



# Board of Directors Meeting

August 22, 2023

2:15pm



695 Moores Creek Lane | Charlottesville, Virginia 22902-9016

434.977.2970



434.293.8858



www.rivanna.org



## BOARD OF DIRECTORS

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

**DATE:** AUGUST 22, 2023

**LOCATION:** Conference Room, Administration Building  
695 Moores Creek Lane, Charlottesville, VA

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

### AGENDA

1. **CALL TO ORDER**
2. **AGENDA APPROVAL**
3. **MINUTES OF PREVIOUS BOARD MEETING ON JULY 25, 2023**
4. **ELECTION OF VICE CHAIR**

*Mr. Gaffney is currently the Chair and Mr. Richardson is the Secretary-Treasurer. The position of Vice Chair has been vacant since the departure of Mr. Rogers on July 31, 2023.*

*A motion, second and vote would be in order to elect a new Vice Chair effective immediately for the term ending on April 30, 2024.*

5. **RECOGNITION**
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 Engineering Services – Crozet GAC Expansion Phase I – Short Elliott Hendrickson, Inc.*
- h. Approval of Engineering Services – Observatory Water Treatment Plant – Expansion and Rehabilitation Project – Additional Construction Phase Services – Short Elliott Hendrickson Inc.*
- i. Approval of Engineering Services – Beaver Creek Raw Water Pump Station and Intake – Hazen and Sawyer*

#### **10. OTHER BUSINESS**

- a. Presentation: Urban Water Supply and Demand Review  
Jennifer Whitaker, Director of Engineering and Maintenance*
- b. Presentation: Wastewater Facilities Review  
David Tungate, Director of Operations and Environmental Services*

#### **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**  
**July 25, 2023**

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, July 25, 2023 at 2:15 p.m. at the Conference Room of the Administration Building at 695 Moores Creek Lane, Charlottesville, Virginia.

**Board Members Present:** Mike Gaffney, Jeff Richardson, Lauren Hildebrand, Gary O'Connell (participated remotely until approximately 3:00 p.m. when disconnected due to technical difficulties), Ann Mallek, Brian Pinkston, Michael Rogers (arrived at approximately 3:00 p.m.).

**Board Members Absent:** None.

**Rivanna Staff Present:** Bill Mawyer, Lonnie Wood, Jennifer Whitaker, David Tungate, Deborah Anama, John Hull, Andrea Bowles, Betsy Nemeth, Austin Marrs.

**Attorney(s) Present:** Valerie Long.

**1. CALL TO ORDER**

Mr. Gaffney called the July 25, 2023, regular meeting of the Rivanna Water and Sewer Authority to order at 2:15 p.m.

Mr. Gaffney stated that Mr. Gary O'Connell was participating remotely.

Ms. Valerie Long stated that pursuant to the Authority's remote participation policy adopted last November, Mr. O'Connell had satisfied the requirements of the code in terms of notifying the Chair in advance of his need or desire to participate remotely due to a family matter. She stated that the policy also required Mr. O'Connell to state a general description of the location where he was participating from and the reason he was participating remotely, and there would be a simple vote afterwards to approve or deny that request.

Mr. O'Connell stated he was located at 1720 Yorktown Drive. He stated that he was unable to be at the Board meeting because he had a family event.

**Ms. Mallek moved to allow Mr. O'Connell to participate remotely in the RWSA meeting. Ms. Hildebrand seconded the motion, which passed unanimously (5-0). (Mr. Rogers was absent.)**

**2. AGENDA APPROVAL**

**Ms. Mallek moved to approve the agenda as presented. Mr. Pinkston seconded the motion, which passed unanimously (6-0). (Mr. Rogers was absent.)**

**3. MINUTES OF PREVIOUS BOARD MEETING ON JUNE 27, 2023**

47  
48 **Ms. Mallek moved to approve the minutes of the June 27, 2023 Board of Directors meeting.**  
49 **Mr. Pinkston seconded the motion, which passed unanimously (6-0). (Mr. Rogers was**  
50 **absent.)**  
51

52 **4. RECOGNITION (presented at end of meeting)**

53 *Resolution of Appreciation for Mr. Michael Rogers*  
54

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

56 Mr. Mawyer stated that the first item of his report was to recognize Mr. Lonnie Wood, Director  
57 of Finance and Information Technology, and to congratulate him and his staff for receiving the  
58 Government Finance Officers Association of the United States and Canada Certificate of  
59 Achievement for Excellence in Financial Reporting. He stated that Mr. Wood informed him that  
60 he had received it every year he had been employed with the Authority, which was 24 years in a  
61 row.  
62

63 Mr. Gaffney stated that he had been at the Authority for 21 years, and the one thing they never  
64 had to worry about was finances. He stated that Mr. Wood was spot-on and so professional  
65 throughout the entire time.  
66

67 Mr. Mawyer stated that they had issued a media release which had been sent to all Board  
68 members, that they had detected PFAS at the North Rivanna Water Treatment Plant. He stated  
69 that samples were taken on May 24, the sample results came back around July 5, and on July 6  
70 they shut down the North Rivanna Water Treatment Plant because two PFAS contaminants were  
71 detected, PFOA and PFOS. He stated that while they were at relatively low levels, the levels  
72 exceeded the EPA's recommended standards. He clarified that the EPA standard was 4 parts per  
73 trillion, and they had test results of 6.5 and 25 parts per trillion.  
74

75 Mr. Mawyer stated that they closed the plant on July 6, and forwarded additional water samples  
76 to a testing lab in Michigan on July 7. They also forwarded additional water samples to the  
77 same lab that did the first test from Indiana on July 10. On Friday, July 21, they received the test  
78 results from Michigan stating that there was no detection of any PFAS in the water at the North  
79 Rivanna Water Treatment Plant. He stated that they restored water production at the North  
80 Rivanna Water Treatment Plant on Saturday, July 22. He stated that they would get test results  
81 from the Indiana lab in two to three weeks.  
82

83 Mr. Mawyer stated that in addition, they would be doing almost monthly testing of the raw water  
84 from the North Rivanna River and the finished water from the North Rivanna Water Treatment  
85 Plant, to detect any PFAS components. He stated that they were exploring as best they could to  
86 find where the PFAS may have come from. It could have come from many different sources. He  
87 stated that they were looking at any potential biosolids land application that may have been in the  
88 watershed of the North Rivanna River.  
89

90 Mr. Mawyer stated that the watershed of the North Rivanna River was in Albemarle, Greene, and  
91 Orange Counties, and their Water Resources Manager had looked at all the licensed land  
92 application sites in Albemarle County, and none of them had received a land application of  
93 biosolids in the last five years. He stated that she was working up the watershed to see if there

94 may be any other land applications that could have been completed before a recent rain event,  
95 with the possibility that the rain may have washed biosolids into the river, then to the water  
96 treatment plant.

97  
98 Mr. Mawyer stated that the Western Virginia Water Authority in Roanoke had a high level of  
99 PFAS and found it was from a company that was washing industrial equipment and emptying the  
100 wastewater containing PFAS into the Roanoke River, which they pumped out of the river into  
101 the Spring Hollow Reservoir. He stated that Rivanna staff were doing their best to track the  
102 source, but they were pleased to reopen the North Rivanna plant, and wanted to reassure the  
103 public that the water was being tested and met all the Virginia Department of Health standards.  
104 He stated that they had been communicating with the Department of Health throughout this  
105 process about closing and reopening the plant.

106  
107 Mr. Pinkston stated that he had some concerns. He stated that they wanted their water to meet all  
108 of the specifications, but one of his concerns was that 4 parts per trillion was a very miniscule  
109 amount, so there may be bad effects on people's health. He stated that he was not arguing with  
110 what the specs were, but was wondering if they should think about the reliability of the testing  
111 protocol. He asked if two separate tests indicated a problem.

112  
113 Mr. Mawyer stated that one test indicated a problem, and they did two retests. He stated that they  
114 had received one test result back that stated there was no PFAS detected, but they had not gotten  
115 the second test results back.

116  
117 Mr. Pinkston asked if they could find a closer testing laboratory if it were a requirement they  
118 were forced to comply with, and also if they could find a way to turn these results around more  
119 quickly. He stated that he was concerned that they shut down a large amount of water, so what if  
120 they had something similar happen at the South Rivanna water treatment plant. He stated that  
121 maybe it turned out to be a fluke in the data. He stated that it was not like measuring turbidity or  
122 something else, this was something explicitly precise. He stated that he did not have any  
123 answers, and he understood this was a new issue that they were being asked to track and had  
124 model recommendations. He asked if there were any sort of parameters that would help them  
125 think through this the next time it came up.

126  
127 Mr. Mawyer stated that there was no private laboratory in the state of Virginia that was certified  
128 by the EPA to run these special tests. He stated that as Mr. Pinkston noted, the one part per  
129 trillion was equal to 1 second in 32,000 years, meaning it was very small quantity the lab was  
130 trying to detect. He stated these had to be laboratories qualified and certified to do the analysis  
131 using EPA methods 533 and 537.1. He stated that when seeking a lab, they were trying to find  
132 those who could run the two specific protocol tests, and they found one in Indiana and one in  
133 Michigan.

134  
135 Mr. Mawyer stated that there were also two laboratories in Pennsylvania and one in Maryland,  
136 but none were in the state of Virginia. He stated that the Virginia Department of Consolidated  
137 Lab Services, the Virginia state testing lab, could perform one of the tests but not the other. He  
138 stated that the private firms typically completed the tests much faster than the Department of Lab  
139 Services, which was partly due to the unregulated contaminant monitoring regulations. He stated

140 that when the EPA heard of a potential contaminant such as PFAS, they requested utilities of a  
141 certain size such as RWSA to test for PFAS, and this was called the Unregulated Contaminant  
142 Monitoring Rule (UCMR5) program.

143  
144 Mr. Mawyer stated that the test had 30 contaminants they must test for quarterly and send the  
145 results to EPA along with thousands of other utilities across the country. He stated that all of the  
146 utilities were looking for laboratories to run the tests, and there were a limited few within the  
147 country. He stated that they requested to have the results expedited from the Indiana laboratory,  
148 but the lab was unable to do so, however, the Michigan laboratory was able to provide results  
149 more quickly.

150  
151 Mr. Pinkston asked if the PFAS requirements were law yet.

152  
153 Mr. Mawyer replied that they were not law, but were proposed regulations from EPA to reduce  
154 the nationwide guideline of 70 parts per trillion to 4 parts per trillion, which was a large decrease  
155 that made it a challenge for utilities which had tested for years and had minor detections but none  
156 above 70. He stated that now those levels exceeded the 4 parts per trillion recommendation.

157  
158 Mr. Pinkston asked if PFAS was a contaminant that had been tested for previously.

159  
160 Mr. Mawyer stated that they had been testing for PFAS for a number of years.

161  
162 Mr. Tungate stated that since 2018, they had tested every six months.

163  
164 Mr. Pinkston asked what the numbers had been,

165  
166 Mr. Tungate stated that they had been very low numbers.

167  
168 Mr. Mawyer stated that PFAS had never been detected at the North Rivanna Water Treatment  
169 Plant.

170  
171 Mr. Pinkston asked about the South Rivanna Water Treatment Plant.

172  
173 Mr. Tungate stated that South Rivanna did not have any detections.

174  
175 Mr. Pinkston stated he hoped they would not.

176  
177 Mr. Tungate clarified that for EPA's UCMR5 program, when the sample kits arrived, there was  
178 one kit for each location, so there would be one kit for North Rivanna raw water samples and one  
179 kit for the finished water sample. He stated that in the sample kit was a trip blank, which was a  
180 sample of water that traveled with the kit for the entire time in case there was environmental  
181 exposure to contaminants.

182  
183 Mr. Tungate stated that at each sample location, they made a method blank at the same time,  
184 which was a vial of water that had no PFAS in it to determine if there was any PFAS in the air at  
185 the time of sample collection. He stated that there were multiple checks and balances to confirm

186 that the sample results were from the water and not from environmental exposures.

187  
188 Mr. Pinkston asked if there had been any discussion about what happened if this was discovered  
189 at South Rivanna. He stated that it seemed that the rules were ahead of what the technology  
190 could do at the treatment plants.

191  
192 Mr. Tungate stated that the UCMR5 collection was one of the steps in creating a national  
193 maximum contaminant level. He stated that they did not know how pervasive it was in drinking  
194 water, but there were now findings on PFAS in groundwater and surface water systems. He  
195 stated that the UCMR5 program was the first step in the public water supply being sampled, and  
196 there were thousands of water treatment facilities across the United States that were collecting  
197 UCMR5 data, which would be used to determine the level and the costs and impacts of setting a  
198 standard for utilities. He stated that they skipped this process when they established the proposed  
199 maximum contamination level in March 2023 of 4 parts per trillion when there had been no  
200 environmental impact study done or evaluation of the impacts to water utilities.

201  
202 Mr. Gaffney asked if the maximum level could change.

203  
204 Mr. Tungate stated yes.

205  
206 Mr. Mawyer stated that all of the professional organizations were monitoring and sending  
207 comments to EPA about the stringency of the standards and the ability to detect PFAS at the  
208 proposed level, and further, the ability of the utilities to pay to reduce PFAS to that level. He  
209 stated that GAC was the state-of-the-art technology for removing PFAS, so EPA had to find how  
210 much it would cost utilities. He stated that Rivanna had implemented GAC to remove  
211 disinfection byproducts and not PFAS, which was not a contaminant of concern a decade ago.

212  
213 Mr. Mawyer stated that they had learned that GAC was an effective filter to remove PFAS,  
214 however, GAC required a contact time to remove disinfection byproducts of 14 minutes, but to  
215 remove PFAS it would be 21 minutes. He stated that if they wanted to get the same amount of  
216 water through the GAC filters in the same amount of time, they would have to add more GAC  
217 vessels. He stated that it could be an expense if the regulation passed at 4 parts per trillion for the  
218 standard and they had to treat for it. He stated that it was estimated that it would cost \$30- \$40M  
219 to add the necessary GAC vessels.

220  
221 Mr. Pinkston stated that all of this information was important and they should put the money  
222 where it was necessary, and maybe the sampling regime described was so robust they did not  
223 have to be concerned with a false positive, but if something like this happened and they got a  
224 sample at the South Rivanna water treatment plant, he suggested they begin to think about what  
225 their messaging would look like. He stated that they were fortunate to be able to shut down the  
226 North Rivanna Water Treatment Plant, but they could not shut down the South Rivanna Water  
227 Treatment Plant.

228  
229 Mr. Mawyer stated that was correct for the South Rivanna plant as well as for the water  
230 treatment plants serving Crozet and Scottsville.

232 Mr. Pinkston stated that he did not have an answer. He stated that it would be one thing if they  
233 were clearly violating a rule that they had lots of experience managing, but this one seemed like  
234 a very new rule that they were walking in the dark within the whole industry.

235  
236 Mr. Mawyer stated that the Virginia Department of Health had not adopted any standard for  
237 PFAS, much less 4 parts per trillion.

238  
239 Mr. Gaffney stated that the federal government had not made the manufacture of PFAS illegal,  
240 so they were still manufacturing PFAS.

241  
242 Mr. Mawyer stated that the other issue was wastewater treatment, because when PFAS entered  
243 the human body, it then came out in the wastewater, and while the wastewater was treated,  
244 treatment was not designed to remove PFAS. He stated that water then was released into the  
245 Rivanna and James Rivers and flowed past Henrico and Richmond.

246  
247 Mr. Mawyer stated that this was a cyclical situation that was not necessarily limited to water  
248 treatment but could also be a compounding concern for wastewater treatment, causing the costs  
249 to escalate. He stated that they hoped the federal regulators would give all of this due  
250 consideration, and to his understanding, that was what they were supposed to do. There was a  
251 benefit-cost analysis about what the harm was to the people and at what contaminant level, and  
252 what it cost to treat to that level of contaminant removal.

253  
254 Ms. Mallek stated that Mr. Tungate participated with her in a risk analysis at an EPA meeting in  
255 June and brought home lots of stories from other communities. She stated that other places were  
256 really in trouble. She stated that in tiny communities with massive contamination in Maine and  
257 New Mexico due to the direct connection with sewage sludge, dairy herds had been destroyed  
258 and entire businesses wiped out because they could not sell milk or meat due to the  
259 contamination.

260  
261 Ms. Mallek stated that the last she heard, they were looking at December to try to wrap up the  
262 formal program. She stated that the numbers for the UCMR5 came down because the testing  
263 ability came down. She stated that the only reason it was at 4 parts per trillion was because that  
264 was the level that tests could reach, but the official federal information was zero because it was a  
265 cancer-causing chemical and there were no allowable limits for cancer-causing things. She stated  
266 that the technology had to catch up, but she was grateful for all of the testing we were doing to  
267 be so careful. She asked if they tested the outfall of the wastewater for PFAS.

268  
269 Mr. Mawyer said we have been testing the wastewater outfall every six months since 2020.

270  
271 Ms. Mallek stated that a reason for concern about a lot of synthetics was because downstream  
272 was someone else's drinking water. She stated that she hoped the standards were approved by  
273 December, because Virginia was waiting for certainty from the federal government. She stated  
274 that there were hundreds of emerging chemicals, and all of this work was going on at once. She  
275 stated that there were 50 labs that were certified to test, which was not a lot considering what  
276 they had to deal with.

278 Mr. Mawyer stated that on a similar but different issue, the drought watch stated that  
279 precipitation was 14.5 inches lower, or 14.5% lower, than normal over the last 30 months. He  
280 stated that they continued to monitor that situation. He stated that for major projects, they were  
281 finalizing some details with UVA Foundation about the easement for the Rivanna to Ragged  
282 Pipeline with no major issues.

283  
284 Mr. Mawyer stated that they were coordinating with the University Architect on the Ragged  
285 Mountain to Observatory Pipeline easement and concerns about a cemetery, so they were  
286 discussing alternate routes and working out details. He stated that the Central Water Line was  
287 continuing to move forward with the plans 60% complete, and would be reviewed by the City,  
288 RWSA, and ACSA. He stated that they had initiated engagements with property owners along  
289 the route about potential easements.

290  
291 Mr. Mawyer stated that the state's drought status for the area designated it as in a normal level,  
292 but in a drought watch for groundwater. He stated that they completed repairs to the Allen Farm  
293 Lane bridge. He stated that they completed repair of three piers at a cost of approximately  
294 \$50,000.

295  
296 Ms. Mallek asked if there was some kind of stone diverter to send the water away from the piers  
297 to prevent some of the impact damage.

298  
299 Mr. Marrs stated that no, there was not a stone diverter or anything like that. He stated that the  
300 stream channel was particularly narrow, so there was not a lot of room for additional measures.  
301 He stated that they put substantial concrete jacketing around the piers, but no upstream features  
302 at this point.

303  
304 Mr. Mawyer stated that there had been concerns voiced by the Glenmore community about  
305 noise, lights, and odors coming from the Glenmore Wastewater Treatment Plant. He stated that  
306 they began a response by putting shields on the lights to keep the light pointing toward the  
307 property, and increased their cleaning program for the clarifiers and other basins. He stated they  
308 had to haul wastewater sludge from Glenmore to Moore's Creek because the Glenmore plant was  
309 not sufficient to treat that sludge. He stated that they were now hauling twice per week rather  
310 than once, in the hopes that it would reduce odors, but in fact it may increase odors since every  
311 time they pumped the sludge, the odors came out.

312  
313 Mr. Mawyer stated that they had received an appreciative email from the community stating that  
314 the lights were better, and they had not experienced any odor problems recently. He stated that  
315 they had a motor that pumped air into the aeration basin, and those motors made a lot of noise, so  
316 they had a noise attenuation curtain around it, and were going to try a second curtain to see if that  
317 helped. He stated that if it did not, they were going to look at putting the motors in an enclosed  
318 facility or getting engines that were less noisy. He stated that they agreed it was noisy as  
319 experienced during their site visit, so they were now doing their best to help the Glenmore  
320 community with these concerns.

321  
322 Mr. Pinkston asked where Glenmore was located.

Mr. Mawyer stated that it was located on Route 250 east just past Shadwell on the right. He stated that the long-range possibility was that the Glenmore Wastewater Treatment Plant could be converted to a pump station, and the wastewater could be pumped to Moores Creek to be treated to a higher level of nutrient removal. He stated that it would be an improvement for the environment to have the wastewater sent to Moores Creek and would allow them to serve the Stone Robinson Elementary School, which also had a small wastewater treatment plant. He stated that it would be a multi-million dollar project, but would likely be a future project for the Authority.

Ms. Mallek asked if there was any connection between what people put down their drain in their houses and the problems they were having with odors. She asked if there was an education program about what not to put in the system.

Mr. Mawyer stated that they educated customers about not putting fats, oils, and grease in the sewer system, but otherwise they had not seen any relationship between what was going in the system and the odors. He stated that they had an odor control program for all of the wastewater from Crozet that they pumped to Moores Creek. They have an odor control system with the biological tower and clarifier covers, so odors were not different at Glenmore than those at Moores Creek. They were looking for solutions to help the community.

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

Mr. Gaffney asked that anyone who wished to speak to identify themselves for the record and limit their comments to three minutes.

There were no speakers, so Mr. Gaffney closed the items from the public.

## **7. RESPONSES TO PUBLIC COMMENTS**

There were no comments, so there were no responses.

## **8. CONSENT AGENDA**

*a. Staff Report on Finance*

*b. Staff Report on Operations*

*c. Staff Report on CIP Projects*

*d. Staff Report on Wholesale Metering*

*e. Staff Report on Drought Monitoring*

*f. Approval to Increase Design Contingency – Airport Road Water Pump Station and Piping Project – Short Elliot Hendrickson (SEH) Engineers*

**Mr. Pinkston moved the Authority to approve the Consent Agenda as presented. Ms. Mallek seconded the motion, which passed unanimously (6-0). (Mr. Rogers was absent.)**

## **9. OTHER BUSINESS**



(reconvene RSWA for a JOINT SESSION with the RWSA)

*a. Presentation: Strategic Plan Update*

*Deborah Anama, Executive Assistant*

Ms. Anama stated that the Vision of the Strategic Plan was to serve the community as a recognized leader in environmental stewardship by providing exceptional water and solid waste services. She stated that the priorities identified were Communication and Collaboration, Environmental Stewardship, Workforce Development, Optimization and Resiliency, and Planning and Infrastructure.

She stated that the Communication and Collaboration priority was to elevate awareness of the Authorities' impact and value through proactive communication, effective partnerships, and community involvement.

Ms. Anama stated that Rivanna Authorities participated in Fix A Leak outreach events with the City and the ACSA. Staff have been conducting student tours of water, wastewater, and recycling facilities. Rivanna Authorities have increased their presence on social media. Community involvement efforts included the electronic newsletter to solid waste customers, timely press releases, and the recent grand opening of the Southern Albemarle Convenience Center.

Ms. Anama stated that communication initiatives included a focus to increase brand identity. Community awareness of the Authorities included sponsoring Tom Sox baseball with a banner at baseball events. She stated that they also established an email signature for staff which included the Authorities' logo, mission statement, and Rivanna website. She stated that internal teambuilding events had participation from all the departments.

Ms. Anama stated that the Environmental Stewardship priority was to demonstrate and promote best practices in sustainability, resources conservation, and environmental education. She stated that a "no mow" initiative was started at Moores Creek to establish pollinator-friendly sites. The Authority was working directly with community partners such as the U.S. Department of Fish and Wildlife Services to consider two different projects involving potential stream restoration. Ms. Anama stated that they were increasing environmental engagement in the community by hosting an education table at RiverFest in May along with the City and the ACSA. She stated that the Authority also looked into resource conservation through fuel savings and solar options.

She stated that the Workforce Development priority was to attract, develop, and retain a professional, highly skilled, engaged, and diverse team.

She stated that the Human Resource Information System expanded HR recruitment possibilities.

Ms. Anama stated that professional training opportunities had expanded to include leadership development programs, which started this spring with 26 employees participating. She stated that their employee turnover goals were to stay below 10%, and that had so far been achieved in 2023 for both Authorities.

411 She stated that the Optimization and Resiliency priority was to empower a culture of innovative and  
412 collaborative thinking that advances efficient operational processes, technology modernization, and  
413 risk mitigation.

414  
415 Ms. Anama stated that the team had established a video library for standard operating procedures  
416 and created 44 new videos since the beginning of the year. She stated that the water department was  
417 using a new Zeta-Meter to allow for operational optimization in continually adjusting chemicals for  
418 water pH, which created a savings of approximately \$15,000 to \$20,000 since February 2023. To  
419 increase cross-departmental awareness, the internal newsletter, Rivanna Review, added additional  
420 sections to spotlight a different department team with each issue and a project from each of the  
421 water and solid waste departments. Ms. Anama stated that employee safety training is always a  
422 priority such as the CPR and First Aid training.

423  
424 She stated that the Planning and Infrastructure priority was to address evolving needs by planning,  
425 delivering, and maintaining dependable infrastructure and facilities in a financially responsible  
426 manner.

427  
428 She stated that the team had implemented an asset management program, CityWorks, and increased  
429 the number of assets in the system. Efforts to implement long-term project management software  
430 included WorkOtter and document management, DocLink. Ms. Anama stated that employees were  
431 always encouraged to expand their knowledge by participating in conferences and training, and  
432 managers had been increasing the SOPs for their departments. She stated that the planning and  
433 infrastructure team was developing data collection methods and establishing metrics to be able to  
434 measure the progress of strategies implemented.

#### 435 436 ***10. OTHER ITEMS FROM BOARD/STAFF NOT ON THE AGENDA***

437 There were none.

#### 438 439 ***11. CLOSED MEETING***

440 At 3:00 p.m., Ms. Mallek moved that the Rivanna Water & Sewer Authority enter into a  
441 joint closed session with the Rivanna Solid Waste Authority to discuss confidential  
442 information related to cybersecurity and the security of the Authorities' physical premises  
443 as permitted by the public safety exemptions at Section 2.2-3711-A(19) of the Code of  
444 Virginia and confidential performance evaluations, goals and objectives of specific  
445 personnel as permitted by the personnel exemption at Section 2.2-3711-A(1) of the Code of  
446 Virginia. Mr. Pinkston seconded the motion, which passed unanimously by roll call vote (6-  
447 0). (Mr. Rogers was absent.)

#### 448 449 ***CERTIFY CLOSED MEETING***

450 At 4:13 p.m., Ms. Mallek moved by recorded vote that, to the best of each member's  
451 knowledge, only public business matters lawfully exempted from the open meeting  
452 requirements of the Virginia Freedom of Information Act and identified in the motion  
453 authorizing the closed meeting were heard, discussed or considered in the closed meeting to  
454 which this certification resolution applies. Mr. Pinkston seconded the motion, which passed  
455 unanimously by roll call vote (6-0). (Mr. O'Connell was absent.)

#### 456 457 ***EXECUTIVE DIRECTOR MERIT INCREASE***

458 **Mr. Rogers moved to approve a merit increase of 3% for Mr. Mawyer and to commend**  
459 **him for his outstanding performance. Ms. Mallek seconded the motion, which passed**  
460 **unanimously (6-0). (Mr. O’Connell was absent.)**

461  
462 **RECOGNITION**

463 *Resolution of Appreciation for Mr. Michael Rogers*

464  
465 Mr. Gaffney read the resolution of appreciation for Michael Rogers:

466 **Resolution of Appreciation for Mr. Michael Rogers**

467 **WHEREAS**, Mr. Rogers has served as a member of the Rivanna Water & Sewer  
468 Authority and Rivanna Solid Waste Authority Boards of Directors since February 2022; and

469 **WHEREAS**, over that same period Mr. Rogers has demonstrated leadership in water and  
470 sewer, solid waste and recycling services, and has been a valuable member of the Boards of  
471 Directors and a resource to the  
472 Authorities; and

473 **WHEREAS**, Mr. Rogers’ understanding of the water, sewer, solid waste and recycling  
474 operations of the City of Charlottesville, the Water & Sewer Authority and the Solid Waste  
475 Authority has supported a strategic decision-making process that provided benefits to the  
476 customers served by the City of Charlottesville as well as the community as a whole. During Mr.  
477 Rogers’ tenure, major initiatives and projects were completed for the Authorities including:

- 478 - a 5-year Strategic Plan  
479 - major renovations at the South Rivanna and Observatory Water Treatment Plants  
480 - a plan to increase the community’s drinking water supply by accelerating construction  
481 of the raw water pipeline to connect the South Rivanna and Ragged Mountain  
482 Reservoirs  
483 - a new Southern Albemarle Convenience Center for collection of recyclable materials  
484 and household refuse  
485 - approval of a route to construct a major drinking water pipeline through the City, the  
486 “Central Water Line” through extensive communications with adjacent neighborhoods

487 **NOW, THEREFORE, BE IT RESOLVED** that the Rivanna Water & Sewer Authority  
488 and the Rivanna Solid Waste Authority Boards of Directors recognize, thank, and commend Mr.  
489 Rogers for his distinguished service, efforts, and achievements as a member of the Rivanna  
490 Water & Sewer Authority and the Rivanna Solid Waste Authority, and present this Resolution as  
491 a token of esteem with best wishes in his future endeavors.

492  
493 **BE IT FURTHER RESOLVED** that this Resolution be entered upon both the  
494 permanent Minutes of the Rivanna Water & Sewer Authority and the Rivanna Solid Waste  
495 Authority.

496  
497 **Ms. Mallek moved to approve the resolution. Mr. Pinkston seconded the motion, which**  
498 **passed unanimously (6-0). (Mr. O’Connell was absent.)**  
499

500 *(Adjournment of RSWA Board)*

501

502 ***12. ADJOURNMENT***

503 **At 4:21 p.m., Mr. Rogers moved to adjourn the meeting of the Rivanna Water and Sewer**  
504 **Authority. Ms. Hildebrand seconded the motion, which passed unanimously (6-0). (Mr.**  
505 **O’Connell was absent.)**

DRAFT



## MEMORANDUM

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

**FROM: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: EXECUTIVE DIRECTOR'S REPORT**

**DATE: AUGUST 22, 2023**

*STRATEGIC PLAN PRIORITY: COMMUNICATION AND COLLABORATION*

### **Communication with by Public Officials**

Local Delegate-candidate Amy Laufer requested a tour of our water and wastewater facilities. Staff provided a presentation about the services we provide and a tour of our facilities on August 21.

Virginia Senator Creigh Deeds and his staff have accepted an invitation to visit our water, wastewater and solid waste facilities on August 30. Chairman Gaffney and staff will provide a review of the services, programs and major projects underway and planned for the Authorities.

*STRATEGIC PLAN PRIORITY: ENVIRONMENTAL STEWARDSHIP*

### **North Rivanna Water Treatment Plant Resumes Production**

Production of drinking water by the North Rivanna Water Treatment Plant (NRWTP) was temporarily suspended in July due to the detection of per- and polyfluorinated alkyl substances (PFAS), which exceeded standards proposed by the federal Environmental Protection Agency. Two recent tests reported that PFAS was not detected in the drinking water produced at the NRWTP. Water production at the NRWTP was resumed on July 22.

*STRATEGIC PLAN PRIORITY: PLANNING AND INFRASTRUCTURE*

### **Major Projects**

We continue to work with UVA and UVAF to acquire the final easements on the following major water piping projects:

1. S. F. Rivanna to Ragged Mtn Reservoir Water Pipe: 8 miles of 36" pipe

Status: Negotiations with UVAF have been completed. Details are being finalized before signatures.

2. Ragged Mtn Reservoir to Observatory WTP Water Pipe and Pump Station: 5 miles of 36" pipe

Status: We are coordinating with UVA on an alternate pipeline alignment north of Fontaine Ave to avoid a potential conflict with a cemetery.

3. Central Water Line: 5 miles of 24” and 36” water pipe primarily along Cherry Ave

Status: Engineering plans and specifications are moving forward towards 90% completion. Construction is expected to begin in December 2024, as delivery of pipe is reportedly taking 6 – 9 months. An extensive communication effort will be completed with the communities adjacent to the project before construction begins. Efforts to obtain easements are underway.

# MEMORANDUM

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

**FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND ADMINISTRATION**

**REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: JUNE 2023 MONTHLY FINANCIAL SUMMARY – FY 2023**

**DATE: AUGUST 22, 2023**

## Financial Snapshot

FY 2023 resulted in an overall net deficit of \$1.5 million, or 3.5% above the annual budget of \$41.8 M. Total operating rate revenues for this fiscal year are \$532,900 over budget estimates. Operating expenses are \$2.6 million over budget. Total revenues are \$1.9 million over budget estimates, and total expenses are \$3.5 million over budget. Urban Water flows and operating rate revenues are slightly (0.17%) below budget estimates, and Urban Wastewater flows and operating rate revenues are 6% over budget.

Revenues and expenses are summarized in the table below:

	Urban Water	Urban Wastewater	Total Other Rate Centers	Total Authority
<b>Operations</b>				
Revenues	\$ 9,306,254	\$ 10,341,929	\$ 2,617,023	\$ 22,265,206
Expenses	(10,096,643)	(11,029,874)	(2,861,363)	(23,987,880)
Surplus (deficit)	\$ (790,389)	\$ (687,945)	\$ (244,340)	\$ (1,722,674)
<b>Debt Service</b>				
Revenues	\$ 8,890,981	\$ 9,594,063	\$ 2,397,887	\$ 20,882,931
Expenses	(8,808,939)	(9,487,559)	(2,379,109)	(20,675,607)
Surplus (deficit)	\$ 82,042	\$ 106,504	\$ 18,778	\$ 207,324
<b>Total</b>				
Revenues	\$ 18,197,235	\$ 19,935,992	\$ 5,014,910	\$ 43,148,137
Expenses	(18,905,582)	(20,517,433)	(5,240,472)	(44,663,487)
Surplus (deficit)	\$ (708,347)	\$ (581,441)	\$ (225,562)	\$ (1,515,350)

A more detailed financial analysis is in the following monthly report which reviews more closely actual financial performance compared to budgeted estimates. There are comments listed that 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 actual operating revenues are \$849,700 over the annual budget estimate, and operating expenses are \$2.6 million over budget. The following comments help 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 a significant impact 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 for leases, health savings account contributions, and certain maintenance agreements. Insurance premiums are paid quarterly.
- B. Personnel Costs (Urban Water, All Wastewater – pages 2, 5, 6, 7) – Salaries are higher than budgeted for some rate centers due to pay increases for plant operators who achieved higher licenses. Urban Wastewater salaries are also high due to salary overlap in one position and payout of accumulated leave upon leaving employment.
- C. Professional Services (Crozet Water, Scottsville Water, Urban Wastewater, Glenmore Wastewater, Administration – pages 3, 4, 5, 6, 8) – Crozet Water, Scottsville Water, Urban Wastewater, and Glenmore Wastewater have spent \$18,000, \$9,500, \$84,600, and \$15,000, respectively, on unbudgeted engineering and technical services for various surveys and studies. The Administration department incurred \$98,800 of unbudgeted engineering and technical services for grant program strategy and application development (*to date, we have received \$3.17 M from these applications, with over \$50 M in grant applications which are pending*).
- D. Other Services & Charges (All Water, Urban Wastewater – pages 2, 3, 4, 5) – Utilities have been high for Urban Wastewater and all Water rate centers. Urban Water has spent \$50,600 in unbudgeted Watershed Management expenses for stream erosion repairs.
- E. Information Technology (all Water, Urban Wastewater, Scottsville Wastewater, Administration, Engineering – pages 2, 3, 5, 7, 8, 11) – The Administration department spent \$559,000 more than its annual budget in this category for computer hardware, software, and support costs. There were several new systems and architecture changes initiated this past year to significantly increase our network physical and cyber security. Crozet Water, Scottsville Water, Urban Wastewater and Scottsville Wastewater went over budget \$23,000, \$9000, \$62,000 and \$13,600, respectively, on SCADA Standard Graphics Rollout costs. The SCADA programing at the different plants was becoming an issue with inconsistent operator controls and interface. Urban Water incurred \$34,000 in unbudgeted expenditures for computer hardware related to staffing the new administration building at the SFRR Water Treatment Plant.
- F. Communications (Urban Wastewater, Administration – pages 5, 8) – The Administration department is \$47,000 over budget in this category, due to switching to a new telephone system in August 2022 which was not included in the budget.
- G. Operations and Maintenance (All Water departments, Urban Wastewater, Maintenance – pages 2, 3, 4, 5, 9) – All of the water departments are over the prorated budget for chemicals due to carbon exchanges. Urban Wastewater has spent \$429,700 in excess of budget on chemicals costs (primarily due to price increases), and \$245,000 on unbudgeted repair costs. The chemical bid



process at the beginning of the year indicated that prices would increase nearly 60% overall. The Maintenance department went over budget on repairs, supplies and fuel costs.

**Please note that the budget and these monthly budget vs. actual statements are prepared on a different basis than the annual comprehensive financial report (ACFR). Year-end adjustments are recorded every year to conform to the accounting principles required for the ACFR. These monthly statements were prepared prior to recording those year-end adjustments.**

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - June 2023**  
**Fiscal Year 2023**

**Consolidated**  
**Revenues and Expenses Summary**

<i>Budget</i>	<i>Budget</i>	<i>Actual</i>	<i>Budget</i>	<i>Variance</i>
<i>FY 2023</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		\$ 20,614,425	\$ 20,614,425	\$ 21,147,332	\$ 532,907	2.59%
Lease Revenue		85,000	85,000	122,101	37,101	43.65%
Admin., Maint. & Engineering Revenue		656,000	656,000	736,128	80,128	12.21%
Other Revenues		639,036	639,036	695,010	55,974	8.76%
Use of Reserves-GAC		150,000	150,000	150,000	-	0.00%
Interest Allocation		7,170	7,170	150,763	143,593	2002.69%
<b>Total Operating Revenues</b>		<b>\$ 22,151,631</b>	<b>\$ 22,151,631</b>	<b>\$ 23,001,334</b>	<b>\$ 849,703</b>	<b>3.84%</b>

**Expenses**

Personnel Cost	<b>B</b>	\$ 10,494,727	\$ 10,494,727	\$ 10,494,984	\$ (257)	0.00%
Professional Services	<b>C</b>	629,900	629,900	776,167	(146,267)	-23.22%
Other Services & Charges	<b>A, D</b>	3,427,460	3,427,460	3,968,915	(541,455)	-15.80%
Communications	<b>F</b>	200,342	200,342	247,034	(46,691)	-23.31%
Information Technology	<b>E</b>	816,626	816,626	1,539,433	(722,807)	-88.51%
Supplies		39,950	39,950	46,727	(6,777)	-16.96%
Operations & Maintenance	<b>A, G</b>	5,222,531	5,222,531	6,500,542	(1,278,011)	-24.47%
Equipment Purchases		420,100	420,100	250,205	169,895	40.44%
Depreciation		900,000	900,000	900,000	-	0.00%
<b>Total Operating Expenses</b>		<b>\$ 22,151,636</b>	<b>\$ 22,151,636</b>	<b>\$ 24,724,007</b>	<b>\$ (2,572,371)</b>	<b>-11.61%</b>
<b>Operating Surplus/(Deficit)</b>		<b>\$ (5)</b>	<b>\$ (5)</b>	<b>\$ (1,722,674)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue		\$ 19,522,929	\$ 19,522,929	\$ 19,522,932	\$ 3	0.00%
Septage Receiving Support - County	<b>A</b>	109,440	109,440	109,440	-	0.00%
Buck Mountain Lease Revenue		1,600	1,600	11,381	9,781	611.29%
Trust Fund Interest		990	990	198,529	197,539	19953.41%
Reserve Fund Interest		64,230	64,230	1,040,650	976,420	1520.19%
<b>Total Debt Service Revenues</b>		<b>\$ 19,699,189</b>	<b>\$ 19,699,189</b>	<b>\$ 20,882,931</b>	<b>\$ 1,183,742</b>	<b>6.01%</b>

**Debt Service Costs**

Total Principal & Interest		\$ 16,165,241	\$ 16,165,241	\$ 16,165,241	\$ -	0.00%
Reserve Additions-Interest		64,230	64,230	1,040,650	(976,420)	-1520.19%
Debt Service Ratio Charge		725,000	725,000	725,000	-	0.00%
Reserve Additions-CIP Growth		2,744,717	2,744,717	2,744,717	-	0.00%
<b>Total Debt Service Costs</b>		<b>\$ 19,699,188</b>	<b>\$ 19,699,188</b>	<b>\$ 20,675,608</b>	<b>\$ (976,420)</b>	<b>-4.96%</b>
<b>Debt Service Surplus/(Deficit)</b>		<b>\$ 1</b>	<b>\$ 1</b>	<b>\$ 207,323</b>		

**Summary**

<b>Total Revenues</b>	\$ 41,850,820	\$ 41,850,820	\$ 43,884,265	\$ 2,033,445	4.86%
<b>Total Expenses</b>	41,850,824	41,850,824	45,399,615	(3,548,791)	-8.48%
<b>Surplus/(Deficit)</b>	<b>\$ (4)</b>	<b>\$ (4)</b>	<b>\$ (1,515,350)</b>		

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - June 2023**

**Urban Water Rate Center**  
**Revenues and Expenses Summary**

<b>Budget FY 2023</b>	<b>Budget Year-to-Date</b>	<b>Actual Year-to-Date</b>	<b>Budget vs. Actual</b>	<b>Variance Percentage</b>
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**Operating Budget vs. Actual**

		Notes								
Revenues										
Operations Rate Revenue		\$	9,014,863	\$	9,014,863	\$	8,998,363	\$	(16,500)	-0.18%
Lease Revenue			60,000		60,000		89,070		29,070	48.45%
Miscellaneous			-		-		6,405		6,405	
Use of Reserves-GAC			150,000		150,000		150,000		-	0.00%
Interest Allocation			3,000		3,000		62,416		59,416	1980.52%
Total Operating Revenues		\$	9,227,863	\$	9,227,863	\$	9,306,254	\$	78,391	0.85%
Expenses										
Personnel Cost	B	\$	2,234,714	\$	2,234,714	\$	2,212,580	\$	22,133	0.99%
Professional Services			222,000		222,000		179,704		42,296	19.05%
Other Services & Charges	A, D		716,300		716,300		923,020		(206,720)	-28.86%
Communications			100,920		100,920		99,685		1,235	1.22%
Information Technology	E		104,950		104,950		146,505		(41,555)	-39.59%
Supplies			5,400		5,400		8,382		(2,982)	-55.21%
Operations & Maintenance	G		2,511,396		2,511,396		3,030,088		(518,692)	-20.65%
Equipment Purchases			16,000		16,000		20,857		(4,857)	-30.36%
Depreciation			300,000		300,000		300,000		-	0.00%
Subtotal Before Allocations		\$	6,211,680	\$	6,211,680	\$	6,920,821	\$	(709,141)	-11.42%
Allocation of Support Departments			3,016,183		3,016,183		3,175,822		(159,639)	-5.29%
Total Operating Expenses		\$	9,227,863	\$	9,227,863	\$	10,096,643	\$	(868,780)	-9.41%
Operating Surplus/(Deficit)		\$	(0)	\$	(0)	\$	(790,389)			

**Debt Service Budget vs. Actual**

<b>Revenues</b>						
Debt Service Rate Revenue		\$ 8,302,224	\$ 8,302,224	\$ 8,302,224	\$ -	0.00%
Trust Fund Interest		400	400	72,662	72,262	18065.38%
Reserve Fund Interest		31,000	31,000	504,715	473,715	1528.11%
Lease Revenue		1,600	1,600	11,381	9,781	611.29%
<b>Total Debt Service Revenues</b>		<b>\$ 8,335,224</b>	<b>\$ 8,335,224</b>	<b>\$ 8,890,981</b>	<b>\$ 555,757</b>	<b>6.67%</b>
<b>Debt Service Costs</b>						
Total Principal & Interest		\$ 6,964,724	\$ 6,964,724	\$ 6,964,724	\$ -	0.00%
Reserve Additions-Interest		31,000	31,000	504,715	(473,715)	-1528.11%
Debt Service Ratio Charge		400,000	400,000	400,000	-	0.00%
Reserve Additions-CIP Growth		939,500	939,500	939,500	-	0.00%
<b>Total Debt Service Costs</b>		<b>\$ 8,335,224</b>	<b>\$ 8,335,224</b>	<b>\$ 8,808,939</b>	<b>\$ (473,715)</b>	<b>-5.68%</b>
<b>Debt Service Surplus/(Deficit)</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 82,042</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 17,563,087	\$ 17,563,087	\$ 18,197,235	\$ 634,148	3.61%
<b>Total Expenses</b>	17,563,087	17,563,087	18,905,582	(1,342,495)	-7.64%
<b>Surplus/(Deficit)</b>	<b>\$ (0)</b>	<b>\$ (0)</b>	<b>\$ (708,347)</b>		
<b>Costs per 1000 Gallons</b>	\$ 2.72		\$ 2.98		
<b>Operating and DS</b>	\$ 5.17		\$ 5.57		
<b>Thousand Gallons Treated</b>	3,397,700	3,397,700	3,391,768	(5,932)	-0.17%
<b>or</b>					
<b>Flow (MGD)</b>	9.309		9.293		

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - June 2023**

**Crozet Water Rate Center**  
**Revenues and Expenses Summary**

<i>Budget FY 2023</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	\$ 1,197,084	\$ 1,197,084	\$ 1,197,084	\$ -	0.00%
Lease Revenues	25,000	25,000	33,031	8,031	32.13%
Interest Allocation	400	400	8,443	8,043	2010.67%
<b>Total Operating Revenues</b>	<b>\$ 1,222,484</b>	<b>\$ 1,222,484</b>	<b>\$ 1,238,558</b>	<b>\$ 16,074</b>	<b>1.31%</b>

**Expenses**

Personnel Cost	\$ 352,559	\$ 352,559	\$ 351,115	\$ 1,444	0.41%
Professional Services	C 22,900	22,900	41,021	(18,121)	-79.13%
Other Services & Charges	D 118,700	118,700	142,276	(23,576)	-19.86%
Communications	17,600	17,600	19,331	(1,731)	-9.84%
Information Technology	E 4,950	4,950	32,124	(27,174)	-548.96%
Supplies	1,500	1,500	1,570	(70)	-4.70%
Operations & Maintenance	G 358,500	358,500	445,887	(87,387)	-24.38%
Equipment Purchases	3,000	3,000	3,735	(735)	-24.51%
Depreciation	60,000	60,000	60,000	-	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 939,709</b>	<b>\$ 939,709</b>	<b>\$ 1,097,060</b>	<b>\$ (157,351)</b>	<b>-16.74%</b>
Allocation of Support Departments	282,780	282,780	296,328	(13,548)	-4.79%
<b>Total Operating Expenses</b>	<b>\$ 1,222,489</b>	<b>\$ 1,222,489</b>	<b>\$ 1,393,388</b>	<b>\$ (170,898)</b>	<b>-13.98%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ (5)</b>	<b>\$ (5)</b>	<b>\$ (154,830)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 2,161,704	\$ 2,161,704	\$ 2,161,704	\$ -	0.00%
Trust Fund Interest	80	80	16,875	16,795	20993.65%
Reserve Fund Interest	1,200	1,200	19,772	18,572	1547.69%
<b>Total Debt Service Revenues</b>	<b>\$ 2,162,984</b>	<b>\$ 2,162,984</b>	<b>\$ 2,198,351</b>	<b>\$ 35,367</b>	<b>1.64%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 1,217,280	\$ 1,217,280	\$ 1,217,280	\$ -	0.00%
Reserve Additions-Interest	1,200	1,200	19,772	(18,572)	-1547.69%
Reserve Additions-CIP Growth	944,500	944,500	944,500	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 2,162,980</b>	<b>\$ 2,162,980</b>	<b>\$ 2,181,552</b>	<b>\$ (18,572)</b>	<b>-0.86%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ 4</b>	<b>\$ 4</b>	<b>\$ 16,799</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 3,385,468	\$ 3,385,468	\$ 3,436,909	\$ 51,441	1.52%
<b>Total Expenses</b>	3,385,469	3,385,469	3,574,940	(189,471)	-5.60%
<b>Surplus/(Deficit)</b>	<b>\$ (1)</b>	<b>\$ (1)</b>	<b>\$ (138,031)</b>		
<b>Costs per 1000 Gallons</b>	\$ 6.03		\$ 6.38		
<b>Operating and DS</b>	\$ 16.70		\$ 16.37		
<b>Thousand Gallons Treated</b>	202,697	202,697	218,321	15,624	7.71%
<b>Flow (MGD)</b>	0.555		0.598		

Rivanna Water & Sewer Authority  
Monthly Financial Statements - June 2023

**Scottsville Water Rate Center**  
**Revenues and Expenses Summary**

<i>Budget FY 2023</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	\$	569,556	\$	569,556	\$	569,556	\$	-	0.00%
Interest Allocation		200		200		3,920		3,720	1859.92%
<b>Total Operating Revenues</b>	<b>\$</b>	<b>569,756</b>	<b>\$</b>	<b>569,756</b>	<b>\$</b>	<b>573,476</b>	<b>\$</b>	<b>3,720</b>	<b>0.65%</b>

**Expenses**

Personnel Cost	\$	212,797	\$	212,797	\$	214,032	\$	(1,235)	-0.58%
Professional Services		5,000		5,000		20,418		(15,418)	-308.36%
Other Services & Charges		27,100		27,100		40,112		(13,012)	-48.01%
Communications		6,400		6,400		6,836		(436)	-6.81%
Information Technology		4,400		4,400		10,893		(6,493)	-147.57%
Supplies		100		100		201		(101)	-101.01%
Operations & Maintenance		97,925		97,925		123,548		(25,623)	-26.17%
Equipment Purchases		1,600		1,600		3,018		(1,418)	-88.62%
Depreciation		40,000		40,000		40,000		0	0.00%
<b>Subtotal Before Allocations</b>	<b>\$</b>	<b>395,322</b>	<b>\$</b>	<b>395,322</b>	<b>\$</b>	<b>459,058</b>	<b>\$</b>	<b>(63,735)</b>	<b>-16.12%</b>
Allocation of Support Departments		174,433		174,433		178,181		(3,748)	-2.15%
<b>Total Operating Expenses</b>	<b>\$</b>	<b>569,755</b>	<b>\$</b>	<b>569,755</b>	<b>\$</b>	<b>637,239</b>	<b>\$</b>	<b>(67,483)</b>	<b>-11.84%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$</b>	<b>1</b>	<b>\$</b>	<b>1</b>	<b>\$</b>	<b>(63,763)</b>			

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$	150,300	\$	150,300	\$	150,300	\$	-	0.00%
Trust Fund Interest		10		10		1,787		1,777	17767.60%
Reserve Fund Interest		850		850		13,528		12,678	1491.58%
<b>Total Debt Service Revenues</b>	<b>\$</b>	<b>151,160</b>	<b>\$</b>	<b>151,160</b>	<b>\$</b>	<b>165,615</b>	<b>\$</b>	<b>14,455</b>	<b>9.56%</b>

**Debt Service Costs**

Total Principal & Interest	\$	148,726	\$	148,726	\$	148,726	\$	-	0.00%
Reserve Additions-Interest		850		850		13,528		(12,678)	
Reserve Additions-CIP Growth		1,589		1,589		1,589		-	
<b>Total Debt Service Costs</b>	<b>\$</b>	<b>151,165</b>	<b>\$</b>	<b>151,165</b>	<b>\$</b>	<b>163,843</b>	<b>\$</b>	<b>(12,678)</b>	<b>-8.39%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$</b>	<b>(5)</b>	<b>\$</b>	<b>(5)</b>	<b>\$</b>	<b>1,772</b>			

**Rate Center Summary**

<b>Total Revenues</b>	\$	720,916	\$	720,916	\$	739,091	\$	18,175	2.52%
<b>Total Expenses</b>		720,920		720,920		801,082		(80,162)	-11.12%
<b>Surplus/(Deficit)</b>	<b>\$</b>	<b>(4)</b>	<b>\$</b>	<b>(4)</b>	<b>\$</b>	<b>(61,991)</b>			
<b>Costs per 1000 Gallons</b>	\$	33.07			\$	33.21			
<b>Operating and DS</b>	\$	41.84			\$	41.75			
<b>Thousand Gallons Treated</b>		17,230		17,230		19,188		1,958	11.36%
<b>or</b>									
<b>Flow (MGD)</b>		0.047				0.053			

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - June 2023**

**Urban Wastewater Rate Center**  
**Revenues and Expenses Summary**

<b>Budget FY 2023</b>	<b>Budget Year-to-Date</b>	<b>Actual Year-to-Date</b>	<b>Budget vs. Actual</b>	<b>Variance Percentage</b>
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**Operating Budget vs. Actual**

Notes

**Revenues**

Operations Rate Revenue	\$	9,033,662	\$	9,033,662	\$	9,583,069	\$	549,407	6.08%
Stone Robinson WWTP		39,036		39,036		20,315		(18,721)	-47.96%
Septage Acceptance		500,000		500,000		629,162		129,162	25.83%
Nutrient Credits		100,000		100,000		39,129		(60,871)	-60.87%
Miscellaneous Revenue		-		-		-		-	
Interest Allocation		3,300		3,300		70,255		66,955	2028.95%
<b>Total Operating Revenues</b>	<b>\$</b>	<b>9,675,998</b>	<b>\$</b>	<b>9,675,998</b>	<b>\$</b>	<b>10,341,929</b>	<b>\$</b>	<b>665,931</b>	<b>6.88%</b>

**Expenses**

Personnel Cost	<b>B</b>	\$	1,325,384	\$	1,325,384	\$	1,451,268	\$	(125,884)	-9.50%
Professional Services	<b>C</b>		75,000		75,000		161,598		(86,598)	-115.46%
Other Services & Charges	<b>A, D</b>		2,276,980		2,276,980		2,619,407		(342,427)	-15.04%
Communications	<b>F</b>		1,900		1,900		13,503		(11,603)	-610.69%
Information Technology	<b>E</b>		110,400		110,400		173,100		(62,700)	-56.79%
Supplies			1,200		1,200		933		267	22.26%
Operations & Maintenance	<b>A, G</b>		1,698,660		1,698,660		2,373,555		(674,895)	-39.73%
Equipment Purchases			143,000		143,000		50,000		93,000	65.03%
Depreciation			470,000		470,000		470,000		(0)	0.00%
<b>Subtotal Before Allocations</b>		<b>\$</b>	<b>6,102,524</b>	<b>\$</b>	<b>6,102,524</b>	<b>\$</b>	<b>7,313,363</b>	<b>\$</b>	<b>(1,210,840)</b>	<b>-19.84%</b>
Allocation of Support Departments			3,573,476		3,573,476		3,716,511		(143,035)	-4.00%
<b>Total Operating Expenses</b>		<b>\$</b>	<b>9,675,999</b>	<b>\$</b>	<b>9,675,999</b>	<b>\$</b>	<b>11,029,874</b>	<b>\$</b>	<b>(1,353,875)</b>	<b>-13.99%</b>
<b>Operating Surplus/(Deficit)</b>		<b>\$</b>	<b>(1)</b>	<b>\$</b>	<b>(1)</b>	<b>\$</b>	<b>(687,945)</b>			

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	<b>A</b>	\$	8,878,107	\$	8,878,107	\$	8,878,104	\$	(3)	0.00%
Septage Receiving Support - County			109,440		109,440		109,440		-	0.00%
Trust Fund Interest			500		500		107,007		106,507	21301.40%
Reserve Fund Interest			31,000		31,000		499,512		468,512	1511.33%
<b>Total Debt Service Revenues</b>		<b>\$</b>	<b>9,019,047</b>	<b>\$</b>	<b>9,019,047</b>	<b>\$</b>	<b>9,594,063</b>	<b>\$</b>	<b>575,016</b>	<b>6.38%</b>

**Debt Service Costs**

Total Principal & Interest		\$	7,808,347	\$	7,808,347	\$	7,808,347	\$	-	0.00%
Reserve Additions-Interest			31,000		31,000		499,512		(468,512)	-1511.33%
Debt Service Ratio Charge			325,000		325,000		325,000		-	0.00%
Reserve Additions-CIP Growth			854,700		854,700		854,700		-	0.00%
<b>Total Debt Service Costs</b>		<b>\$</b>	<b>9,019,047</b>	<b>\$</b>	<b>9,019,047</b>	<b>\$</b>	<b>9,487,559</b>	<b>\$</b>	<b>(468,512)</b>	<b>-5.19%</b>
<b>Debt Service Surplus/(Deficit)</b>		<b>\$</b>	<b>-</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>106,504</b>			

**Rate Center Summary**

<b>Total Revenues</b>	\$	18,695,045	\$	18,695,045	\$	19,935,992	\$	1,240,947	6.64%
<b>Total Expenses</b>		18,695,046		18,695,046		20,517,433		(1,822,387)	-9.75%
<b>Surplus/(Deficit)</b>	<b>\$</b>	<b>(1)</b>	<b>\$</b>	<b>(1)</b>	<b>\$</b>	<b>(581,441)</b>			
<b>Costs per 1000 Gallons</b>	\$	2.85			\$	3.07			
<b>Operating and DS</b>	\$	5.51			\$	5.70			
<b>Thousand Gallons Treated</b>		3,390,400		3,390,400		3,597,248		206,848	6.10%
<b>or</b>									
<b>Flow (MGD)</b>		9.289				9.855			

**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - June 2023**

**Glenmore Wastewater Rate Center**  
**Revenues and Expenses Summary**

<i>Budget FY 2023</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	\$ 443,640	\$ 443,640	\$ 443,640	\$ -	0.00%
Interest Allocation	150	150	3,166	3,016	2010.67%
<b>Total Operating Revenues</b>	<b>\$ 443,790</b>	<b>\$ 443,790</b>	<b>\$ 446,806</b>	<b>\$ 3,016</b>	<b>0.68%</b>

**Expenses**

Personnel Cost	<b>B</b> \$ 115,815	\$ 115,815	\$ 127,631	\$ (11,816)	-10.20%
Professional Services	<b>C</b> 5,000	5,000	20,082	(15,082)	-301.63%
Other Services & Charges	35,750	35,750	38,659	(2,909)	-8.14%
Communications	-	-	3,535	(3,535)	
Information Technology	4,425	4,425	13,407	(8,982)	-202.98%
Supplies	-	-	-	-	
Operations & Maintenance	134,950	134,950	108,916	26,034	19.29%
Equipment Purchases	3,800	3,800	3,800	(0)	0.00%
Depreciation	10,000	10,000	10,000	0	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 309,740</b>	<b>\$ 309,740</b>	<b>\$ 326,031</b>	<b>\$ (16,290)</b>	<b>-5.26%</b>
Allocation of Support Departments	134,045	134,045	132,170	1,875	1.40%
<b>Total Operating Expenses</b>	<b>\$ 443,785</b>	<b>\$ 443,785</b>	<b>\$ 458,200</b>	<b>\$ (14,415)</b>	<b>-3.25%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 5</b>	<b>\$ 5</b>	<b>\$ (11,394)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 20,484	\$ 20,484	\$ 20,484	\$ -	0.00%
Trust Fund Interest	-	-	-	-	
Reserve Fund Interest	80	80	1,041	961	1200.75%
<b>Total Debt Service Revenues</b>	<b>\$ 20,564</b>	<b>\$ 20,564</b>	<b>\$ 21,525</b>	<b>\$ -</b>	<b>0.00%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 18,717	\$ 18,717	\$ 18,717	\$ -	0.00%
Reserve Additions-CIP Growth	1,761	1,761	1,761	-	0.00%
Reserve Additions-Interest	80	80	1,041	(961)	-1200.75%
<b>Total Debt Service Costs</b>	<b>\$ 20,558</b>	<b>\$ 20,558</b>	<b>\$ 21,519</b>	<b>\$ (961)</b>	<b>-4.67%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ 6</b>	<b>\$ 6</b>	<b>\$ 6</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 464,354	\$ 464,354	\$ 468,331	\$ 3,977	0.86%
<b>Total Expenses</b>	464,343	464,343	479,719	(15,376)	-3.31%
<b>Surplus/(Deficit)</b>	<b>\$ 11</b>	<b>\$ 11</b>	<b>\$ (11,388)</b>		
<b>Costs per 1000 Gallons</b>	\$ 10.72		\$ 11.29		
<b>Operating and DS</b>	\$ 11.22		\$ 11.82		
<b>Thousand Gallons Treated or Flow (MGD)</b>	41,401	41,401	40,586	(815)	-1.97%
	0.113		0.111		

Rivanna Water & Sewer Authority  
Monthly Financial Statements - June 2023

**Scottsville Wastewater Rate Center**  
**Revenues and Expenses Summary**

<i>Budget FY 2023</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	\$	355,620	\$	355,620	\$	355,620	\$	-	0.00%
Interest Allocation		120		120		2,563		2,443	2035.83%
<b>Total Operating Revenues</b>	<b>\$</b>	<b>355,740</b>	<b>\$</b>	<b>355,740</b>	<b>\$</b>	<b>358,183</b>	<b>\$</b>	<b>2,443</b>	<b>0.69%</b>

**Expenses**

Personnel Cost	B	\$	115,795	\$	115,795	\$	127,631	\$	(11,836)	-10.22%
Professional Services			5,000		5,000		3,053		1,947	38.94%
Other Services & Charges			26,650		26,650		30,173		(3,523)	-13.22%
Communications			3,770		3,770		3,493		277	7.34%
Information Technology	E		4,125		4,125		17,727		(13,602)	-329.74%
Supplies			-		-		-		-	
Operations & Maintenance			52,000		52,000		43,065		8,935	17.18%
Equipment Purchases			3,800		3,800		3,800		(0)	0.00%
Depreciation			20,000		20,000		20,000		(0)	0.00%
<b>Subtotal Before Allocations</b>		<b>\$</b>	<b>231,140</b>	<b>\$</b>	<b>231,140</b>	<b>\$</b>	<b>248,942</b>	<b>\$</b>	<b>(17,802)</b>	<b>-7.70%</b>
Allocation of Support Departments			124,604		124,604		123,594		1,010	0.81%
<b>Total Operating Expenses</b>		<b>\$</b>	<b>355,744</b>	<b>\$</b>	<b>355,744</b>	<b>\$</b>	<b>372,536</b>	<b>\$</b>	<b>(16,792)</b>	<b>-4.72%</b>
<b>Operating Surplus/(Deficit)</b>		<b>\$</b>	<b>(4)</b>	<b>\$</b>	<b>(4)</b>	<b>\$</b>	<b>(14,353)</b>			

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$	10,110	\$	10,110	\$	10,116	\$	6	0.06%
Trust Fund Interest		-		-		199		199	
Reserve Fund Interest		100		100		2,081		1,981	1981.41%
<b>Total Debt Service Revenues</b>	<b>\$</b>	<b>10,210</b>	<b>\$</b>	<b>10,210</b>	<b>\$</b>	<b>12,396</b>	<b>\$</b>	<b>2,186</b>	<b>21.41%</b>

**Debt Service Costs**

Total Principal & Interest	\$	7,447	\$	7,447	\$	7,447	\$	-	0.00%
Reserve Additions-Interest		100		100		2,081		(1,981)	-1981.41%
Estimated New Principal & Interest		2,667		2,667		2,667		-	0.00%
<b>Total Debt Service Costs</b>	<b>\$</b>	<b>10,214</b>	<b>\$</b>	<b>10,214</b>	<b>\$</b>	<b>12,195</b>	<b>\$</b>	<b>(1,981)</b>	<b>-19.40%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$</b>	<b>(4)</b>	<b>\$</b>	<b>(4)</b>	<b>\$</b>	<b>201</b>			

**Rate Center Summary**

<b>Total Revenues</b>	\$	365,950	\$	365,950	\$	370,579	\$	4,629	1.26%
<b>Total Expenses</b>		365,958		365,958		384,731		(18,773)	-5.13%
<b>Surplus/(Deficit)</b>	<b>\$</b>	<b>(8)</b>	<b>\$</b>	<b>(8)</b>	<b>\$</b>	<b>(14,152)</b>			
<b>Costs per 1000 Gallons</b>	\$	15.05			\$	18.85			
<b>Operating and DS</b>	\$	15.48			\$	19.47			
<b>Thousand Gallons Treated</b>		23,643		23,643		19,761		(3,882)	-16.42%
<b>or</b>									
<b>Flow (MGD)</b>		0.065				0.054			



**Rivanna Water & Sewer Authority**  
**Monthly Financial Statements - June 2023**

**Administration**

<i>Budget FY 2023</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								
<b>Revenues</b>										
Payment for Services SWA		\$	654,000	\$	654,000	\$	669,000	\$	15,000	2.29%
Bond Proceeds Funding Bond Issuance Costs			-		-		-		-	
Miscellaneous Revenue			2,000		2,000		21,073		19,073	953.66%
<i>Total Operating Revenues</i>		<b>\$</b>	<b>656,000</b>	<b>\$</b>	<b>656,000</b>	<b>\$</b>	<b>690,073</b>	<b>\$</b>	<b>34,073</b>	<b>5.19%</b>
<b>Expenses</b>										
Personnel Cost		\$	2,450,092	\$	2,450,092	\$	2,411,356	\$	38,736	1.58%
Professional Services	<b>C</b>		170,000		170,000		289,223		(119,223)	-70.13%
Other Services & Charges			162,600		162,600		144,990		17,610	10.83%
Communications	<b>F</b>		24,780		24,780		72,453		(47,673)	-192.38%
Information Technology	<b>E</b>		404,876		404,876		964,014		(559,138)	-138.10%
Supplies			23,000		23,000		29,143		(6,143)	-26.71%
Operations & Maintenance			67,850		67,850		60,662		7,188	10.59%
Equipment Purchases			13,100		13,100		13,100		(0)	0.00%
Depreciation			-		-		-		-	
<i>Total Operating Expenses</i>		<b>\$</b>	<b>3,316,298</b>	<b>\$</b>	<b>3,316,298</b>	<b>\$</b>	<b>3,984,940</b>	<b>\$</b>	<b>(668,642)</b>	<b>-20.16%</b>

**Department Summary**

<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (2,660,298)</b>	<b>\$ (2,660,298)</b>	<b>\$ (3,294,867)</b>	<b>\$ 634,569</b>	<b>-23.85%</b>
<b><u>Allocations to the Rate Centers</u></b>						
Urban Water	44.00%	\$ 1,170,531	\$ 1,170,531	\$ 1,449,741	\$ (279,210)	
Crozet Water	4.00%	\$ 106,412	\$ 106,412	\$ 131,795	\$ (25,383)	
Scottsville Water	2.00%	\$ 53,206	\$ 53,206	\$ 65,897	\$ (12,691)	
Urban Wastewater	48.00%	\$ 1,276,943	\$ 1,276,943	\$ 1,581,536	\$ (304,593)	
Glenmore Wastewater	1.00%	\$ 26,603	\$ 26,603	\$ 32,949	\$ (6,346)	
Scottsville Wastewater	1.00%	\$ 26,603	\$ 26,603	\$ 32,949	\$ (6,346)	
	100.00%	<b>\$ 2,660,298</b>	<b>\$ 2,660,298</b>	<b>\$ 3,294,867</b>	<b>\$ (634,569)</b>	

Rivanna Water & Sewer Authority  
Monthly Financial Statements - June 2023

**Maintenance**

<i>Budget FY 2023</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		-		-		2,651		2,651
<b>Total Operating Revenues</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>2,651</b>	<b>\$</b>	<b>2,651</b>

**Expenses**

Personnel Cost	\$	1,477,565	\$	1,477,565	\$	1,389,038	\$	88,528	5.99%
Professional Services		-		-		4,207		(4,207)	
Other Services & Charges		33,600		33,600		15,818		17,782	52.92%
Communications		24,500		24,500		17,018		7,482	30.54%
Information Technology		32,500		32,500		21,073		11,427	35.16%
Supplies		2,500		2,500		657		1,843	73.70%
Operations & Maintenance	<b>G</b>	104,900		104,900		141,492		(36,592)	-34.88%
Equipment Purchases		212,600		212,600		128,600		84,000	39.51%
Depreciation		-		-		-		-	
<b>Total Operating Expenses</b>		<b>\$ 1,888,165</b>		<b>\$ 1,888,165</b>		<b>\$ 1,717,904</b>		<b>\$ 170,262</b>	<b>9.02%</b>

**Department Summary**

<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (1,888,165)</b>	<b>\$ (1,888,165)</b>	<b>\$ (1,715,253)</b>	<b>\$ (167,610)</b>	<b>8.88%</b>
<b><u>Allocations to the Rate Centers</u></b>						
Urban Water	30.00%	\$ 566,450	\$ 566,450	\$ 514,576	\$ 51,874	
Crozet Water	3.50%	66,086	66,086	60,034	6,052	
Scottsville Water	3.50%	66,086	66,086	60,034	6,052	
Urban Wastewater	56.50%	1,066,814	1,066,814	969,118	97,696	
Glenmore Wastewater	3.50%	66,086	66,086	60,034	6,052	
Scottsville Wastewater	3.00%	56,645	56,645	51,458	5,187	
	<b>100.00%</b>	<b>\$ 1,888,165</b>	<b>\$ 1,888,165</b>	<b>\$ 1,715,253</b>	<b>\$ 172,913</b>	

Rivanna Water & Sewer Authority  
Monthly Financial Statements - June 2023

**Laboratory**

<i>Budget FY 2023</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	\$	415,324	\$	415,324	\$	410,340	\$	4,984	1.20%
Professional Services		-		-		-		-	
Other Services & Charges		11,780		11,780		6,232		5,548	47.10%
Communications		1,700		1,700		1,057		643	37.84%
Information Technology		1,000		1,000		1,400		(400)	-39.96%
Supplies		1,250		1,250		1,335		(85)	-6.79%
Operations & Maintenance		121,050		121,050		123,295		(2,245)	-1.85%
Equipment Purchases		1,700		1,700		1,795		(95)	-5.59%
Depreciation		-		-		-		-	
<b>Total Operating Expenses</b>	<b>\$</b>	<b>553,804</b>	<b>\$</b>	<b>553,804</b>	<b>\$</b>	<b>545,453</b>	<b>\$</b>	<b>8,351</b>	<b>1.51%</b>

**Department Summary**

<b>Net Costs Allocable to Rate Centers</b>		<b>\$</b>	<b>(553,804)</b>	<b>\$</b>	<b>(553,804)</b>	<b>\$</b>	<b>(545,453)</b>	<b>\$</b>	<b>(8,351)</b>	<b>1.51%</b>
<b><u>Allocations to the Rate Centers</u></b>										
Urban Water	44.00%	\$	243,674	\$	243,674	\$	240,000	\$	3,674	
Crozet Water	4.00%		22,152		22,152		21,818		334	
Scottsville Water	2.00%		11,076		11,076		10,909		167	
Urban Wastewater	47.00%		260,288		260,288		256,363		3,925	
Glenmore Wastewater	1.50%		8,307		8,307		8,182		125	
Scottsville Wastewater	1.50%		8,307		8,307		8,182		125	
	100.00%	<b>\$</b>	<b>553,804</b>	<b>\$</b>	<b>553,804</b>	<b>\$</b>	<b>545,453</b>	<b>\$</b>	<b>8,351</b>	

Rivanna Water & Sewer Authority  
Monthly Financial Statements - June 2023

**Engineering**

<i>Budget FY 2023</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*

\$ -	\$ -	\$ 43,403	\$ 43,403	
<b>\$ -</b>	<b>\$ -</b>	<b>\$ 43,403</b>	<b>\$ 43,403</b>	

**Expenses**

Personnel Cost

Professional Services

Other Services &amp; Charges

Communications

Information Technology

Supplies

Operations &amp; Maintenance

Equipment Purchases

Depreciation

*Total Operating Expenses*

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\$ 1,794,680	\$ 1,794,680	\$ 1,799,992	\$ (5,312)	-0.30%
125,000	125,000	56,860	68,140	54.51%
18,000	18,000	8,229	9,771	54.28%
18,772	18,772	10,122	8,650	46.08%
145,000	145,000	159,191	(14,191)	-9.79%
5,000	5,000	4,507	493	9.87%
75,300	75,300	50,034	25,266	33.55%
21,500	21,500	21,500	0	0.00%
-	-	-	-	
<b>\$ 2,203,252</b>	<b>\$ 2,203,252</b>	<b>\$ 2,110,435</b>	<b>\$ 92,817</b>	<b>4.21%</b>

**Department Summary**

Net Costs Allocable to Rate Centers

\$ (2,203,252)	\$ (2,203,252)	\$ (2,067,032)	\$ (49,413)	2.24%
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**Allocations to the Rate Centers**

Urban Water

Crozet Water

Scottsville Water

Urban Wastewater

Glenmore Wastewater

Scottsville Wastewater

47.00%	\$ 1,035,528	\$ 1,035,528	\$ 971,505	\$ 64,023
4.00%	88,130	88,130	82,681	5,449
2.00%	44,065	44,065	41,341	2,724
44.00%	969,431	969,431	909,494	59,937
1.50%	33,049	33,049	31,005	2,043
1.50%	33,049	33,049	31,005	2,043
100.00%	<b>\$ 2,203,252</b>	<b>\$ 2,203,252</b>	<b>\$ 2,067,032</b>	<b>\$ 136,220</b>

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Urban Water**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 1,414,600	\$ 1,414,600	\$ 1,499,078	\$ (84,478)	-5.97%
11010	Holiday & Overtime Pay	169,650	169,650	135,699	33,951	20.01%
12010	FICA	121,195	121,195	121,832	(636)	-0.53%
12020	Health Insurance	321,000	321,000	228,118	92,882	28.94%
12026	Employee Assistance Program	350	350	360	(10)	-2.86%
12030	Retirement	118,685	118,685	123,229	(4,544)	-3.83%
12040	Life Insurance	16,834	16,834	18,875	(2,041)	-12.12%
12050	Fitness Program	3,000	3,000	3,439	(439)	-14.64%
12060	Worker's Comp Insurance	27,300	27,300	25,404	1,896	6.94%
	<b>Subtotal</b>	<b>\$ 2,192,614</b>	<b>\$ 2,192,614</b>	<b>\$ 2,156,033</b>	<b>\$ 36,581</b>	<b>1.67%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 4,000	\$ 4,000	\$ 5,696	\$ (1,696)	-42.40%
13150	Education & Training	10,100	10,100	23,594	(13,494)	-133.60%
13200	Travel & Lodging	2,500	2,500	736	1,764	70.55%
13250	Uniforms	23,000	23,000	24,671	(1,671)	-7.26%
13325	Recruiting & Medical Testing	1,500	1,500	767	733	48.87%
13350	Other	1,000	1,000	1,083	(83)	-8.33%
	<b>Subtotal</b>	<b>\$ 42,100</b>	<b>\$ 42,100</b>	<b>\$ 56,547</b>	<b>\$ (14,447)</b>	<b>-34.32%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ 10,000	\$ 10,000	\$ 27,660	\$ (17,660)	-176.60%
20200	Financial & Administrative Services	-	-	1,600	(1,600)	
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	212,000	212,000	150,445	61,555	29.04%
	<b>Subtotal</b>	<b>\$ 222,000</b>	<b>\$ 222,000</b>	<b>\$ 179,704</b>	<b>\$ 42,296</b>	<b>19.05%</b>
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 34,400	\$ 34,400	\$ 40,245	\$ (5,845)	-16.99%
21150	Advertising & Communication	-	-	-	-	
21250	Watershed Management	50,000	50,000	100,583	(50,583)	-101.17%
21253	Safety Programs/ Supplies	28,200	28,200	27,843	357	1.26%
21300	Authority Dues/ Permits/ Fees	7,000	7,000	12,540	(5,540)	-79.14%
21350	Laboratory Analysis	36,700	36,700	42,023	(5,323)	-14.50%
21400	Utilities	520,000	520,000	657,722	(137,722)	-26.49%
21420	General Other Services	40,000	40,000	42,064	(2,064)	-5.16%
21430	Governance & Strategic Support	-	-	-	-	
21450	Bad Debts	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 716,300</b>	<b>\$ 716,300</b>	<b>\$ 923,020</b>	<b>\$ (206,720)</b>	<b>-28.86%</b>
	<b>Communication</b>					
22100	Radio	\$ 4,000	\$ 4,000	\$ 12,281	\$ (8,281)	-207.03%
22150	Telephone & Data Service	86,000	86,000	75,725	10,275	11.95%
22200	Cell Phones & Pagers	10,920	10,920	11,679	(759)	-6.95%
	<b>Subtotal</b>	<b>\$ 100,920</b>	<b>\$ 100,920</b>	<b>\$ 99,685</b>	<b>\$ 1,235</b>	<b>1.22%</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 10,000	\$ 10,000	\$ 44,058	\$ (34,058)	-340.58%
31150	SCADA Maint. & Support	79,150	79,150	83,149	(3,999)	-5.05%
31200	Maintenance & Support Services	3,150	3,150	4,286	(1,136)	-36.06%
31250	Software Purchases	-	-	1,026	(1,026)	
31300	Security Systems	8,650	8,650	13,985	(5,335)	-61.68%
31325	Asset Mgt / Project Mgt Systems	4,000	4,000	-	4,000	100.00%
	<b>Subtotal</b>	<b>\$ 104,950</b>	<b>\$ 104,950</b>	<b>\$ 146,505</b>	<b>\$ (41,555)</b>	<b>-39.59%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ 3,000	\$ 3,000	\$ 2,970	\$ 30	0.99%
33150	Subscriptions/ Reference Material	-	-	-	-	
33350	Postage & Delivery	2,400	2,400	5,411	(3,011)	-125.47%
	<b>Subtotal</b>	<b>\$ 5,400</b>	<b>\$ 5,400</b>	<b>\$ 8,382</b>	<b>\$ (2,982)</b>	<b>-55.21%</b>
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 224,400	\$ 224,400	\$ 123,775	\$ 100,625	44.84%
41150	Building & Land Lease	175,000	175,000	175,000	-	0.00%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Urban Water**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41300	Dam Maintenance	123,700	123,700	134,207	(10,507)	-8.49%
41350	Pipelines/ Appurtenances	75,000	75,000	75,505	(505)	-0.67%
41400	Materials, Supplies & Tools	40,000	40,000	60,623	(20,623)	-51.56%
41450	Chemicals	1,343,671	1,343,671	1,990,294	(646,623)	-48.12%
41500	Vehicle Maintenance	10,000	10,000	7,957	2,043	20.43%
41550	Equipment Repair, Replace, Maint.	233,000	233,000	256,897	(23,897)	-10.26%
41600	Instrumentation & Metering	171,625	171,625	148,755	22,870	13.33%
41650	Fuel & Lubricants	25,000	25,000	27,764	(2,764)	-11.06%
41700	General Other Maintenance	90,000	90,000	29,311	60,689	67.43%
<b>Subtotal</b>		<b>\$ 2,511,396</b>	<b>\$ 2,511,396</b>	<b>\$ 3,030,088</b>	<b>\$ (518,692)</b>	<b>-20.65%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ -	\$ -	\$ 4,857	\$ (4,857)	
81250	Equipment (over \$10,000)	-	-	-	-	
81300	Vehicle Replacement Fund	16,000	16,000	16,000	0	0.00%
<b>Subtotal</b>		<b>\$ 16,000</b>	<b>\$ 16,000</b>	<b>\$ 20,857</b>	<b>\$ (4,857)</b>	<b>-30.36%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 1,170,531	\$ 1,170,531	\$ 1,449,741	\$ (279,210)	-23.85%
95150	Maintenance Allocation	566,450	566,450	514,576	51,874	9.16%
95200	Laboratory Allocation	243,674	243,674	240,000	3,674	1.51%
95300	Engineering Allocation	1,035,528	1,035,528	971,505	64,023	6.18%
<b>Subtotal</b>		<b>\$ 3,016,183</b>	<b>\$ 3,016,183</b>	<b>\$ 3,175,822</b>	<b>\$ (159,639)</b>	<b>-5.29%</b>
82100	Depreciation	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	0.00%
<b>Subtotal</b>		<b>\$ 300,000</b>	<b>\$ 300,000</b>	<b>\$ 300,000</b>	<b>\$ -</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 9,227,863</b>	<b>\$ 9,227,863</b>	<b>\$ 10,096,643</b>	<b>\$ (868,780)</b>	<b>-9.41%</b>

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Crozet Water**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 224,300	\$ 224,300	\$ 238,114	\$ (13,814)	-6.16%
11010	Holiday & Overtime Pay	25,000	25,000	22,102	2,898	11.59%
12010	FICA	19,071	19,071	19,417	(345)	-1.81%
12020	Health Insurance	51,700	51,700	36,417	15,283	29.56%
12026	Employee Assistance Program	50	50	58	(8)	-16.00%
12030	Retirement	18,819	18,819	19,570	(752)	-3.99%
12040	Life Insurance	2,669	2,669	2,998	(329)	-12.31%
12050	Fitness Program	400	400	543	(143)	-35.68%
12060	Worker's Comp Insurance	4,300	4,300	3,863	437	10.17%
	<b>Subtotal</b>	<b>\$ 346,309</b>	<b>\$ 346,309</b>	<b>\$ 343,082</b>	<b>\$ 3,228</b>	<b>0.93%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 250	\$ 250	\$ 869	\$ (619)	-247.64%
13150	Education & Training	1,200	1,200	3,024	(1,824)	-152.01%
13200	Travel & Lodging	400	400	50	350	87.60%
13250	Uniforms	3,700	3,700	3,907	(207)	-5.60%
13325	Recruiting & Medical Testing	200	200	121	79	39.43%
13350	Other	500	500	63	437	87.44%
	<b>Subtotal</b>	<b>\$ 6,250</b>	<b>\$ 6,250</b>	<b>\$ 8,034</b>	<b>\$ (1,784)</b>	<b>-28.54%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Administrative Services	-	-	-	-	
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	22,900	22,900	41,021	(18,121)	-79.13%
	<b>Subtotal</b>	<b>\$ 22,900</b>	<b>\$ 22,900</b>	<b>\$ 41,021</b>	<b>\$ (18,121)</b>	
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 2,300	\$ 2,300	\$ 2,691	\$ (391)	-16.99%
21150	Advertising & Communication	-	-	-	-	
21250	Watershed Management	-	-	-	-	
21253	Safety Programs/ Supplies	7,700	7,700	5,175	2,525	32.79%
21300	Authority Dues/ Permits/ Fees	1,700	1,700	1,645	55	3.24%
21350	Laboratory Analysis	21,000	21,000	20,267	733	3.49%
21400	Utilities	86,000	86,000	112,498	(26,498)	-30.81%
21420	General Other Services	-	-	-	-	
21430	Governance & Strategic Support	-	-	-	-	
21450	Bad Debts	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 118,700</b>	<b>\$ 118,700</b>	<b>\$ 142,276</b>	<b>\$ (23,576)</b>	<b>-19.86%</b>
	<b>Communication</b>					
22100	Radio	\$ 400	\$ 400	\$ 610	\$ (210)	-52.49%
22150	Telephone & Data Service	16,000	16,000	17,236	(1,236)	-7.72%
22200	Cell Phones & Pagers	1,200	1,200	1,485	(285)	-23.78%
	<b>Subtotal</b>	<b>\$ 17,600</b>	<b>\$ 17,600</b>	<b>\$ 19,331</b>	<b>\$ (1,731)</b>	<b>-9.84%</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 1,250	\$ 1,250	\$ 3,662	\$ (2,412)	-192.98%
31150	SCADA Maint. & Support	1,500	1,500	24,598	(23,098)	-1539.89%
31200	Maintenance & Support Services	-	-	-	-	
31250	Software Purchases	-	-	87	(87)	
31300	Security Systems	2,200	2,200	3,776	(1,576)	-71.63%
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 4,950</b>	<b>\$ 4,950</b>	<b>\$ 32,124</b>	<b>\$ (27,174)</b>	<b>-548.96%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ -	\$ -	\$ 27	\$ (27)	
33150	Subscriptions/ Reference Material	-	-	-	-	
33350	Postage & Delivery	1,500	1,500	1,543	(43)	-2.90%
	<b>Subtotal</b>	<b>\$ 1,500</b>	<b>\$ 1,500</b>	<b>\$ 1,570</b>	<b>\$ (70)</b>	<b>-4.70%</b>
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 24,200	\$ 24,200	\$ 42,326	\$ (18,126)	-74.90%
41150	Building & Land Lease	-	-	-	-	
41300	Dam Maintenance	-	-	2,240	(2,240)	100.00%
41350	Pipelines/ Appurtenances	2,000	2,000	47,664	(45,664)	-2283.21%
41400	Materials, Supplies & Tools	5,000	5,000	9,297	(4,297)	-85.94%
41450	Chemicals	223,300	223,300	266,046	(42,746)	-19.14%
41500	Vehicle Maintenance	1,000	1,000	1,382	(382)	-38.16%
41550	Equipment Repair, Replace, Maint.	40,000	40,000	36,257	3,743	9.36%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Crozet Water**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering	28,000	28,000	24,908	3,092	11.04%
41650	Fuel & Lubricants	5,000	5,000	4,946	54	1.09%
41700	General Other Maintenance	30,000	30,000	10,822	19,178	63.93%
<b>Subtotal</b>		<b>\$ 358,500</b>	<b>\$ 358,500</b>	<b>\$ 445,887</b>	<b>\$ (87,387)</b>	<b>-24.38%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ -	\$ -	\$ 735	\$ (735)	
81250	Equipment (over \$10,000)	-	-	-	-	
81300	Vehicle Replacement Fund	3,000	3,000	3,000	-	0.00%
<b>Subtotal</b>		<b>\$ 3,000</b>	<b>\$ 3,000</b>	<b>\$ 3,735</b>	<b>\$ (735)</b>	<b>-24.51%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 106,412	\$ 106,412	\$ 131,795	\$ (25,383)	-23.85%
95150	Maintenance Allocation	66,086	66,086	60,034	6,052	9.16%
95200	Laboratory Allocation	22,152	22,152	21,818	334	1.51%
95300	Engineering Allocation	88,130	88,130	82,681	5,449	6.18%
<b>Subtotal</b>		<b>\$ 282,780</b>	<b>\$ 282,780</b>	<b>\$ 296,328</b>	<b>\$ (13,548)</b>	<b>-4.79%</b>
82100	Depreciation	\$ 60,000	\$ 60,000	\$ 60,000	\$ -	0.00%
<b>Subtotal</b>		<b>\$ 60,000</b>	<b>\$ 60,000</b>	<b>\$ 60,000</b>	<b>\$ -</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 1,222,489</b>	<b>\$ 1,222,489</b>	<b>\$ 1,393,388</b>	<b>\$ (170,898)</b>	<b>-13.98%</b>



**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Scottsville Water**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 137,800	\$ 137,800	\$ 145,077	\$ (7,277)	-5.28%
11010	Holiday & Overtime Pay	13,000	13,000	13,536	(536)	-4.12%
12010	FICA	11,536	11,536	11,838	(302)	-2.62%
12020	Health Insurance	31,800	31,800	22,214	9,586	30.15%
12026	Employee Assistance Program	30	30	35	(5)	-18.13%
12030	Retirement	11,561	11,561	11,933	(371)	-3.21%
12040	Life Insurance	1,640	1,640	1,827	(187)	-11.39%
12050	Fitness Program	200	200	330	(130)	-65.17%
12060	Worker's Comp Insurance	2,600	2,600	2,318	282	10.83%
	<b>Subtotal</b>	<b>\$ 210,167</b>	<b>\$ 210,167</b>	<b>\$ 209,108</b>	<b>\$ 1,059</b>	<b>0.50%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 180	\$ 180	\$ 531	\$ (351)	-195.06%
13150	Education & Training	400	400	1,823	(1,423)	-355.83%
13200	Travel & Lodging	200	200	25	175	87.60%
13250	Uniforms	1,400	1,400	2,433	(1,033)	-73.80%
13325	Recruiting & Medical Testing	150	150	74	76	50.88%
13350	Other	300	300	38	262	87.34%
	<b>Subtotal</b>	<b>\$ 2,630</b>	<b>\$ 2,630</b>	<b>\$ 4,924</b>	<b>\$ (2,294)</b>	<b>-87.23%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ -	\$ -	\$ 5,948	\$ (5,948)	
20200	Financial & Administrative Services	-	-	-	-	
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	5,000	5,000	14,470	(9,470)	-189.40%
	<b>Subtotal</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 20,418</b>	<b>\$ (15,418)</b>	
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 900	\$ 900	\$ 1,053	\$ (153)	-17.00%
21150	Advertising & Communication	-	-	-	-	
21250	Watershed Management	-	-	-	-	
21253	Safety Programs/ Supplies	4,200	4,200	3,661	539	12.83%
21300	Authority Dues/ Permits/ Fees	500	500	776	(276)	-55.19%
21350	Laboratory Analysis	5,500	5,500	10,288	(4,788)	-87.05%
21400	Utilities	16,000	16,000	24,334	(8,334)	-52.09%
21420	General Other Services	-	-	-	-	
21430	Governance & Strategic Support	-	-	-	-	
21450	Bad Debts	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 27,100</b>	<b>\$ 27,100</b>	<b>\$ 40,112</b>	<b>\$ (13,012)</b>	<b>-48.01%</b>
	<b>Communication</b>					
22100	Radio	\$ 400	\$ 400	\$ 136	\$ 264	65.91%
22150	Telephone & Data Service	5,000	5,000	5,608	(608)	-12.16%
22200	Cell Phones & Pagers	1,000	1,000	1,092	(92)	-9.18%
	<b>Subtotal</b>	<b>\$ 6,400</b>	<b>\$ 6,400</b>	<b>\$ 6,836</b>	<b>\$ (436)</b>	<b>-6.81%</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 1,250	\$ 1,250	\$ 164	\$ 1,086	86.87%
31150	SCADA Maint. & Support	1,300	1,300	10,685	(9,385)	-721.93%
31200	Maintenance & Support Services	-	-	-	-	
31250	Software Purchases	-	-	44	(44)	
31300	Security Systems	1,850	1,850	-	1,850	100.00%
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 4,400</b>	<b>\$ 4,400</b>	<b>\$ 10,893</b>	<b>\$ (6,493)</b>	<b>-147.57%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ -	\$ -	\$ -	\$ -	
33150	Subscriptions/ Reference Material	-	-	-	-	
33350	Postage & Delivery	100	100	201	(101)	-101.01%
	<b>Subtotal</b>	<b>\$ 100</b>	<b>\$ 100</b>	<b>\$ 201</b>	<b>\$ (101)</b>	<b>-101.01%</b>
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 16,800	\$ 16,800	\$ 24,383	\$ (7,583)	-45.14%
41150	Building & Land Lease	-	-	-	-	
41300	Dam Maintenance	1,500	1,500	3,948	(2,448)	
41350	Pipelines/ Appurtenances	-	-	-	-	
41400	Materials, Supplies & Tools	2,500	2,500	6,661	(4,161)	-166.46%
41450	Chemicals	31,025	31,025	39,722	(8,697)	-28.03%
41500	Vehicle Maintenance	800	800	906	(106)	-13.28%
41550	Equipment Repair, Replace, Maint.	25,800	25,800	19,975	5,825	22.58%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Scottsville Water**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering	10,000	10,000	17,282	(7,282)	-72.82%
41650	Fuel & Lubricants	1,000	1,000	1,946	(946)	-94.57%
41700	General Other Maintenance	8,500	8,500	8,725	(225)	-2.65%
<b>Subtotal</b>		<b>\$ 97,925</b>	<b>\$ 97,925</b>	<b>\$ 123,548</b>	<b>\$ (25,623)</b>	<b>-26.17%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ -	\$ -	\$ 1,418	\$ (1,418)	
81250	Equipment (over \$10,000)	-	-	-	-	
81300	Vehicle Replacement Fund	1,600	1,600	1,600	0	0.00%
<b>Subtotal</b>		<b>\$ 1,600</b>	<b>\$ 1,600</b>	<b>\$ 3,018</b>	<b>\$ (1,418)</b>	<b>-88.62%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 53,206	\$ 53,206	\$ 65,897	\$ (12,691)	-23.85%
95150	Maintenance Allocation	66,086	66,086	60,034	6,052	9.16%
95200	Laboratory Allocation	11,076	11,076	10,909	167	1.51%
95300	Engineering Allocation	44,065	44,065	41,341	2,724	6.18%
<b>Subtotal</b>		<b>\$ 174,433</b>	<b>\$ 174,433</b>	<b>\$ 178,181</b>	<b>\$ (3,748)</b>	<b>-2.15%</b>
82100	Depreciation	\$ 40,000	\$ 40,000	\$ 40,000	\$ 0	0.00%
<b>Subtotal</b>		<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 0</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 569,755</b>	<b>\$ 569,755</b>	<b>\$ 637,239</b>	<b>\$ (67,483)</b>	<b>-11.84%</b>

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Urban Wastewater**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 877,400	\$ 877,400	\$ 990,224	\$ (112,824)	-12.86%
11010	Holiday & Overtime Pay	55,000	55,000	57,536	(2,536)	-4.61%
12010	FICA	71,329	71,329	78,086	(6,758)	-9.47%
12020	Health Insurance	204,800	204,800	190,812	13,988	6.83%
12026	Employee Assistance Program	200	200	248	(48)	-23.82%
12030	Retirement	73,614	73,614	79,622	(6,008)	-8.16%
12040	Life Insurance	10,441	10,441	12,321	(1,880)	-18.01%
12050	Fitness Program	1,200	1,200	1,201	(1)	-0.05%
12060	Worker's Comp Insurance	11,000	11,000	11,258	(258)	-2.35%
	<b>Subtotal</b>	<b>\$ 1,304,984</b>	<b>\$ 1,304,984</b>	<b>\$ 1,421,308</b>	<b>\$ (116,325)</b>	<b>-8.91%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 2,000	\$ 2,000	\$ 1,958	\$ 42	2.09%
13150	Education & Training	4,900	4,900	11,625	(6,725)	-137.25%
13200	Travel & Lodging	500	500	1,002	(502)	-100.38%
13250	Uniforms	11,000	11,000	13,190	(2,190)	-19.91%
13325	Recruiting & Medical Testing	1,000	1,000	898	102	10.21%
13350	Other	1,000	1,000	1,286	(286)	-28.57%
	<b>Subtotal</b>	<b>\$ 20,400</b>	<b>\$ 20,400</b>	<b>\$ 29,959</b>	<b>\$ (9,559)</b>	<b>-46.86%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ 5,000	\$ 5,000	\$ 4,054	\$ 946	18.92%
20200	Financial & Administrative Services	-	-	2,900	(2,900)	
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	70,000	70,000	154,644	(84,644)	-120.92%
	<b>Subtotal</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 161,598</b>	<b>\$ (86,598)</b>	
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 70,300	\$ 70,300	\$ 82,245	\$ (11,945)	-16.99%
21150	Advertising & Communication	-	-	1,750	(1,750)	
21250	Watershed Management	-	-	-	-	
21253	Safety Programs/ Supplies	20,900	20,900	29,365	(8,465)	-40.50%
21300	Authority Dues/ Permits/ Fees	46,000	46,000	51,257	(5,257)	-11.43%
21350	Laboratory Analysis	11,680	11,680	26,467	(14,787)	-126.60%
21400	Utilities	940,000	940,000	1,248,973	(308,973)	-32.87%
21420	General Other Services	1,188,100	1,188,100	1,179,349	8,751	0.74%
21430	Governance & Strategic Support	-	-	-	-	
21450	Bad Debts	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 2,276,980</b>	<b>\$ 2,276,980</b>	<b>\$ 2,619,407</b>	<b>\$ (342,427)</b>	<b>-15.04%</b>
	<b>Communication</b>					
22100	Radio	\$ -	\$ -	\$ 1,663	\$ (1,663)	
22150	Telephone & Data Service	-	-	5,713	(5,713)	
22200	Cell Phones & Pagers	1,900	1,900	6,128	(4,228)	-222.52%
	<b>Subtotal</b>	<b>\$ 1,900</b>	<b>\$ 1,900</b>	<b>\$ 13,503</b>	<b>\$ (11,603)</b>	<b>-610.69%</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 10,000	\$ 10,000	\$ 14,422	\$ (4,422)	-44.22%
31150	SCADA Maint. & Support	90,800	90,800	152,972	(62,172)	-68.47%
31200	Maintenance & Support Services	-	-	200	(200)	
31250	Software Purchases	-	-	960	(960)	
31300	Security Systems	5,600	5,600	4,546	1,054	18.83%
31325	Asset Mgt / Project Mgt Systems	4,000	4,000	-	4,000	100.00%
	<b>Subtotal</b>	<b>\$ 110,400</b>	<b>\$ 110,400</b>	<b>\$ 173,100</b>	<b>\$ (62,700)</b>	<b>-56.79%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ 1,000	\$ 1,000	\$ 442	\$ 558	55.83%
33150	Subscriptions/ Reference Material	-	-	-	-	
33350	Postage & Delivery	200	200	491	(291)	-145.60%
	<b>Subtotal</b>	<b>\$ 1,200</b>	<b>\$ 1,200</b>	<b>\$ 933</b>	<b>\$ 267</b>	<b>22.26%</b>
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 76,160	\$ 76,160	\$ 114,081	\$ (37,921)	-49.79%
41150	Building & Land Lease	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	
41350	Pipelines/ Appurtenances	125,000	125,000	113,579	11,421	9.14%
41400	Materials, Supplies & Tools	57,000	57,000	106,430	(49,430)	-86.72%
41450	Chemicals	727,200	727,200	1,156,977	(429,777)	-59.10%
41500	Vehicle Maintenance	15,000	15,000	26,971	(11,971)	-79.81%
41550	Equipment Repair, Replace, Maint.	508,900	508,900	671,699	(162,799)	-31.99%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Urban Wastewater**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering	144,400	144,400	169,353	(24,953)	-17.28%
41650	Fuel & Lubricants	40,000	40,000	34,472	5,528	13.82%
41700	General Other Maintenance	5,000	5,000	(20,006)	25,006	500.11%
<b>Subtotal</b>		<b>\$ 1,698,660</b>	<b>\$ 1,698,660</b>	<b>\$ 2,373,555</b>	<b>\$ (674,895)</b>	<b>-39.73%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ 26,000	\$ 26,000	\$ -	\$ 26,000	100.00%
81250	Equipment (over \$10,000)	67,000	67,000	-	67,000	100.00%
81300	Vehicle Replacement Fund	50,000	50,000	50,000	(0)	0.00%
<b>Subtotal</b>		<b>\$ 143,000</b>	<b>\$ 143,000</b>	<b>\$ 50,000</b>	<b>\$ 93,000</b>	<b>65.03%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 1,276,943	\$ 1,276,943	\$ 1,581,536	\$ (304,593)	-23.85%
95150	Maintenance Allocation	1,066,814	1,066,814	969,118	97,696	9.16%
95200	Laboratory Allocation	260,288	260,288	256,363	3,925	1.51%
95300	Engineering Allocation	969,431	969,431	909,494	59,937	6.18%
<b>Subtotal</b>		<b>\$ 3,573,476</b>	<b>\$ 3,573,476</b>	<b>\$ 3,716,511</b>	<b>\$ (143,035)</b>	<b>-4.00%</b>
82100	Depreciation	\$ 470,000	\$ 470,000	\$ 470,000	\$ (0)	0.00%
<b>Subtotal</b>		<b>\$ 470,000</b>	<b>\$ 470,000</b>	<b>\$ 470,000</b>	<b>\$ (0)</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 9,675,999</b>	<b>\$ 9,675,999</b>	<b>\$ 11,029,874</b>	<b>\$ (1,353,875)</b>	<b>-13.99%</b>

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Glenmore Wastewater**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 77,100	\$ 77,100	\$ 87,263	\$ (10,163)	-13.18%
11010	Holiday & Overtime Pay	4,000	4,000	5,317	(1,317)	-32.93%
12010	FICA	6,204	6,204	6,916	(712)	-11.48%
12020	Health Insurance	18,600	18,600	17,120	1,480	7.96%
12026	Employee Assistance Program	15	15	22	(7)	-49.60%
12030	Retirement	6,469	6,469	7,020	(551)	-8.52%
12040	Life Insurance	917	917	1,085	(168)	-18.26%
12050	Fitness Program	80	80	99	(19)	-23.48%
12060	Worker's Comp Insurance	800	800	749	51	6.32%
	<b>Subtotal</b>	<b>\$ 114,185</b>	<b>\$ 114,185</b>	<b>\$ 125,592</b>	<b>\$ (11,407)</b>	<b>-9.99%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 100	\$ 100	\$ 110	\$ (10)	-9.55%
13150	Education & Training	500	500	501	(1)	-0.11%
13200	Travel & Lodging	50	50	19	31	62.82%
13250	Uniforms	780	780	1,214	(434)	-55.67%
13325	Recruiting & Medical Testing	100	100	80	20	19.69%
13350	Other	100	100	116	(16)	-16.13%
	<b>Subtotal</b>	<b>\$ 1,630</b>	<b>\$ 1,630</b>	<b>\$ 2,039</b>	<b>\$ (409)</b>	<b>-25.11%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Administrative Services	-	-	-	-	
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	5,000	5,000	20,082	(15,082)	-301.63%
	<b>Subtotal</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 20,082</b>	<b>\$ (15,082)</b>	
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 350	\$ 350	\$ 409	\$ (59)	-16.99%
21150	Advertising & Communication	-	-	-	-	
21250	Watershed Management	-	-	-	-	
21253	Safety Programs/ Supplies	600	600	4,313	(3,713)	-618.83%
21300	Authority Dues/ Permits/ Fees	3,600	3,600	4,049	(449)	-12.46%
21350	Laboratory Analysis	3,200	3,200	510	2,690	84.05%
21400	Utilities	28,000	28,000	29,378	(1,378)	-4.92%
21420	General Other Services	-	-	-	-	
21430	Governance & Strategic Support	-	-	-	-	
21450	Bad Debts	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 35,750</b>	<b>\$ 35,750</b>	<b>\$ 38,659</b>	<b>\$ (2,909)</b>	<b>-8.14%</b>
	<b>Communication</b>					
22100	Radio	\$ -	\$ -	\$ 128	\$ (128)	
22150	Telephone & Data Service	-	-	2,551	(2,551)	
22200	Cell Phones & Pagers	-	-	856	(856)	
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,535</b>	<b>\$ (3,535)</b>	<b>#DIV/0!</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 1,250	\$ 1,250	\$ 123	\$ 1,127	90.15%
31150	SCADA Maint. & Support	1,125	1,125	10,734	(9,609)	-854.12%
31200	Maintenance & Support Services	-	-	-	-	
31250	Software Purchases	-	-	33	(33)	
31300	Security Systems	2,050	2,050	2,517	(467)	-22.79%
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 4,425</b>	<b>\$ 4,425</b>	<b>\$ 13,407</b>	<b>\$ (8,982)</b>	<b>-202.98%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ -	\$ -	\$ -	\$ -	
33150	Subscriptions/ Reference Material	-	-	-	-	
33350	Postage & Delivery	-	-	-	-	
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 14,000	\$ 14,000	\$ 6,929	\$ 7,071	50.51%
41150	Building & Land Lease	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	
41350	Pipelines/ Appurtenances	-	-	-	-	
41400	Materials, Supplies & Tools	7,500	7,500	3,851	3,649	48.65%
41450	Chemicals	5,000	5,000	6,569	(1,569)	-31.39%
41500	Vehicle Maintenance	750	750	(44)	794	105.86%
41550	Equipment Repair, Replace, Maint.	40,000	40,000	17,994	22,006	55.02%

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Glenmore Wastewater**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering	5,000	5,000	-	5,000	100.00%
41650	Fuel & Lubricants	2,700	2,700	3,890	(1,190)	-44.08%
41700	General Other Maintenance	60,000	60,000	69,727	(9,727)	-16.21%
<b>Subtotal</b>		<b>\$ 134,950</b>	<b>\$ 134,950</b>	<b>\$ 108,916</b>	<b>\$ 26,034</b>	<b>19.29%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ -	\$ -	\$ -	\$ -	
81250	Equipment (over \$10,000)	-	-	-	-	
81300	Vehicle Replacement Fund	3,800	3,800	3,800	(0)	0.00%
<b>Subtotal</b>		<b>\$ 3,800</b>	<b>\$ 3,800</b>	<b>\$ 3,800</b>	<b>\$ (0)</b>	<b>0.00%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 26,603	\$ 26,603	\$ 32,949	\$ (6,346)	-23.85%
95150	Maintenance Allocation	66,086	66,086	60,034	6,052	9.16%
95200	Laboratory Allocation	8,307	8,307	8,182	125	1.51%
95300	Engineering Allocation	33,049	33,049	31,005	2,043	6.18%
<b>Subtotal</b>		<b>\$ 134,045</b>	<b>\$ 134,045</b>	<b>\$ 132,170</b>	<b>\$ 1,875</b>	<b>1.40%</b>
82100	Depreciation	\$ 10,000	\$ 10,000	\$ 10,000	\$ 0	0.00%
<b>Subtotal</b>		<b>\$ 10,000</b>	<b>\$ 10,000</b>	<b>\$ 10,000</b>	<b>\$ 0</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 443,785</b>	<b>\$ 443,785</b>	<b>\$ 458,200</b>	<b>\$ (14,415)</b>	<b>-3.25%</b>

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Rate Center: Scottsville Wastewater**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 77,100	\$ 77,100	\$ 87,263	\$ (10,163)	-13.18%
11010	Holiday & Overtime Pay	4,000	4,000	5,317	(1,317)	-32.93%
12010	FICA	6,204	6,204	6,917	(712)	-11.48%
12020	Health Insurance	18,600	18,600	17,120	1,480	7.96%
12026	Employee Assistance Program	15	15	22	(7)	-49.33%
12030	Retirement	6,469	6,469	7,020	(551)	-8.52%
12040	Life Insurance	917	917	1,085	(168)	-18.27%
12050	Fitness Program	70	70	99	(29)	-41.13%
12060	Worker's Comp Insurance	800	800	749	51	6.32%
	<b>Subtotal</b>	<b>\$ 114,175</b>	<b>\$ 114,175</b>	<b>\$ 125,592</b>	<b>\$ (11,417)</b>	<b>-10.00%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 100	\$ 100	\$ 110	\$ (10)	-9.56%
13150	Education & Training	500	500	501	(1)	-0.10%
13200	Travel & Lodging	100	100	19	81	81.41%
13250	Uniforms	750	750	1,214	(464)	-61.89%
13325	Recruiting & Medical Testing	70	70	80	(10)	-14.69%
13350	Other	100	100	116	(16)	-16.12%
	<b>Subtotal</b>	<b>\$ 1,620</b>	<b>\$ 1,620</b>	<b>\$ 2,039</b>	<b>\$ (419)</b>	<b>-25.88%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Administrative Services	-	-	-	-	
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	5,000	5,000	3,053	1,947	38.94%
	<b>Subtotal</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 3,053</b>	<b>\$ 1,947</b>	
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 850	\$ 850	\$ 994	\$ (144)	-16.99%
21150	Advertising & Communication	-	-	-	-	
21250	Watershed Management	-	-	-	-	
21253	Safety Programs/ Supplies	600	600	4,735	(4,135)	-689.15%
21300	Authority Dues/ Permits/ Fees	3,600	3,600	4,049	(449)	-12.46%
21350	Laboratory Analysis	1,600	1,600	643	957	59.80%
21400	Utilities	20,000	20,000	19,752	248	1.24%
21420	General Other Services	-	-	-	-	
21430	Governance & Strategic Support	-	-	-	-	
21450	Bad Debts	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 26,650</b>	<b>\$ 26,650</b>	<b>\$ 30,173</b>	<b>\$ (3,523)</b>	<b>-13.22%</b>
	<b>Communication</b>					
22100	Radio	\$ 500	\$ 500	\$ 128	\$ 372	74.41%
22150	Telephone & Data Service	3,000	3,000	2,963	37	1.24%
22200	Cell Phones & Pagers	270	270	402	(132)	-49.06%
	<b>Subtotal</b>	<b>\$ 3,770</b>	<b>\$ 3,770</b>	<b>\$ 3,493</b>	<b>\$ 277</b>	<b>7.34%</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 1,250	\$ 1,250	\$ 123	\$ 1,127	90.15%
31150	SCADA Maint. & Support	1,125	1,125	14,424	(13,299)	-1182.15%
31200	Maintenance & Support Services	-	-	-	-	
31250	Software Purchases	-	-	33	(33)	
31300	Security Systems	1,750	1,750	3,147	(1,397)	-79.80%
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 4,125</b>	<b>\$ 4,125</b>	<b>\$ 17,727</b>	<b>\$ (13,602)</b>	<b>-329.74%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ -	\$ -	\$ -	\$ -	
33150	Subscriptions/ Reference Material	-	-	-	-	
33350	Postage & Delivery	-	-	-	-	
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 17,250	\$ 17,250	\$ 10,134	\$ 7,116	41.25%
41150	Building & Land Lease	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	
41350	Pipelines/ Appurtenances	-	-	-	-	
41400	Materials, Supplies & Tools	2,000	2,000	301	1,699	84.96%
41450	Chemicals	2,500	2,500	2,855	(355)	-14.18%
41500	Vehicle Maintenance	600	600	(44)	644	107.33%
41550	Equipment Repair, Replace, Maint.	10,000	10,000	7,092	2,908	29.08%

**Rivanna Water and Sewer Authority**  
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**Rate Center: Scottsville Wastewater**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering	5,000	5,000	-	5,000	100.00%
41650	Fuel & Lubricants	1,000	1,000	1,356	(356)	-35.60%
41700	General Other Maintenance	13,650	13,650	21,372	(7,722)	-56.57%
<b>Subtotal</b>		<b>\$ 52,000</b>	<b>\$ 52,000</b>	<b>\$ 43,065</b>	<b>\$ 8,935</b>	<b>17.18%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ -	\$ -	\$ -	\$ -	
81250	Equipment (over \$10,000)	-	-	-	-	
81300	Vehicle Replacement Fund	3,800	3,800	3,800	(0)	0.00%
<b>Subtotal</b>		<b>\$ 3,800</b>	<b>\$ 3,800</b>	<b>\$ 3,800</b>	<b>\$ (0)</b>	<b>0.00%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ 26,603	\$ 26,603	\$ 32,949	\$ (6,346)	-23.85%
95150	Maintenance Allocation	56,645	56,645	51,458	5,187	9.16%
95200	Laboratory Allocation	8,307	8,307	8,182	125	1.51%
95300	Engineering Allocation	33,049	33,049	31,005	2,043	6.18%
<b>Subtotal</b>		<b>\$ 124,604</b>	<b>\$ 124,604</b>	<b>\$ 123,594</b>	<b>\$ 1,010</b>	<b>0.81%</b>
82100	Depreciation	\$ 20,000	\$ 20,000	\$ 20,000	\$ (0)	0.00%
<b>Subtotal</b>		<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ 20,000</b>	<b>\$ (0)</b>	<b>0.00%</b>
<b>Total</b>		<b>\$ 355,744</b>	<b>\$ 355,744</b>	<b>\$ 372,536</b>	<b>\$ (16,792)</b>	<b>-4.72%</b>



**Rivanna Water and Sewer Authority**  
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**Administration**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 1,776,200	\$ 1,776,200	\$ 1,760,991	\$ 15,209	0.86%
11010	Holiday & Overtime Pay	2,000	2,000	1,088	913	45.63%
12010	FICA	136,032	136,032	122,336	13,696	10.07%
12020	Health Insurance	294,100	294,100	275,286	18,814	6.40%
12026	Employee Assistance Program	300	300	320	(20)	-6.56%
12030	Retirement	149,023	149,023	149,322	(299)	-0.20%
12040	Life Insurance	21,137	21,137	22,968	(1,831)	-8.66%
12050	Fitness Program	3,500	3,500	1,947	1,553	44.38%
12060	Worker's Comp Insurance	9,700	9,700	8,345	1,355	13.97%
	<b>Subtotal</b>	<b>\$ 2,391,992</b>	<b>\$ 2,391,992</b>	<b>\$ 2,342,603</b>	<b>\$ 49,390</b>	<b>2.06%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 1,600	\$ 1,600	\$ 2,494	\$ (894)	-55.84%
13150	Education & Training	34,000	34,000	39,388	(5,388)	-15.85%
13200	Travel & Lodging	3,500	3,500	8,533	(5,033)	-143.81%
13250	Uniforms	2,000	2,000	1,395	605	30.23%
13325	Recruiting & Medical Testing	4,000	4,000	1,752	2,248	56.19%
13350	Other	13,000	13,000	15,190	(2,190)	-16.85%
	<b>Subtotal</b>	<b>\$ 58,100</b>	<b>\$ 58,100</b>	<b>\$ 68,753</b>	<b>\$ (10,653)</b>	<b>-18.34%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ 60,000	\$ 60,000	\$ 64,572	\$ (4,572)	-7.62%
20200	Financial & Administrative Services	60,000	60,000	75,789	(15,789)	-26.32%
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	50,000	50,000	148,862	(98,862)	-197.72%
	<b>Subtotal</b>	<b>\$ 170,000</b>	<b>\$ 170,000</b>	<b>\$ 289,223</b>	<b>\$ (119,223)</b>	<b>-70.13%</b>
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 4,800	\$ 4,800	\$ 5,616	\$ (816)	-16.99%
21150	Advertising & Communication	15,000	15,000	21,590	(6,590)	-43.93%
21250	Watershed Management	-	-	-	-	
21253	Safety Programs/ Supplies	5,000	5,000	10,892	(5,892)	-117.84%
21300	Authority Dues/ Permits/ Fees	44,100	44,100	43,832	268	0.61%
21350	Laboratory Analysis	-	-	367	(367)	
21400	Utilities	1,200	1,200	1,632	(432)	-36.04%
21420	General Other Services	5,000	5,000	13,910	(8,910)	-178.20%
21430	Governance & Strategic Support	85,000	85,000	47,151	37,849	44.53%
21450	Bad Debts	2,500	2,500	-	2,500	100.00%
	<b>Subtotal</b>	<b>\$ 162,600</b>	<b>\$ 162,600</b>	<b>\$ 144,990</b>	<b>\$ 17,610</b>	<b>10.83%</b>
	<b>Communication</b>					
22100	Radio	\$ 1,800	\$ 1,800	\$ 497	\$ 1,303	72.39%
22150	Telephone & Data Service	11,000	11,000	58,374	(47,374)	-430.67%
22200	Cell Phones, Wireless Data	11,980	11,980	13,582	(1,602)	-13.37%
	<b>Subtotal</b>	<b>\$ 24,780</b>	<b>\$ 24,780</b>	<b>\$ 72,453</b>	<b>\$ (47,673)</b>	<b>-192.38%</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 60,000	\$ 60,000	\$ 270,363	\$ (210,363)	-350.60%
31150	SCADA Maint. & Support	90,245	90,245	180,238	(89,993)	-99.72%
31200	Maintenance & Support Services	188,350	188,350	379,034	(190,684)	-101.24%
31250	Software Purchases	66,181	66,181	134,160	(67,979)	-102.72%
31300	Security Systems	-	-	219	(219)	
31325	Asset Mgt / Project Mgt Systems	100	100	-	100	100.00%
	<b>Subtotal</b>	<b>\$ 404,876</b>	<b>\$ 404,876</b>	<b>\$ 964,014</b>	<b>\$ (559,138)</b>	<b>-138.10%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ 15,000	\$ 15,000	\$ 20,840	\$ (5,840)	-38.93%
33150	Subscriptions/ Reference Material	1,000	1,000	957	43	4.31%
33350	Postage & Delivery	7,000	7,000	7,345	(345)	-4.94%
	<b>Subtotal</b>	<b>\$ 23,000</b>	<b>\$ 23,000</b>	<b>\$ 29,143</b>	<b>\$ (6,143)</b>	<b>-26.71%</b>
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 53,000	\$ 53,000	\$ 42,697	\$ 10,303	19.44%
41150	Building & Land Lease	5,000	5,000	6,818	(1,818)	-36.36%
41300	Dam Maintenance	-	-	-	-	
41350	Pipelines/ Appurtenances	-	-	-	-	
41400	Materials, Supplies & Tools	3,250	3,250	493	2,757	84.82%
41450	Chemicals	-	-	-	-	
41500	Vehicle Maintenance	3,300	3,300	6,361	(3,061)	-92.77%
41550	Equipment Repair, Replace, Maint.	-	-	-	-	

**Rivanna Water and Sewer Authority**  
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**Administration**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering		-	-	-	
41650	Fuel & Lubricants	3,300	3,300	4,293	(993)	-30.09%
41700	General Other Maintenance		-	-	-	
<b>Subtotal</b>		<b>\$ 67,850</b>	<b>\$ 67,850</b>	<b>\$ 60,662</b>	<b>\$ 7,188</b>	<b>10.59%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ -	\$ -	\$ -	\$ -	
81250	Equipment (over \$10,000)	-	-	-	-	
81300	Vehicle Replacement Fund	13,100	13,100	13,100	(0)	0.00%
<b>Subtotal</b>		<b>\$ 13,100</b>	<b>\$ 13,100</b>	<b>\$ 13,100</b>	<b>\$ (0)</b>	<b>0.00%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	
95150	Maintenance Allocation	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	
95300	Engineering Allocation	-	-	-	-	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
82100	Depreciation	\$ -	\$ -	\$ -	\$ -	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total</b>		<b>\$ 3,316,298</b>	<b>\$ 3,316,298</b>	<b>\$ 3,984,940</b>	<b>\$ (668,642)</b>	<b>-20.16%</b>

**Rivanna Water and Sewer Authority**  
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**Maintenance**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 995,650	\$ 995,650	\$ 978,431	\$ 17,219	1.73%
11010	Holiday & Overtime Pay	10,000	10,000	11,500	(1,500)	-15.00%
12010	FICA	76,932	76,932	73,024	3,909	5.08%
12020	Health Insurance	235,100	235,100	202,126	32,974	14.03%
12026	Employee Assistance Program	250	250	266	(16)	-6.56%
12030	Retirement	83,535	83,535	78,737	4,798	5.74%
12040	Life Insurance	11,848	11,848	12,173	(325)	-2.74%
12050	Fitness Program	-	-	-	-	-
12060	Worker's Comp Insurance	17,200	17,200	14,798	2,402	13.97%
	<b>Subtotal</b>	<b>\$ 1,430,515</b>	<b>\$ 1,430,515</b>	<b>\$ 1,371,055</b>	<b>\$ 59,460</b>	<b>4.16%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 150	\$ 150	\$ 375	\$ (225)	-150.00%
13150	Education & Training	31,000	31,000	6,717	24,283	78.33%
13200	Travel & Lodging	500	500	-	500	100.00%
13250	Uniforms	14,100	14,100	9,916	4,184	29.67%
13325	Recruiting & Medical Testing	500	500	814	(314)	-62.84%
13350	Other	800	800	160	640	80.01%
	<b>Subtotal</b>	<b>\$ 47,050</b>	<b>\$ 47,050</b>	<b>\$ 17,983</b>	<b>\$ 29,067</b>	<b>61.78%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	-
20200	Financial & Administrative Services	-	-	75	(75)	-
20250	Bond Issuance Costs	-	-	-	-	-
20300	Engineering & Technical Services	-	-	4,132	(4,132)	-
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,207</b>	<b>\$ (4,207)</b>	<b>-</b>
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 7,200	\$ 7,200	\$ 8,423	\$ (1,223)	-16.99%
21150	Advertising & Communication	-	-	-	-	-
21250	Watershed Management	-	-	-	-	-
21253	Safety Programs/ Supplies	22,900	22,900	6,378	16,522	72.15%
21300	Authority Dues/ Permits/ Fees	-	-	5	(5)	-
21350	Laboratory Analysis	-	-	-	-	-
21400	Utilities	-	-	-	-	-
21420	General Other Services	3,500	3,500	1,012	2,488	71.09%
21430	Governance & Strategic Support	-	-	-	-	-
21450	Bad Debts	-	-	-	-	-
	<b>Subtotal</b>	<b>\$ 33,600</b>	<b>\$ 33,600</b>	<b>\$ 15,818</b>	<b>\$ 17,782</b>	<b>52.92%</b>
	<b>Communication</b>					
22100	Radio	\$ 6,500	\$ 6,500	\$ 1,646	\$ 4,854	74.68%
22150	Telephone & Data Service	800	800	166	634	79.30%
22200	Cell Phones & Pagers	17,200	17,200	15,207	1,993	11.59%
	<b>Subtotal</b>	<b>\$ 24,500</b>	<b>\$ 24,500</b>	<b>\$ 17,018</b>	<b>\$ 7,482</b>	<b>-</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 12,500	\$ 12,500	\$ 19,266	\$ (6,766)	-54.12%
31150	SCADA Maint. & Support	-	-	-	-	-
31200	Maintenance & Support Services	3,000	3,000	699	2,301	76.70%
31250	Software Purchases	2,000	2,000	1,109	891	44.57%
31300	Security Systems	-	-	-	-	-
31325	Asset Mgt / Project Mgt Systems	15,000	15,000	-	15,000	100.00%
	<b>Subtotal</b>	<b>\$ 32,500</b>	<b>\$ 32,500</b>	<b>\$ 21,073</b>	<b>\$ 11,427</b>	<b>35.16%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ 2,500	\$ 2,500	\$ 657	\$ 1,843	73.70%
33150	Subscriptions/ Reference Material	-	-	-	-	-
33350	Postage & Delivery	-	-	-	-	-
	<b>Subtotal</b>	<b>\$ 2,500</b>	<b>\$ 2,500</b>	<b>\$ 657</b>	<b>\$ 1,843</b>	<b>73.70%</b>
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 12,150	\$ 12,150	\$ 13,808	\$ (1,658)	-13.65%
41150	Building & Land Lease	-	-	-	-	-
41300	Dam Maintenance	-	-	-	-	-
41350	Pipelines/ Appurtenances	3,500	3,500	2,363	1,137	32.49%
41400	Materials, Supplies & Tools	24,500	24,500	40,435	(15,935)	-65.04%
41450	Chemicals	-	-	1,186	(1,186)	-
41500	Vehicle Maintenance	21,150	21,150	33,358	(12,208)	-57.72%
41550	Equipment Repair, Replace, Maint.	27,100	27,100	19,542	7,558	27.89%

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**Maintenance**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering	1,500	1,500	3,219	(1,719)	-114.58%
41650	Fuel & Lubricants	15,000	15,000	27,580	(12,580)	-83.86%
41700	General Other Maintenance	-	-	-	-	
<b>Subtotal</b>		<b>\$ 104,900</b>	<b>\$ 104,900</b>	<b>\$ 141,492</b>	<b>\$ (36,592)</b>	<b>-34.88%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ 1,000	\$ 1,000	\$ -	\$ 1,000	100.00%
81250	Equipment (over \$10,000)	83,000	83,000	-	83,000	100.00%
81300	Vehicle Replacement Fund	128,600	128,600	128,600	(0)	0.00%
<b>Subtotal</b>		<b>\$ 212,600</b>	<b>\$ 212,600</b>	<b>\$ 128,600</b>	<b>\$ 84,000</b>	<b>39.51%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	
95150	Maintenance Allocation	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	
95300	Engineering Allocation	-	-	-	-	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
82100	Depreciation	\$ -	\$ -	\$ -	\$ -	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total</b>		<b>\$ 1,888,165</b>	<b>\$ 1,888,165</b>	<b>\$ 1,717,904</b>	<b>\$ 170,262</b>	<b>9.02%</b>

**Rivanna Water and Sewer Authority**  
**Fiscal Year 2023**  
**June 2023 - Expense Detail Report**

**Laboratory**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 288,000	\$ 288,000	\$ 295,636	\$ (7,636)	-2.65%
11010	Holiday & Overtime Pay	8,000	8,000	16,671	(8,671)	-108.39%
12010	FICA	22,644	22,644	23,183	(539)	-2.38%
12020	Health Insurance	58,700	58,700	39,361	19,339	32.95%
12026	Employee Assistance Program	60	60	71	(11)	-18.40%
12030	Retirement	24,163	24,163	24,781	(617)	-2.55%
12040	Life Insurance	3,427	3,427	3,819	(391)	-11.42%
12050	Fitness Program	200.00	200.00	303	(103)	-51.41%
12060	Worker's Comp Insurance	5,300	5,300	4,560	740	13.97%
	<b>Subtotal</b>	<b>\$ 410,494</b>	<b>\$ 410,494</b>	<b>\$ 408,384</b>	<b>\$ 2,110</b>	<b>0.51%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 200	\$ 200	\$ -	\$ 200	100.00%
13150	Education & Training	1,680	1,680	699	981	58.39%
13200	Travel & Lodging	1,500	1,500	-	1,500	100.00%
13250	Uniforms	1,000	1,000	372	628	62.77%
13325	Recruiting & Medical Testing	250	250	578	(328)	-131.08%
13350	Other	200	200	307	(107)	-53.48%
	<b>Subtotal</b>	<b>\$ 4,830</b>	<b>\$ 4,830</b>	<b>\$ 1,956</b>	<b>\$ 2,874</b>	<b>59.50%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ -	\$ -	\$ -	\$ -	
20200	Financial & Administrative Services	-	-	-	-	
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	-	-	-	-	
	<b>Subtotal</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 500	\$ 500	\$ 585	\$ (85)	-16.99%
21150	Advertising & Communication	-	-	-	-	
21250	Watershed Management	-	-	-	-	
21253	Safety Programs/ Supplies	6,580	6,580	-	6,580	100.00%
21300	Authority Dues/ Permits/ Fees	4,500	4,500	5,522	(1,022)	-22.71%
21350	Laboratory Analysis	100	100	125	(25)	-25.00%
21400	Utilities	-	-	-	-	
21420	General Other Services	100	100	-	100	100.00%
21430	Governance & Strategic Support	-	-	-	-	
21450	Bad Debts	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 11,780</b>	<b>\$ 11,780</b>	<b>\$ 6,232</b>	<b>\$ 5,548</b>	<b>47.10%</b>
	<b>Communication</b>					
22100	Radio	\$ -	\$ -	\$ -	\$ -	
22150	Telephone & Data Service	-	-	-	-	
22200	Cell Phones & Pagers	1,700	1,700	1,057	643	37.84%
	<b>Subtotal</b>	<b>\$ 1,700</b>	<b>\$ 1,700</b>	<b>\$ 1,057</b>	<b>\$ 643</b>	
	<b>Information Technology</b>					
31100	Computer Hardware	\$ -	\$ -	\$ -	\$ -	
31150	SCADA Maint. & Support	-	-	-	-	
31200	Maintenance & Support Services	1,000	1,000	1,400	(400)	-39.96%
31250	Software Purchases	-	-	-	-	
31300	Security Systems	-	-	-	-	
31325	Asset Mgt / Project Mgt Systems	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 1,000</b>	<b>\$ 1,000</b>	<b>\$ 1,400</b>	<b>\$ (400)</b>	<b>-39.96%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ 1,000	\$ 1,000	\$ 1,253	\$ (253)	-25.30%
33150	Subscriptions/ Reference Material	-	-	-	-	
33350	Postage & Delivery	250	250	82	168	67.28%
	<b>Subtotal</b>	<b>\$ 1,250</b>	<b>\$ 1,250</b>	<b>\$ 1,335</b>	<b>\$ (85)</b>	<b>-6.79%</b>
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ -	\$ -	\$ 3,542	\$ (3,542)	
41150	Building & Land Lease	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	
41350	Pipelines/ Appurtenances	-	-	-	-	
41400	Materials, Supplies & Tools	37,000	37,000	84,195	(47,195)	-127.55%
41450	Chemicals	28,000	28,000	2,106	25,894	92.48%
41500	Vehicle Maintenance	3,500	3,500	2,501	999	28.55%
41550	Equipment Repair, Replace, Maint.	15,000	15,000	12,366	2,634	17.56%

**Rivanna Water and Sewer Authority**  
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**Laboratory**

Object Code	Line Item	Total Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering	37,000	37,000	17,774	19,227	51.96%
41650	Fuel & Lubricants	550	550	812	(262)	-47.72%
41700	General Other Maintenance	-	-	-	-	
<i>Subtotal</i>		\$ 121,050	\$ 121,050	\$ 123,295	\$ (2,245)	-1.85%
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ -	\$ -	\$ 95	\$ (95)	
81250	Equipment (over \$10,000)	-	-	-	-	
81300	Vehicle Replacement Fund	1,700	1,700	1,700	(0)	0.00%
<i>Subtotal</i>		\$ 1,700	\$ 1,700	\$ 1,795	\$ (95)	-5.59%
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	
95150	Maintenance Allocation	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	
95300	Engineering Allocation	-	-	-	-	
<i>Subtotal</i>		\$ -	\$ -	\$ -	\$ -	
82100	Depreciation	\$ -	\$ -	\$ -	\$ -	
<i>Subtotal</i>		\$ -	\$ -	\$ -	\$ -	
<b>Total</b>		<b>\$ 553,804</b>	<b>\$ 553,804</b>	<b>\$ 545,453</b>	<b>\$ 8,351</b>	<b>1.51%</b>

**Rivanna Water and Sewer Authority**  
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**Engineering**

Object Code	Line Item	Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 1,289,100	\$ 1,289,100	\$ 1,360,530	\$ (71,430)	-5.54%
11010	Holiday & Overtime Pay	12,000	12,000	15,596	(3,596)	-29.96%
12010	FICA	99,534	99,534	101,939	(2,405)	-2.42%
12020	Health Insurance	205,600	205,600	149,521	56,079	27.28%
12026	Employee Assistance Program	200	200	231	(31)	-15.44%
12030	Retirement	108,155	108,155	113,750	(5,595)	-5.17%
12040	Life Insurance	15,340	15,340	17,397	(2,057)	-13.41%
12050	Fitness Program	3,000	3,000	4,499	(1,499)	-49.97%
12060	Worker's Comp Insurance	22,200	22,200	19,098	3,102	13.97%
	<b>Subtotal</b>	<b>\$ 1,755,130</b>	<b>\$ 1,755,130</b>	<b>\$ 1,782,560</b>	<b>\$ (27,430)</b>	<b>-1.56%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 3,100	\$ 3,100	\$ 2,203	\$ 897	28.92%
13150	Education & Training	16,000	16,000	6,312	9,688	60.55%
13200	Travel & Lodging	15,600	15,600	3,920	11,680	74.87%
13250	Uniforms	3,750	3,750	3,113	637	16.98%
13325	Recruiting & Medical Testing	500	500	1,317	(817)	-163.33%
13350	Other	600	600	567	33	5.56%
	<b>Subtotal</b>	<b>\$ 39,550</b>	<b>\$ 39,550</b>	<b>\$ 17,432</b>	<b>\$ 22,118</b>	<b>55.92%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ 5,000	\$ 5,000	\$ 13,927	\$ (8,927)	-178.53%
20200	Financial & Administrative Services	-	-	4,530	(4,530)	
20250	Bond Issuance Costs	-	-	-	-	
20300	Engineering & Technical Services	120,000	120,000	38,404	81,596	68.00%
	<b>Subtotal</b>	<b>\$ 125,000</b>	<b>\$ 125,000</b>	<b>\$ 56,860</b>	<b>\$ 68,140</b>	<b>54.51%</b>
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 4,100	\$ 4,100	\$ 4,797	\$ (697)	-16.99%
21150	Advertising & Communication	200	200	19	181	90.51%
21250	Watershed Management	-	-	-	-	
21253	Safety Programs/ Supplies	6,500	6,500	1,618	4,882	75.11%
21300	Authority Dues/ Permits/ Fees	1,500	1,500	637	863	57.51%
21350	Laboratory Analysis	250	250	-	250	100.00%
21400	Utilities	450	450	815	(365)	-81.19%
21420	General Other Services	-	-	343	(343)	
21430	Governance & Strategic Support	5,000	5,000	-	5,000	100.00%
21450	Bad Debts	-	-	-	-	
	<b>Subtotal</b>	<b>\$ 18,000</b>	<b>\$ 18,000</b>	<b>\$ 8,229</b>	<b>\$ 9,771</b>	<b>54.28%</b>
	<b>Communication</b>					
22100	Radio	\$ 4,600	\$ 4,600	\$ 1,131	\$ 3,469	75.41%
22150	Telephone & Data Service	1,500	1,500	725	775	51.69%
22200	Cell Phones & Pagers	12,672	12,672	8,266	4,406	34.77%
	<b>Subtotal</b>	<b>\$ 18,772</b>	<b>\$ 18,772</b>	<b>\$ 10,122</b>	<b>\$ 8,650</b>	<b>46.08%</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 12,000	\$ 12,000	\$ 48,436	\$ (36,436)	-303.64%
31150	SCADA Maint. & Support	-	-	-	-	
31200	Maintenance & Support Services	53,800	53,800	90,466	(36,666)	-68.15%
31250	Software Purchases	2,000	2,000	4,844	(2,844)	-142.20%
31300	Security Systems	28,200	28,200	15,445	12,755	45.23%
31325	Asset Mgt / Project Mgt Systems	49,000	49,000	-	49,000	100.00%
	<b>Subtotal</b>	<b>\$ 145,000</b>	<b>\$ 145,000</b>	<b>\$ 159,191</b>	<b>\$ (14,191)</b>	<b>-9.79%</b>
	<b>Supplies</b>					
33000						
33100	Office Supplies	\$ 3,500	\$ 3,500	\$ 3,129	\$ 371	10.59%
33150	Subscriptions/ Reference Material	900	900	773	127	14.11%
33350	Postage & Delivery	600	600	604	(4)	-0.74%
	<b>Subtotal</b>	<b>\$ 5,000</b>	<b>\$ 5,000</b>	<b>\$ 4,507</b>	<b>\$ 493</b>	<b>9.87%</b>
	<b>Operation &amp; Maintenance</b>					
41000						
41100	Building & Grounds	\$ 20,200	\$ 20,200	\$ 14,931	\$ 5,269	26.09%
41150	Building & Land Lease	1,800	1,800	1,723	77	4.28%
41300	Dam Maintenance	-	-	-	-	
41350	Pipelines/ Appurtenances	16,300	16,300	10,130	6,170	37.85%
41400	Materials, Supplies & Tools	6,000	6,000	10,085	(4,085)	-68.08%
41450	Chemicals	-	-	-	-	
41500	Vehicle Maintenance	24,000	24,000	2,662	21,338	88.91%
41550	Equipment Repair, Replace, Maint.	1,000	1,000	1,388	(388)	-38.85%

**Rivanna Water and Sewer Authority**  
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**Engineering**

Object Code	Line Item	Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
41600	Instrumentation & Metering	-	-	-	-	
41650	Fuel & Lubricants	6,000	6,000	9,114	(3,114)	-51.91%
41700	General Other Maintenance	-	-	-	-	
<b>Subtotal</b>		<b>\$ 75,300</b>	<b>\$ 75,300</b>	<b>\$ 50,034</b>	<b>\$ 25,266</b>	<b>33.55%</b>
81000	<b>Equipment Purchases</b>					
81200	Rental & Leases	\$ -	\$ -	\$ -	\$ -	
81250	Equipment (over \$10,000)	-	-	-	-	
81300	Vehicle Replacement Fund	21,500	21,500	21,500	0	0.00%
<b>Subtotal</b>		<b>\$ 21,500</b>	<b>\$ 21,500</b>	<b>\$ 21,500</b>	<b>\$ 0</b>	<b>0.00%</b>
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ -	\$ -	
95150	Maintenance Allocation	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	
95300	Engineering Allocation	-	-	-	-	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
82100	Depreciation	\$ -	\$ -	\$ -	\$ -	
<b>Subtotal</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	
<b>Total</b>		<b>\$ 2,203,252</b>	<b>\$ 2,203,252</b>	<b>\$ 2,110,435</b>	<b>\$ 92,817</b>	<b>4.21%</b>



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**Consolidated**

Object Code	Line Item	Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
10000	<b>Salaries &amp; Benefits</b>					
11000	Salaries	\$ 7,157,250	\$ 7,157,250	\$ 7,442,608	\$ (285,358)	-3.99%
11010	Holiday & Overtime Pay	302,650	302,650	284,361	18,289	6.04%
12010	FICA	570,682	570,682	565,488	5,195	0.91%
12020	Health Insurance	1,440,000	1,440,000	1,178,095	261,906	18.19%
12026	Employee Assistance Program	1,470	1,470	1,634	(164)	-11.15%
12030	Retirement	600,493	600,493	614,983	(14,489)	-2.41%
12040	Life Insurance	85,171	85,171	94,548	(9,376)	-11.01%
12050	Fitness Program	11,650	11,650	12,459	(809)	-6.94%
12060	Worker's Comp Insurance	101,200	101,200	91,143	10,057	9.94%
	<b>Subtotal</b>	<b>\$ 10,270,567</b>	<b>\$ 10,270,567</b>	<b>\$ 10,285,317</b>	<b>\$ (14,750)</b>	<b>-0.14%</b>
	<b>Other Personnel Costs</b>					
13100	Employee Dues & Licenses	\$ 11,680	\$ 11,680	\$ 14,346	\$ (2,666)	-22.82%
13150	Education & Training	100,280	100,280	94,184	6,096	6.08%
13200	Travel & Lodging	24,850	24,850	14,303	10,547	42.44%
13250	Uniforms	61,480	61,480	61,427	53	0.09%
13325	Recruiting & Medical Testing	8,270	8,270	6,481	1,789	21.63%
13350	Other	17,600	17,600	18,926	(1,326)	-7.53%
	<b>Subtotal</b>	<b>\$ 224,160</b>	<b>\$ 224,160</b>	<b>\$ 209,666</b>	<b>\$ 14,494</b>	<b>6.47%</b>
	<b>Professional Services</b>					
20100	Legal Fees	\$ 80,000	\$ 80,000	\$ 116,160	\$ (36,160)	-45.20%
20200	Financial & Administrative Services	60,000	60,000	84,894	(24,894)	-41.49%
20250	Bond Issuance Costs	-	-	-	-	-
20300	Engineering & Technical Services	489,900	489,900	575,113	(85,213)	-17.39%
	<b>Subtotal</b>	<b>\$ 629,900</b>	<b>\$ 629,900</b>	<b>\$ 776,167</b>	<b>\$ (146,267)</b>	<b>-23.22%</b>
	<b>Other Services and Charges</b>					
21100	General Liability/ Property Ins.	\$ 125,700	\$ 125,700	\$ 147,059	\$ (21,359)	-16.99%
21150	Advertising & Communication	15,200	15,200	23,359	(8,159)	-53.68%
21250	Watershed Management	50,000	50,000	100,583	(50,583)	-101.17%
21253	Safety Programs/ Supplies	103,180	103,180	93,980	9,200	8.92%
21300	Authority Dues/ Permits/ Fees	112,500	112,500	124,311	(11,811)	-10.50%
21350	Laboratory Analysis	80,030	80,030	100,690	(20,660)	-25.81%
21400	Utilities	1,611,650	1,611,650	2,095,105	(483,455)	-30.00%
21420	General Other Services	1,236,700	1,236,700	1,236,678	22	0.00%
21430	Governance & Strategic Support	90,000	90,000	47,151	42,849	47.61%
21450	Bad Debts	2,500	2,500	-	2,500	100.00%
	<b>Subtotal</b>	<b>\$ 3,427,460</b>	<b>\$ 3,427,460</b>	<b>\$ 3,968,915</b>	<b>\$ (541,455)</b>	<b>-15.80%</b>
	<b>Communication</b>					
22100	Radio	\$ 18,200	\$ 18,200	\$ 18,220	\$ (20)	-0.11%
22150	Telephone & Data Service	123,300	123,300	169,059	(45,759)	-37.11%
22200	Cell Phones & Pagers	58,842	58,842	59,754	(912)	-1.55%
	<b>Subtotal</b>	<b>\$ 200,342</b>	<b>\$ 200,342</b>	<b>\$ 247,034</b>	<b>\$ (46,691)</b>	<b>-23.31%</b>
	<b>Information Technology</b>					
31100	Computer Hardware	\$ 109,500	\$ 109,500	\$ 400,617	\$ (291,117)	-265.86%
31150	SCADA Maint. & Support	265,245	265,245	476,802	(211,557)	-79.76%
31200	Maintenance & Support Services	249,300	249,300	476,085	(226,785)	-90.97%
31250	Software Purchases	70,181	70,181	142,295	(72,114)	-102.75%
31300	Security Systems	50,300	50,300	43,634	6,666	13.25%
31325	Asset Mgt / Project Mgt Systems	72,100	72,100	-	72,100	100.00%
	<b>Subtotal</b>	<b>\$ 816,626</b>	<b>\$ 816,626</b>	<b>\$ 1,539,433</b>	<b>\$ (722,807)</b>	<b>-88.51%</b>
	<b>Supplies</b>					
33000	Office Supplies	\$ 26,000	\$ 26,000	\$ 29,319	\$ (3,319)	-12.76%
33150	Subscriptions/ Reference Material	1,900	1,900	1,730	170	8.95%
33350	Postage & Delivery	12,050	12,050	15,679	(3,629)	-30.11%
	<b>Subtotal</b>	<b>\$ 39,950</b>	<b>\$ 39,950</b>	<b>\$ 46,727</b>	<b>\$ (6,777)</b>	<b>-16.96%</b>
	<b>Operation &amp; Maintenance</b>					
41000	Building & Grounds	\$ 458,160	\$ 458,160	\$ 396,605	\$ 61,555	13.44%
41100	Building & Land Lease	181,800	181,800	183,541	(1,741)	-0.96%
41300	Dam Maintenance	125,200	125,200	140,395	(15,195)	-12.14%
41350	Pipelines/ Appurtenances	221,800	221,800	249,241	(27,441)	-12.37%
41400	Materials, Supplies & Tools	184,750	184,750	322,371	(137,621)	-74.49%
41450	Chemicals	2,360,696	2,360,696	3,465,754	(1,105,058)	-46.81%
41500	Vehicle Maintenance	80,100	80,100	82,010	(1,910)	-2.38%
41550	Equipment Repair, Replace, Maint.	900,800	900,800	1,043,211	(142,411)	-15.81%
41600	Instrumentation & Metering	402,525	402,525	381,290	21,235	5.28%
41650	Fuel & Lubricants	99,550	99,550	116,173	(16,623)	-16.70%
41700	General Other Maintenance	207,150	207,150	119,951	87,199	42.09%
	<b>Subtotal</b>	<b>\$ 5,222,531</b>	<b>\$ 5,222,531</b>	<b>\$ 6,500,542</b>	<b>\$ (1,278,011)</b>	<b>-24.47%</b>
	<b>Equipment Purchases</b>					
81000	Rental & Leases	\$ 27,000	27,000	\$ 7,105	\$ 19,895	73.68%

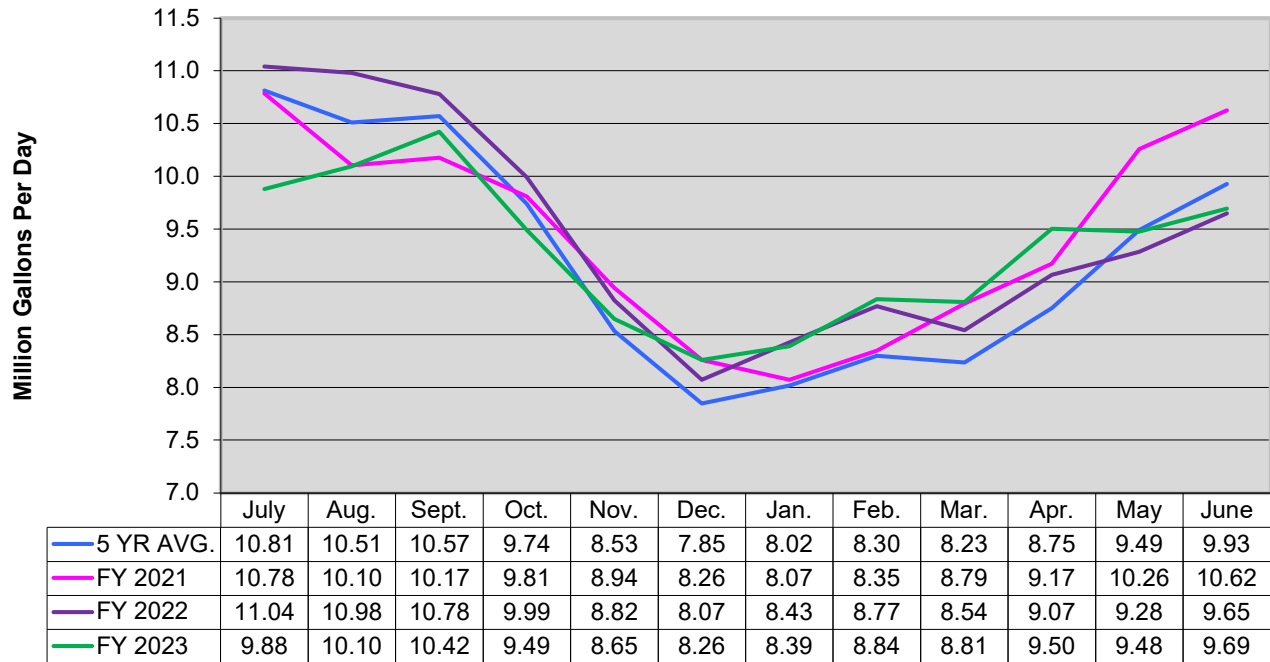
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**Consolidated**

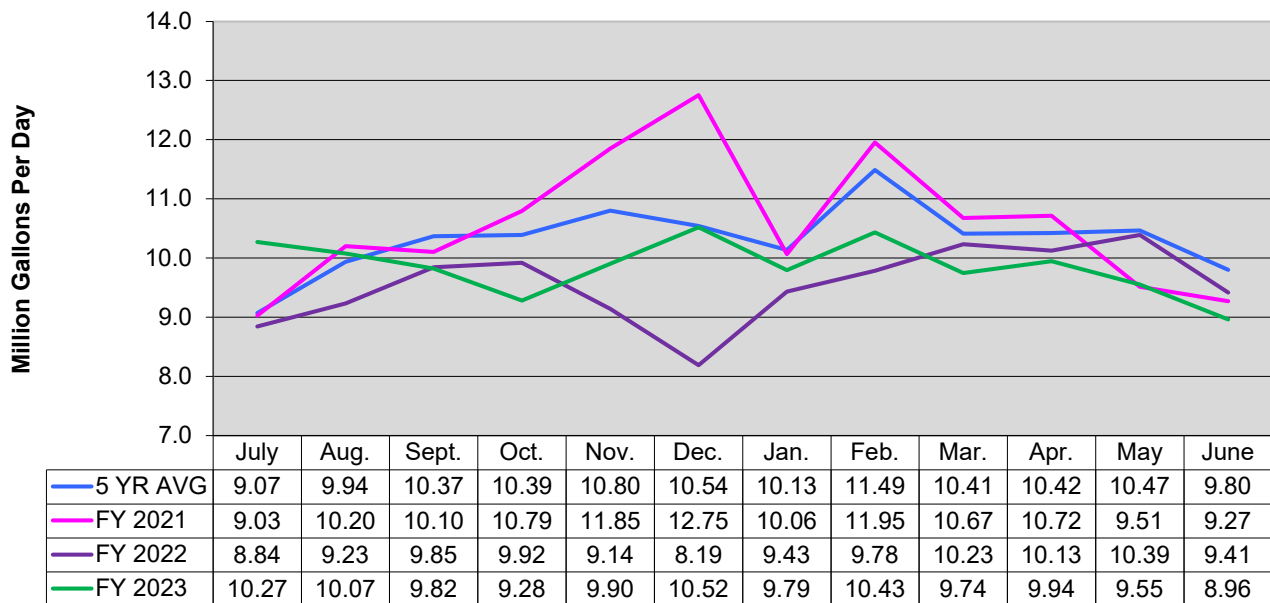
Object Code	Line Item	Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
81250	Equipment (over \$10,000)	150,000	150,000	-	150,000	100.00%
81300	Vehicle Replacement Fund	243,100	243,100	243,100	0	0.00%
	<i>Subtotal</i>	\$ 420,100	\$ 420,100	\$ 250,205	\$ 169,895	40.44%
<b>Allocations from Departments</b>						
95100	Administrative Allocation	\$ -	\$ -	\$ 0	\$ (0)	
95150	Maintenance Allocation	-	-	0	(0)	
95200	Laboratory Allocation	-	-	0	(0)	
95300	Engineering Allocation	-	-	-	-	
	<i>Subtotal</i>	\$ -	\$ -	\$ 0	\$ (0)	
82100	Depreciation	\$ 900,000	\$ 900,000	\$ 900,000	\$ -	0.00%
82110	Capital Reserve Transfers	-	-	-	-	
	<i>Subtotal</i>	\$ 900,000	\$ 900,000	\$ 900,000	\$ -	0.00%
	<b>Total</b>	<b>\$ 22,151,636</b>	<b>\$ 22,151,636</b>	<b>\$ 24,724,007</b>	<b>\$ (2,572,371)</b>	<b>-11.61%</b>

**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 JULY 2023**

**DATE: AUGUST 22, 2023**

### WATER OPERATIONS:

The average and maximum daily water volumes produced in July 2023 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	8.75	10.11 (7/12/2023)
Observatory	1.20	1.95 (7/7/2023)
North Rivanna	<u>0.46</u>	<u>0.64 (7/28/2023)</u>
<b><i>Urban Total</i></b>	10.41	12.07 (7/28/2023)
Crozet	0.64	0.81 (7/6/2023)
Scottsville	0.06	0.070 (7/7/2023)
Red Hill	<u>0.0018</u>	0.005 (7/1/2023)
<b><i>RWSA Total</i></b>	11.11	-

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

### Status of Reservoirs (as of August 15, 2023):

- Urban Reservoirs are 96% of Total Useable Capacity
  - Ragged Mountain Reservoir is 94% full
  - Sugar Hollow Reservoir is 99% full
  - South Rivanna 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 July 2023. Performance of the WRRFs in July was as follows compared to the respective VDEQ permit limits:

<i>WRRF</i>	<i>Average Daily Effluent Flow (MGD)</i>	<i>Average CBOD<sub>5</sub> (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>
<b>Moores Creek</b>	10.0	<QL	9	<QL	22	<QL	2.2
<b>Glenmore</b>	0.127	1.5	15	3.9	30	NR	NL
<b>Scottsville</b>	0.07	1.5	25	7.3	30	NR	NL
<b>Stone Robinson</b>	0.0002	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 July 2023.

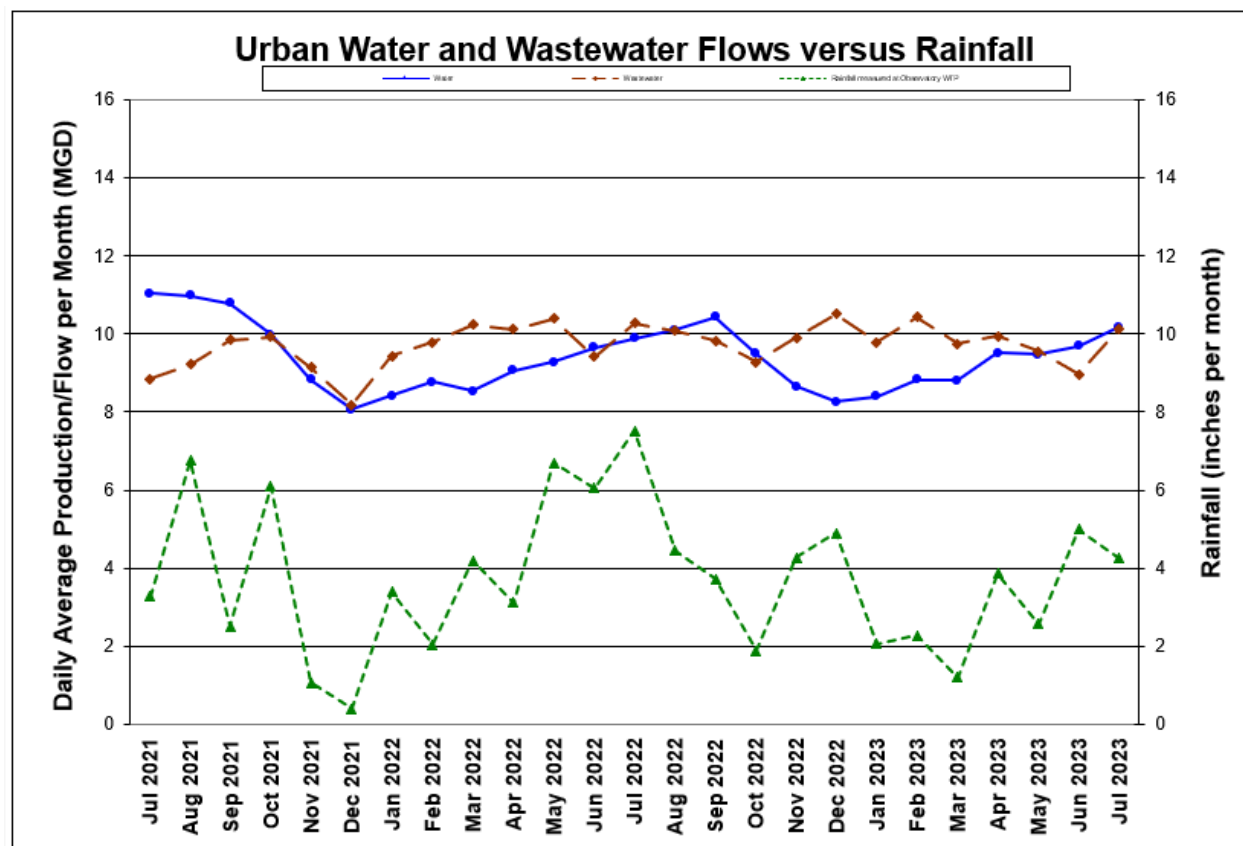
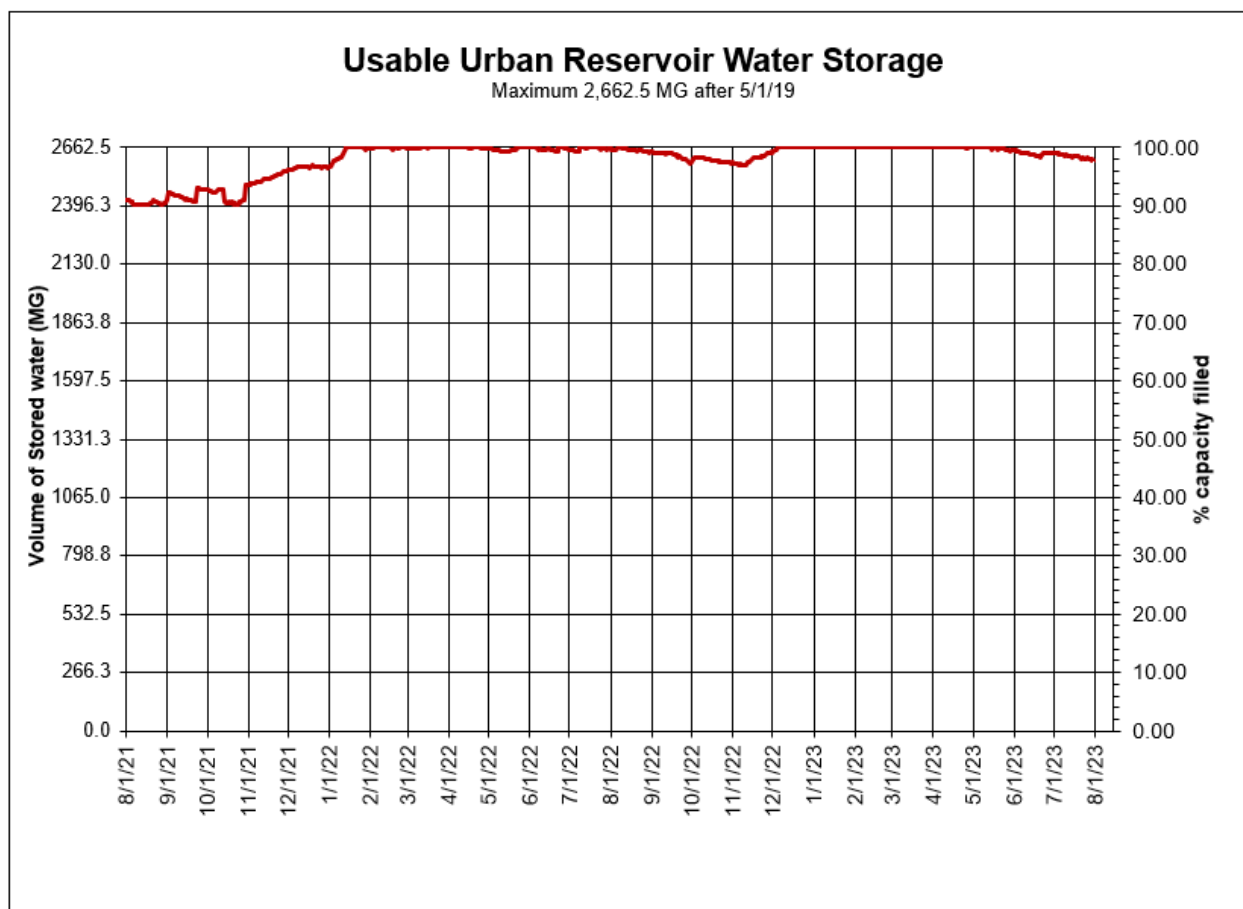
<i>State Annual Allocation (lb./yr.) Permit</i>		<i>Average Monthly Allocation (lb./mo.) *</i>	<i>Moores Creek Discharge July (lb./mo.)</i>	<i>Performance as % of monthly average Allocation*</i>	<i>Year to Date Performance as % of annual allocation</i>
<b>Nitrogen</b>	282,994	23,583	10,114	43%	23%
<b>Phosphorous</b>	18,525	1,544	713	46%	17%

\*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:** AUGUST 22, 2023

This memorandum reports on the status of the following 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	Bid Advertise Date	Construction Completion Date
1	SRWTP and OBWTP Renovations	November 2019	March 2024
2	Airport Rd. Water Pump Station and Piping	September 2021	September 2024
3	MC 5kV Electrical System Upgrades	December 2021	December 2024
4	South Fork Rivanna River Crossing	December 2023	December 2025
5	Red Hill Water Treatment Plant Upgrades	September 2023	November 2024
6	Central Water Line	March 2024	December 2028
7	Scottsville WRRF Whole Plant Generator and ATS	December 2023	June 2025
8	MC Administration Building Renovation and Addition	January 2024	June 2026
9	RMR to OBWTP Raw Water Line and Pump Station	April 2024	December 2028
10	MC Building Upfits and Gravity Thickener Improvements	April 2024	December 2025
11	Emmet Street Water Line Betterment	January 2024	July 2026
12	MC Structural and Concrete Rehabilitation	September 2024	June 2026
13	Crozet Pump Stations Rehabilitation	November 2024	December 2026
14	Crozet WTP GAC Expansion – Phase I	December 2024	May 2026
15	Beaver Creek Dam, Pump Station and Piping	July 2025	January 2029
16	SFRR to RMR Pipeline, Intake, and Facilities	December 2025	December 2030
17	Upper Schenks Branch Interceptor, Phase II	TBD	TBD

Under Construction

1. South Rivanna and Observatory Water Treatment Plant Renovations
2. Airport Road Water Pump Station and Piping
3. MC 5kV Electrical System Upgrades

#### Design and Bidding

4. South Fork Rivanna River Crossing
5. Red Hill Water Treatment Plant Upgrades
6. Central Water Line
7. Scottsville WRRF Whole Plant Generator and ATS
8. MC Administration Building Renovation and Addition
9. RMR to OBWTP Raw Water Line and Pump Station
10. MC Building Upfits and Gravity Thickener Improvements
11. Emmet Street Water Line Betterment
12. MC Structural and Concrete Rehabilitation
13. Crozet Pump Stations Rehabilitation
14. Crozet WTP GAC Expansion – Phase I
15. Beaver Creek Dam, Pump Station, and Piping
16. SFRR to RMR Pipeline, Intake, and Facilities
17. Upper Schenks Branch Interceptor, Phase II

#### Planning and Studies

18. Asset Management Plan
19. MCAWRRF Biogas Upgrades
20. North Rivanna Water Treatment Plant Decommissioning

#### Other Significant Projects

21. Urgent and Emergency Repairs
22. Security Enhancements

### **Under Construction**

#### **1. South Rivanna and Observatory Water Treatment Plant Renovations**

Design Engineer:	Short Elliot Hendrickson, Inc. (SEH)
Construction Contractor:	English Construction Company (Lynchburg, VA)
Construction Start:	May 2020
Percent Complete:	90%
Base Construction Contract +	
Change Orders to Date = Current Value:	\$36,748,500 + \$1,329,762 = \$38,078,262
Completion:	March 2024
Budget:	\$43,000,000

Current Status: Improvements continue at the OBWTP including completion of the new Chemical Building, GAC Building Expansion, and general site improvements. At the SRWTP, sludge pump improvements, general site improvements and final instrumentation programming work continues.



## **2. 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:	55%
Base Construction Contract + Change Order to Date = Current Value:	\$8,520,312
Completion:	September 2024
Budget:	\$10,000,000

Current Status: The masons are completing the brick exterior walls. The pump station will be dried in over the next month. Installation of two parallel water lines is nearly complete along Berkmar Drive between the pump station site and Timberwood Blvd. Once water line testing and disinfection is completed, tie-ins to the existing system will be made, and the pavement will be restored and opened to traffic. The water line crew will then move south on Berkmar Drive and install the water line between the Towncenter and Timberwood Blvd. traffic circles.

## **3. MCAWRRE 5kV Electrical System Upgrades**

Design Engineer:	Hazen and Sawyer (Hazen)
Construction Contractor:	Pyramid Electrical Contractors (Richmond, VA)
Construction Start:	May 2022
Percent Complete:	17%
Base Construction Contract + Change Order to Date = Current Value:	\$5,180,000 - \$863,767 = \$4,316,233
Completion:	December 2024
Budget:	\$5,050,000

Current Status: All major site-related work, including underground electrical ductbank, equipment pads, and curb and gutter replacements, is now complete. The electrical equipment for this project is still in a substantial delivery delay, with the majority of the equipment scheduled to arrive in the Fall/Winter.

## **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:	May 2024
Completion:	December 2025
Budget:	\$7,000,000

Current Status: Easement acquisition work is on-going. A required easement on the south side of the river is on a remnant property from the VDOT Berkmar Bridge project, and we cannot finalize that easement until the property transfer back to the original property owner is complete. The third outstanding easement is on a VEPCO parcel for which we are conducting a Phase 1 Environmental Survey because VEPCO prefers that we purchase the small parcel instead of acquiring an easement. Water Protection Ordinance (WPO) plans were submitted to the County for review in May and

comments were received on July 10<sup>th</sup>. The County cannot approve the WPO until all easements have been finalized.

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

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	July 2022
Project Status:	95% Design
Construction Start:	November 2023
Completion:	November 2024
Budget:	\$800,000

Current Status: Project is scheduled to advertise for construction bids in September, 2023. This project received ARPA grant funding from Albemarle County.

**6. Central Water Line**

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2021
Project Status:	45% Design
Construction Start:	December 2024
Completion:	December 2028
Budget:	\$41,000,000

Current Status: Delivery of 60% design documents to the stakeholders took place on July 10th and a design review workshop was completed on August 8th. Soil borings and utility test pits along the alignment are anticipated in August and September. Easement acquisitions will begin over the next few months. The Construction Start date has been extended as delivery of pipe is reportedly taking 6 - 9 months.

**7. Scottsville WRRF Whole Plant Generator and ATS**

Design Engineer:	Wiley Wilson
Project Start:	December 2021
Project Status:	100% Design
Construction Start:	April 2024
Completion:	June 2025
Budget:	\$520,000

Current Status: A small section of the electrical conduit installation is being reviewed for feasibility to incorporate a horizontal direction drill as a potential cost savings and to minimize disruption. Easement acquisition will commence pending the outcome of this section re-design.

**8. Moore's Creek Administration Building Renovation and Addition**

Design Engineer:	SEH
Project Start:	October 2022
Project Status:	30% Design
Construction Start:	June 2024

Completion: June 2026  
Budget: \$17,000,000

Current Status: Architectural Review Board and Site plan comments have been received from the County and are currently being addressed by SHE. A second sustainability workshop is scheduled for mid-August to finalize what components will be incorporated into the design.

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

Design Engineer: Kimley-Horn  
Project Start: August 2018  
Project Status: 75% Design  
Construction Start: September 2024  
Completion: December 2028  
Budget: \$44,000,000

Current Status: Design of the pump station is 75% complete. Waterline design has reached 90% completion between the Ragged Mountain Reservoir and Fontaine Avenue. Staff are working with UVA on the alignment between Fontaine Avenue and the Observatory WTP.

**10. MCAWRRF Building Upfits and Gravity Thickener Improvements**

Design Engineer: Short Elliot Hendrickson (SEH)  
Project Start: March 2023  
Project Status: Preliminary Engineering  
Construction Start: August 2024  
Completion: December 2025  
Budget: \$5,000,000

Current Status: The building program review was completed in July for both Operations and Maintenance. Needs assessment and conceptual design will be completed over the next month, followed by detailed design in September.

**11. Emmet Street Water Line Betterment**

Design Engineer: Whitman, Requardt & Associates (WRA)  
Project Start: September 2021  
Project Status: Ivy Corridor Public Realm – Complete  
Contemplative Commons – Complete  
Emmet Streetscape –Design  
Hydraulic/29 – Preliminary Design  
Completion: July 2026, Phase I  
Budget: \$2,900,000

Current Status: RWSA is coordinating with the City for design of a 24-30” water main in Emmet Street from Ivy Road to Arlington Boulevard as part of the City’s Emmet Streetscape Phase I project. A Betterment Agreement is under review with the City for the additional design work by its consultant,

Clark-Nexsen, and the cost of the betterment construction for the Streetscape Project. WRA has begun work on the final design and permitting of the water main.

RWSA is reviewing possible water main alignments along the Emmet Street Corridor between Morton Drive and Hydraulic Road and has initiated discussion with VDOT on potential pipe routing in the upcoming design-build Hydraulic/29 project.

## **12. MCAWRRF Structural and Concrete Rehabilitation**

Design Engineer:	Hazen and Sawyer (Hazen)
Project Start:	April 2023
Project Status:	Preliminary Engineering
Completion:	June 2026
Budget:	\$13,550,000

Current Status: Preliminary engineering work is continuing. Subsurface utility engineering investigations and surveying work have been completed.

## **13. Crozet Pump Stations Rehabilitation**

Design Engineer:	Wiley   Wilson
Project Start:	July 2023
Project Status:	5% Design
Construction Start:	January 2025
Completion:	December 2026
Budget:	\$10,350,000

Current Status: Site surveying and design of engineering plans and specifications are underway.

## **14. Crozet GAC Expansion – Phase I**

Design Engineer:	SEH
Project Start:	July 2023
Project Status:	Preliminary Engineering
Completion:	May 2026
Budget:	\$6,550,000

Current Status: Scope and fee negotiations with SEH have been completed. Cornwell Engineering is currently completing a PFAS analysis of the Granular Activated Carbon influent water to determine required Empty Bed Contact Time and the most viable media for treatment use.

## **15. 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:	Work Authorization Development
Construction Start:	November 2025

Completion:	January 2029
Budget:	\$43,000,000

Current Status: A Joint Permit Application and supporting documents were submitted to VDEQ in October 2022, and are under review. The Plan-Environmental Assessment for the Beaver Creek Dam spillway upgrades was approved by NRCS in April of 2023. Federal funding from USDA-NRCS has been awarded for final design of the spillway upgrades in the amount of \$980,250. A work authorization for Hazen and Sawyer for preliminary design, final design, and construction services for the new raw water pump station, intake, raw water main, and hypolimnetic oxygenation system is included in the consent agenda in this month's Board of Directors Meeting. Design work by Schnabel Engineering and by Hazen and Sawyer is anticipated to start in September 2023.

#### **16. SFRR to RMR Pipeline, Intake, and Facilities**

Design Engineer:	Kimley Horn/SEH
Project Start:	July 2023
Project Status:	3% Design
Construction Start:	June 2026
Completion:	December 2030
Budget:	\$79,700,000

Current Status: Staff continue to work with CSX railroad on the draft permit documents. Topographic survey for the pipeline alignment has been completed, and survey of the remaining project locations is under way. Staff are working on the final phases of the SFRR-RMR Nutrient Analysis, with the necessary equipment needed to complete study efforts scheduled to arrive in the Fall, and a final report published in the Winter. The SFRR Intake and Pump Station Project will require closure of the public boat ramp at the site once construction begins.

#### **17. Upper Schenks Branch Interceptor, Phase II**

Design Engineer:	Frazier Engineering, P.A.
Project Start:	July 2021
Project Status:	Design
Construction Start:	TBD
Completion:	TBD
Budget:	\$4,725,000

Current Status: A regional coordination meeting to discuss the project was held on May 2, 2023. The design team is gathering additional information to assist the County in continuing the easement acquisition process.

### **Planning and Studies**

#### **18. Asset Management Plan**

Design Engineer:	GHD, Inc.
Project Start:	July 2018
Project Status:	CMMS Implementation – 99% Complete AMP Implementation – 62% Complete

Completion: CMMS Implementation – April 2023  
AMP Implementation – 2024  
Budget: \$1,180,000

Current Status: Assistance with Cityworks implementation continues with the software now in place and work orders being generated. Work continues to fully implement the Asset Management program across all applicable Authority facilities with development of management strategy group assignments and attributes for both vertical and horizontal assets, preparation for condition assessments and consequence of failure determination workshops.

## **19. 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 the Cogeneration Upgrades. RWSA and City staff continue to discuss all available options to reuse the biogas, with further investigation and analysis ongoing.

## **20. North Rivanna Water Treatment Plant Decommissioning**

Design Engineer: SEH  
Project Start: July 2019  
Project Status: Work Authorization Development  
Completion: March 2027  
Budget: \$2,425,000

Current Status: SEH is preparing a scope of work for design of the plant decommissioning. Staff are also pursuing funding and administrative assistance for removal of the North Fork Rivanna low head dam from the U.S. Fish and Wildlife Service through their Partners for Fish and Wildlife Program.

## **Other Significant Projects**

### **21. 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
2022-02/05/12	Miscellaneous MCI/PCI/RVI MH Repairs	\$70,000
2023-01	Finished Water System ARV Repairs	\$150,000
2023-02	WWM 32-02 Valve Replacement	\$50,000
2023-07	NRWTP 4" Non-Potable Waterline Leak	\$5,000

- Miscellaneous MCI/PCI/RVI MH Repairs: Over the past several months, staff have identified issues with various manholes on the Moores Creek, Powell Creek, and Rivanna Interceptors (MCI, PCI, and RVI, respectively). These include one manhole on MCI that needs to be raised, as it was historically buried but found in Summer 2021 by the RWSA Maintenance & Engineering Departments, one manhole on RVI that needs a failing HDPE liner to be removed and cementitious mortar to be installed, and one manhole each on PCI and MCI that need to be coated with cementitious mortar due to root intrusion and groundwater infiltration. This work will be performed through the On-Call Maintenance contract with Digs, and staff visited the site with the Contractor on July 15<sup>th</sup>. The appropriate MH on MCI was raised on November 1<sup>st</sup>, 2022. The remaining coating efforts were completed during the week of January 30<sup>th</sup>. Two additional small MH repairs are being planned for the summer, including one additional MH coating and height adjustment of one MH.
- 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 this Fall. The Contractor is currently working on acquiring applicable VDOT permits for the work.
- WWM 32-02 Replacement: An 8” gate valve at RWSA’s Wholesale Water Meter site 32 was identified as defective during a recent meter calibration effort. Staff is coordinating the replacement efforts for this valve for the Summer-Fall time period with its On-Call Maintenance Contractor, as well as ACSA and the RWSA Water & Maintenance Departments. Due to the amount and critical nature of customers that would be impacted in a potential shutdown, RWSA will be utilizing an insertion valve in this location.
- NRWTP Non Potable Waterline Leak: On July 10<sup>th</sup>, staff identified an apparent water leak between the GAC Building and Sedimentation Basins at the North Rivanna Water Treatment Plant. Upon further investigation, it became apparent that a 4” non-potable waterline supplying process water to portions of the treatment plant had begun leaking, just outside the footer of the GAC building. RWSA Maintenance staff was able to complete the repairs in a very tight corridor, with all hand work being required, on July 14<sup>th</sup>.

## 22. Security Enhancements

Design Engineer:	Hazen & Sawyer
Construction Contractor:	Security 101 (Richmond, VA)
Construction Start:	March 2020
Percent Complete:	99% (WA5), 10% (WA6), 25% (WA7)
Based Construction Contract +	
Change Orders to Date = Current Value:	\$718,428 (WA1) + \$611,764 (WA2-7)
Completion:	December 2023 (WA6), October 2023 (WA7)
Budget:	\$2,810,000

Current Status: WA5, which authorizes card access installation at Glenmore Water Resource Recovery Facility (GWRRF), Scottsville Water Resource Recovery Facility (SVWRRF), and Red Hill Water Treatment Plant (RHWTP), began during the week of June 20<sup>th</sup>, 2022. Work is substantially complete, with only programming at SVWRRF remaining. WA6 includes card access installation at RWSA's remote sites, including all dams and pump stations. Work has begun running conduit at each of the sites. WA7, which includes a pilot of a program that will test electronic padlocks at several RWSA facilities, has begun. These electronic padlocks have the potential to add an extra layer of security to unmanned facilities such as tanks, dams, and other facilities. If the pilot is successful, wide scale implementation of this technology is possible. 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 permitting phase. As these discussions are ongoing, staff is working on appropriate permitting submittals with 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 FOR JULY 2023**

**DATE: AUGUST 22, 2023**

### **Human Resources**

The Rivanna Water & Sewer Authority had an 8.3% turnover rate for FY 23 which year ended on June 30, 2023. This is under our strategic plan goal of 10% and a significant decrease from our FY 22 turnover rate of 14.9%.

We continue implementation of the Paychex payroll system, and are starting implementation of the Benefits and Recruiting modules. We have signed a service contract for the Paychex Learning Management System. This system has a significant number of Safety and Human Resources training modules that are available for use. We can upload our own training modules, and the system will track our employees' training hours.

### **Safety**

We have continued the CPR and First Aid training for our employees. Fire extinguisher training is planned for September. This will be hands-on training for our employees.

We were pleased to host the AWWA – Virginia Section, Safety Committee for a safety meeting on August 16, 2023. We met with them at our Moores Creek facility and then toured the Crozet Water Treatment Plant.

### **Community Outreach**

We were excited to host two groups of campers from the University of Virginia Equity Center's Starr Hill Pathways summer program at the Crozet Water Treatment Plant and the Beaver Creek Reservoir. The Starr Hill Pathways program offers Charlottesville area rising 7<sup>th</sup> graders the opportunity to explore different careers and colleges. The tours were led by our Water Department managers and several employees who shared their experiences working for the Rivanna Water & Sewer Authority and why they chose to come here to work. You can see pictures from both tours posted on the Rivanna Authorities Facebook page.



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

**FROM: ANDREA BOWLES, WATER RESOURCES MANAGER  
JENNIFER WHITAKER, DIRECTOR OF ENGINEERING &  
MAINTENANCE**

**REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: DROUGHT MONITORING REPORT**

**DATE: AUGUST 22, 2023**

### **State and Federal Drought Monitoring, as of August 14, 2023:**

- U.S. Drought Monitoring Report: Indicates Charlottesville and Albemarle County are not experiencing drought conditions.
- VDEQ Drought Status Report: Our region is listed as being in a “Normal” level for all drought indicators. Levels of severity increase from “Normal” to “Watch” to “Warning” to “Emergency.”

### **Precipitation & Stream Flows**

Charlottesville Precipitation				
Year	Month	Observed (in.)	Normal (in.)	Departure (in.)
2021	Jan - Dec	33.82	41.61	-7.79
2022	Jan - Dec	43.53	41.61	+1.92
2023	Jan – July	15.69	24.06	-8.37

Source: National Weather Service, National Climatic Data Center

USGS Stream Gaging Station Near the Urban Area (July 3-9)				
Gage Name	Rolling 7-day Avg. Stream Flow		Median Daily Streamflow	
	cfs	mgd	cfs	mgd
Mechums River	28.5	18.4	27	17.5
Moormans River	12.6	8.2	11	7.1
NF Rivanna River	13.1	8.5	19	12.3
SF Rivanna River	46.5	30.0	75	48.5

Median daily flow: August 13<sup>th</sup> for the period of record (approx. 30 - 80 years)

### **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 WATER & SEWER AUTHORITY  
BOARD OF DIRECTORS**

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

**REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: WHOLESALE METERING REPORT FOR JULY 2023**

**DATE: AUGUST 22, 2023**

The monthly and average daily Urban water system usages by the City and the ACSA for July 2023 were as follows:

	<i>Month</i>	<i>Daily Average</i>	
City Usage (gal)	151,610,314	4,890,655	<b>48.1%</b>
ACSA Usage (gal)	163,900,723	5,287,120	<b>51.9%</b>
<b>Total (gal)</b>	<b>315,511,037</b>	<b>10,177,775</b>	

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 August 2022), 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.

Note: Staff detected a read issue with Meter Site 20 – Trader Joe’s in June and replaced the register. Staff brought the meter back online in July. There is some partial data from July, but the 3-month average was used.

Figure 1: City of Charlottesville Monthly Water Usage and Allocation

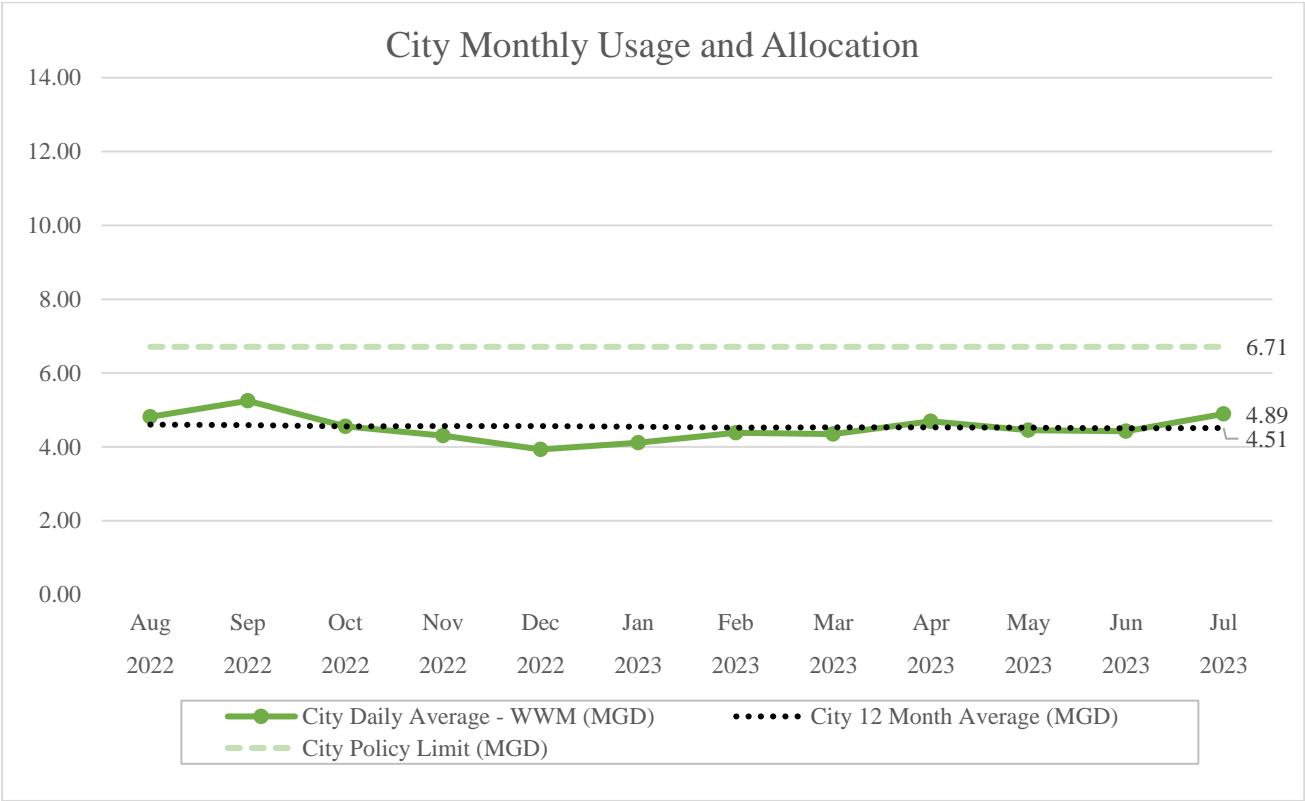
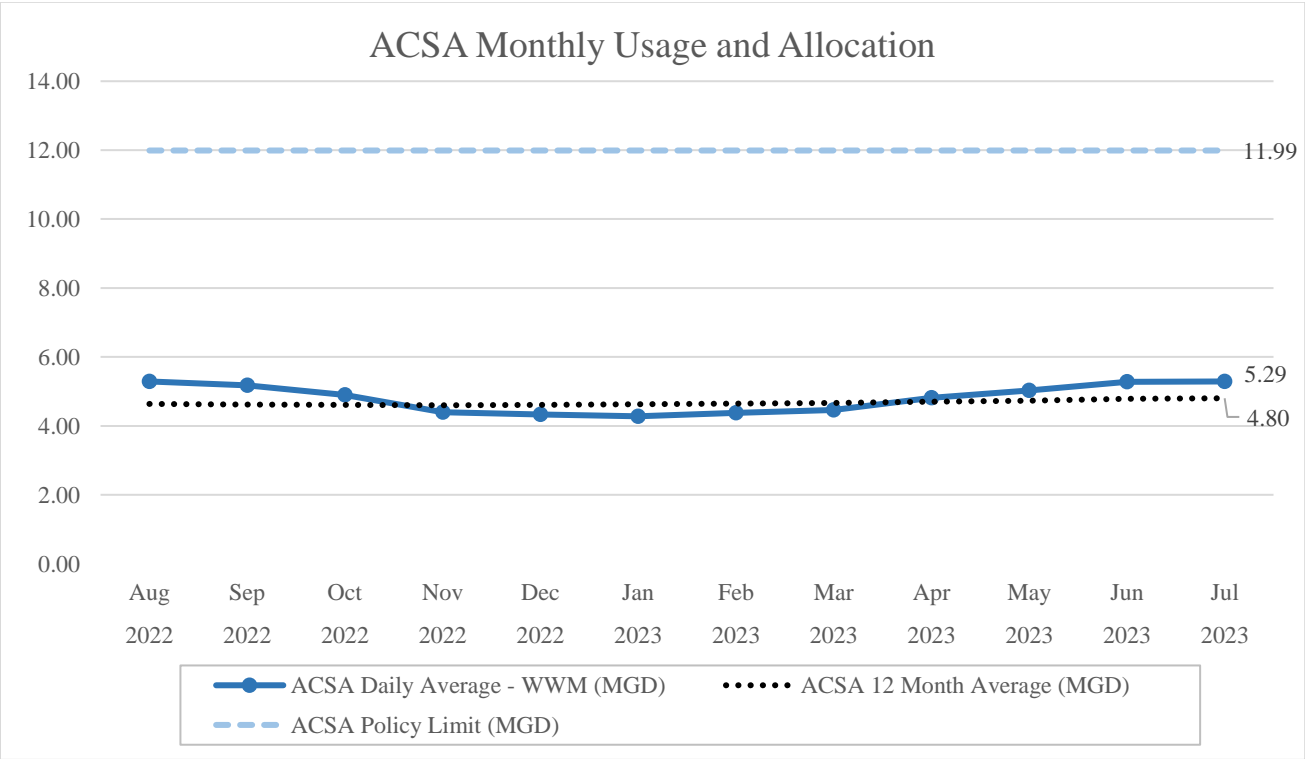


Figure 2: Albemarle County Service Authority Monthly Water Usage and Allocation





# Meter Locations for the Wholesale Water Metering Project



Miles  
0 0.25 0.5

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





## MEMORANDUM

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

**FROM: JENNIFER A. WHITAKER, DIRECTOR OF ENGINEERING AND  
MAINTENANCE**

**REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: APPROVAL OF ENGINEERING SERVICES – CROZET GAC  
EXPANSION, PHASE I – SHORT ELLIOTT HENDRICKSON**

**DATE: AUGUST 22, 2023**

This request is to authorize the Executive Director to execute a Work Authorization with Short Elliot Hendrickson Inc. (SEH) totaling \$523,642 to provide design, bidding and construction administration services to complete the Crozet WTP GAC Expansion – Phase I project. This project will increase the GAC treatment capacity from 1 to 2 MGD, comparable to the other components of the water treatment process. Grant funding from the VDH and the federal BIL program totaling \$3.17 M will be utilized to support this project which has an estimated total cost of \$6.5 M.

### **Background**

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) system capacity at the Crozet WTP to match the current plant treatment capacity. GAC has been identified as a leading best management practice to remove disinfection by-product precursors from source water and can be used to manage the removal of other emerging contaminants and compounds that are under consideration for regulation in the future, such as per- and polyfluoroalkyl substances (PFAS). As a result, full GAC treatment capacity will provide the Crozet WTP with the flexibility to provide high quality drinking water under various 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.

RWSA entered into a term agreement with SEH on July 21, 2023, for Professional Water Treatment Plant Engineering Services. Under this work authorization, SEH would provide Professional Engineering Services for the Crozet WTP GAC Expansion – Phase I project to include design, permitting, bidding, construction administration and part-time field inspection services.

Engineering staff has negotiated a scope of work to include:

- Preliminary Engineering Report

- Geotechnical Investigations and reporting
- Detailed design and regulatory permitting
- Site plan development and assistance through Albemarle County approval
- Development of construction documents and bidding assistance
- Construction administration services
- Part-time construction inspection services

**Board Action Requested:**

Authorize the Executive Director to execute a Work Authorization with SEH for professional services to complete the Crozet WTP GAC Expansion – Phase I project totaling \$523,642 and any further amendments needed to complete the tasks identified above, not to exceed 25% of the original contract amount, provided the resulting total cost is within the approved CIP project budget.





## MEMORANDUM

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

**FROM:** JENNIFER A. WHITAKER, DIRECTOR OF ENGINEERING AND  
MAINTENANCE

**REVIEWED BY:** BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT:** APPROVAL OF ENGINEERING SERVICES – OBSERVATORY  
WATER TREATMENT PLANT – EXPANSION AND  
REHABILITATION PROJECT – ADDITIONAL CONSTRUCTION  
PHASE SERVICES – SHORT ELLIOTT HENDRICKSON INC.

**DATE:** AUGUST 22, 2023

This request is to authorize additional construction phase services for the Observatory Water Treatment Plant – Expansion and Rehabilitation project for an amount not to exceed \$219,000. These additional services are substantially due to unforeseen delays in completing the work created by supply chain issues, covid-driven process changes, and other facility changes requested by our Operations staff. This change will effectively increase the consultant’s contract to \$2.1 M, and will remain within the total project budget of \$22 M.

### **Background**

The Observatory Water Treatment Plant (OBWTP) is the oldest of the three urban water plants. A previous Preliminary Engineering Report was completed by Short Elliott Hendrickson (SEH) that evaluated replacement and rehabilitation methods to modernize the facility and increase the plant’s capacity to 10 million gallons per day. To take this project from the PER phase through construction, staff had previously negotiated a scope, fee, and schedule with SEH to perform preliminary engineering, final design, bidding, and construction administration services under their previous Water Treatment Plant Engineering Services contract. The schedule for construction activities at the OBWTP has been extended due to various issues, including the COVID-19 pandemic and supply chain delays, and as a result additional construction phase services are needed from SEH, now under their new Water Treatment Plant Engineering Services contract (RFP #23-01).

As a result, instead of developing an amendment to the previous work authorization, staff has negotiated a new scope, fee, and schedule with SEH to account for these additional construction phase services under the firm’s new contract. These additional services do not require an amendment to the total project budget of \$22 M.

**Board Action Requested:**

Authorize the Executive Director to execute a Work Authorization with Short Elliott Hendrickson Inc. for Professional Engineering services related to additional construction phase services for the Observatory Water Treatment Plant – Expansion and Rehabilitation project, for an amount not to exceed \$219,000, and any amendments needed to complete the tasks identified above, not to exceed 25% of the original contract amount provided the resulting total cost is within the approved CIP project budget.



## MEMORANDUM

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

**FROM:** JENNIFER A. WHITAKER, DIRECTOR OF ENGINEERING AND  
MAINTENANCE

**REVIEWED BY:** BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT:** APPROVAL OF ENGINEERING SERVICES – BEAVER CREEK  
RAW WATER PUMP STATION AND INTAKE – HAZEN AND  
SAWYER

**DATE:** AUGUST 22, 2023

This request is to authorize the Executive Director to execute a Work Authorization with Hazen and Sawyer totaling \$3,790,539 to provide engineering services for the design, bidding, permitting, and construction of the Beaver Creek Raw Water Pump Station, Intake, and Transmission Main project including the Hypolimnetic Oxygenation System (HLOS). The current CIP project budget is \$20 million.

### **Background**

The existing Raw Water Pump Station and Intake facility at the Beaver Creek Reservoir was constructed in 1964 and is located immediately downstream of the Beaver Creek Dam. Obligatory dam safety spillway upgrades 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 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 property owned by Albemarle County on the south side of the Beaver Creek Reservoir.

RWSA entered into a term agreement with Hazen and Sawyer on July 7, 2023, for Professional Water Treatment Plant Engineering Services. Under this contract, Hazen and Sawyer will provide engineering services for the design, bidding, and construction of the Beaver Creek Raw Water Pump Station, Intake, Raw Water Transmission Main, and HLOS Project. Engineering staff has negotiated a scope of work for these services to include the following:

- Project Site Survey and Investigation
- Development of a Preliminary Engineering Report (PER)
- Value Engineering Workshop
- Final Design & Permitting
- Development of Easement Plats

- Bid and Construction Phase Services

This project and the Beaver Creek Dam Spillway Upgrades will be bid and constructed under a single contract, so this work will be performed in coordination with Schnabel Engineering.

This authorization replaces the preliminary engineering work authorized by the Board of Directors in April of 2023. The previous term contract expired prior to the commencement of that work, so those efforts were put on hold until the new term contract went into effect. This also allowed for the development of a single work authorization that included the preliminary engineering work as well as the final design, bidding and construction.

**Board Action Requested:**

Authorize the Executive Director to execute a Work Authorization with Hazen and Sawyer for preliminary, final, bidding, and construction phase engineering services for the Beaver Creek Raw Water Pump Station and Intake project totaling \$3,790,539, and any amendments needed to complete the tasks identified above, not to exceed 25% of the Work Authorization amount, provided the resulting total cost is within the approved CIP project budget.





# Urban Drinking Water Supply & Demand Review

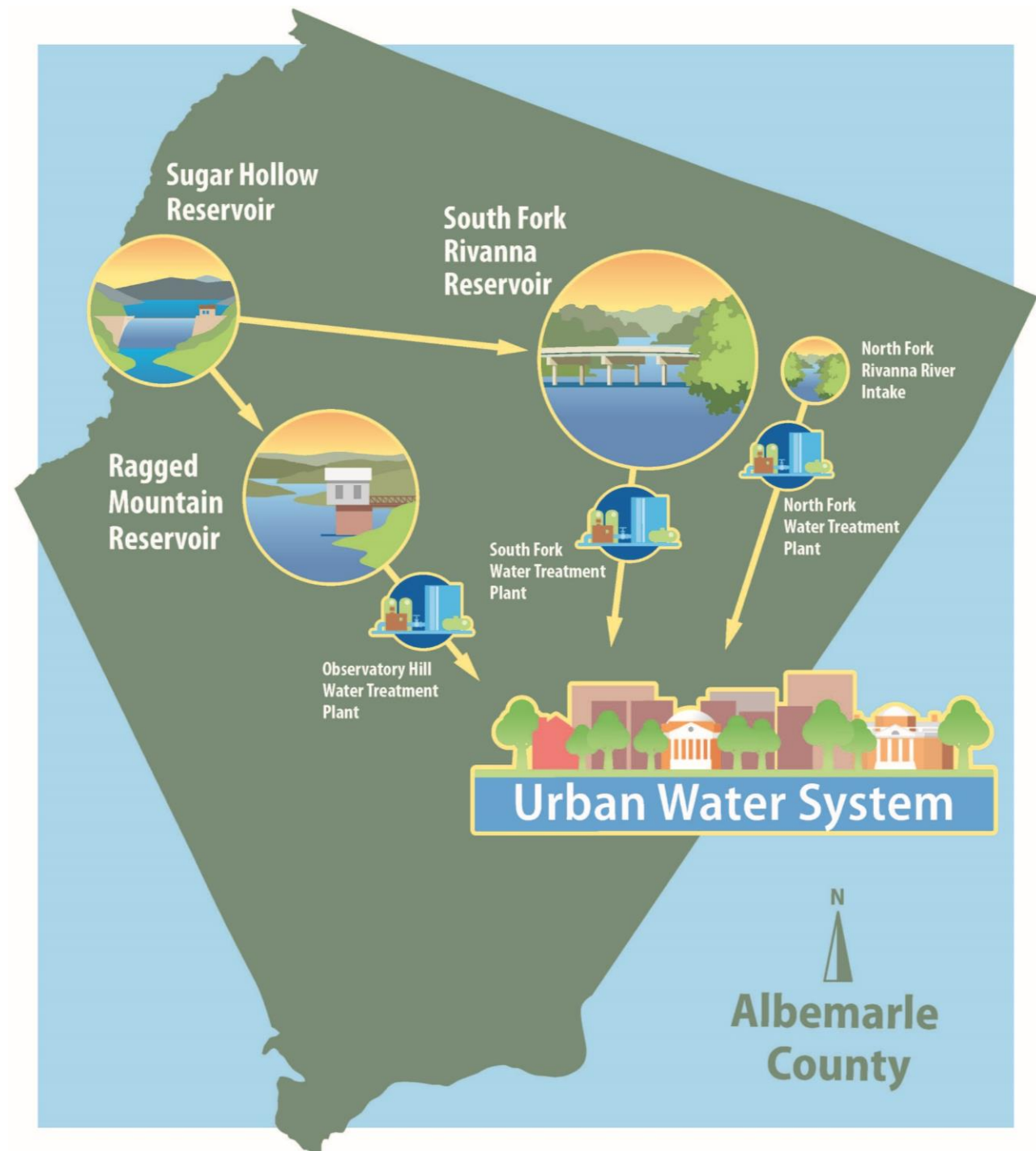
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PRESENTED TO THE RWSA BOARD OF DIRECTORS BY:  
JENNIFER WHITAKER, DIRECTOR OF ENGINEERING & MAINTENANCE  
AUGUST 22, 2023

# Urban Water Supply System

## Urban

Sugar Hollow Reservoir	339 MG
Rivanna Reservoir	883 MG
Ragged Mtn Reservoir	1.44 BG
	<b>2.6 BG</b>





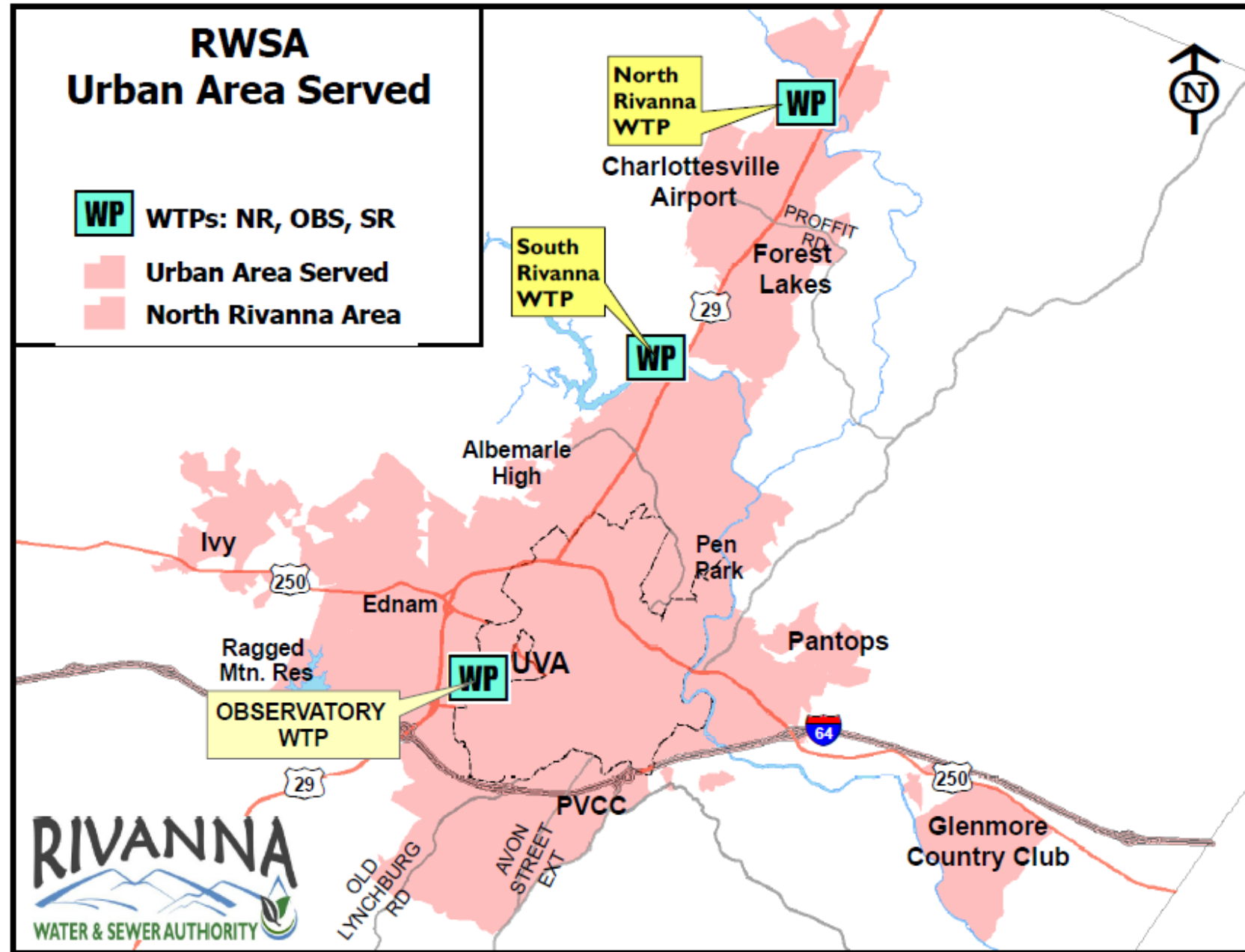
# Urban Water Treatment System

## Urban

S. Rivanna WTP	12 MGD
Observatory WTP	10* MGD
N. Rivanna WTP**	2 MGD
	<hr/>
	24 MGD

\*Upon completion of upgrade late 2023

\*\* to be decommissioned by 2026



# Urban Water Supply | History

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- The Virginia Administrative Code, Chapter 780, requires local water supply planning designed to “ensure adequate and safe drinking water is available” and to “promote conservation”.
- In 2001 – 2002, drought in central Virginia sparked a ten-year long water supply planning process. The community evaluated many alternatives, including taking water from the James River, but decided to “drink local” and stay within our watershed. A Water Supply Plan for the community was ultimately completed and approved in 2012, which required the RWSA to construct:
  - A larger replacement dam for the Ragged Mountain Reservoir (completed in 2014)
  - A raw water line from S. Rivanna Reservoir to fill the larger RMR (originally 2027 – 2035, now 2023 - 2030 )
  - Renovation of the S. Rivanna and Observatory WTPs (under construction, complete in late 2023)
  - Replacement piping and pumping between the RMR and the Ob WTP (currently planned for 2024 – 2028)



# Urban Water Supply | Agreements & Env. Permits

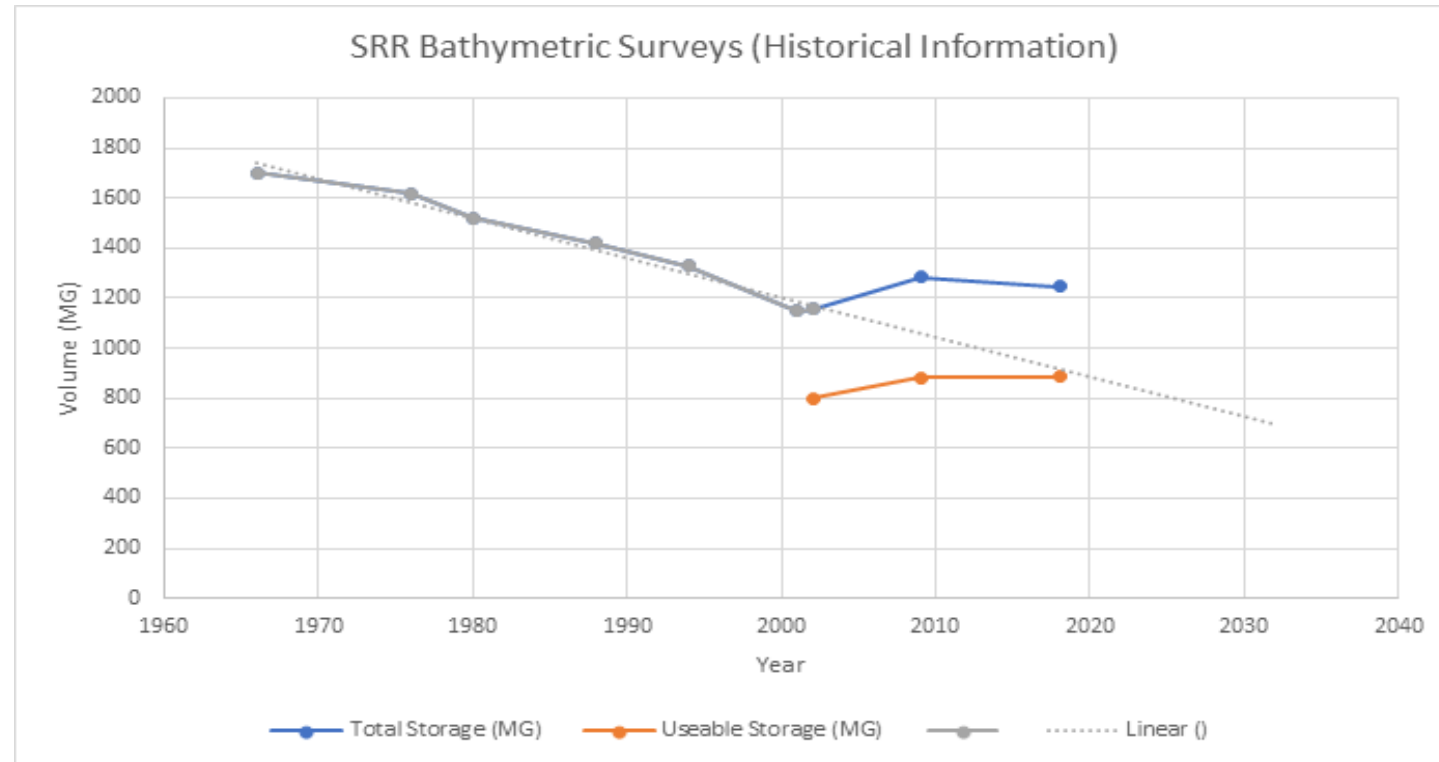
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- In 2012, the **Ragged Mountain Dam Project Agreement** was completed between the City, ACSA, and RWSA. The Agreement established cost allocations between the City and the ACSA for these water supply projects.
  - Dam at RMR City 15%, ACSA 85%
  - Water Line from SRR – RMR City 20%, ACSA 80%
  - Raise RMR Water Level 12 feet City 15%, ACSA 85%: when Demand = 85% of Water Supply
- Required RWSA to complete a bathymetric survey of the Urban reservoirs, and an Urban Water Safe Yield and Demand Study every 10 years, beginning in 2020.
- Two **environmental permits** were issued in 2008, authorizing construction of a new and taller dam for the RMR, as well as a pipeline from the SRR to fill the larger RMR.
  1. U.S. Army Corps of Engineers (10-year permit) Expired June 2018; extended to June 2023; working on Administrative Continuance and Jurisdictional Determination
  2. VA Dept. of Environmental Quality (15-year permit) Expired February 2023; Under Administrative Continuance
- An application for new permits (Joint Permit Application) was submitted in May 2021, 1- year ahead of schedule
  - Currently Under review by DEQ

# Urban Water Supply Analysis | Reservoirs

- Completed bathymetric surveys of Ragged Mtn. and S. Rivanna Reservoirs in 2018, Sugar Hollow Reservoir in 2015.

Reservoirs	Prior Useable	2018 (MG)	Changes (MG)
RMR	1,513 (2014)	1,441	-72
SRR	883 (2009)	885	+2
SHR	350 (1995)	339 (2015)	-11
		2.6 BG	



# Urban Water Supply Analysis | Operational Yield

---

## ➤ Consultant evaluated:

- Local rainfall quantities and patterns since 1920
- Flow into reservoirs, based on recent hydraulic modeling
- Local weather data during the “drought of record” in 2001-2002 (18 months)
- Available water supply over the next 50 years, based on these findings

## ➤ Calculated “Safe Yield” for the Urban Reservoir System:

18.6 MGD

- Safe Yield = “The maximum water withdrawal rate during the worst drought of record in VA since 1930.” (12 VAC5-590-830: Va Dept of Health)

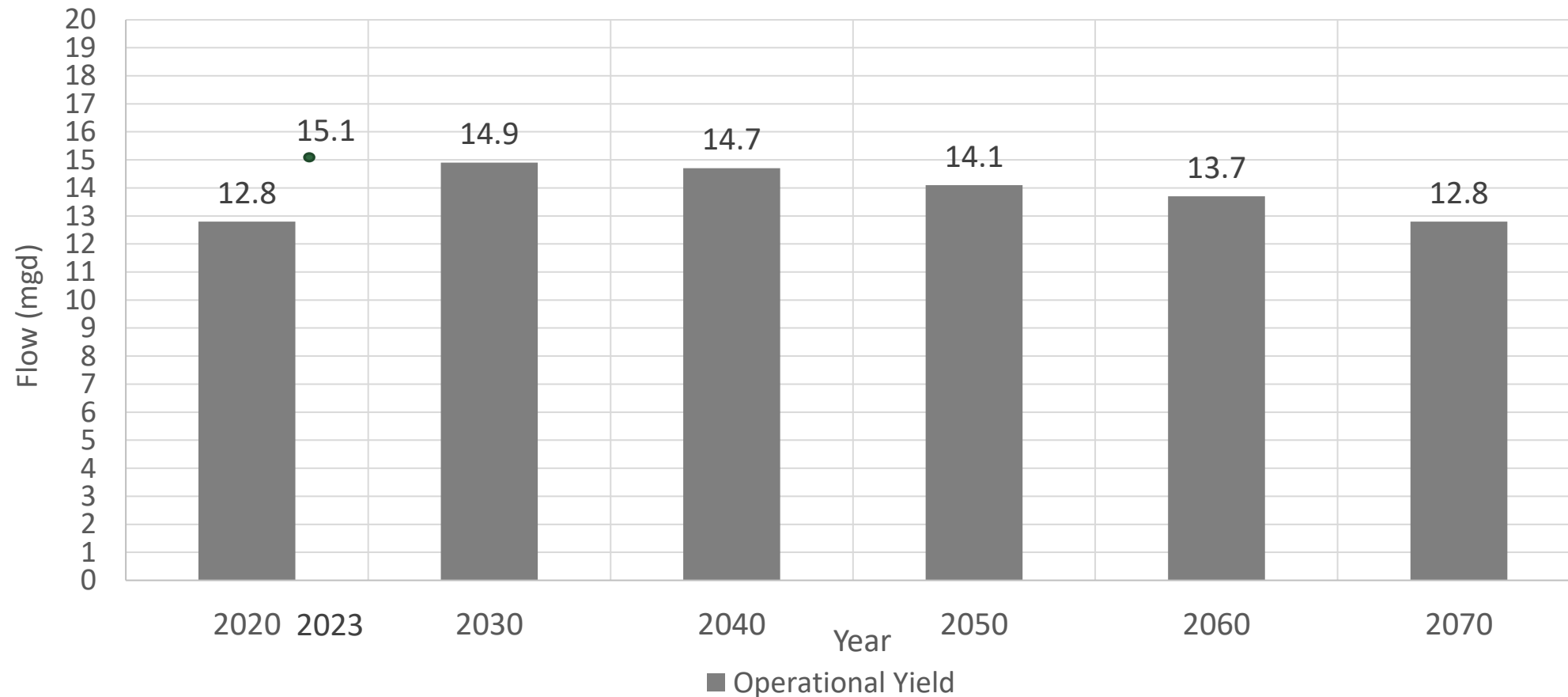
## ➤ Calculated “Operational Yield” for the Urban Water System:

12.8 MGD

- The maximum water withdrawal, treatment, and conveyance rate available from our current water supply, treatment and piping facilities during a drought similar to the drought of 2001-2002.

# Available Water Supply

- Increase in available water supply after upgrades to WTPs in 2023
- Decline in available supply after 2023 resulting from loss of useable storage in South Rivanna Reservoir due to sedimentation



# Urban Water Demand Analysis | Population Forecast

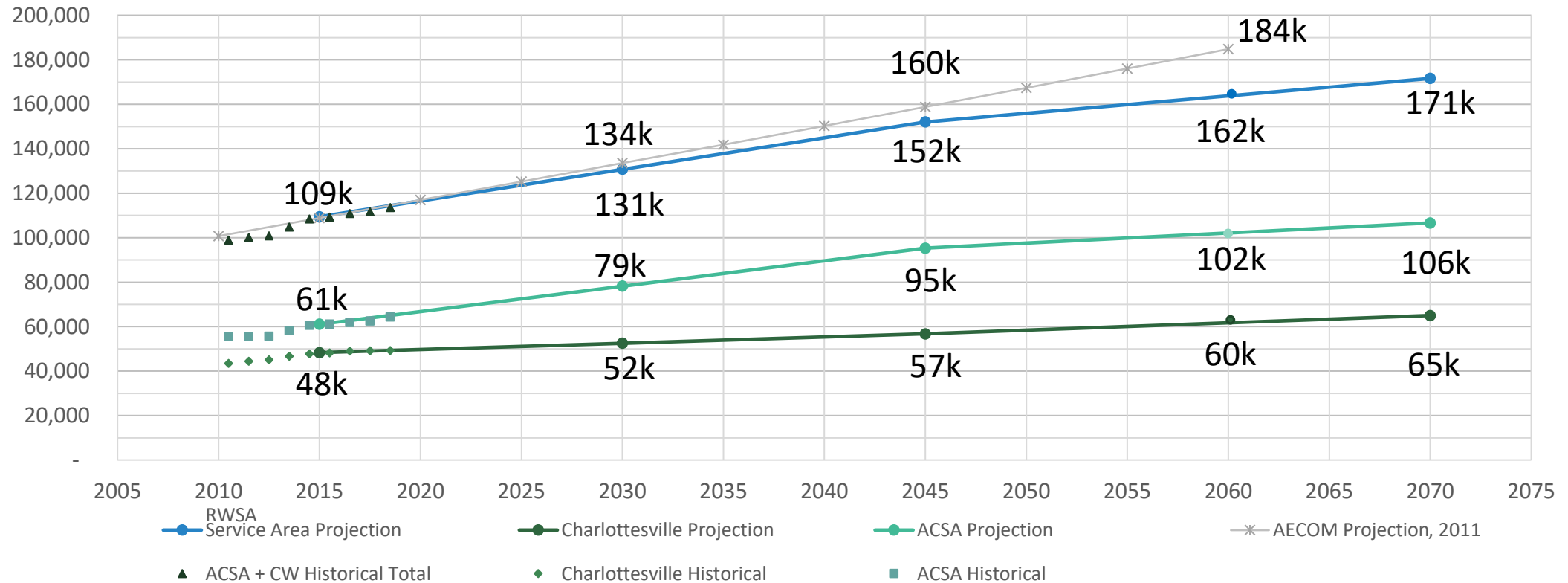
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Population Forecast Data was obtained from:

- Weldon Cooper Center
- Thomas Jefferson Planning District Commission (2045 Long Range Transportation Plan)
- Albemarle Office of Community Development
- City Neighborhood Development Services Department
- UVA Facilities and Architect Offices

# Urban Water Demand Analysis | Population Forecast

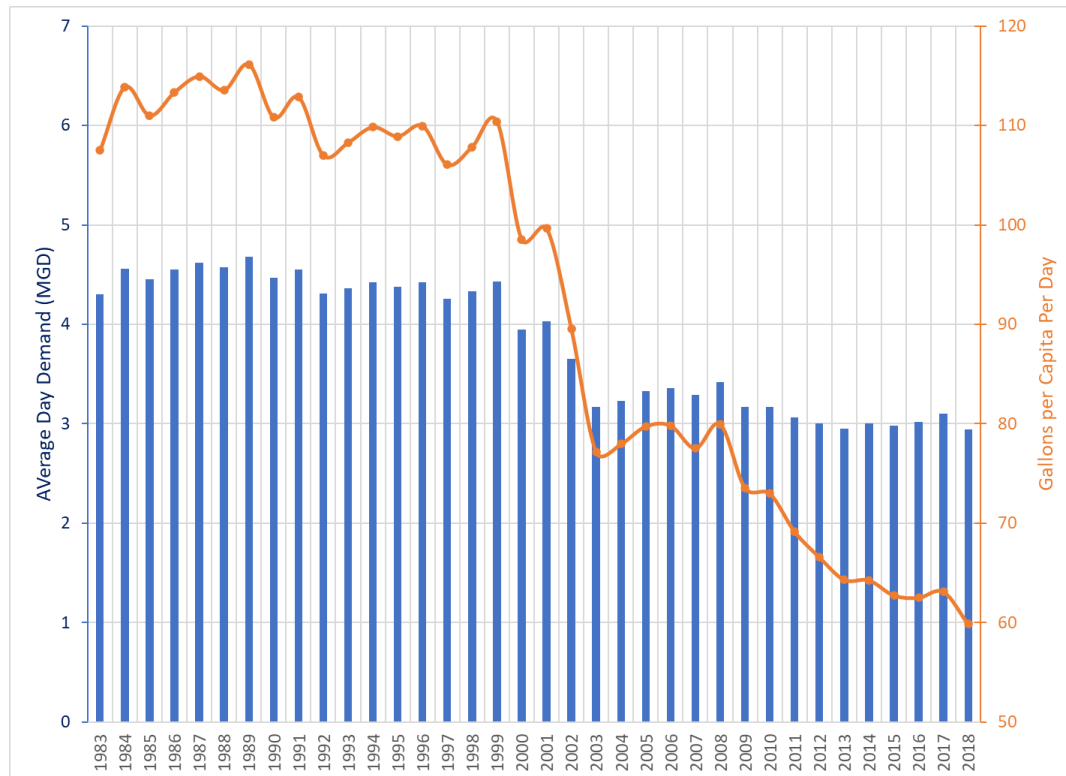
City, ACSA and RWSA Service Area Populations



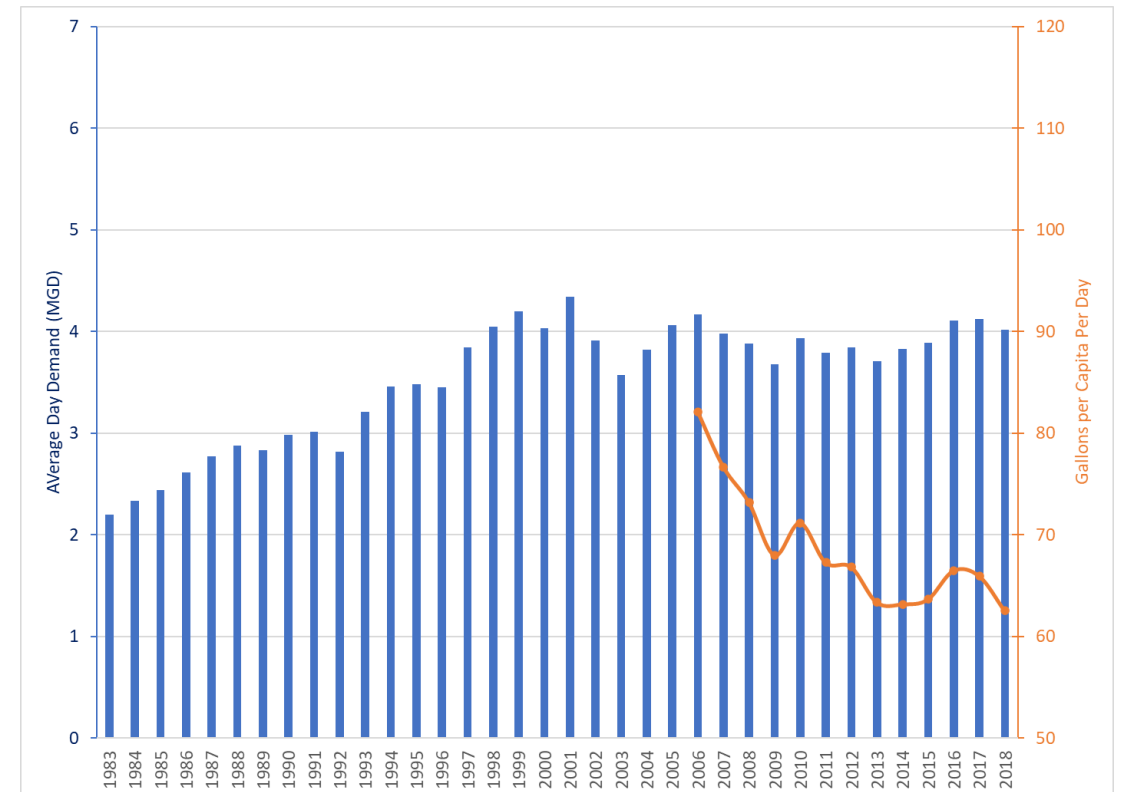
# Urban Water Demand Analysis | Unit Demand

- Significant decrease in the gallons consumed per capita per day

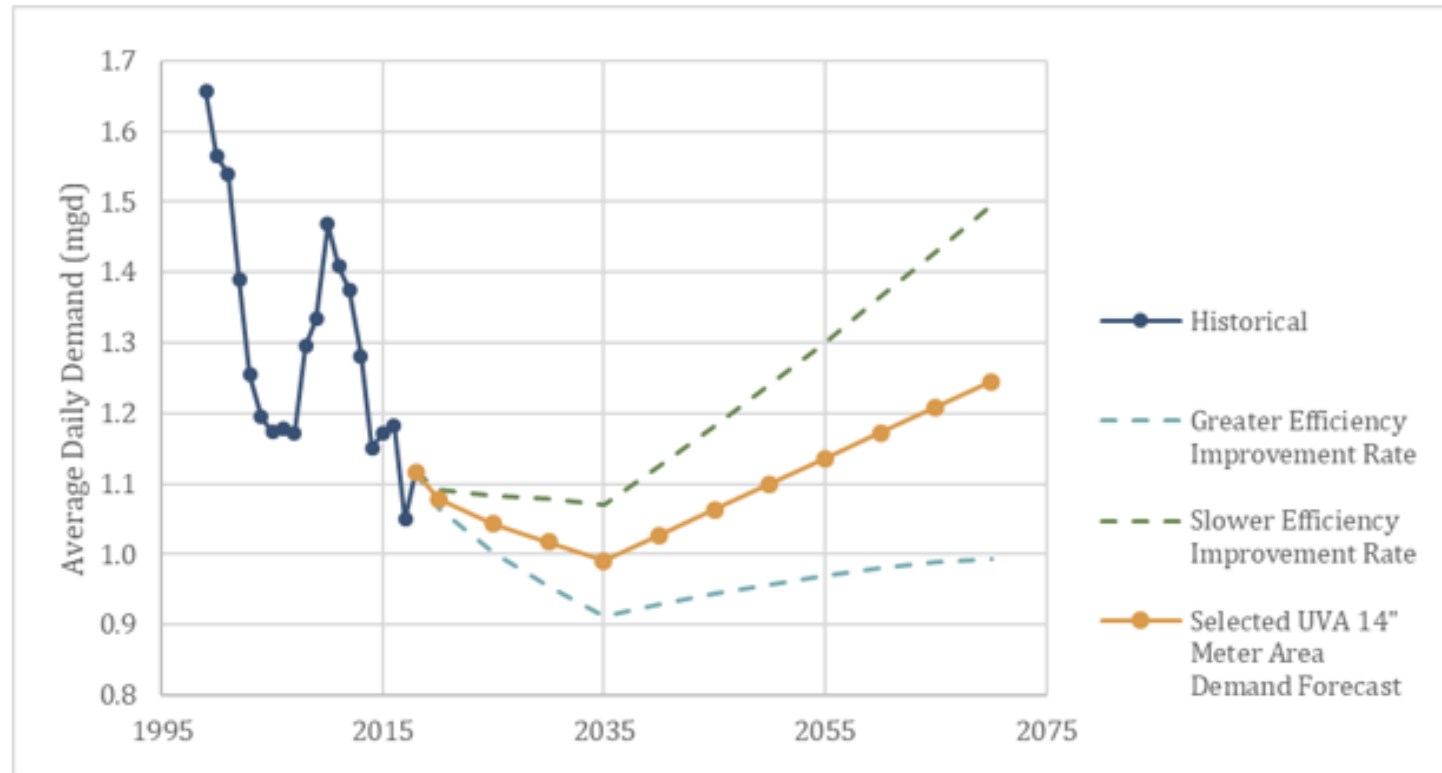
City avg day & per capita trend



ACSA avg day & per capita trend

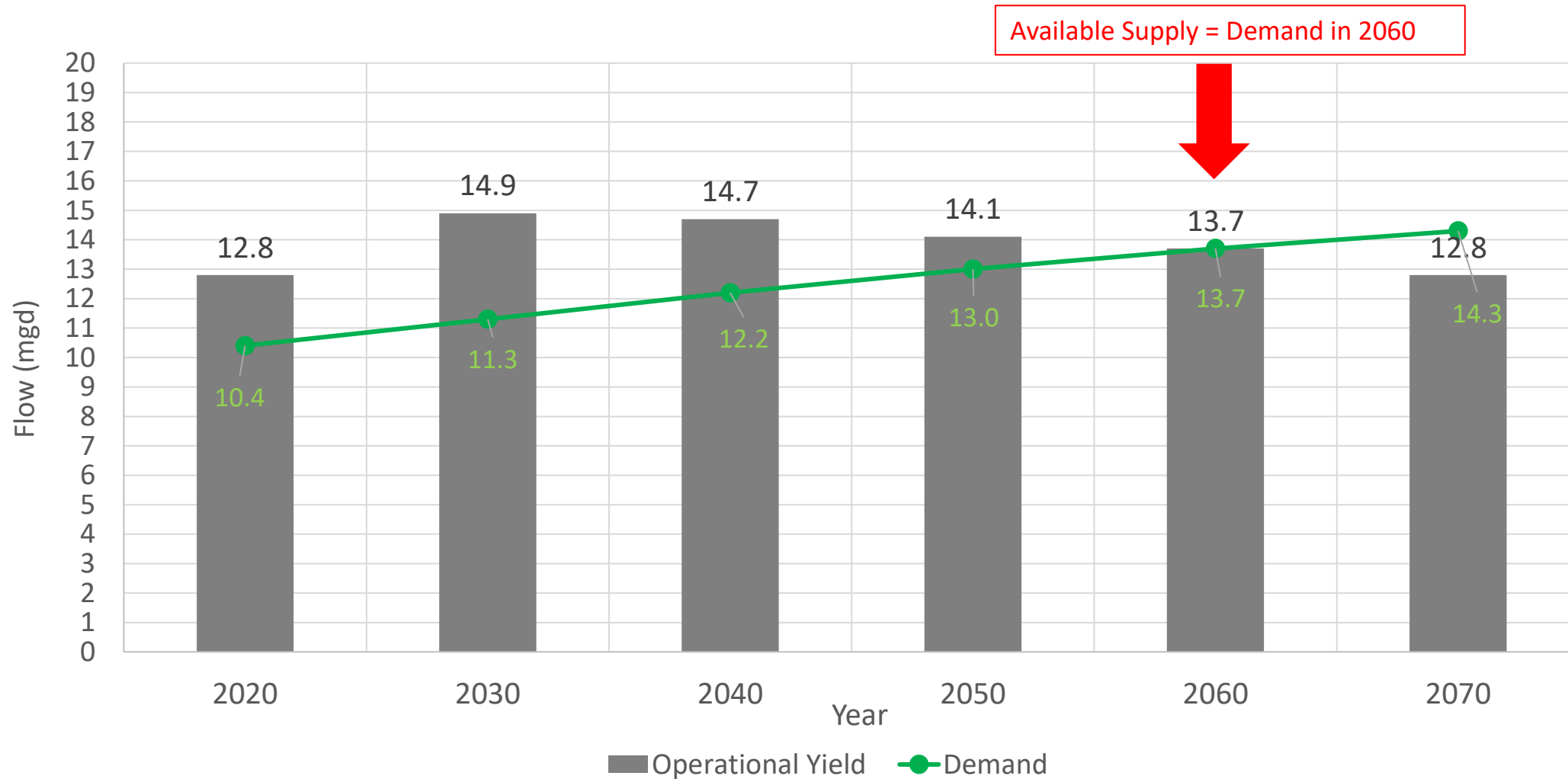


# Urban Water Demand Analysis | UVA Demand





# Available Water Supply vs Demand | 2020 - 2070



# Urban Water System 2070 | Summary

---

- RWSA Service Population = 171,000
- Available Water Supply = 12.8 MGD
- Water Demand = 14.3 MGD
- Additional Available Water Supply will be required by 2060
- Demand will = 85% of Available Water Supply by 2045

# Plans to Increase Water Supply

## Construct the RMR to Obs. WTP Pipeline & Pump Station 2024-2028

- Replaces 100-year-old infrastructure
- Increases raw water capacity to the Observatory WTP
- Completes a portion of the SRR – RMR system

## Construct the Central Water Line 2024-2028

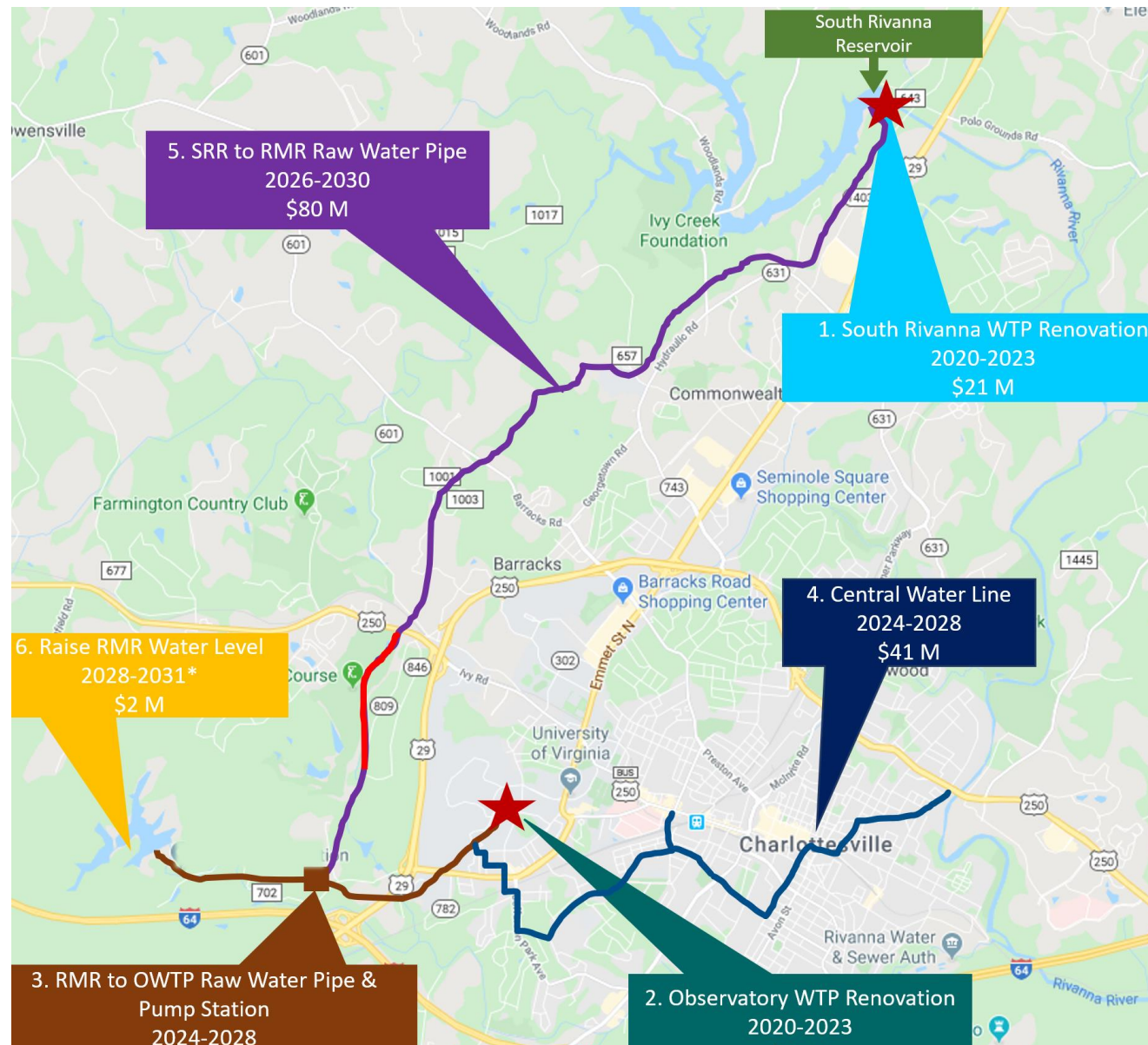
- Connects finished water plants, tanks and pipelines
- Adds significant finished water redundancy
- Allows for the use of the full Observatory WTP capacity
- Increases use of RMR

## Construct SRR – RMR Pipeline 2026-2030

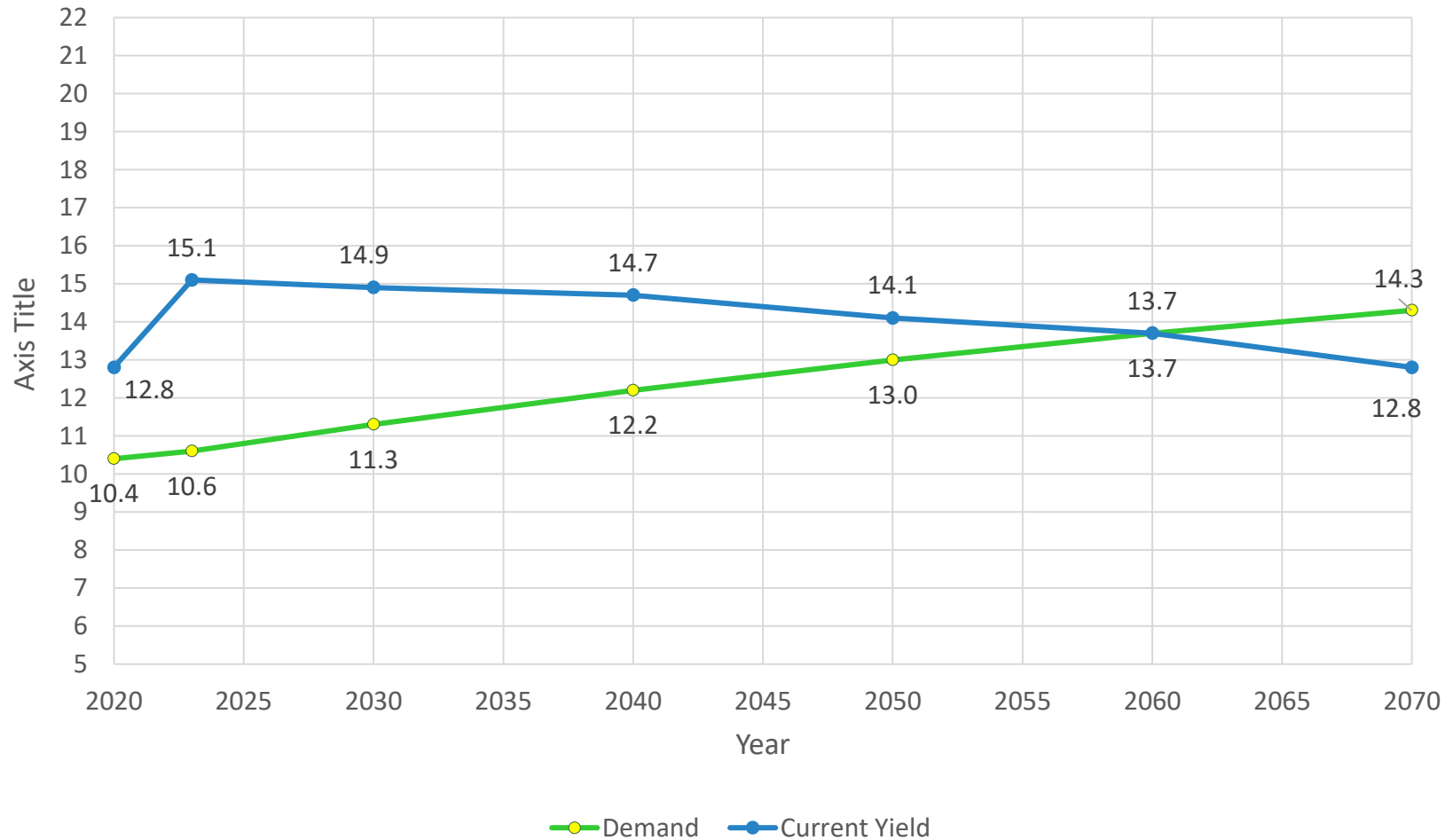
- Adds redundancy, resiliency, operational and env. benefits
- Increases reservoir fill rates from 3.5mgd to 25mgd
- Large increase in system operational yield
- Provides for Climate change uncertainty

## Raise Ragged Mtn. Reservoir Pool 12 feet

- Increases Storage from 1.4 BG to 2.1 BG
- Ragged Mtn. Dam Agreement governs timing
- Proposal to amend RMD Agreement

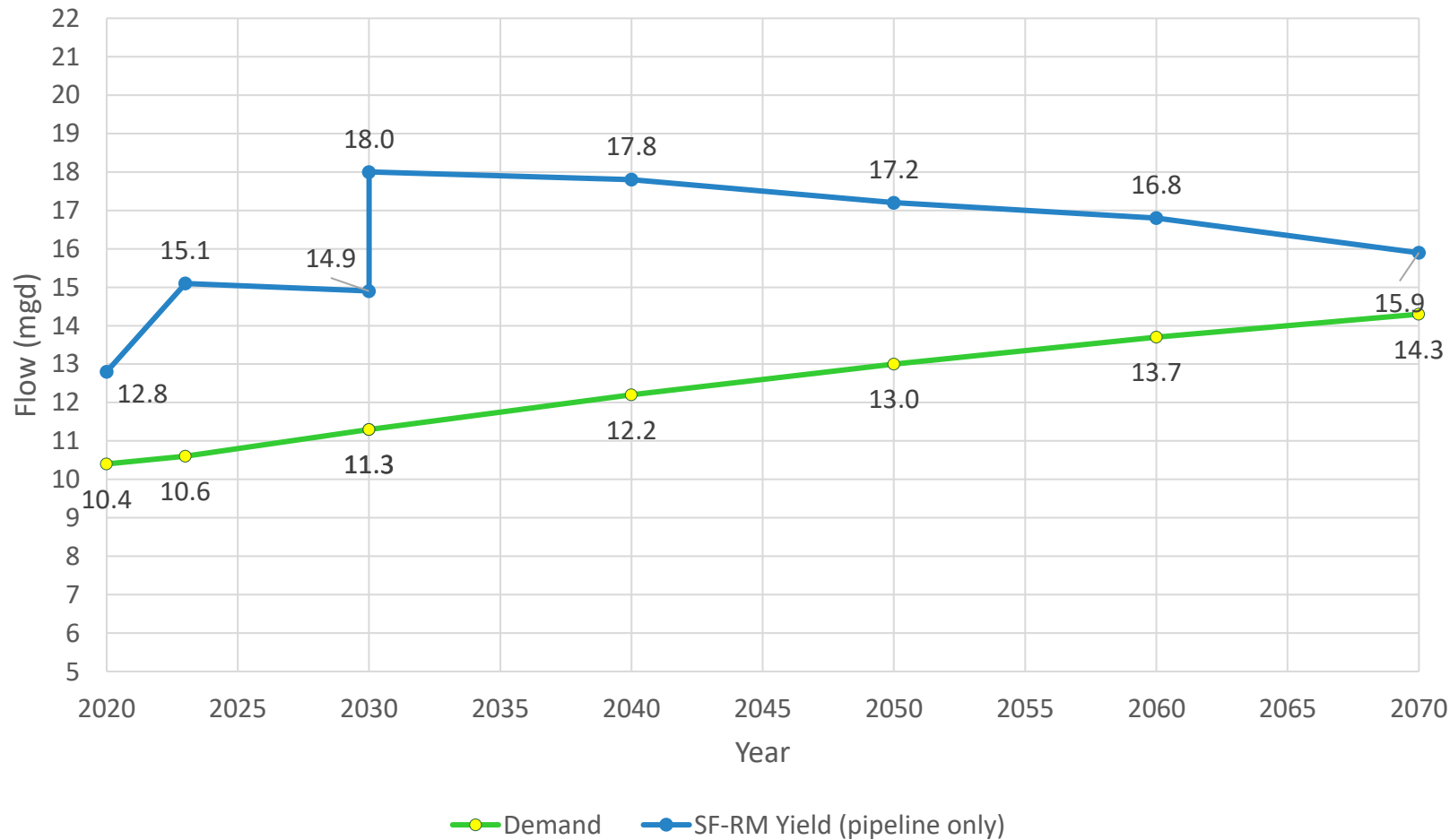


# Supply vs Demand | Current Yield



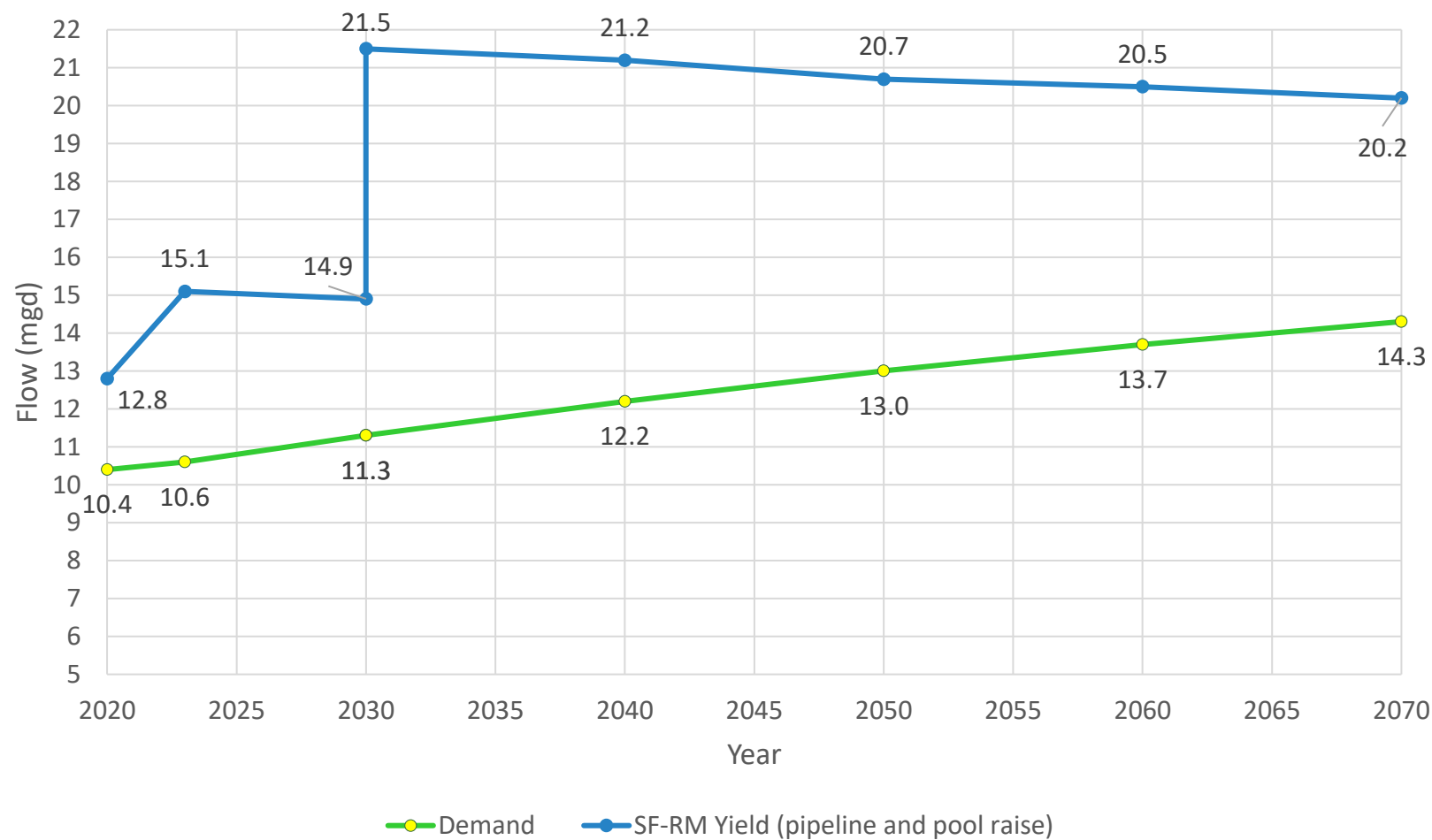
- Additional Yield once Observatory and South Rivanna Plant Upgrades complete in late 2023
- Additional Supply Needed by 2060
- System May be Challenged by Climate Change or a New Drought

# Supply vs Demand | SR-RMR Pipeline Only by 2030



- Build pipeline 2024-2030
- Available Water Supply will be adequate past 2070
- Can be completed within the term of new permits (2038)
- Adds redundancy, resiliency, operational and environmental benefits

# Supply vs Demand | SR-RMR Pipeline and Raise RMR by 2030



- Build pipeline 2024-2030
- Raise RMR Pool by 2030, adding 700 MG
- Available Water Supply will be adequate past 2070
- Completes the Community Water Supply Plan
- Adds redundancy, resiliency, operational and environmental benefits

# Summary

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- *Water Supply and Demand studies completed in 2020 estimate that our community has an adequate water supply until 2060.*
- *Severe drought conditions are being experienced in many parts of our country.*
- *Completion of the SRR to RMR water transfer pipeline and pump station project has been accelerated 5 years for completion by 2030.*
- *The Ragged Mtn dam and reservoir were constructed to impound an additional 700 million gallons (50% increase above current storage).*
- *An amendment to the Ragged Mtn Dam Project Agreement will be recommended to allow more water to be stored in the RMR as soon as possible. Must be approved by City Council as well as the ACSA and RWSA Boards.*

# Questions?

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THE NEXT WATER SUPPLY & DEMAND REPORT IS DUE IN 2030.



# Wastewater Program Review



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DAVE TUNGATE

DIRECTOR OF OPERATIONS AND  
ENVIRONMENTAL SERVICES

BOARD OF DIRECTORS MEETING

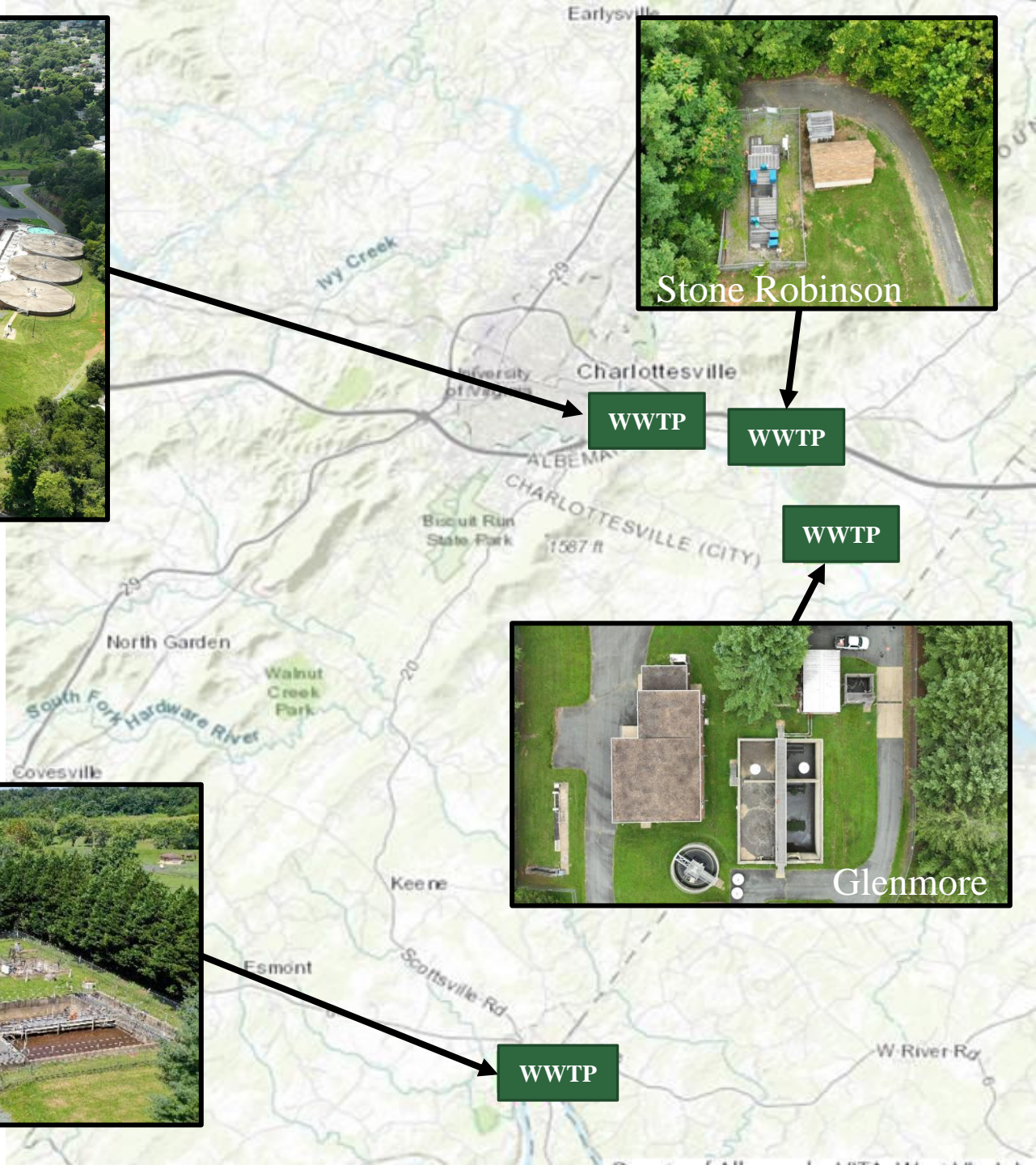
AUGUST 22, 2023

Moore's Creek Advanced Water Resource Recovery Facility





## 4 Wastewater Facilities

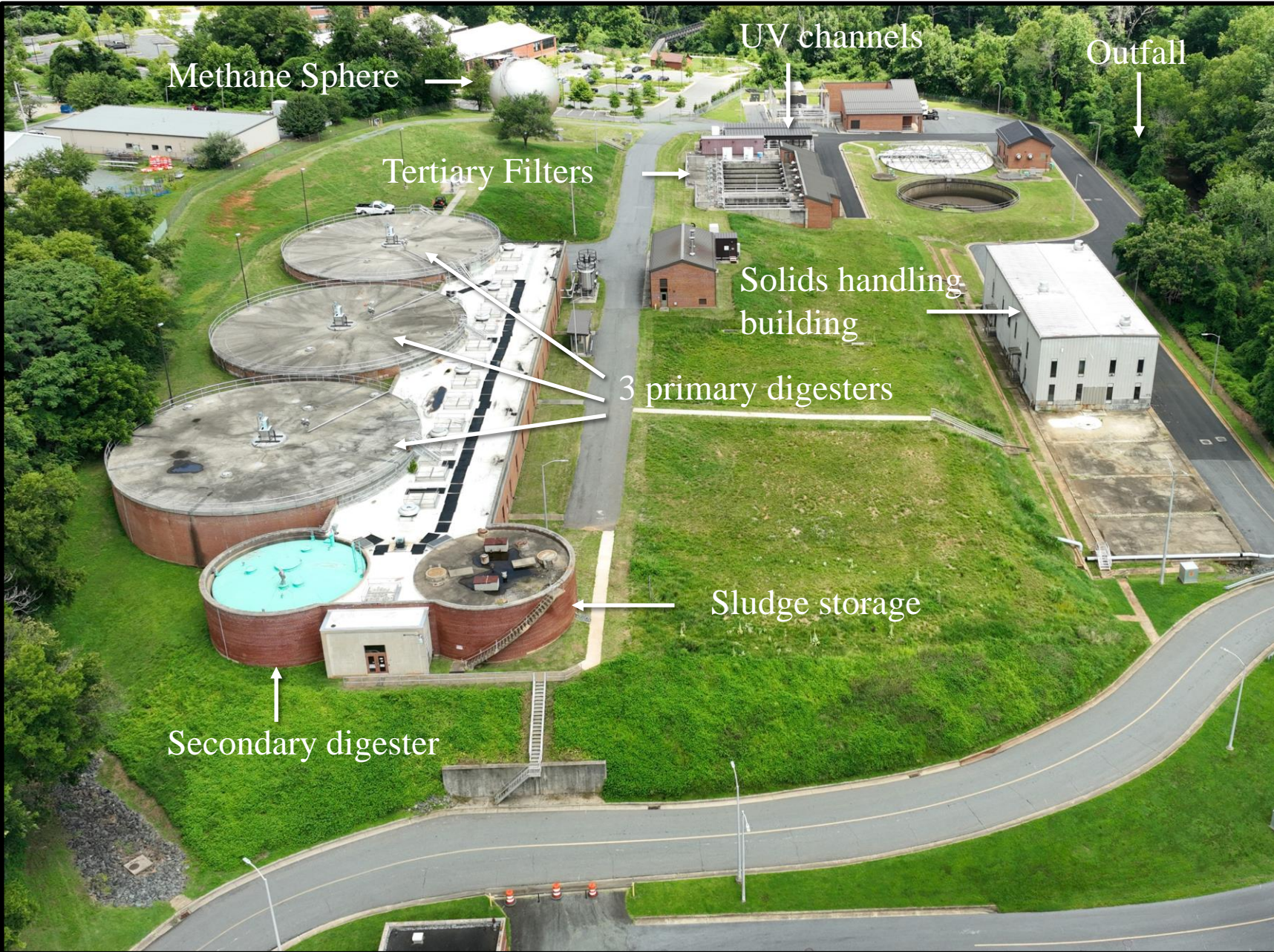






Moores Creek “Wet Side”

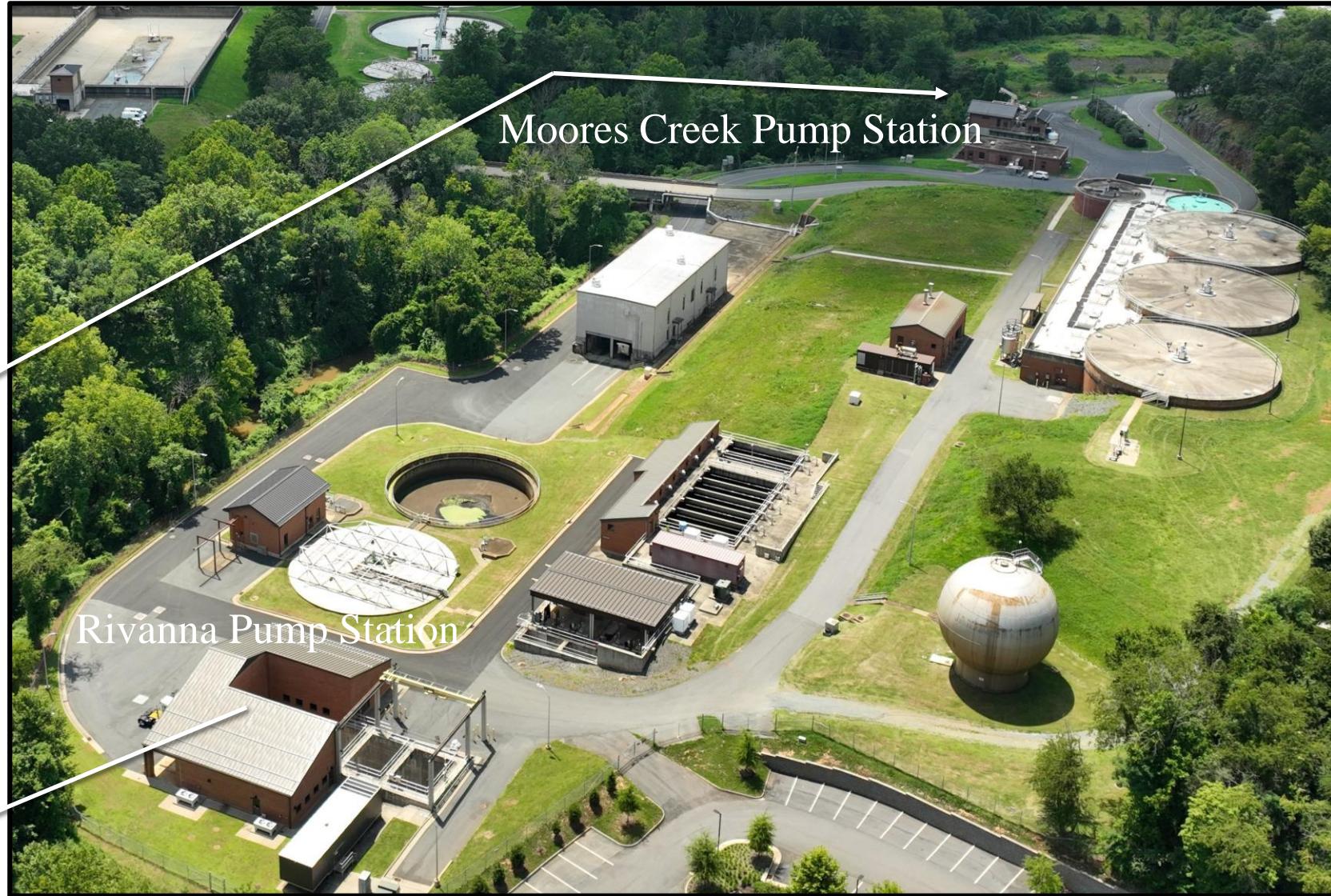




# Moores Creek “Solids Side”



# Sewer Pump Stations at Moores Creek





**Service Areas for the Moores Creek & Rivanna Waste Water Pump Stations at Moores Creek AWWRF**

The map displays the service areas for the Rivanna and Moores Creek Waste Water Pump Stations (WWPS) at the Moores Creek Advanced Wastewater Reclamation Facility (AWWRF). The Rivanna Service Area is highlighted in yellow, and the Moores Creek Service Area is highlighted in light blue. The map includes various landmarks and infrastructure, such as the University of Virginia, Charlottesville-Albemarle Airport, and several schools. The legend in the bottom left corner defines the symbols used:

- PS** (green square): RWSA SS PS
- Red line**: RWSA SS Lines
- Light blue area**: Moores Creek Service Area
- Yellow area**: Rivanna Service Area

Key locations and infrastructure shown on the map include:

- Landmarks:** Piney Mountain, Charlottesville-Albemarle Airport, Baker-Butler Elementary School, Hollymead, Northfields, Albemarle High School, Farmington, Ednam Forest, University of Virginia, Charlottesville, Frys Spring, Oak Hill, Monticello High School.
- Infrastructure:** Highway 29, Highway 250, Highway 64.
- Service Areas:** Moores Creek Service Area (light blue), Rivanna Service Area (yellow).
- Pump Stations:** PS (green squares) located along the RWSA SS Lines.





# Band Screens

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*remove debris from  
wastewater after the  
pump stations*



# Grit Removal System



*Grit removed*







# Primary Clarifiers

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*First stage of sludge  
and grease/oil  
removal*





# Moores Creek Odor Control

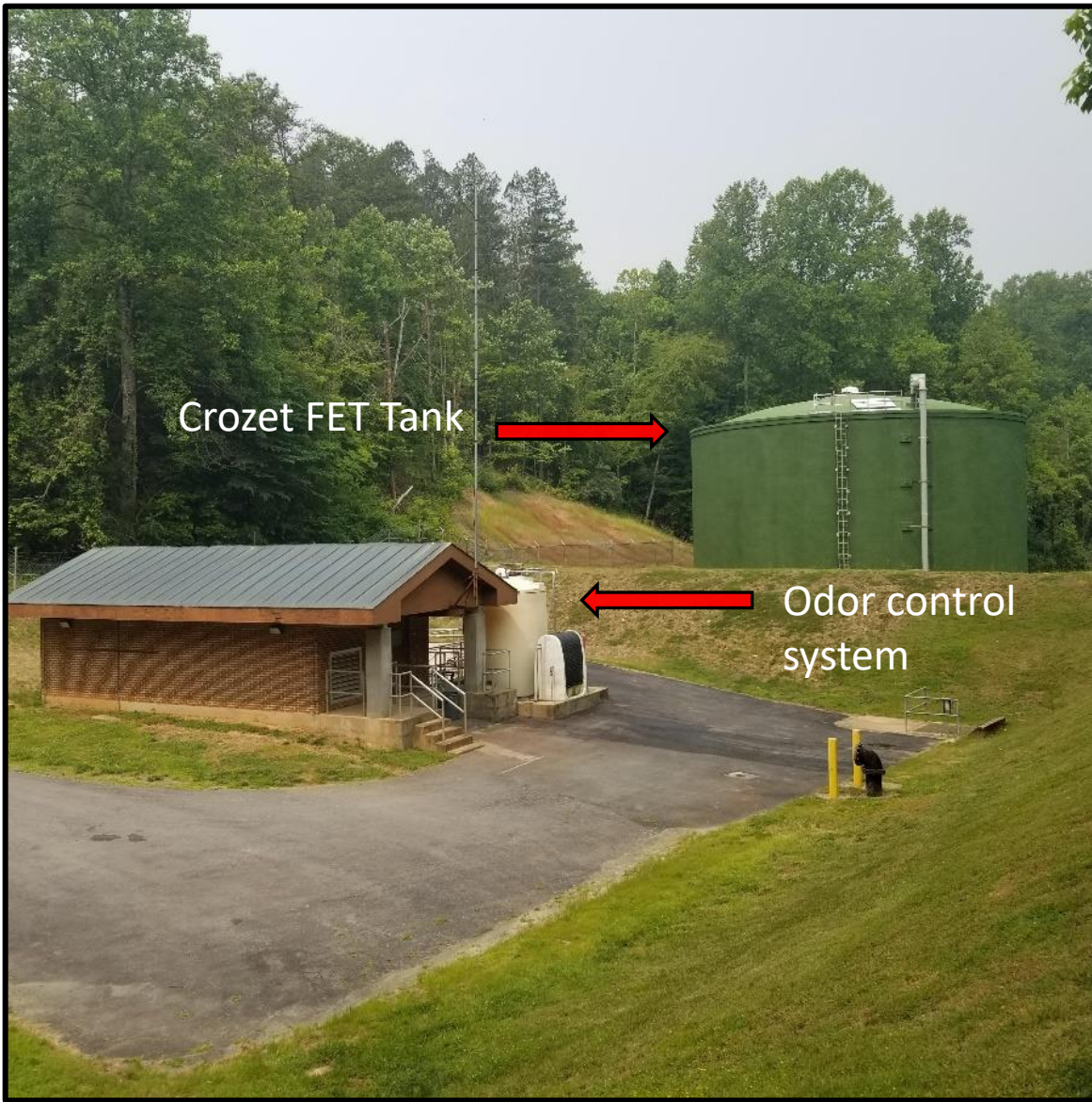
*removes odors from  
gases under primary  
clarifier covers*



# Crozet Wastewater Odor Control

*Injects chemicals to  
reduce odors in  
wastewater line from  
Crozet to Moores Creek*

◆ *costs  $\approx$  \$400,000/year*



Crozet pump station 4





# Biological Treatment

---

*enhanced  
nutrient removal  
by microbes*





# Secondary Clarifiers

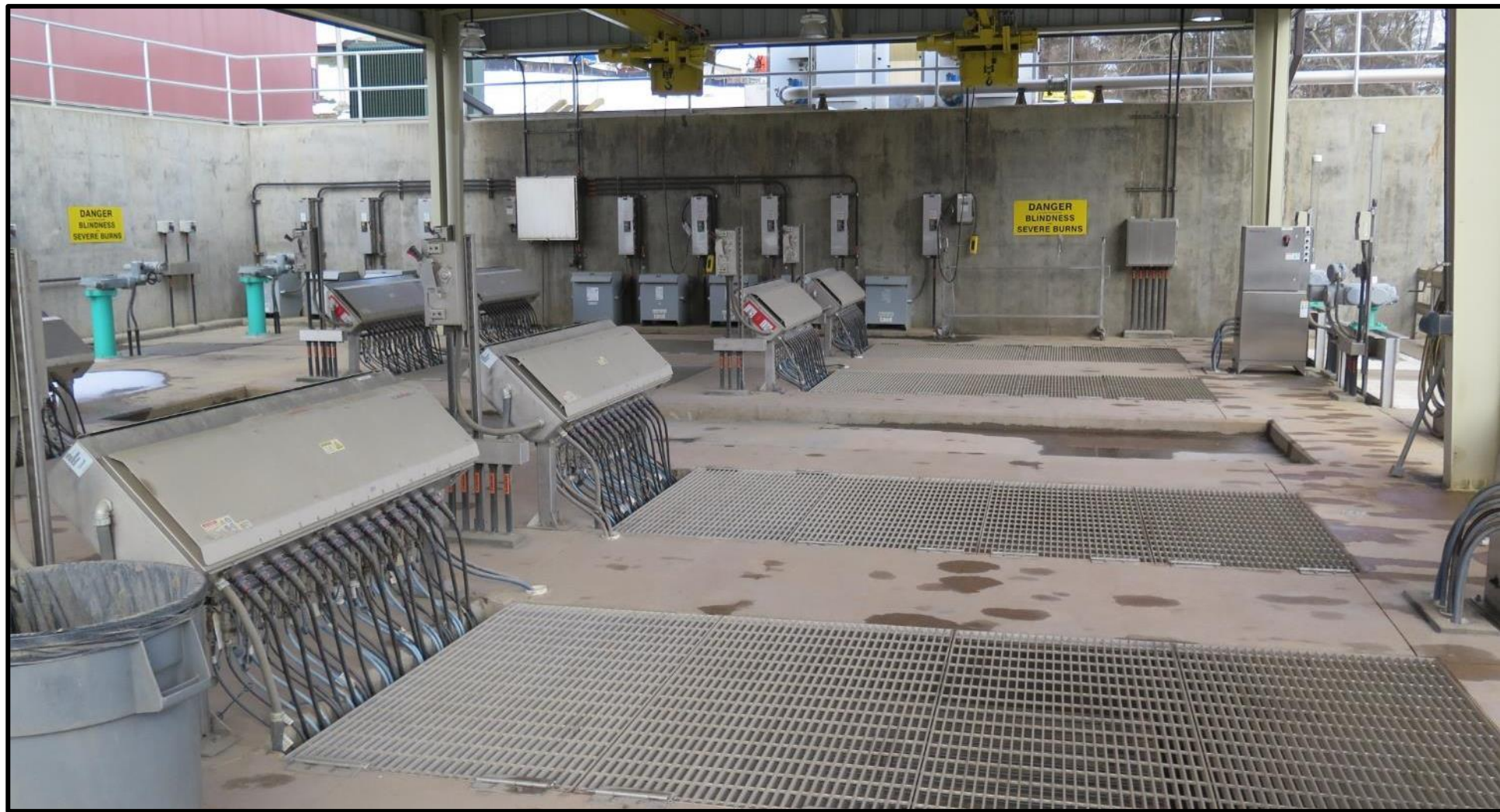
*Final stage of sludge removal*





Gravity sand filters  
*remove small particles prior to UV disinfection*





Ultraviolet light channels  
*disinfects wastewater prior to outflow*





# Outfall to Moores Creek







# Centrifuge

*dewater  
anaerobic sludge  
from digesters*



# Dewatered solids or Biosolids

---

*Moore's Creek  
generated approx.  
14,000 tons of  
biosolids in 2022.  
Hauled to Waverly, Va  
daily.*

# Moores Creek Nutrients

---

Nutrient discharges at the Moores Creek AWRRF were as follows for July 2023.

<i>State Annual Allocation (lb./yr.) Permit</i>		<i>Average Monthly Allocation (lb./mo.) *</i>	<i>Moores Creek Discharge July (lb./mo.)</i>	<i>Performance as % of monthly average Allocation*</i>	<i>Year to Date Performance as % of annual allocation</i>
<b>Nitrogen</b>	282,994	23,583	10,114	43%	23%
<b>Phosphorous</b>	18,525	1,544	713	46%	17%

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

# Wastewater Plant Performance Testing

---

Monthly compliance reports are sent to VDEQ

## **Moores Creek**

• Dissolved oxygen	Daily
• pH	Daily
• Total Suspended Solids	5 times a week
• Ammonia	5 times a week
• Escherichia coli bacteria	7 times a week
• Total Phosphorus	2 times a week
• Total Nitrogen	2 times a week
• Chemical Biological Oxygen Demand	4 times a week

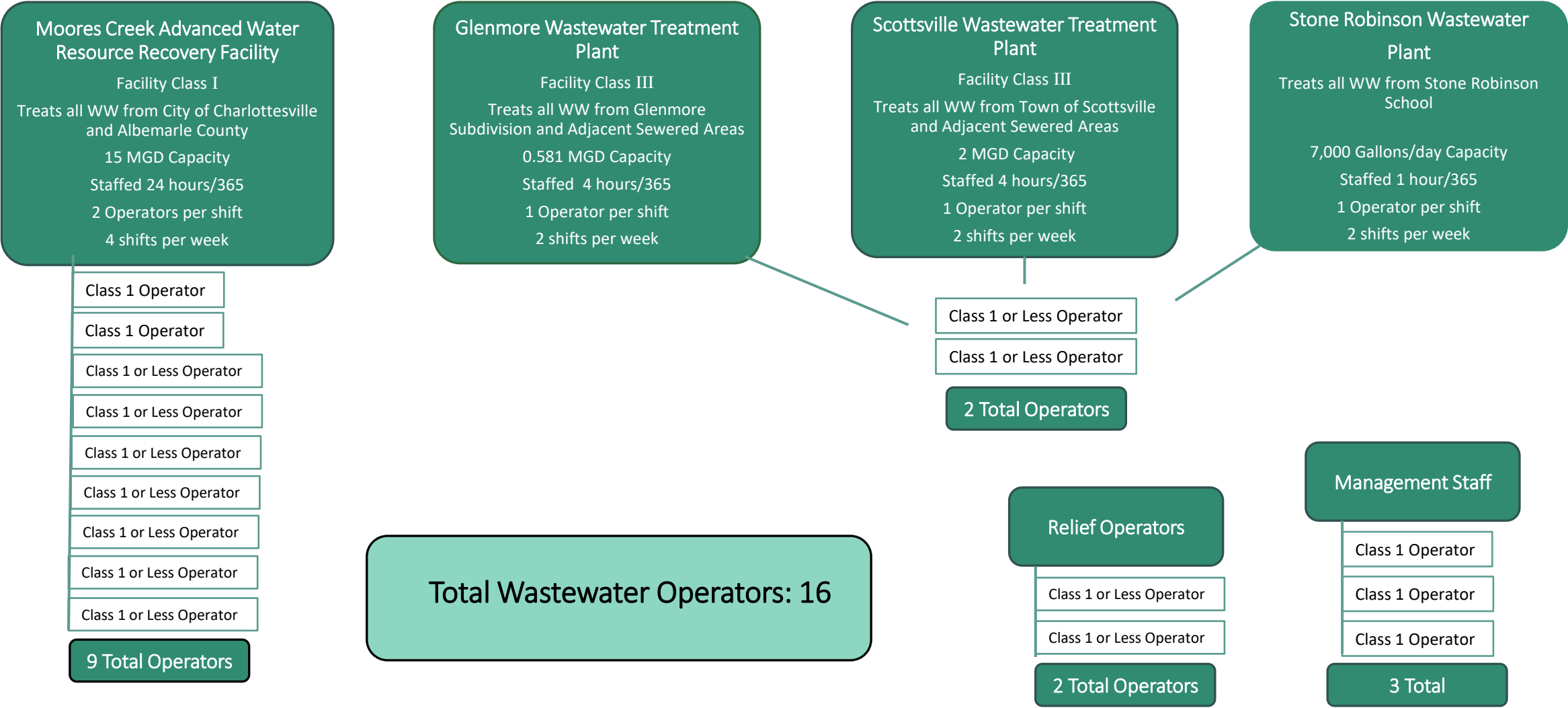




# Moores Creek Septic Station

*≈ 9 million gallons of  
septage and 7,000  
deliveries each year*

# Wastewater Treatment Plants



# Wastewater Staff Licenses

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Wastewater License	Number of Operators
Class 1	7
Class 2	5
Class 3	2
Class 4	-
Unlicensed Trainee	2
Total Wastewater Operators	16



# Industrial Waste Pre-Treatment Program





# Purpose of the program

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- To protect the sewer collection system and the processes in the wastewater treatment plants by having discharge limits
- Required by EPA and Virginia Department of Environmental Quality (VDEQ)



# Sewer Discharge limits

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- Pretreatment program looks at the following constituents:
  - Fats Oils and Greases (FOG)
  - Metals (Manganese, Copper, Lead, heavy metals)
  - Nutrients (Nitrogen and Phosphorus)
  - pH (discharge must be between 6.0 and 9.0)
  - Biochemical Oxygen Demand



# Identifying Industrial Users

- Significant Industrial User (SIU)
  - Categorical (metal finishing, semiconductor manufacturing, etc. )
  - Non-categorical (discharges more than 25,000 gal/day or has potential to adversely affect our treatment process)
- Sewer users with processes that discharge products of concern
  - Restaurants
  - Breweries, wineries, and soft drink bottling facilities
  - Food Preparation facilities

# Current Industrial Permits

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- We have 3 SIUs we are monitoring in the pretreatment program:

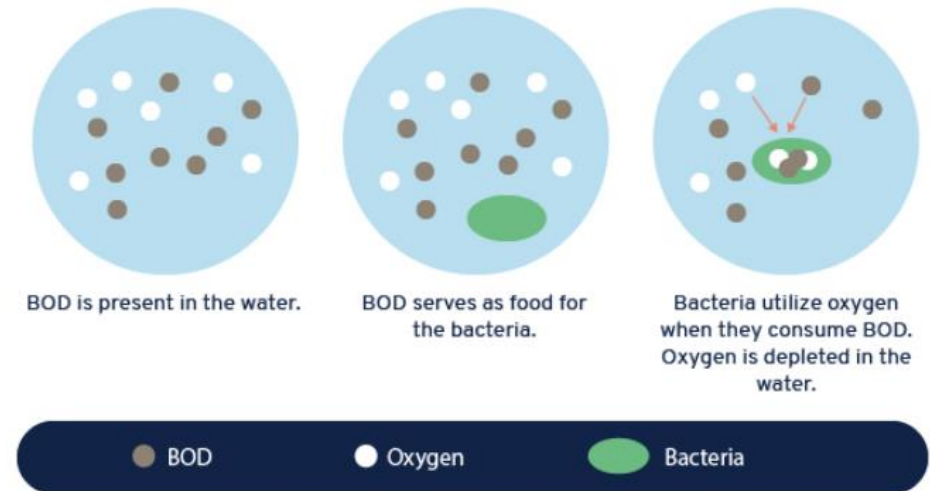


- Each industry is required to submit a semi-annual report for the periods ending in June and December of each year.
- Current project to identify additional SIUs



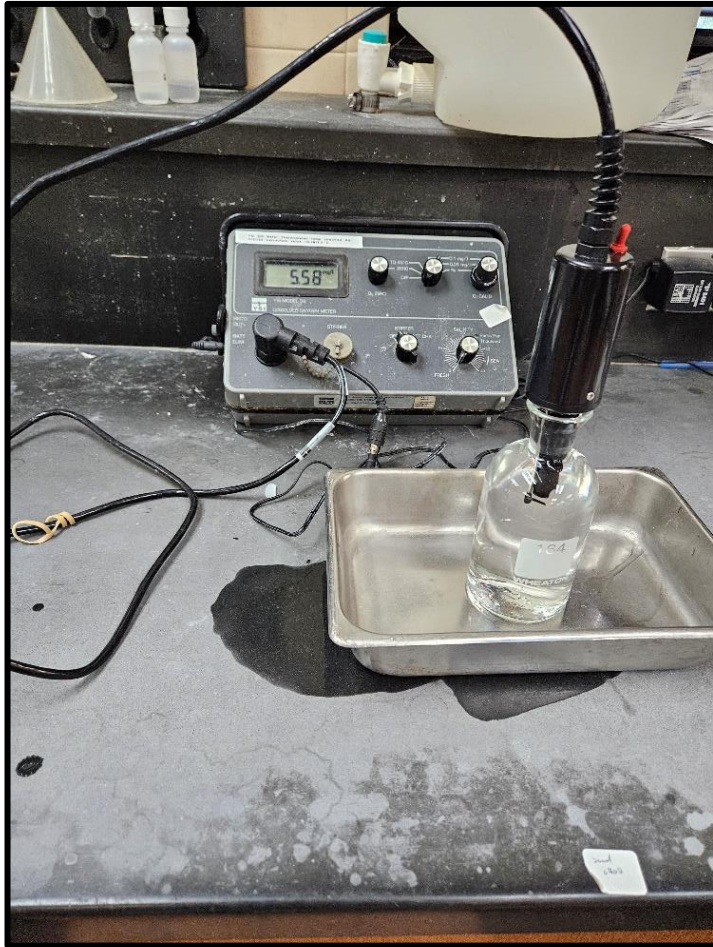
# What are BOD and CBOD?

- **Biochemical Oxygen Demand (BOD)** measures the amount of oxygen consumed by aerobic bacteria in a water sample at a specific temperature over a specific time period.
- **Carbonaceous Biochemical Oxygen Demand (CBOD)** represents the BOD from carbon-based compounds only. Any BOD from nitrifying organisms is removed by adding a nitrification inhibitor.

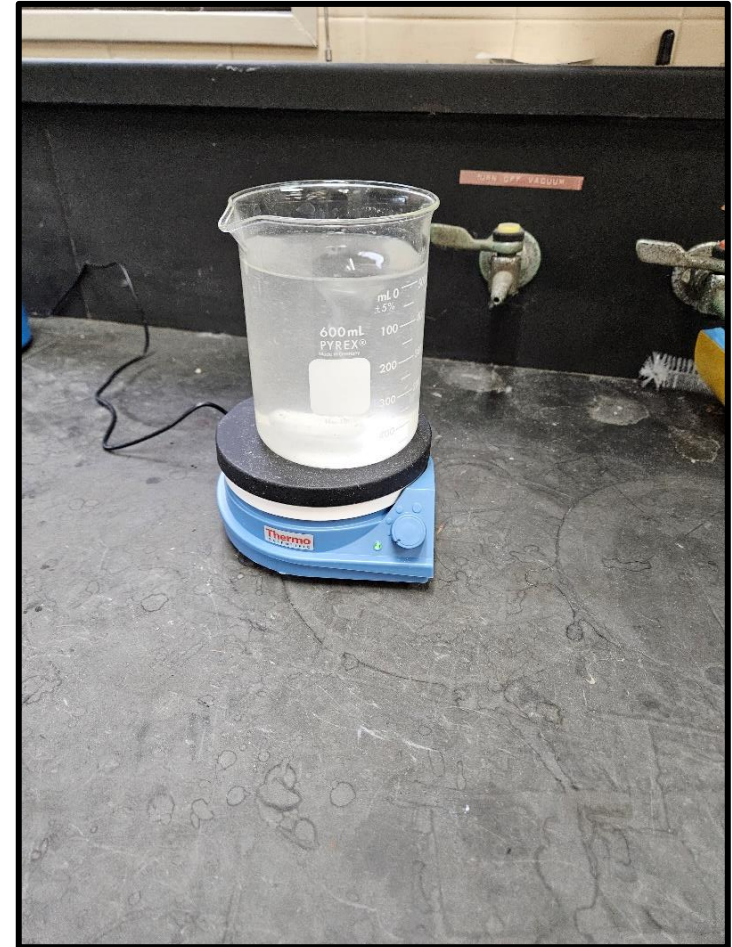


# CBOD test

Step 1  
Initial  
Dissolved  
Oxygen  
reading



Step 2  
Carbon  
based  
bacteria are  
added to  
the sample



# CBOD test

Step 3  
Samples  
remain at  
20 °C for 5  
days



Step 4  
Dissolved  
Oxygen  
reading  
after 5 days  
at 20 °C





### EFFLUENT LIMITATIONS:

A comparison of technology and water quality-based limits was performed and the most stringent limits were selected, as summarized in the table below.

#### **Outfall 001**

#### **Final Limits**

#### **Design Flow: 15 MGD**

PARAMETER	BASIS FOR LIMITS	EFFLUENT LIMITATIONS				MONITORING REQUIREMENTS	
		Monthly Average		Maximum		Frequency	Sample Type
Flow (MGD)	1	NL		NL		Continuous	TIRE
-----	-----	Monthly Average		Weekly Average		-----	-----
CBOD <sub>5</sub>	3,4	9 mg/L	510 kg/d	14 mg/L	790 kg/d	1/Week	24 HC
TSS	5	22 mg/L	1200 kg/d	33 mg/L	1900 kg/d	5/Week	24 HC

#### BASIS DESCRIPTIONS

1. *VPDES Permit Regulation (9VAC25-31)*
2. *Federal Effluent Requirements (Secondary Treatment Regulation - 40CFR133)*
3. *Water Quality Standards (9VAC25-260)*
4. *Regional Stream Model*
5. *Rivanna River Watershed Benthic TMDL*
6. *Rivanna River Watershed Bacteria TMDL*
7. *Professional Judgment (PJ)*
8. *Guidance Memo No. 07-2008, Amendment No. 2, Permitting Considerations for Facilities in the Chesapeake Bay Watershed*
9. *Regulation for Nutrient Enriched Waters and Dischargers within the Chesapeake Bay Watershed (9VAC25-40)*





Moores Creek aeration basins have CBOD treatment capacity of 34,900 lbs./day.

Daily average CBOD for 2022 was 24,000 lbs./day

If daily average CBOD load increases to 31,700 lbs./day over 3 consecutive months, possible expansion is needed to treat CBOD

# Wastewater Department Budget ~FY 2024~

- \$21.5 million
  - \$10 million for debt service
  - \$4.3 million for central support (Finance, IT, HR, Engineering, Maintenance, Lab services)
  - \$1.7 million for employee salaries
  - \$1 million for wastewater treatment chemicals
  - \$1.1 million for operations and maintenance
  - \$1.2 million (odor control, biosolids disposal and trucking)
  - \$1.2 million – communication lines, IT, misc. supplies, professional services
  - \$0.98 million – utility costs (electricity, natural gas)
- Treated 3.4 billion gallons of wastewater in FY 2023
- At the cost of \$3.11 per 1,000 gallons of wastewater





Questions?