustee from such registered owner. Principal of and premium, if any, and interest on this bond shall be payable in lawful money of the United States of America. In case the payment date on this bond shall not be a Business Day (as defined below), then payment of principal, premium, if any, and interest need not be made on such date, but may be made on the next succeeding Business Day, and, if made on such next succeeding Business Day, no additional interest shall accrue for the period after such

payment date. “Business Day” means any day on which commercial banking institutions generally are open for business in New York, New York, and Richmond, Virginia.

This bond is issued under an Agreement of Trust dated as of October 1, 1979 (the “Master Trust Agreement”), between the Authority and the Trustee, as supplemented and amended from time to time, and as further supplemented and amended by a Thirty-Third Supplemental Agreement of Trust dated as of [June 14, 2024] (collectively, the “Trust Agreement”), and is secured equally and ratably on a parity with the outstanding balance of the Authority’s Taxable Regional Water and Sewer System Revenue Bond, Series 2005A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2009A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2010A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2011A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2011B; its Taxable Regional Water and Sewer System Revenue Bond, Series 2011D; its Taxable Regional Water and Sewer System Revenue Bond, Series 2011E; its Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2012A; its Regional Water and Sewer System Revenue Bonds, Series 2012B; its Taxable Regional Water and Sewer System Revenue Bond, Series 2014A; its Taxable Regional Water and Sewer System Revenue Bond, Series 2015A; its Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2015B; its Regional Water and Sewer System Revenue Bond, Series 2016; its Taxable Regional Water and Sewer System Revenue Bond, Series 2018; its Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2019; and its Taxable Regional Water and Sewer System Revenue Bond, Series 2021 (collectively, the “Prior Bonds”), to the extent provided in the Trust Agreement and the Financing Agreement. Reference is made to the Trust Agreement for a description of the provisions, among others, with respect to the nature and extent of the security, the rights, duties and obligations of the Authority and the Trustee, the rights of the registered owner of this bond and the terms upon which this bond is issued and secured.

Additional bonds secured on a parity with this bond and the Prior Bonds may be issued on the terms provided in the Trust Agreement. This bond is authorized and issued pursuant to the Act and the Trust Agreement to finance the acquisition, construction and equipping of capital improvements to the System and to pay related costs of issuance. The Authority’s obligations under this bond shall terminate when all amounts due and to become due pursuant to this bond, the Financing Agreement and the Trust Agreement have been paid in full.

This bond is a limited obligation of the Authority and (except to the extent payment with respect to this bond shall be made from the proceeds from the sale of this bond or the income, if any, derived from the investment thereof) are payable solely from certain revenues to be derived from the ownership or operation of the System (as defined in the Trust Agreement), which serves, on a wholesale basis, the City of Charlottesville, Virginia, and the Albemarle County Service Authority, as the same may from time to time exist, certain pledged reserves, income from investments pursuant to the Trust Agreement and proceeds of insurance, which revenues and other moneys have been pledged pursuant to the Trust Agreement to secure payment thereof. This bond shall not be deemed to constitute a pledge of the faith and credit of the Commonwealth or any political subdivision thereof, including the Authority, the City of Charlottesville, Virginia, Albemarle County, Virginia, and the Albemarle County Service Authority (collectively, the “Political Subdivisions”).

Neither the Commonwealth nor any political subdivision thereof, including the Political Subdivisions, shall be obligated to pay the principal of this bond or other costs incident thereto except from the revenues pledged therefor, and neither the faith and credit nor the taxing power of the Commonwealth or any political subdivision thereof, including the Political Subdivisions, is pledged to the payment of the principal of or interest on this bond or other costs incident thereto. The Authority has no taxing power.

If any failure of the Authority to pay all or any portion of any required payment of the principal of or premium, if any, or interest on this bond results in a withdrawal from or a drawing on any VRA Reserve (as defined in the Financing Agreement), the interest rates applicable to this bond shall be increased to interest rates sufficient to reimburse the VRA Reserve for any foregone investment earnings on the funds withdrawn therefrom and pay any interest, fees or penalties assessed as a result of the withdrawal from or drawing on the VRA Reserve. The increment of interest payable pursuant to the increase in rates shall be referred to as "Supplemental Interest." The term "interest" as used in this bond shall include Supplemental Interest, when and if payable. The Authority's obligation to pay Supplemental Interest shall commence on the date of the withdrawal or drawing of funds from the VRA Reserve occasioned by the Authority's failure to pay a required payment or portion thereof as described above (the "Supplemental Interest Commencement Date"). The Authority's obligation to pay Supplemental Interest shall terminate on the date on which the Authority makes all payments required but outstanding since the date of the initial failure to pay (the "Supplemental Interest Termination Date"). From the Supplemental Interest Commencement Date to the Supplemental Interest Termination Date, Supplemental Interest shall be due and payable on the regularly scheduled interest payment dates provided for in this bond. As soon as reasonably possible after the Supplemental Interest Commencement Date and before the next regularly scheduled interest payment date provided for in this bond, VRA shall deliver to the Authority a certificate as to the increase in interest rates and the amount of Supplemental Interest. The certificate shall set forth in reasonable detail the basis for the increase in interest rates and the manner of calculation of the increase and the amount of Supplemental Interest. Such certificate shall be conclusive (absent manifest error) as to the interest rate increase and amount of Supplemental Interest set forth therein. In determining the interest rate increase and the amount of Supplemental Interest, VRA may use any reasonable averaging and attribution methods.

This bond is subject to prepayment to the extent and under the terms set forth in the Trust Agreement and the Financing Agreement. The optional redemption and notice provisions set forth in Sections 401 and 402 of the Master Trust Agreement shall not apply to this bond.

This bond is issued as a registered bond and may be transferred only in accordance with the provisions with respect thereto as provided in the Trust Agreement and the Financing Agreement.

The registered owner of this bond shall have no right to enforce the provisions of the Trust Agreement, to institute action to enforce the covenants therein, to take any action with respect to any Event of Default under the Trust Agreement or to institute, appear in or defend any suit or other proceeding with respect thereto, except as provided in the Trust Agreement. Modifications or alterations of the Trust Agreement, or of any supplement thereto, may be made only to the extent and in the circumstances permitted by the Trust Agreement.

Upon surrender of this bond at the corporate trust office of the Trustee in Pittsburgh, Pennsylvania, together with an assignment duly executed by the registered owner or his duly authorized attorney or legal representative in such form as shall be satisfactory to the Trustee, the Authority shall execute, and the Trustee shall authenticate and deliver in exchange, a new bond or bonds in the manner and subject to the limitations and conditions provided in the Trust Agreement, having an equal aggregate principal amount, in authorized denominations, of the same series, form and maturity, bearing interest at the same rate, and registered in names as requested by the then registered owner hereof or his duly authorized attorney or legal representative. Any such exchange shall be at the expense of the Authority, except that the Trustee may charge the person requesting such exchange the amount of any tax or other governmental charge required to be paid with respect thereto.

All acts, conditions and things required to happen, exist or be performed precedent to and in connection with the issuance of this bond have happened, exist and have been performed.

This bond shall not be valid until the Trustee shall have executed the Certificate of Authentication appearing hereon and inserted the date of authentication hereon.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Rivanna Water and Sewer Authority has caused this bond to be signed by its Chair or Vice Chair, its seal to be affixed hereto and attested by its Secretary-Treasurer, and this bond to be dated the date first above written.

RIVANNA WATER AND SEWER AUTHORITY

(SEAL)

By_____

ATTEST:

Secretary-Treasurer

CERTIFICATE OF AUTHENTICATION

Date Authenticated: [August 7, 2024]

This bond is the Series 2024 Bond described in the within-mentioned Trust Agreement.

**THE BANK OF NEW YORK
MELLON TRUST COMPANY, N.A.**

By _____
Authorized Signature

ASSIGNMENT

FOR VALUE RECEIVED the undersigned sell(s), assign(s) and transfer(s) unto

_(please print or typewrite name and address including postal zip code of Transferee)

PLEASE INSERT SOCIAL SECURITY OR OTHER
IDENTIFYING NUMBER OF TRANSFEREE

: :
: :
: :

the within bond and all rights thereunder, irrevocably constituting and appointing

_____,
Attorney, to transfer said bond on the books kept for the registration thereof, with full power of
substitution in the premises.

Dated: _____

Signature Guaranteed

NOTICE: Signature(s) must be
guaranteed by an Eligible Guarantor
Institution such as a Commercial
Bank, Trust Company, Securities
Broker/Dealer, Credit Union, or
Savings Association who is a member
of a medallion program approved by
The Securities Transfer Association, Inc.
Inc.

(Signature of Registered Owner)

NOTICE: The signature above must
correspond with the name of the
registered owner as it appears on the
front of this bond in every particular,
without alteration or enlargement
or any change whatsoever.

TRANSFER OF BOND

The transfer of this bond may be registered by the registered owner or its duly authorized attorney or legal representative upon presentation hereof to the Registrar who shall make note of such transfer in books kept by the Registrar for that purpose and in the registration blank below.

<u>Date of Registration</u>	<u>Name of Registered Owner</u>	<u>Signature of Registrar</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

SCHEDULE I

Installment Date (October 1)	Installment Amount	Interest Rate
	\$	%

EXHIBIT B

DESCRIPTION OF THE PROJECT

The Project consists of the acquisition, construction and equipping of various capital projects to the System included (or to be included) in the Local Government's five-year capital improvement plan, including, without limitation, (a) projects for the conveyance of water and wastewater, (b) treatment plant upgrades and (c) facility expansion improvements (collectively, the "Project"), together with related issuance expenses.

EXHIBIT C

**PENDING OR THREATENED ACTIONS, SUITS, PROCEEDINGS, OR
INVESTIGATIONS**

[None.]

EXHIBIT D
FORM OF REQUISITION

Requisition No.

Date: _____

U.S Bank Trust Company, National Association, as Trustee
Attention: Corporate Trust Department
Three James Center
1051 E. Cary Street
Suite 600
Richmond, Virginia 23219

Virginia Resources Authority
1111 East Main Street
Suite 1920
Richmond, Virginia 23219
Attention: Executive Director

This Requisition, including Schedule 1 and Schedule 2 hereto, is submitted in connection with the Local Bond Sale and Financing Agreement dated as of June 14, 2024 (the "Financing Agreement") between the Virginia Resources Authority and the Rivanna Water and Sewer Authority (the "Local Government"). Unless otherwise defined in this Requisition, each capitalized term used herein has the meaning given it under Article I of the Financing Agreement. The undersigned Local Representative hereby requests payment of the following amounts from the Local Account established for the Local Government in the 2024B Acquisition Fund established under the Fifty-Eighth Supplemental Series Indenture.

Payee (including wiring instructions if receiving electronic payment):

Address:

Amount to be paid:

Purpose (in reasonable detail) for which obligations(s) to be paid were incurred:

Attached on Schedule 2 are the wire instructions for this requisition, and also attached hereto is an invoice (or invoices) relating to the items for which payment is requested.

The undersigned certifies that (i) the amounts requested by this Requisition will be applied in accordance with the Local Tax Document and solely and exclusively to the payment, or the reimbursement of the Local Government for its payment, of Project Costs of the construction portion of the Project, (ii) no notice of any lien, right to lien or attachment upon, or claim affecting the right to receive payment of, any of the money payable under this Requisition to any of the persons, firms or corporations named in it has been received, or if any notice of any such lien, attachment or claim has been received, such lien, attachment or claim has been released or discharged or will be released or discharged upon payment of the Requisition, and (iii) this Requisition contains no items representing payment on account of any retained percentage entitled to be retained at this date.

If this Requisition includes payments for labor or to contractors, builders or materialmen, the attached Certificate of Consulting Engineer (Payments for Labor/Contractors) must be completed. If this Requisition includes payments for any lands or easements, or any rights or interest in or relating to lands, the attached Certificate of the Consulting Engineer (Land Interests) must be completed.

The Local Government has agreed in the Financing Agreement that any amounts it receives pursuant to this Requisition will be (i) immediately applied to reimburse the Local Government for Project Costs it has already paid or (ii) actually spent to pay Project Costs not later than five banking days after receipt.

Local Representative

SCHEDULE 1

Form to Accompany Requisition

Requisition # _____
Recipient: Rivanna Water and Sewer Authority – VRA 2024B
Local Representative: _____
Title: _____
Date: _____

<u>Cost Category</u>	<u>Total Project Cost</u>	<u>Previous Disbursements</u>	<u>Disbursement This Period</u>	<u>Disbursements to Date</u>	<u>Remaining Balance</u>
	\$	\$	\$	\$	\$
TOTALS	\$	\$	\$	\$	\$

SCHEDULE 2

Wire Instructions for Requisition

[To be provided by the Local Government]

**CERTIFICATE OF CONSULTING ENGINEER (PAYMENTS FOR
LABOR/CONTRACTORS)**

The undersigned Consulting Engineer for the Local Government hereby certifies that insofar as the amounts covered by this Requisition include payments for labor or to contractors, builders or materialmen, such work was actually performed or such materials, supplies or equipment were actually furnished or installed in or about the Project.

Date: _____, 20__

Consulting Engineer

CERTIFICATE OF CONSULTING ENGINEER (LAND INTERESTS)

The undersigned Consulting Engineer for the Local Government hereby certifies that insofar as the amounts covered by the Requisition include payments for land or easements, rights or interests in or relating to lands, (i) such lands, easements, rights or interests are being acquired and are necessary or convenient for the construction of the Project, and (ii) upon payment therefor the Local Government will have title in fee simple to, or easements, rights or interests sufficient for the purposes of, the Project over and through the subject lands.

Date: _____, 20__

Consulting Engineer

EXHIBIT E
OPERATING DATA

Description of Local Government. A description of the Local Government including a summary description of the System.

Debt. A description of the terms of the Local Government's outstanding debt including a historical summary of outstanding debt and a summary of annual debt service on outstanding debt as of the end of the preceding fiscal year. The annual disclosure should also include (to the extent not shown in the latest audited financial statements) a description of contingent obligations as well as pension plans administered by the Local Government and any unfunded pension liabilities.

Financial Information and Operating Data. Financial information for the System as of the end of the preceding fiscal year, including a description of revenues and expenditures, largest users, a summary of rates, fees and other charges of the System, and a historical summary of debt service coverage.

EXHIBIT F

FORM OF OPINION OF COUNSEL TO THE LOCAL GOVERNMENT

[Print on the Letterhead of Counsel for the Local Government]

August 7, 2024

Rivanna Water and Sewer Authority
Charlottesville, Virginia

The Bank of New York Mellon Trust
Company, N.A., as Trustee
Pittsburgh, Pennsylvania

Hunton Andrews Kurth LLP
Richmond, Virginia

Virginia Resources Authority
Richmond, Virginia

**Rivanna Water and Sewer Authority
Taxable Regional Water and Sewer System Revenue Bond
Series 2024**

Ladies and Gentlemen:

We have served as general counsel to Rivanna Water and Sewer Authority (the "Authority") in connection with the issuance and sale by the Authority of its \$_____ Taxable Regional Water and Sewer System Revenue Bond, Series 2024 (the "Bond").

As counsel to the Authority, we have examined, among other things, the following:

(a) The Virginia Water and Waste Authorities Act, Chapter 51, Title 15.2, Code of Virginia of 1950, as amended (the "Act").

(b) The Authority's Articles of Incorporation and By-Laws.

(c) Resolutions adopted by the Board of Directors of the Authority authorizing the execution of a Service Agreement between the Authority, the City of Charlottesville, Albemarle County Service Authority and the Board of County Supervisors of Albemarle County, acting for and on behalf of Albemarle County, dated as of June 12, 1973, as amended by Amendment No. 1 to Service Agreement dated October 27, 2015 and supplemented by (i) Joint Resolution adopted in January, 1983 (as such resolution was clarified by Resolution of the Albemarle County Service Authority dated March 17, 1983, and by Resolution of the Charlottesville City Council dated May 2, 1983, and modified by Joint Resolution adopted in December, 1983); (ii) Working Agreement on Urban Area Wholesale Flow Allocation and Billing Methodology dated January 24, 1983; (iii) Agreement dated October 26, 1987; (iv) Agreement dated June 29, 1990; (v) Memorandum dated December 15, 1993; (vi) Agreement dated December 1, 2003; (vii) Ragged Mountain Dam Project Agreement dated as of January 1, 2012; (viii) Water Cost Allocation Agreement dated as of

January 1, 2012; and (ix) Wastewater Projects Cost Allocation Agreement dated April 22, 2014 (as so amended and supplemented, the "Service Agreement").

(d) A resolution adopted by the Board of Directors of the Authority on May 28, 2024 (the "Resolution"), authorizing, among other things, the execution and delivery of:

(i) a Thirty-Third Supplemental Agreement of Trust dated as of [June 14, 2024] (the "Thirty-Third Supplemental Agreement"), between the Authority and The Bank of New York Mellon Trust Company, N.A., New York, New York, as successor trustee (the "Trustee"), providing for the security and form of the Bond as an additional bond pursuant to an Agreement of Trust between the Authority and the Trustee dated as of October 1, 1979, as previously supplemented and amended (together with the Thirty-Third Supplemental Agreement, the "Trust Agreement"), to provide funds to be used, together with other available funds, to finance the acquisition, construction and equipping of improvements to the Authority's regional water and sewer system (the "System"); and

(ii) a Local Bond Sale and Financing Agreement dated as of June 14, 2024 (the "Financing Agreement"), between the Authority and the Virginia Resources Authority.

(e) Executed counterparts of the Financing Agreement, the Service Agreement and the Trust Agreement.

As to questions of fact material to this opinion, we have relied upon representations of the Authority contained in the Trust Agreement and the Financing Agreement, certifications of public officials furnished to us, and certifications and representations contained in certificates of the Authority and others delivered at the closing. We have assumed that all signatures on documents, certificates, and instruments examined by us are genuine, all documents, certificates, and instruments submitted to us as originals are authentic, and all documents, certificates, and instruments submitted to us as copies conform to the originals. In addition, we have assumed that all documents, certificates, and instruments relating to this financing have been duly authorized, executed, and delivered by all parties other than the Authority, and we have further assumed the due organization, existence, and powers of such other parties.

Whenever the phrase "to the best of our knowledge" is used herein, it refers to the actual knowledge of the attorneys of this firm involved in the representation of the Authority for the purposes of this transaction.

Based on the foregoing and such other information and documents as we consider necessary for rendering this opinion, we are of the opinion that:

1. The Authority was created pursuant to the Act, is validly existing and in good standing under the Act, and pursuant to the Act, has all necessary power and authority to (a) operate the System, (b) fix, charge and collect rates, fees and other charges for the use of the System, and (c) enter into and perform its obligations under the Financing Agreement, the Service Agreement and the Trust Agreement and to issue and sell the Bond. To the best of our knowledge, the Authority has not instituted any dissolution proceedings pursuant to Section 15.2-5109 of the Act.

2. The Financing Agreement, the Service Agreement and the Trust Agreement have been duly authorized, executed and delivered by the Authority, and assuming their due authorization, execution and delivery by the other parties to them, are in full force and effect and constitute valid and legally binding limited obligations of the Authority, enforceable against the Authority in accordance with their terms.

3. The Bond has been duly authorized, executed and delivered by the Authority.

4. The enforceability of the obligations of the Authority with respect to the documents described above is subject to the provisions of bankruptcy, insolvency, reorganization, moratorium and similar laws, now or hereafter in effect, relating to or affecting the enforcement of creditors' rights generally. The enforceability of the obligations is also subject to usual equitable principles which may limit the specific enforcement of certain remedies.

5. The authorization, execution and delivery of the Bond, the Financing Agreement, the Service Agreement and the Trust Agreement and compliance with their provisions are within the powers of the Authority under the Act and do not and will not conflict with or constitute a violation of, breach of or default under (a) the Articles of Incorporation or By-Laws of the Authority, (b) any federal or Virginia constitutional provision or any other provision of Virginia law, including, but not limited to, the Act, or, (c) to the best of our knowledge (i) any agreement or other instrument to which the Authority is a party or by which the Authority is bound, or (ii) any order, rule or regulation of any court or governmental agency or body having jurisdiction over the Authority or any of its properties.

6. There is no litigation at law or in equity or any proceeding before any governmental agency pending or, to the best of our knowledge, threatened (a) with respect to (i) the organization or existence of the Authority, (ii) its authority to execute and deliver the Bond, the Financing Agreement, the Service Agreement or the Trust Agreement, (iii) the validity or enforceability of any of such instruments or the transactions contemplated by them, (iv) the title of the officers who executed such instruments, (v) any authority or proceedings relating to the execution and delivery of any of such instruments by the Authority, (vi) the ability of the Authority to fix, charge and collect charges under the Act and as provided in the Financing Agreement, the Service Agreement and the Trust Agreement, or (vii) the ability of the Authority to undertake the Project (as defined in the Financing Agreement) or (b), except as disclosed in Section 2.2(k) of the Financing Agreement, in which a judgment, order or resolution would reasonably be expected to have a material adverse effect on the Authority or its business, assets, condition (financial or otherwise), operations or prospects or its ability to perform its obligations under the Financing Agreement, the Trust Agreement or the Bond.

7. To the best of our knowledge, there have been obtained all consents, approvals, authorizations and orders of governmental or regulatory authorities, if any, which are required to be obtained by the Authority as conditions precedent to the execution and delivery of the Financing Agreement, the Service Agreement and the Trust Agreement.

The foregoing opinions are being furnished only to the addressees and only in connection with the financing referred to in the first paragraph of this opinion letter and this opinion letter is not to be furnished to any other person or entity or used or relied upon by any other person or for any other purpose without our prior written consent.

Very truly yours,

EXHIBIT G

FORM OF CERTIFICATION AS TO NO DEFAULT AND TAX COMPLIANCE

[DATE]

[Insert Name]

Compliance & Financial Analyst
Virginia Resources Authority
1111 East Main Street, Suite 1920
Richmond, VA 23219

Dear [Mr./Ms.] _____:

In accordance with Section 9.4 of the Local Bond Sale and Financing Agreement dated as of June 14, 2024 (the "Financing Agreement") between Virginia Resources Authority and the Rivanna Water and Sewer Authority (the "Local Government"), I hereby certify that, during the fiscal year that ended June 30, _____, and through the date of this letter:

1. [No event or condition has happened or existed, or is happening or existing, which constitutes, or which, with notice or lapse of time, or both, would constitute, an Event of Default as defined in Section 10.1 of the Financing Agreement.] [If an Event of Default has occurred, please specify the nature and period of such Event of Default and what action the Local Government has taken, is taking or proposes to take to rectify it].
2. [The ownership and status of the Related Financed Property in whole or in part has not changed since the Closing Date.] [If untrue, please describe.]
3. [Neither the Related Financed Property nor any portion thereof is being used by a Nongovernmental Person pursuant to a lease, an incentive payment contract or a take-or-pay or other output-type contract.] [If untrue, please describe.]
4. [Neither the Related Financed Property nor any portion or function thereof is being used pursuant to or is otherwise subject to a Service Contract that does not satisfy the requirements of Revenue Procedure 2017-13.] [If untrue, please describe.]
5. [Other than as may be described in paragraphs 2, 3 and 4 above, neither the Related Financed Property nor any portion or function thereof nor any portion of the Proceeds is being used for a Private Business Use.] [If untrue, please describe.]
6. [The Local Government has not used or permitted the use of any Proceeds of the Local Bond directly or indirectly to make a loan to an ultimate borrower other than itself within the meaning of Section 4.3 of the Local Tax Document.] [If untrue, please describe.]

7. [Other than any amounts described in the Local Tax Document (as defined in the Financing Agreement), between VRA and the Local Government and amounts that may constitute or be on deposit in a Bona Fide Debt Service Fund, there neither have been nor are now any monies, securities, obligations, annuity contracts, residential rental property, AMT Bonds, investment-type property, Sinking Funds, Pledged Funds, or other Replacement Proceeds accumulated or held or pledged as security by the Local Government or any other Substantial Beneficiary of the Local Bond as security for or the direct or indirect source of the payment of the principal of or interest on the Local Bond.] [If untrue, please describe.]
8. [The Local Government is in compliance with the recordkeeping requirements of Section 4.8 of the Local Tax Document.] [If untrue, please describe.]
9. [Other than as may be described above, the Local Government is not in default of any of its obligations under the Local Tax Document.] [If untrue, please describe.]
10. Unless otherwise defined herein, each capitalized term used herein has the meaning set forth in the Local Tax Document.

Sincerely,

[Insert Name]
Local Representative

EXHIBIT H
DESCRIPTION OF SPECIAL USE ARRANGEMENTS

None.

EXHIBIT I
FORM OF ANNUAL BUDGET

[DATE]

Compliance and Financial Analyst
Virginia Resources Authority
1111 East Main Street, Suite 1920
Richmond, VA 23219

Ladies and Gentlemen:

Pursuant to the Financing Agreement[s] between Virginia Resources Authority and the Rivanna Water and Sewer Authority, dated as of [add dates of all outstanding Financing Agreements], a copy of the fiscal year [20xx] annual budget is enclosed. Such annual budget provides for the satisfaction of the rate covenant as demonstrated below.

Revenues	Operation & Maintenance Expenses	Net Revenues Available for Debt Service (Revenues – O&M Expenses)	Debt Service	*Coverage (Net Revenues Available for Debt Service/Debt Service)
-----------------	---	---	---------------------	---

Unless otherwise defined herein, the capitalized terms used in this Certificate shall have the meanings set forth in the Financing Agreement[s].

Very truly yours,

By: _____

Its: _____

EXHIBIT J

EXISTING PARITY BONDS

1. Taxable Regional Water and Sewer System Revenue Bond, Series 2005A
2. Taxable Regional Water and Sewer System Revenue Bond, Series 2009A
3. Taxable Regional Water and Sewer System Revenue Bond, Series 2010A
4. Taxable Regional Water and Sewer System Revenue Bond, Series 2011A
5. Taxable Regional Water and Sewer System Revenue Bond, Series 2011B
6. Taxable Regional Water and Sewer System Revenue Bond, Series 2011D
7. Taxable Regional Water and Sewer System Revenue Bond, Series 2011E
8. Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2012A
9. Regional Water and Sewer System Revenue Bonds, Series 2012B
10. Taxable Regional Water and Sewer System Revenue Bond, Series 2014A
11. Taxable Regional Water and Sewer System Revenue Bond, Series 2015A
12. Taxable Regional Water and Sewer System Revenue and Refunding Bond, Series 2015B
13. Regional Water and Sewer System Revenue Bond, Series 2016
14. Taxable Regional Water and Sewer System Revenue Bond, Series 2018
15. Taxable Regional Water and Sewer System Revenue Refunding Bond, Series 2019
16. Taxable Regional Water and Sewer System Revenue Bond, Series 2021

SCHEDULE 1.1

FINAL TERMS

Total Related Series of VRA Bonds \$ _____

Principal Amount of Local Bond \$ _____

Purchase Price* \$ _____

* The Purchase Price was determined as follows: by adding to the Related Portion of VRA Bonds (\$_____), the Local Government's share of the net premium on the Related Series of VRA Bonds (\$_____) and by subtracting from the Related Portion of VRA Bonds the Local Government's share of VRA's Expenses set forth in Section 3.2 (\$_____) and the Local Government's share of the deposit on the Closing Date to a VRA Reserve (\$_____).

ADDITIONAL CONDITIONS PRECEDENT TO PURCHASE OF LOCAL BOND:

[None.]

**ADDITIONAL CONDITIONS PRECEDENT TO FIRST REQUISITION OF PROCEEDS
OF LOCAL BOND:**

[None.]

PROJECT BUDGET

Rivanna Water & Sewer Authority Sources and Uses of Funds

Sources

Par Amount	\$ _____
Premium (Discount)	_____
Estimated Earnings*	_____
Total Sources	\$ _____

Uses

[Conveyance of water and wastewater projects	\$ _____
Treatment plant upgrades	_____
Facility expansion improvements]	_____
Local Costs of Issuance	_____
CRF Equity Contribution	_____
VRA Costs of Issuance	_____
Underwriter's Discount	_____
Additional Proceeds / Contingency	_____
Total Uses	\$ _____

** based on draw schedule provided with VPFP 2024B application and the Virginia SNAP 7-Day rate as of ____/____/2021*

INTEREST RATES AND PAYMENT SCHEDULE FOR LOCAL BOND

Buck Mountain Property Update and Sale of 1706 Buck Mtn Road



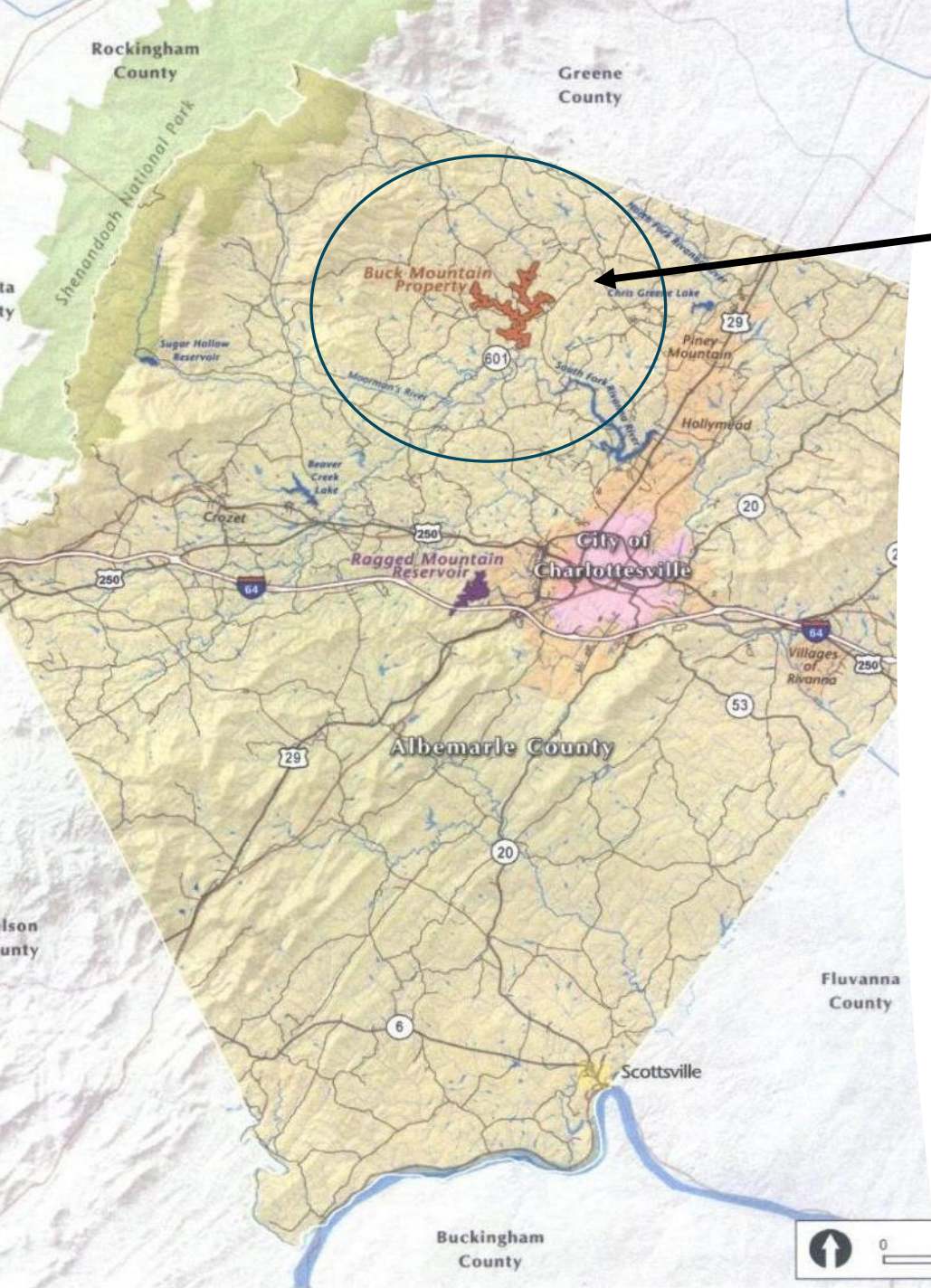
BETHANY HOUCHENS

WATER RESOURCES COORDINATOR

BOARD OF DIRECTORS MEETING

MAY 28, 2024

Buck Mountain Property



1,312 Acres



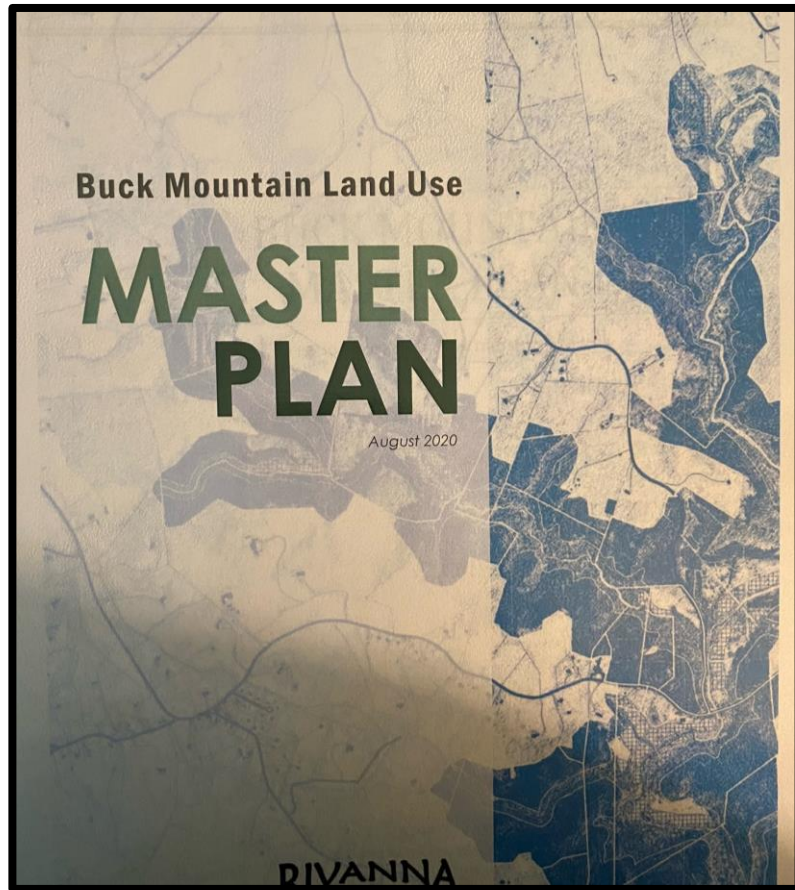
Deed Restrictions on
600 Acres



38 Parcels

Buck Mountain Master Plan

Completed 2020



- History
- Site Description
- Land Use and Regulatory Constraints
- Infrastructure
- Property Management

Leased property information

- ▶ 21 Parcels total
- ▶ ~735 Acres
- ▶ ~\$11,500 / year



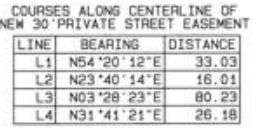
RWSA Property on Catterton Road

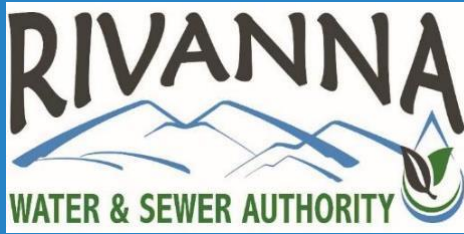
Buck Mtn Sale Criteria and Procedure ~ 2022

- Only property above elevation 474 feet, the planned normal pool elevation of the reservoir, plus a 10 foot (vertical) high water buffer will be considered for any sale.
- Offer any property for sale to the public through a sealed bidding process at a minimum fair market value.
- Conduct a Public Hearing by the Board before executing a contract with the highest responsive bidder.



- Original property 9 Acres
- Completed a division of the property and sold 2.2 acres & House for \$136,501 in 2022





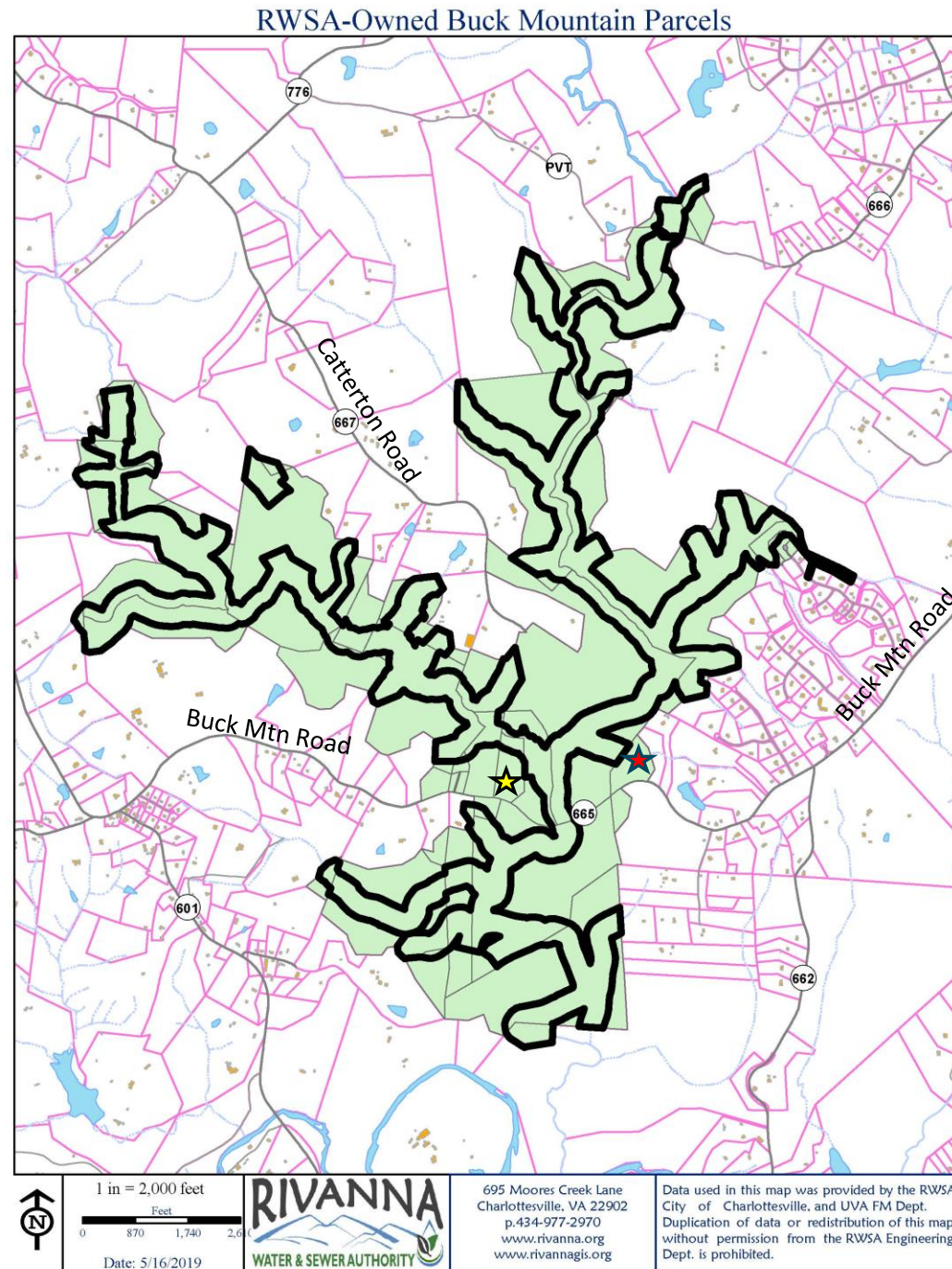
1706 Buck Mountain Rd

Purchased in 1985

\$67,500

6.88 acres

Life estate for prior owners



1706 Buck Mountain Rd

- Built in 1966
- 1,050 SF
- 3 bedrooms
- Unfinished basement
- 2024 Albemarle Assessment
 - Land \$138,700
 - House \$156,300

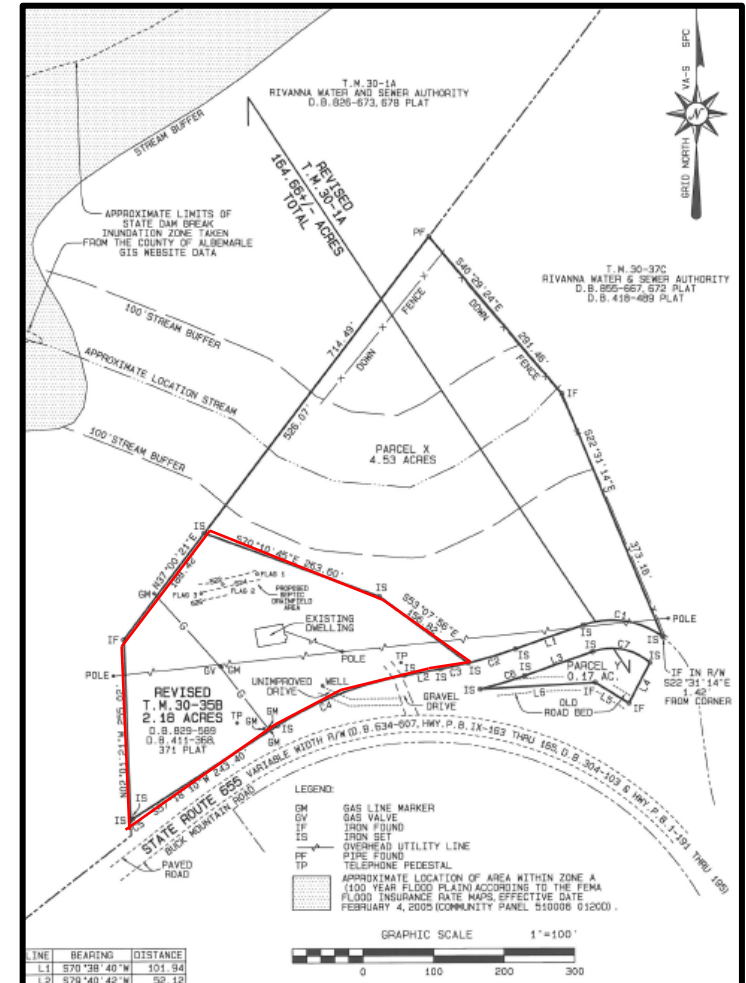


Strategy: 1706 Buck Mountain Road

- Subdivide property and sell house with ~2.18 acres



Proposed divided plat



A wide-angle landscape photograph showing a lush green field in the foreground, a line of trees in the middle ground, and distant mountains under a sky filled with white and grey clouds. The word "Questions?" is superimposed in the upper left area of the image.

Questions?

RWSA Property on Catterton Road